



*B R E N N A N*

*c a t a l o g*

## Dear Valued Customer:

We are pleased to present our hydraulic tube fitting and adapter catalog. Since 1953, Brennan Industries, Inc. has been supplying hydraulic tube fittings and adapters to all types of industries. As a result of our efforts to continuously improve, today we offer the most complete line of hydraulic tube fittings and adapters anywhere in the world. With over 10,000 line items inventoried in 6 strategically located, full-service warehouses and over 4,000 distributors, Brennan not only has what you need when you need it, but we have what you need where you need it. Whether you need steel, stainless steel or brass, standards or specials, we have the fittings you are looking for...in stock, and in sizes ranging from 1/8" to 2". All are high-quality products that meet or, in most cases, exceed J.I.C./S.A.E. specifications.

To order any of our many products, please contact the regional warehouse nearest you, as listed on the back of this catalog. Our experienced sales and customer service representatives are available to assist you with any questions or special arrangements that you may require.

Thank you for doing business with Brennan.

## Terms of Payment:

Subject to credit approval and, unless otherwise specified, cash discount terms are 1% 10 Days, Net 30 Days.

## Shipping:

All prices are F.O.B. Warehouse.

## Returns:

Fittings may be returned only with the authorization of Brennan Industries, Inc., subject to our inspection and must be shipped freight-prepaid. A minimum handling charge of 20% will apply. All returns must be clearly marked with the Return Goods Authorization number on the package and all paperwork.

## Special Fittings:

Special fittings made to your specifications are not returnable.

## Minimum Billing Charge:

All orders are subject to a \$25.00 minimum billing charge per order.

## Material:

All Brennan fittings and adapters are produced using high-quality Carbon Steel, 316 Stainless Steel and Brass and conform to the design requirements as specified in the Society of Automotive Engineers Section J514, J1453 and J518.

## Note:

This catalog supersedes any previous catalog covering these products. Prices are subject to change without notice.

## Disclaimer:

Brennan Industries, Inc. cannot be held responsible for omissions or typographical errors.

# SAE J514 Working Pressure Ratings Capable of 4 to 1 Minimum Burst

**Note:** In the case of a fitting that is a jump size, it is recommend that the lower pressure of the two ends must be recognized as the working pressure rating for that fitting. This is also the case if the fitting has one or more different style ends. For example, straight threads to pipe threads. In this case it is also recommended that the lower pressure rating of the two different style ends must be recognized as the working pressure rating for that fitting.

Nom SAE Dash Size	Nom Tube O.D. M.M.	Nom Tube O.D. Inch	Straight Thread Size	Nom Pipe Size	Rigid SAE St. Thread Unions & Bulkhead MPa	Rigid SAE St. Thread Unions & Bulkhead PSI	Adjustable SAE Std. Thread & Female Swivel MPa	Adjustable SAE Std. Thread & Female Swivel PSI	Fittings with Pipe Thread MPa	Fittings with Pipe Thread PSI	NPSM Std. Pipe Thread Maximum Operating Pressure MPa	NPSM Std. Pipe Thread Maximum Operating Pressure PSI
2	3.18	0.125	5/16-24	1/8	34.5	5,000	34.5	5,000	34.5	5,000	34.5	5,000
3	4.76	0.188	3/8-24	1/8	34.5	5,000	34.5	5,000	34.5	5,000	—	—
4	6.35	0.250	7/16-20	1/8	34.5	5,000	31.0	4,500	34.5	5,000	34.5	5,000
5	7.94	0.313	1/2-20	1/8	34.5	5,000	27.5	4,000	34.5	5,000	—	—
6	9.52	0.375	9/16-18	1/4	34.5	5,000	27.5	4,000	27.5	4,000	27.5	4,000
8	12.70	0.500	3/4-16	3/8	31.0	4,500	27.5	4,000	21.0	3,000	24.1	3,500
10	15.88	0.625	7/8-14	1/2	24.0	3,500	21.0	3,000	21.0	3,000	—	—
12	19.05	0.750	1 1/16-12	3/4	24.0	3,500	21.0	3,000	17.0	2,500	15.5	2,250
14	22.22	0.875	1 3/16-12	3/4	21.0	3,000	17.0	2,500	17.0	2,500	—	—
16	25.40	1.000	1 5/16-12	1	21.0	3,000	17.0	2,500	14.0	2,000	13.8	2,000
20	31.75	1.250	1 5/8-12	1 1/4	17.0	2,500	14.0	2,000	8.0	1,150	11.2	1,625
24	38.10	1.500	1 7/8-12	1 1/2	14.0	2,000	10.5	1,500	7.0	1,000	8.6	1,250
32	50.30	2.000	2 1/2-12	2	10.5	1,500	8.0	1,125	7.0	1,000	7.8	1,125

MPa (Mega Paskels) – 1 MPa = 145 PSI

# SAE J1453 Working, Proof & Minimum Pressures for Face Seal Fittings

**Note:** In the case of a fitting that is a jump size, it is recommend that the lower pressure of the two ends must be recognized as the working pressure rating for that fitting. This is also the case if the fitting has one or more different style ends. For example, Face Seal to pipe threads. In this case it is also recommended that the lower pressure rating of the two different style ends must be recognized as the working pressure rating for that fitting.

Nom SAE Dash Size	Straight Fittings Working MPa	Straight Fittings Working PSI	Straight Fittings Proof MPa	Straight Fittings Proof PSI	Straight Fittings Min. Burst MPa	Straight Fittings Min. Burst PSI	Adjustable Fittings Working MPa	Adjustable Fittings Working PSI	Adjustable Fittings Proof MPa	Adjustable Fittings Proof PSI	Adjustable Fittings Min. Burst MPa	Adjustable Fittings Min. Burst PSI
4	41.3	6,000	82.5	12,000	165	24,000	41.3	6,000	82.5	12,000	165.0	24,000
6	41.3	6,000	82.5	12,000	165	24,000	41.3	6,000	82.5	12,000	165.0	24,000
8	41.3	6,000	82.5	12,000	165	24,000	41.3	6,000	82.5	12,000	165.0	24,000
10	41.3	6,000	82.5	12,000	165	24,000	41.3	6,000	82.5	12,000	165.0	24,000
12	41.3	6,000	82.5	12,000	165	24,000	41.3	6,000	82.5	12,000	165.0	24,000
16	41.3	6,000	82.5	12,000	165	24,000	34.5	5,000	69.9	10,000	138.0	20,000
20	27.5	4,000	55.0	8,000	110	16,000	27.5	4,000	55.0	8,000	110.0	16,000
24	27.5	4,000	55.0	8,000	110	16,000	20.7	3,000	41.3	6,000	82.5	12,000

MPa (Mega Paskels) – 1 MPa = 145 PSI

# General Technical

## SAE J518 Maximum Working Pressure Ratings for Code 61 Flange Fittings

Nominal Flange Size Inch	Maximum Recommended Working Pressure MPa	Maximum Recommended Working Pressure PSI
1/2	34.5	5,000
3/4	34.5	5,000
1	34.5	5,000
1 1/4	27.6	4,000
1 1/2	20.7	3,000
2	20.7	3,000

MPa (Mega Paskels) – 1 MPa = 145 PSI

## SAE J518 Maximum Working Pressure Ratings for Code 62 Flange Fittings

Nominal Flange Size Inch	Maximum Recommended Working Pressure MPa	Maximum Recommended Working Pressure PSI
1/2	41.4	6,000
3/4	41.4	6,000
1	41.4	6,000
1 1/4	41.4	6,000
1 1/2	41.4	6,000
2	41.4	6,000

MPa (Mega Paskels) – 1 MPa = 145 PSI

AORB: Adjustable O-ring Boss (NWO)

B: Brass

BHLN: Bulk Head Lock Nut

BSPP: British Standard Pipe Parallel

BSPPS: British Standard Pipe Parallel Swivel

BSPT: British Standard Pipe Taper

BT: Bite Type

BTS: Bite Type Swivel

BULN: Back-up Lock Nut (NWO)

BW: Butt Weld

C: (before number) Bite Type

C: (after number) Cap

C HEX: Width Across the Wrench

D: Aluminum

F: (before number) Flare-O

FBSP: Female British Standard Pipe Parallel

FBSP: Female British Standard Pipe Tapered

FBSPS: Female British Standard Pipe Parallel Swivel

FFS: Female Face Seal

FFSS: Female Face Seal Swivel

FG: Forged Flats of the Hex

FIF: Female Inverted Flare

FJ: Female J.I.C.

FJIS: Female J.I.S.

FJS: Female J.I.C. Swivel

FJIS: Female J.I.S.

FK: Female Komatsu

FMS: Female Metric Swivel

FO: Flare-O

FORB: Female O-ring Boss

FP: Female Pipe

FPS: Female Pipe Swivel

FS: Face Seal

FSAES: Female SAE Swivel, 45° Seat

H: Hollow Hex O-ring Plug

HB: Hose Barb

HP: Hollow Hex Pipe Plug

I.D.: Inside Dimension

JIC: Joint Industrial Council, 37° Flare

JIS: Japanese Industrial Standard, 30° Flare

L: Light (7005-04-L06-12)

L: Long (6400-L-20-20-O)

LGTH: Length

LH: Large Hex

LL: Extra Long

LLL: Extra Extra Long

LLLL: Extra Extra Extra Long

MAORB: Male Adjustable O-ring Boss (NWO)

# *Glossary of Descriptions*

MBSPP: Male British Standard Pipe Parallel

MBSPPADJ: Male British Standard Pipe Parallel Adjustable

MBSPPAORB: Male British Standard Pipe Parallel Adjustable O-ring Boss

MBSPT: Male British Standard Pipe Tapered

MFS: Male Face Seal

MIFS: Male Inverted Flare Swivel

MJ: Male J.I.C.

MJIS: Male J.I.S.

MK: Male Komatsu

M.M.: Millimeters

MM: Male Metric

MMADJ: Male Metric Adjustable

MMAORB: Male Metric Adjustable O-ring Boss

MORB: Male O-ring Boss

MP: Male Pipe

MS: Metric Swivel

N: Extended Length (5404-N-02x0.750)

N: Locknut for NWO Assembly (0306-N-03)

NPSM: American (formerly National) Pipe Straight Mechanical

NPTF: American (formerly National) Pipe Taper Fuel

NWO: Nut Washer O-ring (MAORB)

O: O Ring

O.D.: Outside Dimension

ORB: O-ring Boss

PL: Push Lock

PLATE MAX: Recommended Maximum Plate Thickness After Assembling the Bulkhead with the 306 Locknut, 318 Nut & 319 Sleeve.

P: Plug

S: Heavy (7005-04-S06-14)

S: Steel

SAE: Society of Automotive Engineering

SHP: Square Head Plug

SS: Stainless Steel

TS: Tube Spud

Y FLATS: Width Across the Wrench Flats

V: Versa Flare

## Parts Nomenclature

Brennan Industries, Inc.'s hydraulic tube fitting and adapter part numbers are constructed from symbols that identify the series, size, material and type of product. When ordering part numbers you would begin by listing the series followed by the size and the material suffix. Sizes are measured in sixteenths of an inch (example: 4/16 or 4). The standard product is produced in steel and requires no material suffix. If ordering stainless steel products you would add the suffix SS and if you are ordering brass products you would add the suffix B. Standard steel shapes such as 90°, 45°, tees and crosses are produced as a forging as well as fitting components brazed together. If you require forged one piece construction parts you would order the part number with the FG suffix. All stainless steel and brass shapes are forged one piece construction and therefore do not require

the FG suffix. For example:

### 2501-08-08-SS

This is a 2501 Series with a 1/2" male JIC tube and a 1/2" male pipe thread. The part number also indicates that the product is made of stainless steel.

### 2501-12-08-FG

This is a 2501 Series with a 3/4" male JIC tube and a 1/2" male pipe thread. The part number also indicates that the product was produced as a forged one piece construction, steel adapter.

### 2501-04-04-B

This is a 2501 Series with a 1/4" male JIC tube and a 1/4" male pipe thread. The part number also indicates that the product is made of brass.

## *NEW Product Dimensions*

For products indicated as "*NEW*," the dimensions can be found on the Brennan web site. Please visit the site at [www.brennaninc.com](http://www.brennaninc.com) and follow the instructions to find a specific product.



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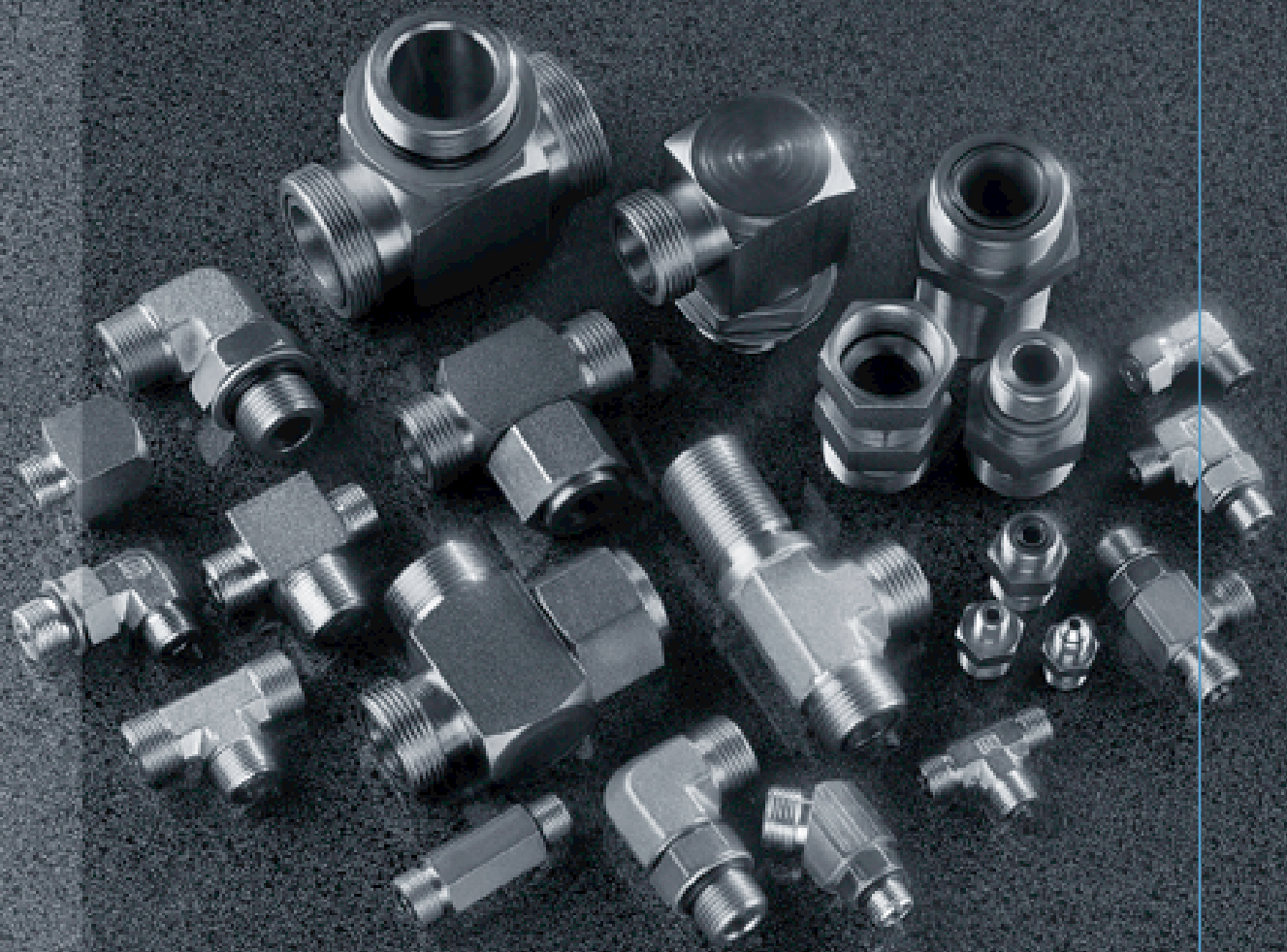
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


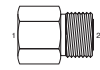
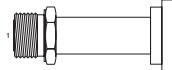
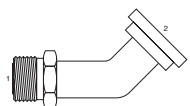
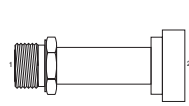
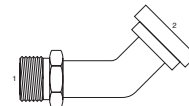
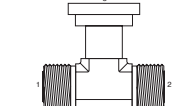
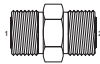





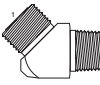
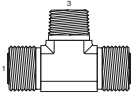
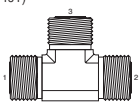
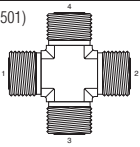
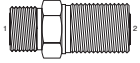
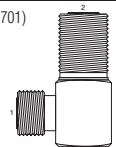
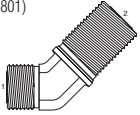
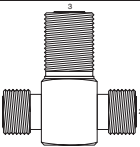
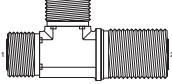

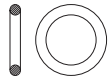

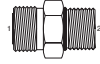
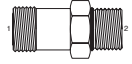
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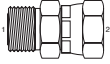
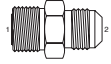
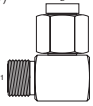

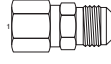
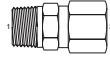
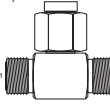
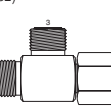
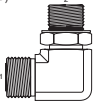
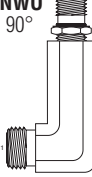
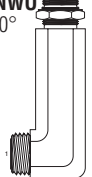
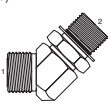

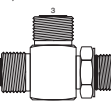
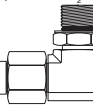
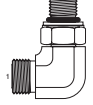
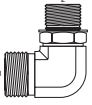
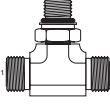
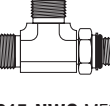

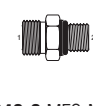
*O-Ring Face Seal Fittings*

## O-Ring Face Seal Fittings

Brennan Industries, Inc.'s steel and stainless steel o-ring face seal fittings meet all design and performance requirements for o-ring face seal fittings in Standard J1453 published by the Society of Automotive Engineers (SAE).

(520112)  <b>FS0304-C</b> Cap Assembly Insert	(520118)  <b>FS0306</b> Bulkhead Lock Nut	(520110)  <b>FS0318</b> Nut	(520115)  <b>FS0319</b> Sleeve	(520104)  <b>FS0403</b> Bore-MFS Straight	 <b>FS1700</b> MFS-Flange Straight Code 61
 <b>FS1703</b> MFS-Flange 45° Code 61	 <b>FS1800</b> MFS-Flange Straight Code 62	 <b>FS1803</b> MFS-Flange 45° Code 62	 <b>FS1805</b> MFS-MFS-Flange Code 62	(520101)  <b>FS2403</b> MFS-MFS Straight	 <b>FS2404</b> MFS-MP Straight
 <b>FS2406</b> FFS-MFS Tube End Reducer	(520109)  <b>FS2408</b> MFS Plug	(520201)  <b>FS2500</b> MFS-MFS 90°	 <b>FS2501</b> MFS-MP 90°	 <b>FS2503</b> MFS-MP 45°	 <b>FS2601</b> MFS-MFS-MP Tee
(520401)  <b>FS2603</b> MFS-MFS-MFS Tee	(520501)  <b>FS2650</b> MFS-MFS-MFS-MFS Cross	(520601)  <b>FS2700</b> MFS-MFS Bulkhead Union	(520701)  <b>FS2701</b> MFS-MFS Bulkhead 90°	(520801)  <b>FS2702</b> MFS-MFS Bulkhead 45°	 <b>FS2703</b> MFS-MFS-Bulkhead Tee
(520201)  <b>FS2704</b> MFS-MFS-MFS Tee	(J515 Type CH)  <b>FS4000</b> Buna O Ring	 <b>FS4001</b> Viton O Ring	 <b>FS6001</b> Silver Braze Ring	(520120)  <b>FS6400-O</b> MFS-MORB Straight	(520122)  <b>FS6400-L-O</b> MFS-MORB Straight Long

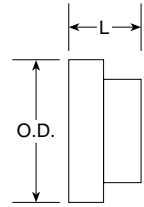
# O-ring Face Seal Fittings

 <p><b>FS6402</b> MFS-FJS Straight</p>	 <p><b>FS6403</b> MFS-MJ Straight</p>	<p>(520221)</p>  <p><b>FS6500</b> MFS-FFSS 90°</p>	 <p><b>FS6503</b> FP-FFSS 90°</p>	 <p><b>FS6504</b> FFSS-MJ Straight</p>	 <p><b>FS6505</b> MP-FFSS Straight</p>
<p>(520433)</p>  <p><b>FS6600</b> MFS-MFS- FFSS Branch Tee</p>	<p>(520432)</p>  <p><b>FS6602</b> MFS-FFSS- MFS Tee</p>	<p>(520220)</p>  <p><b>FS6801-NWO</b> MFS- MAORB 90°</p>	<p><b>FS6801-L-NWO</b> MFS- MORB 90° Long</p> 	<p><b>FS6801-LL-NWO</b> MF- MAORB 90° X-Long</p> 	<p>(520320)</p>  <p><b>FS6802-NWO</b> MFS- MAORB 45°</p>
<p>(520429)</p>  <p><b>FS6803-NWO</b> MFS- MFS-MAORB Tee</p>	<p>(520428)</p>  <p><b>FS6804-NWO</b> MFS- MAORB-MFS Tee</p>	<p>(520281)</p>  <p><b>FS6809-NWO</b> FFSS- MAORB 90°</p>	 <p><b>FS7202-NWO</b> MFS- MBSP 90° Elbow</p>	 <p><b>FS7205-NWO</b> MFS- MMAORB 90° Elbow</p>	 <p><b>FS7210-NWO</b> MFS- MFS-MMAORB Tee</p>
 <p><b>FS7215-NWO</b> MFS- MMAORB-MFS Tee</p>	 <p><b>FS7300-NWO</b> MFS- MMAORB 45° Elbow</p>	 <p><b>FS7640-0</b> MFS-MMORB</p>			

# Cap Assembly Insert

## FS0304-C Series

Used with FS0318



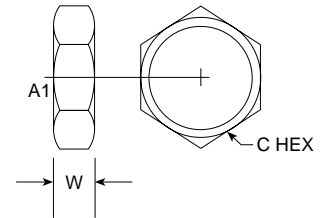
SAE # 520112

PART NO. SIZE	TUBE O.D.	O.D.	M.M.	L LGTH	M.M.	Standard Material From Stock			
						S	FG	SS	B
FS0304-C-04	1/4	0.502	12.75	0.340	8.64	•			
FS0304-C-06	3/8	0.620	15.75	0.370	9.40	•			
FS0304-C-08	1/2	0.745	18.92	0.470	11.94	•			
FS0304-C-10	5/8	0.923	23.44	0.470	11.94	•			
FS0304-C-12	3/4	1.097	27.86	0.530	13.46	•			
FS0304-C-16	1	1.347	34.21	0.590	14.99	•			
FS0304-C-20	1 1/4	1.597	40.56	0.590	14.99	•			
FS0304-C-24	1 1/2	1.910	48.51	0.590	14.99	•			

# Bulkhead Lock Nut

## FS0306 Series

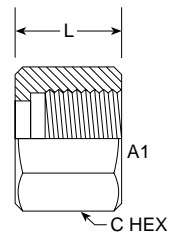
SAE # 520118



PART NO. SIZE	TUBE O.D.	A1 THREAD	C HEX	M.M.	W WIDTH	M.M.	Standard Material From Stock			
							S	FG	SS	B
FS0306-04	1/4	9/16-18	13/16	20.64	0.270	6.86	•			
FS0306-06	3/8	11/16-16	1	25.40	0.310	8.13	•			
FS0306-08	1/2	13/16-16	1 1/8	28.58	0.350	8.89	•			
FS0306-10	5/8	1-14	1 5/16	33.34	0.410	10.41	•			
FS0306-12	3/4	1 3/16-12	1 1/2	38.10	0.410	10.41	•			
FS0306-16	1	1 7/16-12	1 3/4	44.45	0.410	10.41	•			
FS0306-20	1 1/4	1 11/16-12	2	50.80	0.410	10.41	•			
FS0306-24	1 1/2	2-12	2 3/8	60.33	0.410	10.41	•			

# Nut FS0318 Series

SAE # 520110



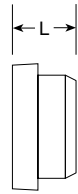
PART NO. SIZE	TUBE O.D.	A1 THREAD	C HEX	M.M.	L LGTH	M.M.	Standard Material From Stock			
							S	FG	SS	B
FS0318-04	1/4	9/16-18	11/16	17.46	0.580	14.73	•			
FS0318-06	3/8	11/16-16	13/16	20.63	0.670	17.02	•			
FS0318-08	1/2	13/16-16	15/16	23.81	0.830	21.08	•			
FS0318-10	5/8	1-14	1-1/8	28.58	0.930	23.62	•			
FS0318-12	3/4	1 4/16-12	1-3/8	34.93	1.024	26.01	•			
FS0318-16	1	1 7/16-12	1-5/8	41.28	1.100	27.94	•			
FS0318-20	1 1/4	1 11/16-12	1-7/8	47.64	1.100	27.94	•			
FS0318-24	1 1/2	2-12	2-1/4	57.15	1.100	27.94	•			

# O-ring Face Seal Fittings

PART NO. SIZE	TUBE O.D.	LGTH L	M.M.	Standard Material From Stock			
				S	FG	SS	B
FS0319-04	1/4	0.374	9.50	•			
FS0319-06	3/8	0.374	9.50	•			
FS0319-08	1/2	0.374	9.50	•			
FS0319-10	5/8	0.413	10.49	•			
FS0319-12	3/4	0.551	13.99	•			
FS0319-16	1	0.610	15.49	•			
FS0319-20	1 1/4	0.610	15.49	•			
FS0319-24	1 1/2	0.610	15.49	•			

## Sleeve FS0319 Series

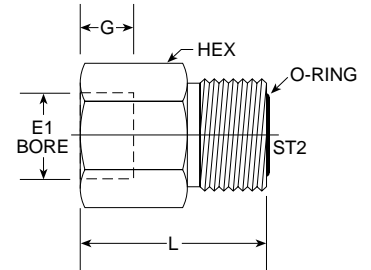
SAE # 520115



Note: Braze Style

## Bore-MFS Straight FS0403 Series

SAE # 520104

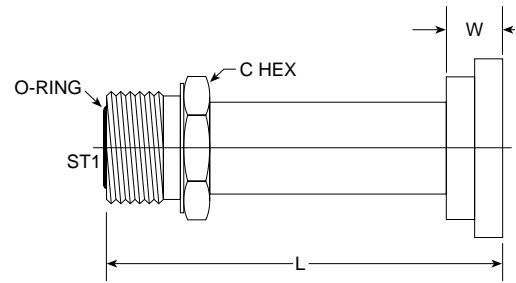


PART NO. SIZE	E1* BORE	ST2 THREAD	G*	M.M.	L LGTH M.M.	HEX	HEX	M.M.	Standard Material From Stock		
									S	SS	
FS0403-04-04	0.256	9/16-18	0.330	8.38	0.860	21.84	5/8	0.625	15.87	•	
FS0403-04-06	0.256	11/16-16	0.330	8.38	0.900	22.86	3/4	0.750	19.05	•	
FS0403-06-04	0.381	9/16-18	0.330	8.38	0.860	21.84	5/8	0.625	15.87	•	
FS0403-06-06	0.381	11/16-16	0.330	8.38	0.900	22.86	3/4	0.750	19.05	•	
FS0403-06-08	0.381	13/16-16	0.330	8.38	0.970	24.64	7/8	0.875	22.22	•	
FS0403-08-06	0.506	11/16-16	0.330	8.38	0.900	22.86	3/4	0.750	19.05	•	
FS0403-08-08	0.506	13/16-16	0.330	8.38	0.970	24.64	7/8	0.875	22.22	•	
FS0403-08-10	0.506	1-14	0.330	8.38	1.070	27.18	1 1/16	1.062	26.97	•	
FS0403-08-12	0.506	1 3/16-12	0.330	8.38	1.160	29.46	1 1/4	1.250	31.75	•	
FS0403-10-08	0.631	13/16-16	0.330	8.38	0.970	24.64	7/8	0.875	22.22	•	
FS0403-10-10	0.631	1-14	0.330	8.38	1.070	27.18	1 1/16	1.062	26.97	•	
FS0403-10-12	0.631	1 3/16-12	0.330	8.38	1.160	29.46	1 1/4	1.250	31.75	•	
FS0403-12-08	0.757	13/16-16	0.490	12.45	1.160	29.46	1 1/16	1.062	26.97	•	
FS0403-12-10	0.757	1-14	0.490	12.45	1.230	31.24	1 1/4	1.250	31.75	•	
FS0403-12-12	0.757	1 3/16-12	0.490	12.45	1.320	33.53	1 1/4	1.250	31.75	•	
FS0403-12-16	0.757	1 7/16-12	0.490	12.45	1.460	37.08	1 1/2	1.500	38.10	•	
FS0403-16-12	1.007	1 3/16-12	0.550	13.97	1.380	35.05	1 1/2	1.500	38.10	•	
FS0403-16-16	1.007	1 7/16-12	0.550	13.97	1.520	38.61	1 1/2	1.500	38.10	•	
FS0403-16-20	1.007	1 11/16-12	0.550	13.97	1.520	38.61	1 3/4	1.750	44.45	•	
FS0403-20-20	1.258	1 11/16-12	0.550	13.97	1.520	38.61	1 3/4	1.750	44.45	•	
FS0403-20-24	1.258	2-12	0.550	13.97	1.520	38.61	2 1/8	2.125	53.97	•	
FS0403-24-20	1.508	1 11/16-12	0.550	13.97	1.520	38.61	2 1/8	2.125	53.97	•	
FS0403-24-24	1.508	2-12	0.550	13.97	1.520	38.61	2 1/8	2.125	53.97	•	

\*E dimensions are for silver brazing. (SAE J1453)

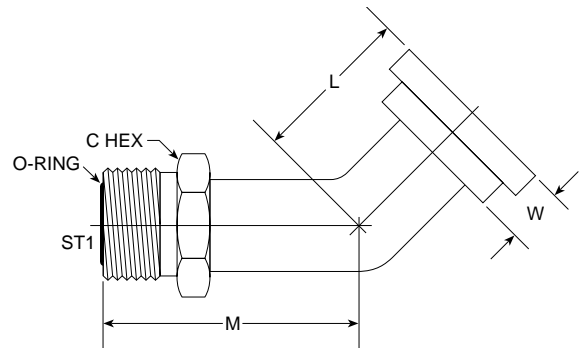
\*G dimensions are for silver brazing. (SAE J1453)

# MFS-Flange Straight Code 61 FS1700 Series



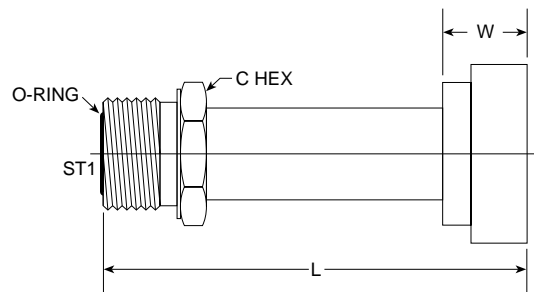
PART NO. SIZE	TUBE O.D.	ST1	FLANGE	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	C HEX M.M.	Standard Material From Stock						
								S	FG	SS	B			
NEW FS1700-12-12														
NEW FS1700-16-16														
NEW FS1700-20-20														
NEW FS1700-24-24														

# MFS-Flange 45° Code 61 FS1703 Series



PART NO. SIZE	TUBE O.D.	ST1	FLANGE	L LGTH M.M.	M LGTH M.M.	W WIDTH M.M.	C HEX M.M.	C HEX M.M.	Standard Material From Stock				
									S	FG	SS	B	
NEW FS1703-12-12													
NEW FS1703-12-16													
NEW FS1703-16-16													
NEW FS1703-20-20													
NEW FS1703-24-24													

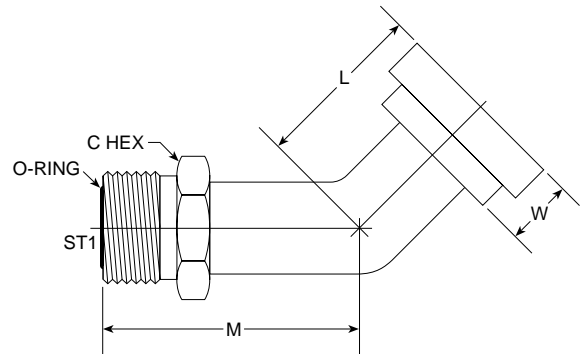
# MFS-Flange Straight Code 62 FS1800 Series



PART NO. SIZE	TUBE O.D.	ST1	FLANGE	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	C HEX M.M.	Standard Material From Stock					
								S	FG	SS	B		
NEW FS1800-12-12													
NEW FS1800-16-12													
NEW FS1800-16-16													
NEW FS1800-20-20													
NEW FS1800-24-24													

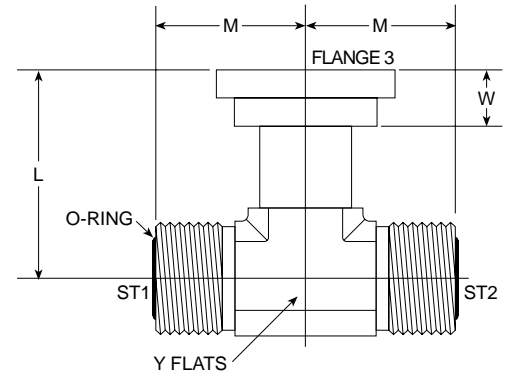
# O-ring Face Seal Fittings

MFS-Flange 45°  
Code 62  
FS1803 Series



PART NO. SIZE	TUBE O.D.	ST1	FLANGE	L LGTH	M M.M.	M LGTH	M M.M.	W WIDTH	M M.M.	C HEX	C HEX	M.M.	Standard Material From Stock				
													S	FG	SS	B	
NEW FS1803-12-12																	
NEW FS1803-16-16																	
NEW FS1803-20-20																	
NEW FS1803-24-24																	

MFS-MFS-Flange  
Code 62  
FS1805 Series

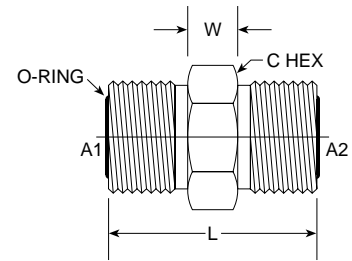


PART NO. SIZE	TUBE O.D.	ST1	ST2	L LGTH	M M.M.	M LGTH	M M.M.	W WIDTH	M M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
													S	FG	SS	B	
NEW FS1805-12-12-16																	
NEW FS1805-16-16-16																	



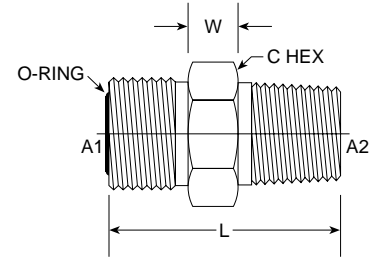
# MFS-MFS Straight FS2403 Series

SAE # 520101



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS2403-04-04	1/4	9/16-18	9/16-18	1.080	27.43	0.310	7.87	5/8	0.625	15.87	•			
FS2403-06-04	3/8 1/4	11/16-16	9/16-18	1.170	29.72	0.340	8.64	3/4	0.750	19.05	•			
FS2403-06-06	3/8	11/16-16	11/16-16	1.220	30.99	0.340	8.64	3/4	0.750	19.05	•			
FS2403-08-06	1/2 3/8	13/16-16	11/16-16	1.330	33.78	0.390	9.91	7/8	0.875	22.22	•			
FS2403-08-08	1/2	13/16-16	13/16-16	1.390	35.31	0.390	9.91	7/8	0.875	22.22	•			
FS2403-10-08	5/8 1/2	1-14	13/16-16	1.570	39.88	0.460	11.68	1 1/16	1.062	26.97	•			
FS2403-10-10	5/8	1-14	1-14	1.680	42.67	0.460	11.68	1 1/16	1.062	26.97	•			
<b>NEW</b> FS2403-12-08											•			
FS2403-12-10	3/4 5/8	1 3/16-12	1-14	1.800	45.72	0.520	13.20	1 1/4	1.250	31.75	•			
FS2403-12-12	3/4	1 3/16-12	1 3/16-12	1.850	46.99	0.520	13.20	1 1/4	1.250	31.75	•			
FS2403-16-12	1 3/4	1 7/16-12	1 3/16-12	1.920	48.77	0.560	14.22	1 1/2	1.500	38.10	•			
FS2403-16-16	1	1 7/16-12	1 7/16-12	1.940	49.28	0.560	14.22	1 1/2	1.500	38.10	•			
FS2403-20-20	1 1/4	1 11/16-12	1 11/16-12	2.020	51.31	0.640	16.26	1 3/4	1.750	44.45	•			
<b>NEW</b> FS2403-24-20											•			
FS2403-24-24	1 1/2	2-12	2-12	2.090	53.09	0.710	18.03	2 1/8	2.125	53.97	•			

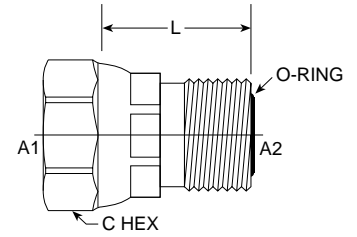
# MFS-MP Straight FS2404 Series



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS2404-04-02	1/4	9/16-18	1/8-27	1.070	27.18	0.270	6.86	5/8	0.625	15.87	•			
FS2404-04-04	1/4	9/16-18	1/4-18	1.260	32.00	0.270	6.86	5/8	0.625	15.87	•			
FS2404-04-06	1/4	9/16-18	3/8-18	1.320	33.53	0.270	6.86	3/4	0.750	19.05	•			
FS2404-04-08	1/4	9/16-18	1/2-14	1.500	38.10	0.270	6.86	7/8	0.875	22.22	•			
<b>NEW</b> FS2404-06-02											•			
FS2404-06-04	3/8	11/16-16	1/4-18	1.250	31.75	0.310	7.87	3/4	0.750	19.05	•			
FS2404-06-06	3/8	11/16-16	3/8-18	1.340	34.04	0.310	7.87	3/4	0.750	19.05	•			
FS2404-06-08	3/8	11/16-16	1/2-14	1.550	39.37	0.310	7.87	7/8	0.875	22.22	•			
FS2404-08-04	1/2	13/16-16	1/4-18	1.480	37.59	0.350	8.89	7/8	0.875	22.22	•			
FS2404-08-06	1/2	13/16-16	3/8-18	1.480	37.59	0.350	8.89	7/8	0.875	22.22	•			
FS2404-08-08	1/2	13/16-16	1/2-14	1.640	41.66	0.350	8.89	7/8	0.875	22.22	•			
FS2404-08-12	1/2	13/16-16	3/4-14	1.690	42.93	0.410	10.41	1 1/8	1.125	28.57	•			
FS2404-10-08	5/8	1-14	1/2-14	1.820	46.23	0.410	10.41	1 1/16	1.062	26.97	•			
FS2404-10-12	5/8	1-14	3/4-14	1.820	46.23	0.410	10.41	1 1/8	1.125	28.57	•			
FS2404-10-16	5/8	1-14	1-11 1/2	1.950	49.53	0.380	9.65	1 3/8	1.375	34.93	•			
FS2404-12-08	3/4	1 3/16-12	1/2-14	1.930	49.02	0.410	10.41	1 1/4	1.250	31.75	•			
FS2404-12-12	3/4	1 3/16-12	3/4-14	1.930	49.02	0.410	10.41	1 1/4	1.250	31.75	•			
FS2404-12-16	3/4	1 3/16-12	1 11-1/2	2.130	54.10	0.410	10.41	1 3/8	1.375	34.92	•			
FS2404-16-12	1	1 7/16-12	3/4-14	2.000	50.80	0.410	10.41	1 1/2	1.500	38.10	•			
FS2404-16-16	1	1 7/16-12	1 11-1/2	2.190	55.63	0.410	10.41	1 1/2	1.500	38.10	•			
FS2404-16-20	1	1 7/16-12	1 1/4-11 1/2	2.30	58.42	0.620	15.75	1 11/16	1.6875	42.86	•			
FS2404-16-24	1	1 7/16-12	1 1/2-11 1/2	2.15	54.61	0.445	11.30	2	2.000	50.80	•			
FS2404-20-16	1 1/4	1 11/16-12	1-11 1/2	2.300	58.42	.645	16.38	1 3/4	1.750	44.45	•			
FS2404-20-20	1 1/4	1 11/16-12	1 1/4-11 1/2	2.300	58.42	0.410	10.41	1 7/8	1.875	47.62	•			
FS2404-24-24	1 1/2	2-12	1 1/2-11 1/2	2.400	60.96	0.410	10.41	2 1/8	2.125	53.97	•			

# O-ring Face Seal Fittings

## FFS-MFS Tube End Reducer FS2406 Series

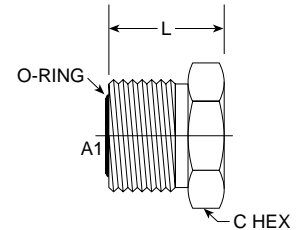


PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
									S	FG	SS	B
FS2406-06-04	3/8 1/4	11/16-16	9/16-18	0.770	19.56	13/16	0.812	20.62	•			
FS2406-08-04*	1/2 1/4	13/16-16	9/16-18	0.860	21.84	15/16	0.937	23.80	•			
FS2406-08-06	1/2 3/8	13/16-16	9/16-18	0.880	22.35	15/16	0.937	23.80	•			
FS2406-10-04*	5/8 1/4	1-14	9/16-18	0.900	22.86	1 1/8	1.125	28.57	•			
FS2406-10-06*	5/8 3/8	1-14	11/16-16	0.950	24.13	1 1/8	1.125	28.57	•			
FS2406-10-08*	5/8 1/2	1-14	13/16-16	1.020	25.91	1 1/8	1.125	28.57	•			
FS2406-12-04*	3/4 1/4	1 3/16-12	9/16-18	0.980	24.89	1 3/8	1.375	34.92	•			
NEW FS2406-12-06									•			
FS2406-12-08*	3/4 1/2	1 3/16-12	13/16-16	1.090	27.69	1 3/8	1.375	34.92	•			
FS2406-12-10	3/4 5/8	1 3/16-12	1-14	1.160	29.46	1 3/8	1.375	34.92	•			
NEW FS2406-12-16									•			
FS2406-16-08*	1 1/2	1 7/16-12	13/16-16	1.150	29.21	1 5/8	1.625	41.27	•			
FS2406-16-10*	1 5/8	1 7/16-12	1-14	1.260	32.00	1 5/8	1.625	41.27	•			
FS2406-16-12	1 3/4	1 7/16-12	1 3/16-12	1.300	33.02	1 5/8	1.625	41.27	•			
NEW FS2406-16-20									•			
FS2406-20-12*	1 1/4 3/4	1 11/16-12	1 3/16-12	1.320	33.53	1 7/8	1.875	47.62	•			
FS2406-20-16	1 1/4 1	1 11/16-12	1 7/16-12	1.510	38.35	1 7/8	1.875	47.62	•			
FS2406-20-24*	1 1/4 1 1/2	1 11/16-12	2-12	1.300	33.02	2 1/4	2.250	57.15	•			
FS2406-24-16*	1 1/2 1	1 7/16-12	2-12	1.230	31.24	2 1/4	2.250	57.15	•			
FS2604-24-20*	1 1/2 1 1/4	1 11/16-12	2-12	1.350	34.29	2 1/4	2.250	57.15	•			

\*Note: Two-Piece Assembly

## MFS Plug FS2408 Series

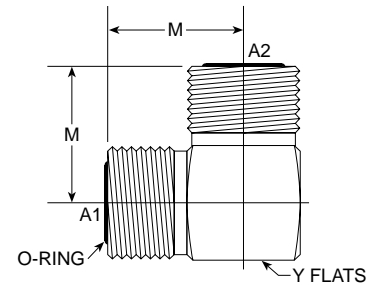
SAE # 520109



PART NO. SIZE	A1 THREAD	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
							S	FG	SS	B
FS2408-04	9/16-18	0.660	16.76	5/8	0.625	15.87	•			
FS2408-06	11/16-16	0.750	19.05	3/4	0.750	19.05	•			
FS2408-08	13/16-16	0.850	21.59	7/8	0.875	22.22	•			
FS2408-10	1-14	1.020	25.91	1 1/16	1.062	26.97	•			
FS2408-12	1 3/16-12	1.080	27.43	1 1/4	1.250	31.75	•			
FS2408-16	1 7/16-12	1.090	27.69	1 1/2	1.500	38.10	•			
FS2408-20	1 11/16-12	1.090	27.69	1 3/4	1.750	44.45	•			
FS2408-24	2-12	1.090	27.69	2 1/8	2.125	53.97	•			

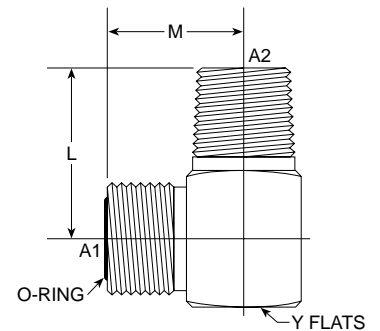
# MFS-MFS 90° FS2500 Series

SAE # 520201



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
									S	FG	SS	B
FS2500-04-04	1/4	9/16-18	9/16-18	0.850	21.59	9/16	0.562	14.27	•	•		
FS2500-06-06	3/8	11/16-16	11/16-16	0.980	24.89	3/4	0.750	19.05	•	•		
FS2500-08-08	1/2	13/16-16	13/16-16	1.100	27.94	3/4	0.750	19.05	•	•		
FS2500-10-10	5/8	1-14	1-14	1.310	33.27	1 1/16	1.062	26.97	•	•		
FS2500-12-12	3/4	1 3/16-12	1 3/16-12	1.470	37.34	1 3/16	1.188	30.17	•	•		
FS2500-16-16	1	1 7/16-12	1 7/16-12	1.640	41.66	1 7/16	1.438	36.52	•	•		
FS2500-20-20	1 1/4	1 11/16-12	1 11/16-12	1.760	44.70	1 5/8	1.625	41.27	•	•		
FS2500-24-24	1 1/2	2-12	2-12	1.920	48.77	1 7/8	1.875	47.62	•	•		

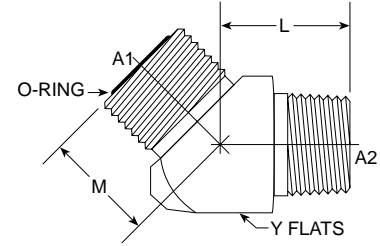
# MFS-MP 90° FS2501 Series



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS2501-04-02	1/4	9/16-18	1/8-27	0.800	20.32	0.850	21.59	9/16	0.562	14.27	•	•		
FS2501-04-04	1/4	9/16-18	1/4-18	1.120	28.45	0.850	21.59	9/16	0.562	14.27	•	•		
FS2501-04-06	1/4	9/16-18	3/8-18	1.220	30.99	0.970	24.64	3/4	0.750	19.05	•	•		
FS2501-06-04	3/8	11/16-16	1/4-18	1.090	27.69	0.980	24.89	3/4	0.750	19.05	•	•		
FS2501-06-06	3/8	11/16-16	3/8-18	1.220	30.99	0.980	24.89	3/4	0.750	19.05	•	•		
FS2501-06-08	3/8	11/16-16	3/8-18	1.470	37.34	1.150	29.21	7/8	0.875	22.22	•	•		
FS2501-08-04	1/2	13/16-16	1/4-18	1.220	30.99	1.100	27.94	3/4	0.750	19.05	•	•		
FS2501-08-06	1/2	13/16-16	3/8-18	1.220	30.99	1.100	27.94	3/4	0.750	19.05	•	•		
FS2501-08-08	1/2	13/16-16	1/2-14	1.470	37.34	1.100	27.94	1 7/8	1.875	47.62	•	•		
FS2501-08-12	1/2	13/16-16	3/4-14	1.470	37.34	1.320	33.53	1 1/16	1.062	26.97	•	•		
FS2501-10-08	5/8	1-14	1/2-14	1.470	37.34	1.310	33.27	1 1/16	1.062	26.97	•	•		
FS2501-10-12	5/8	1-14	3/4-14	1.590	40.39	1.410	35.81	1 3/16	1.188	30.17	•	•		
FS2501-12-08	3/4	1 3/16-12	1/2-14	1.590	40.39	1.470	37.34	1 3/16	1.188	30.17	•	•		
FS2501-12-12	3/4	1 3/16-12	3/4-14	1.590	40.39	1.470	37.34	1 3/16	1.188	30.17	•	•		
FS2501-12-16	3/4	1 3/16-12	1-11 1/2	1.970	50.04	1.620	41.15	1 5/16	1.312	33.32	•	•		
FS2501-16-12	1	1 7/16-12	3/4-14	1.780	45.21	1.64	41.66	1 7/16	1.438	36.53	•	•		
FS2501-16-16	1	1 7/16-12	1-11 1/2	1.970	50.04	1.640	41.66	1 7/16	1.438	36.52	•	•		
FS2501-16-20	1	1 7/16-12	1 1/4-11 1/2	2.380	60.45	1.760	44.70	1 5/8	1.625	41.27	•	•		
FS2501-20-16	1 1/4	1 11/16-12	1-11 1/2	2.350	59.69	1.76	44.70	1 5/8	1.625	41.28	•	•		
FS2501-20-20	1 1/4	1 11/16-12	1 1/4-11 1/2	2.380	60.45	1.760	44.70	1 5/8	1.625	41.27	•	•		
FS2501-24-24	1 1/2	2-12	1 1/2-11 1/2	2.640	67.06	1.920	48.77	1 7/8	1.875	47.62	•	•		

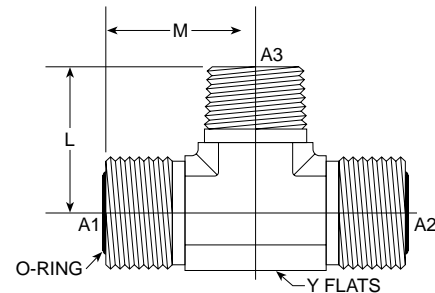
# O-ring Face Seal Fittings

## MFS-MP 45° FS2503 Series



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS2503-04-04	1/4	9/16-18	1/4-18	1.020	25.91	0.630	16.00	9/16	0.562	14.27	•	•		
FS2503-06-04	3/8	11/16-16	1/4-18	0.870	22.10	0.740	18.80	3/4	0.750	19.05	•	•		
FS2503-06-06	3/8	11/16-16	3/8-18	0.930	23.62	0.850	21.59	3/4	0.750	19.05	•	•		
FS2503-08-06	1/2	13/16-16	3/8-18	0.930	23.62	0.910	23.11	3/4	0.750	19.05	•	•		
FS2503-08-08	1/2	13/16-16	1/2-14	1.170	29.72	0.890	22.61	3/4	0.750	19.05	•	•		
FS2503-10-08	5/8	1-14	1/2-14	1.175	29.84	0.920	23.37	1 1/16	1.062	26.97	•	•		
FS2503-12-08	3/4	1 3/16-12	1/2-14	1.300	33.02	1.020	25.91	1 3/16	1.188	30.17	•	•		
FS2503-12-12	3/4	1 3/16-12	3/4-14	1.200	30.48	1.110	28.19	1 3/16	1.188	30.17	•	•		
FS2503-16-16	1	1 7/16-12	1-11 1/2	1.560	39.62	1.180	29.97	1 7/16	1.438	36.52	•	•		
FS2503-20-20	1 1/4	1 11/16-12	1 1/4-11 1/2	1.670	42.42	1.260	32.00	1 5/8	1.625	41.28	•	•		

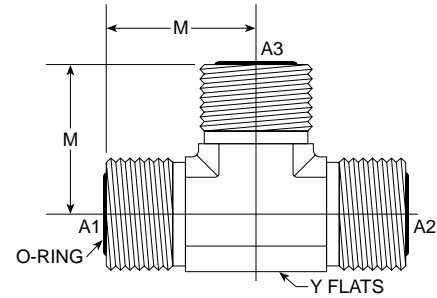
## MFS-MFS-MP Tee FS2601 Series



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	A3 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
FS2601-06-06-04	3/8	11/16-16	11/16-16	1/4-18	1.090	27.64	0.980	24.89	3/4	0.750	19.05	•			
FS2601-06-06-06	3/8	9/16-18	9/16-18	3/8-18	1.195	30.35	1.013	25.73	3/4	0.750	19.05	•			
FS2601-08-08-08	1/2	13/16-16	13/16-16	1/2-14	1.470	37.34	1.100	27.94	7/8	0.875	22.22	•			
FS2601-12-12-12	3/4	1 3/16-12	1 3/16-12	3/4-14	1.59	40.39	1.47	37.34	1 3/16	1.188	30.18	•	•		

# MFS-MFS-MFS Tee FS2603 Series

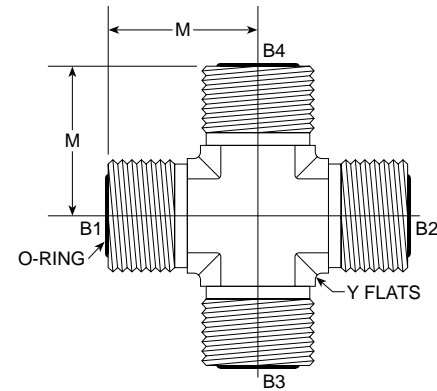
SAE # 520401



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	A3 THREAD	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
										S	FG	SS	B
FS2603-04-04-04	1/4	9/16-18	9/16-18	9/16-18	0.850	21.59	9/16	0.562	14.27	•	•		
FS2603-06-06-06	3/8	11/16-16	11/16-16	11/16-16	0.980	24.89	3/4	0.750	19.05	•	•		
FS2603-08-08-08	1/2	13/16-16	13/16-16	13/16-16	1.100	27.94	3/4	0.750	19.05	•	•		
FS2603-10-10-10	5/8	1-14	1-14	1-14	1.310	33.27	1 1/16	1.062	26.97	•	•		
FS2603-12-12-12	3/4	1 3/16-12	1 3/16-12	1 3/16-12	1.470	37.34	1 3/16	1.188	30.17	•	•		
FS2603-16-16-16	1	1 7/16-12	1 7/16-12	1 7/16-12	1.640	41.66	1 7/16	1.438	36.52	•	•		
FS2603-20-20-20	1 1/4	1 11/16-12	1 11/16-12	1 11/16-12	1.760	44.70	1 5/8	1.625	41.27	•	•		
FS2603-24-24-24	1 1/2	2-14	2-14	2-14	1.920	48.77	1 7/8	1.875	47.62	•	•		

# MFS-MFS-MFS-MFS Cross FS2650 Series

SAE # 520501

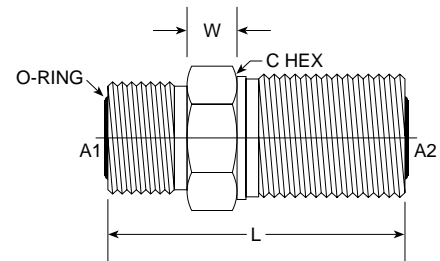


PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	A3 THREAD	A4 THREAD	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS2650-04-04-04-04	1/4	9/16-12	9/16-12	9/16-12	9/16-12	0.850	21.59	9/16	0.562	14.27	•	•		
FS2650-06-06-06-06	3/8	11/16-16	11/16-16	11/16-16	11/16-16	0.980	24.89	3/4	0.750	19.05	•	•		
FS2650-08-08-08-08	1/2	13/16-16	13/16-16	13/16-16	13/16-16	1.100	27.94	3/4	0.750	19.05	•	•		
FS2650-10-10-10-10	5/8	1-14	1-14	1-14	1-14	1.310	33.27	1 1/16	1.062	26.97	•	•		
FS2650-12-12-12-12	3/4	1 3/16-12	1 3/16-12	1 3/16-12	1 3/16-12	1.470	37.34	1 3/16	1.188	30.17	•	•		
FS2650-16-16-16-16	1	1 7/16-12	1 7/16-12	1 7/16-12	1 7/16-12	1.640	41.66	1 7/16	1.438	36.52	•	•		
FS2650-20-20-20-20	1 1/4	1 11/16-12	1 11/16-12	1 11/16-12	1 11/16-12	1.760	44.71	1 5/8	1.625	41.27	•	•		
FS2650-24-24-24-24	1 1/2	2-12	2-12	2-12	2-12	1.920	48.77	1 7/8	1.875	47.62	•	•		

# O-ring Face Seal Fittings

## MFS-MFS Bulkhead Union FS2700 Series

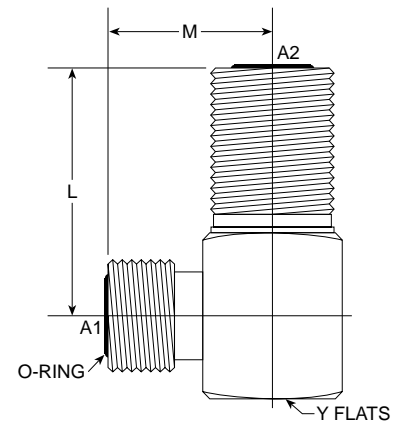
SAE # 520601



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	L LGTH M.M.	W WIDTH M.M.	C HEX	C HEX	M.M.	PLATE MAX	Standard Material From Stock					
										S	FG	SS	B		
FS2700-04-04	1/4	9/16-18	9/16-18	1.090	27.69	0.270	6.86	13/16	0.812	20.63	1/2	•			
FS2700-06-06	3/8	11/16-16	11/16-16	2.090	53.09	0.310	7.87	1	1.000	25.40	35/64	•			
FS2700-08-08	1/2	13/16-16	13/16-16	2.300	58.42	0.350	8.89	1 1/4	1.250	31.75	35/64	•			
FS2700-10-10	5/8	1-14	1-14	2.620	66.55	0.410	10.41	1 5/16	1.312	33.32	35/64	•			
FS2700-12-12	3/4	1 3/16-12	1 3/16-12	2.720	69.09	0.410	10.41	1 1/2	1.500	38.10	35/64	•			
FS2700-16-16	1	1 7/16-12	1 7/16-12	2.760	70.10	0.410	10.41	1 3/4	1.750	44.45	35/64	•			
FS2700-20-20	1 1/4	1 11/16-12	1 11/16-12	2.760	70.10	0.410	10.41	2	2.000	50.80	35/64	•			
FS2700-24-24	1 1/2	2-14	2-14	2.760	70.10	0.410	10.41	2 3/8	2.375	60.32	35/64	•			

## MFS-MFS Bulkhead 90° FS2701 Series

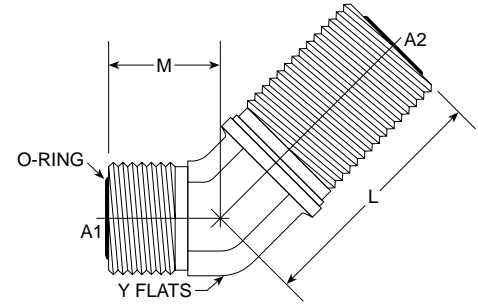
SAE # 520701



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	L LGTH M.M.	M LGTH M.M.	Y FLATS	Y FLATS	M.M.	PLATE MAX	Standard Material From Stock					
										S	FG	SS	B		
FS2701-04-04	1/4	9/16-12	9/16-12	1.850	46.99	0.890	22.61	9/16	0.562	14.27	1/2	•	•		
FS2701-06-06	3/8	11/16-16	11/16-16	2.050	52.07	1.020	25.91	3/4	0.750	19.05	35/64	•	•		
FS2701-06-08	3/8	11/16-12	13/16-12	2.180	55.37	1.08	27.43	3/4	0.750	19.05	35/64	•	•		
FS2701-08-08	1/2	13/16-16	13/16-16	2.180	55.37	1.140	28.96	3/4	0.750	19.05	35/64	•	•		
NEW FS2701-08-10												•	•		
FS2701-10-10	5/8	1-14	1-14	2.480	62.99	1.360	34.54	1 1/16	1.062	26.97	35/64	•	•		
FS2701-12-12	3/4	1 3/16-12	1 3/16-12	2.650	67.31	1.520	38.61	1 3/16	1.188	30.17	35/64	•	•		
FS2701-16-16	1	1 7/16-12	1 7/16-12	2.800	71.12	1.670	42.42	1 7/16	1.438	36.52	35/64	•	•		
FS2701-20-20	1 1/4	1 11/16-12	1 11/16-12	2.970	75.44	1.790	45.47	1 5/8	1.625	41.27	35/64	•	•		
FS2701-24-24	1 1/2	2-12	2-12	3.130	79.50	1.950	49.53	1 7/8	1.875	47.62	35/64	•	•		

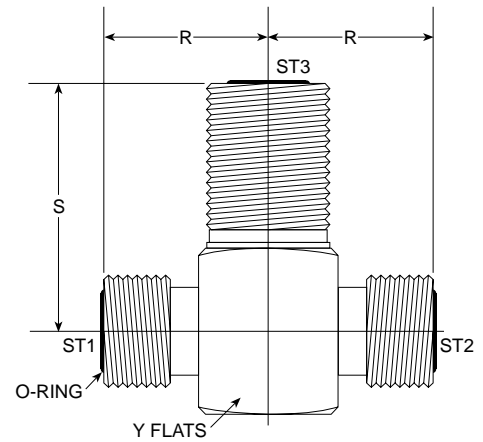
# MFS-MFS Bulkhead 45° FS2702 Series

SAE# 520801



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	PLATE MAX	Standard Material From Stock			
												S	FG	SS	B
FS2702-04-04	1/4	9/16-18	9/16-18	1.730	43.94	0.630	16.00	9/16	0.562	14.27	1/2	•	•		
FS2702-06-06	3/8	11/16-16	11/16-16	1.910	48.51	0.740	18.80	3/4	0.750	19.05	35/64	•	•		
FS2702-08-08	1/2	13/16-16	13/16-16	2.010	51.05	0.800	20.32	3/4	0.750	19.05	35/64	•	•		
<b>NEW</b> FS2702-10-08															
FS2702-10-10	5/8	1-14	1-14	2.230	56.64	0.920	23.37	1 1/16	1.062	26.97	35/64	•	•		
FS2702-12-12	3/4	1 3/16-12	1 3/16-12	2.390	60.71	1.020	25.91	1 3/16	1.188	30.17	35/64	•	•		
FS2702-16-16	1	1 7/16-12	1 7/16-12	2.570	65.28	1.180	29.97	1 7/16	1.438	36.52	35/64	•	•		
FS2702-20-20	1 1/4	1 11/16-12	1 11/16-12	2.640	67.06	1.260	32.00	1 5/8	1.625	41.27	35/64	•	•		
FS2704-24-24	1 1/2	2-14	2-14	2.640	67.06	1.450	36.83	1 7/8	1.875	47.62	35/64	•	•		

# MFS-MFS-Bulkhead Tee FS2703 Series

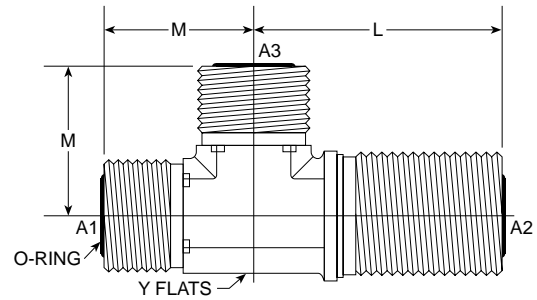


PART NO. SIZE	TUBE O.D.	ST1 THREAD	ST2 THREAD	ST3 THREAD	S LGTH	M.M.	R LGTH	M.M.	Y FLATS	Y FLATS	M.M.	PLATE MAX	Standard Material From Stock			
													S	FG	SS	B
FS2703-04-04-04	1/4	9/16-18	9/16-18	9/16-18	1.850	46.99	0.89	22.61	9/16	0.562	14.27		•			
FS2703-06-06-06	3/8	11/16-16	11/16-16	11/16-16	2.050	52.07	1.02	25.91	3/4	0.750	19.05		•			
FS2703-08-08-08	1/2	13/16-12	13/16-12	13/16-12	2.180	55.37	1.14	28.96	3/4	0.750	19.05		•			
FS2703-12-12-12	3/4	1 3/16-12	1 3/16-12	1 3/16-12	2.650	67.31	1.52	38.61	1 3/16	1.188	30.18		•			

# O-ring Face Seal Fittings

## MFS-MFS-MFS Tee FS2704 Series

SAE# 520201

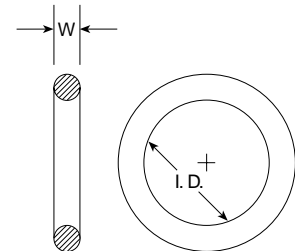


PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	A3 THREAD	L LGTH	M M.M.	M LGTH	Y FLATS	Y FLATS	M.M.	PLATE MAX	Standard Material From Stock				
												S	FG	SS	B	
FS2704-04-04-04	1/4	9/16-12	9/16-12	9/16-12	1.850	46.99	0.890	22.61	9/16	0.562	14.27	1/2	•	•		
FS2704-06-06-06	3/8	11/16-16	11/16-16	11/16-16	2.050	52.07	1.020	25.91	3/4	0.750	19.05	35/64	•	•		
FS2704-08-08-08	1/2	13/16-16	13/16-16	13/16-16	2.180	55.37	1.140	28.96	3/4	0.750	19.05	35/64	•	•		
FS2704-10-10-10	5/8	1-14	1-14	1-14	2.480	62.99	1.360	34.55	1 1/16	1.062	26.97	35/64	•	•		
FS2704-12-12-12	3/4	1 3/16-12	1 3/16-12	1 3/16-12	2.650	67.31	1.520	38.61	1 3/16	1.188	30.17	35/64	•	•		
FS2704-16-16-16	1	1 7/16-12	1 7/16-12	1 7/16-12	2.800	71.12	1.670	42.42	1 7/16	1.438	36.52	35/64	•	•		
FS2704-20-20-20	1 1/4	1 11/16-12	1 11/16-12	1 11/16-12	2.970	75.44	1.790	45.47	1 5/8	1.625	41.27	35/64	•	•		

PART NO. SIZE	TUBE O.D.	W WIDTH	I.D.	M.M.
FS4000-04	1/4	0.070	0.301	7.64
FS4000-06	3/8	0.070	0.364	9.25
FS4000-08	1/2	0.070	0.489	12.42
FS4000-10	5/8	0.070	0.614	15.60
FS4000-12	3/4	0.070	0.739	18.77
FS4000-16	1	0.070	0.926	23.52
FS4000-20	1 1/4	0.070	1.176	29.87
FS4000-24	1 1/2	0.070	1.489	37.82

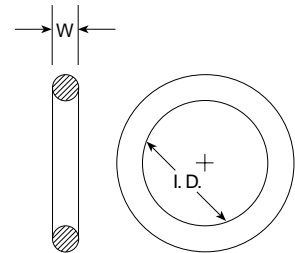
## Buna O Ring FS4000 Series

SAE# J515 TYPE CH



PART NO. SIZE	TUBE O.D.	W WIDTH	I.D.	M.M.
NEW FS4001-04				
NEW FS4001-06				
NEW FS4001-08				
NEW FS4001-10				
NEW FS4001-12				
NEW FS4001-16				
NEW FS4001-20				
NEW FS4001-24				

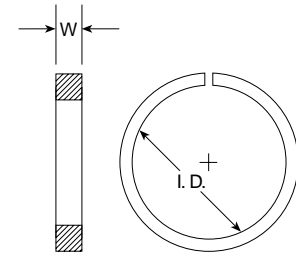
## Viton O Ring FS4001 Series





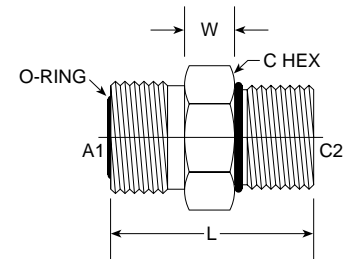
PART NO. SIZE	TUBE O.D.	W WIDTH	I.D.	M.M.
FS6001-04	1/4	0.047	0.260	6.60
FS6001-06	3/8	0.071	0.389	9.88
FS6001-08	1/2	0.071	0.515	13.08
FS6001-10	5/8	0.071	0.642	16.31
FS6001-12	3/4	0.079	0.764	19.41
FS6001-16	1	0.079	1.020	25.91
FS6001-20	1-1/4	0.079	1.264	32.11

## Silver Braze Ring FS6001 Series



## MFS-MORB Straight FS6400-O Series

SAE # 520120

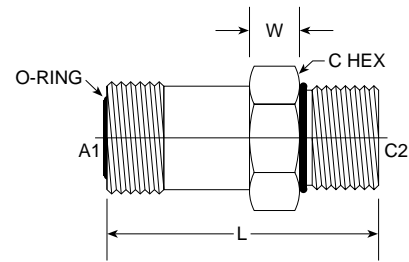


PART NO. SIZE	TUBE O.D.	A1 THREAD	C2 THREAD	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS6400-04-04-O	1/4	9/16-18	7/16-20	1.130	28.70	0.310	7.87	5/8	0.625	15.87	•			
FS6400-04-05-O	1/4	9/16-18	1/2-20	1.133	28.78	0.310	7.87	5/8	0.625	15.88	•			
FS6400-04-06-O	1/4	9/16-18	9/16-18	1.200	30.48	0.340	8.64	3/4	0.750	19.05	•			
NEW FS6400-04-08-O	1/4	9/16-18	3/4-16	1.321	33.55	0.390	9.91	7/8	0.875	22.23	•			
NEW FS6400-04-10-O											•			
NEW FS6400-04-12-O	1/4	9/16-18	1 1/16-12	1.638	41.61	0.520	13.21	1 1/4	1.250	31.75	•			
NEW FS6400-06-04-O	3/8	11/16-16	7/16-20	1.370	34.80	0.340	8.64	3/4	0.750	19.05	•			
NEW FS6400-06-05-O											•			
NEW FS6400-06-06-O	3/8	11/16-16	9/16-18	1.260	32.00	0.340	8.64	3/4	0.750	19.05	•			
NEW FS6400-06-08-O	3/8	11/16-18	3/4-16	1.380	35.05	0.390	9.91	7/8	0.875	22.22	•			
NEW FS6400-06-10-O											•			
NEW FS6400-06-16-O											•			
NEW FS6400-08-06-O											•			
NEW FS6400-08-08-O	1/2	13/16-16	3/4-16	1.440	36.58	0.390	9.91	7/8	0.875	22.22	•			
NEW FS6400-08-10-O	1/2	13/16-16	7/8-14	1.590	40.39	0.460	11.68	1	1.000	25.40	•			
NEW FS6400-08-12-O	1/2	13/16-16	1 1/16-12	1.750	44.45	0.520	13.21	1 1/4	1.250	31.75	•			
NEW FS6400-08-16-O											•			
NEW FS6400-10-08-O	5/8	1-14	3/4-16	1.780	45.21	0.460	11.68	1 1/16	1.062	26.97	•			
NEW FS6400-10-10-O	5/8	1-14	7/8-14	1.700	43.18	0.460	11.68	1 1/16	1.062	26.97	•			
NEW FS6400-10-12-O	5/8	1-14	1 1/16-12	1.120	28.45	0.520	13.21	1 1/4	1.250	31.75	•			
NEW FS6400-12-08-O	3/4	1 3/16-12	3/4-16	1.910	48.51	0.520	13.21	1 1/4	1.250	31.75	•			
NEW FS6400-12-10-O	3/4	1 3/16-12	7/8-14	1.990	50.55	0.520	13.21	1 1/4	1.250	31.75	•			
NEW FS6400-12-12-O	3/4	1 3/16-12	1 1/16-12	1.910	48.51	0.520	13.21	1 1/4	1.250	31.75	•			
NEW FS6400-12-16-O	3/4	1 3/16-12	1 5/16-12	1.960	49.78	0.520	13.21	1 1/2	1.125	28.57	•			
NEW FS6400-16-10-O											•			
NEW FS6400-16-12-O	1	1 7/16-12	1 1/16-12	2.200	55.88	0.560	14.22	1 1/2	1.125	28.57	•			
NEW FS6400-16-16-O	1	1 7/16-12	1 5/16-12	1.980	50.29	0.560	14.22	1 1/2	1.125	28.57	•			
NEW FS6400-16-20-O	1	1 7/16-12	1 5/8-12	2.060	52.32	0.640	16.26	1 7/8	1.875	47.62	•			
NEW FS6400-20-16-O	1 1/4	1 11/16-16	1 5/16-12	2.280	57.91	0.640	16.26	1 7/8	1.875	47.62	•			
NEW FS6400-20-20-O	1 1/4	1 11/16-16	1 5/8-12	2.060	52.32	0.640	16.26	1 7/8	1.875	47.62	•			
NEW FS6400-20-24-O	1 1/4	1 11/16-12	1 7/8-12	2.128	54.05	0.710	18.03	2 1/8	2.125	53.98	•			
NEW FS6400-24-20-O											•			
NEW FS6400-24-24-O	1 1/2	2-12	1 7/8-12	2.130	54.10	0.710	18.03	2 1/8	2.125	53.97	•			

# O-ring Face Seal Fittings

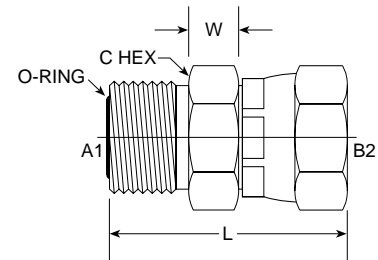
## MFS-MORB Straight Long FS6400-L-O Series

SAE # 520122



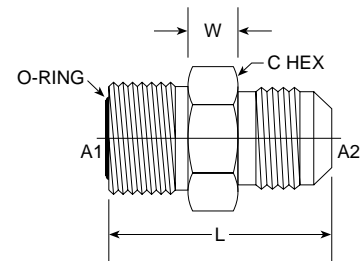
PART NO. SIZE	TUBE O.D.	A1 THREAD	C2 THREAD	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS6400-L-04-04-O	1/4	9/16-18	7/16-20	2.060	52.32	0.310	7.87	5/8	0.625	15.87	•			
FS6400-L-06-06-O	3/8	11/16-16	9/16-18	2.270	57.66	0.340	8.64	3/4	0.750	19.05	•			
FS6400-L-08-08-O	1/2	13/16-16	3/4-16	2.680	68.07	0.390	9.91	7/8	0.875	22.22	•			
FS6400-L-10-10-O	5/8	1-14	7/8-14	3.130	79.50	0.460	11.69	1 1/16	1.062	26.97	•			
FS6400-L-12-12-O	3/4	1 3/16-12	1 1/16-12	3.760	95.50	0.520	13.21	1 1/4	1.250	31.75	•			
FS6400-L-16-16-O	1	1 7/8-12	1 5/16-12	4.140	105.16	0.560	14.23	1 1/2	1.125	28.57	•			
FS6400-L-20-20-O	1 1/4	1 11/16-16	1 5/8-12	4.760	120.90	0.640	16.26	1 7/8	1.875	47.62	•			
FS6400-L-24-24-O	1 1/2	2-12	1 7/8-12	5.260	133.60	0.710	18.03	2 1/8	2.125	53.97	•			

## MFS-FJS Straight FS6402 Series



PART NO. SIZE	TUBE O.D.	A1 THREAD	B2 THREAD	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS6402-04-04	1/4	9/16-18	7/16-20	1.350	34.29	0.310	7.87	5/8	0.625	15.87	•			
FS6402-06-06	3/8	11/16-16	9/16-18	1.540	39.12	0.340	8.64	3/4	0.750	19.05	•			
FS6402-08-08	1/2	13/16-16	3/4-16	1.720	43.69	0.390	9.91	7/8	0.875	22.22	•			
FS6402-10-10	5/8	1-14	7/8-14	2.000	50.80	0.460	11.68	1 1/16	1.062	26.97	•			
FS6402-12-12	3/4	1 3/16-12	1 1/16-12	2.250	57.15	0.520	13.21	1 1/4	1.250	31.75	•			
FS6402-16-16	1	1 7/16-12	1 5/16-12	2.375	60.33	0.550	13.97	1 1/2	1.500	38.10	•			
NEW FS6402-20-20											•			

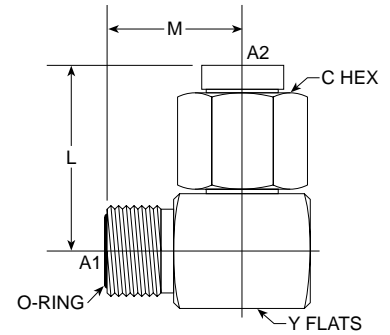
## MFS-MJ Straight FS6403 Series



PART NO. SIZE	TUBE O.D.	A1 THREAD	B2 THREAD	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS6403-04-04	1/4	9/16-18	7/16-20	1.250	31.75	0.310	7.87	5/8	0.625	15.87	•			
FS6403-06-06	3/8	11/16-16	9/16-18	1.300	33.02	0.310	7.87	3/4	0.750	19.05	•			
FS6403-08-08	1/2	13/16-16	3/4-16	1.550	39.37	0.390	9.90	7/8	0.875	22.22	•			
FS6403-10-10	5/8	1-14	7/8-14	1.750	44.45	0.390	9.90	1 1/16	1.062	26.97	•			
FS6403-12-12	3/4	1 3/16-12	1 1/16-12	1.950	49.53	0.390	9.90	1 1/4	1.250	31.75	•			
NEW FS6403-16-16											•			

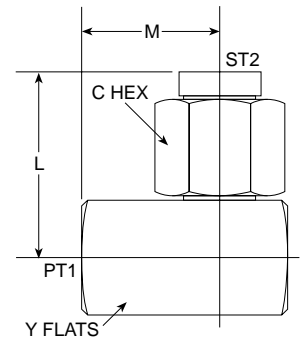
# MFS-FFSS 90° FS6500 Series

SAE# 520221



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	L LGTH M.M.	M LGTH M.M.	C HEX	C HEX	Y FLATS M.M.	Y FLATS	Standard Material From Stock							
										S	FG	SS	B				
FS6500-04-04	1/4	9/16-18	9/16-18	1.040	26.42	0.850	21.59	11/16	0.688	17.47	9/16	0.562	14.27	•	•		
FS6500-06-06	3/8	11/16-16	11/16-16	1.150	29.21	0.980	24.89	13/16	0.812	20.62	3/4	0.750	19.05	•	•		
FS6500-08-08	1/2	13/16-16	13/16-16	1.490	37.85	0.850	21.59	15/16	0.938	23.82	3/4	0.750	19.05	•	•		
FS6500-10-10	5/8	1-14	1-14	1.620	41.15	0.980	24.89	1 1/8	1.125	28.57	1 1/16	1.062	26.97	•	•		
FS6500-12-12	3/4	1 3/16-12	1 3/16-12	2.290	58.17	0.850	21.59	1 3/8	1.375	34.92	1 3/16	1.188	30.17	•	•		
FS6500-16-16	1	1 7/16-12	1 7/16-12	2.410	61.21	0.980	24.89	1 5/8	1.625	41.27	1 7/16	1.438	36.52	•	•		
FS6500-20-20	1 1/4	1 11/16-12	1 11/16-12	2.290	58.17	0.850	21.59	1 7/8	1.875	47.62	1 5/8	1.625	41.27	•	•		
FS6500-24-24	1 1/2	2-12	2-12	2.410	61.21	0.980	24.89	2 1/2	2.250	57.15	1 7/8	1.875	47.62	•	•		

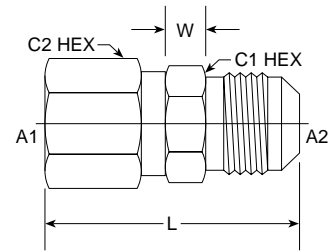
# FP-FFSS 90° FS6503 Series



PART NO. SIZE	TUBE O.D.	PT1 THREAD	ST2 THREAD	L LGTH M.M.	W WIDTH M.M.	C HEX	C HEX	Y FLATS M.M.	Y FLATS	Standard Material From Stock							
										S	FG	SS	B				
NEW FS6503-04-04																	
NEW FS6503-06-06																	

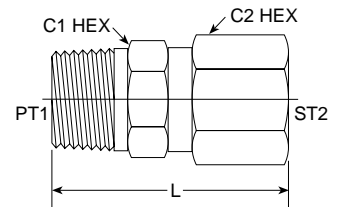
# O-ring Face Seal Fittings

## FFSS-MJ Straight FS6504 Series



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	L LGTH	W		C1 HEX	C1 HEX	C2 HEX	C2 HEX	M.M.	Standard Material From Stock					
					M.M.	WIDTH M.M.						S	FG	SS	B		
FS6504-04-04	1/4	9/16-18	7/16-20	1.500	38.10	0.270	6.86	1/2	0.500	12.70	11/16	0.688	17.47	•			
FS6504-06-06	3/8	11/16-16	9/16-18	1.760	44.70	0.270	6.86	5/8	0.625	15.87	13/16	0.812	20.62	•			
FS6504-08-04	1/2	13/16-16	7/16-20	2.524	64.11	0.350	8.89	3/4	0.750	19.05	15/16	0.937	23.81	•			
FS6504-08-08	1/2	13/16-16	3/4-16	1.900	48.26	0.350	8.89	13/16	0.812	20.62	15/16	0.937	23.80	•			
FS6504-10-04	5/8	1-14	7/16-20	2.670	67.82	0.370	9.40	7/8	0.880	22.22	1 1/8	1.125	28.58	•			
FS6504-10-10	5/8	1-14	7/8-14	2.300	58.42	0.350	8.89	15/16	0.937	23.80	1 1/4	1.125	28.57	•			
FS6504-12-04	3/4	1 3/16-12	7/16-20	2.916	74.07	0.406	10.31	1 1/8	1.130	28.575	1 3/8	1.375	34.93	•			
NEW FS6504-12-12														•			
FS6504-16-04	1	1 3/16-12	7/16-20	3.115	79.12	0.400	10.21	1 3/8	1.375	34.93	1 5/8	1.625	41.28	•			
FS6504-16-16	3/4	1 7/16-12	1 5/16-12	2.700	68.58	0.410	10.41	1 3/8	1.375	34.92	1 5/8	1.625	41.27	•			
FS6504-20-20	1 1/4	1 11/16-12	1 11/16-12	3.350	85.09	0.410	10.41	1 11/16	1.688	42.87	1 7/8	1.875	47.62	•			

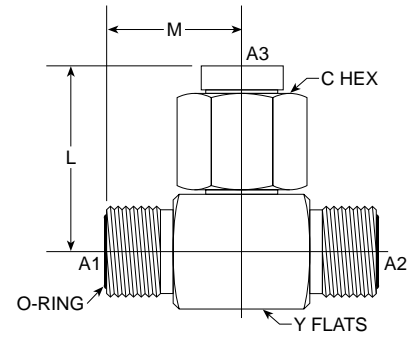
## MP-FFSS Straight FS6505 Series



PART NO. SIZE	TUBE O.D.	PT1 THREAD	ST2 THREAD	L LGTH	W		C1 HEX	C1 HEX	C2 HEX	C2 HEX	M.M.	Standard Material From Stock					
					M.M.	WIDTH M.M.						S	FG	SS	B		
NEW FS6505-04-06																	

# MFS-MFS-FFSS Branch Tee FS6600 Series

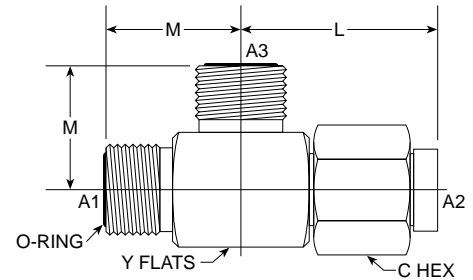
SAE # 520433



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	A3 THREAD	L LGTH M.M.	M LGTH M.M.	C HEX	C HEX	C M.M.	Y FLATS	Y FLATS	Y M.M.	Standard Material From Stock					
													S	FG	SS	B		
FS6600-04-04-04	1/4	9/16-18	9/16-18	9/16-18	1.040	26.42	0.850	21.59	11/16	0.688	17.47	9/16	0.562	14.27	•	•		
FS6600-06-06-06	3/8	11/16-16	11/16-16	11/16-16	1.150	29.21	0.980	24.89	13/16	0.812	20.62	3/4	0.750	19.05	•	•		
FS6600-08-08-08	1/2	13/16-16	13/16-16	13/16-16	1.490	37.85	0.850	21.59	15/16	0.937	23.80	3/4	0.750	19.05	•	•		
FS6600-10-10-10	5/8	1-14	1-14	1-14	1.620	41.15	0.850	21.59	1 1/8	1.125	28.57	1 1/16	1.062	26.97	•	•		
FS6600-12-12-12	3/4	1 3/16-12	1 3/16-12	1 3/16-12	2.290	58.17	0.850	21.59	1 3/8	1.375	34.92	1 3/16	1.188	30.17	•	•		
FS6600-16-16-16	1	1 7/16-12	1 7/16-12	1 7/16-12	2.410	61.21	0.980	24.89	1 5/8	1.625	41.27	1 7/16	1.438	36.52	•	•		
FS6600-20-20-20	1 1/4	1 11/16-12	1 11/16-12	1 11/16-12	2.290	58.17	0.850	21.59	1 7/8	1.875	47.62	1 5/8	1.625	41.27	•	•		
FS6600-24-24-24	1 1/2	2-12	2-12	2-12	2.410	61.21	0.980	24.89	2 1/4	2.250	57.15	1 7/8	1.875	47.62	•	•		

# MFS-FFSS-MFS Tee FS6602 Series

SAE # 520432

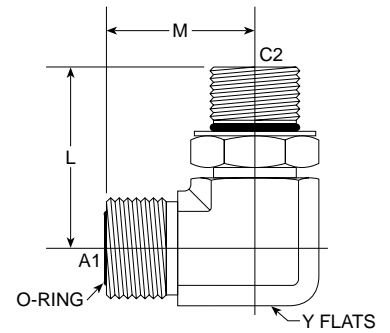


PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	A3 THREAD	L LGTH M.M.	M LGTH M.M.	C HEX	C HEX	C M.M.	Y FLATS	Y FLATS	Y M.M.	Standard Material From Stock					
													S	FG	SS	B		
FS6602-04-04-04	1/4	9/16-18	9/16-18	9/16-18	1.040	26.42	0.850	21.59	11/16	0.688	17.47	9/16	0.562	14.27	•	•		
FS6602-06-06-06	3/8	11/16-16	11/16-16	11/16-16	1.150	29.21	0.980	24.89	13/16	0.812	20.62	3/4	0.750	19.05	•	•		
FS6602-08-08-08	1/2	13/16-16	13/16-16	13/16-16	1.490	37.85	1.100	27.94	15/16	0.937	23.80	3/4	0.750	19.05	•	•		
FS6602-10-10-10	5/8	1-14	1-14	1-14	1.620	41.15	1.310	33.27	1 1/4	1.250	31.75	1 1/16	1.062	26.97	•	•		
FS6602-12-12-12	3/4	1 3/16-12	1 3/16-12	1 3/16-12	1.820	46.23	1.470	37.34	1 3/8	1.375	34.92	1 3/16	1.188	30.17	•	•		
FS6602-16-16-16	1	1 7/16-12	1 7/16-12	1 7/16-12	2.100	53.34	1.640	41.66	1 5/8	1.625	41.27	1 7/16	1.438	36.52	•	•		
FS6602-20-20-20	1 1/4	1 11/16-12	1 11/16-12	1 11/16-12	2.290	58.17	1.760	44.70	1 7/8	1.875	47.62	1 5/8	1.625	41.27	•	•		
FS6602-24-24-24	1 1/2	2-12	2-12	2-12	2.410	61.21	1.920	48.77	2 1/4	2.250	57.15	1 7/8	1.875	47.62	•	•		

# O-ring Face Seal Fittings

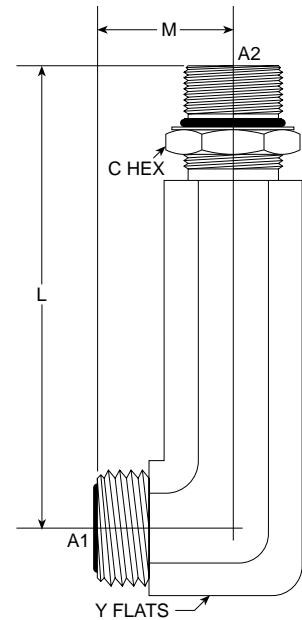
## MFS-MAORB 90° FS6801-NWO Series

SAE # 520220



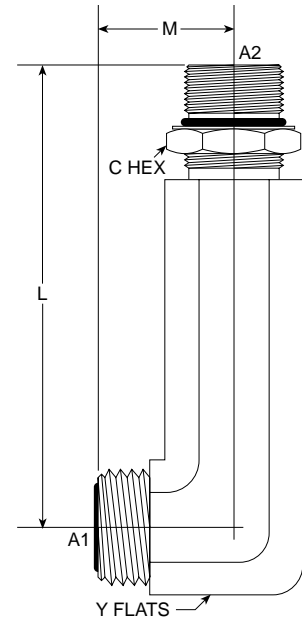
PART NO. SIZE	TUBE O.D.	A1 THREAD	C2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS6801-04-04-NWO	1/4	9/16-18	7/16-20	1.290	32.77	0.850	21.59	9/16	0.562	14.27	•	•		
FS6801-04-06-NWO	1/4	9/16-18	9/16-18	1.450	36.83	0.920	23.37	3/4	0.750	19.05	•	•		
FS6801-04-08-NWO	1/4	9/16-18	3/4-16	1.600	40.64	0.970	24.64	3/4	0.750	19.05	•	•		
FS6801-06-04-NWO	3/8	11/16-16	7/16-20	1.370	34.80	0.980	24.89	3/4	0.750	19.05	•	•		
<b>NEW</b> FS6801-06-05-NWO												•		
FS6801-06-06-NWO	3/8	11/16-16	9/16-18	1.450	36.83	0.980	24.89	3/4	0.750	19.05	•	•		
FS6801-06-08-NWO	3/8	11/16-16	3/4-16	1.600	40.64	1.040	26.42	3/4	0.750	19.05	•	•		
FS6801-06-10-NWO	3/8	11/16-16	5/8-14	1.970	50.03	1.150	29.21	1 1/16	1.062	26.97	•	•	•	
FS6801-06-12-NWO	3/8	11/16-12	1 1/16-12	2.170	55.12	1.250	31.75	1 3/16	1.188	30.17	•	•		
FS6801-08-06-NWO	1/2	13/16-16	9/16-18	1.440	36.58	1.100	27.94	3/4	0.750	19.05	•	•		
FS6801-08-08-NWO	1/2	13/16-16	3/4-16	1.600	40.64	1.100	27.94	3/4	0.750	19.05	•	•		
FS6801-08-10-NWO	1/2	13/16-16	5/8-14	1.970	50.04	1.210	30.73	1 1/16	1.062	26.97	•	•		
FS6801-08-12-NWO	1/2	13/16-16	1 1/16-12	2.170	55.12	1.320	33.53	1 3/16	1.188	30.17	•	•		
<b>NEW</b> FS6801-10-08-NWO											•	•		
FS6801-10-10-NWO	5/8	1-14	7/8-14	1.970	50.04	1.310	33.27	1 1/16	1.062	26.97	•	•		
FS6801-10-12-NWO	5/8	1-14	1 1/16-12	2.170	55.12	1.410	35.81	1 3/16	1.188	30.17	•	•		
FS6801-12-08-NWO	3/4	1 3/16-12	3/4-16	1.840	46.74	1.470	37.34	1 3/16	1.188	30.17	•	•		
FS6801-12-10-NWO	3/4	1 3/16-12	7/8-14	2.170	55.12	1.470	37.34	1 3/16	1.188	30.17	•	•		
FS6801-12-12-NWO	3/4	1 3/16-12	1 1/16-12	2.170	55.12	1.470	37.34	1 3/16	1.188	30.17	•	•		
FS6801-12-16-NWO	3/4	1 3/16-12	1 5/16-12	2.350	59.69	1.620	41.15	1 7/16	1.438	36.52	•	•		
<b>NEW</b> FS6801-12-20-NWO												•		
FS6801-16-12-NWO	1	1 7/16-12	1 1/16-12	2.320	58.93	1.640	41.66	1 7/16	1.438	36.52	•	•		
FS6801-16-16-NWO	1	1 7/16-12	1 5/16-12	2.350	59.69	1.640	41.66	1 7/16	1.438	36.52	•	•		
FS6801-16-20-NWO	1	1 7/16-12	1 5/8-12	2.450	62.23	1.760	44.70	1 5/8	1.625	41.27	•	•		
FS6801-20-16-NWO	1 1/4	1 11/16-12	1 5/16-12	2.450	62.23	1.760	44.70	1 5/8	1.625	41.27	•	•		
FS6801-20-20-NWO	1 1/4	1 11/16-12	1 5/8-12	2.450	62.23	1.760	44.70	1 5/8	1.625	41.27	•	•		
FS6801-20-24-NWO	1 1/4	1 11/16-12	1 7/8-12	2.590	65.79	1.920	48.77	1 7/8	1.875	47.62	•	•		
FS6801-24-20-NWO	1 1/2	2-12	1 5/8-12	2.590	65.79	1.920	48.77	1 7/8	1.875	47.62	•	•		
FS6801-24-24-NWO	1 1/2	2-12	1 7/8-12	2.590	65.79	1.920	48.77	1 7/8	1.875	47.62	•	•		

# MFS-MORB 90° Long FS6801-L-NWO Series



PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS6801-L-04-04-NWO	1/4	9/16-18	7/16-20	2.23	56.64	.85	21.59	9/16	.562	14.27		•		
FS6801-L-06-06-NWO	3/8	11/16-16	9/16-18	2.61	66.29	.98	24.89	3/4	.750	19.05		•		
FS6801-L-08-08-NWO	1/2	13/16-16	3/4-16	2.95	74.93	1.10	27.94	3/4	.750	19.05		•		
FS6801-L-16-16-NWO	1	1 7/16-12	1 5/16-12	4.51	114.55	1.64	41.66	1 7/16	1.438	36.53		•		

# MF-MAORB X-Long FS6801-LL-NWO Series

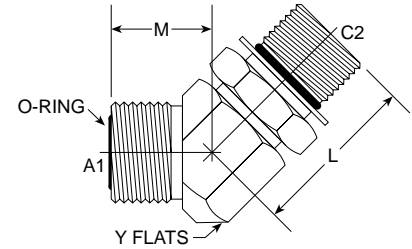


PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS6801-LL-08-08-NWO	1/2	13/16-16	3/4-16	3.50	88.90	1.10	27.94	3/4	.750	19.05		•		
FS6801-LL-16-16-NWO	1	1 7/16-12	1 5/16-12	5.00	127.00	1.64	41.66	1 7/16	1.438	36.53		•		

# O-ring Face Seal Fittings

## MFS-MAORB 45° FS6802-NWO Series

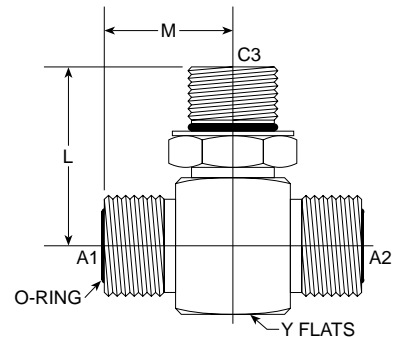
SAE # 520320



PART NO. SIZE	TUBE O.D.	A1 THREAD	C2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
FS6802-04-04-NWO	1/4	9/16-18	7/16-20	1.180	29.97	0.630	16.00	9/16	0.562	14.27	•	•		
FS6802-04-06-NWO	1/4	9/16-18	9/16-18	1.300	33.02	0.690	17.53	3/4	0.750	19.05	•	•		
FS6802-06-04-NWO	3/8	11/16-16	7/16-20	1.220	30.99	0.740	18.80	3/4	0.750	19.05	•	•		
FS6802-06-06-NWO	3/8	11/16-16	9/16-18	1.300	33.02	0.740	18.80	3/4	0.750	19.05	•	•		
FS6802-06-08-NWO	3/8	11/16-16	3/4-16	1.450	36.83	0.740	18.80	3/4	0.750	19.05	•	•		
<b>NEW</b> FS6802-06-10-NWO												•		
FS6802-08-06-NWO	1/2	13/16-16	9/16-18	1.270	32.26	0.800	20.32	3/4	0.750	19.05	•	•		
FS6802-08-08-NWO	1/2	13/16-16	3/4-16	1.430	36.32	0.800	20.32	3/4	0.750	19.05	•	•		
FS6802-08-10-NWO	1/2	13/16-16	7/8-14	1.760	44.70	0.840	21.34	3/4	0.750	19.05	•	•		
FS6802-10-08-NWO	5/8	1-14	3/4-16	1.590	40.39	0.920	23.27	1 1/16	1.062	26.97	•	•		
FS6802-10-10-NWO	5/8	1-14	7/8-14	1.760	44.70	0.920	23.37	1 1/16	1.062	26.97	•	•		
FS6802-10-12-NWO	5/8	1-14	1 1/16-12	1.970	50.04	0.980	24.89	1 3/16	1.188	30.17	•	•		
FS6802-12-10-NWO	3/4	1 3/16-12	7/8-14	1.810	45.98	1.020	25.91	1 3/16	1.188	30.17	•	•		
FS6802-12-12-NWO	3/4	1 3/16-12	1 1/16-12	1.970	50.04	1.020	25.91	1 3/16	1.188	30.17	•	•		
FS6802-12-16-NWO	3/4	1 3/16-12	1 5/16-12	2.060	52.33	1.020	25.91	1 7/16	1.438	36.52	•	•		
FS6802-16-12-NWO	1	1 7/16-12	1 1/16-12	2.030	51.57	1.180	29.97	1 7/16	1.438	36.52	•	•		
FS6802-16-16-NWO	1	1 7/16-12	1 5/16-12	2.060	52.33	1.180	29.97	1 7/16	1.438	36.52	•	•		
FS6802-16-20-NWO	1	1 7/16-12	1 5/8-12	2.250	57.15	1.260	32.00	1 5/8	1.625	41.27	•	•		
FS6802-20-20-NWO	1 1/4	1 11/16-12	1 5/8-12	2.110	53.59	1.260	32.00	1 5/8	1.625	41.27	•	•		
FS6802-24-24-NWO	1 1/2	2-12	1 7/8-12	2.110	53.59	1.450	36.83	1 7/8	1.875	47.62	•	•		

## MFS-MFS-MAORB Tee FS6803-NWO Series

SAE # 520429

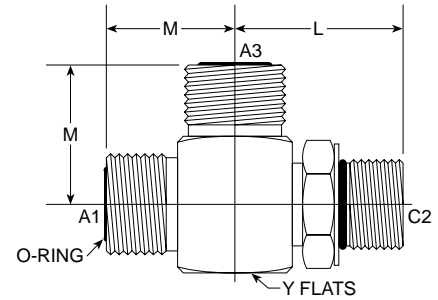


PART NO. SIZE	TUBE O.D.	A1 THREAD	A2 THREAD	C3 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
FS6803-04-04-04-NWO	1/4	9/16-18	9/16-18	7/16-20	1.290	32.77	0.850	21.59	9/16	0.562	14.27	•	•		
FS6803-06-06-06-NWO	3/8	11/16-16	11/16-16	9/16-18	1.450	36.83	0.980	24.89	3/4	0.750	19.05	•	•		
FS6803-08-08-08-NWO	1/2	13/16-16	13/16-16	3/4-16	1.600	40.64	1.100	27.94	3/4	0.750	19.05	•	•		
FS6803-10-10-10-NWO	5/8	1-14	1-14	7/8-14	1.970	50.04	1.310	33.27	1 1/16	1.062	26.97	•	•		
FS6803-12-12-12-NWO	3/4	1 3/16-12	1 3/16-12	1 1/16-12	2.170	55.12	1.470	37.34	1 3/16	1.188	30.17	•	•		
FS6803-16-16-16-NWO	1	1 7/16-12	1 7/16-12	1 5/16-12	2.350	59.69	1.640	41.66	1 7/16	1.438	36.52	•	•		
FS6803-20-20-20-NWO	1 1/4	1 11/16-12	1 11/16-12	1 5/8-12	2.450	62.23	1.760	44.70	1 5/8	1.625	41.27	•	•		



# MFS-MAORB-MFS Tee FS6804-NWO Series

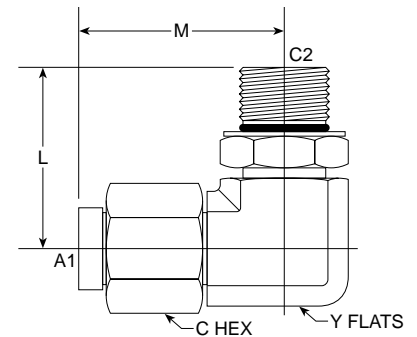
SAE # 520428



PART NO. SIZE	TUBE O.D.	A1 THREAD	C2 THREAD	A3 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
FS6804-04-04-04-NWO	1/4	9/16-18	7/16-20	9/16-18	1.290	32.77	0.850	21.59	9/16	0.562	14.27	•	•		
FS6804-04-06-04-NWO	1/4	9/16-18	9/16-18	9/16-18	1.450	36.83	0.920	23.37	3/4	0.750	19.05	•	•		
FS6804-06-04-06-NWO	3/8	11/16-16	11/16-16	7/16-20	1.370	34.80	0.980	24.89	3/4	0.750	19.05	•	•		
FS6804-06-06-06-NWO	3/8	11/16-16	9/16-18	11/16-16	1.450	36.83	0.980	24.89	3/4	0.750	19.05	•	•		
FS6804-08-06-08-NWO	1/2	13/16-16	13/16-16	9/16-18	1.440	36.58	1.100	27.94	3/4	0.750	19.05	•	•		
FS6804-08-08-08-NWO	1/2	13/16-16	3/4-16	13/16-16	1.600	40.64	1.100	27.94	3/4	0.750	19.05	•	•		
FS6804-08-12-08-NWO	1/2	13/16-16	13/16-12	1 1/16-12	2.170	55.12	1.320	33.53	1 3/16	1.188	30.18	•	•		
FS6804-10-10-10-NWO	5/8	1-14	7/8-14	1-14	1.970	50.04	1.310	33.27	1 1/16	1.062	26.97	•	•		
NEW FS6804-10-12-10-NWO															
FS6804-12-12-12-NWO	3/4	1 3/16-12	1 1/16-12	1 3/16-12	2.170	55.12	1.470	37.34	1 3/16	1.188	30.17	•	•		
FS6804-16-16-16-NWO	1	1 7/16-12	1 5/16-12	1 7/16-12	2.350	59.69	1.640	41.66	1 7/16	1.437	36.50	•	•		
FS6804-20-20-20-NWO	1 1/4	1 11/16-12	1 5/8-12	1 11/16-12	2.450	62.23	1.760	44.70	1 5/8	1.625	41.27	•	•		
FS6804-24-24-24-NWO	1 1/2	2-12	1 7/8-12	2-12	2.590	65.79	1.920	48.77	1 7/8	1.875	47.62	•	•		

# FFSS-MAORB 90° FS6809-NWO Series

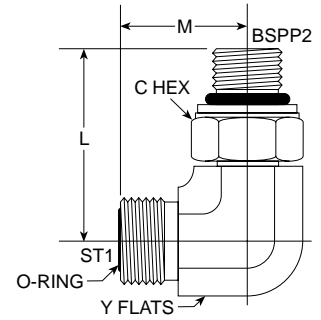
SAE # 520281



PART NO. SIZE	TUBE O.D.	A1 THREAD	C2 THREAD	L LGTH	M.M.	M LGTH	M.M.	C HEX	C HEX	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
														S	FG	SS	B
FS6809-04-04-NWO	1/4	9/16-18	7/16-20	1.290	32.77	1.040	26.42	11/16	0.688	17.47	9/16	0.562	14.27	•	•		
FS6809-06-06-NWO	3/8	11/16-16	9/16-18	1.450	36.83	1.150	29.21	13/16	0.812	20.62	3/4	0.750	19.05	•	•		
FS6809-08-08-NWO	1/2	13/16-16	3/4-16	1.600	40.64	1.490	37.85	15/16	0.937	23.80	3/4	0.750	19.05	•	•		
FS6809-10-10-NWO	5/8	1-14	7/8-14	1.970	50.04	1.620	41.25	1 1/8	1.125	28.57	1 1/16	1.062	26.97	•	•		
FS6809-12-12-NWO	3/4	1 3/16-12	1 1/16-12	2.170	55.12	1.820	46.23	1 3/8	1.387	34.23	1 3/16	1.188	30.17	•	•		
FS6809-16-16-NWO	1	1 3/16-12	1 5/16-12	2.350	59.69	2.100	53.34	1 5/8	1.625	41.27	1 7/16	1.437	36.50	•	•		

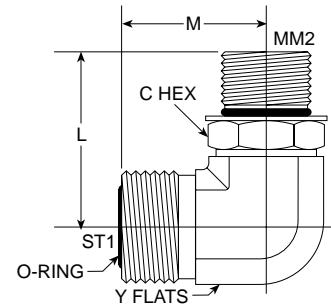
# O-ring Face Seal Fittings

## MFS-MBSPP 90° Elbow FS7202-NWO Series



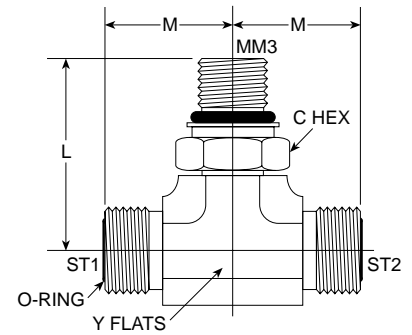
PART NO. SIZE	TUBE O.D.	ST1 THREAD	BSPP2 THREAD	L LGTH	M.M.	M LGTH	M.M.	C HEX	Y FLATS	M.M.	Standard Material From Stock						
											S	FG	SS	B			
NEW FS7202-04-02-NWO																	
NEW FS7202-04-04-NWO																	
NEW FS7202-04-06-NWO																	
NEW FS7202-06-04-NWO																	
NEW FS7202-06-06-NWO																	
NEW FS7202-08-04-NWO																	
NEW FS7202-08-06-NWO																	
NEW FS7202-08-08-NWO																	
NEW FS7202-08-12-NWO																	
NEW FS7202-10-06-NWO																	
NEW FS7202-10-08-NWO																	
NEW FS7202-10-12-NWO																	
NEW FS7202-10-16-NWO																	
NEW FS7202-12-08-NWO																	
NEW FS7202-12-12-NWO																	
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NEW FS7202-16-12-NWO																	
NEW FS7202-16-16-NWO																	
NEW FS7202-16-20-NWO																	
NEW FS7202-20-16-NWO																	
NEW FS7202-20-20-NWO																	
NEW FS7202-20-24-NWO																	
NEW FS7202-24-24-NWO																	

# MFS-MMAORB 90° Elbow FS7205-NWO Series



PART NO. SIZE	TUBE O.D.	ST1 THREAD	MM2 THREAD	L LGTH	M.M.	M LGTH	M.M.	C HEX	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
NEW FS7205-04-12-NWO														
NEW FS7205-04-14-NWO														
NEW FS7205-06-10-NWO														
NEW FS7205-06-12-NWO														
NEW FS7205-06-14-NWO														
NEW FS7205-06-16-NWO														
NEW FS7205-06-18-NWO														
NEW FS7205-08-14-NWO														
NEW FS7205-08-16-NWO														
NEW FS7205-08-18-NWO														
NEW FS7205-10-18-NWO														
NEW FS7205-10-22-NWO														
NEW FS7205-10-27-NWO														
NEW FS7205-12-22-NWO														
NEW FS7205-12-27-NWO														
NEW FS7205-16-33-NWO														
NEW FS7205-20-38-NWO														
NEW FS7205-20-42-NWO														
NEW FS7205-24-48-NWO														

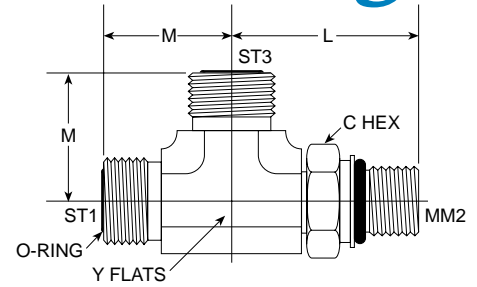
# MFS-MFS-MMAORB Tee FS7210-NWO Series



PART NO. SIZE	TUBE O.D.	ST1 THREAD	ST2 THREAD	MM3 THREAD	L LGTH	M.M.	M LGTH	M.M.	C HEX	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
NEW FS7210-04-04-12-NWO															
NEW FS7210-04-04-14-NWO															
NEW FS7210-06-06-14-NWO															
NEW FS7210-06-06-16-NWO															
NEW FS7210-08-08-14-NWO															
NEW FS7210-08-08-18-NWO															
NEW FS7210-08-08-22-NWO															
NEW FS7210-10-10-22-NWO															
NEW FS7210-12-12-27-NWO															
NEW FS7210-16-16-33-NWO															
NEW FS7210-20-20-42-NWO															
NEW FS7210-24-24-48-NWO															

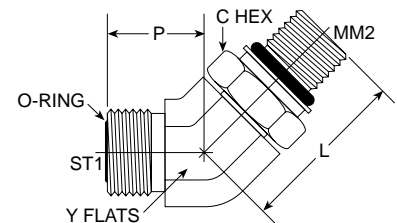
# O-ring Face Seal Fittings

## MFS-MMAORB-MFS Tee FS7215-NWO Series



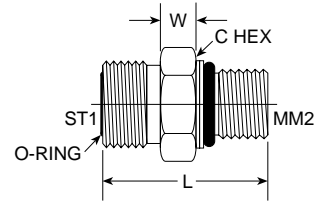
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									S	FG	SS	B	
NEW FS7215-04-12-04-NWO													
NEW FS7215-04-14-04-NWO													
NEW FS7215-06-14-06-NWO													
NEW FS7215-06-16-06-NWO													
NEW FS7215-08-14-08-NWO													
NEW FS7215-08-18-08-NWO													
NEW FS7215-08-22-08-NWO													
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NEW FS7215-10-22-10-NWO													
NEW FS7215-12-27-12-NWO													
NEW FS7215-16-33-16-NWO													
NEW FS7215-20-42-20-NWO													
NEW FS7215-24-48-24-NWO													

## MFS-MMAORB 45° Elbow FS7300-NWO Series

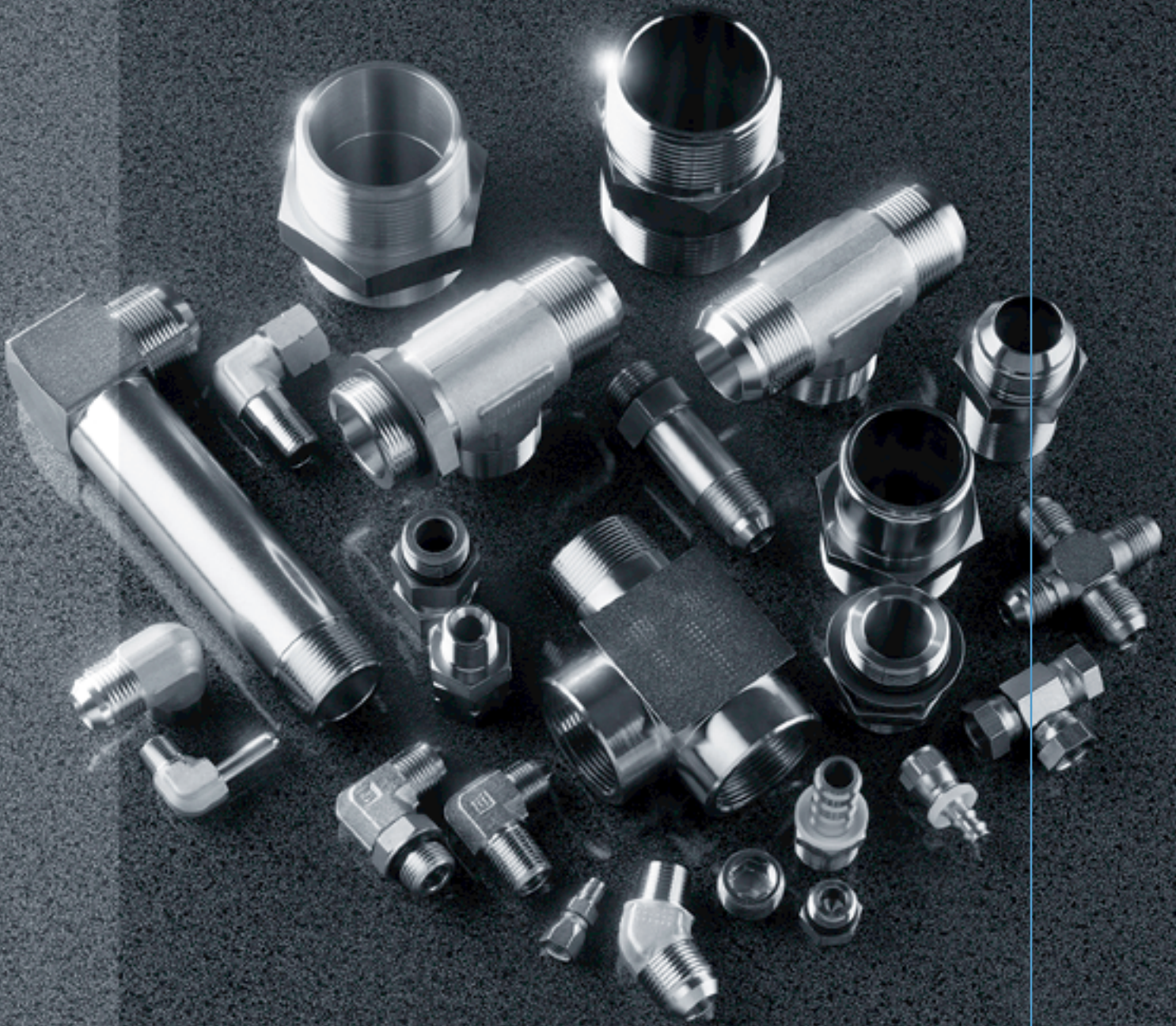


PART NO. SIZE	TUBE O.D.	ST1 THREAD	MM2 THREAD	L LGTH M.M.	P LGTH M.M.	C HEX	Y FLATS M.M.	Standard Material From Stock				
								S	FG	SS	B	
NEW FS7300-04-12-NWO												
NEW FS7300-04-14-NWO												
NEW FS7300-06-16-NWO												
NEW FS7300-08-14-NWO												
NEW FS7300-08-18-NWO												
NEW FS7300-10-22-NWO												
NEW FS7300-12-27-NWO												
NEW FS7300-16-33-NWO												
NEW FS7300-20-40-NWO												
NEW FS7300-24-48-NWO												

# MFS-MMORB FS7640-O Series



PART NO. SIZE	TUBE O.D.	ST1 THREAD	MM2 THREAD	L LGTH	M.M.	W LGTH	C HEX	Standard Material From Stock				
								S	FG	SS	B	
NEW FS7640-04-10-0												
NEW FS7640-04-12-0												
NEW FS7640-04-14-0												
NEW FS7640-06-12-0												
NEW FS7640-06-14-0												
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












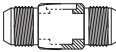




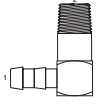

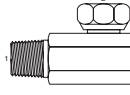
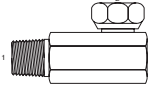

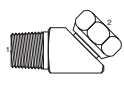
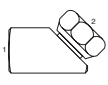
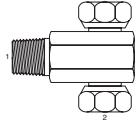


*Tube Fittings & Adapters*

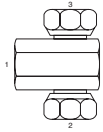
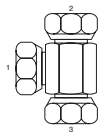
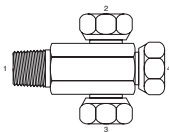
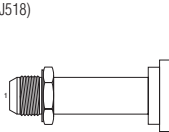
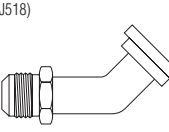
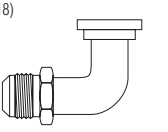
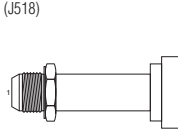
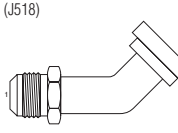
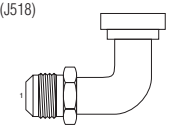
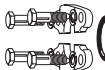
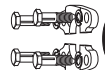















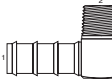




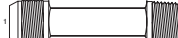




## Tube Fittings & Adapters

Brennan Industries, Inc.'s steel and stainless steel 37° flare tube fittings meet all design and performance requirements for 37° flare tube fittings in Standard J514 published by the Society of Automotive Engineers (SAE). This design was originally founded as a JIC (Joint Industrial Council) design and was later adopted by the SAE to assure dimensional interchangeability between various manufacturers worldwide.


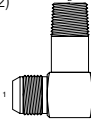
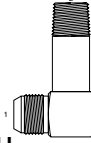
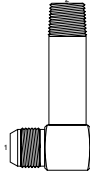



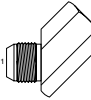












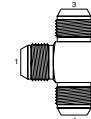
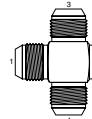
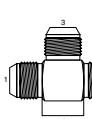
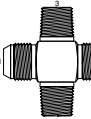
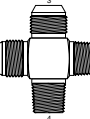
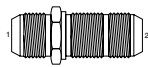
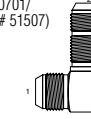

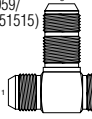


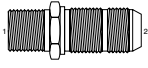




Brennan also offers a wide variety of pipe fittings and adapters including straight thread adapters, male and female pipe fittings, male to female pipe adapters and straight thread to pipe adapters.

 <b>0302</b> Short Nut	(070111)  <b>0304</b> Standard Nut	(070112)  <b>0304-C</b> JIC Cap Nut	(070118/MS # 51860)  <b>0306</b> BHLN	(070117)  <b>0306-N</b> BULN	(070110)  <b>0318</b> JIC Tube Nut
(070115)  <b>0319</b> JIC Tube Sleeve	 <b>0403</b> Bore-MJ Straight	 <b>0403-TS</b> MJ Tube Spud	 <b>0404</b> Bore-MP Straight	 <b>0405</b> Bore-FP Straight	 <b>0406</b> Bore-MJ Bulkhead Straight
 <b>0500</b> Bore-MJ 90°	 <b>0501</b> Bore-MP 90°	 <b>0600</b> Bore-Bore-MJ Tee	 <b>0601</b> Bore-Bore-MP Tee	 <b>0602</b> Bore-Bore-FP	 <b>0702</b> Bore-MJ-MJ Tee
 <b>0800</b> Bore-FPS Straight	 <b>0801</b> Bore-FPS 90°	 <b>0900</b> Bore-FJS Straight	 <b>0954</b> Brass Elbow	 <b>0954-L</b> Brass Elbow	(140131)  <b>1405</b> FP-FPS Straight
(140230)  <b>1501</b> MP-FPS 90°	 <b>1501-L</b> MP-FPS 90° Long	(140231)  <b>1502</b> FP-FPS 90°	(140330)  <b>1503</b> MP-FPS 45°	(140331)  <b>1504</b> FP-FPS 45°	 <b>1601</b> MP-FPS-FPS Tee

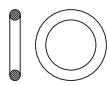
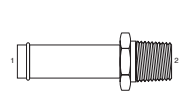
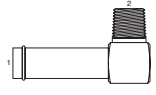
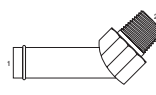
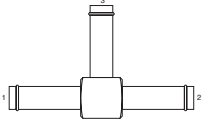
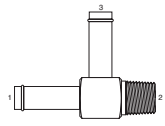
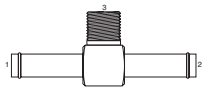
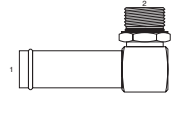
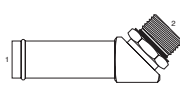
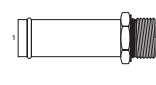



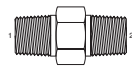

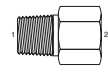


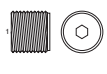

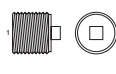
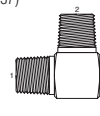
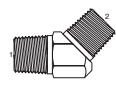

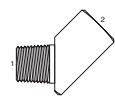


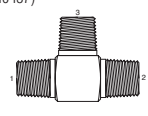
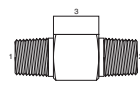
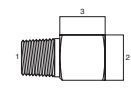
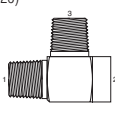
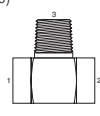
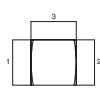
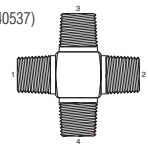
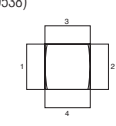
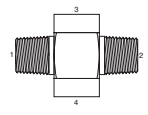
# Tube Fittings & Adapters

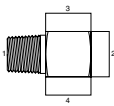
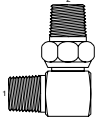
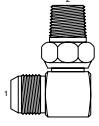
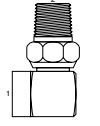


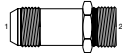

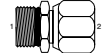
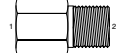




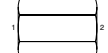
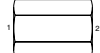


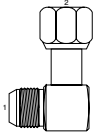
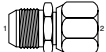

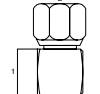
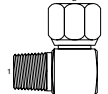
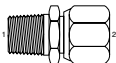
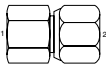
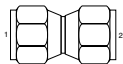
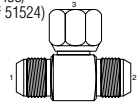
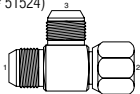
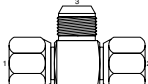
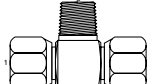
 <p><b>1602</b> FP-FPS-FPS Tee</p>	 <p><b>1603</b> FPS-FPS-FPS Tee</p>	 <p><b>1604</b> MP-FPS-FPS-FPS Cross</p>	 <p>(J518) <b>1700</b> MJ-Flange Straight Code 61</p>	 <p>(J518) <b>1703</b> MJ-Flange 45° Code 61</p>	 <p>(J518) <b>1704</b> MJ-Flange 90° Code 61</p>
 <p>(J518) <b>1800</b> MJ-Flange Straight Code 62</p>	 <p>(J518) <b>1803</b> MJ-Flange 45° Code 62</p>	 <p>(J518) <b>1804</b> MJ-Flange 90° Code 62</p>	 <p>(J518) <b>1901</b> Flange Kit Code 61</p>	 <p>(J518) <b>1902</b> Flange Kit Code 62</p>	 <p><b>1951</b> Flange Halves Code 61</p>
 <p><b>1952</b> Flange Halves Code 62</p>	 <p><b>1961</b> Bolts Code 61</p>	 <p><b>1962</b> Bolts Code 62</p>	 <p><b>1971</b> Washers Code 61</p>	 <p><b>1972</b> Washers Code 62</p>	 <p><b>2111</b> PL-FJS Straight</p>
 <p><b>2112</b> PL-FSAES Straight</p>	 <p><b>2113</b> PL-MP Straight</p>	 <p><b>2114</b> PL-FIF Straight</p>	 <p><b>2115</b> PL-MIFS Straight</p>	 <p><b>2116</b> PL-MJ Straight</p>	 <p><b>2117</b> PL-Stem Straight</p>
 <p><b>2118</b> PL-PL Straight</p>	 <p><b>2119</b> PL-FP Straight</p>	 <p><b>2120</b> PL-MP 90° Elbow</p>	 <p>(070101/MS# 51501) <b>2403</b> MJ-MJ Straight</p>	 <p>(070119/MS# 51519) <b>2403-LH</b> MJ-MJ Straight Large Hex</p>	 <p>(070102/MS# 51500) <b>2404</b> MJ-MP Straight</p>
 <p><b>2404-L</b> MJ-MP Straight Long</p>	 <p><b>2404-LL</b> MJ-MP Straight X-Long</p>	 <p>(070103/MS# 51503) <b>2405</b> MJ-FP Straight</p>	 <p><b>2406</b> FJ-MJ Straight Reducer</p>	 <p>(070109/MS# 51518) <b>2408</b> MJ Plug</p>	 <p>(070201/MS# 51505) <b>2500</b> MJ-MJ 90°</p>



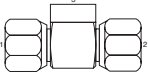
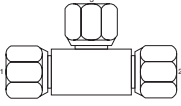
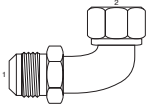





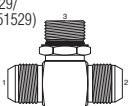
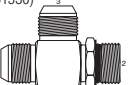

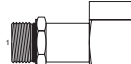


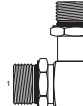




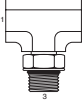

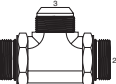
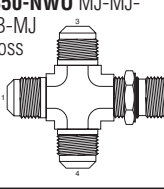

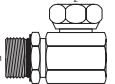
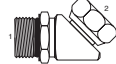


<p>(070302/MS# 51504)</p>  <p><b>2501 MJ-MP 90°</b></p>	<p>(071502)</p>  <p><b>2501-L MJ-MP 90° Long</b></p>	<p>(071602)</p>  <p><b>2501-LL MJ-MP 90° X-Long</b></p>	<p><b>2501-LLL MJ-MP 90° XX-Long</b></p> 	<p>(070203/MS# 51506)</p>  <p><b>2502 MJ-FP 90°</b></p>	<p>(070302/MS# 51508)</p>  <p><b>2503 MJ-MP 45°</b></p>
 <p><b>2504 MJ-MJ 45°</b></p>	 <p><b>2505 MJ-FP 45°</b></p>	<p>(070425/MS# 51512)</p>  <p><b>2601 MJ-MJ-MP Tee</b></p>	<p>(070427/MS# 51513)</p>  <p><b>2602 MJ-MJ-FP Tee</b></p>	<p>(070401/MS# 51510)</p>  <p><b>2603 MJ-MJ-MJ Tee</b></p>	<p>(070424/MS# 51511)</p>  <p><b>2605 MJ-MP-MJ Tee</b></p>
<p>(070426/MS# 51514)</p>  <p><b>2606 MJ-FP-MJ Tee</b></p>	 <p><b>2607 MJ-MP-MP Tee</b></p>	 <p><b>2608 MJ-FP-MP Tee</b></p>	 <p><b>2609 MJ-FP-FP Tee</b></p>	 <p><b>2610 MP-MP-MJ Tee</b></p>	 <p><b>2611 MJ-MP-FP Tee</b></p>
 <p><b>2612 FP-FP-MJ Tee</b></p>	 <p><b>2613 MP-FP-MJ Tee</b></p>	 <p><b>2650 MJ-MJ-MJ-MJ Cross</b></p>	 <p><b>2651 MJ-MP-MJ-MJ Cross</b></p>	 <p><b>2652 MJ-MJ-MJ-FP Cross</b></p>	 <p><b>2653 MJ-MJ-MP-MP Cross</b></p>
 <p><b>2654 MJ-MP-MJ-MP Cross</b></p>	<p>(070601/MS# 51520)</p>  <p><b>2700 MJ-MJ Bulkhead Straight</b></p>	<p>(070701/MS# 51507)</p>  <p><b>2701 MJ-MJ Bulkhead 90°</b></p>	<p>(070801/MS# 51509)</p>  <p><b>2702 MJ-MJ Bulkhead 45°</b></p>	<p>(070959/MS# 51515)</p>  <p><b>2703 MJ-MJ-MJ Bulkhead Branch Tee</b></p>	<p>(070958/MS# 51516)</p>  <p><b>2704 MJ-MJ-MJ Bulkhead Run Tee</b></p>
 <p><b>2705 FP-MJ Bulkhead Straight</b></p>	 <p><b>2706 MP-MJ Bulkhead Straight</b></p>	 <p><b>3051 MP-FP Low Profile 90°</b></p>	 <p><b>3474-NWO MAORB-ORB Straight</b></p>	<p>(J515 Type I CH/MS# 28778)</p>  <p><b>4000 Buna O Ring</b></p>	<p>(J515 Type I I H K)</p>  <p><b>4001 Viton O Ring</b></p>

# Tube Fittings & Adapters

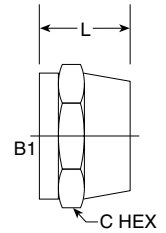
 <p><b>4005</b> Flange O Ring</p>	 <p><b>4404</b> HB-MP Straight</p>	 <p><b>4501</b> HB-MP 90°</p>	 <p><b>4503</b> HB-MP 45°</p>	 <p><b>4504</b> HB-HB-HB Tee</p>	 <p><b>4505</b> HB-MP-HB Tee</p>
 <p><b>4506</b> HB-HB-MP Tee</p>	 <p><b>4601-NWO</b> HB-MAORB 90°</p>	 <p><b>4603-NWO</b> HB-MAORB 45°</p>	 <p><b>4604-O</b> HB-MORB Straight</p>	<p>(140138)</p>  <p><b>5000</b> FP-FP Straight</p>	 <p><b>5304</b> MP-BW Weld-on Fitting 304SS</p>
 <p><b>5316</b> MP-BW Weld-on Fitting 316SS</p>	<p>(140137)</p>  <p><b>5404</b> MP-MP Hex Nipple</p>	 <p><b>5404-N</b> MP-MP Straight Nipple Long</p>	<p>(140139)</p>  <p><b>5405</b> MP-FP Straight Expander</p>	<p>(140140)</p>  <p><b>5406</b> MP-FP Reducer Bushing</p>	 <p><b>5406-C</b> Pipe Cap</p>
 <p><b>5406-HP</b> Hollow Hex Pipe Plug</p>	<p>(130109E)</p>  <p><b>5406-P</b> External Hex Pipe Plug</p>	<p>(130109A)</p>  <p><b>5406-SHP</b> Square Head Pipe Plug</p>	<p>(140237)</p>  <p><b>5500</b> MP-MP 90°</p>	 <p><b>5501</b> MP-MP 45°</p>	<p>(140239)</p>  <p><b>5502</b> MP-FP 90° Street Elbow</p>
<p>(140339)</p>  <p><b>5503</b> MP-FP 45° Street Elbow</p>	<p>(140238)</p>  <p><b>5504</b> FP-FP 90° Street Elbow</p>	<p>(140338)</p>  <p><b>5505</b> FP-FP 45°</p>	<p>(140437)</p>  <p><b>5600</b> MP-MP-MP Tee</p>	<p>(140427)</p>  <p><b>5601</b> MP-MP-FP Tee</p>	<p>(140424)</p>  <p><b>5602</b> MP-FP-FP Street Tee</p>
<p>(140426)</p>  <p><b>5603</b> MP-FP-MP Tee</p>	<p>(140425)</p>  <p><b>5604</b> FP-FP-MP Branch Tee</p>	<p>(140438)</p>  <p><b>5605</b> FP-FP-FP Tee</p>	<p>(140537)</p>  <p><b>5650</b> MP-MP-MP-MP Cross</p>	<p>(140538)</p>  <p><b>5652</b> FP-FP-FP-FP Cross</p>	 <p><b>5653</b> MP-MP-FP-FP Cross</p>

 <p><b>6555</b> MP-FP-FP-FP Cross</p>	 <p><b>5700</b> MP-MPS 90°</p>	 <p><b>5701</b> MJ-MPS 90°</p>	 <p><b>5702</b> FP-MPS 90°</p>	 <p><b>6000</b> Back-Up Washer</p>	<p>(070120/MS# 51525)</p>  <p><b>6400-0</b> MJ-MORB Straight</p>
<p>(070122/MS# 51526)</p>  <p><b>6400-L-0</b> MJ-MORB Straight Long</p>	 <p><b>6401-0</b> MORB-MP Straight</p>	 <p><b>6402-0</b> MORB-FJS Straight</p>	 <p><b>6404</b> FORB-MP Straight</p>	 <p><b>6405-0</b> MORB-FP Straight</p>	<p>(090109A)</p>  <p><b>6408-0</b> MORB External Hex Plug</p>
<p>(090109B)</p>  <p><b>6408-H-0</b> MORB Hollow Hex Plug</p>	 <p><b>6410-0</b> MORB FORB Straight Reducer</p>	 <p><b>6420</b> FORB-FP Straight</p>	 <p><b>6425</b> FORB-FORB Straight</p>	 <p><b>6464</b> MORB-MORB Straight</p>	<p>(070221)</p>  <p><b>6500</b> MJ-FJS 90°</p>
 <p><b>6500-L</b> MJ-FJS 90° Long</p>	 <p><b>6504</b> MJ-FJS Straight</p>	<p>(070321/MS# 51522)</p>  <p><b>6502</b> MJ-FJS 45°</p>	 <p><b>6503</b> FP-FJS 90°</p>	 <p><b>6501</b> MP-FJS 90°</p>	 <p><b>6505</b> MP-FJS Straight</p>
 <p><b>6506</b> FP-FJS Straight</p>	 <p><b>6565</b> FJS-FJS Straight</p>	<p>(070433/MS# 51524)</p>  <p><b>6600</b> MJ-MJ-FJS Tee</p>	<p>(070432/MS# 51524)</p>  <p><b>6602</b> MJ-FJS-MJ Tee</p>	 <p><b>6603</b> FJS-FJS-MJ Tee</p>	 <p><b>6604</b> FJS-FJS-MP Tee</p>

# Tube Fittings & Adapters

 <p><b>6605</b> FJS-FJS-FP Tee</p>	 <p><b>6606</b> FJS-FJS-FJS Tee</p>	 <p><b>6701</b> MJ-FJS Swept 90°</p>	<p>(070220/ MS# 51527)</p>  <p><b>6801-NWO</b> MJ-MAORB 90°</p>	 <p><b>6801-L-NWO</b> MJ-MAORB 90° Long</p>	 <p><b>6801-LL-NWO</b> MJ-MAORB 90° X-Long</p>
 <p><b>6801-LLL-NWO</b> MJ-MAORB 90° XX-Long</p>	<p>(070320/MS# 51528)</p>  <p><b>6802-NWO</b> MJ-MAORB 45°</p>	<p>(070429/ MS# 51529)</p>  <p><b>6803-NWO</b> MJ-MJ-MAORB Branch Tee</p>	<p>(07048/ MS# 51530)</p>  <p><b>6804-NWO</b> MJ-MAORB-MJ Run Tee</p>	 <p><b>6805-NWO</b> MAORB-FP 90°</p>	 <p><b>6805-L-NWO</b> MAORB-FP 90° Long</p>
 <p><b>6806-NWO</b> MAORB-MP 90°</p>	 <p><b>6807-NWO</b> MAORB-MAORB 90°</p>	 <p><b>6807-LL-NWO</b> MAORB-MAORB 90° X-Long</p>	 <p><b>6808-NWO</b> MAORB-MAORB 45°</p>	 <p><b>6809-NWO</b> MAORB-FJS 90°</p>	 <p><b>6810-NWO</b> MAORB-FJS 45°</p>
 <p><b>6815-NWO</b> MAORB-FORB 90°</p>	 <p><b>6832-NWO</b> FORB-FORB-MAORB Tee</p>	 <p><b>6835-NWO</b> MAORB-FORB-FORB Tee</p>	 <p><b>6840-NWO</b> MAORB-MAORB-MJ</p>	 <p><b>6850-NWO</b> MJ-MJ-MB-MJ Cross</p>	 <p><b>6900-O</b> MORB-FPS Straight</p>
<p>(140257)</p>  <p><b>6901-NWO</b> MAORB-FPS 90°</p>	<p>(140357)</p>  <p><b>6902-NWO</b> MAORB-FPS 45°</p>	 <p><b>V0318</b> JIC-Flareless Nut</p>	 <p><b>V0319</b> JIC Flareless Sleeve</p>		

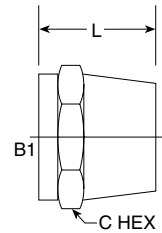
## Short Nut 0302 Series



PART NO. SIZE	TUBE O.D.	B1 THREAD	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
								S	FG	SS	B
0302-04	1/4	7/16-20	0.593	15.06	9/16	0.562	14.27	•		•	•
0302-05	5/16	1/2-20	0.593	15.06	5/8	0.625	15.88	•			•
0302-06	3/8	9/16-18	0.656	16.66	11/16	0.687	17.45	•		•	•
0302-08	1/2	3/4-16	0.812	20.62	7/8	0.875	22.23	•		•	
0302-10	5/8	7/8-14	0.937	23.80	1	1.000	25.40	•			
0302-12	3/4	1 1/16-12	1.140	28.96	1 1/4	1.250	31.75	•		•	
0302-14	7/8	1 3/16-12	1.203	30.56	1 3/8	1.375	34.93	•			
0302-16	1	1 5/16-12	1.281	32.54	1 1/2	1.500	38.10	•		•	
0302-20	1 1/4	1 5/8-12	1.437	36.50	2	2.000	50.80	•		•	
0302-24	1 1/2	1 7/8-12	1.562	39.67	2 1/4	2.250	57.15	•		•	
0302-32	2	2 1/2-12	2.000	50.80	2 7/8	2.875	73.03	•			

## Standard Nut 0304 Series

SAE # 070111

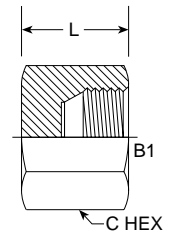


PART NO. SIZE	TUBE O.D.	B1 THREAD	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
								S	FG	SS	B
0304-04	1/4	7/16-20	1.000	25.40	9/16	0.562	14.27	•		•	
0304-05	5/16	1/2-20	1.062	26.97	5/8	0.625	15.88	•			•
0304-06	3/8	9/16-18	1.093	27.76	11/16	0.687	17.45	•		•	•
0304-08	1/2	3/4-16	1.281	32.54	7/8	0.875	22.23	•			
0304-10	5/8	7/8-14	1.484	37.69	1	1.000	25.40	•			
0304-12	3/4	1 1/16-12	1.656	42.06	1 1/4	1.250	31.75	•			•
0304-14	7/8	1 3/16-12	1.812	46.02	1 3/8	1.375	34.93	•			
0304-16	1	1 5/16-12	1.937	49.20	1 1/2	1.500	38.10	•		•	
0304-20	1 1/4	1 5/8-12	2.187	55.55	2	2.000	50.80	•			
0304-24	1 1/2	1 7/8-12	2.312	58.72	2 1/4	2.250	57.15	•			
0304-32	2	2 1/2-12	2.750	69.85	2 7/8	2.875	73.03	•			

# Tube Fittings & Adapters

## JIC Cap Nut 0304-C Series

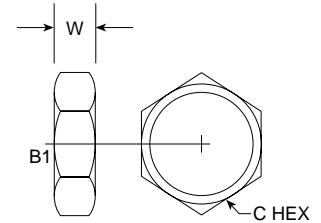
SAE# 070112



PART NO. SIZE	TUBE O.D.	B1 THREAD	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
								S	FG	SS	B
0304-C-02	1/8	5/16-24	0.500	12.70	3/8	0.375	9.53	•		•	•
0304-C-03	3/16	3/8-24	0.562	14.27	7/16	0.438	11.13	•		•	•
0304-C-04	1/4	7/16-20	0.594	15.09	9/16	0.562	14.27	•		•	•
0304-C-05	5/16	1/2-20	0.609	15.47	5/8	0.625	15.88	•		•	•
0304-C-06	3/8	9/16-18	0.625	15.88	11/16	0.687	17.45	•		•	•
0304-C-08	1/2	3/4-16	0.750	19.05	7/8	0.875	22.23	•		•	•
0304-C-10	5/8	7/8-14	0.844	21.44	1	1.000	25.40	•		•	•
0304-C-12	3/4	1 1/16-12	0.906	23.01	1 1/4	1.250	31.75	•		•	•
0304-C-14	7/8	1 3/16-12	0.969	24.61	1 3/8	1.375	34.93	•		•	•
0304-C-16	1	1 5/16-12	1.016	25.81	1 1/2	1.500	38.10	•		•	•
0304-C-20	1 1/4	1 5/8-12	1.062	26.97	2	2.000	50.80	•		•	•
0304-C-24	1 1/2	1 7/8-12	1.188	30.18	2 1/4	2.250	57.15	•		•	•
0304-C-32	2	2 1/2-12	1.438	36.53	2 7/8	2.875	73.03	•		•	•

## BHLN 0306 Series

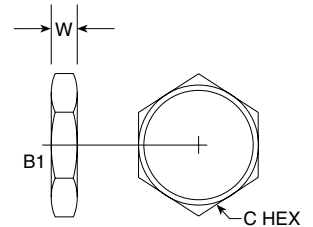
SAE# 070118 / MS# 51860



PART NO. SIZE	TUBE O.D.	B1 THREAD	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
								S	FG	SS	B
0306-02	1/8	5/16-24	0.220	5.60	9/16	0.562	14.28	•		•	
0306-03	3/16	3/8-24	0.220	5.60	5/8	0.625	15.87	•		•	
0306-04	1/4	7/16-20	0.250	6.35	11/16	0.687	17.46	•		•	
0306-05	5/16	1/2-20	0.250	6.35	3/4	0.750	19.05	•		•	
0306-06	3/8	9/16-18	0.281	7.14	13/16	0.812	20.64	•		•	
0306-08	1/2	3/4-16	0.343	8.71	1	1.000	25.40	•		•	
0306-10	5/8	7/8-14	0.391	9.93	1 1/8	1.125	28.58	•		•	
0306-12	3/4	1 1/16-12	0.438	11.13	1 3/8	1.375	34.93	•		•	
0306-14	7/8	1 3/16-12	0.406	10.31	1 1/2	1.500	38.10	•		•	
0306-16	1	1 5/16-12	0.406	10.31	1 5/8	1.625	41.28	•		•	
0306-20	1 1/4	1 5/8-12	0.406	10.31	1 7/8	1.875	47.63	•		•	
0306-24	1 1/2	1 7/8-12	0.421	10.46	2 1/8	2.125	53.98	•		•	
0306-32	2	2 1/2-12	0.406	10.31	2 3/4	2.750	69.85	•		•	

# BULN 0306-N Series

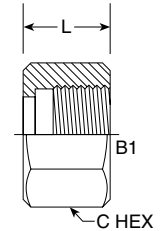
SAE # 070117



PART NO. SIZE	TUBE O.D.	B1 THREAD	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
								S	FG	SS	B
0306-N-03	3/16	3/8-24	0.223	5.66	1/2	0.500	12.70			•	
0306-N-04	1/4	7/16-20	0.250	6.35	9/16	0.562	14.27	•		•	
0306-N-05	5/16	1/2-20	0.250	6.35	5/8	0.625	15.88	•		•	
0306-N-06	3/8	9/16-18	0.270	6.86	11/16	0.687	17.45	•		•	
0306-N-08	1/2	3/4-16	0.310	7.87	7/8	0.875	22.23	•		•	
0306-N-10	5/8	7/8-14	0.360	9.14	1	1.000	25.40	•		•	
0306-N-12	3/4	1 1/16-12	0.410	10.41	1 1/4	1.250	31.75	•		•	
0306-N-14	7/8	1 3/16-12	0.406	10.31	1 3/8	1.375	34.93	•		•	
0306-N-16	1	1 5/16-12	0.406	10.31	1 1/2	1.500	38.10	•		•	

# JIC Tube Nut 0318 Series

SAE # 070110

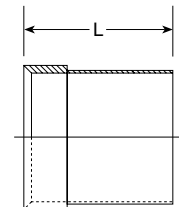


PART NO. SIZE	TUBE O.D.	B1 THREAD	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
								S	FG	SS	B
0318-02	1/8	5/16-24	0.540	13.72	3/8	0.375	9.53	•		•	•
0318-03	3/16	3/8-24	0.600	15.24	7/16	0.438	11.13	•		•	•
0318-04	1/4	7/16-20	0.610	15.49	9/16	0.562	14.27	•		•	•
0318-05	5/16	1/2-20	0.670	17.02	5/8	0.625	15.88	•		•	•
0318-06	3/8	9/16-18	0.720	18.29	11/16	0.688	17.48	•		•	•
0318-08	1/2	3/4-16	0.840	21.34	7/8	0.875	22.23	•		•	•
0318-10	5/8	7/8-14	0.970	24.64	1	1.000	25.40	•		•	•
0318-12	3/4	1 1/16-12	1.020	25.91	1 1/4	1.250	31.75	•		•	•
0318-14	7/8	1 3/16-12	1.080	27.43	1 3/8	1.375	34.93	•		•	•
0318-16	1	1 5/16-12	1.120	28.45	1 1/2	1.500	38.10	•		•	•
0318-20	1 1/4	1 5/8-12	1.220	30.99	2	2.000	50.80	•		•	•
0318-24	1 1/2	1 7/8-12	1.410	35.81	2 1/4	2.250	57.15	•		•	•
0318-32	2	2 1/2-12	1.740	44.20	2 7/8	2.875	73.03	•		•	•
0318-40	2 1/2	3-12	1.638	41.61	3 3/8	3.375	85.73	•		•	•

PART NO. SIZE	TUBE O.D.	L LGTH	M.M.	Standard Material From Stock			
				S	FG	SS	B
V0319-02	1/8	0.340	8.64	•		•	•
V0319-03	3/16	0.340	8.64	•		•	•
V0319-04	1/4	0.410	10.41	•		•	•
V0319-05	5/16	0.440	11.18	•		•	•
V0319-06	3/8	0.500	12.70	•		•	•
V0319-08	1/2	0.560	14.22	•		•	•
V0319-10	5/8	0.660	16.76	•		•	•
V0319-12	3/4	0.680	17.27	•		•	•
V0319-14	7/8	0.760	19.30	•		•	•
V0319-16	1	0.780	19.81	•		•	•
V0319-20	1 1/4	0.910	23.11	•		•	•
V0319-24	1 1/2	1.120	28.45	•		•	•
V0319-32	2	1.190	30.23	•		•	•

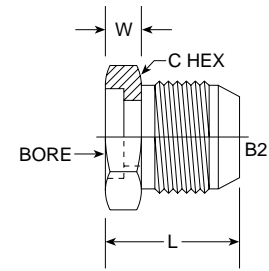
# JIC Tube Sleeve 0319 Series

SAE # 070115



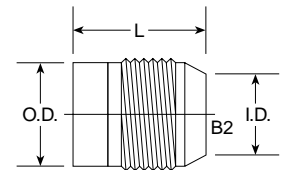
# Tube Fittings & Adapters

## Bore-MJ Straight 0403 Series



PART NO. SIZE	TUBE O.D.	B2 THREAD	BORE	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
0403-04-04	1/4	7/16-20	1/4	0.796	20.22	0.220	15.59	1/2	0.500	12.70	•		•	
0403-05-04	5/16	1/2-20	5/16	0.796	20.22	0.220	5.59	1/2	0.500	12.70	•		•	
0403-05-05	5/16	1/2-20	5/16	0.796	20.22	0.220	5.59	9/16	0.562	14.27	•		•	
0403-06-06	3/8	9/16-18	3/8	0.843	21.41	0.250	6.35	5/8	0.625	15.88	•		•	
0403-06-08	3/8	3/4-16	3/8	0.937	23.80	0.250	6.35	13/16	0.812	20.62	•		•	
NEW 0403-08-06											•		•	
0403-08-08	1/2	3/4-16	1/2	0.937	23.80	0.250	6.35	13/16	0.812	20.62	•		•	
0403-08-10	1/2	7/8-14	1/2	1.093	27.76	0.310	7.87	15/16	0.937	23.80	•		•	
0403-10-08	5/8	3/4-16	5/8	0.937	23.80	0.250	6.35	15/16	0.937	23.80	•		•	
0403-10-10	5/8	7/8-14	5/8	1.093	27.76	0.310	7.87	15/16	0.937	23.80	•		•	
0403-10-12	5/8	1 1/16-12	5/8	1.281	32.54	0.380	9.65	1 1/4	1.250	31.75	•		•	
0403-12-08	3/4	3/4-16	3/4	0.937	23.80	0.380	9.65	1 1/4	1.250	31.75	•		•	
0403-12-10	3/4	7/8-14	3/4	1.093	27.76	0.380	9.65	1 1/4	1.250	31.75	•		•	
0403-12-12	3/4	1 1/16-12	3/4	1.281	32.54	0.380	9.65	1 1/4	1.250	31.75	•		•	
0403-14-14	7/8	1 3/16-12	7/8	1.312	33.32	0.380	9.65	1 1/2	1.500	38.10	•		•	
0403-16-12	1	1 1/16-12	1	1.281	32.54	0.380	9.65	1 3/8	1.375	34.93	•		•	
0403-16-16	1	1 5/16-12	1	1.328	33.73	0.380	9.65	1 3/8	1.375	34.93	•		•	
0403-16-20	1	1 5/8-12	1	1.453	36.91	0.460	11.68	1 11/16	1.688	42.86	•		•	
0403-20-16	1 1/4	1 5/16-12	1 1/4	1.328	33.73	0.460	11.68	1 11/16	1.688	42.86	•		•	
0403-20-20	1 1/4	1 5/8-12	1 1/4	1.453	36.91	0.460	11.68	1 11/16	1.688	42.86	•		•	
0403-20-24	1 1/4	1 7/8-12	1 1/4	1.656	42.06	0.530	13.46	2	2.000	50.80	•		•	
0403-24-20	1 1/4	1 5/8-12	1 1/2	1.453	36.91	0.530	13.46	2	2.000	50.80	•		•	
0403-24-24	1 1/2	1 7/8-12	1 1/2	1.656	42.06	0.530	13.46	2	2.000	50.80	•		•	
0403-32-32	2	2 1/2-12	2	2.046	51.97	0.680	17.27	2 5/8	2.625	66.68	•		•	

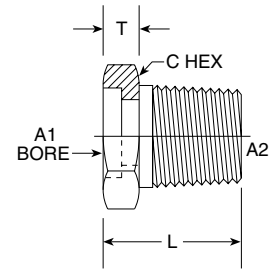
## MJ Tube Spud 0403-TS Series



PART NO. SIZE	TUBE O.D.	B2	O.D.	I.D.	Standard Material From Stock			
					S	FG	SS	B
0403-TS-04-04	1/4	7/16-20	0.361	0.172	•			
0403-TS-06-06	3/8	9/16-18	0.471	0.297	•			
0403-TS-08-08	1/2	3/4-16	0.628	0.391	•			
0403-TS-10-10	5/8	7/8-14	0.752	0.484	•			
0403-TS-12-12	3/4	1 1/16-12	0.862	0.609	•			
0403-TS-16-16	1	1 5/8-12	1.159	0.844	•			
0403-TS-20-20	1 1/4	1 5/8-12	1.504	1.078	•			
0403-TS-24-24	1 1/2	1 7/8-12	1.628	1.312	•			

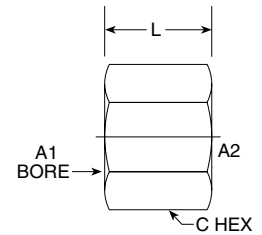


# Bore-MP Straight 0404 Series



PART NO. SIZE	TUBE O.D.	A2 THREAD	A1 BORE	L LGTH	M.M.	T WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
0404-04-02	1/4	1/8-27	1/4	0.562	14.27	0.187	4.75	1/2	0.500	12.70	•		•	
0404-04-04	1/4	1/4-18	1/4	0.843	21.43	0.270	6.86	5/8	0.625	15.88	•		•	
0404-06-04	3/8	1/4-18	3/8	0.812	20.62	0.250	6.35	5/8	0.625	15.88	•		•	
0404-06-06	3/8	3/8-18	3/8	0.875	22.22	0.310	7.88	3/4	0.750	19.05	•		•	
0404-08-06	1/2	3/8-18	1/2	0.843	21.41	0.281	7.14	13/16	0.812	20.62	•		•	
0404-08-08	1/2	1/2-14	1/2	1.100	27.00	0.360	9.14	7/8	0.875	22.22	•		•	
0404-10-06	5/8	3/8-18	5/8	0.843	21.41	0.281	7.14	13/16	0.812	20.62	•		•	
0404-10-08	5/8	1/2-14	5/8	1.078	27.38	0.328	8.33	15/16	0.940	23.88	•		•	
0404-12-08	3/4	1/2-14	3/4	1.080	27.53	0.360	9.14	15/16	0.937	23.81	•		•	
0404-12-12	3/4	3/4-14	3/4	1.093	27.76	0.343	8.71	1 1/8	1.125	28.58	•		•	
0404-16-12	1	3/4-16	1	1.260	32.00	0.500	12.70	1 1/4	1.250	31.76	•		•	
0404-16-16	1	1-11 1/2	1	1.312	33.32	0.375	9.53	1 3/8	1.375	34.93	•		•	
0404-20-16	1 1/4	1-11 1/2	1 1/4	1.376	34.95	0.437	11.10	1 11/16	1.688	42.86	•		•	
0404-20-20	1 1/4	1 1/4-11 1/2	1 1/4	1.406	35.71	0.437	11.10	1 11/16	1.688	42.86	•		•	
0404-24-16	1 1/2	1-11 1/2	1.5	1.375	34.92	0.500	12.70	1 3/4	1.750	44.45	•		•	
0404-24-24	1 1/2	1 1/2-11 1/2	1 1/2	1.500	38.10	0.500	12.70	2	2.000	50.80	•		•	
0404-32-32	2	2-11 1/2	2	1.781	45.24	0.750	19.05	2 5/8	2.625	66.68	•		•	

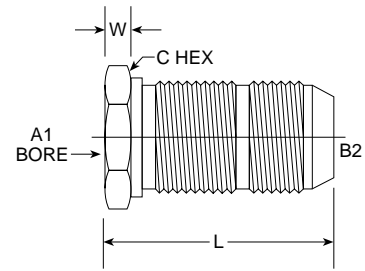
# Bore-FP Straight 0405 Series



PART NO. SIZE	TUBE O.D.	A2 THREAD	A1 BORE	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
									S	FG	SS	B
0405-04-02	1/4	7/16-20	1/4	0.640	16.26	9/16	0.562	14.27	•		•	
0405-06-04	3/8	9/16-18	3/8	0.843	21.41	3/4	0.750	19.05	•		•	
0405-08-06	1/2	3/4-16	1/2	0.906	23.01	7/8	0.875	22.23	•		•	
0405-12-12	3/4	1 1/16-12	3/4	1.203	30.56	1 3/8	1.375	34.93	•		•	
0405-16-16	1	1 5/16-12	1	1.437	36.50	1 5/8	1.625	41.28	•		•	
0405-20-20	1 1/4	1 5/8-12	1 1/4	1.531	38.89	2	2.000	50.80	•		•	

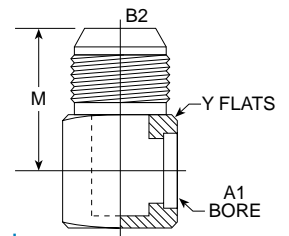
# Tube Fittings & Adapters

## Bore-MJ Bulkhead Straight 0406 Series



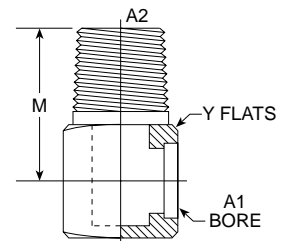
PART NO. SIZE	TUBE O.D.	B2 THREAD	A1 BORE	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
0406-08-08	1/2	3/4-16	1/2	1.845	46.45	0.375	9.52	1	1.000	25.40	•			
0406-12-12	3/4	1 1/16-12	3/4	2.300	58.42	0.500	12.70	1 3/8	1.375	34.92	•			

## Bore-MJ 90° 0500 Series



PART NO. SIZE	TUBE O.D.	B2 THREAD	A1 BORE	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
									S	FG	SS	B
0500-04-04	1/4	7/16-20	1/4	0.890	22.61	1/2	0.500	12.70	•			
0500-05-05	5/16	1/2-20	5/16	0.953	24.21	9/16	0.562	14.27	•			
0500-06-04	3/8	9/16-18	3/8	1.062	26.97	5/8	0.625	15.88	•			
0500-06-06	3/8	9/16-18	3/8	1.062	26.97	5/8	0.625	15.88	•			
0500-08-08	1/2	3/4-16	1/2	1.250	31.75	13/16	0.812	20.62	•			
0500-10-08	1/2	3/4-16	5/8	1.310	33.28	15/16	0.937	23.82	•			
0500-10-10	5/8	7/8-14	5/8	1.453	36.91	15/16	0.937	23.80	•			
0500-12-08	5/8	7/8-14	5/8	1.453	36.91	15/16	0.937	23.80	•			
0500-12-12	3/4	1 1/16-12	3/4	1.656	42.06	1 1/8	1.125	28.58	•		•	
0500-14-14	7/8	1 3/16-12	7/8	1.734	44.04	1 1/4	1.250	31.75	•			
NEW 0500-16-12	1	1 5/16-12	1	1.812	46.02	1 3/8	1.375	34.93	•		•	
0500-16-16	1 1/4	1 5/8-12	1 1/4	2.062	52.37	1 3/4	1.750	44.45	•			
0500-20-16	1 1/4	1 5/8-12	1 1/4	2.062	52.37	1 3/4	1.750	44.45	•			
0500-24-20	1 1/2	1 7/8-12	1 1/2	2.328	59.13	2	2.000	50.80	•			
0500-24-24	1 1/2	1 7/8-12	1 1/2	2.328	59.13	2	2.000	50.80	•			
0500-32-32	2	2 1/2-12	2	3.062	77.77	2 5/8	2.625	66.68	•			

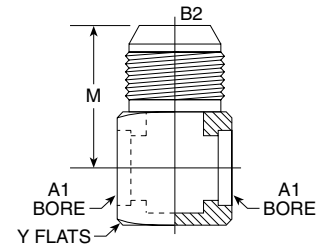
## Bore-MP 90° 0501 Series



PART NO. SIZE	TUBE O.D.	A2 THREAD	A1 BORE	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
									S	FG	SS	B
0501-06-04	3/8	1/4-18	3/8	1.055	26.8	5/8	0.625	15.88	•		•	

# Bore-Bore-MJ Tee

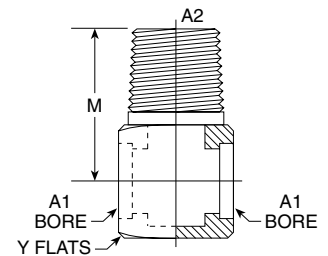
## 0600 Series



PART NO. SIZE	TUBE O.D.	B2 THREAD	A1 BORE	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
									S	FG	SS	B
0600-04-04-04	1/4	7/16-20	1/4	0.890	22.61	1/2	0.500	12.70	•			
0600-05-05-05	5/16	1/2-20	5/16	0.953	24.21	9/16	0.562	14.27	•			
0600-06-06-06	3/8	9/16-18	3/8	1.062	26.97	5/8	0.625	15.88	•			
0600-08-08-08	1/2	3/4-16	1/2	1.250	31.75	13/16	0.812	20.62	•			
0600-10-10-10	5/8	7/8-14	5/8	1.453	36.91	15/16	0.937	23.80	•			
0600-12-12-12	3/4	1 1/16-12	3/4	1.656	42.06	1-1/8	1.125	28.58	•			
0600-14-14-14	7/8	1 3/16-12	7/8	1.734	44.04	1-1/4	1.250	31.75	•			
0600-16-16-16	1	1 5/16-12	1	1.812	46.02	1-3/8	1.375	34.93	•			
0600-20-20-20	1 1/4	1 5/8-12	1 1/4	2.062	52.37	1-3/4	1.750	44.45	•			
0600-24-24-24	1 1/2	1 7/8-12	1 1/2	2.328	59.13	2	2.000	50.80	•			

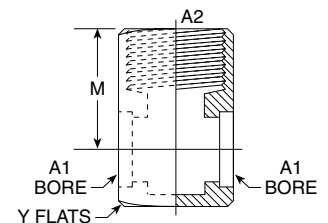
# Bore-Bore-MP Tee

## 0601 Series



PART NO. SIZE	TUBE O.D.	A2 THREAD	A1 BORE	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
									S	FG	SS	B
0601-16-16-16	1	1 11-1/2	1	1.970	50.04	1 3/8	1.375	34.93	•			

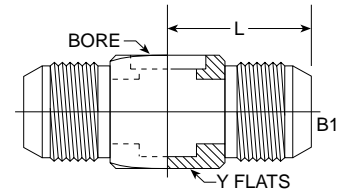
# Bore-Bore-FP 0602 Series



PART NO. SIZE	TUBE O.D.	A2 THREAD	A1 BORE	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
									S	FG	SS	B
0602-06-06-04	3/8	1/4-18	3/8	0.900	22.86	3/4	0.750	19.00	•			
0602-16-16-16	1	1 11-1/2	1	1.650	41.91	1 5/8	1.625	41.28	•		•	

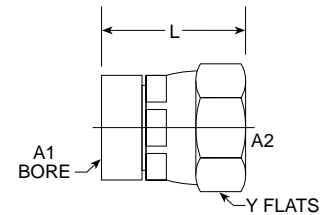
# Tube Fittings & Adapters

## Bore-MJ-MJ Tee 0702 Series



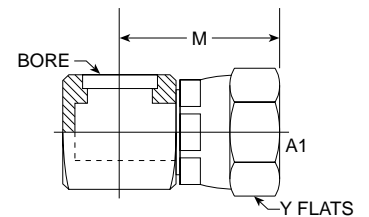
PART NO. SIZE	TUBE O.D.	B1 THREAD	BORE	L LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
									S	FG	SS	B
0702-05-05-05	5/16	1/2-20	5/16	0.970	24.64	9/16	0.562	14.28	•			
0702-06-06-06	3/8	9/16-18	3/8	1.090	27.69	5/8	0.625	15.88	•			
0702-08-08-08	1/2	3/4-16	1/2	1.250	31.75	13/16	0.812	20.63	•			
0702-10-10-10	5/8	7/8-14	5/8	1.450	36.83	15/16	0.937	23.80	•			
0702-12-12-12	3/4	1 1/16	3/4	1.660	42.16	1 1/8	1.125	28.58	•			
0702-16-16-16	1	1 5/16	1	1.810	45.98	1 3/8	1.375	34.92	•			

## Bore-FPS Straight 0800 Series



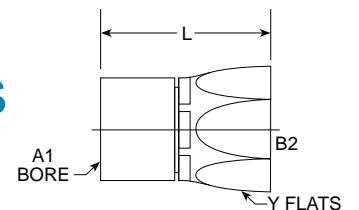
PART NO. SIZE	TUBE O.D.	A2 NPTF	A1 BORE	L LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
									S	FG	SS	B
0800-08-06	1/2	3/8-18	1/2	1.023	25.99	7/8	0.875	22.22	•			

## Bore-FPS 90° 0801 Series



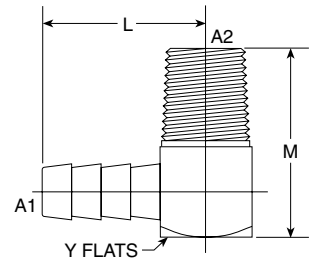
PART NO. SIZE	TUBE O.D.	A1 NPTF	BORE	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
									S	FG	SS	B
0801-06-04	3/8	1/4-18	3/8	0.880	22.36	11/16	0.687	17.47	•			

## Bore-FJS Straight 0900 Series



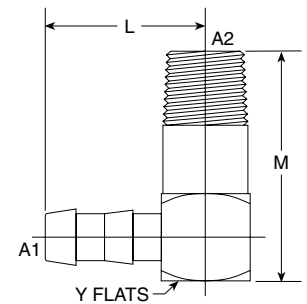
PART NO. SIZE	TUBE O.D.	B2 THREAD	A1 BORE	L LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
									S	FG	SS	B
NEW 0900-04-04	1/4	7/16-20	1/4	0.900	22.86	9/16	0.562	14.28	•			
NEW 0900-08-08	3/8	1 1/16-12	3/4	1.625	41.28	1 1/4	1.250	31.75	•			
NEW 0900-12-12	3/4	1 1/16-12	3/4	1.625	41.28	1 1/4	1.250	31.75	•			
NEW 0900-16-16	1 1/4	1 5/8-12	1 1/4	1.950	49.54	2	2.000	50.80	•			

## Brass Elbow 0954 Series



PART NO. SIZE	TUBE O.D.	A1 NPTF	BORE	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
									S	FG	SS	B		
<b>NEW</b> 0954														•

## Brass Elbow 0954-L Series

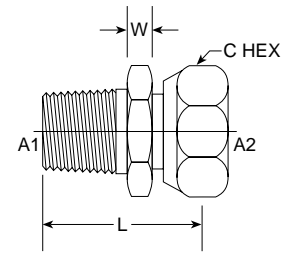


PART NO. SIZE	TUBE O.D.	A1 NPTF	BORE	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
									S	FG	SS	B		
<b>NEW</b> 0954-L														•

# Tube Fittings & Adapters

## MP-FPS Straight 1404 Series

SAE # 140130

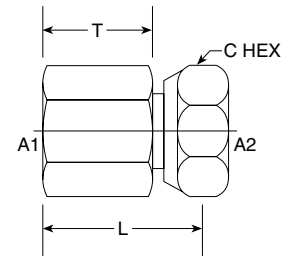


PART NO. SIZE	TUBE O.D.	A1 NPTF	A2 NPSM	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
1404-02-02	1/8	1/8-27	1/8-27	0.940	23.88	0.180	4.57	9/16	0.562	14.27	•		•	
1404-02-04	1/8 1/4	1/8-27	1/4-18	1.000	25.40	0.183	4.65	11/16	0.687	17.45	•		•	
1404-04-02	1/4 1/8	1/4-18	1/8-27	1.187	30.15	0.253	6.43	11/16	0.687	17.45	•		•	
1404-04-04*	1/4	1/4-18	1/4-18	1.250	31.75	0.240	6.10	11/16	0.687	17.45	•		•	
1404-04-06	1/4 3/8	1/4-18	3/8-18	1.250	31.75	0.253	6.43	7/8	0.875	22.23	•		•	
1404-04-08	1/4 1/2	1/4-18	1/2-14	1.424	36.17	0.370	9.40	7/8	0.875	22.23	•		•	
1404-06-04	3/8 1/4	3/8-18	1/4-18	1.312	33.32	0.313	7.95	7/8	0.875	22.23	•		•	
1404-06-06*	3/8	3/8-18	3/8-18	1.310	33.27	0.313	7.95	7/8	0.875	22.23	•		•	
1404-06-08	3/8 1/2	3/8-18	1/2-14	1.310	33.27	0.266	6.76	1	1.000	25.40	•		•	
1404-08-04	1/2 1/4	1/2-14	1/4-18	1.531	38.89	0.370	9.40	1	1.000	25.40	•		•	
1404-08-06	1/2 3/8	1/2-14	3/8-18	1.590	40.39	0.403	10.24	1	1.000	25.40	•		•	
1404-08-08*	1/2	1/2-14	1/2-14	1.620	41.15	0.370	9.40	1	1.000	25.40	•		•	
1404-08-12	1/2 3/4	1/2-14	3/4-14	1.750	44.45	0.391	9.93	1 1/4	1.250	31.75	•		•	
1404-12-06	3/4 3/8	3/4-14	3/8-18	1.550	39.37	0.370	9.40	1 1/4	1.250	31.75	•		•	
1404-12-08	3/4 1/2	3/4-14	1/2-14	1.650	41.91	0.386	9.80	1 1/4	1.250	31.75	•		•	
1404-12-12*	3/4	3/4-14	3/4-14	1.750	44.45	0.370	9.40	1 1/4	1.250	31.75	•		•	
1404-12-16	3/4 1	3/4-14	1-11 1/2	1.812	46.02	0.430	10.92	1 1/2	1.500	38.10	•		•	
1404-12-20	3/4 1 1/4	3/4-14	1 1/4-11 1/2	1.840	46.74	0.490	12.45	1 7/8	1.875	47.63	•		•	
1404-16-06	1 3/8	1-11 1/2	3/8-18	1.830	46.48	0.430	10.92	1 1/2	1.500	38.10	•		•	
1404-16-08	1 1/2	1-11 1/2	1/2-14	1.810	45.97	0.430	10.92	1 1/2	1.500	38.10	•		•	
1404-16-12	1 3/4	1-11 1/2	3/4-14	2.010	51.05	0.430	10.92	1 1/2	1.500	38.10	•		•	
1404-16-16	1	1-11 1/2	1-11 1/2	2.000	50.80	0.430	10.92	1 1/2	1.500	38.10	•		•	
1404-16-20	1 1/4	1-11 1/2	1 1/4-11 1/2	2.050	52.07	0.490	12.45	1 7/8	1.875	47.63	•		•	
<b>NEW</b> 1404-16-24											•		•	
1404-20-16	1 1/4 1	1 1/4-11 1/2	1-11 1/2	2.017	51.23	0.490	12.45	1 7/8	1.875	47.63	•		•	
1404-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	2.060	52.32	0.490	12.45	1 7/8	1.875	47.63	•		•	
1404-20-24	1 1/4 1 1/2	1 1/4-11 1/2	1 1/2-11 1/2	2.093	53.16	0.490	12.45	2 1/8	2.125	53.98	•		•	
1404-24-20	1 1/4 1 1/4	1 1/2-11 1/2	1 1/4-11 1/2	2.187	55.55	0.490	12.45	2 1/8	2.125	53.98	•		•	
1404-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.190	55.63	0.490	12.45	2 1/8	2.125	53.98	•		•	
1404-32-32	2	2-11 1/2	2-11 1/2	2.380	60.45	0.610	15.49	2 5/8	2.625	66.68	•		•	

\*available in blanks

# FP-FPS Straight 1405 Series

SAE # 140131

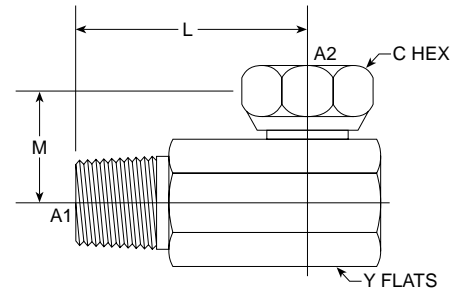


PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPSM	L LGTH	M.M.	T WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
1405-02-02	1/8	1/8-27	1/8-27	0.880	22.35	0.500	12.70	9/16	0.562	14.27	•		•	
1405-02-04	1/8 1/4	1/8-27	1/4-18	1.260	32.00	0.812	20.62	11/16	0.687	17.45	•		•	
1405-04-02	1/4 1/8	1/4-18	1/8-27	1.170	29.72	0.812	20.62	11/16	0.687	17.45	•		•	
1405-04-04	1/4	1/4-18	1/4-18	1.240	31.50	0.812	20.62	11/16	0.687	17.45	•		•	
1405-04-06	1/4 3/8	1/4-18	3/8-18	1.250	31.75	0.812	20.62	11/16	0.687	17.45	•		•	
<b>NEW</b> 1405-04-08											•		•	
1405-06-04	3/8 1/4	3/8-18	1/4-18	1.312	33.32	0.875	22.23	7/8	0.875	22.23	•		•	
1405-06-06	3/8	3/8-18	3/8-18	1.310	33.27	0.875	22.23	7/8	0.875	22.23	•		•	
1405-06-08	3/8 1/2	3/8-18	1/2-14	1.357	34.47	0.875	22.23	1	1.000	25.40	•		•	
1405-08-04	1/2 1/4	3/4-16	1/4-18	1.550	39.37	1.120	28.45	1	1.000	25.40	•		•	
1405-08-06	1/2 3/8	1/2-14	3/8-18	1.453	36.91	1.036	26.31	1	1.000	25.40	•		•	
1405-08-08	1/2	1/2-14	1/2-14	1.500	38.10	1.015	25.78	1	1.000	25.40	•		•	
1405-08-12	1/2 3/4	1/2-14	3/4-14	1.620	41.15	1.015	25.78	1 1/4	1.250	31.75	•		•	
1405-12-08	3/4 1/2	3/4-14	1/2-14	1.530	38.86	1.023	25.98	1 1/4	1.250	31.75	•		•	
1405-12-12	3/4	3/4-14	3/4-14	1.620	41.15	1.015	25.78	1 1/4	1.250	31.75	•		•	
1405-12-16	3/4 1	3/4-14	1-11 1/2	1.920	48.77	1.261	32.03	1 1/2	1.500	38.10	•		•	
1405-16-12	1 3/4	1-11 1/2	3/4-14	1.930	49.02	1.261	32.03	1 1/2	1.500	38.10	•		•	
1405-16-16	1	1-11 1/2	1-11 1/2	2.000	50.80	1.375	34.93	1 1/2	1.500	38.10	•		•	
1405-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	2.000	50.80	1.281	32.54	1 7/8	1.875	47.63	•		•	
1405-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.000	50.80	1.312	33.32	2 1/8	2.125	53.98	•		•	
1405-32-32	2	2-11 1/2	2-11 1/2	2.120	53.85	1.375	34.93	2 5/8	2.625	66.68	•		•	

# Tube Fittings & Adapters

## MP-FPS 90° 1501 Series

SAE # 140230

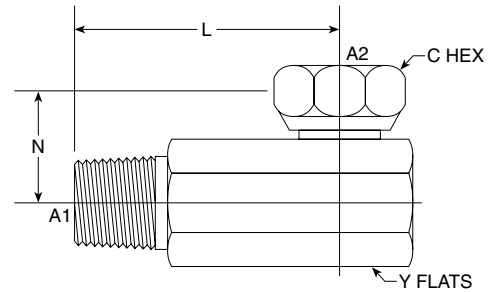


PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPSM	L LGTH	M		C HEX	C HEX	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
					M.M.	M.M.						S	FG	SS	B		
1501-02-02	1/8	1/8-27	1/8-27	0.940	23.88	0.690	17.53	9/16	0.562	14.27	9/16	0.562	14.27	•		•	
1501-02-04	1/8 1/4	1/8-27	1/4-18	1.190	30.23	0.750	19.05	11/16	0.687	17.45	11/16	0.687	17.45	•		•	
1501-04-02	1/4 1/8	1/4-18	1/8-27	1.010	25.65	0.700	17.78	9/16	0.562	14.27	11/16	0.687	17.45	•		•	
1501-04-04*	1/4	1/4-18	1/4-18	1.190	30.23	0.750	19.05	11/16	0.687	17.45	11/16	0.687	17.45	•		•	
1501-04-06	1/4 3/8	1/4-18	3/8-18	1.500	38.10	0.937	23.80	7/8	0.875	22.23	7/8	0.875	22.23	•		•	
1501-04-08	1/4 1/2	1/4-18	1/2-14	1.620	41.15	1.000	25.40	1	1.000	25.40	1	1.000	25.40	•		•	
1501-06-04	3/8 1/4	3/8-18	1/4-18	1.500	38.10	0.858	21.79	11/16	0.687	17.45	7/8	0.875	22.23	•		•	
1501-06-06*	3/8	3/8-18	3/8-18	1.500	38.10	0.940	23.88	7/8	0.875	22.23	7/8	0.875	22.23	•		•	
1501-06-08	3/8 1/2	3/8-18	1/2-14	1.586	40.28	0.937	23.80	1	1.000	25.40	1	1.000	25.40	•		•	
1501-06-12	3/4	3/8-18	3/4-14	1.125	28.58	1.810	45.97	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
1501-08-04	1/2 1/4	3/4-16	1/4-18	1.750	44.45	0.920	23.37	11/16	0.687	17.45	1	1.000	25.40	•		•	
1501-08-06	1/2 3/8	1/2-14	3/8-18	1.750	44.45	1.000	25.40	1	1.000	25.40	1	1.000	25.40	•		•	
1501-08-08*	1/2	1/2-14	1/2-14	1.875	47.63	1.500	38.10	1	1.000	25.40	1	1.000	25.40	•		•	
1501-08-12	1/2 3/4	1/2-14	3/4-14	1.250	31.75	1.190	30.23	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
1501-12-04	3/4 1/4	3/4-14	1/4-18	2.000	50.80	0.960	24.38	11/16	0.687	17.45	1 1/4	1.250	31.75	•		•	
1501-12-06	3/4 3/8	3/4-14	3/8-18	2.000	50.80	1.020	25.91	7/8	0.875	22.23	1 1/4	1.250	31.75	•		•	
1501-12-08	3/4 1/2	3/4-14	1/2-14	2.000	50.80	1.170	29.72	1	1.000	25.40	1 1/4	1.250	31.75	•		•	
1501-12-12*	3/4	3/4-14	3/4-14	2.000	50.80	1.190	30.23	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
1501-12-16	3/4 1	3/4-14	1-11 1/2	2.190	55.63	1.440	36.58	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•		•	
1501-12-20	3/4 1 1/4	3/4-14	1 1/4-11 1/2	2.370	60.20	1.620	41.15	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•		•	
1501-16-08	1 1 1/2	1-11 1/2	1/2-14	2.380	60.45	1.230	31.24	1	1.000	25.40	1 1/2	1.500	38.10	•		•	
1501-16-12	1 3/4	1-11 1/2	3/4-14	2.380	60.45	1.390	35.31	1 1/4	1.250	31.75	1 1/2	1.500	38.10	•		•	
1501-16-16	1	1-11 1/2	1-11 1/2	2.380	60.45	1.440	36.58	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•		•	
1501-16-20	1 1 1/4	1-11 1/2	1 1/4-11 1/2	2.620	66.55	1.620	41.15	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•		•	
1501-20-12	1 1/4 3/4	1 1/4-11 1/2	3/4-14	2.620	66.55	1.570	39.88	1 1/4	1.250	31.75	1 7/8	1.875	47.63	•		•	
1501-20-16	1 1/4 1	1 1/4-11 1/2	1-11 1/2	2.620	66.55	1.580	40.13	1 1/2	1.500	38.10	1 7/8	1.875	47.63	•		•	
1501-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	2.620	66.55	1.620	41.15	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•		•	
1501-20-24	1 1/4 1 1/2	1 1/4-11 1/2	1 1/2-11 1/2	2.810	71.37	1.720	43.69	2 1/8	2.125	53.98	2 1/8	2.125	53.98	•		•	
1501-24-20	1 1/2 1 1/4	1 1/2-11 1/2	1 1/4-11 1/2	2.810	71.37	1.750	44.45	1 7/8	1.875	47.63	2 1/8	2.125	53.98	•		•	
1501-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.810	71.37	1.750	44.45	2 1/8	2.125	53.98	2 1/8	2.125	53.98	•		•	
1501-32-32	2	2-11 1/2	2-11 1/2	3.120	79.25	2.310	58.67	2 5/8	2.625	66.68	2 5/8	2.625	66.68	•		•	

\*Note: Available in blanks.



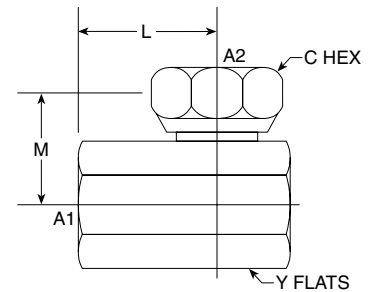
# MP-FPS 90° Long 1501-L Series



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPSM	L LGTH	N		C		Y		Standard Material From Stock						
					M.M.	LGTH M.M.	HEX	HEX	M.M.	FLATS	FLATS	M.M.	S	FG	SS	B	
1501-L-02-02	1/8	1/8-27	1/8-27	1.640	41.66	0.940	23.88	9/16	0.562	14.27	9/16	0.562	14.27	•		•	
1501-L-04-04	1/4	1/4-18	1/4-18	2.250	57.15	1.190	30.23	11/16	0.687	17.45	11/16	0.687	17.45	•		•	
1501-L-06-06	3/8	3/8-18	3/8-18	2.760	70.10	1.500	38.10	7/8	0.875	22.23	7/8	0.875	22.23	•		•	
<b>NEW</b> 1501-L-08-06														•		•	
1501-L-08-08	1/2	1/2-14	1/2-14	3.190	81.03	1.500	38.10	1	1.000	25.40	1	1.000	25.40	•		•	
1501-L-12-12	3/4	3/4-14	3/4-14	3.660	92.96	2.000	50.80	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
1501-L-16-16	1	1 11-1/2	1 11-1/2	4.330	109.99	1.440	36.58	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•		•	

# FP-FPS 90° 1502 Series

SAE # 140231

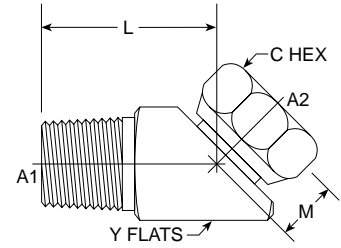


PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPSM	L LGTH	M		C		Y		Standard Material From Stock						
					M.M.	LGTH M.M.	HEX	HEX	M.M.	FLATS	FLATS	M.M.	S	FG	SS	B	
1502-02-02	1/8	1/8-27	1/8-27	0.656	16.66	0.687	17.45	9/16	0.560	14.22	9/16	0.560	14.22	•			
1502-02-04	1/8 1/4	1/8-27	1/4-18	0.781	19.84	0.690	17.53	11/16	0.687	17.45	11/16	0.687	17.45	•			
1502-04-02	1/4 1/8	1/4-18	1/8-27	0.750	19.05	0.937	23.80	9/16	0.560	14.22	11/16	0.687	17.45	•			
1502-04-04	1/4	1/4-18	1/4-18	0.781	19.84	0.937	23.80	11/16	0.687	17.45	11/16	0.687	17.45	•			
1502-04-06	1/4 3/8	1/4-18	3/8-18	0.937	23.80	1.062	26.97	7/8	0.875	22.23	7/8	0.875	22.23	•		•	
1502-06-04	3/8 1/4	3/8-18	1/4-18	0.796	20.22	1.062	26.97	11/16	0.687	17.45	7/8	0.875	22.23	•		•	
1502-06-06	3/8	3/8-18	3/8-18	0.937	23.80	1.062	26.97	7/8	0.875	22.23	7/8	0.875	22.23	•		•	
1502-06-08	3/8 1/2	3/8-18	1/2-14	1.000	25.40	1.250	31.75	1	1.000	25.40	1	1.000	25.40	•		•	
1502-08-04	1/2 1/4	3/4-16	1/4-18	0.937	23.80	1.250	31.75	11/16	0.687	17.45	1	1.000	25.40	•		•	
1502-08-06	1/2 3/8	1/2-14	3/8-18	1.000	25.40	1.250	31.75	7/8	0.875	22.23	1	1.000	25.40	•		•	
1502-08-08	1/2	1/2-14	1/2-14	1.000	25.40	1.250	31.75	1	1.000	25.40	1	1.000	25.40	•		•	
1502-08-12	1/2 3/4	1/2-14	3/4-14	1.250	31.75	1.437	36.50	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
1502-12-08	3/4	3/4-14	1/2-14	1.125	28.58	1.437	36.50	1	1.000	25.40	1 1/4	1.250	31.75	•		•	
1502-12-12	3/4 1/2	3/4-14	3/4-14	1.250	31.75	1.437	36.50	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•	•	•	
1502-12-16	3/4 1	3/4-14	1-11 1/2	1.390	35.31	1.750	44.45	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•		•	
1502-16-12	1 3/4	1-11 1/2	3/4-14	1.375	34.93	1.750	44.45	1 1/4	1.250	31.75	1 1/2	1.500	38.10	•		•	
1502-16-16	1	1-11 1/2	1-11 1/2	0.390	09.91	1.750	44.45	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•	•	•	
1502-20-16	1 1/4 1	1 1/4-11 1/2	1-11 1/2	1.626	41.30	2.000	50.80	1 1/2	1.500	38.10	1 7/8	1.875	47.63	•		•	
1502-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1.656	42.06	2.000	50.80	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•		•	
1502-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1.734	44.04	2.250	57.15	2 1/8	2.125	53.98	2 1/8	2.125	53.98	•		•	
1502-32-32	2	2-11 1/2	2-11 1/2	2.312	58.72	2.500	63.50	2 5/8	2.625	66.68	2 5/8	2.625	66.68	•		•	

# Tube Fittings & Adapters

## MP-FPS 45° 1503 Series

SAE # 140330

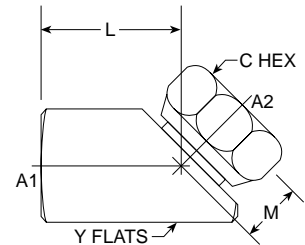


PART NO. SIZE	TUBE O.D.	A1 NPTF	A2 NPSM	L LGTH	M		C HEX	C HEX	Y FLATS	Y FLATS	Y FLATS	Standard Material From Stock					
					M.M.	LGTH						M.M.	HEX	M.M.	FLATS	M.M.	S
1503-02-02	1/8	1/8-27	1/8-27	0.620	15.75	0.500	12.70	9/16	0.562	14.27	9/16	0.562	14.27	•	•	•	
1503-02-04	1/8 1/4	1/8-27	1/4-18	0.656	16.66	0.468	11.89	11/16	0.687	17.45	11/16	0.687	17.45	•			
1503-04-02	1/4 1/8	1/4-18	1/8-27	0.910	23.11	0.510	12.95	9/16	0.562	14.27	11/16	0.687	17.45	•			
1503-04-04*	1/4	1/4-18	1/4-18	0.940	23.88	0.690	17.53	11/16	0.687	17.45	11/16	0.687	17.45	•	•	•	
1503-04-06	1/4 3/8	1/4-18	3/8-18	0.750	19.05	1.062	26.97	7/8	0.875	22.23	7/8	0.875	22.23	•			
1503-04-08	1/4 1/2	1/4-18	1/2-14	1.310	33.27	0.690	17.53	1	1.000	25.40	1	1.000	25.40	•			
1503-06-04	3/8 1/4	3/8-18	1/4-18	0.625	15.88	1.062	26.97	11/16	0.687	17.45	7/8	0.875	22.23	•			
1503-06-06	3/8	3/8-18	3/8-18	1.060	26.92	0.750	19.05	7/8	0.875	22.23	7/8	0.875	22.23	•	•	•	
1503-06-08	3/8 3/8	3/8-18	1/2-14	0.781	19.84	1.187	30.15	1	1.000	25.40	1	1.000	25.40	•			
1503-08-04	1/2 1/4	3/4-16	1/4-18	0.734	18.64	1.375	34.93	11/16	0.687	17.45	1	1.000	25.40	•			
1503-08-06	1/2 3/8	1/2-14	3/8-18	0.828	21.03	1.375	34.93	7/8	0.875	22.23	1	1.000	25.40	•			
1503-08-08*	1/2	1/2-14	1/2-14	1.310	33.27	0.880	22.35	1	1.000	25.40	1	1.000	25.40	•	•	•	
1503-08-12	1/2 3/4	1/2-14	3/4-14	1.500	38.10	1.000	25.40	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•			
1503-12-06	3/8	3/4-14	3/8-18	1.326	33.68	1.000	25.40	7/8	0.875	22.23	1 1/4	1.250	31.75	•			
1503-12-08	3/4 1/2	3/4-14	1/2-14	0.875	22.23	1.150	29.21	1	1.000	25.40	1 1/4	1.250	31.75	•	•	•	
1503-12-12	3/4	3/4-14	3/4-14	1.500	38.10	1.000	25.40	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•	•	•	
1503-12-16	3/4 1	3/4-14	1-11 1/2	0.046	01.17	1.312	33.32	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•			
1503-16-12	1 3/4	1-11 1/2	3/4-14	1.031	26.19	1.500	38.10	1 1/4	1.250	31.75	1 1/2	1.500	38.10	•			
1503-16-16	1	1-11 1/2	1-11 1/2	1.500	38.10	1.060	26.92	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•	•	•	
1503-16-20	1 1 1/4	1-11 1/2	1 1/4-11 1/2	1.750	44.45	1.065	27.05	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•			
1503-20-16	1 1/4 1	1 1/4-11 1/2	1-11 1/2	1.296	32.92	1.796	45.62	1 1/2	1.500	38.10	1 7/8	1.875	47.63	•			
1503-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1.750	44.45	1.250	31.75	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•			
1503-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1.940	49.28	1.380	35.05	2 1/8	2.125	53.98	2 1/8	2.125	53.98	•	•	•	
1503-32-32	2	2-11 1/2	2-11 1/2	2.000	50.80	1.500	38.10	2 5/8	2.625	66.68	2 5/8	2.625	66.68	•			

\*Note: Available in blanks.

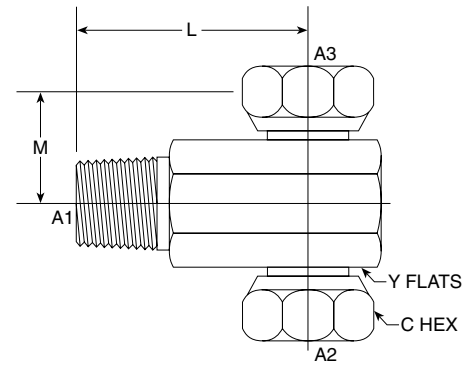
## FP-FPS 45° 1504 Series

SAE # 140331



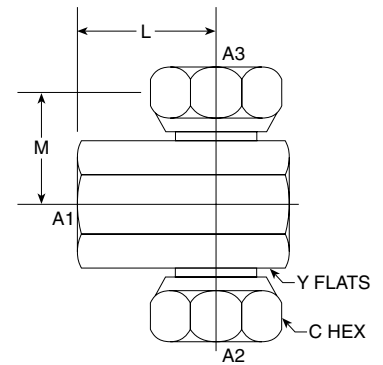
PART NO. SIZE	TUBE O.D.	A1 NPTF	A2 NPSM	L LGTH	M		C HEX	C HEX	Y FLATS	Y FLATS	Y FLATS	Standard Material From Stock					
					M.M.	LGTH						M.M.	HEX	M.M.	FLATS	M.M.	S
1504-02-02	1/8	1/8-27	1/8-27	0.500	12.70	0.460	11.68	9/16	0.562	14.27	9/16	0.562	14.27				
1504-02-04	1/8 1/4	1/8-27	1/4-18	0.500	12.70	0.560	14.22	11/16	0.687	17.45	11/16	0.687	17.45				
1504-04-04	1/4	1/4-18	1/4-18	0.656	16.66	0.906	23.01	11/16	0.687	17.45	11/16	0.687	17.45				
1504-04-06	1/4 3/8	1/4-18	3/8-18	0.734	18.64	1.004	25.50	7/8	0.875	22.23	7/8	0.875	22.23				
1504-06-04	3/8 1/4	3/8-18	1/4-18	1.062	26.97	0.625	15.88	11/16	0.687	17.45	7/8	0.875	22.23				
1504-06-06	3/8	3/8-18	3/8-18	0.734	18.64	1.062	26.97	7/8	0.875	22.23	7/8	0.875	22.23				
1504-06-08	3/8 1/2	3/8-18	1/2-14	0.781	19.84	1.375	34.93	1	1.000	25.40	1	1.000	25.40				
1504-08-06	1/2 3/8	1/2-14	3/8-18	1.375	34.93	0.785	19.94	7/8	0.875	22.23	1	1.000	25.40				
1504-08-08	1/2	1/2-14	1/2-14	0.781	19.84	1.375	34.93	1	1.000	25.40	1	1.000	25.40				
NEW 1504-12-08																	
1504-12-12	3/4	3/4-14	3/4-14	1.000	25.40	1.250	31.75	1 1/4	1.250	31.75	1 1/4	1.250	31.75				
1504-16-12	1 3/4	1-11 1/2	3/4-14	1.500	38.10	1.031	26.19	1 1/4	1.250	31.75	1 1/2	1.500	38.10				
1504-16-16	1	1-11 1/2	1-11 1/2	1.046	26.57	1.500	38.10	1 1/2	1.500	38.10	1 1/2	1.500	38.10				
1504-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1.328	33.73	1.781	45.24	1 7/8	1.875	47.63	1 7/8	1.875	47.63				
1504-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1.250	31.75	1.968	49.99	2 1/8	2.125	53.98	2 1/8	2.125	53.98				

# MP-FPS-FPS Tee 1601 Series



PART NO. SIZE	TUBE O.D.	A1 NPTF	A2 NPSM	A3 NPSM	L		M		C HEX	C HEX M.M.	Y FLATS	Y FLATS M.M.	Standard Material From Stock					
					LGTH	M.M.	LGTH	M.M.					S	FG	SS	B		
1601-02-02-02	1/8	1/8-27	1/8-27	1/8-27	0.940	23.88	0.690	17.53	9/16	0.562	14.27	9/16	0.562	14.27	•			
1601-02-04-04	1/8	1/8-27	1/4-18	1/4-18	1.190	30.23	0.712	18.08	11/16	0.687	17.45	11/16	0.687	17.45	•			
1601-04-04-04	1/4	1/4-18	1/4-18	1/4-18	1.190	30.23	0.750	19.05	11/16	0.687	17.45	11/16	0.687	17.45	•			
1601-04-06-06	1/4	1/4-18	3/8-18	3/8-18	1.500	38.10	0.822	20.88	7/8	0.875	22.23	7/8	0.875	22.23	•			
1601-06-04-04	3/8	3/8-18	1/4-18	1/4-18	1.500	38.10	0.872	22.15	11/16	0.687	17.45	7/8	0.875	22.23	•			
1601-06-06-06	3/8	3/8-18	3/8-18	3/8-18	1.500	38.10	0.940	23.88	7/8	0.875	22.23	7/8	0.875	22.23	•	•		
1601-08-04-04	1/2	1/2-14	1/4-18	1/4-18	1.750	44.45	0.937	23.80	11/16	0.687	17.45	1	1.000	25.40	•			
1601-08-06-06	1/2	1/2-14	3/8-18	3/8-18	1.750	44.45	1.000	25.40	7/8	0.875	22.23	1	1.000	25.40	•			
1601-08-08-08	1/2	1/2-14	1/2-14	1/2-14	1.810	45.97	1.000	25.40	1	1.000	25.40	1	1.000	25.40	•		•	
1601-12-08-08	3/4	3/4-14	1/2-14	1/2-14	2.000	50.80	2.125	53.98	1	1.000	25.40	1 1/4	1.250	31.75	•			
1601-12-12-12	3/4	3/4-14	3/4-14	3/4-14	2.000	50.80	1.190	30.23	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•			
1601-12-16-16	3/4	3/4-14	1-11 1/2	1-11 1/2	2.000	50.80	1.390	35.31	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•			
1601-16-12-12	1	1-11 1/2	3/4-14	3/4-14	2.375	60.33	1.338	33.99	1 1/4	1.250	31.75	1 1/2	1.500	38.10	•			
1601-16-16-16	1	1-11 1/2	1-11 1/2	1-11 1/2	2.380	60.45	1.440	36.58	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•			
1601-20-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1 1/4-11 1/2	2.620	66.55	1.620	41.15	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•			
1601-24-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.810	71.37	1.750	44.45	2 1/8	2.125	53.98	2 1/8	2.125	53.98	•			

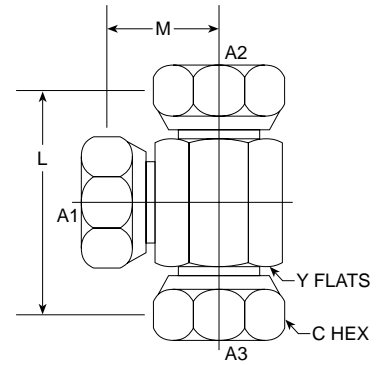
# FP-FPS-FPS Tee 1602 Series



PART NO. SIZE	TUBE O.D.	A1 NPTF	A2 NPSM	A3 NPSM	L		M		C HEX	C HEX M.M.	Y FLATS	Y FLATS M.M.	Standard Material From Stock					
					LGTH	M.M.	LGTH	M.M.					S	FG	SS	B		
1602-02-02-02	1/8	1/8-27	1/8-27	1/8-27	0.656	16.66	0.687	17.45	9/16	0.562	14.27	9/16	0.562	14.27	•			
1602-04-04-04	1/4	1/4-18	1/4-18	1/4-18	0.937	23.80	0.781	19.84	11/16	0.687	17.45	11/16	0.687	17.45	•			
1602-06-04-04	3/8	3/8-18	1/4-18	1/4-18	1.062	26.97	0.872	22.15	11/16	0.687	17.45	7/8	0.875	22.23	•			
1602-06-06-06	3/8	3/8-18	3/8-18	3/8-18	0.937	23.80	1.062	26.97	7/8	0.875	22.23	7/8	0.875	22.23	•			
1602-08-06-06	1/2	1/2-14	3/8-18	3/8-18	1.250	31.75	1.000	25.40	7/8	0.875	22.23	1	1.000	25.40	•			
1602-08-08-08	1/2	1/2-14	1/2-14	1/2-14	1.000	25.40	1.250	31.75	1	1.000	25.40	1	1.000	25.40	•			
1602-08-12-12	1/2	1/2-14	3/4-14	3/4-14	1.250	31.75	1.437	36.50	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•			
1602-12-08-08	3/4	3/4-14	1/2-14	1/2-14	1.437	36.50	1.125	28.58	1	1.000	25.40	1 1/4	1.250	31.75	•			
1602-12-12-12	3/4	3/4-14	3/4-14	3/4-14	1.250	31.75	1.437	36.50	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•			
1602-16-12-12	1	1-11 1/2	3/4-14	3/4-14	1.750	44.45	1.375	34.93	1 1/4	1.250	31.75	1 1/2	1.500	38.10	•			
1602-16-16-16	1	1-11 1/2	1-11 1/2	1-11 1/2	1.755	44.58	1.390	35.31	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•			
1602-20-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1 1/4-11 1/2	2.000	50.80	1.656	42.06	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•			

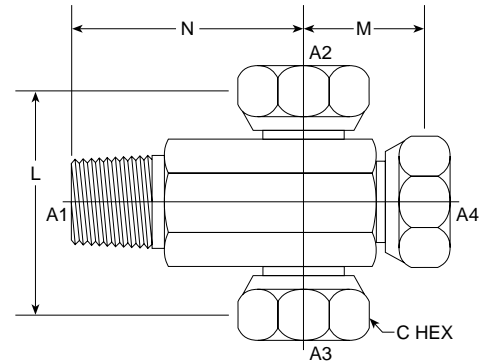
# Tube Fittings & Adapters

## FPS-FPS-FPS Tee 1603 Series



PART NO. SIZE	TUBE O.D.	A1 NPTF	A2 NPSM	A3 NPSM	L LGTH	M M.M.	C HEX	C HEX	Y M.M.	Y FLATS	Y M.M.	Standard Material From Stock						
												S	FG	SS	B			
1603-02-02-02	1/8	1/8-27	1/8-27	1/8-27	1.406	35.71	0.656	16.66	9/16	0.562	14.27	9/16	0.562	14.27	•			
1603-04-04-04	1/4	1/4-18	1/4-18	1/4-18	1.718	43.64	0.781	19.84	11/16	0.687	17.45	11/16	0.687	17.45	•		•	
1603-04-04-06	1/4	1/4-18	1/4-18	3/8-18	1.718	43.64	0.878	22.30	11/16	0.687	17.45	7/8	0.875	22.23	•			
1603-06-06-06	3/8	3/8-18	3/8-18	3/8-18	1.718	43.64	0.937	23.80	7/8	0.875	22.23	7/8	0.875	22.23	•			
1603-06-06-08	3/8	3/8-18	3/8-18	1/2-14	2.190	55.63	0.949	24.10	1	1.000	25.40	1	1.000	25.40	•			
1603-08-08-08	1/2	1/2-14	1/2-14	1/2-14	2.218	56.34	1.000	25.40	1	1.000	25.40	1	1.000	25.40	•	•		
1603-12-12-12	3/4	3/4-14	3/4-14	3/4-14	2.781	70.64	1.250	31.75	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•			
1603-16-16-16	1	1-11 1/2	1-11 1/2	1-11 1/2	3.062	77.77	1.390	35.31	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•			
1603-20-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1 1/4-11 1/2	3.312	84.12	1.656	42.06	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•			

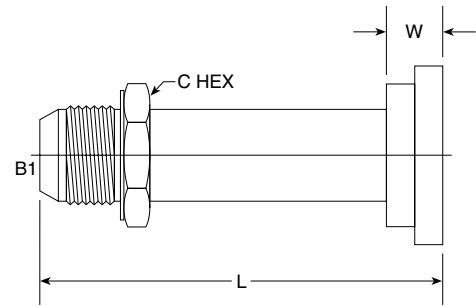
## MP-FPS-FPS-FPS Cross 1604 Series



PART NO. SIZE	TUBE O.D.	A1 NPTF	A2 NPSM	A3 NPSM	A4 NPSM	L LGTH	M M.M.	N LGTH	M M.M.	C HEX	C HEX	M.M.	Standard Material From Stock					
													S	FG	SS	B		
1604-04-04-04-04	1/4	1/4-18	1/4-18	1/4-18	1/4-18	1.580	40.13	0.880	22.35	1.09	27.69	11/16	0.687	17.46	•			

# MJ-Flange Straight Code 61 1700 Series

SAE # J518

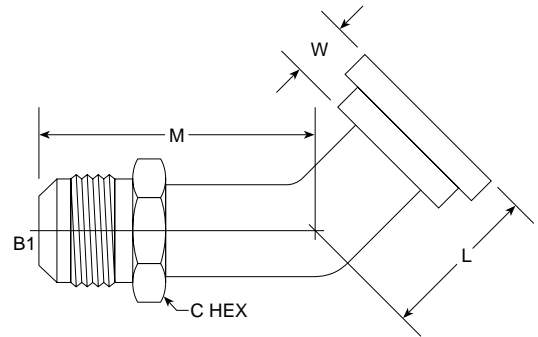


PART NO. SIZE	TUBE O.D.	FLANGE SIZE	B1 SAE 37	L LGTH M.M.	W* WIDTH M.M.	C HEX	C HEX M.M.	Standard Material From Stock						
									S	FG	SS	B		
1700-08-08	1/2	1/2	3/4-16	2.350	59.69	0.500	12.70	13/16	0.812	20.62	•		•	
1700-08-12	1/2	3/4	3/4-16	2.350	59.69	0.560	14.22	1 1/4	1.125	28.57	•			
<b>NEW</b> 1700-10-10											•			
<b>NEW</b> 1700-12-10											•			
1700-12-12	3/4	3/4	1 1/16-12	2.600	66.04	0.560	14.22	1 1/4	1.125	28.57	•		•	
1700-12-16	3/4	1	1 1/16-12	2.600	66.04	0.560	14.22	1 1/4	1.125	28.57	•		•	
1700-12-20	3/4	1 1/4	1 1/16-12	2.600	66.04	0.560	14.22	1 3/8	1.375	34.92	•			
<b>NEW</b> 1700-12-24											•			
1700-16-12	1	3/4	1 5/16-12	2.640	67.04	0.560	14.22	1 3/8	1.375	34.92	•		•	
1700-16-16	1	1	1 5/16-12	2.640	67.04	0.560	14.22	1 3/8	1.375	34.92	•			
1700-16-20	1	1 1/4	1 5/16-12	2.640	67.04	0.560	14.22	1 3/8	1.375	34.92	•			
1700-16-24	1	1 1/2	1 5/16-12	2.640	67.04	0.620	15.75	2	2.000	50.80	•			
1700-20-16	1 1/4	1	1 5/8-12	3.125	79.38	0.560	14.22	1 11/16	1.687	42.85	•			
1700-20-20	1 1/4	1 1/4	1 5/8-12	3.125	79.38	0.560	14.22	1 11/16	1.687	42.85	•		•	
1700-20-24	1 1/4	1 1/2	1 5/8-12	2.687	68.25	0.620	15.75	2	2.000	50.80	•			
1700-20-32	1 1/4	2	1 5/8-12	3.100	78.74	0.620	16.00	1 11/16	1.688	42.88	•			
<b>NEW</b> 1700-24-16											•			
1700-24-20	1 1/2	1 1/4	1 7/8-12	3.000	76.20	0.560	14.22	2	2.000	50.80	•			
1700-24-24	1 1/2	1 1/2	1 7/8-12	3.000	76.20	0.620	15.75	2	2.000	50.80	•		•	
1700-24-32	1 1/2	2	1 7/8-12	3.000	76.20	0.620	16.00	2	2.000	50.80	•			
1700-32-24	2	1 1/2	2 1/2-12	3.350	85.09	0.620	15.75	2 3/4	2.750	69.85	•			
1700-32-32											•			

# Tube Fittings & Adapters

## MJ-Flange 45° Code 61 1703 Series

SAE# J 518

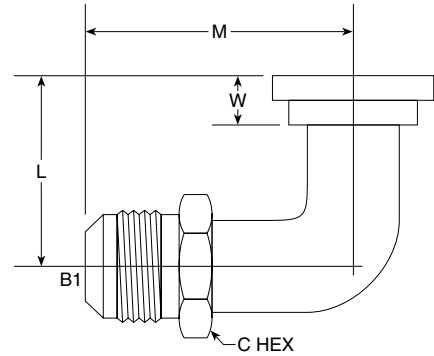


PART NO.	SIZE	TUBE O.D.	FLANGE SIZE	B1 SAE 37	L LGTH	M M.M.	M LGTH	W* M.M.	WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
														S	FG	SS	B
NEW	1703-08-08	1/2	1/2	3/4-16	1.080	27.43	1.770	44.96	0.500	12.70	13/16	0.812	20.62	•			
	1703-08-12													•			
	1703-12-12	3/4	3/4	1 1/16-12	1.500	38.10	1.650	41.93	0.560	14.22	1 1/8	1.125	28.57	•			
	1703-12-16	3/4	1	1 1/16-12	1.300	33.02	1.850	46.99	0.560	14.22	1 1/8	1.125	28.57	•			
NEW	1703-12-20													•			
NEW	1703-16-12													•			
	1703-16-16	1	1	1 5/16-12	1.400	35.56	2.200	55.88	0.560	14.22	1 3/8	1.375	34.92	•			
NEW	1703-16-20													•			
NEW	1703-16-24													•			
NEW	1703-20-16													•			
	1703-20-20	1 1/4	1 1/4	1 5/8-12	1.300	33.02	2.350	59.69	0.560	14.22	1 11/16	1.687	42.85	•			
NEW	1703-24-16													•			
	1703-20-24	1 1/4	1 1/2	1 5/8-12	1.750	44.45	2.000	50.80	0.560	14.22	1 11/16	1.687	42.85	•			
NEW	1703-24-20													•			
	1703-24-24	1 1/2	1 1/2	1 7/8-12	1.600	40.64	2.300	58.42	0.620	15.75	2	2.000	50.80	•			
	1703-32-32	2	2	2 1/2-12	1.700	43.18	2.900	73.66	0.620	15.75	2 5/8	2.625	66.68	•			

\*Note: Fitting design beyond dimension "W" is optional providing that adequate clearance for installing bolts is maintained.

# MJ-Flange 90° Code 61 1704 Series

SAE # J518



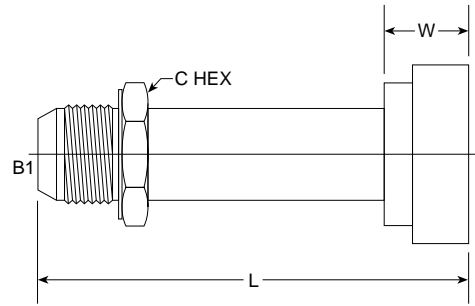
PART NO.	SIZE	TUBE O.D.	FLANGE SIZE	B1 SAE 37	L LGTH M.M.	M LGTH M.M.	W* WIDTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock						
											S	FG	SS	B			
1704-08-08		1/2	1/2	3/4-16	1.650	41.91	1.700	43.18	0.500	12.70	13/16	0.812	20.64	•			
1704-08-12		1/2	3/4	3/4-16	1.67	42.42	1.890	48.01	0.560	14.22	1 1/16	1.062	26.97	•			
<b>NEW</b> 1704-10-10														•			
<b>NEW</b> 1704-12-10														•			
1704-12-12		3/4	3/4	1 1/16-12	3.100	78.74	2.250	57.15	0.560	14.22	1 1/8	1.125	28.57	•	•		
1704-12-16		3/4	1	1 1/16-12	2.120	53.85	2.480	62.99	0.560	14.22	1 1/8	1.125	28.57	•			
1704-12-20		3/4	1 1/4	1 1/16-12	2.150	54.61	2.500	63.50	0.560	14.22	1 1/8	1.125	28.57	•			
1704-16-12		1	3/4	1 5/16-12	1.800	45.72	2.600	66.04	0.560	14.22	1 3/8	1.375	34.92	•			
1704-16-16		1	1	1 5/16-12	2.375	60.33	1.812	46.02	0.560	14.22	1 3/8	1.375	34.92	•	•		
1704-16-20		1	1 1/4	1 5/16-12	2.450	62.23	2.870	72.90	0.560	14.22	1 3/8	1.375	34.92	•			
1704-16-24		1	1 1/2	1 5/16-12	1.170	29.72	2.950	74.93	0.620	15.75	1 3/8	1.375	34.92	•			
1704-20-16		1 1/4	1	1 5/8-12	2.168	55.07	3.051	77.50	0.560	14.22	1 11/16	1.688	42.88	•			
1704-20-12		1 1/4	3/4	1 5/8-12	1.810	45.97	2.630	66.80	0.560	14.22	1 11/16	1.687	42.86	•			
1704-20-20		1 1/4	1 1/4	1 5/8-12	2.500	63.50	2.062	52.37	0.560	14.22	1 11/16	1.687	42.85	•	•		
<b>NEW</b> 1704-20-24														•			
1704-20-32		1 1/4	2	1 5/8-12	2.500	63.50	3.400	86.36	0.620	15.75	1 11/16	1.687	42.86	•			
1704-24-16		1 1/2	1	1 7/8-12	2.240	56.90	3.178	80.72	0.560	14.22	2 3/64	2.047	51.99	•			
1704-24-20		1 1/2	1 1/4	1 7/8-12	2.700	68.58	3.530	89.66	0.560	14.22	2	2.000	50.80	•			
1704-24-24		1 1/2	1 1/2	1 7/8-12	2.750	69.85	2.328	59.13	0.620	15.75	2 3/64	2.046	50.80	•	•	•	
<b>NEW</b> 1704-24-32														•			
<b>NEW</b> 1704-32-24														•			
1704-32-32		2	2	2 1/2-12	3.700	93.98	4.950	125.73	0.620	15.75	2 3/4	2.750	69.85	•	•		

\*Note: Fitting design beyond dimension "W" is optional providing that adequate clearance for installing bolts is maintained.

# Tube Fittings & Adapters

## MJ-Flange Straight Code 62 1800 Series

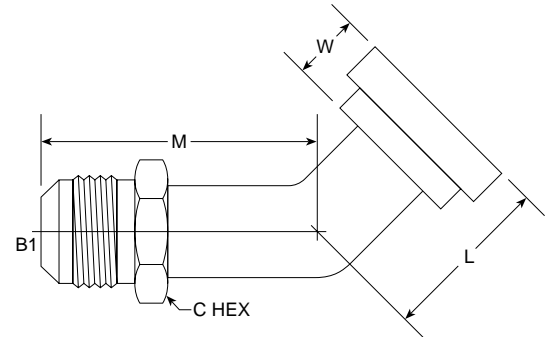
SAE # J 5 1 8



PART NO. SIZE	TUBE O.D.	FLANGE SIZE	B1 SAE 37	L LGTH M.M.	W* WIDTH M.M.	C HEX M.M.	C HEX M.M.	C HEX M.M.	Standard Material From Stock					
									S	FG	SS	B		
1800-12-12	3/4	3/4	1 1/16-12	2.570	65.28	0.690	17.53	1 1/8	1.125	28.57	•			
1800-12-16	3/4	3/4	1 1/16-12	2.930	74.42	0.810	20.57	1 1/8	1.125	28.57	•			
1800-16-16	1	1	1 5/16-12	2.900	73.66	0.810	20.57	1 3/8	1.375	34.92	•			
1800-16-20	1	1 1/4	1 5/16-12	2.880	73.15	1.000	25.40	1 3/8	1.375	34.92	•			
1800-16-24	1	1 1/2	1 5/16-12	4.026	102.26	1.190	30.23	1 3/8	1.375	34.93	•			
1800-20-16	1 1/4	1	1 5/8-12	2.950	74.93	0.810	20.57	1 11/16	1.687	42.86	•			
1800-20-20	1 1/4	1 1/4	1 5/8-12	3.123	79.32	1.000	25.40	1 11/16	1.688	42.88	•			
1800-20-24	1 1/4	1 1/2	1 5/8-12	4.170	105.92	1.190	30.23	1 3/4	1.75	44.45	•			
1800-24-20	1 1/2	1 1/4	1 7/8-12	2.240	56.90	1.000	25.40	2 3/64	2.047	51.99	•			
1800-24-24	1 1/2	1 1/2	1 7/8-12	2.288	58.12	1.190	30.23	2	2.000	50.80	•			
NEW 1800-32-32											•			

## MJ-Flange 45° Code 62 1803 Series

SAE # J 5 1 8



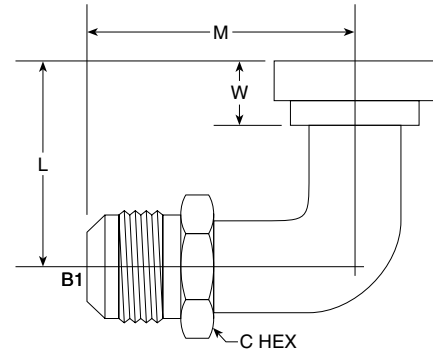
PART NO. SIZE	TUBE O.D.	FLANGE SIZE	B1 SAE 37	L LGTH M.M.	M LGTH M.M.	W* WIDTH M.M.	C HEX M.M.	C HEX M.M.	C HEX M.M.	Standard Material From Stock						
										S	FG	SS	B			
1803-08-08	1/2	1/2	3/4-16	1.100	27.94	1.600	40.64	0.560	14.22	13/16	0.812	20.62	•			
1803-12-12	3/4	3/4	1 1/16-12	1.400	35.56	1.800	45.72	0.690	17.53	1 1/8	1.125	28.57	•			
1803-12-20	3/4	1 1/4	1 1/16-12	2.000	50.80	2.190	55.63	1.000	25.40	1 1/4	1.25	31.75	•			
1803-12-16	3/4	1	1 1/16-12	1.400	35.56	1.900	48.26	0.812	20.57	1 7/64	1.109	28.17	•			
1803-16-12	1	3/4	1 5/16-12	1.560	39.62	2.400	60.96	1.190	30.23	1 3/8	1.375	34.93	•			
1803-16-16	1	1	1 5/16-12	1.800	45.72	2.200	55.88	0.812	20.57	1 3/8	1.375	34.92	•			
1803-16-20	1	1 1/4	1 5/16-12	1.400	35.56	2.000	50.80	1.000	25.40	1 3/8	1.375	34.92	•			
NEW 1803-16-24													•			
NEW 1803-20-12													•			
1803-20-16	1 1/4	1	1 5/8-12	1.550	39.37	2.020	51.31	0.810	20.57	1 11/16	1.688	42.88	•			
1803-20-20	1 1/4	1 1/4	1 5/8-12	2.170	55.12	2.190	55.63	1.000	25.40	2	2.000	50.80	•			
1803-20-24	1 1/2	1 1/2	1 7/8-12	1.700	43.18	2.500	63.50	1.190	30.23	2 3/64	2.046	51.97	•			
1803-24-20	1 1/2	1 1/4	1 7/8-12	1.500	38.10	2.330	59.18	1.000	25.40	2 3/64	2.047	51.99	•			
1803-24-24	1 1/2	1 1/2	1 7/8-12	2.400	60.96	3.430	87.12	1.190	30.23	2	2.000	50.80	•			
1803-32-32	2	2	1 1/2-12	2.600	66.04	3.200	81.28	1.500	38.10	2 3/4	2.750	69.87	•			

\*Note: Fitting design beyond dimension "W" is optional providing that adequate clearance for installing bolts is maintained.



# MJ-Flange 90° Code 62 1804 Series

SAE # J518

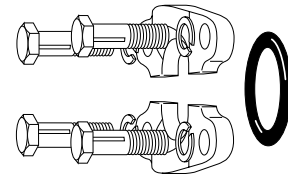


PART NO. SIZE	TUBE O.D.	FLANGE SIZE	B1 SAE 37	L LGTH M.M.	M LGTH M.M.	W* WIDTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock						
										S	FG	SS	B			
1804-08-08	1/2	1/2	3/4-16	1.970	50.04	1.470	37.34	0.560	14.22	7/8	0.875	22.22	•			
1804-12-12	3/4	3/4	1 1/16-12	3.100	78.74	2.250	57.17	0.690	17.53	1 1/8	1.125	28.57	•			
<b>NEW</b> 1804-12-16													•			
1804-12-20	3/4	1 1/4	1 1/16-12	1.980	50.29	2.580	65.53	1.000	25.40	1 1/8	1.125	28.58	•			
1804-16-12	1	3/4	1 5/16-12	1.800	45.72	2.560	65.02	0.690	17.53	1 3/8	1.375	34.93	•			
1804-16-16	1	1	1 5/16-12	2.480	62.99	3.100	78.74	0.810	20.57	1 3/8	1.375	34.93	•	•		
1804-16-20	1	1 1/4	1 5/16-12	2.500	63.50	3.000	76.20	1.000	25.40	1 3/8	1.375	34.93	•	•		
1804-16-24	1	1 1/2	1 1/16-12	2.950	74.93	2.350	59.69	1.190	30.23	1 3/8	1.375	34.92	•			
1804-20-16	1 1/4	1	1 5/8-12	3.310	84.07	2.350	59.69	0.810	20.57	1 11/16	1.687	42.86	•			
1804-20-20	1 1/4	1 1/4	1 5/8-12	3.380	85.85	2.460	62.48	1.000	24.50	1 11/16	1.687	42.86	•	•		
1804-20-24	1 1/4	1 1/2	1 5/8-12	3.750	95.25	2.720	69.09	1.190	30.23	1 11/16	1.687	42.86	•			
<b>NEW</b> 1804-24-16													•			
<b>NEW</b> 1804-24-20													•			
1804-24-24	1 1/2	1 1/2	1 7/8-12	4.000	101.60	3.000	76.20	1.190	30.23	2 3/64	2.046	51.97	•			
1804-24-32	1 1/2	2	1 7/8-12	3.680	93.47	4.050	102.87	1.500	38.10	2	2.000	50.80	•			
1804-32-32	2	2	2 1/2-12	4.688	119.08	6.600	167.64	1.500	38.10	2 3/4	2.750	69.85	•			

PART NO. SIZE	TUBE O.D.	Standard Material From Stock			
		S	FG	SS	B
1901-08	1/2	•			
1901-12	3/4	•			
1901-16	1	•			
1901-20	1 1/4	•			
1901-24	1 1/2	•			
1901-32	2	•			
<b>NEW</b> 1901-40		•			

## Flange Kit Code 61 1901 Series

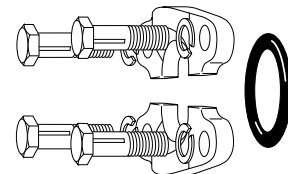
SAE # J518



PART NO. SIZE	TUBE O.D.	Standard Material From Stock			
		S	FG	SS	B
1902-08	1/2	•			
1902-12	3/4	•			
1902-16	1	•			
1902-20	1 1/4	•			
1902-24	1 1/2	•			
1902-32	2	•			

## Flange Kit Code 62 1902 Series

SAE # J518

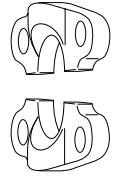


# Tube Fittings & Adapters

PART NO. SIZE	TUBE O.D.	Standard Material From Stock			
		S	FG	SS	B
1951-08	1/2	•			
1951-12	3/4	•			
1951-16	1	•			
1951-20	1 1/4	•			
1951-24	1 1/2	•			
1951-32	2	•			
NEW NEW 1951-40					
1951-48					

## Flange Halves Code 61 1951 Series

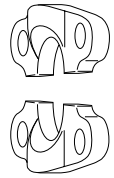
SAE# J 5 1 8



PART NO. SIZE	TUBE O.D.	Standard Material From Stock			
		S	FG	SS	B
1952-12	3/4	•			
1952-16	1	•			
1952-20	1 1/4	•			
1952-24	1 1/2	•			
1952-32	2	•			

## Flange Halves Code 62 1952 Series

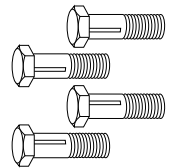
SAE# J 5 1 8



PART NO. SIZE	TUBE O.D.	Standard Material From Stock			
		S	FG	SS	B
1961-08	1/2	•			
1961-12	3/4	•			
1961-16	1	•			
1961-20	1 1/4	•			
1961-24	1 1/2	•			
1961-32	2	•			
NEW NEW 1961-40					
1961-48					

## Bolts Code 61 1961 Series

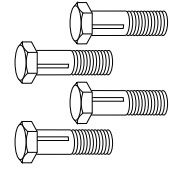
SAE# J 5 1 8



PART NO. SIZE	TUBE O.D.	Standard Material From Stock			
		S	FG	SS	B
1962-12	3/4	•			
1962-16	1	•			
1962-20	1 1/4	•			
1962-24	1 1/2	•			
1962-32	2	•			

## Bolts Code 62 1962 Series

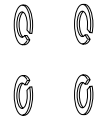
SAE # J518



PART NO. SIZE	TUBE O.D.	Standard Material From Stock			
		S	FG	SS	B
1971-08	1/2	•			
1971-12	3/4	•			
1971-16	1	•			
1971-20	1 1/4	•			
1971-24	1 1/2	•			
1971-32	2	•			
<b>NEW</b> 1971-40					
<b>NEW</b> 1971-48					

## Washers Code 61 1971 Series

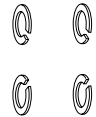
SAE # J518



PART NO. SIZE	TUBE O.D.	Standard Material From Stock			
		S	FG	SS	B
1972-12	3/4	•			
1972-16	1	•			
1972-20	1 1/4	•			
1972-24	1 1/2	•			
1972-32	2	•			

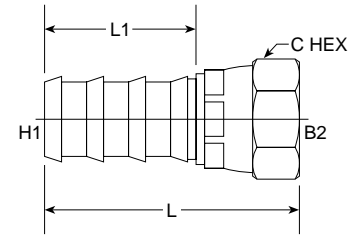
## Washers Code 62 1972 Series

SAE # J518



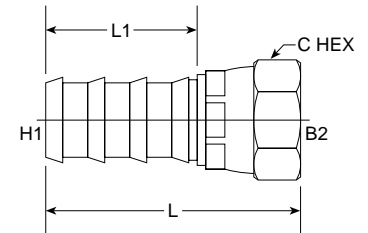
# Tube Fittings & Adapters

## PL-FJS Straight 2111 Series



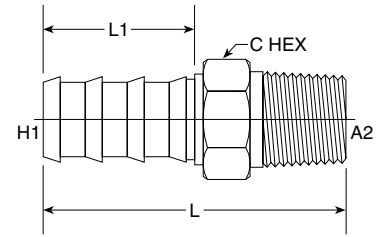
PART NO. SIZE	H1 HOSE I.D.	B2 SAE 37	L LGTH M.M.	L1 LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock					
								S	FG	SS	B		
2111-04-04	1/4	7/16-20	1.488	37.79	0.700	17.78	9/16	0.562	14.28			•	•
2111-04-05	1/4	1/2-20	1.560	39.62	0.700	17.78	5/8	0.625	15.87			•	•
2111-04-06	1/4	9/16-18	1.588	40.33	0.830	21.08	11/16	0.687	17.46			•	•
2111-05-05	5/16	1/2-20	1.580	40.13	0.830	21.08	5/8	0.625	15.87			•	•
2111-06-06	3/8	9/16-18	1.700	43.18	0.830	21.08	11/16	0.687	17.46			•	•
2111-06-08	3/8	3/4-16	1.780	45.21	0.930	23.62	7/8	0.875	22.22			•	•
2111-08-08	1/2	3/4-16	2.060	52.32	1.000	25.40	7/8	0.875	22.22			•	•
2111-08-10	1/2	5/8-12	1.840	46.74	0.930	23.62	1	1.000	25.40			•	•
2111-10-08	5/8	3/4-16	2.540	64.52	1.500	38.10	7/8	0.875	22.22			•	•
2111-10-10	5/8	5/8-12	2.700	68.58	1.500	38.10	7/8	0.875	22.22			•	•
2111-12-12	3/4	1 1/16-12	2.400	60.96	1.400	35.56	1 1/4	1.250	31.75			•	•

## PL-FSAES Straight 2112 Series



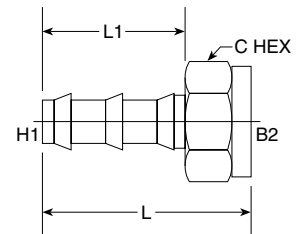
PART NO. SIZE	H1 HOSE I.D.	B2 SAE 45	L LGTH M.M.	L1 LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock					
								S	FG	SS	B		
NEW 2112-04-06	1/4	9/16-18	1.620	41.15	0.873	22.17	3/4	0.750	19.05				•
2112-05-06	1/4	1/2-20	1.560	39.62	0.700	17.78	5/8	0.625	15.87				•
2112-06-06	3/8	9/16-18	1.710	43.43	0.975	24.77	3/4	0.750	19.05				•
2112-08-06	3/8	5/8-18	1.930	49.02	1.000	25.40	3/4	0.750	19.05				•
NEW 2112-08-08	1/2	3/4-16	2.060	52.32	1.000	25.40	7/8	0.875	22.22				•
2112-12-12	3/4	1 1/16-14	2.380	60.45	1.400	35.56	1 1/4	1.250	31.75				•

# PL-MP Straight 2113 Series



PART NO. SIZE	H1 HOSE I.D.	A2 NPTF	L LGTH M.M.	L1 LGTH M.M.	C HEX M.M.	C HEX M.M.	Standard Material From Stock						
							S	FG	SS	B			
2113-04-02	1/4	1/8-27	1.290	32.77	0.700	17.78	7/16	0.4375	11.11			•	•
2113-04-04	1/4	1/4-18	1.430	36.32	0.700	17.78	9/16	0.562	14.28			•	•
2113-04-06	1/4	3/8-18	1.430	36.32	0.700	17.78	11/16	0.687	17.46			•	•
2113-05-02	5/16	1/2-27	1.416	35.97	0.819	20.80	7/16	0.438	11.13			•	•
2113-05-04	5/16	1/4-18	1.660	42.16	0.871	22.12	9/16	0.562	14.27			•	•
2113-06-02	3/8	1/8-27	1.450	36.83	0.830	21.08	1/2	0.500	12.70			•	•
2113-06-04	3/8	1/4-18	1.550	39.37	0.830	21.08	9/16	0.562	14.28			•	•
2113-06-06	3/8	3/8-18	1.620	41.15	0.830	21.08	11/16	0.687	17.46			•	•
2113-06-08	3/8	1/2-14	1.670	42.42	0.830	21.08	7/8	0.875	22.22			•	•
2113-08-04	1/2	1/4-18	1.770	44.96	0.930	23.62	11/16	0.687	17.46			•	•
2113-08-06	1/2	3/8-18	1.810	45.97	1.000	25.40	11/16	0.687	17.46			•	•
2113-08-08	1/2	1/2-14	1.860	47.24	1.000	25.40	7/8	0.875	22.22			•	•
2113-08-12	1/2	3/4-14	1.970	50.04	0.930	23.62	1 1/16	1.062	26.99			•	•
2113-10-06	5/8	3/8-18	2.370	60.20	1.560	39.62	3/4	0.750	19.05			•	•
2113-10-08	5/8	1/2-14	2.550	64.77	1.500	38.10	7/8	0.875	22.22			•	•
2113-10-12	5/8	3/4-14	2.500	63.51	1.500	38.10	1 1/16	1.062	26.99			•	•
2113-12-08	3/4	1/2-14	2.450	62.23	1.500	38.10	7/8	0.875	22.22			•	•
2113-12-12	3/4	3/4-14	2.450	62.23	1.400	35.56	1 1/16	1.062	26.99			•	•

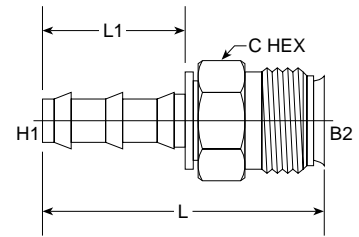
# PL-FIF Straight 2114 Series



PART NO. SIZE	H1 HOSE I.D.	B2 SAE 45	L LGTH M.M.	L1 LGTH M.M.	C HEX M.M.	C HEX M.M.	Standard Material From Stock						
							S	FG	SS	B			
2114-04-03	1/4	3/8-24	1.170	29.72	0.760	19.30	7/16	0.438	11.11				•
2114-04-04	1/4	7/16-20	1.110	28.19	0.700	17.78	1/2	0.500	25.40				•
2114-04-05	1/4	1/2-20	1.570	39.88	0.700	17.78	9/16	0.562	14.28				•
2114-06-05	3/8	1/2-20	1.275	32.38	0.830	21.08	9/16	0.562	14.28				•
2114-06-06	3/8	5/8-18	1.330	33.78	0.830	21.08	3/4	0.750	19.05				•
NEW 2114-08-08													•

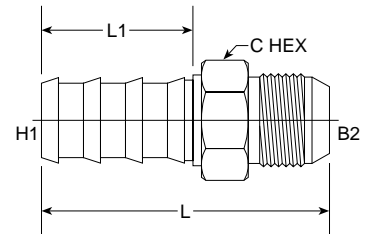
# Tube Fittings & Adapters

## PL-MIFS Straight 2115 Series



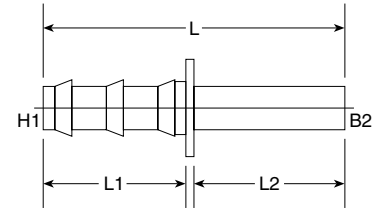
PART NO. SIZE	H1 HOSE I.D.	B2 MALE SWIVEL	L LGTH M.M.	L1 LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock					
								S	FG	SS	B		
2115-04-03	1/4	3/8-24	1.392	35.36	0.700	17.78	3/8	0.375	9.52				•
2115-04-04	1/4	7/16-24	1.425	36.19	0.700	17.78	7/16	0.437	11.11				•
2115-04-05	1/4	1/2-20	1.520	38.61	0.700	17.78	1/2	0.500	12.70				•
2115-05-05	5/16	1/2-20	1.610	40.89	0.830	21.08	1/2	0.500	12.70				•
2115-06-05	3/8	1/2-20	1.650	41.91	0.830	21.08	1/2	0.500	12.70				•
2115-06-06	3/8	5/8-18	1.670	42.42	0.830	21.08	5/8	0.625	15.87				•
2115-06-08	3/8	3/4-18	1.800	45.72	0.830	21.08	3/4	0.750	19.05				•
2115-08-06	1/2	5/8-18	1.769	44.93	0.971	24.99	5/8	0.625	15.87				•
2115-08-08	1/2	3/4-18	1.960	49.78	1.000	25.40	3/4	0.750	19.05				•
2115-10-10	5/8	5/8-18	2.500	63.50	1.500	38.10	7/8	0.875	22.22				•

## PL-SAE Straight 2116 Series



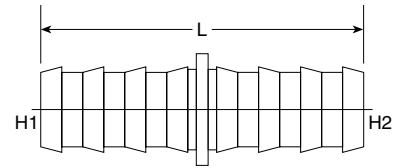
PART NO. SIZE	H1 HOSE I.D.	B2 SAE 45	L LGTH M.M.	L1 LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock					
								S	FG	SS	B		
2116-04-04	1/4	7/16-24	1.435	36.45	0.742	18.85	7/16	0.438	11.13				•
2116-04-05	1/4	1/2-20	1.534	38.96	0.749	19.02	1/2	0.500	12.70				•
2116-06-05	3/8	1/2-20	1.646	41.81	0.866	22.00	1/2	0.500	12.70				•
2116-06-06	3/8	5/8-18	1.700	43.18	0.830	21.08	5/8	0.625	15.87				•
NEW 2116-08-06													•
2116-08-08	1/2	3/4-16	2.050	52.07	1.000	25.40	3/4	0.750	19.05				•
NEW 2116-10-10													•

# PL-Stem Straight 2117 Series



PART NO. SIZE	H1 HOSE I.D.	STEM	L LGTH	M.M.	L1 LGTH	M.M.	LGTH L2	M.M.	Standard Material From Stock			
									S	FG	SS	B
2117-04-03	1/4	3/16	1.570	39.88	0.700	17.78	0.750	19.05				•
2117-04-04	1/4	1/4	1.615	41.02	0.700	17.78	0.800	20.32				•
2117-06-06	3/8	3/8	1.800	45.72	0.830	21.08	0.880	22.35				•
2117-08-08	1/2	1/2	2.110	53.59	1.020	25.91	0.986	25.04				•

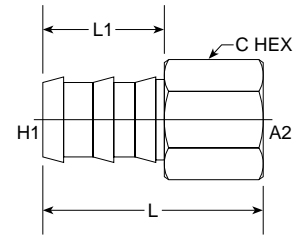
# PL-PL Straight 2118 Series



PART NO. SIZE	H1 TUBE I.D.	H2 TUBE I.D.	L LGTH	M.M.	Standard Material From Stock			
					S	FG	SS	B
2118-04-04	1/4	1/4	1.550	39.37				•
2118-05-05	5/16	5/16	1.800	45.72				•
2118-06-06	3/8	3/8	1.900	48.26				•
2118-08-08	1/2	1/2	2.000	50.80				•
2118-10-10	7/8	7/8	3.000	76.20				•
2118-12-12	3/4	3/4	3.000	76.20				•

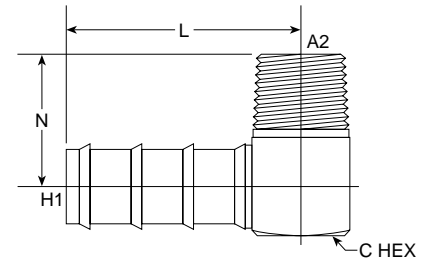
# Tube Fittings & Adapters

## PL-FP Straight 2119 Series



PART NO. SIZE	PIPE O.D.	H1 HOSE I.D.	A2 NPTF	L LGTH M.M.	L1 LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock					
									S	FG	SS	B		
2119-04-02	1/8	1/4	1/8-27	1.340	34.04	0.700	17.78	1/2	0.055	12.70				•
2119-04-04	1/4	1/4	1/4-18	1.410	35.81	0.700	17.78	5/8	0.625	15.87				•
<b>NEW</b> 2119-04-06														•
2119-06-04	1/4	3/8	1/4-18	1.630	41.40	0.940	23.88	5/8	0.625	15.87				•
2119-06-06	3/8	3/8	3/8-18	1.530	38.86	0.830	21.08	13/16	0.812	20.63				•
<b>NEW</b> 2119-06-08														•
2119-08-06	3/8	1/2	3/8-18	1.730	43.94	1.020	25.91	13/16	.812	20.63				•
2119-08-08	1/2	1/2	1/2-14	1.750	44.45	0.925	23.49	15/16	0.938	23.83				•

## PL-MP 90° Elbow 2120 Series

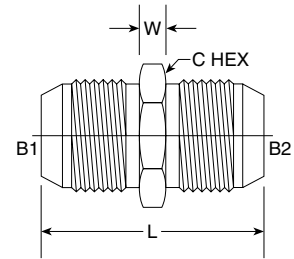


PART NO. SIZE	PIPE O.D.	H1 HOSE I.D.	A2 NPTF	L LGTH M.M.	N LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock					
									S	FG	SS	B		
2120-04-02	1/8	1/4	1/8-27	0.990	25.15	0.750	19.05	1/2	0.500	12.70				•
2120-04-04	1/4	1/4	1/4-18	1.010	25.65	0.900	22.86	9/16	0.562	14.27				•
2120-06-02	1/8	3/8	1/8-27	1.120	28.45	0.750	19.05	1/2	0.500	12.70				•
2120-06-04	1/4	3/8	1/4-18	1.140	28.96	0.908	23.06	9/16	0.562	14.27				•
2120-06-06	3/8	3/8	3/8-18	1.205	30.61	0.905	22.99	11/16	0.688	17.46				•
2120-06-08	1/2	3/8	1/2-14	1.310	33.27	1.185	30.10	7/8	0.875	22.22				•
2120-08-06	3/8	1/2	3/8-18	1.387	35.20	0.900	22.86	11/16	0.688	17.46				•
2120-08-08	1/2	1/2	1/2-14	1.490	37.85	1.180	29.97	7/8	0.875	22.22				•
<b>NEW</b> 2120-10-08														•
2120-12-12	3/4	3/4	3/4-14	2.070	52.58	1.270	32.26	1 1/16	1.062	26.98				•



# MJ-MJ Straight 2403 Series

SAE # 070101 / MS# 51501

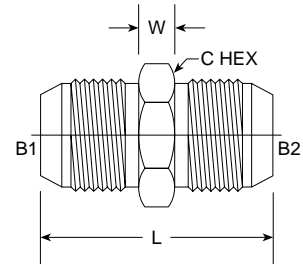


PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
2403-02-02	1/8	5/16-24	5/16-24	1.170	29.72	0.220	5.59	7/16	0.438	11.13	•		•	•
2403-03-02	3/16	3/8-24	5/16-24	1.200	30.50	0.220	5.59	7/16	0.438	11.13	•		•	
2403-03-03	3/16	3/8-24	3/8-24	1.230	31.24	0.220	5.59	7/16	0.438	11.13	•		•	•
2403-04-02	1/4 1/8	7/16-20	5/16-24	1.270	32.26	0.220	5.59	1/2	0.500	12.70	•		•	
2403-04-03	1/4 3/16	7/16-20	3/8-24	1.300	33.04	0.220	5.59	1/2	0.500	12.70	•		•	
2403-04-04	1/4	7/16-20	7/16-20	1.375	34.93	0.220	5.59	1/2	0.500	12.70	•		•	•
2403-05-04	5/16 1/4	1/2-20	7/16-20	1.375	34.93	0.220	5.59	9/16	0.562	14.27	•		•	
2403-05-05	5/16	1/2-20	1/2-20	1.375	34.93	0.220	5.59	9/16	0.562	14.27	•		•	•
2403-06-04	3/8 1/4	9/16-18	7/16-20	1.406	35.71	0.250	6.35	5/8	0.625	15.88	•		•	•
2403-06-05	3/8 5/16	9/16-18	1/2-20	1.400	35.56	0.250	6.35	5/8	0.625	15.88	•		•	
2403-06-06	3/8	9/16-18	9/16-18	1.400	35.56	0.250	6.35	5/8	0.625	15.88	•		•	•
2403-08-04	1/2 1/4	3/4-16	7/16-20	1.510	38.35	0.250	6.35	13/16	0.812	20.62	•		•	
2403-08-05	1/2 5/16	3/4-16	1/2-20	1.510	38.35	0.250	6.35	13/16	0.812	20.62	•		•	
2403-08-06	1/2 3/8	3/4-16	9/16-18	1.515	38.48	0.250	6.35	13/16	0.812	20.62	•		•	
2403-08-08	1/2	3/4-16	3/4-16	1.625	41.28	0.250	6.35	13/16	0.812	20.62	•		•	•
2403-10-04	5/8 1/4	7/8-14	7/16-20	1.670	42.42	0.310	7.87	15/16	0.937	23.80	•		•	
2403-10-05	5/8 5/16	7/8-14	1/2-20	1.670	42.42	0.310	7.87	15-16	0.937	23.80	•		•	
2403-10-06	5/8 3/8	7/8-14	9/16-18	1.680	42.67	0.310	7.87	15/16	0.937	23.80	•		•	
2403-10-08	5/8 1/2	7/8-14	3/4-16	1.781	45.24	0.310	7.87	15/16	0.937	23.80	•		•	
2403-10-10	5/8	7/8-14	7/8-14	1.875	47.63	0.310	7.87	15/16	0.937	23.80	•		•	•
2403-12-04	3/4 1/4	1 1/16-12	7/16-20	1.850	46.99	0.380	9.65	1 1/8	1.125	28.58	•		•	
2403-12-05	3/4 5/16	1 1/16-12	1/2-20	1.840	46.74	0.380	9.65	1 1/8	1.125	28.58	•		•	
2403-12-06	3/4 3/8	1 1/16-12	9/16-18	1.856	47.14	0.380	9.65	1 1/8	1.125	28.58	•		•	
2403-12-08	3/4 1/2	1 1/16-12	3/4-16	1.953	49.61	0.380	9.65	1 1/8	1.125	28.58	•		•	
2403-12-10	3/4 5/8	1 1/16-12	7/8-14	2.046	51.97	0.380	9.65	1 1/8	1.125	28.58	•		•	
2403-12-12	3/4	1 1/16-12	1 1/16-12	2.156	54.76	0.380	9.65	1 1/8	1.125	28.58	•		•	•
2403-14-12	7/8 3/4	1 3/16-12	1 1/16-12	2.180	55.37	0.380	9.65	1 1/4	1.250	31.75	•		•	
2403-14-14	7/8	1 3/16-12	1 3/16-12	2.218	56.34	0.380	9.65	1 1/4	1.250	31.75	•		•	•
2403-16-06	1 3/8	1 1/16-12	9/16-18	1.900	48.26	0.525	13.34	1 3/8	1.375	34.93	•		•	
2403-16-08	1 1/2	1 5/16-12	3/4-16	2.000	50.80	0.380	9.65	1 3/8	1.375	34.93	•		•	
2403-16-10	1 5/8	1 5/16-12	7/8-14	2.100	53.34	0.380	9.65	1 3/8	1.375	34.93	•		•	
2403-16-12	1 3/4	1 5/16-12	1 1/16-12	2.210	56.13	0.380	9.65	1 3/8	1.375	34.93	•		•	
2403-16-14	1 7/8	1 5/16-12	1 3/16-12	2.240	56.90	0.380	9.65	1 3/8	1.375	34.93	•		•	
2403-16-16	1	1 5/16-12	1 5/16-12	2.250	57.15	0.380	9.65	1 3/8	1.375	34.93	•		•	•
2403-20-12	1 1/4 3/4	1 5/8-12	1 1/16-12	2.347	59.61	0.460	11.68	1 11/16	1.688	42.86	•		•	
2403-20-16	1 1/4 1	1 5/8-12	1 5/16-12	2.380	60.45	0.460	11.68	1 11/16	1.688	42.86	•		•	
2403-20-20	1 1/4	1 5/8-12	1 5/8-12	2.437	61.90	0.460	11.68	1 11/16	1.688	42.86	•		•	
2403-24-10	1 1/4 7/8	1 7/8-12	7/8-14	2.420	61.47	0.530	13.46	2	2.000	50.80	•		•	
2403-24-12	1 1/2 3/4	1 7/8-12	1 1/16-12	2.530	64.26	0.530	13.46	2	2.000	50.80	•		•	
2403-24-16	1 1/2 1	1 7/8-12	1 5/16-12	2.580	65.53	0.530	13.46	2	2.000	50.80	•		•	
2403-24-20	1 1/2 1 1/4	1 7/8-12	1 5/8-12	2.620	66.55	0.530	13.46	2	2.000	50.80	•		•	
2403-24-24	1 1/2	1 7/8-12	1 7/8-12	2.750	69.85	0.530	13.46	2	2.000	50.80	•		•	
2403-32-16	1 1/2 1	2 1/2-12	1 5/16-12	2.980	75.70	0.680	17.27	2 5/8	2.625	66.68	•		•	
2403-32-20	1 1/2 1 1/4	2 1/2-12	1 5/16-12	3.020	76.71	0.680	17.27	2 5/8	2.625	66.68	•		•	
2403-32-24	1 1/2 1 1/2	2 1/2-12	1 7/8-1/2	3.150	80.01	0.680	17.27	2 5/8	2.625	66.68	•		•	
2403-32-32	2	2 1/2-12	2 1/2-12	3.406	86.51	0.680	17.27	2 5/8	2.625	66.68	•		•	
2403-40-40	2 1/2	3-12	3-12	2.950	75.93	0.725	18.42	3 1/4	3.250	82.55	•		•	

# Tube Fittings & Adapters

## MJ-MJ Straight Large Hex 2403-LH Series

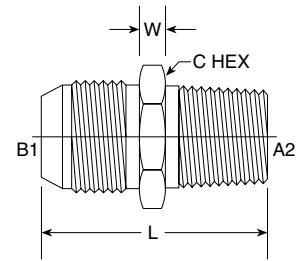
SAE# 070119 / MS# 51519



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	C HEX M.M.	C HEX M.M.	C HEX M.M.	Standard Material From Stock				
										S	FG	SS	B	
2403-LH-02-02	1/8 1/8	5/16-24	5/16-24	1.170	29.72	0.220	5.59	5/8	0.625	15.87			•	
2403-LH-03-02	3/16 1/8	3/8-24	5/16-24	1.200	30.48	0.220	5.59	5/8	0.625	15.88	•		•	
2403-LH-03-03	3/16	3/8-24	3/8-24	1.230	31.24	0.220	5.59	5/8	0.625	14.27	•		•	
2403-LH-04-02	1/4 1/8	7/16-20	5/16-24	1.270	32.26	0.220	5.59	11/16	0.687	17.45	•		•	
2403-LH-04-03	1/4 3/16	7/16-20	3/8-24	1.300	33.02	0.220	5.59	11/16	0.687	17.45	•		•	
2403-LH-04-04	1/4	7/16-20	7/16-20	1.375	34.93	0.220	5.59	11/16	0.687	17.45	•		•	
2403-LH-05-04	5/16 1/4	1/2-20	7/16-20	1.375	34.93	0.220	5.59	3/4	0.750	19.05	•		•	
2403-LH-05-05	5/16	1/2-20	1/2-20	1.375	34.93	0.220	5.59	3/4	0.750	19.05	•		•	
2403-LH-06-04	3/8 1/4	9/16-18	7/16-20	1.400	35.56	0.250	6.35	13/16	0.812	20.62	•		•	
2403-LH-06-05	3/8 5/16	9/16-18	1/2-20	1.400	35.71	0.310	7.87	15-16	0.937	23.80	•		•	
2403-LH-06-06	3/8 3/8	9/16-18	9/16-18	1.410	35.80	0.250	6.35	13/16	0.812	20.62	•		•	•
2403-LH-08-04	1/2 1/4	3/4-16	7/16-20	1.510	38.35	0.250	6.35	1	1.000	25.40	•		•	
2403-LH-08-05	1/2 5/16	3/4-16	1/2-20	1.510	38.35	0.250	6.35	1	1.000	25.40	•		•	
2403-LH-08-06	1/2 3/8	3/4-16	9/16-18	1.520	38.61	0.250	6.35	1	1.000	25.40	•		•	
2403-LH-08-08	1/2	3/4-16	3/4-16	1.625	41.28	0.250	6.35	1	1.000	25.40	•		•	
2403-LH-10-04	5/8 1/4	7/8-14	7/16-20	1.670	42.42	0.310	7.87	1 1/8	1.125	28.58	•		•	
2403-LH-10-06	3/8	7/8-14	9/16-18	1.670	42.42	0.310	7.87	1 1/8	1.125	28.58	•		•	
2403-LH-10-08	5/8 1/2	7/8-14	3/4-16	1.780	45.21	0.310	7.87	1 1/8	1.125	28.58	•		•	
2403-LH-10-10	5/8	7/8-14	7/8-14	1.875	47.63	0.310	7.87	1 1/8	1.125	28.58	•		•	
2403-LH-12-04	3/4 1/4	1 1/16-12	7/16-20	1.840	45.99	0.380	9.65	1 3/8	1.375	34.92	•		•	
2403-LH-12-05	3/4 5/16	1 1/16-12	1/2-20	1.840	46.99	0.380	9.65	1 3/8	1.375	41.28	•		•	
2403-LH-12-08	3/4 1/2	1 1/16-12	3/4-16	1.960	49.78	0.380	9.65	1 3/8	1.375	34.93	•		•	
2403-LH-12-10	3/4 5/8	1 1/16-12	7/8-14	2.046	51.97	0.380	9.65	1 3/8	1.375	34.93	•		•	
2403-LH-12-12	3/4	1 1/16-12	1 1/16-12	2.156	54.76	0.380	9.65	1 3/8	1.375	34.93	•		•	
2403-LH-14-14	7/8	1 3/16-12	1 3/16-12	2.218	56.34	0.380	9.65	1 1/2	1.500	38.10	•		•	
2403-LH-16-08	1 1/2	1 5/16-12	3/4-16	2.000	50.80	0.380	9.65	1 5/8	1.625	41.28	•		•	
2403-LH-16-10	1 5/8	7/8-14	7/8-14	2.100	53.34	0.380	9.65	1 5/8	1.625	41.28	•		•	
2403-LH-16-12	1 3/4	1 5/16-12	1 1/16-12	2.200	55.88	0.380	9.65	1 5/8	1.625	41.28	•		•	
2403-LH-16-16	1	1 5/16-12	1 5/16-12	2.250	57.15	0.380	9.65	1 5/8	1.625	41.28	•		•	
2403-LH-20-10	1 1/4 5/8	1 5/8-12	7/8-14	2.230	56.64	0.460	11.68	1 7/8	1.875	47.63	•		•	
2403-LH-20-12	1 1/4 3/4	1 5/8-12	1 1/16-12	2.330	59.18	0.460	11.68	1 7/8	1.875	47.63	•		•	
2403-LH-20-16	1 1/4 1	1 5/8-12	1 5/16-12	2.380	60.45	0.460	11.68	1 7/8	1.875	47.63	•		•	
2403-LH-20-20	1 1/4	1 5/8-12	1 5/8-12	2.437	61.90	0.460	11.68	1 7/8	1.875	47.63	•		•	
2403-LH-24-16	1 1/2 1	1 7/8-12	1 5/16-12	2.580	65.53	0.530	13.46	2 1/8	2.125	53.98	•		•	
2403-LH-24-20	1 1/2 1 1/4	1 7/8-12	1 5/8-12	2.370	60.20	0.530	13.46	2 1/8	2.125	53.97	•		•	
2403-LH-24-24	1 1/2	1 7/8-12	1 7/8-12	2.750	69.85	0.530	13.46	2 1/8	2.125	63.50	•		•	
2403-LH-32-32	2 2	2-12	2-12	3.400	86.36	0.680	17.27	2 3/4	2.750	69.85	•		•	

# MJ-MP Straight 2404 Series

SAE # 070102 / MS # 51500



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 NPTF	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
2404-02-02	1/8	5/16-24	1/8-27	1.110	28.19	0.220	5.59	7/16	0.438	11.13	•		•	•
2404-02-04	1/8	5/16-24	1/4-18	1.120	28.45	0.220	5.59	5/8	0.625	15.88	•		•	•
2404-03-02	3/16	3/8-24	1/8-27	1.140	28.96	0.220	5.59	7/16	0.438	11.13	•		•	•
<b>NEW</b> 2404-03-04													•	•
2404-04-02	1/4	7/16-20	1/8-27	1.218	30.94	0.220	5.59	1/2	0.500	12.70	•		•	•
2404-04-04	1/4	7/16-20	1/4-18	1.421	36.09	0.250	6.35	9/16	0.562	15.88	•		•	•
2404-04-06	1/4	7/16-20	3/8-18	1.421	36.09	0.250	6.35	3/4	0.750	20.62	•		•	•
2404-04-08	1/4	7/16-20	1/2-14	1.640	41.66	0.250	6.35	7/8	0.875	22.23	•		•	•
2404-04-12	1/4	7/16-20	3/4-14	1.750	44.45	0.380	9.65	1 1/8	1.125	28.57	•		•	•
2404-05-02	5/16	1/2-20	1/8-27	1.218	30.94	0.220	5.59	9/16	0.562	14.27	•		•	•
2404-05-04	5/16	1/2-20	1/4-18	1.421	36.09	0.250	6.35	9/16	0.562	15.88	•		•	•
2404-05-06	5/16	1/2-20	3/8-18	1.421	36.09	0.250	6.35	3/4	0.750	20.62	•		•	•
2404-05-08	5/16	1/2-20	1/2-14	1.710	43.43	0.250	6.35	7/8	0.875	15.88	•		•	•
2404-06-02	3/8	9/16-18	1/8-27	1.250	31.75	0.250	6.35	5/8	0.625	15.88	•		•	•
2404-06-04	3/8	9/16-18	1/4-18	1.437	36.50	0.250	6.35	5/8	0.625	15.88	•		•	•
2404-06-06	3/8	9/16-18	3/8-18	1.421	36.09	0.250	6.35	3/4	0.750	20.62	•		•	•
2404-06-08	3/8	9/16-18	1/2-14	1.687	42.85	0.250	6.35	7/8	0.875	23.80	•		•	•
2404-06-12	3/8	9/16-18	3/4-14	1.750	44.45	0.380	9.65	1-1/8	1.125	28.58	•		•	•
2404-06-16	3/8	9/16-18	1-11 1/2	1.940	49.29	0.380	9.65	1 3/8	1.375	34.92	•		•	•
2404-08-02	1/2	3/4-16	1/8-27	1.340	34.04	0.250	6.35	13/16	0.812	20.62	•		•	•
2404-08-04	1/2	3/4-16	1/4-18	1.531	38.89	0.250	6.35	13/16	0.812	20.62	•		•	•
2404-08-06	1/2	3/4-16	3/8-18	1.531	38.89	0.250	6.35	13/16	0.812	20.62	•		•	•
2404-08-08	1/2	3/4-16	1/2-14	1.781	45.24	0.310	7.87	15/16	0.937	23.80	•		•	•
2404-08-12	1/2	3/4-16	3/4-14	1.859	47.22	0.380	9.65	1 1/8	1.125	28.58	•		•	•
2404-08-16	1/2	3/4-16	1-11 1/2	2.050	52.07	0.380	9.65	1 3/8	1.375	34.93	•		•	•
2404-10-04	5/8	7/8-14	1/4-18	1.690	42.93	0.310	7.87	15/16	0.937	23.80	•		•	•
2404-10-06	5/8	7/8-14	3/8-18	1.700	43.18	0.380	9.65	15/16	0.937	23.80	•		•	•
2404-10-08	5/8	7/8-14	1/2-14	1.890	48.01	0.310	7.87	15/16	0.937	23.80	•		•	•
2404-10-12	5/8	7/8-14	3/4-14	1.950	49.53	0.380	9.65	1 1/8	1.125	28.58	•		•	•
2404-10-16	5/8	7/8-14	1-11 1/2	2.150	54.61	0.380	9.65	1 3/8	1.375	34.93	•		•	•
<b>NEW</b> 2404-10-20													•	•
2404-12-04	3/4	1 1/16-12	1/4-18	1.820	46.23	0.380	9.65	1 1/8	1.125	28.57	•		•	•
2404-12-06	3/4	1 1/16-12	3/8-18	1.765	44.83	0.380	9.65	1 1/8	1.125	28.58	•		•	•
2404-12-08	3/4	1 1/16-12	3/8-18	1.765	44.83	0.380	9.65	1 1/8	1.125	28.58	•		•	•
2404-12-12	3/4	1 1/16-12	3/4-14	2.062	52.37	0.380	9.65	1 1/8	1.125	28.58	•		•	•
2404-12-16	3/4	1 1/16-12	1-11 1/2	2.250	57.15	0.380	9.65	1 3/8	1.375	34.93	•		•	•
2404-12-20	3/4	1 1/16-12	1 1/4-11 1/2	2.360	59.94	0.460	11.68	1 11/16	1.688	42.86	•		•	•
2404-12-24	3/4	1 1/16-12	1 1/2-11 1/2	2.461	62.51	0.530	13.46	2	2.000	50.80	•		•	•
2404-14-08	7/8	1 3/16-12	1/2-14	2.090	53.09	0.380	9.65	1 1/4	1.250	31.75	•		•	•
2404-14-12	7/8	1 3/16-12	3/4-14	2.093	53.16	0.380	9.65	1 1/4	1.250	31.75	•		•	•
2404-14-16	7/8	1 3/16-12	1-11 1/2	2.275	57.79	0.380	9.65	1 3/8	1.375	34.93	•		•	•
2404-16-06	1	1 5/16-12	3/8-18	1.920	48.77	0.380	9.65	1 3/8	1.375	34.93	•		•	•
2404-16-08	1	1 5/16-12	1/2-14	2.110	53.59	0.380	9.65	1 3/8	1.375	34.93	•		•	•
2404-16-12	1	1 5/16-12	3/4-14	2.110	53.59	0.380	9.65	1 3/8	1.375	34.93	•		•	•
2404-16-16	1	1 5/16-12	1-11 1/2	2.296	58.32	0.380	9.65	1 3/8	1.375	34.93	•		•	•
2404-16-20	1	1 5/16-12	1 1/4-11 1/2	2.406	61.11	0.460	11.68	1 11/16	1.688	42.86	•		•	•
2404-16-24	1	1 5/16-12	1 1/2-11 1/2	2.510	63.75	0.530	13.46	2	2.000	50.80	•		•	•
<b>NEW</b> 2404-16-32													•	•
2404-20-12	1 1/4	1 5/8-12	3/4-14	2.200	55.88	0.460	11.68	1 11/16	1.688	42.86	•		•	•
2404-20-16	1 1/4	1 5/8-12	1-11 1/2	2.421	61.49	0.460	11.68	1 11/16	1.688	42.86	•		•	•
2404-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	2.453	62.31	0.460	11.68	1 11/16	1.688	42.86	•		•	•
2404-20-24	1 1/4	1 5/8-12	1 1/4-11 1/2	2.555	64.90	0.530	13.46	2	2.000	50.80	•		•	•
2404-20-32	1 1/4	1 5/8-12	2-11 1/2	2.730	69.34	0.680	17.27	2 5/8	2.625	66.68	•		•	•
<b>NEW</b> 2404-20-40													•	•
2404-24-16	1 1/2	1 7/8-12	1-11 1/2	2.620	66.55	0.530	13.46	2	2.000	50.80	•		•	•
2404-24-20	1 1/2	1 7/8-12	1 1/4-11 1/2	2.640	67.06	0.530	13.46	2	2.000	50.80	•		•	•
2404-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	2.687	68.25	0.530	13.46	2	2.000	50.80	•		•	•

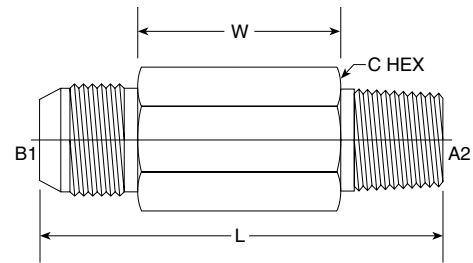
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# Tube Fittings & Adapters

## 2404 Series *continued*

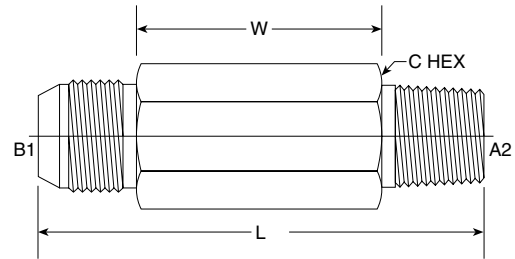
PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 NPTF	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
2404-24-32	1 1/2	1 7/8-12	2-11 1/2	2.860	72.64	0.680	17.27	2 1/2	2.500	63.50	•		•	
2404-32-16	2 1	2 1/2-12	1-11 1/2	3.020	76.71	0.680	17.27	2 5/8	2.625	66.68	•		•	
2404-32-20	2	2 1/2-12	1 1/4-11 1/2	3.050	77.47	0.680	17.27	2 5/8	2.625	66.68	•		•	
2404-32-24	2	2 1/2-12	1 1/2-11 1/2	3.080	78.23	0.680	17.27	2 5/8	2.625	66.68	•		•	•
2404-32-32	2	2 1/2-12	2-11 1/2	3.109	78.97	0.680	17.27	2 5/8	2.625	66.68	•		•	•
<b>NEW</b> 2404-32-40											•			
<b>NEW</b> 2404-32-48											•			
2404-40-40	2 1/2	3-12	2 1/2-8	3.375	85.73	0.750	19.05	3 1/4	3.250	82.55	•		•	•
<b>NEW</b> 2404-48-48											•			

## MJ-MP Straight Long 2404-L Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
2404-L-04-02	1/4	7/16-20	1/8-27	1.812	46.02	0.890	22.61	1/2	0.500	12.70	•		•	
2404-L-04-04	1/4	7/16-20	1/4-18	2.253	57.23	0.890	22.61	5/8	0.625	15.88	•		•	
2404-L-05-02	5/16	1/2-20	1/8-27	1.937	49.20	1.020	25.91	9/16	0.562	14.27	•		•	
2404-L-05-04	5/16	1/2-20	1/4-18	2.250	57.15	1.140	28.96	5/8	0.625	15.88	•		•	
2404-L-06-02	3/8	9/16-18	1/8-27	2.202	55.93	1.125	28.58	5/8	0.625	15.88	•		•	
2404-L-06-04	3/8	9/16-18	1/4-18	2.250	57.15	1.125	28.58	5/8	0.625	15.88	•		•	
2404-L-06-06	3/8	9/16-18	3/8-18	2.501	63.53	1.351	34.30	3/4	0.750	19.05	•		•	
2404-L-06-08	3/8	9/16-18	1/2-14	2.945	74.80	1.654	42.01	7/8	0.875	22.23	•			
2404-L-08-04	1/2	3/4-16	1/4-18	2.749	69.82	1.481	37.62	13/16	0.812	20.62	•			
2404-L-08-06	1/2	3/4-16	3/8-18	2.750	69.85	1.531	38.89	13/16	0.812	20.62	•			
2404-L-08-08	1/2	3/4-16	1/2-14	3.041	77.24	1.590	40.37	7/8	0.875	22.23	•		•	
<b>NEW</b> 2404-L-10-06											•			
2404-L-10-08	5/8	7/8-14	1/2-14	3.125	79.38	1.625	41.28	15/16	0.937	23.80	•			
2404-L-12-12	3/4	1 1/16-12	3/4-14	3.500	88.90	1.890	48.01	1 1/8	1.125	28.58	•		•	
2404-L-16-12	1	1 5/16-12	3/4-14	3.809	96.75	2.141	54.38	1 3/8	1.375	34.93	•		•	
2404-L-16-16	1	1 5/16-12	1-11 1/2	4.000	101.60	2.156	54.76	1 3/8	1.375	34.93	•		•	
2404-L-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	4.500	114.30	2.578	65.48	1 11/16	1.688	42.86	•		•	
2404-L-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	4.880	123.95	2.780	70.60	2	2.000	50.80	•		•	
2404-L-32-32	2	2 1/2-12	2-11 1/2	5.620	142.75	3.250	82.55	2 5/8	2.625	66.68	•		•	

# MJ-MP Straight X-Long 2404-LL Series

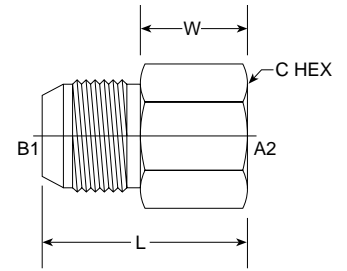


PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
2404-LL-04-02	1/4	7/16-20	1/8-27	2.562	65.07	1.640	41.66	1/2	0.500	12.70	•		•	
2404-LL-04-04	1/4	7/16-20	1/4-18	3.251	82.58	2.120	53.85	5/8	0.625	15.88	•		•	
2404-LL-05-02	5/16	1/2-20	1/8-27	2.812	71.42	1.890	48.01	9/16	0.562	14.27	•		•	
2404-LL-06-04	3/8	9/16-18	1/4-18	3.250	82.55	2.125	53.98	5/8	0.625	15.88	•		•	
2404-LL-06-06	3/8	9/16-18	3/8-18	3.922	99.62	2.795	70.99	3/4	0.750	19.05	•		•	
2404-LL-08-06	1/2	3/4-16	3/8-18	4.000	101.60	2.781	70.64	13/16	0.812	20.62	•		•	
2404-LL-08-08	1/2	3/4-16	1/2-14	4.199	106.65	2.839	72.11	7/8	0.875	22.23	•		•	
2404-LL-10-08	5/8	7/8-14	1/2-14	4.375	111.13	2.875	73.03	15/16	0.937	23.80	•		•	
2404-LL-12-12	3/4	1 1/16-12	3/4-14	5.000	127.00	3.390	86.11	1-1/8	1.125	28.58	•		•	
<b>NEW</b> 2404-LL-16-12											•		•	
2404-LL-16-16	1	1 5/16-12	1-11 1/2	5.750	146.05	3.906	99.21	1-3/8	1.375	34.93	•		•	

# Tube Fittings & Adapters

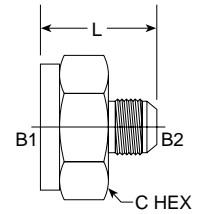
## MJ-FP Straight 2405 Series

SAE# 070103 / MS# 51503



PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
2405-02-02	1/8	5/16-24	1/8-27	1.120	28.45	0.460	11.68	9/16	0.562	14.27	•		•	•
2405-03-02	3/16	3/8-24	1/8-27	1.130	28.70	0.460	11.68	9/16	0.562	14.27	•		•	•
2405-03-04	3/16	3/8-24	1/4-18	1.310	33.27	0.831	21.11	3/4	0.750	19.05	•		•	•
2405-04-02	1/4	7/16-20	1/8-27	1.187	30.15	0.460	11.68	9/16	0.562	14.27	•		•	•
2405-04-04	1/4	7/16-20	1/4-18	1.390	35.31	0.840	21.34	3/4	0.750	19.05	•		•	•
2405-04-06	1/4	7/16-20	3/8-18	1.430	36.32	0.880	22.35	7/8	0.875	22.23	•		•	•
2405-04-08	1/4	7/16-20	1/2-14	1.690	42.93	1.140	28.96	1 1/8	1.125	28.58	•		•	•
2405-05-02	5/16	1/2-20	1/8-27	1.171	29.74	0.460	11.68	9/16	0.562	14.27	•		•	•
2405-05-04	5/16	1/2-20	1/4-18	1.394	35.41	0.843	21.41	3/4	0.750	19.05	•		•	•
2405-05-06	5/16	1/2-20	3/8-18	1.460	37.08	0.910	23.11	7/8	0.875	22.23	•		•	•
2405-06-02	3/8	9/16-18	1/8-27	1.180	29.97	0.625	15.88	5/8	0.625	15.88	•		•	•
2405-06-04	3/8	9/16-18	1/4-18	1.406	35.71	0.670	17.02	3/4	0.750	19.05	•		•	•
2405-06-06	3/8	9/16-18	3/8-18	1.459	37.06	0.906	23.01	7/8	0.875	22.23	•		•	•
2405-06-08	3/8	9/16-18	1/2-14	1.688	42.88	1.132	28.75	1 1/8	1.125	28.58	•		•	•
NEW 2405-06-12											•		•	•
2405-08-04	1/2	3/4-16	1/4-18	1.510	38.35	0.853	21.67	13/16	0.812	20.62	•		•	•
2405-08-06	1/2	3/4-16	3/8-18	1.562	39.67	0.680	17.27	7/8	0.875	22.23	•		•	•
2405-08-08	1/2	3/4-16	1/2-14	1.789	45.44	1.125	28.58	1 1/8	1.125	28.58	•		•	•
2405-08-12	1/2	3/4-16	3/4-14	1.850	46.99	1.193	30.30	1 3/8	1.375	34.93	•		•	•
2405-08-16	1/2	3/4-16	1-11 1/2	2.100	56.13	1.140	28.96	1 5/8	1.625	41.28	•		•	•
2405-10-04	5/8	7/8-14	1/4-18	1.760	44.70	1.000	25.40	15/16	0.937	23.80	•		•	•
NEW 2405-10-06											•		•	•
2405-10-08	5/8	7/8-14	1/2-14	1.890	48.01	0.900	22.86	1 1/8	1.125	28.58	•		•	•
2405-10-12	5/8	7/8-14	3/4-14	1.954	49.63	1.196	30.38	1 3/8	1.375	34.93	•		•	•
2405-10-16	5/8	7/8-14	1-11 1/2	2.300	58.42	1.525	38.74	1 5/8	1.625	41.28	•		•	•
2405-12-08	3/4	1 1/16-12	1/2-14	2.050	52.07	1.186	30.12	1 1/8	1.125	28.58	•		•	•
2405-12-12	3/4	1 1/16-12	3/4-14	2.062	52.37	1.213	30.81	1 3/8	1.375	34.93	•		•	•
2405-12-16	3/4	1 1/16-12	1-11 1/2	2.300	58.42	1.436	36.47	1 5/8	1.625	41.28	•		•	•
2405-14-08	7/8	1 3/16-12	1/2-14	2.076	52.73	1.186	30.12	1 1/4	1.250	31.75	•		•	•
2405-14-12	7/8	1 3/16-12	3/4-14	2.062	52.37	0.910	23.11	1 3/8	1.375	34.93	•		•	•
2405-16-12	1	1 5/16-12	3/4-14	2.085	52.96	1.172	29.77	1 3/8	1.375	34.93	•		•	•
2405-16-16	1	1 5/16-12	1-11 1/2	2.343	59.51	1.140	28.96	1 5/8	1.625	41.28	•		•	•
2405-16-20	1	1 5/8-12	1 1/4-11 1/2	2.420	41.47	1.525	38.74	2	2.000	50.80	•		•	•
2405-20-16	1 1/4	1 5/8-12	1-11 1/2	2.400	60.96	1.442	36.63	1 11/16	1.688	42.86	•		•	•
2405-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	2.484	63.09	1.160	29.46	2	2.000	50.80	•		•	•
2405-20-24	1 1/4	1 5/8-12	1 1/2-11 1/2	2.500	63.50	1.536	39.01	2 3/8	2.375	60.33	•		•	•
NEW 2405-24-16											•		•	•
2405-24-20	1 1/2	1 7/8-12	1 1/4-11 1/2	2.614	66.40	1.531	38.90	2	2.000	50.80	•		•	•
2405-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	2.625	66.68	1.160	29.46	2 3/8	2.375	60.33	•		•	•
2405-24-32	1 1/2	1 7/8-12	1 5/8-12	2.615	66.42	1.532	38.91	2	2.000	50.80	•		•	•
NEW 2405-32-24											•		•	•
2405-32-32	2	2 1/2-12	2-11 1/2	2.968	75.39	1.180	29.97	2 7/8	2.375	60.33	•		•	•

# FJ-MJ Straight Reducer 2406 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH M.M.	L1 LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock								
									S	FG	SS	B					
NEW 2406-03-04																	
NEW 2406-04-02																	
2406-04-03	1/4	7/16-20	3/8-24	1.049	26.64	—	—	9/16	0.562	14.27	•						
NEW 2406-04-05											•						
2406-04-06	1/4	7/16-20	9/16-18	1.007	25.58	—	—	5/8	0.625	15.88	•						
2406-05-04	5/16	1/2-20	7/16-20	1.159	29.44	—	—	5/8	0.625	15.88	•						
NEW 2406-05-06											•						
2406-05-08	5/16	1/2-20	3/4-16	1.266	32.16	—	—	13/16	0.812	20.62	•						
2406-06-02	3/8	9/16-18	5/16-24	1.073	27.25	—	—	11/16	0.687	17.45	•						
2406-06-03	3/8	9/16-18	3/8-24	1.104	28.04	—	—	11/16	0.687	17.45	•						
2406-06-04* +	3/8	9/16-18	7/16-20	1.187	30.15	0.970	24.64	11/16	0.687	17.45	•						
2406-06-05	3/8	9/16-18	1/2-20	1.181	30.00	—	—	11/16	0.687	17.45	•						
2406-06-06	3/8	9/16-18	9/16-18	1.185	30.10	—	—	11/16	0.687	17.47	•						
2406-06-08	3/8	9/16-18	3/4-16	1.282	32.56	—	—	13/16	0.812	20.62	•						
NEW 2406-06-10											•						
2406-08-04* +	1/2	3/4-16	7/16-20	1.328	33.73	1.000	25.40	7/8	0.875	22.23	•						
2406-08-05	1/2	3/4-16	1/2-20	1.310	33.27	—	—	7/8	0.875	22.23	•						
2406-08-06* +	1/2	3/4-16	9/16-18	1.328	33.73	1.000	25.40	7/8	0.875	22.23	•						
2406-08-10	1/2	3/4-16	7/8-14	1.288	32.72	—	—	15/16	0.937	23.81	•						
2406-08-12	1/2	3/4-16	1 1/16-12	1.620	41.15	—	—	1 1/8	1.125	28.58	•						
2406-10-04* +	5/8	7/8-14	7/16-20	1.468	37.29	1.030	26.16	1	1.000	25.40	•						
2406-10-06* +	5/8	7/8-14	9/16-18	1.406	35.71	1.030	26.16	1	1.000	25.40	•						
2406-10-08	5/8	7/8-14	3/4-16	1.406	35.71	—	—	1	1.000	25.40	•						
2406-10-12	5/8	7/8-14	1 1/16-12	1.740	44.20	—	—	1 1/8	1.125	28.58	•						
2406-10-16	5/8	7/8-14	1 5/16-12	1.220	41.20	—	—	1 3/8	1.375	34.93	•						
2406-12-04* +	3/4	1 1/16-12	7/16-20	1.499	38.07	1.090	27.69	1 1/4	1.250	31.75	•						
2406-12-06* +	3/4	1 1/16-12	9/16-18	1.460	37.08	1.090	27.69	1 1/4	1.250	31.75	•						
2406-12-08* +	3/4	1 1/16-12	3/4-16	1.563	39.70	1.090	27.69	1 1/4	1.250	31.75	•						
2406-12-10	3/4	1 1/16-12	7/8-14	1.638	41.59	—	—	1 1/4	1.250	31.75	•						
2406-12-12	3/4	1 1/16-12	1 1/16-12	1.740	44.19	—	—	1 1/4	1.250	31.75	•						
2406-12-16	3/4	1 1/16-12	1 5/16-12	1.608	40.84	—	—	1 3/8	1.375	34.93	•						
NEW 2406-14-04											•						
2406-14-06	7/8	1 3/16-12	9/16-18	1.682	42.72	—	—	1 3/8	1.375	34.93	•						
2406-14-08	7/8	1 3/16-12	3/4-16	1.760	44.70	—	—	1 3/8	1.375	34.93	•						
2406-14-10	7/8	1 3/16-12	7/8-14	1.730	43.94	—	—	1 3/8	1.375	34.93	•						
2406-14-12	7/8	1 3/16-12	1 1/16-12	1.796	45.62	—	—	1 3/8	1.375	34.93	•						
2406-14-16	7/8	1 3/16-12	1 5/16-12	1.986	50.44	—	—	1 3/8	1.375	34.93	•						
2406-16-04	1	1 5/16-12	7/16-20	1.840	46.74	—	—	1 1/2	1.500	38.10	•						
2406-16-06	1	1 5/16-12	9/16-18	1.840	46.74	—	—	1 1/2	1.500	38.10	•						
2406-16-08* +	1	1 5/16-12	3/4-16	1.719	43.66	1.270	32.26	1 1/2	1.500	38.10	•						
2406-16-10* +	1	1 5/16-12	7/8-14	1.821	46.24	1.380	35.05	1 1/2	1.500	38.10	•						
2406-16-12* +	1	1 5/16-12	1 1/16-12	1.823	46.30	1.470	37.34	1 1/2	1.500	38.10	•						
2406-16-14	1	1 5/16-12	1 3/16-12	1.830	46.48	—	—	1 1/2	1.500	38.10	•						
2406-16-20	1	1 5/16-12	1 5/8-12	2.300	58.42	—	—	1 11/16	1.688	42.86	•						
NEW 1406-16-24											•						
2406-20-06	1 1/4	1 5/8-12	9/16-18	1.743	44.27	—	—	2	2.000	50.80	•						
2406-20-08*	1 1/4	1 5/8-12	3/4-16	1.844	46.84	1.330	33.78	2	2.000	50.80	•						
2406-20-10*	1 1/4	1 5/8-12	7/8-14	1.914	48.62	1.440	36.58	2	2.000	50.80	•						
2406-20-12* +	1 1/4	1 5/8-12	1 1/16-12	2.000	50.80	1.530	38.86	2	2.000	50.80	•						
2406-20-14	1 1/4	1 5/8-12	1 3/16-12	2.031	51.59	—	—	2	2.000	50.80	•						
2406-20-16* +	1 1/4	1 5/8-12	1 5/16-12	2.005	50.93	1.590	40.39	2	2.000	50.80	•						
2406-20-24	1 1/4	1 5/8-12	1 7/8-12	2.145	54.48	—	—	2	2.000	50.80	•						
2406-24-08	1 1/2	1 7/8-12	3/4-16	2.249	57.12	—	—	2 1/4	2.250	57.15	•						
2406-24-10	1 1/2	1 7/8-12	7/8-14	2.350	59.69	—	—	2 1/4	2.250	57.15	•						

\*Note: Only Stainless Steel inset style available. Does not include nut.

+ Note: Steel insert style available. Use part number 2406-(size)-IN.

continued on next page

# Tube Fittings & Adapters

## 2406 Series *continued*

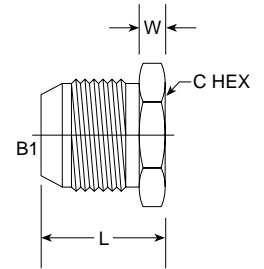
PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH	M.M.	L1 LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
2406-24-12*	1 1/2	1 7/8-12	1 1/16-12	2.456	62.38	1.560	39.63	2 1/4	2.250	57.15	•		•	
2406-24-14	1 1/2	1 7/8-12	1 3/16-12	2.480	62.99	—	—	2 1/4	2.250	57.15	•		•	
2406-24-16*	1 1/2	1 7/8-12	1 5/16-12	2.503	63.58	1.600	40.64	2 1/4	2.250	57.15	•		•	
2406-24-20	1 1/2	1 7/8-12	1 5/8-12	2.650	67.31	—	—	2 1/4	2.250	57.15	•		•	
2406-24-32	1 1/2	1 7/8-12	2 1/2-12	2.395	60.83	—	—	2 5/8	2.625	66.68	•		•	
NEW 2406-32-08													•	
NEW 2406-32-12													•	
NEW 2406-32-16													•	
2406-32-20	2	2 1/2-12	1 5/8-12	2.774	70.46	—	—	2 7/8	2.875	73.03	•		•	
2406-32-24*	2	2 1/2-12	1 7/8-12	2.614	66.40	1.900	48.26	2 7/8	2.875	73.03	•		•	

\*Note: Only Stainless Steel insert style available. Does not include nut.

†Note: Steel insert style available. Use part number 2406-(size)-IN.

## MJ Plug 2408 Series

SAE # 070109 / MS # 51518

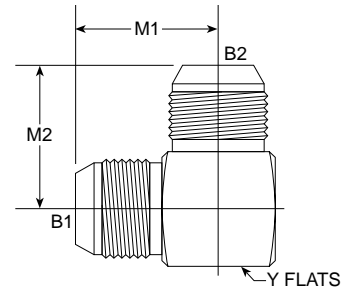


PART NO. SIZE	TUBE O.D.	B1 SAE 37	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
										S	FG	SS	B
2408-02	1/8	5/16-24	0.700	17.78	0.220	5.59	7/16	0.438	11.13	•		•	•
2408-03	3/16	3/8-24	0.730	18.54	0.220	5.59	7/16	0.438	11.13	•		•	•
2408-04	1/4	7/16-20	0.796	20.22	0.220	5.59	1/2	0.500	12.70	•		•	•
2408-05	5/16	1/2-20	0.796	20.22	0.220	5.59	9/16	0.562	14.27	•		•	•
2408-06	3/8	9/16-18	0.843	21.41	0.250	6.35	5/8	0.625	15.88	•		•	•
2408-08	1/2	3/4-16	0.937	23.80	0.250	6.35	13/16	0.812	20.62	•		•	•
2408-10	5/8	7/8-14	1.093	27.76	0.310	7.87	15/16	0.937	23.80	•		•	•
2408-12	3/4	1 1/16-12	1.281	32.54	0.380	9.65	1 1/8	1.125	28.58	•		•	•
2408-14	7/8	1 3/16-12	1.312	33.32	0.380	9.65	1 1/4	1.250	31.75	•		•	•
2408-16	1	1 5/16-12	1.328	33.73	0.380	9.65	1 3/8	1.375	34.93	•		•	•
2408-20	1 1/4	1 5/8-12	1.453	36.91	0.460	11.68	1 11/16	1.688	42.86	•		•	•
2408-24	1 1/2	1 7/8-12	1.656	42.06	0.530	13.46	2	2.000	50.80	•		•	•
2408-32	2	2 1/2-12	2.005	50.93	0.680	17.27	2 5/8	2.625	66.68	•		•	•



# MJ-MJ 90° 2500 Series

SAE# 070201 / MS# 51505

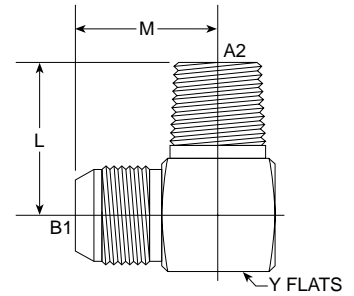


PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	M1 LGTH	M.M.	M2 LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
2500-02-02	1/8	5/16-24	5/16-24	0.770	19.56	0.770	19.56	3/8	0.312	07.92	•	•	•	
2500-03-03	3/16	3/8-24	3/8-24	0.830	21.10	0.830	21.10	9/16	0.562	11.10	•	•	•	
2500-04-04	1/4	7/16-20	7/16-20	0.890	22.61	0.890	22.61	1/2	0.500	12.70	•	•	•	•
2500-05-04	5/16 1/4	1/2-20	7/16-20	0.950	24.13	0.950	24.13	1/2	0.500	12.70	•	•	•	
2500-05-05	5/16	1/2-20	1/2-20	0.950	24.13	0.950	24.13	9/16	0.562	14.27	•	•	•	•
2500-06-04	3/8 1/4	9/16-18	7/16-20	1.060	26.92	1.050	26.67	9/16	0.562	14.27	•	•	•	
2500-06-05	3/8 5/16	9/16-18	1/2-20	1.060	26.92	1.050	26.67	9/16	0.562	14.27	•	•	•	
2500-06-06	3/8	9/16-18	9/16-18	1.062	26.97	1.060	26.92	5/8	0.625	15.88	•	•	•	•
NEW 2500-08-04											•			
2500-08-06	1/2 3/8	3/4-16	9/16-18	1.250	31.75	1.150	29.21	13/16	0.812	20.62	•	•	•	•
2500-08-08	1/2	3/4-16	3/4-16	1.250	31.75	1.250	31.75	13/16	0.812	20.62	•	•	•	•
2500-10-08	5/8 1/2	7/8-14	3/4-16	1.450	36.83	1.350	34.29	15/16	0.937	23.80	•	•	•	
2500-10-10	5/8	7/8-14	7/8-14	1.450	36.83	1.450	36.83	15/16	0.937	23.80	•	•	•	•
2500-12-08	3/4 1/2	1 1/16-12	3/4-16	1.660	42.16	1.450	36.83	1 1/8	1.125	28.58	•	•	•	
2500-12-10	3/4	1 1/16-12	7/8-14	1.660	42.16	1.540	39.12	1 1/8	1.125	28.58	•	•	•	
2500-12-12	3/4	1 1/16-12	1 1/16-12	1.660	42.16	1.660	42.16	1 1/8	1.125	28.58	•	•	•	•
2500-14-14	7/8	1 3/16-12	1 3/16-12	1.800	45.72	1.800	45.72	1 1/4	1.250	31.75	•	•	•	•
2500-16-12	1 3/4	1 5/16-12	1 1/16-12	1.810	45.97	1.760	44.70	1 3/8	1.375	34.93	•	•	•	
2500-16-16	1	1 5/16-12	1 5/16-12	1.810	45.97	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
2500-20-20	1 1/4	1 5/8-12	1 5/8-12	2.060	52.32	2.060	52.32	1 3/4	1.750	44.45	•	•	•	
2500-24-24	1 1/2	1 7/8-12	1 7/8-12	2.330	59.18	2.330	59.18	2	2.000	50.80	•	•	•	
2500-32-32	2	2 1/2-12	2 1/2-12	3.060	77.72	3.060	77.72	2 5/8	2.625	66.68	•	•	•	

# Tube Fittings & Adapters

## MJ-MP 90° 2501 Series

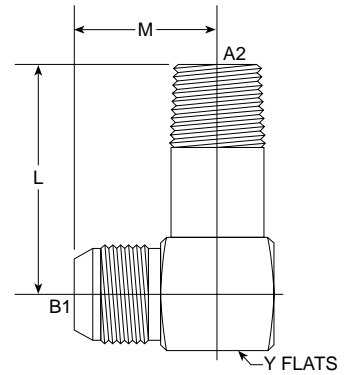
SAE# 070202 / MS# 51504



PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
NEW 2501-02-02	1/8	5/16-24	1/8-27	0.720	18.29	0.770	19.56	7/16	0.438	11.13	•	•	•	•
2501-02-04											•	•	•	•
2501-03-02	3/16	3/8-24	1/8-27	0.720	18.29	0.830	21.08	7/16	0.438	11.133	•	•	•	•
NEW 2501-04-01											•	•	•	•
2501-04-02	1/4	7/16-20	1/8-27	0.781	19.84	0.890	22.61	1/2	0.500	12.70	•	•	•	•
2501-04-04	1/4	7/16-20	1/4-18	1.090	27.69	1.050	26.67	5/8	0.625	15.88	•	•	•	•
2501-04-06	1/4	7/16-20	3/8-18	1.220	30.99	1.120	28.45	13/16	0.812	20.62	•	•	•	•
2501-04-08	1/4	7/16-20	1/2-14	1.470	37.34	1.210	30.73	15/16	0.937	23.80	•	•	•	•
2501-04-12	1/4	7/16-20	3/4-14	1.590	40.39	1.350	34.29	1 1/16	1.062	26.97	•	•	•	•
2501-05-02	5/16	1/2-20	1/8-27	0.781	19.84	0.953	24.21	9/16	0.562	14.27	•	•	•	•
2501-05-04	5/16	1/2-20	1/4-18	1.093	27.76	1.050	26.67	5/8	0.625	15.88	•	•	•	•
2501-05-06	5/16	1/2-20	3/8-18	1.220	30.99	1.090	27.69	13/16	0.812	20.62	•	•	•	•
2501-05-08	5/16	1/2-20	1/2-14	1.470	37.34	1.250	31.75	15/16	0.937	23.80	•	•	•	•
2501-06-02	3/8	9/16-18	1/8-27	0.900	22.86	1.062	26.97	5/8	0.625	15.88	•	•	•	•
2501-06-04	3/8	9/16-18	1/4-18	1.093	27.76	1.062	26.97	5/8	0.625	15.88	•	•	•	•
2501-06-06	3/8	9/16-18	3/8-18	0.220	30.99	1.140	28.96	15/16	0.937	23.80	•	•	•	•
2501-06-08	3/8	9/16-18	1/2-14	1.470	37.34	1.220	30.99	15/16	0.937	23.80	•	•	•	•
2501-06-12	3/8	9/16-18	3/4-14	1.590	40.39	1.310	33.27	1 1/16	1.062	26.97	•	•	•	•
2501-08-02	1/2	3/4-16	1/8-27	1.040	26.42	1.250	31.75	3/4	0.750	19.05	•	•	•	•
2501-08-04	1/2	3/4-16	1/4-18	1.220	30.99	1.250	31.75	13/16	0.812	20.62	•	•	•	•
2501-08-06	1/2	3/4-16	3/8-18	1.220	30.99	1.250	31.75	13/16	0.812	20.62	•	•	•	•
2501-08-08	1/2	3/4-16	1/2-14	1.470	37.34	1.330	33.78	15/16	0.937	23.80	•	•	•	•
2501-08-12	1/2	3/4-16	3/4-14	1.593	40.46	1.420	36.07	1 1/8	1.125	28.58	•	•	•	•
2501-08-16	1/2	3/4-16	1-11 1/2	1.970	50.04	1.560	39.62	1 3/8	1.375	34.93	•	•	•	•
2501-10-06	5/8	7/8-14	3/8-18	1.281	32.54	1.453	36.91	15/16	0.937	23.80	•	•	•	•
2501-10-08	5/8	7/8-14	1/2-14	1.470	37.34	1.453	36.91	15/16	0.937	23.80	•	•	•	•
2501-10-12	5/8	7/8-14	3/4-14	1.593	40.46	1.546	39.27	1 1/8	1.125	28.58	•	•	•	•
2501-10-16	5/8	7/8-14	1-11 1/2	1.970	50.04	1.660	42.16	1 3/8	1.375	34.93	•	•	•	•
2501-12-06	3/4	1 1/16-12	3/8-18	1.370	34.80	1.660	42.16	1 1/8	1.125	28.58	•	•	•	•
2501-12-08	3/4	1 1/16-12	1/2-14	1.590	40.39	1.656	42.06	1 1/8	1.125	28.58	•	•	•	•
2501-12-12	3/4	1 1/16-12	3/4-14	1.593	40.46	1.656	42.06	1 1/8	1.125	28.58	•	•	•	•
2501-12-16	3/4	1 1/16-12	1-11 1/2	1.968	49.99	1.760	44.70	1 3/8	1.375	34.93	•	•	•	•
2501-12-20	3/4	1 1/16-12	1 1/4-11 1/2	2.380	60.45	1.950	49.53	1 3/4	1.750	44.45	•	•	•	•
2501-14-08	7/8	1 3/16-12	1/2-14	1.690	42.93	1.730	43.94	1 1/4	1.250	31.75	•	•	•	•
2501-14-12	7/8	1 3/16-12	3/4-14	1.687	42.85	1.800	45.72	1 1/4	1.250	31.75	•	•	•	•
2501-14-16	7/8	1 3/16-12	1-11 1/2	1.970	50.04	1.790	45.47	1 3/8	1.375	34.93	•	•	•	•
2501-16-08	1	1 5/16-12	1/2-14	1.780	45.21	1.810	45.97	1 3/8	1.375	34.93	•	•	•	•
2501-16-12	1	1 5/16-12	3/4-14	1.780	45.21	1.812	46.02	1 3/8	1.375	34.93	•	•	•	•
2501-16-16	1	1 5/16-12	1-11 1/2	1.968	49.99	1.812	46.02	1 3/8	1.375	34.93	•	•	•	•
2501-16-20	1	1 5/16-12	1 1/4-11 1/2	2.375	60.33	2.090	53.09	1 3/4	1.750	44.45	•	•	•	•
2501-16-24	1	1 5/16-12	1 1/2-11 1/2	2.640	67.06	2.140	54.36	2	2.000	50.80	•	•	•	•
2501-20-12	1 1/4	1 5/8-12	3/4-14	1.970	50.04	2.060	52.32	1 3/4	1.750	44.45	•	•	•	•
2501-20-16	1 1/4	1 5/8-12	1-11 1/2	2.156	54.76	2.062	52.37	1 3/4	1.750	44.45	•	•	•	•
2501-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	2.375	60.33	2.062	52.37	1 3/4	1.750	44.45	•	•	•	•
2501-20-24	1 1/4	1 5/8-12	1 1/2-11 1/2	2.640	67.06	2.300	58.42	2	2.000	50.80	•	•	•	•
2501-24-16	1 1/2	1 7/8-12	1-11 1/2	2.380	60.45	2.330	59.18	2	2.000	50.80	•	•	•	•
2501-24-20	1 1/2	1 7/8-12	1 1/4-11 1/2	2.500	63.50	2.328	59.13	2	2.000	50.80	•	•	•	•
2501-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	2.640	67.06	2.328	59.13	2	2.000	50.80	•	•	•	•
NEW 2501-24-32											•	•	•	•
2501-32-24	2	2 1/2-12	1 1/2-11 1/2	2.640	67.06	3.080	78.23	2 5/8	2.625	66.68	•	•	•	•
2501-32-32	2	2 1/2-12	2-11 1/2	3.000	76.20	3.062	77.77	2 5/8	2.625	66.68	•	•	•	•
NEW 2501-40-40											•	•	•	•

# MJ-MP 90° Long 2501-L Series

SAE# 071502

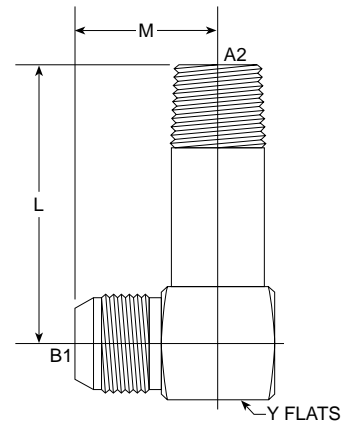


PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	L LGTH M.M.	M LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
									S	FG	SS	B		
2501-L-04-02	1/4	7/16-20	1/8-27	1.171	29.74	0.890	22.61	1/2	0.500	12.70	•	•	•	
2501-L-04-04	1/4	7/16-20	1/4-18	1.580	40.13	0.970	24.64	5/8	0.625	15.88	•	•	•	
2501-L-05-02	5/16	1/2-20	1/8-27	1.170	29.72	0.953	24.21	9/16	0.562	14.27	•		•	
2501-L-05-04	5/16	1/2-20	1/4-18	1.580	40.13	0.953	24.21	9/16	0.562	14.27	•		•	
2501-L-06-02	3/8	9/16-18	1/8-27	1.229	31.22	1.062	26.97	5/8	0.625	15.88	•		•	
2501-L-06-04	3/8	9/16-18	1/4-18	1.580	40.13	1.062	26.97	5/8	0.625	15.88	•	•	•	
2501-L-06-06	3/8	9/16-18	3/8-18	1.828	46.43	1.156	29.36	13/16	0.812	20.62	•	•	•	
2501-L-06-08	3/8	9/16-18	1/2-14	2.250	57.15	1.220	30.99	15/16	0.937	23.80	•	•	•	
2501-L-08-04	1/2	3/4-16	1/4-18	1.840	46.74	1.250	31.75	13/16	0.812	20.62	•		•	
2501-L-08-06	1/2	3/4-16	3/8-18	1.828	46.43	1.250	31.75	13/16	0.812	20.62	•	•	•	•
2501-L-08-08	1/2	3/4-16	1/2-14	2.230	56.64	1.250	31.75	15/16	0.937	23.80	•	•	•	
2501-L-08-12	1/2	3/4-16	3/4-14	2.437	61.90	1.406	35.71	1 1/8	1.125	28.58	•		•	
2501-L-10-08	5/8	7/8-14	1/2-14	2.171	55.14	1.453	36.91	15/16	0.937	23.80	•	•	•	
2501-L-10-12	5/8	7/8-14	3/4-14	2.480	62.99	1.550	39.37	1 1/8	1.125	28.58	•		•	
2501-L-12-08	3/4	1 1/16-12	1/2-14	2.250	57.15	1.660	42.16	1 1/8	1.125	28.58	•		•	
2501-L-12-12	3/4	1 1/16-12	3/4-14	2.437	61.90	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
2501-L-12-16	3/4	1 1/16-12	1-11 1/2	3.010	76.45	1.760	44.70	1 5/16	1.312	33.34	•	•	•	
2501-L-14-12	7/8	1 3/16-12	3/4-14	2.590	65.79	1.800	45.72	1 1/4	1.250	31.75	•		•	
2501-L-16-12	1	1 5/16-12	3/4-14	2.630	66.80	1.810	45.97	1 3/8	1.375	34.93	•		•	
2501-L-16-16	1	1 5/16-12	1-11 1/2	3.015	76.58	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
2501-L-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	3.687	93.65	2.062	52.37	1 3/4	1.750	44.45	•	•	•	
2501-L-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	4.109	104.37	2.323	59.00	2	2.000	50.80	•		•	

# Tube Fittings & Adapters

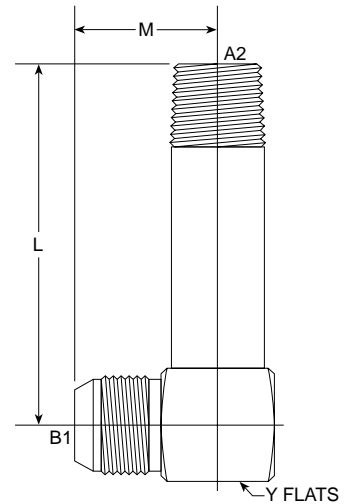
## MJ-MP 90° X-Long 2501-LL Series

SAE# 071602



PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
2501-LL-04-02	1/4	7/16-20	1/8-27	1.562	39.67	0.890	22.61	1/2	0.500	12.70	•	•	•	
2501-LL-04-04	1/4	7/16-20	1/4-18	2.070	52.59	0.970	24.64	5/8	0.625	15.88	•	•	•	
2501-LL-05-02	5/16	1/2-20	1/8-27	1.625	41.28	0.950	24.13	9/16	0.562	14.27	•	•	•	
2501-LL-05-04	5/16	1/2-20	1/4-18	2.060	52.32	0.950	24.13	9/16	0.562	14.27	•	•	•	
2501-LL-06-04	3/8	9/16-18	1/4-18	2.078	52.78	1.060	26.92	5/8	0.625	15.88	•	•	•	
2501-LL-06-06	3/8	9/16-18	3/8-18	2.420	61.47	1.140	28.96	13/16	0.812	20.62	•	•	•	
2501-LL-06-08	3/8	9/16-18	1/2-14	2.870	72.90	1.220	30.99	15/16	0.937	23.80	•	•	•	
2501-LL-08-04	1/2	3/4-16	1/4-18	2.160	54.86	1.250	31.75	13/16	0.812	20.62	•	•	•	
2501-LL-08-06	1/2	3/4-16	3/8-18	2.421	61.49	1.250	31.75	13/16	0.812	20.62	•	•	•	
2501-LL-08-08	1/2	3/4-16	1/2-14	3.010	76.45	1.250	31.75	15/16	0.937	23.80	•	•	•	
2501-LL-10-08	5/8	7/8-14	1/2-14	2.875	73.03	1.450	36.83	15/16	0.937	23.80	•	•	•	
2501-LL-10-12	5/8	7/8-14	3/4-14	3.280	83.31	1.550	39.37	1 1/8	1.125	28.58	•	•	•	
2501-LL-12-08	3/4	1 1/16-12	1/2-14	3.090	78.49	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
2501-LL-12-12	3/4	1 1/16-12	3/4-14	3.280	83.31	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
2501-LL-14-12	7/8	1 3/16-12	3/4-14	3.500	88.90	1.800	45.72	1 1/4	1.250	31.75	•	•	•	
2501-LL-16-12	1	1 5/16-12	3/4-14	3.380	85.85	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
2501-LL-16-16	1	1 5/16-12	1-11 1/2	4.050	102.87	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
2501-LL-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	5.000	127.00	2.060	52.32	1 3/4	1.750	44.45	•	•	•	
2501-LL-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	5.550	140.97	2.330	59.18	2	2.000	50.80	•	•	•	

# MJ-MP 90° XX-Long 2501-LLL Series

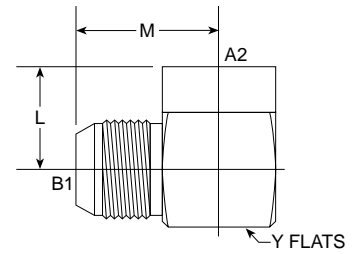


PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
2501-LLL-04-02	1/4	7/16-20	1/8-27	2.312	58.72	0.890	22.61	1/2	0.500	12.70	•	•		
2501-LLL-04-04	1/4	7/16-20	1/4-18	3.000	76.20	0.950	24.13	5/8	0.625	15.88	•		•	
2501-LLL-05-02	5/16	1/2-20	1/8-27	2.310	58.67	0.950	24.13	9/16	0.562	14.27	•			
2501-LLL-06-04	3/8	9/16-18	1/4-18	3.062	77.77	1.060	26.92	5/8	0.625	15.88	•			
2501-LLL-06-06	3/8	9/16-18	3/8-18	3.750	95.25	1.160	29.46	13/16	0.812	20.62	•			
2501-LLL-08-06	1/2	3/4-16	3/8-18	3.750	95.25	1.250	31.75	13/16	0.812	20.62	•			
2501-LLL-08-08	1/2	3/4-16	1/2-14	4.500	114.30	1.310	33.27	15/16	0.937	23.80	•	•		
2501-LLL-10-08	5/8	7/8-14	1/2-14	4.500	114.30	1.450	36.83	15/16	0.937	23.80	•			
2501-LLL-12-12	3/4	1 1/16-12	3/4-14	5.031	127.97	1.660	42.16	1 1/8	1.125	28.58	•			
2501-LLL-16-16	1	1 5/16-12	1-11 1/2	6.343	161.11	1.810	45.97	1 3/8	1.375	34.93	•		•	
2501-LLL-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	7.343	186.51	2.060	52.32	1 3/4	1.750	44.45	•			

# Tube Fittings & Adapters

## MJ-FP 90° 2502 Series

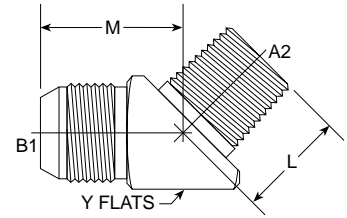
SAE# 070203 / MS# 51506



PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock						
											S	FG	SS	B			
NEW NEW	2502-02-02																
	2502-03-02																
	2502-04-02	1/4	7/16-20	1/8-27	1.080	27.43	0.660	16.76	5/8	0.625	15.88						
	2502-04-04	1/4	7/16-20	1/4-18	1.220	30.98	0.880	22.35	3/4	0.750	19.05						
	2502-04-06	1/4	7/16-20	3/8-18	1.020	25.91	1.290	32.77	3/4	0.750	19.05						
	2502-04-08	1/4	7/16-20	1/2-14	1.230	31.24	1.400	35.56	1 1/8	1.125	28.58						
	2502-05-02	5/16	1/2-20	1/8-27	0.660	16.76	1.080	27.43	5/8	0.625	15.88						
	2502-05-04	5/16	1/2-20	1/4-18	0.880	22.35	1.220	30.98	7/8	0.875	22.23						
	2502-05-06	5/16	1/2-20	3/8-18	1.020	25.91	1.290	32.76	3/4	0.750	19.05						
	2502-06-02	3/8	9/16-18	1/8-27	0.670	17.02	1.234	31.34	3/4	0.750	19.05						
	2502-06-04	3/8	9/16-18	1/4-18	0.880	22.35	1.234	31.34	3/4	0.750	19.05						
	2502-06-06	3/8	9/16-18	3/8-18	1.020	25.91	1.310	33.27	3/4	0.750	19.05						
	2502-06-08	3/8	9/16-18	1/2-14	1.234	31.34	1.410	35.81	1 1/8	1.125	28.58						
	2502-08-04	1/2	3/4-16	1/4-18	1.010	25.65	1.421	36.09	7/8	0.875	22.23						
	2502-08-06	1/2	3/4-16	3/8-18	1.020	25.91	1.421	36.09	7/8	0.875	22.23						
	2502-08-08	1/2	3/4-16	1/2-14	1.234	31.34	1.520	38.61	1 1/8	1.125	28.58						
	2502-08-12	1/2	3/4-16	3/4-14	1.360	34.54	1.650	41.91	1 3/8	1.375	34.93						
	2502-10-06	5/8	7/8-14	3/8-18	1.010	25.65	1.640	41.66	1 1/8	1.125	28.58						
	2502-10-08	5/8	7/8-14	1/2-14	1.234	31.34	1.640	41.66	1 1/8	1.125	28.58						
	2502-10-12	5/8	7/8-14	3/4-14	1.360	34.54	1.770	44.96	1 3/8	1.375	34.93						
	2502-12-08	3/4	1 1/16-12	1/2-14	1.359	34.52	1.890	48.01	1 3/8	1.375	34.93						
	2502-12-12	3/4	1 1/16-12	3/4-14	1.359	34.52	1.890	48.01	1 3/8	1.375	34.93						
	2502-12-16	3/4	1 1/16-12	1-11 1/2	1.625	41.28	1.701	43.21	1 5/8	1.625	41.28						
	2502-14-12	7/8	1 3/16-12	3/4-14	1.421	36.09	1.859	47.22	1 3/8	1.375	34.93						
	2502-16-12	1	1 5/16-12	3/4-14	1.390	35.31	2.171	55.14	1 5/8	1.625	41.28						
	2502-16-16	1	1 5/16-12	1-11 1/2	1.625	41.28	2.171	55.14	1 5/8	1.625	41.28						
	2502-16-20	1	1 5/16-12	1 1/4-11 1/2	1.703	43.26	2.281	57.94	2	2.000	50.80						
	2502-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	1.703	43.26	2.328	59.13	2	2.000	50.80						
	2502-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	2.080	52.83	2.890	73.41	2 3/8	2.375	60.33						
	2502-32-32	2	2 1/2-12	2-11 1/2	2.390	60.71	3.300	83.82	2 7/8	2.875	73.03						

# MJ-MP 45° 2503 Series

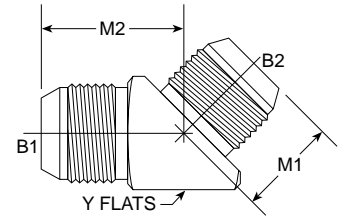
SAE# 070302 / MS# 51508



PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
2503-02-02	1/8	5/16-24	1/8-27	0.520	13.21	0.690	17.53	1/2	0.500	12.70	•	•	•	
2503-03-02	3/16	3/8-24	1/8-27	0.520	13.21	0.690	17.53	1/2	0.500	12.70	•	•	•	
2503-04-02	1/4	7/16-20	1/8-27	0.640	16.26	0.720	18.29	1/2	0.500	12.70	•	•	•	•
2503-04-04	1/4	7/16-20	1/4-18	0.860	21.84	0.820	20.83	5/8	0.625	15.88	•	•	•	•
2503-04-06	1/4	7/16-20	3/8-18	0.950	24.13	0.850	21.59	13/16	0.812	20.62	•	•	•	
2503-04-08	1/4	7/16-20	1/2-14	1.170	29.72	0.870	22.10	15/16	0.937	23.80	•	•	•	
2503-05-02	5/16	1/2-20	1/8-27	0.640	16.26	0.770	19.59	9/16	0.562	14.27	•	•	•	
2503-05-04	5/16	1/2-20	1/4-18	0.859	21.82	0.820	20.83	5/8	0.625	15.88	•	•	•	
2503-05-06	5/16	1/2-20	3/8-18	0.950	24.13	0.850	21.59	13/16	0.812	20.62	•	•	•	
2503-06-02	3/8	9/16-18	1/8-27	0.656	16.66	0.830	21.08	5/8	0.625	15.88	•	•	•	
2503-06-04	3/8	9/16-18	1/4-18	0.859	21.82	0.830	21.08	5/8	0.625	15.88	•	•	•	•
2503-06-06	3/8	9/16-18	3/8-18	0.950	24.13	0.870	22.10	13/16	0.812	20.62	•	•	•	•
2503-06-08	3/8	9/16-18	1/2-14	1.171	29.74	0.880	22.35	15/16	0.937	23.80	•	•	•	
2503-06-12	3/8	9/16-18	3/4-14	1.200	30.48	0.930	23.62	1 1/8	1.125	28.58	•	•	•	
2503-08-04	1/2	3/4-16	1/4-18	0.760	19.30	0.980	24.89	13/16	0.812	20.62	•	•	•	
2503-08-06	1/2	3/4-16	3/8-18	0.953	24.21	0.980	24.89	13/16	0.812	20.62	•	•	•	•
2503-08-08	1/2	3/4-16	1/2-14	1.171	29.74	0.990	25.15	15/16	0.937	23.80	•	•	•	•
2503-08-12	1/2	3/4-16	3/4-14	1.200	30.48	1.040	26.42	1 1/8	1.125	28.58	•	•	•	
2503-10-04	5/8	7/8-14	1/4-18	0.980	24.89	1.110	28.19	7/8	0.875	22.23	•	•	•	
2503-10-06	5/8	7/8-14	3/8-18	1.060	26.92	1.110	28.19	15/16	0.937	23.80	•	•	•	
2503-10-08	5/8	7/8-14	1/2-14	1.170	29.72	1.110	28.19	15/16	0.937	23.80	•	•	•	•
2503-10-12	5/8	7/8-14	3/4-14	1.200	30.48	1.160	29.46	1 1/8	1.125	28.58	•	•	•	
2503-12-08	3/4	1 1/16-12	1/2-14	1.200	30.48	1.280	32.51	1 1/8	1.125	28.58	•	•	•	
2503-12-12	3/4	1 1/16-12	3/4-14	1.200	30.48	1.280	32.51	1 1/8	1.125	28.58	•	•	•	•
2503-12-16	3/4	1 1/16-12	1-11 1/2	1.480	37.59	1.420	36.07	1 3/8	1.375	34.93	•	•	•	
2503-14-12	7/8	1 3/16-12	3/4-14	1.300	33.02	1.450	36.83	1 1/4	1.250	31.75	•	•	•	
2503-16-08	1	1 5/16-12	1/2-14	1.280	32.51	1.470	37.34	1 3/8	1.375	34.93	•	•	•	
2503-16-12	1	1 5/16-12	3/4-14	1.290	32.17	1.470	37.34	1 3/8	1.375	34.93	•	•	•	
2503-16-16	1	1 5/16-12	1-11 1/2	1.480	37.59	1.470	37.34	1 3/8	1.375	34.93	•	•	•	•
2503-16-20	1	1 5/16-12	1 1/4-11 1/2	1.670	42.42	1.550	39.37	1 3/4	1.750	44.45	•	•	•	
2503-20-16	1 1/4	1 5/8-12	1-11 1/2	1.640	41.66	1.590	40.39	1 3/4	1.750	44.45	•	•	•	
2503-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	1.670	42.42	1.590	40.39	1 3/4	1.750	44.45	•	•	•	
2503-20-24	1 1/4	1 5/8-12	1 1/2-11 1/2	1.770	44.96	1.660	42.16	2	2.000	50.80	•	•	•	
2503-24-20	1 1/2	1 7/8-12	1 1/2-11 1/2	1.740	44.20	1.780	45.21	1 7/8	1.875	47.63	•	•	•	
2503-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	1.770	44.96	1.780	45.21	2	2.000	50.80	•	•	•	
2503-32-32	2	2 1/2-12	2-11 1/2	2.110	53.59	2.220	56.38	2 5/8	2.625	66.68	•	•	•	
2503-40-40	2 1/2	3/8	2 1/2-8	2.485	63.12	2.200	55.88	3 15/64	3.234	82.15	•	•	•	

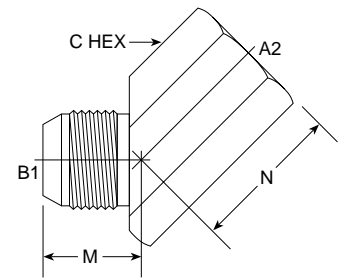
# Tube Fittings & Adapters

## MJ-MJ 45° 2504 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	M1 LGTH	M.M.	M2 LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
2504-04-04	1/4	7/16-20	7/16-20	0.720	18.29	0.720	18.29	1/2	0.500	12.70	•	•	•	
2504-06-04	3/8	9/16-18	7/16-20	0.820	20.83	0.830	21.08	5/8	0.625	15.88	•	•	•	
2504-06-06	3/8	9/16-18	9/16-18	0.830	21.08	0.830	21.08	5/8	0.625	15.88	•	•	•	
2504-08-08	1/2	3/4-16	3/4-16	0.980	24.89	0.980	24.89	13/16	0.812	20.62	•	•	•	
2504-10-10	5/8	7/8-14	7/8-14	1.110	28.19	1.110	28.19	15/16	0.937	23.80	•	•	•	
2504-12-12	3/4	1 1/16-12	1 1/16-12	1.280	32.51	1.280	32.51	1 1/8	1.125	28.58	•	•	•	
2504-16-16	1	1 1/16-12	1 1/16-12	1.510	38.35	1.510	38.35	1 3/8	1.375	34.93	•	•	•	

## MJ-FP 45° 2505 Series

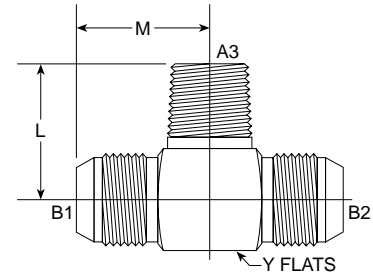


PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	M LGTH	M.M.	N LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
2505-04-04	1/4	7/16-20	1/4-18	0.870	22.10	0.610	15.49	3/4	0.750	19.05	•	•	•	
2505-06-04	3/8	9/16-18	1/4-18	0.740	18.80	1.120	28.45	3/4	0.750	19.05	•	•	•	
2505-06-06	3/8	9/16-18	3/8-18	1.050	26.67	0.790	20.07	7/8	0.875	22.23	•	•	•	
2505-08-06	1/2	3/4-16	3/8-18	0.940	23.88	1.200	30.48	7/8	0.875	22.23	•	•	•	
2505-08-08	1/2	1/2-14	1/2-14	0.960	24.38	1.220	30.99	1 1/8	1.125	28.58	•	•	•	
2505-10-08	5/8	7/8-14	1/2-14	0.960	24.38	1.410	35.81	1 1/8	1.125	28.58	•	•	•	
2505-12-12	3/4	1 1/16-12	3/4-14	1.030	26.16	1.530	38.86	1 3/16	1.188	30.16	•	•	•	
2505-16-16	1	1 5/16-12	1-11 1/2	1.110	28.19	1.700	43.18	1 5/8	1.625	41.28	•	•	•	



# MJ-MJ-MP Tee 2601 Series

SAE# 070425 / MS# 51512

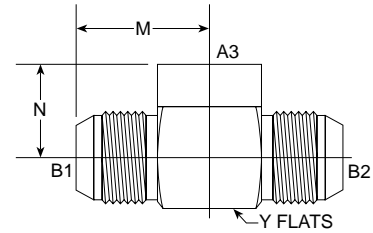


PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	A3 NPTF	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
2601-02-02-02	1/8	5/16-24	5/16-24	1/8-27	0.720	18.30	0.770	19.56	7/16	0.438	11.11			•	
2601-03-03-02	3/16	3/8-24	3/8-24	1/8-27	0.720	18.29	0.830	21.08	7/16	0.438	11.13	•	•	•	
2601-04-04-02	1/4	7/16-20	7/16-20	1/8-27	0.780	19.81	0.890	22.61	1/2	0.500	12.70	•	•	•	
2601-04-04-04	1/4	7/16-20	7/16-20	1/4-18	1.090	27.69	1.050	26.67	5/8	0.625	15.88	•	•	•	
2601-04-04-06	1/4	7/16-20	7/16-20	3/8-18	1.220	30.99	1.020	25.91	5/8	0.625	15.88	•	•	•	
2601-05-05-02	5/16	1/2-20	1/2-20	1/8-27	0.780	19.81	0.950	24.13	9/16	0.562	14.27	•	•	•	
2601-05-05-04	5/16	1/2-20	1/2-20	1/4-18	1.090	27.69	1.050	26.67	5/8	0.625	15.88	•	•	•	
2601-06-06-02	3/8	9/16-18	9/16-18	1/8-27	0.830	21.08	1.060	26.92	5/8	0.625	15.88	•	•	•	
2601-06-06-04	3/8	9/16-18	9/16-18	1/4-18	1.090	27.69	1.060	26.92	5/8	0.625	15.88	•	•	•	
2601-06-06-06	3/8	9/16-18	9/16-18	3/8-18	1.220	30.99	1.150	29.21	13/16	0.812	20.62	•	•	•	
2601-06-06-08	3/8	9/16-18	9/16-18	1/2-14	1.470	37.34	1.220	30.99	15/16	0.937	23.80	•	•	•	
2601-08-04-08	1/2	3/4-16	3/4-16	1/4-18	1.470	37.34	1.090	27.68	15/16	0.937	23.81	•	•	•	
2601-08-08-04	1/2	3/4-16	3/4-16	1/4-18	1.190	30.23	1.250	31.75	13/16	0.812	20.62	•	•	•	
2601-08-08-06	1/2	3/4-16	3/4-16	3/8-18	1.220	30.99	1.250	31.75	13/16	0.812	20.62	•	•	•	
2601-08-08-08	1/2	3/4-16	3/4-16	1/2-14	1.470	37.34	1.330	33.78	15/16	0.937	23.80	•	•	•	
2601-08-08-12	1/2	3/4-16	3/4-16	3/4-14	1.590	40.39	1.420	36.07	1 1/8	1.125	28.58	•	•	•	
2601-10-10-06	5/8	7/8-14	7/8-14	3/8-18	1.290	32.77	1.450	36.83	15/16	0.937	23.80	•	•	•	
2601-10-10-08	5/8	7/8-14	7/8-14	1/2-14	1.470	37.34	1.450	36.83	15/16	0.937	23.80	•	•	•	
2601-10-10-12	5/8	7/8-14	7/8-14	3/4-14	1.590	40.39	1.550	39.37	1 1/8	1.125	28.58	•	•	•	
2601-12-12-08	3/4	1 1/16-12	1 1/16-12	1/2-14	1.590	40.39	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
2601-12-12-12	3/4	1 1/16-12	1 1/16-12	3/4-14	1.590	40.39	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
2601-12-12-16	3/4	1 1/16-12	1 1/16-12	1-11 1/2	1.970	50.04	1.800	45.72	1 3/8	1.375	34.93	•	•	•	
<b>NEW</b> 2601-12-16-20												•	•	•	
2601-14-14-12	7/8	1 3/16-12	1 3/16-12	3/4-14	1.687	42.85	1.800	45.72	1 1/4	1.250	31.75	•	•	•	
2601-16-16-12	1	1 5/16-12	1 5/16-12	3/4-14	1.730	43.94	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
2601-16-16-16	1	1 5/16-12	1 5/16-12	1-11 1/2	1.968	49.99	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
2601-20-20-20	1 1/4	1 5/8-12	1 5/8-12	1 1/4-11 1/2	2.800	71.12	2.060	52.32	1 3/4	1.750	44.45	•	•	•	
2601-24-24-24	1 1/2	1 7/8-12	1 7/8-12	1 1/2-11 1/2	2.640	67.06	2.328	59.13	2	2.000	50.80	•	•	•	
2601-32-32-32	2	2 1/2-12	2 1/2-12	2-11 1/2	3.000	76.20	3.060	77.72	2 5/8	2.625	66.68	•	•	•	

# Tube Fittings & Adapters

## MJ-MJ-FP Tee 2602 Series

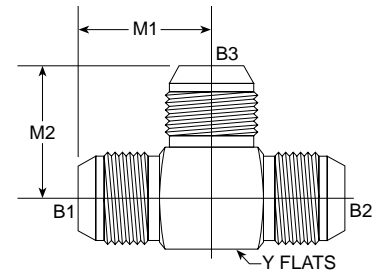
SAE# 070427 / MS# 51513



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	A3 NPTF	M LGTH M.M.	N LGTH M.M.	Y FLATS M.M.	Y FLATS M.M.	Standard Material From Stock						
									S	FG	SS	B			
2602-04-04-02	1/4	7/16-20	7/16-20	1/8-27	1.080	27.43	0.660	16.76	5/8	0.625	15.88	•	•	•	
2602-04-04-04	1/4	7/16-20	7/16-20	1/4-18	1.130	28.70	0.880	22.35	3/4	0.750	19.05	•	•	•	
2602-05-05-02	5/16	1/2-20	1/2-20	1/8-27	1.080	27.43	0.660	16.76	5/8	0.625	15.88	•	•	•	
2602-06-06-04	3/8	9/16-18	9/16-18	1/4-18	1.240	31.50	0.880	22.35	3/4	0.750	19.05	•	•	•	
2602-06-06-06	3/8	9/16-18	9/16-18	3/8-18	1.320	33.53	1.020	25.91	7/8	0.875	22.23	•	•	•	
2602-08-08-04	1/2	3/4-16	3/4-16	1/4-18	1.420	36.07	0.900	22.86	13/16	0.812	20.62	•	•	•	
2602-08-08-06	1/2	3/4-16	3/4-16	3/8-18	1.420	36.07	1.015	25.78	7/8	0.875	22.23	•	•	•	•
2602-08-08-08	1/2	3/4-16	3/4-16	1/2-14	1.520	38.61	1.230	31.24	1 1/8	1.125	28.58	•	•	•	
2602-10-10-04	5/8	7/8-14	7/8-14	1/4-18	1.450	36.83	1.000	25.40	15/16	0.937	23.80	•	•	•	
2602-10-10-08	5/8	7/8-14	7/8-14	1/2-14	1.640	41.66	1.240	31.50	1 1/8	1.125	28.58	•	•	•	
2602-10-10-12	5/8	7/8-14	7/8-14	3/4-14	1.760	44.70	1.360	34.54	1 3/8	1.375	34.93	•	•	•	
2602-12-12-08	3/4	1 1/16-12	1 1/16-12	1/2-14	1.660	42.16	1.240	31.50	1 1/8	1.125	28.58	•	•	•	
2602-12-12-12	3/4	1 1/16-12	1 1/16-12	3/4-14	1.890	48.01	1.359	34.52	1 3/8	1.375	34.93	•	•	•	•
2602-12-12-16	3/4	1 1/16-12	1 1/16-12	1-11 1/2	2.000	50.80	1.620	41.15	1 5/8	1.623	41.28	•	•	•	
2602-14-14-12	7/8	1 3/16-12	1 3/16-12	3/4-14	1.859	47.22	1.421	36.09	1 3/8	1.375	34.93	•	•	•	
2602-16-16-12	1	1 5/16-12	1 5/16-12	3/4-14	2.170	55.12	1.360	34.54	1 3/8	1.375	34.93	•	•	•	
2602-16-16-16	1	1 5/16-12	1 5/16-12	1-11 1/2	2.170	55.12	1.625	41.28	1 5/8	1.625	41.28	•	•	•	•
2602-20-20-20	1 1/4	1 5/8-12	1 5/8-12	1 1/4-11 1/2	2.330	59.18	1.703	43.26	2	2.000	50.80	•	•	•	
2602-24-24-24	1 1/2	1 7/8-12	1 7/8-12	1 1/2-11 1/2	2.890	73.41	2.078	52.78	2 3/8	2.375	60.33	•	•	•	
2602-32-32-32	2	2 1/2-12	2 1/2-12	2-11 1/2	3.300	83.82	2.390	60.71	2 7/8	2.875	73.03	•	•	•	

# MJ-MJ-MJ Tee 2603 Series

SAE# 070401 / MS# 51510

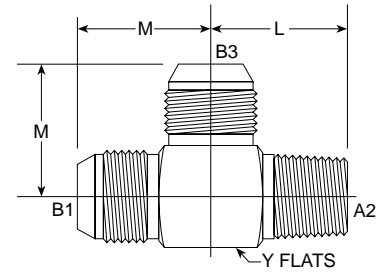


PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	B3 SAE 37	M1		M2		Y		Standard Material From Stock				
					LGTH	M.M.	LGTH	M.M.	FLATS	FLATS	M.M.	S	FG	SS	B
2603-02-02-02	1/8	5/16-24	5/16-24	5/16-24	0.770	19.56	0.770	19.56	7/16	0.438	11.13	•	•	•	•
2603-03-03-03	3/16	3/8-24	3/8-24	3/8-24	0.830	21.08	0.830	21.08	7/16	0.438	11.13	•	•	•	•
2603-04-04-04	1/4	7/16-20	7/16-20	7/16-20	0.890	22.61	0.890	22.61	1/2	0.500	12.70	•	•	•	•
2603-04-04-06	1/4	7/16-20	7/16-20	9/16-18	1.050	26.67	1.060	26.92	5/8	0.625	15.88	•	•	•	•
2603-05-05-04	5/16	1/2-20	1/2-20	7/16-20	0.950	24.13	0.890	22.61	9/16	0.562	14.27	•	•	•	•
2603-05-05-05	5/16	1/2-20	1/2-20	1/2-20	0.950	24.13	0.950	24.13	9/16	0.562	14.27	•	•	•	•
2603-06-06-04	3/8	9/16-18	9/16-18	7/16-20	1.060	26.92	0.980	24.89	9/16	0.562	14.28	•	•	•	•
2603-06-06-06	3/8	9/16-18	9/16-18	9/16-18	1.060	26.92	1.060	26.92	5/8	0.625	15.88	•	•	•	•
2603-06-06-08	3/8	9/16-18	9/16-18	3/4-16	1.140	28.96	1.250	31.75	13/16	0.812	20.62	•	•	•	•
<b>NEW</b> 2603-06-06-10												•	•	•	•
2603-08-06-06	1/2	3/4-16	9/16-18	9/16-18	1.250	31.75	1.140	28.96	13/16	0.812	20.62	•	•	•	•
2603-08-08-06	1/2	3/4-16	3/4-16	9/16-18	1.250	31.75	1.140	28.96	13/16	0.812	20.62	•	•	•	•
2603-08-08-08	1/2	3/4-16	3/4-16	3/4-16	1.250	31.75	1.250	31.75	13/16	0.812	20.62	•	•	•	•
2603-08-08-10	1/2	3/4-16	3/4-16	7/8-14	1.350	34.29	1.450	36.83	15/16	0.937	23.80	•	•	•	•
2603-08-08-12	1/2	3/4-16	3/4-16	1 1/16-12	1.450	36.83	1.660	42.16	1 1/8	1.125	28.58	•	•	•	•
2603-10-08-08	5/8	7/8-14	3/4-16	3/4-16	1.453	36.91	1.312	33.32	15/16	0.937	23.80	•	•	•	•
<b>NEW</b> 2603-10-10-06												•	•	•	•
2603-10-10-08	5/8	7/8-14	7/8-14	3/4-16	1.450	36.83	1.350	34.29	15/16	0.937	23.80	•	•	•	•
2603-10-10-10	5/8	7/8-14	7/8-14	7/8-14	1.450	36.83	1.450	36.83	15/16	0.937	23.80	•	•	•	•
2603-10-10-12	5/8	7/8-14	7/8-14	1 1/16-12	1.550	39.37	1.660	42.16	1 1/8	1.125	28.58	•	•	•	•
2603-12-10-10	3/4	1 1/16-12	7/8-14	7/8-14	1.660	42.16	1.550	39.37	1 1/16	1.062	26.98	•	•	•	•
2603-12-12-06	3/4	1 1/16-12	1 1/16-12	9/16-18	1.660	42.16	1.350	34.29	1 1/8	1.125	28.58	•	•	•	•
2603-12-12-08	3/4	1 1/16-12	1 1/16-12	3/4-16	1.660	42.16	1.430	36.32	1 1/8	1.125	28.58	•	•	•	•
2603-12-12-10	3/4	1 1/16-12	1 1/16-12	7/8-14	1.660	42.16	1.560	39.62	1 1/8	1.125	28.58	•	•	•	•
2603-12-12-12	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1.660	42.16	1.660	42.16	1 1/8	1.125	28.58	•	•	•	•
2603-12-12-16	3/4	1 1/16-12	1 1/16-12	1 5/16-12	1.760	44.70	1.810	45.97	1 3/8	1.375	34.93	•	•	•	•
2603-12-12-20	3/4	1 1/16-12	1 1/16-12	1 5/8-12	1.970	50.04	2.060	52.32	1 3/4	1.750	44.45	•	•	•	•
2603-14-14-14	7/8	1 3/16-12	1 3/16-12	1 3/16-12	1.800	45.72	1.800	45.72	1 1/4	1.250	31.75	•	•	•	•
2603-16-12-12	1	1 5/16-12	1 1/16-12	1 1/16-12	1.810	45.97	1.760	44.70	1 5/16	1.313	33.35	•	•	•	•
2603-16-12-16	1	1 5/16-12	1 1/16-12	1 5/16-12	1.760	44.70	1.810	45.97	1 5/16	1.313	33.35	•	•	•	•
2603-16-16-12	1	1 5/16-12	1 5/16-12	1 1/16-12	1.810	45.97	1.760	44.70	1 3/8	1.375	34.93	•	•	•	•
2603-16-16-16	1	1 5/16-12	1 5/16-12	1 5/16-12	1.810	45.97	1.810	45.97	1 3/8	1.375	34.93	•	•	•	•
<b>NEW</b> 2603-20-20-12												•	•	•	•
2603-20-20-16	1 1/4	1 5/8-12	1 5/8-12	1 5/16-12	2.060	52.32	2.010	51.05	1 3/4	1.750	44.45	•	•	•	•
2603-20-20-20	1 1/4	1 5/8-12	1 5/8-12	1 5/8-12	2.060	52.32	2.060	52.32	1 3/4	1.750	44.45	•	•	•	•
2603-24-24-24	1 1/2	1 7/8-12	1 7/8-12	1 7/8-12	2.330	59.18	2.330	59.18	2	2.000	50.80	•	•	•	•
2603-32-32-32	2	2 1/2-12	2 1/2-12	2 1/2-12	3.060	77.72	3.060	77.72	2 5/8	2.625	66.68	•	•	•	•

# Tube Fittings & Adapters

## MJ-MP-MJ Tee 2605 Series

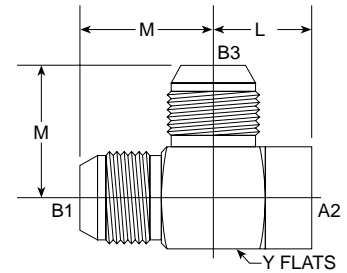
SAE# 070424 / MS# 51511



PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	B3 SAE 37	L LGTH M.M.	M LGTH M.M.	Y FLATS	Y FLATS	Standard Material From Stock						
									S	FG	SS	B			
2605-03-02-03	3/16	3/8-24	1/8-27	3/8-24	0.720	18.29	0.830	21.08	7/16	0.438	11.13	•	•	•	
2605-04-02-04	1/4	7/16-20	1/8-27	7/16-20	0.781	19.84	0.890	22.61	1/2	0.500	12.70	•	•	•	
2605-04-04-04	1/4	7/16-20	1/4-18	7/16-20	1.090	27.69	0.890	22.61	5/8	0.625	15.88	•	•	•	•
2605-05-02-05	5/16	1/2-20	1/8-27	1/2-20	0.810	20.57	0.950	24.13	9/16	0.562	14.27	•		•	
2605-05-04-05	5/16	1/2-20	1/4-18	1/2-20	1.090	27.69	0.950	24.13	9/16	0.562	14.27	•		•	
2605-06-02-06	3/8	9/16-18	1/8-27	9/16-18	0.900	22.86	1.060	26.92	5/8	0.625	15.88	•	•		
<b>NEW</b> 2605-06-04-04													•		
2605-06-04-06	3/8	9/16-18	1/4-18	9/16-18	1.090	27.69	1.060	26.92	5/8	0.625	15.88	•	•	•	
2605-06-06-06	3/8	9/16-18	3/8-18	9/16-18	1.220	30.99	1.060	26.92	13/16	0.812	20.62	•	•	•	
2605-06-08-06	3/8	9/16-18	1/2-14	9/16-18	1.470	37.34	1.220	30.99	15/16	0.937	23.80	•			
2605-08-04-08	1/2	3/4-16	1/4-18	3/4-16	1.220	30.99	1.250	31.75	13/16	0.812	20.62	•	•		
2605-08-06-06	1/2	3/4-16	3/8-18	3/8-18	1.220	30.99	1.250	31.75	13/16	0.812	20.62	•			
2605-08-06-08	1/2	3/4-16	3/8-18	3/4-16	1.218	30.94	1.250	31.75	13/16	0.812	20.62	•	•	•	
2605-08-08-06	1/2	3/4-16	1/2-14	3/8-18	1.220	30.99	1.250	31.75	13/16	0.8125	20.62	•			
2605-08-08-08	1/2	3/4-16	1/2-14	3/4-16	1.470	37.34	1.250	31.75	15/16	0.937	23.80	•	•	•	
2605-08-12-08	1/2	3/4-16	3/4-14	3/4-16	1.590	40.39	1.250	31.75	1 1/8	1.125	28.58	•			
2605-10-08-10	5/8	7/8-14	1/2-14	7/8-14	1.470	37.34	1.450	36.83	15/16	0.937	23.80	•	•	•	
2605-10-12-10	5/8	7/8-14	3/4-14	7/8-14	1.590	40.39	1.540	39.12	1 1/8	1.125	28.58	•			
2605-12-08-12	3/4	1 1/16-12	1/2-14	1 1/16-12	1.590	40.39	1.660	42.16	1 1/4	1.250	31.75	•		•	
2605-12-12-08	3/4	1 1/16-12	3/4-14	3/4-16	1.590	40.39	1.660	42.16	1 1/8	1.125	28.58	•			
2605-12-12-12	3/4	1 1/16-12	3/4-14	1 1/16-12	1.690	42.93	1.800	45.72	1 1/8	1.125	28.58	•	•	•	
2605-14-12-14	7/8	1 3/16-12	3/4-14	1 3/16-12	1.687	42.85	1.734	44.04	1 1/4	1.250	31.75	•			
2605-16-12-16	1	1 5/16-12	3/4-14	1 5/16-12	1.780	45.21	1.810	49.97	1 3/8	1.375	34.93	•			
2605-16-16-16	1	1 5/16-12	1-11 1/2	1 5/16-12	1.970	50.04	1.810	49.97	1 3/8	1.375	34.93	•		•	
2605-20-16-20	1 1/4	1 5/8-12	1-11 1/2	1 5/8-12	2.350	59.69	2.060	52.32	1 3/4	1.750	44.45	•	•	•	
2605-20-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	1 5/8-12	2.380	60.45	2.060	52.32	1 3/4	1.750	44.45	•	•	•	
2605-24-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	1 7/8-12	2.640	67.06	2.330	59.18	2	2.000	50.80	•	•	•	
2605-32-32-32	2	2 1/2-12	2-11 1/2	2 1/2-12	3.000	76.20	3.060	77.72	2 5/8	2.625	66.68	•	•	•	

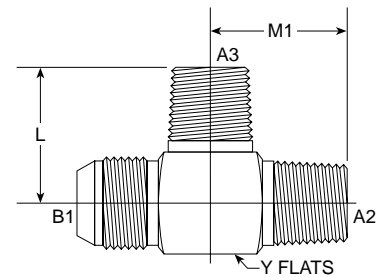
# MJ-FP-MJ Tee 2606 Series

SAE# 070426 / MS# 51514



PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	B3 SAE 37	L LGTH M.M.	M LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
										S	FG	SS	B		
NEW 2606-03-02-03											•				
2606-04-02-04	1/4	7/16-20	1/8-27	7/16-20	0.660	16.76	1.080	27.43	5/8	0.625	15.87	•			•
2606-04-04-04	1/4	7/16-20	1/4-18	7/16-20	0.880	22.35	1.130	28.70	3/4	0.750	19.05	•	•		•
2606-05-02-05	5/16	1/2-20	1/8-27	1/2-20	0.660	16.76	1.080	27.43	5/8	0.625	15.87	•	•		
2606-05-04-05	5/16	1/2-20	1/4-18	1/2-20	0.880	22.35	1.220	30.99	3/4	0.750	19.05	•			
2606-06-04-06	3/8	9/16-18	1/4-18	9/16-18	0.880	22.35	1.230	31.24	3/4	0.750	19.05	•	•		•
2606-06-06-04	3/8	9/16-18	3/8-18	1/4-18	1.020	25.91	1.290	32.77	3/4	0.750	19.05	•			
2606-06-06-06	3/8	9/16-18	3/8-18	9/16-18	1.020	25.91	1.310	33.27	7/8	0.875	22.23	•			
2606-08-06-08	1/2	3/4-16	3/8-18	3/4-16	1.230	31.24	1.420	36.07	7/8	0.875	22.23	•		•	•
2606-08-08-08	1/2	3/4-16	1/2-14	3/4-16	1.230	31.24	1.520	38.61	1 1/8	1.125	28.58	•			
2606-10-08-10	5/8	7/8-14	1/2-14	7/8-14	1.230	31.24	1.640	41.66	1 1/8	1.125	28.58	•			
2606-12-12-12	3/4	1 1/16-12	3/4-14	1 1/16-12	1.360	34.54	1.890	48.01	1 3/8	1.375	34.93	•	•		
2606-14-12-14	7/8	1 3/16-12	3/4-14	1 3/16-12	1.420	36.07	1.860	47.24	1 3/8	1.375	34.93	•			
2606-16-16-16	1	1 5/16-12	1-11 1/2	1 5/16-12	1.630	41.40	2.170	55.12	1 5/8	1.625	41.28	•	•		
2606-20-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	1 5/8-12	1.700	43.18	2.330	59.18	2	2.000	50.80	•	•		
2606-24-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	1 7/8-12	2.080	52.83	2.890	73.41	2 3/8	2.375	60.33	•	•		

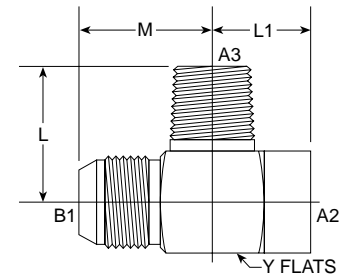
# MJ-MP-MP Tee 2607 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	A3 NPTF	L LGTH M.M.	M1 LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
										S	FG	SS	B		
2607-04-02-02	1/4	7/16-20	1/8-27	1/8-27	0.760	19.30	0.875	22.23	1/2	0.500	12.70	•			
2607-06-04-04	3/8	9/16-18	1/4-18	1/4-18	1.080	27.43	1.060	26.92	5/8	0.625	15.88	•			
2607-06-06-06	3/8	9/16-18	3/8-18	3/8-18	1.220	30.99	1.220	30.99	13/16	0.812	20.62	•			
2607-08-06-06	1/2	3/4-16	3/8-18	3/8-18	1.200	30.48	1.250	31.75	13/16	0.812	20.62	•			
2607-08-08-08	1/2	3/4-16	1/2-14	1/2-14	1.450	36.83	1.320	33.53	15/16	0.937	23.80	•			
2607-10-08-06	5/8	7/8-14	1/2-14	3/8-18	0.775	19.68	0.800	20.32	7/8	0.875	22.22	•		•	
2607-10-08-08	5/8	7/8-14	1/2-14	1/2-14	1.480	37.59	1.450	36.83	5/16	0.937	23.80	•			
2607-12-12-12	3/4	1 1/16-12	3/4-14	3/4-14	1.600	40.64	1.650	41.91	1 1/8	1.125	28.58	•			
2607-16-16-16	1	1 5/16-12	1-11 1/2	1-11 1/2	1.970	50.04	1.820	46.23	1 3/8	1.375	34.93	•			
2607-20-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	1 1/4-11 1/2	2.375	60.33	2.062	52.37	2	2.000	50.80	•	•		

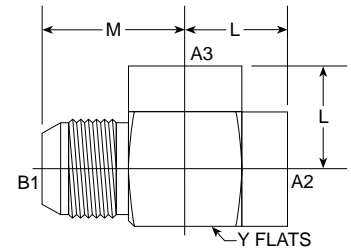
# Tube Fittings & Adapters

## MJ-FP-MP Tee 2608 Series



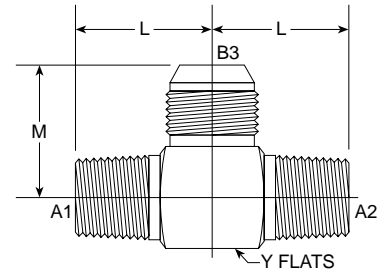
PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	A3 NPTF	L LGTH M.M.	L1 LGTH M.M.	M LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock						
											S	FG	SS	B			
2608-04-02-02	1/4	7/16-20	1/8-27	1/8-27	0.850	21.59	0.650	16.51	1.080	27.43	11/16	0.687	17.45	•			
2608-06-04-04	3/8	9/16-18	1/4-18	1/4-18	1.150	29.21	0.875	22.22	1.140	28.96	3/4	0.750	19.05	•			
NEW 2608-08-02-06																	
2608-08-06-06	1/2	3/4-16	3/8-18	3/8-18	1.310	33.27	1.020	25.91	1.430	36.32	1	1.000	25.40	•		•	
2608-10-08-08	5/8	7/8-14	1/2-14	1/2-14	1.470	37.34	1.230	31.24	1.630	41.40	1 1/8	1.125	28.58	•			
2608-12-12-12	3/4	1 1/16-12	3/4-14	3/4-14	1.730	43.94	1.360	34.54	1.790	45.47	1 3/8	1.375	34.93	•			
NEW 2608-16-16-16															•		

## MJ-FP-FP Tee 2609 Series



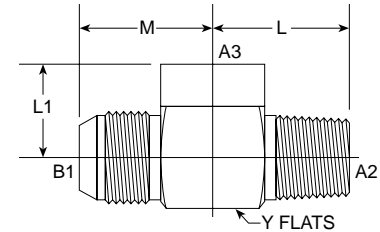
PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	A3 NPTF	L LGTH M.M.	M LGTH M.M.	M LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock						
											S	FG	SS	B			
2609-04-02-02	1/4	7/16-20	1/8-27	1/8-27	0.640	16.26	1.080	27.43	5/8	0.625	15.88	•					
2609-05-04-04	5/16	1/2-20	1/4-18	1/4-18	0.510	12.95	1.135	28.83	3/4	0.750	19.05	•					
2609-06-04-04	3/8	9/16-18	1/4-18	1/4-18	0.870	22.10	1.100	27.94	3/4	0.750	19.05	•		•			
2609-08-06-06	1/2	3/4-16	3/8-18	3/8-18	1.010	25.65	1.420	36.07	3/4	0.750	19.05	•					
NEW 2609-08-08-08																	
2609-10-08-08	5/8	7/8-14	1/2-14	1/2-14	1.230	31.24	1.630	41.40	1 1/8	1.125	28.58	•					
2609-12-12-12	3/4	1 1/16-12	3/4-14	3/4-14	1.370	34.80	1.780	45.21	1 3/8	1.375	34.93	•					
2609-16-16-16	1	1 5/16-12	1-11 1/2	1-11 1/2	1.590	40.39	2.200	55.88	1 5/8	1.625	41.30	•		•			
NEW 2609-20-20-20														•			

# MP-MP-MJ Tee 2610 Series



PART NO. SIZE	TUBE O.D.	A1 NPTF	A2 NPTF	B3 SAE 37	L		M		Y		Standard Material From Stock				
					LGTH	M.M.	LGTH	M.M.	FLATS	FLATS	M.M.	S	FG	SS	B
2610-04-04-04	1/4	1/4-18	1/4-18	7/16-20	1.090	27.69	0.940	23.88	5/8	0.625	15.88	•			
2610-04-04-06	1/4	1/4-18	1/4-18	9/16-18	1.100	27.94	1.040	26.42	5/8	0.625	15.88	•		•	
2610-06-06-06	3/8	3/8-18	3/8-18	9/16-18	1.210	30.73	1.150	29.21	13/16	0.812	20.62	•			
2610-06-06-08	3/8	3/8-18	3/8-18	3/4-16	1.210	30.73	1.250	31.75	13/16	0.812	20.62	•			
2610-08-08-08	1/2	3/4-16	1/2-14	1/2-14	1.470	37.34	1.320	33.53	15/16	0.937	23.82	•	•		
2610-08-08-10	1/2	1/2-14	1/2-14	7/8-14	1.470	37.34	1.450	36.83	15/16	0.937	23.80	•			
2610-12-12-12	3/4	3/4-14	3/4-14	1 1/16-12	1.590	40.39	1.650	41.91	1 1/8	1.125	28.58	•	•		
2610-12-12-16	3/4	3/4-14	3/4-14	1-11 1/2	1.720	43.69	1.810	45.97	1 3/8	1.375	34.93	•			
2610-16-16-16	1	1 5/16-12	1-11 1/2	1-11 1/2	1.980	50.29	1.810	45.97	1 3/8	1.375	34.93	•			

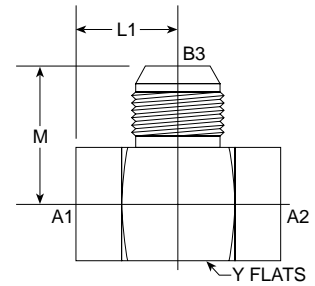
# MJ-MP-FP Tee 2611 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	A3 NPTF	L		L1		M		Y		Standard Material From Stock				
					LGTH	M.M.	LGTH	M.M.	LGTH	M.M.	FLATS	FLATS	M.M.	S	FG	SS	B
2611-04-02-02	1/4	7/16-20	1/8-27	1/8-27	0.830	22.35	0.660	16.76	0.940	23.88	5/8	0.625	15.88	•			
2611-04-04-02	1/4	7/16-20	1/4-18	1/8-27	1.030	26.16	0.660	16.76	0.940	23.88	5/8	0.625	15.88	•			
2611-04-04-04	1/4	7/16-20	1/4-18	1/4-18	1.090	27.68	0.880	22.35	1.000	25.40	3/4	0.750	19.05	•			
2611-04-08-06	1/4	7/16-20	1/2-14	3/8-18	1.460	37.08	1.010	25.65	1.090	27.69	7/8	0.875	22.23	•			
2611-06-04-04	3/8	9/16-18	1/4-18	1/4-18	1.160	29.46	0.880	22.35	1.120	28.45	3/4	0.750	19.05	•			
2611-06-06-06	3/8	9/16-18	3/8-18	3/8-18	1.260	32.00	1.010	25.65	1.190	30.23	7/8	0.875	22.23	•			
2611-08-06-06	1/2	3/4-16	3/8-18	3/8-18	1.240	31.50	1.020	25.91	1.270	32.26	7/8	0.875	22.23	•			
2611-08-08-08	1/2	3/4-16	1/2-14	1/2-14	1.460	37.08	1.230	31.24	1.400	35.56	1 1/8	1.125	28.58	•	•		
2611-10-08-08	5/8	7/8-14	1/2-14	1/2-14	1.500	38.10	1.230	31.24	1.480	37.59	1 1/16	1.062	26.98	•			
2611-12-12-12	3/4	1 1/16-12	3/4-14	3/4-14	1.600	40.64	1.360	34.54	1.890	48.01	1 3/8	1.375	34.93	•		•	
2611-16-16-16	1	1 5/16-12	1-11 1/2	1-11 1/2	2.090	53.09	1.630	41.40	2.080	52.83	1 5/8	1.625	41.28	•		•	
2611-20-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	1 1/4-11 1/2	2.480	62.70	1.700	43.25	2.475	62.70	2	2.000	50.80	•	•	•	

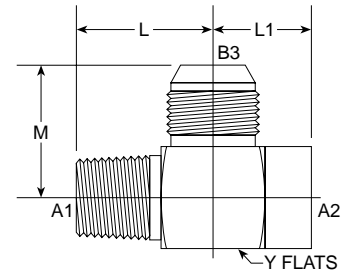
# Tube Fittings & Adapters

## FP-FP-MJ Tee 2612 Series



PART NO. SIZE	TUBE O.D.	A1 NPTF	A2 NPTF	B3 SAE 37	L1 LGTH	M M.M.	M LGTH	Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
											S	FG	SS	B	
2612-02-02-04	1/4	1/8-27	1/8-27	7/16-20	0.660	16.76	1.080	27.43	5/8	0.625	15.27	•			
2612-04-04-06	3/8	1/4-18	1/4-18	3/8-18	0.880	22.35	1.230	31.24	3/4	0.750	19.05	•			
2612-06-06-08	3/8	3/8-18	3/8-18	3/4-16	1.020	25.91	1.420	36.07	7/8	0.875	22.23	•			
2612-08-08-08	1/2	1/2-14	1/2-14	3/4-16	1.300	33.02	1.410	35.81	7/8	0.875	22.23	•			
2612-08-08-10	1/2	1/2-14	1/2-14	7/8-14	1.650	41.91	1.240	31.50	1 1/8	1.125	28.58	•			
2612-12-12-12	3/4	3/4-14	3/4-14	1 1/16-12	1.890	48.01	1.360	34.54	1 3/8	1.375	34.93	•		•	
NEW 2612-16-16-16												•	•		

## MP-FP-MJ Tee 2613 Series

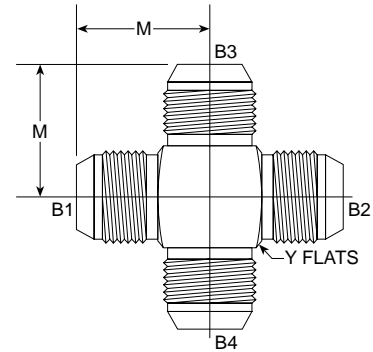


PART NO. SIZE	TUBE O.D.	B1 NPTF	A2 NPTF	A3 SAE 37	L LGTH	L1 LGTH	M M.M.	M LGTH	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
												S	FG	SS	B		
2613-02-02-04	1/8	1/8-27	1/8-27	7/16-20	0.780	19.81	0.650	16.51	0.960	24.38	5/8	0.625	15.88	•			•
2613-04-04-06	1/4	1/4-18	1/4-18	9/16-18	1.100	27.94	0.870	22.10	1.120	28.45	3/4	0.750	19.05	•		•	
2613-06-06-06	3/8	3/8-18	3/8-18	9/16-18	1.230	31.24	1.020	25.91	1.190	30.23	7/8	0.875	22.23	•			
2613-06-06-08	3/8	3/8-18	3/8-18	3/4-16	1.230	31.24	1.020	25.91	1.290	32.77	7/8	0.875	22.23	•		•	
2613-08-08-10	1/2	1/2-14	1/2-14	7/8-14	1.470	37.34	1.230	31.24	1.570	39.88	1 1/8	1.125	28.58	•			
2613-12-12-12	3/4	3/4-14	3/4-14	1 1/16-12	1.590	40.38	1.360	34.54	1.790	45.47	1 3/8	1.375	34.93	•			
2613-16-16-16	1	1-11 1/2	1-11 1/2	1 5/8-12	1.620	41.15	1.250	31.76	2.170	55.12	1 5/8	1.625	41.30	•	•	•	



# MJ-MJ-MJ-MJ Cross 2650 Series

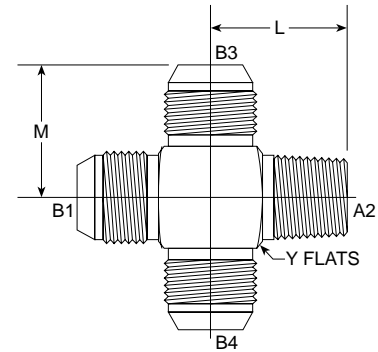
SAE# 070501 / MS# 51517



NEW

PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	B3 SAE 37	B4 SAE 37	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
2650-04-04-04-04	1/4	7/16-20	7/16-20	7/16-20	7/16-20	0.890	22.61	1/2	0.500	12.70	•	•	•	
2650-05-05-05-05	5/16	1/2-20	1/2-20	1/2-20	1/2-20	0.950	24.13	9/16	0.562	14.27	•	•	•	
2650-06-06-06-06	3/8	9/16-18	9/16-18	9/16-18	9/16-18	1.060	26.92	5/8	0.625	15.88	•	•	•	
2650-06-08-06-08	1/2	3/4-16	3/4-16	3/4-16	3/4-16	1.250	31.75	13/16	0.812	20.62	•	•	•	
2650-08-08-08-08	5/8	7/8-14	7/8-14	7/8-14	7/8-14	1.450	36.83	15/16	0.937	23.80	•	•	•	
2650-10-10-10-10	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1 1/16-12	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
2650-12-12-12-12	7/8	1 3/16-12	1 3/16-12	1 3/16-12	1 3/16-12	1.800	45.72	1 1/4	1.250	31.75	•	•	•	
2650-14-14-14-14	1	1 5/16-12	1 5/16-12	1 5/16-12	1 5/16-12	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
2650-16-16-16-16	1 1/4	1 5/8-12	1 5/8-12	1 5/8-12	1 5/8-12	2.060	52.32	1 3/4	1.750	44.45	•	•	•	
2650-20-20-20-20	1 1/2	1 7/8-12	1 7/8-12	1 7/8-12	1 7/8-12	2.330	59.18	2	2.000	50.80	•	•	•	
2650-24-24-24-24	2	2 1/2-12	2 1/2-12	2 1/2-12	2 1/2-12	3.060	77.72	2 5/8	2.625	66.68	•	•	•	

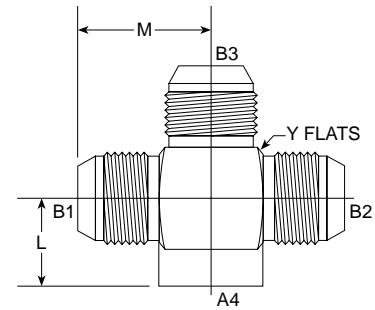
# MJ-MP-MJ-MJ Cross 2651 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	B3 SAE 37	B4 SAE 37	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
													S	FG	SS	B
2651-04-04-04-04	1/4	7/16-20	1/4-18	7/16-20	7/16-20	1.090	27.69	1.050	26.67	5/8	0.625	15.88	•			
2651-06-06-04-06	3/8	7/16-20	1/4-18	7/16-20	7/16-20	1.090	27.69	1.060	26.92	5/8	0.625	15.88	•			
2651-06-04-06-06	3/8	9/16-18	1/4-18	9/16-18	9/16-18	1.060	26.92	1.060	26.92	5/8	0.625	15.88	•			
2651-06-06-06-06	3/8	9/16-18	3/8-18	9/16-18	9/16-18	1.220	30.99	1.140	28.96	13/16	0.812	20.62	•			
2651-08-08-08-08	1/2	3/4-16	1/2-14	3/4-16	3/4-16	1.470	37.34	1.330	33.78	15/16	0.937	23.80	•			
2651-16-16-16-16	1	1 5/8-12	1-11 1/2	1 5/8-12	1 5/8-12	1.970	50.04	1.810	45.97	1 3/8	1.375	34.93	•			
2651-12-12-12-12	3/4	1 1/16-12	3/4-14	1 1/16-12	1 1/16-12	1.660	42.16	1.660	42.16	1 1/8	1.125	28.58	•			

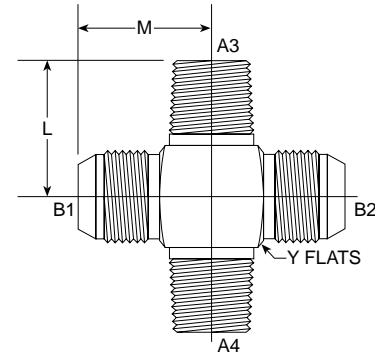
# Tube Fittings & Adapters

## MJ-MJ-MJ-FP Cross 2652 Series



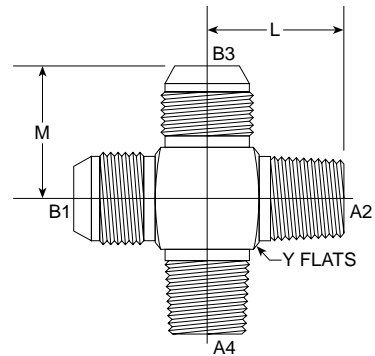
PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	B3 SAE 37	A4 NPTF	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
													S	FG	SS	B	
2652-10-10-10-08	5/8	7/8-14	7/8-14	7/8-14	1/2-14	1.230	31.24	1.640	41.66	1 1/4	1.125	28.58	•				

## MJ-MJ-MP-MP Cross 2653 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	A3 NPTF	A4 NPTF	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
													S	FG	SS	B	
2653-04-04-02-02	1/4	7/16-20	7/16-20	1/8-27	1/8-27	0.780	19.81	0.980	24.89	1/2	0.500	12.70	•				
2653-16-16-16-16	1	15/16-12	15/16-12	1-11 1/2	1-11 1/2	1.970	50.04	1.810	45.97	1 3/8	1.375	34.93	•				

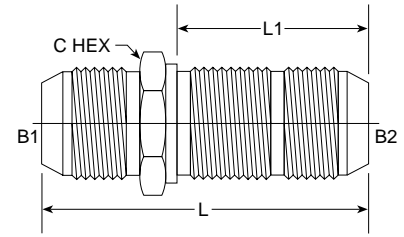
## MJ-MP-MJ-MP Cross 2654 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	A2 NPTF	B3 SAE 37	A4 NPTF	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
													S	FG	SS	B	
2654-08-06-08-06	1/2	3/4-16	3/8-18	3/4-16	3/8-18	1.220	30.99	1.250	31.75	13/16	0.812	20.62	•				

# MJ-MJ Bulkhead Straight 2700 Series

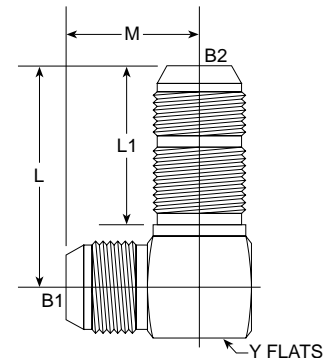
SAE# 070601 / MS# 51520



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH M.M.	L1 LGTH M.M.	C HEX	C HEX	M.M.	PLATE MAX	Standard Material From Stock					
										S	FG	SS	B		
2700-02-02	1/8	5/16-24	5/16-24	1.870	47.50	1.110	28.19	9/16	0.562	14.27	27/64	•		•	
2700-03-03	3/16	3/8-24	3/8-24	1.900	48.26	1.110	28.19	5/8	0.625	15.88	23/64	•		•	
2700-04-04	1/4	7/16-20	7/16-20	2.070	52.58	1.200	30.48	11/16	0.687	17.45	27/64	•		•	•
2700-05-05	5/16	1/2-20	1/2-20	2.070	52.58	1.200	30.48	3/4	0.750	19.05	27/64	•		•	
<b>NEW</b> 2700-06-04												•			
2700-06-06	3/8	9/16-18	9/16-18	2.180	55.37	1.280	32.51	13/16	0.812	20.62	27/64	•		•	
2700-08-08	1/2	3/4-16	3/4-16	2.440	61.98	1.440	36.58	1	1.000	25.40	31/64	•		•	
2700-10-10	5/8	7/8-14	7/8-14	2.740	69.60	1.580	40.13	1 1/8	1.125	28.58	29/64	•		•	
2700-12-12	3/4	1 1/16-12	1 1/16-12	3.090	78.49	1.750	44.45	1 3/8	1.375	34.93	33/64	•		•	
2700-14-14	7/8	1 3/16-12	1 3/16-12	3.125	79.38	1.750	44.45	1 1/2	1.500	38.10	27/64	•			
<b>NEW</b> 2700-16-12												•			
2700-16-16	1	1 5/16-12	1 5/16-12	3.140	79.76	1.750	44.45	1 5/8	1.625	41.28	27/64	•		•	
2700-20-20	1 1/4	1 5/8-12	1 5/8-12	3.310	84.07	1.800	45.72	1 7/8	1.875	47.63	27/64	•		•	
2700-24-24	1 1/2	1 7/8-12	1 7/8-12	3.520	89.41	1.810	45.97	2 1/8	2.125	53.98	21/64	•		•	
2700-32-32	2	2 1/2-12	2 1/2-12	4.200	106.68	2.090	53.09	2 3/4	2.750	69.85	6/16	•		•	

# MJ-MJ Bulkhead 90° 2701 Series

SAE# 070701 / MS# 51507

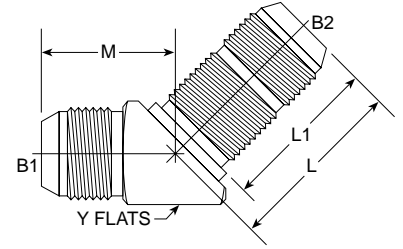


PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH M.M.	L1 LGTH M.M.	M LGTH M.M.	Y FLATS	Y FLATS	M.M.	PLATE MAX	Standard Material From Stock					
											S	FG	SS	B		
2701-03-03	3/16	3/8-24	3/8-24	1.500	38.10	0.920	23.37	0.940	23.88	7/16	0.438	11.13	•	•	•	
2701-04-04	1/4	7/16-20	7/16-20	1.590	40.39	1.020	25.90	0.970	24.64	1/2	0.500	12.70	5/16	•	•	•
2701-05-05	5/16	1/2-20	1/2-20	1.720	43.69	1.020	25.90	1.060	26.92	9/16	0.562	14.27	17/64	•	•	•
2701-06-06	3/8	9/16-18	9/16-18	1.810	45.97	1.184	30.07	1.090	27.69	5/8	0.625	15.88	19/64	•	•	•
2701-08-08	1/2	3/4-16	3/4-16	2.110	53.59	1.250	31.75	1.360	34.54	13/16	0.812	20.62	5/16	•	•	•
2701-10-10	5/8	7/8-14	7/8-14	2.390	60.71	1.390	35.31	1.560	39.62	15/16	0.937	23.80	3/8	•	•	•
2701-12-12	3/4	1 1/16-12	1 1/16-12	2.760	70.10	1.560	39.62	1.780	45.21	1 1/8	1.125	28.58	25/64	•	•	•
2701-12-16	3/4	1 1/16-12	1 5/16-12	2.750	69.85	1.560	39.62	1.910	48.51	1 3/8	1.375	34.93		•		
<b>NEW</b> 2701-14-14														•		
2701-16-12	1	1 5/16-12	1 1/16-12	2.790	70.87	1.560	39.62	1.800	45.72	1 3/8	1.375	34.93	25/64	•		•
2701-16-16	1	1 5/16-12	1 5/16-12	2.790	70.87	1.560	39.62	1.940	49.28	1 3/8	1.375	34.93	21/64	•	•	•
2701-20-20	1 1/4	1 5/8-12	1 5/8-12	3.120	79.25	1.610	40.89	2.170	55.12	1 3/4	1.750	44.45	1/4	•	•	•
2701-24-24	1 1/2	1 7/8-12	1 7/8-12	3.430	87.12	1.620	41.15	2.340	59.44	2	2.000	50.80	19/64	•	•	•

# Tube Fittings & Adapters

## MJ-MJ Bulkhead 45° 2702 Series

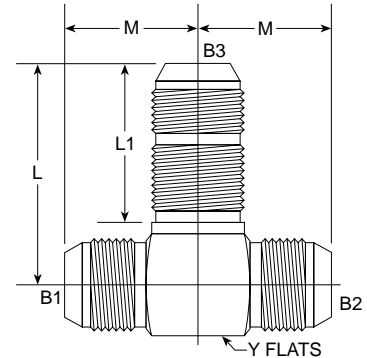
SAE# 070801 / MS# 51509



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH M.M.	L1 LGTH M.M.	M LGTH M.M.	Y FLATS	Y FLATS	PLATE MAX	Standard Material From Stock							
										S	FG	SS	B				
NEW 2702-03-03	1/4	7/16-20	7/16-20	1.530	38.86	1.020	25.90	0.720	18.29	1/2	0.500	12.70	5/16	•	•	•	•
2702-04-04	5/16	1/2-20	1/2-20	1.660	42.16	1.020	25.90	0.770	19.56	9/16	0.562	14.27	17/64	•	•	•	•
2702-06-06	3/8	9/16-18	9/16-18	1.670	42.42	1.184	30.07	0.830	21.08	5/8	0.625	15.88	19/64	•	•	•	•
2702-08-08	1/2	3/4-16	3/4-16	1.940	49.28	1.250	31.75	0.980	24.89	13/16	0.812	20.62	5/16	•	•	•	•
2702-10-10	5/8	7/8-14	7/8-14	2.170	55.12	1.390	35.31	1.110	28.19	15/16	0.937	23.80	3/8	•	•	•	•
2702-12-12	3/4	1 1/16-12	1 1/16-12	2.440	61.98	1.560	39.62	1.280	32.51	1 1/8	1.125	28.58	25/64	•	•	•	•
2702-14-14	7/8	1 3/16-12	1 3/16-12	2.500	63.50	1.560	39.62	1.450	36.83	1 3/8	1.375	34.93	3/8	•	•	•	•
2702-16-16	1	1 5/16-12	1 5/16-12	2.560	65.02	1.560	39.62	1.470	37.34	1 3/8	1.375	34.93	21/64	•	•	•	•
2702-20-20	1 1/4	1 5/8-12	1 5/8-12	2.650	67.31	1.610	40.89	1.590	40.39	1 3/4	1.750	44.45	1/4	•	•	•	•
2702-24-24	1 1/2	1 7/8-12	1 7/8-12	2.670	67.82	1.620	41.15	1.780	45.21	2	2.000	50.80	19/64	•	•	•	•
NEW 2702-32-32														•	•	•	•

## MJ-MJ-MJ Bulkhead Branch Tee 2703 Series

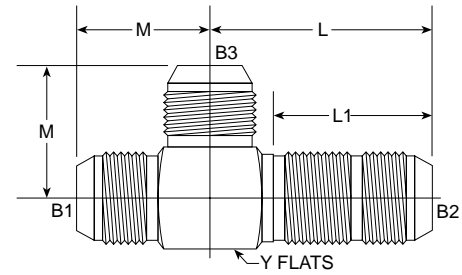
SAE# 070959 / MS# 51515



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	B3 SAE 37	L LGTH M.M.	L1 LGTH M.M.	M LGTH M.M.	Y FLATS	Y FLATS	PLATE MAX	Standard Material From Stock							
											S	FG	SS	B				
2703-03-03-03	3/16	3/8-24	3/8-24	3/8-24	1.500	38.10	0.920	23.37	0.940	23.88	7/16	0.438	11.13	•	•	•	•	
2703-04-04-04	1/4	7/16-20	7/16-20	7/16-20	1.590	40.39	1.020	25.90	0.970	24.64	1/2	0.500	12.70	•	•	•	•	
2703-04-04-06	1/4 3/8	7/16-20	7/16-20	9/16-20	1.810	45.97	1.184	30.07	1.080	27.43	5/8	0.625	15.88	19/64	•	•	•	•
2703-05-05-05	5/16	1/2-20	1/2-20	1/2-20	1.720	43.69	1.020	25.90	1.060	26.92	9/16	0.562	14.27	•	•	•	•	
2703-06-06-06	3/8	9/16-18	9/16-18	9/16-18	1.810	45.97	1.184	30.07	1.090	27.69	5/8	0.625	15.88	19/64	•	•	•	•
2703-08-08-08	1/2	3/4-16	3/4-16	3/4-16	2.110	53.59	1.250	31.75	1.360	34.54	13/16	0.812	20.62	5/16	•	•	•	•
2703-10-10-10	5/8	7/8-14	7/8-14	7/8-14	2.390	60.71	1.390	35.31	1.560	39.62	15/16	0.937	23.80	3/8	•	•	•	•
2703-12-12-12	3/4	1 1/16-12	1 1/16-12	1 1/16-12	2.670	67.82	1.560	39.62	1.780	45.21	1 1/8	1.125	28.58	25/64	•	•	•	•
2703-12-12-16	3/4 1	1 1/16-12	1 1/16-12	1 5/8-12	2.800	71.12	1.560	39.62	1.890	48.01	1 3/8	1.375	34.93	•	•	•	•	
2703-14-14-14	7/8	1 3/16-12	1 3/16-12	1 3/16-12	2.800	71.12	1.560	39.62	1.920	48.77	1 1/4	1.250	31.75	3/8	•	•	•	•
2703-16-16-16	1	1 5/16-12	1 5/16-12	1 5/16-12	2.800	71.02	1.560	39.62	1.940	49.28	1 3/8	1.375	34.93	21/64	•	•	•	•
2703-20-20-20	1 1/4	1 5/8-12	1 5/8-12	1 5/8-12	2.120	53.85	1.610	46.64	2.170	55.12	1 3/4	1.750	44.45	1/4	•	•	•	•
NEW 2703-24-24-24														•	•	•	•	

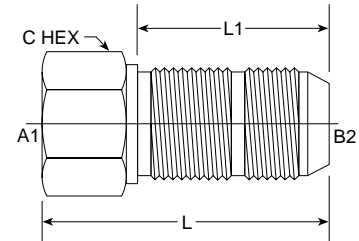
# MJ-MJ-MJ Bulkhead Run Tee 2704 Series

SAE# 070958 / MS# 51516



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	B3 SAE 37	L LGTH M.M.	L1 LGTH M.M.	M LGTH M.M.	Y FLATS	Y FLATS	PLATE M.M. MAX	Standard Material From Stock							
											S	FG	SS	B				
2704-03-03-03	3/16	3/8-24	3/8-24	3/8-24	1.500	38.10	0.920	23.37	0.940	23.88	7/16	0.438	11.13	•	•	•	•	
2704-04-04-04	1/4	7/16-20	7/16-20	7/16-20	1.590	40.39	1.020	25.91	0.970	24.64	1/2	0.500	12.70	5/16	•	•	•	•
2704-05-05-05	5/16	1/2-20	1/2-20	1/2-20	1.720	43.68	1.020	25.90	1.060	26.92	17/64	0.266	6.75	•	•	•	•	
2704-06-06-06	3/8	9/16-18	9/16-18	9/16-18	1.810	45.97	1.184	30.07	1.090	27.69	5/8	0.625	15.88	19/64	•	•	•	•
2704-08-08-08	1/2	3/4-16	3/4-16	3/4-16	2.110	53.59	1.250	31.75	1.360	34.54	13/16	0.812	20.62	5/16	•	•	•	•
2704-10-10-10	5/8	7/8-14	7/8-14	7/8-14	2.390	60.71	1.390	35.31	1.560	39.62	15/16	0.937	23.80	3/8	•	•	•	•
2704-12-12-12	3/4	1 1/16-12	1 1/16-12	1 1/16-12	2.670	67.82	1.560	39.62	1.780	45.21	1 1/8	1.125	28.58	25/64	•	•	•	•
2704-16-16-16	1	1 5/16-12	1 5/16-12	1 5/16-12	2.810	71.37	1.560	39.62	1.940	49.28	1 3/8	1.375	34.93	21/64	•	•	•	•
2704-20-20-20	1 1/4	1 5/8-12	1 5/8-12	1 5/8-12	3.120	79.25	1.610	40.89	2.170	55.12	1 5/8	1.625	41.28	1/4	•	•	•	•
2704-24-24-24	1 1/2	1 7/8-12	1 7/8-12	1 7/8-12	3.420	86.87	1.620	41.15	2.340	59.44	1 7/8	1.875	47.62	19/64	•	•	•	•

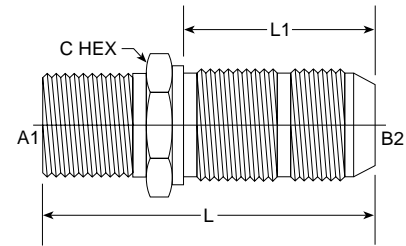
# FP-MJ Bulkhead Straight 2705 Series



PART NO. SIZE	TUBE O.D.	A1 NPTF	B2 SAE 37	L LGTH M.M.	L1 LGTH M.M.	C HEX	C HEX	M.M.	PLATE M.M. MAX	Standard Material From Stock						
										S	FG	SS	B			
2705-02-04	1/4	1/8-27	7/16-20	2.080	52.83	1.200	30.48	11/16	0.687	17.45	27/64	•	•	•	•	
2705-02-05	5/16	1/8-27	1/2-20	1.785	45.34	1.200	30.48	3/4	0.750	19.05	27/64	•	•	•	•	
2705-04-04	1/4	1/4-18	7/16-20	2.041	51.84	1.200	30.48	3/4	0.750	19.05	27/64	•	•	•	•	
2705-04-06	3/8	1/4-18	9/16-18	2.124	53.95	1.280	32.51	11/16	0.687	17.45	27/64	•	•	•	•	
2705-06-06	3/8	3/8-18	9/16-18	2.190	55.63	1.280	32.51	7/8	0.875	22.23	27/64	•	•	•	•	
2705-06-08	1/2	3/8-18	3/4-16	2.480	62.99	1.440	36.58	7/8	0.875	22.23	31/64	•	•	•	•	
NEW 2705-08-06	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2705-08-08	1/2	1/2-14	3/4-16	2.530	64.26	1.440	36.58	1 1/8	1.125	28.58	31/64	•	•	•	•	•
2705-08-10	5/8	1/2-14	7/8-14	2.840	72.14	1.580	40.13	1	1.000	25.40	29/64	•	•	•	•	•
2705-12-12	3/4	3/4-14	1 1/16-12	3.050	77.47	1.750	44.45	1 3/8	1.375	34.93	33/64	•	•	•	•	•
2705-12-14	7/8	1 1/16-12	1 3/16-12	2.890	73.41	1.750	44.45	1 1/2	1.500	38.10	27/64	•	•	•	•	•
2705-16-16	1	1-11 1/2	1 5/16-12	3.250	82.55	1.750	44.45	1 1/2	1.500	38.10	27/64	•	•	•	•	•
2705-20-20	1 1/4	1 1/4-11 1/2	1 5/8-12	3.218	81.74	1.800	45.72	2	2.000	50.80	27/64	•	•	•	•	•
2705-24-24	1 1/2	1 1/2-11 1/2	1 7/8-12	3.320	84.33	1.810	45.97	2 3/8	2.375	60.32	21/64	•	•	•	•	•

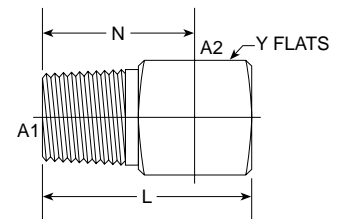
# Tube Fittings & Adapters

## MP-MJ Bulkhead Straight 2706 Series



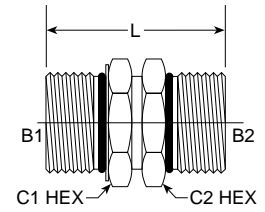
PART NO. SIZE	TUBE O.D.	A1 NPTF	B2 SAE 37	L LGTH M.M.	L1 LGTH M.M.	C HEX	C HEX	M.M.	PLATE MAX	Standard Material From Stock					
										S	FG	SS	B		
2706-02-04	1/4	1/8-27	7/16-20	1.840	46.74	1.200	30.48	11/16	0.687	17.45	27/64	•		•	
2706-04-04	1/4	1/4-18	7/16-20	2.040	51.82	1.200	30.48	11/16	0.687	17.45	27/64	•		•	
2706-04-06	3/8	1/4-18	9/16-18	2.190	55.63	1.280	32.51	13/16	0.812	20.62	27/64	•		•	
2706-06-06	3/8	3/8-18	9/16-18	2.190	55.63	1.280	32.51	13/16	0.812	20.62	27/64	•		•	
2706-06-08	1/2	3/8-18	3/4-16	2.350	59.69	1.440	36.58	1	1.000	25.40	31/64	•		•	
2706-08-08	1/2	1/2-14	3/4-19	2.570	65.28	1.440	36.58	1	1.000	12.70	31/64	•		•	
2706-08-10	5/8	1/2-14	7/8-14	2.720	69.09	1.580	40.13	1 1/8	1.125	28.58	29/64	•		•	
2706-08-12	3/4	1/2-14	1 1/16-12	2.920	74.17	1.750	44.45	1 3/8	1.375	34.93	???	•		•	
2706-12-12	3/4	3/4-14	1 1/16-12	2.920	74.17	1.750	44.45	1 3/8	1.375	34.93	33/64	•		•	
NEW 2706-12-16															
2706-16-16	1	1-11 1/2	1 5/16-12	3.100	78.74	1.750	44.45	1 5/8	1.625	41.28	27/64	•		•	
2706-20-20	1 1/4	1 1/4-11 1/2	1 5/8-12	3.230	82.04	1.800	45.72	1 7/8	1.875	47.63	27/64	•		•	
2706-24-24	1 1/2	1 1/2-11 1/2	1 7/8-12	3.450	87.63	1.810	45.97	2 1/8	2.125	53.97	21/64	•			
2706-32-32	2	2-11 1/2	2-11 1/2	3.890	98.81	2.090	53.09	2 3/4	2.750	69.85	9/16	•			

## MP-FP Low Profile 90° 3051 Series



PART NO. SIZE	TUBE O.D.	A1 NPTF	A2 NPTF	L LGTH M.M.	N LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
									S	FG	SS	B		
3051-02-02	1/8	1/8-27	1/8-27	1.020	25.91	0.750	25.91	1/2	0.500	12.70	•		•	
3051-04-04	1/4	1/4-18	1/4-18	2.007	50.98	1.570	39.88	7/8	0.875	22.23	•		•	
3051-06-06	3/8	3/8-18	3/8-18	2.007	50.98	1.570	39.88	7/8	0.875	22.23	•			
3051-08-08	1/2	1/2-14	1/2-14	2.562	65.07	2.000	50.80	1 1/8	1.125	28.58	•			
3051-12-12	3/4	1 1/16-12	3/4-14	2.937	74.60	2.250	57.15	1 3/8	1.375	34.93	•			

# MAORB-ORB Straight 3474-NWO Series

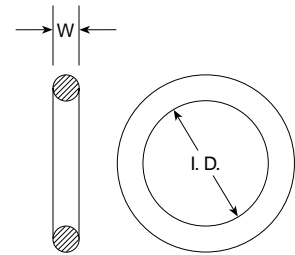


PART NO. SIZE	TUBE O.D.	B1 AORB	B2 ORB	L LGTH M.M.	C1 HEX M.M.	C1 HEX M.M.	C2 HEX M.M.	C2 HEX M.M.	C2 HEX M.M.	C2 HEX M.M.	Standard Material From Stock				
											S	FG	SS	B	
3474-04-04-NWO	1/4	7/16-20	7/16-20	1.360	34.54	9/16	0.562	14.27	9/16	0.562	14.27	•		•	
3474-06-06-NWO	3/8	9/16-18	9/16-18	1.500	38.10	11/16	0.687	17.45	11/16	0.687	17.45	•		•	
3474-08-08-NWO	1/2	3/4-16	3/4-16	1.560	39.62	7/8	0.875	22.23	7/8	0.875	22.23	•		•	
3474-10-10-NWO	5/8	7/8-14	7/8-14	1.790	45.47	1	1.000	25.40	1	1.000	25.40	•		•	
3474-12-08-NWO	3/4	1 1/16-12	3/4-16	2.200	55.88	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
3474-12-12-NWO	3/4	1 1/16-12	1 1/16-12	2.320	58.93	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
3474-16-12-NWO	1 3/4	1 5/16-12	1 1/16-12	2.345	59.56	1 1/2	1.500	38.10	1 1/4	1.250	31.75	•		•	
3474-16-16-NWO	1	1 5/16-12	1 5/16-12	2.130	54.10	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•		•	
3474-20-20-NWO	1 1/4	1 5/8-12	1 5/8-12	2.130	54.10	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•		•	
3474-24-24-NWO	1 1/2	1 7/8-12	1 7/8-12	2.130	54.10	2 1/8	2.125	53.98	2 1/8	2.125	53.98	•		•	
3474-32-32-NWO	2	2 1/2-12	2 1/2-12	2.130	54.10	2 3/4	2.750	69.85	2 3/4	2.750	69.85	•		•	

PART NO. SIZE	TUBE O.D.	W WIDTH	I.D.	M.M.
4000-02	1/8	0.064	0.239	6.07
4000-03	3/16	0.064	0.301	7.64
4000-04	1/4	0.072	0.351	8.91
4000-05	5/16	0.072	0.414	10.52
4000-06	3/8	0.078	0.468	11.89
4000-08	1/2	0.087	0.644	16.36
4000-10	5/8	0.097	0.755	19.18
4000-12	3/4	0.116	0.924	23.47
4000-14	7/8	0.116	1.048	26.62
4000-16	1	0.116	1.171	37.47
4000-20	1 1/4	0.118	1.475	29.74
4000-24	1 1/2	0.118	1.720	43.69
4000-32	2	0.118	2.337	59.36

## Buna O Ring 4000 Series

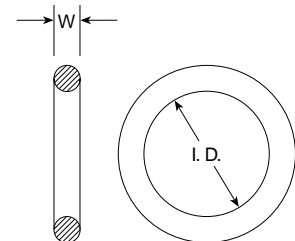
SAE# J515 Type I CH  
MS# 28778



PART NO. SIZE	TUBE O.D.	W WIDTH	I.D.	M.M.
4001-02	1/8	0.064	0.239	6.07
4001-03	3/16	0.064	0.301	7.64
4001-04	1/4	0.072	0.351	8.91
4001-06	3/8	0.078	0.468	11.89
4001-08	1/2	0.087	0.644	16.36
4001-10	5/8	0.097	0.755	19.18
4001-12	3/4	0.116	0.924	23.47
4001-14	7/8	0.116	1.048	26.62
4001-16	1	0.116	1.171	37.47
4001-20	1 1/4	0.118	1.475	29.74
4001-24	1 1/2	0.118	1.720	43.69
4001-32	2	0.118	2.337	59.36

## Viton O Ring 4001 Series

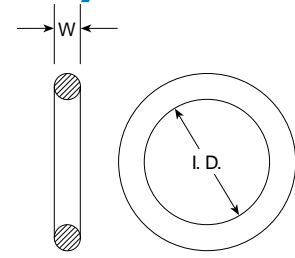
SAE# J515 Type III HK



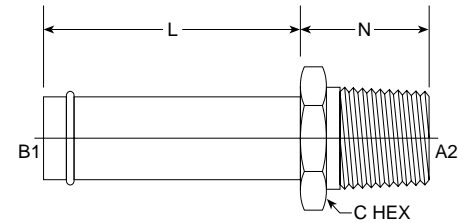
# Tube Fittings & Adapters

	PART NO. SIZE	TUBE O.D.	W WIDTH	I.D.	M.M.
NEW	4005-08	1/2	0.140	0.734	18.64
	4005-10				
	4005-12	3/4	0.140	0.984	24.99
	4005-16	1	0.140	1.296	32.92
	4005-20	1 1/4	0.140	1.859	47.22
	4005-24	1 1/2	0.140	1.859	47.22
NEW	4005-32	2	0.140	2.234	56.74
	4005-40				

## Flange O Ring 4005 Series



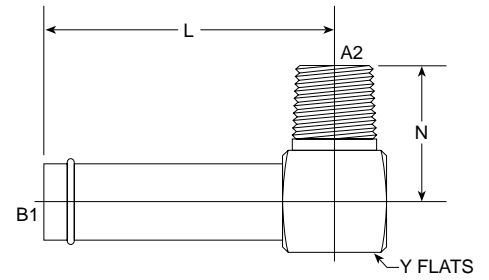
## HB-MP Straight 4404 Series



PART NO. SIZE	B1 TUBE O.D.	A2 NPTF	L LGTH M.M.	M.M.	N LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock				
									S	FG	SS	B	
4404-04-02	1/4	1/8-27	1.500	38.10	0.578	14.68	9/16	0.562	14.27	•		•	
4404-04-04	1/4	1/4-18	1.500	38.10	0.860	21.84	9/16	0.562	14.27	•		•	
4404-05-02	5/16	1/8-27	1.500	38.10	0.580	14.73	7/16	0.438	11.13	•		•	
4404-06-04	3/8	1/4-18	1.500	38.10	0.843	21.41	5/8	0.625	15.88	•		•	•
4404-06-06	3/8	3/8-18	1.500	38.10	0.770	19.56	3/4	0.750	19.05	•		•	
4404-08-04	1/2	1/4-18	1.500	38.10	0.880	22.35	5/8	0.625	15.88	•		•	
4404-08-06	1/2	3/8-18	1.500	38.10	0.875	22.23	3/4	0.750	19.05	•		•	
4404-08-08	1/2	1/2-14	1.500	38.10	1.070	27.18	15/16	0.937	23.80	•		•	
4404-08-12	1/2	3/4-14	1.500	38.10	1.170	29.72	1 1/8	1.125	28.58	•		•	
4404-10-06	5/8	3/8-18	1.500	38.10	0.897	22.78	7/8	0.875	22.23	•		•	
4404-10-08	5/8	1/2-14	1.500	38.10	1.078	27.38	15/16	0.937	23.80	•		•	
4404-10-12	5/8	3/4-14	1.500	38.10	1.160	29.46	1 1/8	1.125	28.58	•		•	
4404-12-06	3/4	3/8-18	1.500	38.10	0.920	23.37	1	1.000	25.40	•		•	
4404-12-08	3/4	1/2-14	1.500	38.10	1.170	29.72	15/16	0.937	23.80	•		•	
4404-12-12	3/4	3/4-14	1.500	38.10	1.171	29.74	1 1/8	1.125	28.58	•		•	
4404-12-16	3/4	1-11 1/2	1.500	38.10	1.353	34.37	1 3/8	1.375	34.93	•		•	
4404-16-12	1	3/4-14	1.500	38.10	1.125	28.58	1 1/4	1.250	31.75	•		•	
4404-16-16	1	1-11 1/2	1.500	38.10	1.359	34.52	1 3/8	1.375	34.93	•		•	
4404-20-12	1 1/4	3/4-14	1.500	38.10	1.120	28.45	1 3/8	1.375	34.93	•		•	
4404-20-16	1 1/4	1-11 1/2	1.500	38.10	1.310	33.27	1 3/8	1.375	34.93	•		•	
4404-20-20	1 1/4	1 1/4-11 1/2	1.500	38.10	1.468	37.29	1 3/4	1.750	44.45	•		•	
4404-20-24	1 1/4	1 1/2-11 1/2	1.500	38.10	1.584	40.23	2	2.000	50.80	•		•	
4404-24-20	1 1/2	1 1/4-11 1/2	1.500	38.10	1.468	37.29	1 3/4	1.750	44.45	•		•	
4404-24-24	1 1/2	1 1/2-11 1/2	1.500	38.10	1.570	39.88	2	2.000	50.80	•		•	
4404-32-32	2	2-11 1/2	1.500	38.10	1.437	36.50	2 1/2	2.500	63.50	•		•	



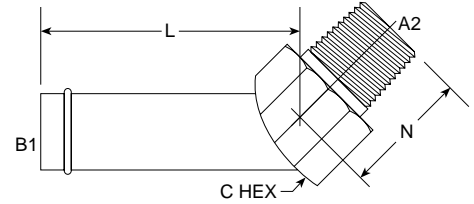
# HB-MP 90° 4501 Series



PART NO. SIZE	B1 TUBE O.D.	A2 NPTF	L LGTH	M.M.	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
										S	FG	SS	B
4501-04-02	1/4	1/8-27	1.750	44.45	0.781	19.84	1/2	0.500	12.70	•			
4501-04-04	1/4	1/4-18	1.810	45.97	1.060	26.92	5/8	0.625	15.88	•			
4501-05-02	5/16	1/8-27	1.750	44.45	0.780	19.81	1/2	0.500	12.70	•			
NEW 4501-06-02										•			
4501-06-04	3/8	1/4-18	1.812	46.02	1.093	27.76	5/8	0.625	15.88	•			
4501-06-06	3/8	3/8-18	1.890	48.01	1.220	30.99	13/16	0.812	20.62	•		•	
4501-06-08	3/8	1/2-14	1.970	50.04	1.460	37.08	15/16	0.937	23.80	•			
4501-08-04	1/2	1/4-18	1.810	45.97	1.100	27.94	5/8	0.625	15.88	•			
4501-08-06	1/2	3/8-18	1.906	48.41	1.218	30.94	13/16	0.812	20.62	•		•	•
4501-08-08	1/2	1/2-14	1.980	50.29	1.470	37.34	15/16	0.937	23.80	•			
4501-08-12	1/2	3/4-14	1.968	49.99	2.062	52.37	1 1/8	1.125	28.58	•			
4501-10-06	5/8	3/8-18	1.968	49.99	1.278	32.46	15/16	0.937	23.80	•		•	
4501-10-08	5/8	1/2-14	1.968	49.99	1.468	37.29	15/16	0.937	23.80	•			
4501-10-12	5/8	3/4-14	2.060	52.32	1.600	40.64	1 1/8	1.125	28.58	•			
4501-12-06	3/4	3/8-18	1.900	48.26	1.220	30.99	13/16	0.812	20.62	•			
4501-12-08	3/4	1/2-14	1.970	37.34	1.470	50.04	15/16	0.937	23.80	•			
4501-12-12	3/4	3/4-14	2.062	52.37	1.593	40.46	1 1/8	1.125	28.58	•		•	
4501-12-16	3/4	1-11 1/2	2.190	55.63	1.980	50.29	1 3/8	1.375	34.93	•			
4501-16-08	1	1/2-14	2.053	52.15	1.561	39.65	1 1/8	1.125	28.58	•			
4501-16-12	1	3/4-14	2.080	52.83	1.600	40.64	1 1/8	1.125	28.58	•		•	
4501-16-16	1	1-11 1/2	2.187	55.55	1.968	49.99	1 3/8	1.375	34.93	•		•	
4501-16-20	1	1 1/4-11 1/2	2.380	60.45	2.380	60.45	1 3/4	1.750	44.45	•			
4501-16-24	1	1 1/2-11 1/2	2.520	64.01	2.640	67.06	2	2.000	50.80	•			
4501-20-16	1 1/4	1-11 1/2	1.200	30.48	1.980	50.29	1 3/8	1.375	34.93	•			
4501-20-20	1 1/4	1 1/4-11 1/2	2.375	60.33	2.375	60.33	1 3/4	1.750	44.45	•			
4501-20-24	1 1/4	1 1/2-11 1/2	2.500	63.50	2.640	67.06	2	2.000	50.80	•			
4501-24-16	1 1/2	1-11-1/2	2.380	60.45	2.160	54.86	1 3/4	1.750	44.45	•	•		
4501-24-20	1 1/2	1 1/4-11 1/2	2.380	60.45	2.380	60.45	1 3/4	1.750	44.45	•			
4501-24-24	1 1/2	1 1/2-11 1/2	2.500	63.50	2.640	67.06	2	2.000	50.80	•			
4501-32-32	2	2-11 1/2	2.812	71.42	3.000	76.20	2 5/8	2.625	66.68	•	•		

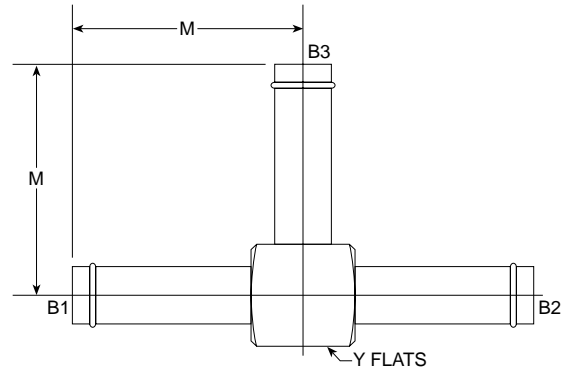
# Tube Fittings & Adapters

## HB-MP 45° 4503 Series



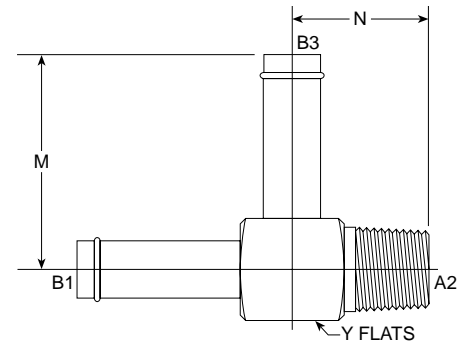
PART NO. SIZE	B1 TUBE O.D.	A2 NPTF	L LGTH M.M.	N LGTH M.M.	C HEX	C HEX M.M.	Standard Material From Stock						
							S	FG	SS	B			
4503-04-02	1/4	1/8-27	0.640	16.26	1.562	39.67	1/2	0.500	12.70	•			
4503-04-04	1/4	1/4-18	0.830	21.08	1.810	45.97	5/8	0.625	15.88	•		•	
4503-05-02	5/16	1/8-27	0.640	16.26	1.650	41.91	1/2	0.500	12.70	•			
4503-06-04	3/8	1/4-18	0.859	21.82	1.625	41.28	5/8	0.625	15.88	•			
4503-06-06	3/8	3/8-18	0.950	24.13	1.710	43.43	13/16	0.812	20.62	•			
4503-08-04	1/2	1/4-18	0.830	21.08	1.710	43.43	5/8	0.625	15.88	•			
4503-08-06	1/2	3/8-18	0.953	24.21	1.687	42.85	13/16	0.812	20.62	•			
4503-08-08	1/2	1/2-14	1.180	29.97	1.740	44.20	15/16	0.937	23.80	•			
4503-10-06	5/8	3/8-18	0.981	24.92	1.718	43.64	15/16	0.937	23.80	•			
4503-10-08	5/8	1/2-14	1.171	29.74	1.718	43.64	15/16	0.937	23.80	•			
4503-10-12	5/8	3/4-14	1.220	30.99	1.830	46.48	1 1/8	1.125	28.58	•			
4503-12-08	3/4	1/2-14	1.170	29.72	1.760	44.70	15/16	0.937	23.80	•			
4503-12-12	3/4	3/4-14	1.203	30.56	1.718	43.64	1 1/8	1.125	28.58	•			
4503-12-16	3/4	1-11 1/2	1.540	39.12	2.100	53.34	1 3/8	1.375	34.93	•			
4503-16-12	1	3/4-14	1.203	30.56	1.750	44.45	1 1/8	1.125	28.58	•			
4503-16-16	1	1-11 1/2	1.484	37.69	1.750	44.45	1 3/8	1.375	34.93	•			
4503-16-20	1	1 1/4-11 1/2	1.620	41.15	2.070	52.58	1 3/4	1.750	44.45	•			
4503-20-16	1 1/4	1-11 1/2	1.570	39.88	1.740	44.20	1 3/8	1.375	34.93	•			
4503-20-20	1 1/4	1 1/4-11 1/2	1.671	42.44	1.812	46.02	1 3/4	1.750	44.45	•			
4503-24-20	1 1/2	1 1/4-11 1/2	1.620	41.15	1.930	49.02	1 3/4	1.750	44.45	•			
4503-24-24	1 1/2	1 1/2-11 1/2	1.765	44.83	1.875	47.63	2	2.000	50.80	•			
4503-32-32	2	2-11 1/2	2.109	53.57	2.000	50.80	2 1/2	2.500	63.50	•	•		

# HB-HB-HB Tee 4504 Series



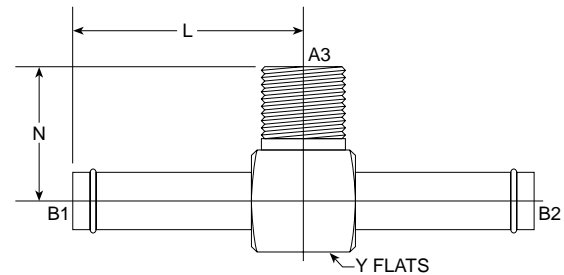
PART NO. SIZE	B1 TUBE O.D.	B2 TUBE O.D.	B3 TUBE O.D.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
									S	FG	SS	B	
4504-04-04-04	1/4	1/4	1/4	1.750	44.45	1/2	0.500	12.70	•				
4504-06-06-06	3/8	3/8	3/8	1.750	44.45	1/2	0.500	12.70	•				
4504-08-08-08	1/2	1/2	1/2	1.750	44.45	13/16	0.812	20.63	•				

# HB-MP-HB Tee 4505 Series



PART NO. SIZE	B1 TUBE O.D.	A3 NPTF	B3 TUBE O.D.	M LGTH	M.M.	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
											S	FG	SS	B	
4505-24-24-24	1 1/2	1 1/2-11 1/2	1 1/2	2.500	63.50	2.620	66.55	2	2.000	50.80	•				

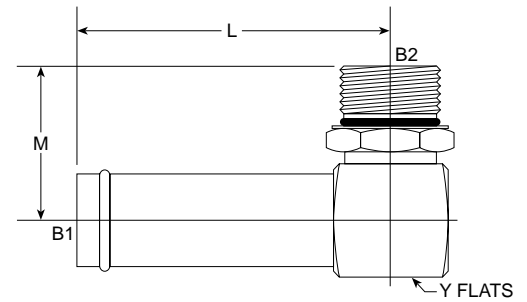
# HB-HB-MP Tee 4506 Series



PART NO. SIZE	B1 TUBE O.D.	B2 TUBE O.D.	A3 NPTF	L LGTH	M.M.	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
											S	FG	SS	B	
4506-08-08-06	1/2	1/2	3/8-18	1.920	48.77	1.220	30.99	13/16	0.812	20.62	•				

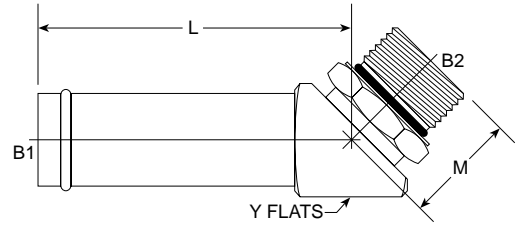
# Tube Fittings & Adapters

## HB-MAORB 90° 4601-NWO Series



PART NO. SIZE	B1 TUBE O.D.	B2 AORB	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
										S	FG	SS	B
4601-04-04-NWO	1/4	7/16-20	1.750	44.45	1.031	26.19	1/2	0.500	12.70	•	•		
4601-04-06-NWO	1/4	9/16-18	1.810	45.97	1.270	32.26	5/8	0.625	15.88	•			
4601-05-04-NWO	5/16	7/16-20	1.770	44.96	1.010	25.65	1/2	0.500	12.70	•			
4601-06-04-NWO	3/8	7/16-20	1.810	45.97	1.190	30.20	7/16	0.438	14.30	•	•		
4601-06-06-NWO	3/8	9/16-18	1.812	46.02	1.250	31.75	5/8	0.625	15.88	•	•		
4601-06-08-NWO	3/8	3/4-16	1.890	48.01	1.470	37.34	13/16	0.812	20.62	•			
4601-08-06-NWO	1/2	9/16-18	1.906	48.41	1.812	46.02	13/16	0.812	20.62	•			
4601-08-08-NWO	1/2	3/4-16	1.906	48.41	1.453	36.91	13/16	0.812	20.62	•			
4601-10-08-NWO	5/8	3/4-16	1.900	48.26	1.450	36.83	13/16	0.812	20.62	•			
4601-10-10-NWO	5/8	7/8-14	1.968	49.99	1.703	43.26	15/16	0.937	23.80	•			
4601-10-12-NWO	5/8	1 1/16-12	2.070	52.58	1.930	49.02	1 1/8	1.125	28.58	•			
4601-12-08-NWO	3/4	3/4-16	1.890	48.01	1.450	36.83	13/16	0.812	20.62	•			
4601-12-10-NWO	3/4	7/8-14	1.930	49.02	1.680	42.67	15/16	0.937	23.80	•			
4601-12-12-NWO	3/4	1 1/16-12	2.062	52.37	1.937	49.20	1 1/8	1.125	28.58	•			
4601-12-16-NWO	3/4	1 5/16-12	2.190	55.63	2.040	51.82	1 3/8	1.375	34.93	•			
4601-14-14-NWO	7/8	1 3/16-12	2.125	53.98	2.000	50.80	1 1/4	1.250	31.75	•			
4601-16-08-NWO	1	3/4-16	2.050	52.07	1.600	40.64	1 1/8	1.125	31.75	•			
4601-16-10-NWO	1	7/8-14	2.375	60.20	2.000	50.80	1 5/16	1.312	33.30	•	•		
4601-16-12-NWO	1	1 1/16-12	2.020	51.31	1.950	49.53	1 1/8	1.125	28.58	•			
4601-16-14-NWO	1	1 3/16-12	2.110	53.59	2.000	50.80	1 1/4	1.250	31.75	•			
4601-16-16-NWO	1	1 5/16-12	2.187	55.55	2.046	51.97	1 3/8	1.375	34.93	•			
4601-16-20-NWO	1	1 5/8-12	2.340	59.44	2.250	57.15	1 3/4	1.750	44.45	•			
4601-16-24-NWO	1	1 7/8-12	2.470	62.74	2.400	60.96	2	2.000	50.80	•			
4601-20-12-NWO	1 1/4	1 1/16-12	2.400	60.96	2.000	50.80	1 5/8	1.625	41.30	•	•		
4601-20-16-NWO	1 1/4	1 5/16-12	2.200	55.88	2.040	51.82	1 3/8	1.375	34.93	•			
4601-20-20-NWO	1 1/4	1 5/8-12	2.375	60.33	2.250	57.15	1 3/4	1.750	44.45	•			
4601-20-24-NWO	1 1/4	1 7/8-12	2.500	63.50	2.400	60.96	2	2.000	50.80	•			
4601-24-16-NWO	1 1/2	1 5/16-12	2.320	58.93	2.170	55.12	1 5/8	1.625	41.28	•			
4601-24-20-NWO	1 1/2	1 5/8-12	2.370	60.20	2.240	56.90	1 3/4	1.750	44.45	•			
4601-24-24-NWO	1 1/2	1 7/8-12	2.500	63.50	2.390	60.71	2	2.000	50.80	•			
4601-32-32-NWO	2	2 1/2-12	2.812	71.42	2.890	73.41	2 5/8	2.625	66.68	•	•		

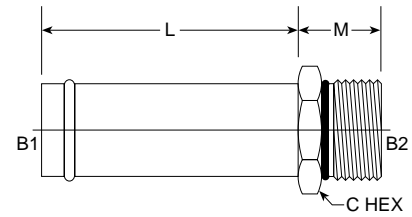
# HB-MAORB 45° 4603-NWO Series



PART NO. SIZE	B1 TUBE O.D.	B2 AORB	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
										S	FG	SS	B
4603-04-04-NWO	1/4	7/16-20	1.562	39.67	1.046	26.57	1/2	0.500	12.70	•			
4603-06-06-NWO	3/8	9/16-18	1.593	40.46	1.140	28.96	5/8	0.625	15.88	•			
4603-08-08-NWO	1/2	3/4-16	1.625	41.28	1.296	32.92	13/16	0.812	20.62	•	•		
4603-08-10-NWO	1/2	7/8-14	1.870	47.50	1.520	38.61	15/16	0.937	23.80	•			
4603-10-08-NWO	5/8	3/4-16	1.700	43.18	1.320	33.53	13/16	0.812	20.62	•			
4603-10-10-NWO	5/8	7/8-14	1.609	40.87	1.515	38.48	15/16	0.937	23.80	•			
4603-10-12-NWO	5/8	1 1/16-12	1.880	47.75	1.740	44.20	1 1/8	1.125	28.58	•			
4603-12-08-NWO	3/4	3/4-16	1.643	41.73	1.300	33.02	13/16	0.812	20.62	•			
4603-12-10-NWO	3/4	7/8-14	1.650	41.91	1.590	40.39	15/16	0.937	23.80	•			
4603-12-12-NWO	3/4	1 1/16-12	1.703	43.26	1.734	44.04	1 1/8	1.125	28.58	•			
4603-16-12-NWO	1	1 1/16-12	1.780	45.21	1.720	43.69	1 1/8	1.125	28.58	•			
4603-16-14-NWO	1	1 3/16-12	1.850	46.99	1.830	46.48	1 1/4	1.250	31.75	•			
4603-16-16-NWO	1	1 5/16-12	0.859	21.82	1.859	47.22	1 3/8	1.375	34.93	•			
NEW 4603-20-12-NWO										•			
4603-20-16-NWO	1 1/4	1 5/16-12	1.870	47.50	1.900	48.26	1 3/8	1.375	34.93	•			
4603-20-20-NWO	1 1/4	1 5/8-12	1.921	48.79	1.906	48.41	1 3/4	1.750	44.45	•			
4603-24-20-NWO	1 1/2	1 5/8-12	1.990	50.55	1.857	47.17	1 3/4	1.750	44.45	•			
4603-24-24-NWO	1 1/2	1 7/8-12	1.968	49.99	1.906	48.41	2	2.000	50.80	•	•		
4603-32-32-NWO	2	2 1/2-12	2.180	55.37	1.859	47.22	2 5/8	2.625	66.68	•	•		

# Tube Fittings & Adapters

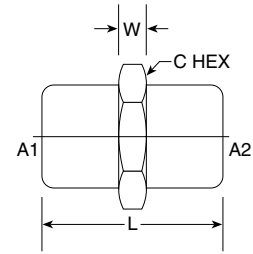
## HB-MORB Straight 4604-O Series



PART NO. SIZE	B1 TUBE O.D.	B2 ORB	L LGTH	M.M.	M LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
										S	FG	SS	B
4604-04-04-O	1/4	7/16-20	1.500	38.10	0.600	15.24	9/16	0.562	14.27	•			
4604-05-05-O	5/16	1/2-20	1.500	38.10	0.670	17.02	5/8	0.625	15.88	•			
4604-06-04-O	3/8	7/16-20	1.500	38.10	0.670	17.02	9/16	0.562	14.27	•			
4604-06-06-O	3/8	9/16-18	1.500	38.10	0.730	18.54	11/16	0.687	17.45	•			
4604-08-06-O	1/2	9/16-18	1.500	38.10	0.730	18.54	11/16	0.687	17.45	•			
4604-08-08-O	1/2	3/4-16	1.500	38.10	0.800	20.32	7/8	0.875	22.23	•			
4604-10-08-O	5/8	3/4-16	1.500	38.10	0.800	20.32	7/8	0.875	22.23	•			
4604-10-10-O	5/8	7/8-14	1.500	38.10	0.940	23.88	1	1.000	25.40	•			
4604-10-12-O	5/8	1 1/16-12	1.500	38.10	1.090	27.69	1 1/4	1.250	31.75	•			
4604-12-08-O	3/4	3/4-16	1.500	38.10	0.800	20.32	7/8	0.875	22.23	•			
4604-12-10-O	3/4	7/8-14	1.500	38.10	0.940	23.88	1	1.000	25.40	•			
4604-12-12-O	3/4	1 1/16-12	1.500	38.10	1.090	27.69	1 1/4	1.250	31.75	•			
4604-12-16-O	3/4	1 5/16-12	1.500	38.10	1.130	28.70	1 1/2	1.500	38.10	•			
4604-16-10-O	1	7/8-14	1.500	38.10	0.940	23.88	1 1/4	1.250	31.75	•			
4604-16-12-O	1	1 1/16-12	1.500	38.10	1.090	27.69	1 1/4	1.250	31.75	•			
4604-16-16-O	1	1 5/16-12	1.500	38.10	1.130	28.70	1 1/2	1.500	38.10	•			
4604-16-20-O	1	1 5/8-12	1.500	38.10	1.200	30.48	1 7/8	1.875	47.63	•			
4604-20-10-O	1 1/4	7/8-14	1.500	38.10	1.075	27.30	1 1/2	1.500	38.10	•			
4604-20-12-O	1 1/4	1 1/16-12	1.500	38.10	1.100	27.94	1 3/8	1.375	34.92	•			
4604-20-16-O	1 1/4	1 5/16-12	1.500	38.10	1.130	28.70	1 1/2	1.500	38.10	•			
4604-20-20-O	1 1/4	1 5/8-12	1.500	38.10	1.200	30.48	1 7/8	1.875	47.63	•			
4604-20-24-O	1 1/4	1 7/8-12	1.500	38.10	1.270	32.26	2 1/8	2.125	53.98	•			
NEW 4604-20-32-O										•			
4604-24-16-O	1 1/2	1 5/16-12	1.500	38.10	1.130	28.70	1 11/16	1.688	42.86	•			
4604-24-20-O	1 1/2	1 5/8-12	1.500	38.10	1.200	30.48	1 7/8	1.875	47.63	•			
4604-24-24-O	1 1/2	1 7/8-12	1.500	38.10	1.270	32.26	2 1/8	2.125	53.98	•			
4604-32-32-O	2	2 1/2-12	1.500	38.10	1.440	36.58	2 3/4	2.750	69.85	•			

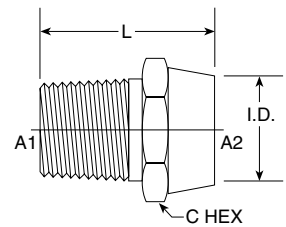
# FP-FP Straight 5000 Series

SAE # 140138



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
5000-02-02	1/8	1/8-27	1/8-27	0.750	19.05	0.220	5.59	5/8	0.625	15.88	•		•	•
5000-04-02	1/4	1/4-18	1/8-27	1.130	28.70	0.250	6.35	3/4	0.750	19.05	•		•	•
5000-04-04	1/4	1/4-18	1/4-18	1.130	28.70	0.250	6.35	3/4	0.750	19.05	•		•	•
5000-06-02	3/8	3/8-18	1/8-27	1.130	28.70	0.250	6.35	7/8	0.875	22.23	•		•	•
5000-06-04	3/8	3/8-18	1/4-18	1.130	28.70	0.250	6.35	7/8	0.875	22.23	•		•	•
5000-06-06	3/8	3/8-18	3/8-18	1.130	28.70	0.250	6.35	7/8	0.875	22.23	•		•	•
5000-08-02	1/2	1/2-14	1/8-27	1.500	38.10	0.310	7.87	1 1/8	1.125	28.58	•		•	•
5000-08-04	1/2	1/2-14	1/4-18	1.500	38.10	0.310	7.87	1 1/8	1.125	28.58	•		•	•
5000-08-06	1/2	1/2-14	3/8-18	1.500	38.10	0.310	7.87	1 1/8	1.125	28.58	•		•	•
5000-08-08	1/2	1/2-14	1/2-14	1.500	38.10	0.310	7.87	1 1/8	1.125	28.58	•		•	•
5000-12-04	3/4	3/4-14	1/4-18	1.530	38.86	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5000-12-06	3/4	3/4-14	3/8-18	1.530	38.86	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5000-12-08	3/4	3/4-14	1/2-14	1.530	38.86	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5000-12-12	3/4	3/4-14	3/4-14	1.530	38.86	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5000-16-06	1	1-11 1/2	3/8-18	1.890	48.01	0.380	9.65	1 5/8	1.625	41.28	•		•	•
5000-16-08	1	1-11 1/2	1/2-14	1.890	48.01	0.380	9.65	1 5/8	1.625	41.28	•		•	•
5000-16-12	1	1-11 1/2	3/4-14	1.890	48.01	0.380	9.65	1 5/8	1.625	41.28	•		•	•
5000-16-16	1	1-11 1/2	1-11 1/2	1.890	48.01	0.380	9.65	1 5/8	1.625	41.28	•		•	•
5000-20-12	1 1/4	1 1/4-11 1/2	3/4-14	1.930	49.02	0.460	11.68	2	2.000	50.80	•		•	•
5000-20-16	1 1/4	1 1/4-11 1/2	1-11 1/2	1.930	49.02	0.460	11.68	2	2.000	50.80	•		•	•
5000-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1.930	49.02	0.460	11.68	2	2.000	50.80	•		•	•
5000-24-16	1 1/2	1 1/2-11 1/2	1-11 1/2	1.930	49.02	0.530	13.46	2 3/8	2.375	60.33	•		•	•
5000-24-20	1 1/2	1 1/2-11 1/2	1 1/4-11 1/2	1.930	49.02	0.530	13.46	2 3/8	2.375	60.33	•		•	•
5000-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1.930	49.02	0.530	13.46	2 3/8	2.375	60.33	•		•	•
5000-32-24	2	2-11 1/2	1 1/2-11 1/2	2.000	50.80	6.600	167.64	2 7/8	2.875	73.03	•		•	•
5000-32-32	2	2-11 1/2	2-11 1/2	1.960	49.78	0.680	17.27	2 7/8	2.875	73.03	•		•	•

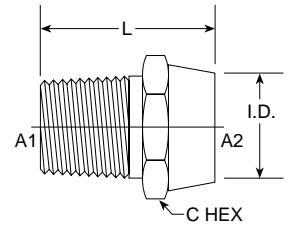
# MP-BW Weld-on Fitting 304SS 5304 Series



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 WELD-ON	I.D.	M.M.	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
5304-04	1/4	1/4-18	1/4	0.250	6.35	1.197	30.40	9/16	0.562	14.28			•	
5304-06	3/8	3/8-18	3/8	0.375	9.52	1.250	31.75	11/16	0.687	17.46			•	
5304-08	1/2	1/2-14	1/2	0.500	12.70	1.438	36.53	7/8	0.875	22.22			•	
5304-12	3/4	3/4-14	3/4	0.750	19.05	1.500	38.10	1 1/16	1.062	26.99			•	
5304-16	1	1-11 1/2	1	1.000	25.40	1.700	43.18	1 5/16	1.312	33.33			•	
5304-20	1 1/4	1 1/4-11 1/2	1 1/4	1.250	31.75	1.940	49.28	1 3/4	1.750	44.45			•	
5304-24	1 1/2	1 1/2-11 1/2	1 1/2	1.500	63.50	2.138	54.31	2	2.000	50.80			•	

# Tube Fittings & Adapters

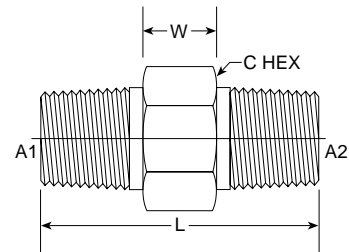
## MP-BW Weld-on Fitting 316SS 5316 Series



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 WELD-ON	I.D.	M.M.	L LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock				
										S	FG	SS	B	
5316-04	1/4	1/4-18	1/4	0.250	6.35	1.197	30.40	9/16	0.562	14.28			•	
5316-06	3/8	3/8-18	3/8	0.375	9.52	1.250	31.75	11/16	0.687	17.46			•	
5316-08	1/2	1/2-14	1/2	0.500	12.70	1.438	36.52	7/8	0.875	22.22			•	
5316-12	3/4	3/4-14	3/4	0.750	19.05	1.500	38.10	1 1/16	1.062	26.99			•	
5316-16	1	1-11 1/2	1	1.000	25.40	1.700	43.18	1 5/16	1.312	33.33			•	

## MP-MP Hex Nipple 5404 Series

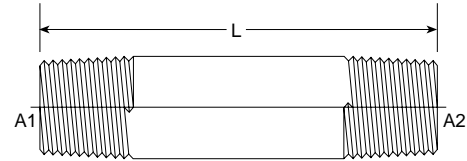
SAE # 140137



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	L LGTH M.M.	M.M.	W WIDTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock				
										S	FG	SS	B	
5404-02-02	1/8	1/8-27	1/8-27	1.060	26.92	0.220	5.59	7/16	0.438	11.13	•		•	•
5404-04-02	1/4	1/4-18	1/8-27	1.260	32.00	0.250	6.35	9/16	0.562	14.27	•		•	•
5404-04-04	1/4	1/4-18	1/4-18	1.450	36.83	0.250	6.35	5/8	0.562	14.27	•		•	•
5404-06-02	3/8	3/8-18	1/8-27	1.265	32.13	0.250	6.35	11/16	0.750	19.05	•		•	•
5404-06-04	3/8	3/8-18	1/4-18	1.450	36.83	0.250	6.35	11/16	0.750	19.05	•		•	•
5404-06-06	3/8	3/8-18	3/8-18	1.450	36.83	0.250	6.35	11/16	0.687	17.45	•		•	•
5404-08-04	1/2	1/2-14	1/4-18	1.700	43.18	0.310	7.87	7/8	0.875	22.23	•		•	•
5404-08-06	1/2	1/2-14	3/8-18	1.700	43.18	0.310	7.87	7/8	0.875	22.23	•		•	•
5404-08-08	1/2	1/2-14	1/2-14	1.890	48.01	0.310	7.87	7/8	0.875	22.23	•		•	•
5404-12-04	3/4	3/4-14	1/4-18	1.770	44.96	0.380	9.65	1 1/8	1.125	28.58	•		•	•
5404-12-06	3/4	3/4-14	3/8-18	1.770	44.96	0.380	9.65	1 1/8	1.125	28.58	•		•	•
5404-12-08	3/4	3/4-14	1/2-14	1.960	49.78	0.380	9.65	1 1/8	1.125	28.58	•		•	•
5404-12-12	3/4	3/4-14	3/4-14	1.960	49.78	0.380	9.65	1 1/8	1.125	28.58	•		•	•
5404-16-04	1	1-11 1/2	1/4-18	1.960	49.78	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5404-16-06	1	1-11 1/2	3/8-18	1.970	50.04	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5404-16-08	1	1-11 1/2	1/2-14	2.150	54.61	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5404-16-12	1	1-11 1/2	3/4-14	2.156	54.76	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5404-16-16	1	1-11 1/2	1-11 1/2	2.340	59.44	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5404-20-12	1 1/4	1 1/4-11 1/2	3/4-14	2.410	61.21	0.460	11.68	1 3/4	1.750	44.45	•		•	•
5404-20-16	1 1/4	1 1/4-11 1/2	1-11 1/2	2.450	62.23	0.460	11.68	1 3/4	1.750	44.45	•		•	•
5404-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	2.480	62.99	0.460	11.68	1 3/4	1.750	44.45	•		•	•
5404-24-12	1 1/2	1 1/2-11 1/2	3/4-14	2.380	60.45	0.530	13.46	2	2.000	50.80	•		•	•
5404-24-16	1 1/2	1 1/2-11 1/2	1-11 1/2	2.560	65.02	0.530	13.46	2	2.000	50.80	•		•	•
5404-24-20	1 1/2	1 1/2-11 1/2	1 1/4-11 1/2	2.590	65.79	0.530	13.46	2	2.000	50.80	•		•	•
5404-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.610	66.29	0.530	13.46	2	2.000	50.80	•		•	•
<b>NEW</b> 5404-32-12											•		•	•
5404-32-16	2	2-11 1/2	1-11 1/2	2.710	68.83	0.680	17.27	2 1/2	2.500	63.50	•		•	•
5404-32-20	2	2-11 1/2	1 1/4-11 1/2	2.760	70.10	0.680	17.27	2 1/2	2.500	63.50	•		•	•
5404-32-24	2	2-11 1/2	1 1/2-11 1/2	2.760	70.10	0.680	17.27	2 1/2	2.500	63.50	•		•	•
5404-32-32	2	2-11 1/2	2-11 1/2	2.820	71.63	0.680	17.27	2 1/2	2.500	63.50	•		•	•
<b>NEW</b> 5404-40-40											•		•	•



# MP-MP Straight Nipple Long 5404-N Series



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	L LGTH	M.M.	Standard Material From Stock			
						S	FG	SS	B
5404-N-02x0.750	1/8	1/8-27	1/8-27	0.750	19.05	•			
5404-N-02x1.000	1/8	1/8-27	1/8-27	1.000	25.40	•			
5404-N-02x1.500	1/8	1/8-27	1/8-27	1.500	38.10	•			•
5404-N-02x2.000	1/8	1/8-27	1/8-27	2.000	50.80	•		•	
5404-N-02x2.500	1/8	1/8-27	1/8-27	2.500	63.50	•		•	
5404-N-02x3.000	1/8	1/8-27	1/8-27	3.000	76.20	•		•	•
5404-N-02x3.500	1/8	1/8-27	1/8-27	3.500	88.90	•			
5404-N-02x4.000	1/8	1/8-27	1/8-27	4.000	101.60	•			
5404-N-02x4.500	1/8	1/8-27	1/8-27	4.500	114.30	•			
5404-N-02x5.000	1/8	1/8-27	1/8-27	5.000	127.00	•			
5404-N-02x6.000	1/8	1/8-27	1/8-27	6.000	152.40	•			
5404-N-04x0.875	1/4	1/4-18	1/4-18	0.875	22.23	•		•	
5404-N-04x1.500	1/4	1/4-18	1/4-18	1.500	38.10	•		•	
5404-N-04x2.000	1/4	1/4-18	1/4-18	2.000	50.80	•		•	
5404-N-04x2.500	1/4	1/4-18	1/4-18	2.500	63.50	•		•	
5404-N-04x3.000	1/4	1/4-18	1/4-18	3.000	76.20	•		•	
5404-N-04x3.500	1/4	1/4-18	1/4-18	3.500	88.90	•			
5404-N-04x4.000	1/4	1/4-18	1/4-18	4.000	101.60	•		•	
5404-N-04x4.500	1/4	1/4-18	1/4-18	4.500	114.30	•			
5404-N-04x5.000	1/4	1/4-18	1/4-18	5.000	127.00	•		•	
5404-N-04x5.500	1/4	1/4-18	1/4-18	5.500	139.70	•			
5404-N-04x6.000	1/4	1/4-18	1/4-18	6.000	152.40	•		•	
5404-N-06x1.000	3/8	3/8-18	3/8-18	1.000	25.40	•			
5404-N-06x1.500	3/8	3/8-18	3/8-18	1.500	38.10	•			
5404-N-06x2.000	3/8	3/8-18	3/8-18	2.000	50.80	•		•	
5404-N-06x2.500	3/8	3/8-18	3/8-18	2.500	63.50	•		•	
5404-N-06x3.500	3/8	3/8-18	3/8-18	3.500	88.90	•		•	
5404-N-06x4.000	3/8	3/8-18	3/8-18	4.000	101.60	•		•	
5404-N-06x5.000	3/8	3/8-18	3/8-18	5.000	127.00	•			
5404-N-06x5.500	3/8	3/8-18	3/8-18	5.500	139.70	•			
5404-N-06x6.000	3/8	3/8-18	3/8-18	6.000	152.40	•		•	
5404-N-06x7.000	3/8	3/8-18	3/8-18	7.000	165.10	•		•	
5404-N-08x1.125	1/2	1/2-14	1/2-14	1.125	28.58	•		•	
5404-N-08x1.250	1/2	1/2-14	1/2-14	1.250	31.75	•			
5404-N-08x1.375	1/2	1/2-14	1/2-14	1.375	34.93	•			
5404-N-08x1.500	1/2	1/2-14	1/2-14	1.500	38.10	•		•	
5404-N-08x1.750	1/2	1/2-14	1/2-14	1.750	44.45	•			
5404-N-08x2.000	1/2	1/2-14	1/2-14	2.000	50.80	•		•	
5404-N-08x2.250	1/2	1/2-14	1/2-14	2.250	57.15	•			
5404-N-08x2.500	1/2	1/2-14	1/2-14	2.500	63.50	•		•	
5404-N-08x3.000	1/2	1/2-14	1/2-14	3.000	76.20	•		•	
5404-N-08x3.500	1/2	1/2-14	1/2-14	3.500	88.90	•			
5404-N-08x4.000	1/2	1/2-14	1/2-14	4.000	101.60	•		•	
5404-N-08x4.500	1/2	1/2-14	1/2-14	4.500	114.30	•			
5404-N-08x5.000	1/2	1/2-14	1/2-14	5.000	127.00	•		•	
5404-N-08x6.000	1/2	1/2-14	1/2-14	6.000	152.40	•		•	
5404-N-12x1.375	3/4	3/4-14	3/4-14	1.375	34.93	•			
5404-N-12x1.500	3/4	3/4-14	3/4-14	1.500	38.10	•			
5404-N-12x1.625	3/4	3/4-14	3/4-14	1.625	41.28	•			
5404-N-12x2.000	3/4	3/4-14	3/4-14	2.000	50.80	•		•	
5404-N-12x2.500	3/4	3/4-14	3/4-14	2.500	63.50	•			
5404-N-12x3.000	3/4	3/4-14	3/4-14	3.000	76.20	•		•	
5404-N-12x3.500	3/4	3/4-14	3/4-14	3.500	88.90	•			
5404-N-12x4.000	3/4	3/4-14	3/4-14	4.000	101.60	•		•	
5404-N-12x4.500	3/4	3/4-14	3/4-14	4.500	114.30	•			

NOTE: All stainless steel fittings are hex bodies.

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# Tube Fittings & Adapters

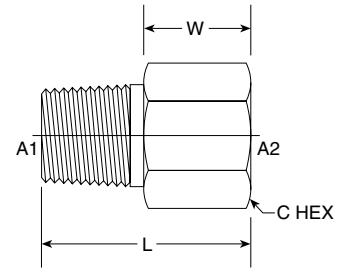
## 5404-N Series *continued*

PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	L LGTH	M.M.	Standard Material From Stock			
						S	FG	SS	B
5404-N-12x5.000	3/4	3/4-14	3/4-14	5.000	127.00	•			
5404-N-12x5.500	3/4	3/4-14	3/4-14	5.500	139.70	•			
5404-N-12x6.000	3/4	3/4-14	3/4-14	6.000	152.40	•		•	
5404-N-12x6.500	3/4	3/4-14	3/4-14	6.500	165.10	•			
5404-N-12x8.000	3/4	3/4-14	3/4-14	8.000	190.50			•	
5404-N-16x1.500	1	1-11 1/2	1-11 1/2	1.500	38.10	•			
5404-N-16x2.000	1	1-11 1/2	1-11 1/2	2.000	50.80	•			
5404-N-16x2.500	1	1-11 1/2	1-11 1/2	2.500	63.50	•			
5404-N-16x3.000	1	1-11 1/2	1-11 1/2	3.000	76.20	•		•	
5404-N-16x3.250	1	1-11 1/2	1-11 1/2	3.250	82.55	•			
5404-N-16x3.500	1	1-11 1/2	1-11 1/2	3.500	88.90	•			
5404-N-16x3.750	1	1-11 1/2	1-11 1/2	3.750	95.25	•			
5404-N-16x4.000	1	1-11 1/2	1-11 1/2	4.000	101.60	•			
5404-N-16x4.500	1	1-11 1/2	1-11 1/2	4.500	114.30	•			
5404-N-16x5.000	1	1-11 1/2	1-11 1/2	5.000	127.00	•			
5404-N-16x5.500	1	1-11 1/2	1-11 1/2	5.500	139.70	•			
5404-N-16x6.000	1	1-11 1/2	1-11 1/2	6.000	152.40	•		•	
5404-N-20x1.500	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1.500	38.10	•			
5404-N-20x1.625	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1.625	41.28	•			
5404-N-20x2.000	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	2.000	50.80	•		•	
5404-N-20x2.500	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	2.500	63.50	•		•	
5404-N-20x3.000	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	3.000	76.20	•		•	
5404-N-20x3.500	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	3.500	88.90	•			
5404-N-20x4.000	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	4.000	101.60	•			
5404-N-20x6.000	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	6.000	152.40	•			
5404-N-20x8.000	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	8.000	190.50			•	
5404-N-24x1.000	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1.000	25.40			•	
5404-N-24x1.750	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1.750	44.45	•			
5404-N-24x2.500	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.500	63.50	•			
5404-N-24x4.000	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	4.000	101.60	•			
5404-N-24x6.000	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	6.000	152.40	•			

NOTE: All stainless steel fittings are hex bodies.

# MP-FP Straight Expander 5405 Series

SAE # 140139

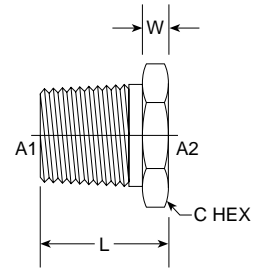


PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
5405-01-02	1/16	1/16-27	1/8-27	0.880	22.35	0.519	13.18	1/2	0.500	12.70	•			
5405-02-02	1/8	1/8-27	1/8-27	1.040	26.42	0.660	16.76	5/8	0.625	15.88	•		•	
5405-02-04	1/8	1/8-27	1/4-18	1.210	30.73	0.830	21.08	3/4	0.750	19.05	•		•	•
5405-02-06	1/8	1/8-27	3/8-18	1.340	34.04	0.880	22.35	7/8	0.875	22.23	•		•	
5405-02-08	1/8	1/8-27	1/2-14	1.480	37.59	1.120	28.45	1 1/8	1.125	28.58	•		•	
5405-04-02	1/4	1/4-18	1/8-27	1.220	30.99	0.660	16.76	5/8	0.625	15.88	•		•	
5405-04-04	1/4	1/4-18	1/4-18	1.390	35.31	0.830	21.08	3/4	0.750	19.05	•		•	
5405-04-06	1/4	7/16-20	3/8-18	1.437	36.50	0.880	22.35	7/8	0.875	22.23	•		•	
5405-04-08	1/4	1/4-18	1/2-14	1.680	42.67	1.120	28.45	1 1/8	1.125	28.58	•		•	•
5405-04-12	1/4	1/4-18	3/4-14	1.740	44.20	1.180	29.97	1 3/8	1.375	34.93	•		•	
5405-06-02	3/8	3/8-18	1/8-27	1.425	36.20	0.660	16.76	5/8	0.625	15.88	•		•	
5405-06-04	3/8	3/8-18	1/4-18	1.440	36.58	0.830	21.08	3/4	0.750	19.05	•		•	
5405-06-06	3/8	3/8-18	3/8-18	1.437	36.50	0.880	22.35	7/8	0.875	22.23	•		•	
5405-06-08	3/8	3/8-18	1/2-14	1.680	42.67	1.120	28.45	1 1/8	1.125	28.58	•		•	•
5405-06-12	3/8	3/8-18	3/4-14	1.740	44.20	1.180	29.97	1 3/8	1.375	34.93	•		•	
<b>NEW</b> 5405-08-04	1/2										•		•	
5405-08-06	1/2	1/2-14	3/8-18	1.850	46.99	0.880	22.35	7/8	0.875	22.23	•		•	
5405-08-08	1/2	1/2-14	1/2-14	1.870	47.50	1.120	28.45	1 1/8	1.125	28.58	•		•	•
5405-08-12	1/2	1/2-14	3/4-14	1.930	49.02	1.180	29.97	1 3/8	1.375	34.93	•		•	
5405-08-16	1/2	1/2-14	1-11 1/2	2.180	55.37	1.430	36.32	1 5/8	1.625	41.28	•		•	
5405-12-04	3/4	3/4-14	1/4-18	1.825	46.36	0.830	21.08	1	1.000	25.40	•		•	
5405-12-06	3/4	3/4-14	3/8-18	1.627	41.33	0.880	22.35	1	1.000	25.40	•		•	
5405-12-08	3/4	3/4-14	1/2-14	1.936	49.17	1.120	28.45	1 1/8	1.125	28.58	•		•	
5405-12-12	3/4	3/4-14	3/4-14	1.930	49.02	1.180	29.97	1 3/8	1.375	34.93	•		•	
5405-12-16	3/4	3/4-14	1-11 1/2	2.180	55.37	1.430	36.32	1 5/8	1.625	41.28	•		•	
5405-12-20	3/4	3/4-14	1 1/4-11 1/2	2.270	57.66	1.520	38.61	2	2.000	50.80	•		•	
5405-16-08	1	1-11 1/2	1/2-14	2.060	52.32	1.120	28.45	1 1/8	1.125	28.58	•		•	
5405-16-12	1	1-11 1/2	3/4-14	2.120	53.85	1.180	29.97	1 3/8	1.375	34.93	•		•	
5405-16-16	1	1-11 1/2	1-11 1/2	2.370	60.20	1.430	36.32	1 5/8	1.625	41.28	•		•	
5405-16-20	1	1-11 1/2	1 1/4-11 1/2	2.460	62.48	1.520	38.61	2	2.000	50.80	•		•	
5405-16-24	1	1-11 1/2	1 1/2-11 1/2	2.470	62.74	1.530	38.86	2 3/8	2.375	60.33	•		•	
5405-20-16	1 1/4	1 1/4-11 1/2	1-11 1/2	2.520	64.01	1.430	36.32	1 3/4	1.750	44.45	•		•	
5405-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	2.490	63.25	1.520	38.61	2	2.000	50.80	•		•	
5405-20-24	1 1/4	1 1/4-11 1/2	1 1/2-11 1/2	2.500	63.50	1.530	38.86	2 3/8	2.375	60.33	•		•	
5405-20-32	1 1/4	1 1/4-11 1/2	2-11 1/2	2.595	65.91	1.630	41.40	2 7/8	2.875	73.03	•		•	
5405-24-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	2.200	55.88	1.520	38.61	2	2.000	50.80	•		•	
5405-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.530	64.26	1.530	38.86	2 3/8	2.375	60.33	•		•	
5405-24-32	1 1/2	1 1/2-11 1/2	2-11 1/2	2.625	66.68	1.630	41.40	2 7/8	2.875	73.03	•		•	
5405-32-32	2	2-11 1/2	2-11 1/2	2.625	66.68	1.630	41.40	2 7/8	2.875	73.03	•		•	

# Tube Fittings & Adapters

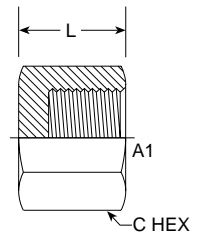
## MP-FP Reducer Bushing 5406 Series

SAE # 140140



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
5406-04-02	1/4	1/4-18	1/8-27	0.859	21.82	0.250	6.35	5/8	0.625	15.88	•		•	•
5406-06-02	3/8	3/8-18	1/8-27	0.859	21.82	0.250	6.35	3/4	0.750	19.05	•		•	•
5406-06-04	3/8	3/8-18	1/4-18	0.859	21.82	0.250	6.35	3/4	0.750	19.05	•		•	•
5406-08-02	1/2	1/2-14	1/8-27	1.109	28.17	0.310	7.87	7/8	0.875	22.23	•		•	•
5406-08-04	1/2	1/2-14	1/4-18	1.109	28.17	0.310	7.87	7/8	0.875	22.23	•		•	•
5406-08-06	1/2	1/2-14	3/8-18	1.109	28.17	0.310	7.87	7/8	0.875	22.23	•		•	•
5406-12-02	3/4	3/4-14	1/8-27	1.171	29.74	0.380	9.65	1 1/8	1.125	28.58	•		•	•
5406-12-04	3/4	3/4-14	1/4-18	1.171	29.74	0.380	9.65	1 1/8	1.125	28.58	•		•	•
5406-12-06	3/4	3/4-14	3/8-18	1.171	29.74	0.380	9.65	1 1/8	1.125	28.58	•		•	•
5406-12-08	3/4	3/4-14	1/2-14	1.171	29.74	0.380	9.65	1 1/8	1.125	28.58	•		•	•
5406-16-02	1	1-11 1/2	1/8-27	1.359	34.52	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5406-16-04	1	1-11 1/2	1/4-18	1.359	34.52	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5406-16-06	1	1-11 1/2	3/8-18	1.359	34.52	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5406-16-08	1	1-11 1/2	1/2-14	1.359	34.52	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5406-16-12	1	1-11 1/2	3/4-14	1.359	34.52	0.380	9.65	1 3/8	1.375	34.93	•		•	•
5406-20-04	1 1/4	1 1/4-11 1/2	1/4-18	1.470	37.34	0.460	11.68	1 3/4	1.750	44.45	•		•	•
5406-20-06	1 1/4	1 1/4-11 1/2	3/8-18	1.470	37.34	0.460	11.68	1 3/4	1.750	44.45	•		•	•
5406-20-08	1 1/4	1 1/4-11 1/2	1/2-14	1.470	37.34	0.460	11.68	1 3/4	1.750	44.45	•		•	•
5406-20-12	1 1/4	1 1/4-11 1/2	3/4-14	1.470	37.34	0.460	11.68	1 3/4	1.750	44.45	•		•	•
5406-20-16	1 1/4	1 1/4-11 1/2	1-11 1/2	1.470	37.34	0.460	11.68	1 3/4	1.750	44.45	•		•	•
<b>NEW</b> 5406-24-02	1 1/2	1 1/2-11 1/2	1/4-18	1.570	39.88	0.530	13.46	2	2.000	50.80	•		•	•
5406-24-04	1 1/2	1 1/2-11 1/2	3/8-18	1.570	39.88	0.530	13.46	2	2.000	50.80	•		•	•
5406-24-06	1 1/2	1 1/2-11 1/2	1/2-14	1.570	39.88	0.530	13.46	2	2.000	50.80	•		•	•
5406-24-08	1 1/2	1 1/2-11 1/2	3/4-14	1.570	39.88	0.530	13.46	2	2.000	50.80	•		•	•
5406-24-12	1 1/2	1 1/2-11 1/2	1-11 1/2	1.570	39.88	0.530	13.46	2	2.000	50.80	•		•	•
5406-24-16	1 1/2	1 1/2-11 1/2	1 1/4-11 1/2	1.570	39.88	0.530	13.46	2	2.000	50.80	•		•	•
5406-24-20	1 1/2	1 1/2-11 1/2	1 1/4-11 1/2	1.570	39.88	0.530	13.46	2	2.000	50.80	•		•	•
5406-32-04	2	2-11 1/2	1/4-18	1.750	44.45	0.680	17.27	2 1/2	2.500	63.50	•		•	•
5406-32-06	2	2-11 1/2	3/8-18	1.750	44.45	0.680	17.27	2.5	2.500	63.50	•		•	•
5406-32-08	2	2-11 1/2	1/2-14	1.750	44.45	0.680	17.27	2 1/2	2.500	63.50	•		•	•
5406-32-12	2	2-11 1/2	3/4-14	1.750	44.45	0.680	17.27	2 1/2	2.500	63.50	•		•	•
5406-32-16	2	2-11 1/2	1-11 1/2	1.750	44.45	0.680	17.27	2 1/2	2.500	63.50	•		•	•
5406-32-20	2	2-11 1/2	1 1/4-11 1/2	1.750	44.45	0.680	17.27	2 1/2	2.500	63.50	•		•	•
5406-32-24	2	2-11 1/2	1 1/2-11 1/2	1.750	44.45	0.680	17.27	2 1/2	2.500	63.50	•		•	•

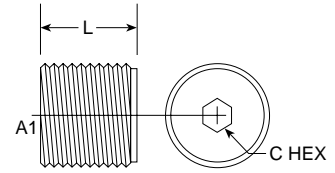
## Pipe Cap 5406-C Series



PART NO. SIZE	PIPE O.D.	A1 NPTF	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock				
								S	FG	SS	B	
5406-C-02	1/8	1/8-27	0.550	13.97	9/16	0.562	14.28	•				
5406-C-04	1/4	1/4-18	0.810	20.57				•				
5406-C-06	3/8	3/8-18	0.810	20.57	13/16	0.812	20.66	•				
5406-C-08	1/2	1/2-14	1.000	25.40	1	1.000	25.40	•				
5406-C-12	3/4	3/4-14	1.130	28.70	1 3/16	1.188	30.17	•				
5406-C-16	1	1-11 1/2	1.150	29.21	1 1/2	1.500	38.10	•				
5406-C-20	1 1/2	1 1/4-11 1/2	1.250	31.75	2	2.000	50.80	•		•		

# Hollow Hex Pipe Plug 5406-HP Series

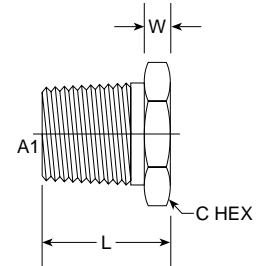
SAE # 130109



PART NO. SIZE	PIPE O.D.	A1 NPTF	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
								S	FG	SS	B
5406-HP-01	1/16	1/16-27	0.300	7.62	5/32	0.156	3.96	•		•	
5406-HP-02	1/8	1/8-27	0.300	7.62	3/16	0.188	4.76	•		•	•
5406-HP-04	1/4	1/4-18	0.460	11.68	1/4	0.250	6.35	•		•	•
5406-HP-06	3/8	3/8-18	0.460	11.68	5/16	0.312	7.92	•		•	•
5406-HP-08	1/2	1/2-14	0.610	15.49	3/8	0.375	9.53	•		•	•
5406-HP-12	3/4	3/4-14	0.620	15.75	9/16	0.562	14.27	•		•	•
5406-HP-16	1	1-11 1/2	0.770	19.56	5/8	0.625	15.88	•		•	
5406-HP-20	1 1/4	1 1/4-11 1/2	0.830	21.08	3/4	0.750	19.05	•		•	
5406-HP-24	1 1/2	1 1/2-11 1/2	0.830	21.08	1	1.000	25.40	•		•	
5406-HP-32	2	2-11 1/2	0.830	21.08	1	1.000	25.40	•		•	

# External Hex Pipe Plug 5406-P Series

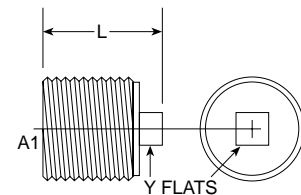
SAE # 130109E



PART NO. SIZE	PIPE O.D.	A1 NPTF	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
										S	FG	SS	B
NEW 5405-P-01										•			
5406-P-02	1/8	1/8-27	0.562	14.27	0.187	4.75	7/16	0.438	11.13	•		•	
5406-P-04	1/4	1/4-18	0.750	19.05	0.187	4.75	9/16	0.562	14.27	•		•	
5406-P-06	3/8	3/8-18	0.781	19.84	0.219	5.56	11/16	0.688	17.46	•		•	•
5406-P-08	1/2	1/2-14	1.120	28.45	0.220	5.59	7/8	0.875	22.23	•		•	•
5406-P-12	3/4	3/4-14	1.170	29.72	0.420	10.67	1 1/8	1.125	28.58	•		•	•
5406-P-16	1	1-11 1/2	1.360	34.54	0.420	10.67	1 3/8	1.375	34.93	•		•	
5406-P-20	1 1/4	1 1/4-11 1/2	1.468	37.29	0.500	12.70	1 3/4	1.750	44.45	•		•	
5406-P-24	1 1/2	1 1/2-11 1/2	1.570	39.88	0.570	14.48	2	2.000	50.80	•		•	
5406-P-32	2	2-11 1/2	1.750	44.45	0.718	18.24	2 1/2	2.500	63.50	•		•	

# Square Head Pipe Plug 5406-SHP Series

SAE # 130109A

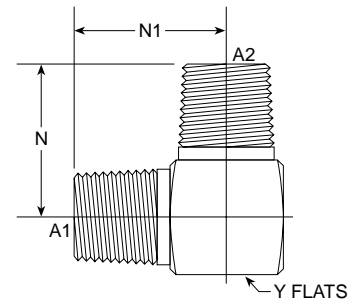


PART NO. SIZE	PIPE O.D.	A1 NPTF	L LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
								S	FG	SS	B
5406-SHP-02	1/8	1/8-27	0.630	16.00	9/32	0.281	7.11	•		•	
5406-SHP-04	1/4	1/4-18	0.760	19.30	3/8	0.375	9.65	•		•	•
5406-SHP-06	3/8	3/8-18	0.845	21.46	7/16	0.437	10.92	•		•	
5406-SHP-08	1/2	1/2-14	1.000	25.40	9/16	0.558	16.66	•		•	
5406-SHP-12	3/4	3/4-14	1.080	27.43	5/8	0.625	15.75	•		•	
5406-SHP-16	1	1-11 1/2	1.270	32.26	13/16	0.812	20.32	•		•	
5406-SHP-20	1 1/4	1 1/4-11 1/2	1.400	35.56	15/16	0.937	23.62	•		•	
5406-SHP-24	1 1/2	1 1/2-11 1/2	1.470	37.34	1 1/8	1.125	28.58	•		•	

# Tube Fittings & Adapters

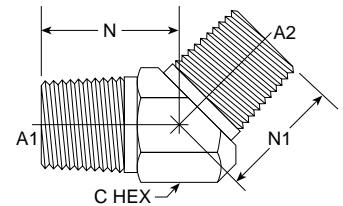
## MP-MP 90° 5500 Series

SAE# 140237



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	N LGTH	M.M.	N1 LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
5500-02-02	1/8	1/8-27	1/8-27	0.780	19.81	0.780	19.84	1/2	0.500	12.70	•	•	•	•
5500-04-02	1/4	1/4-18	1/8-27	1.090	27.69	0.835	21.21	5/8	0.625	15.88	•	•	•	•
5500-04-04	1/4	1/4-18	1/4-18	1.090	27.69	1.090	27.69	5/8	0.625	15.88	•	•	•	•
5500-06-02	3/8	3/8-18	1/8-27	0.836	21.23	1.200	30.48	3/4	0.750	19.05	•	•	•	•
5500-06-04	3/8	3/8-18	1/4-18	1.220	30.99	1.220	30.99	13/16	0.812	20.62	•	•	•	•
5500-06-06	3/8	3/8-18	3/8-18	1.220	30.99	1.220	30.99	13/16	0.812	20.62	•	•	•	•
5500-08-04	1/2	1/2-14	1/4-18	1.470	37.34	1.280	37.34	15/16	0.937	23.80	•	•	•	•
5500-08-06	1/2	1/2-14	3/8-18	1.470	37.34	1.280	37.34	15/16	0.937	23.80	•	•	•	•
5500-08-08	1/2	1/2-14	1/2-14	1.470	37.34	1.470	37.34	15/16	0.937	23.80	•	•	•	•
5500-12-06	3/4	3/4-14	3/8-18	1.380	35.05	1.600	40.64	1 1/8	1.125	28.58	•	•	•	•
5500-12-08	3/4	3/4-14	1/2-14	1.590	40.39	1.590	40.39	1 1/8	1.125	28.58	•	•	•	•
5500-12-12	3/4	3/4-14	3/4-14	1.590	40.39	1.590	40.39	1 1/8	1.125	28.58	•	•	•	•
5500-16-08	1	1-11 1/2	1/2-14	1.620	41.15	2.020	51.31	1 3/8	1.375	34.93	•	•	•	•
5500-16-12	1	1-11 1/2	3/4-14	1.970	50.04	1.780	45.21	1 3/8	1.375	34.93	•	•	•	•
5500-16-16	1	1-11 1/2	1-11 1/2	1.970	50.04	1.970	50.04	1 3/8	1.375	34.93	•	•	•	•
5500-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	2.380	60.45	2.380	60.45	1 3/4	1.750	44.45	•	•	•	•
5500-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.640	67.06	2.640	67.06	2	2.000	50.80	•	•	•	•
5500-32-32	2	2-11 1/2	2-11 1/2	3.000	76.20	3.000	76.20	2 5/8	2.625	66.68	•	•	•	•

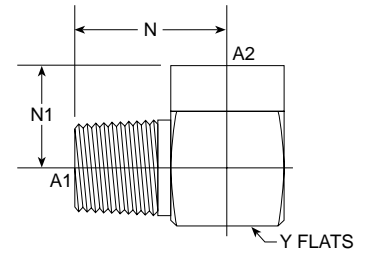
## MP-MP 45° 5501 Series



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	N LGTH	M.M.	N1 LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
5501-02-02	1/8	1/8-27	1/8-27	0.710	18.03	0.710	18.03	5/8	0.625	15.88	•	•	•	•
5501-04-04	1/4	1/4-18	1/4-18	0.840	21.34	0.840	21.34	5/8	0.625	15.88	•	•	•	•
5501-06-06	3/8	3/8-18	3/8-18	0.960	24.38	0.960	24.38	13/16	0.812	20.62	•	•	•	•
5501-08-08	1/2	1/2-14	1/2-14	1.170	29.72	1.170	29.72	15/16	0.937	23.80	•	•	•	•
5501-12-12	3/4	3/4-14	3/4-14	1.210	30.73	1.210	30.73	1 1/8	1.125	28.58	•	•	•	•
5501-16-16	1	1-11 1/2	1-11 1/2	1.560	39.62	1.560	39.62	1 3/8	1.375	34.93	•	•	•	•
5501-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1.620	41.15	1.620	41.15	1 3/4	1.750	44.45	•	•	•	•
5501-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1.770	44.96	1.770	44.96	2	2.000	50.80	•	•	•	•

# MP-FP 90° Street Elbow 5502 Series

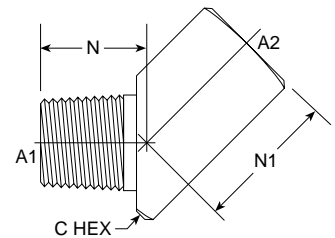
SAE # 140239



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	N LGTH	M.M.	N1 LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
5502-02-02	1/8	1/8-27	1/8-27	0.780	19.81	0.660	16.76	5/8	0.625	15.88	•	•	•	•
5502-02-04	1/8	1/8-27	1/4-18	0.910	23.11	0.880	22.35	3/4	0.750	19.05	•	•	•	•
5502-02-06	1/8	1/8-27	3/8-18	1.000	25.40	1.010	25.65	1	1.000	25.40	•	•	•	•
5502-04-02	1/4	1/4-18	1/8-27	1.090	27.69	0.670	17.02	5/8	0.625	15.88	•	•	•	•
5502-04-04	1/4	1/4-18	1/4-18	1.090	27.69	0.880	22.35	3/4	0.750	19.05	•	•	•	•
5502-04-06	1/4	1/4-18	3/8-18	1.220	30.99	1.020	25.91	7/8	0.875	22.23	•	•	•	•
5502-06-04	3/8	3/8-18	1/4-18	1.220	30.99	1.010	25.65	13/16	0.812	20.62	•	•	•	•
5502-06-06	3/8	3/8-18	3/8-18	1.220	30.99	1.020	25.91	7/8	0.875	22.23	•	•	•	•
5502-06-08	3/8	3/8-18	1/2-14	1.380	35.05	1.230	31.24	1 1/8	1.125	28.58	•	•	•	•
5502-08-04	1/2	1/2-14	1/4-18	1.470	37.34	0.960	24.38	15/16	0.937	23.80	•	•	•	•
5502-08-06	1/2	1/2-14	3/8-18	1.470	37.34	1.050	26.67	15/16	0.937	23.80	•	•	•	•
5502-08-08	1/2	1/2-14	1/2-14	1.470	37.34	1.230	31.24	1 1/8	1.125	28.58	•	•	•	•
5502-08-12	1/2	1/2-14	3/4-14	1.590	40.39	1.230	31.24	1 3/8	1.375	34.93	•	•	•	•
5502-12-06	3/4	3/4-14	3/8-18	1.590	40.39	1.120	28.45	1 1/8	1.125	28.58	•	•	•	•
5502-12-08	3/4	3/4-14	1/2-14	1.590	40.39	1.230	31.24	1 1/8	1.125	28.58	•	•	•	•
5502-12-12	3/4	3/4-14	3/4-14	1.590	40.39	1.360	34.54	1 3/8	1.375	34.93	•	•	•	•
5502-12-16	3/4	3/4-14	1-11 1/2	1.710	43.43	1.630	41.40	1 5/8	1.625	41.28	•	•	•	•
5502-16-12	1	1-11 1/2	3/4-14	1.840	46.74	1.370	34.80	1 3/8	1.375	34.93	•	•	•	•
5502-16-16	1	1-11 1/2	1-11 1/2	1.970	50.04	1.630	41.40	1 5/8	1.625	41.28	•	•	•	•
5502-16-20	1	1-11 1/2	1 1/4-11 1/2	2.160	54.86	1.720	43.69	2	2.000	50.80	•	•	•	•
5502-20-16	1 1/4	1 1/4-11 1/2	1-11 1/2	2.380	60.45	1.680	42.67	1 3/4	1.750	44.45	•	•	•	•
5502-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	2.380	60.45	1.700	43.18	2	2.000	50.80	•	•	•	•
5502-20-24	1 1/4	1 1/4-11 1/2	1 1/2-11 1/2	2.500	63.50	2.000	50.80	2 3/8	2.375	60.33	•	•	•	•
5502-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.640	67.06	2.080	52.83	2 3/8	2.375	60.33	•	•	•	•
5502-32-32	2	2-11 1/2	2-11 1/2	3.000	76.20	2.390	60.71	2 7/8	2.875	73.03	•	•	•	•

# MP-FP 45° Street Elbow 5503 Series

SAE # 140339

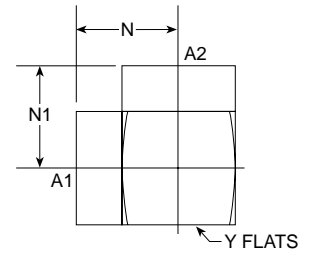


PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	N LGTH	M.M.	N1 LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
5503-02-02	1/8	1/8-27	1/8-27	0.720	18.29	0.470	11.94	5/8	0.625	15.88	•	•	•	•
5503-02-04	1/8	1/8-27	1/4-18	0.825	20.96	0.640	16.26	3/4	0.750	19.05	•	•	•	•
5503-04-04	1/4	1/4-18	1/4-18	1.050	26.67	0.630	16.00	3/4	0.750	19.05	•	•	•	•
5503-06-06	3/8	3/8-18	3/8-18	1.060	26.92	0.720	18.29	7/8	0.875	22.23	•	•	•	•
5503-08-08	1/2	1/2-14	1/2-14	1.340	34.04	0.910	23.11	1 1/8	1.125	28.58	•	•	•	•
5503-12-12	3/4	3/4-14	3/4-14	1.380	35.05	0.970	24.64	1 3/8	1.375	34.93	•	•	•	•
5503-16-16	1	1-11 1/2	1-11 1/2	1.720	43.69	1.130	28.70	1 5/8	1.625	41.28	•	•	•	•
5503-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1.800	45.72	1.630	41.40	2	2.000	50.80	•	•	•	•
5503-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.060	52.32	1.690	42.93	2 3/8	2.375	60.33	•	•	•	•

# Tube Fittings & Adapters

## FP-FP 90° Street Elbow 5504 Series

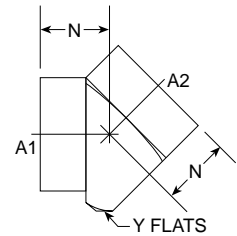
SAE # 140238



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	N LGTH	M.M.	N1 LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
5504-02-02	1/8	1/8-27	1/8-27	0.660	16.76	0.660	16.76	5/8	0.625	15.88	•	•	•	•
5504-04-02	1/4	1/4-18	1/8-27	0.880	22.35	0.720	18.29	3/4	0.750	19.05	•	•	•	•
5504-04-04	1/4	1/4-18	1/4-18	0.880	22.35	0.880	22.35	3/4	0.750	19.05	•	•	•	•
5504-06-04	3/8	3/8-18	1/4-18	1.020	25.91	0.940	23.88	7/8	0.875	22.23	•	•	•	•
5504-06-06	3/8	3/8-18	3/8-18	1.020	25.91	1.020	25.91	7/8	0.875	22.23	•	•	•	•
5504-08-04	1/2	1/2-14	1/4-18	1.230	31.24	1.070	27.18	1 1/8	1.125	28.58	•	•	•	•
5504-08-06	1/2	1/2-14	3/8-18	1.230	31.24	1.140	28.96	1 1/8	1.125	28.58	•	•	•	•
5504-08-08	1/2	1/2-14	1/2-14	1.230	31.24	1.230	31.24	1 1/8	1.125	28.58	•	•	•	•
5504-12-06	3/4	3/4-14	3/8-18	1.360	34.54	1.130	28.70	1 3/8	1.375	34.93	•	•	•	•
5504-12-08	3/4	3/4-14	1/2-14	1.230	31.24	1.230	31.24	1 3/8	1.375	34.93	•	•	•	•
5504-12-12	3/4	3/4-14	3/4-14	1.360	34.54	1.360	34.54	1 3/8	1.375	34.93	•	•	•	•
5504-16-08	1	1-11 1/2	1/2-14	1.620	41.15	1.530	38.86	1 3/4	1.750	44.45	•	•	•	•
5504-16-12	1	1-11 1/2	3/4-14	1.630	41.40	1.480	37.59	1 5/8	1.625	41.28	•	•	•	•
5504-16-16	1	1-11 1/2	1-11 1/2	1.630	41.40	1.630	41.40	1 5/8	1.625	41.28	•	•	•	•
NEW 5504-20-12											•	•	•	•
NEW 5504-20-16											•	•	•	•
5504-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1.700	43.18	1.700	43.18	2	2.000	50.80	•	•	•	•
NEW 5504-24-20											•	•	•	•
5504-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.080	52.83	2.080	52.83	2 3/8	2.375	60.33	•	•	•	•
5504-32-32	2	2-11 1/2	2-11 1/2	2.390	60.71	2.390	60.71	2 7/8	2.875	73.03	•	•	•	•

## FP-FP 45° 5505 Series

SAE # 140338

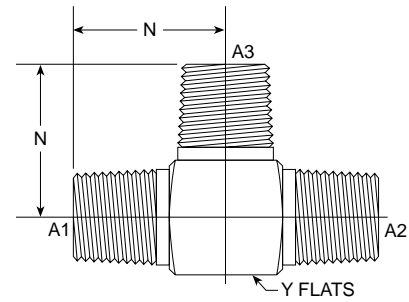


PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
									S	FG	SS	B
5505-02-02	1/8	1/8-27	1/8-27	0.510	12.95	5/8	0.625	15.88	•	•	•	•
5505-04-04	1/4	1/4-18	1/4-18	0.660	16.76	3/4	0.750	19.05	•	•	•	•
5505-06-06	3/8	3/8-18	3/8-18	0.810	20.57	7/8	0.875	22.23	•	•	•	•
5505-08-08	1/2	1/2-14	1/2-14	0.920	23.37	1 1/16	1.062	26.97	•	•	•	•
5505-12-12	3/4	3/4-14	3/4-14	0.920	23.37	1 3/8	1.375	34.93	•	•	•	•
5505-16-16	1	1-11 1/2	1-11 1/2	1.250	31.75	1 5/8	1.625	41.20	•	•	•	•
5505-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1.440	36.58	1 7/8	1.875	47.63	•	•	•	•



# MP-MP-MP Tee 5600 Series

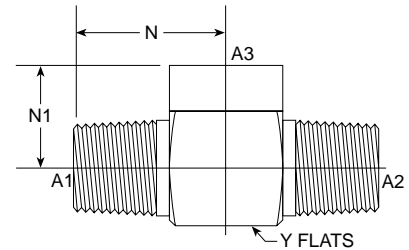
SAE # 140437  
(As coded per SAE J846)



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	A3 NPTF	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
										S	FG	SS	B
5600-02-02-02	1/8	1/8-27	1/8-27	1/8-27	0.780	19.81	1/2	0.500	12.70	•	•	•	
5600-04-04-04	1/4	1/4-18	1/4-18	1/4-18	1.090	27.69	5/8	0.625	15.88	•	•	•	
5600-06-06-06	3/8	3/8-18	3/8-18	3/8-18	1.220	30.99	13/16	0.812	20.62	•	•	•	
5600-08-08-08	1/2	1/2-14	1/2-14	1/2-14	1.470	37.34	15/16	0.937	23.80	•	•	•	
5600-12-12-12	3/4	3/4-14	3/4-14	3/4-14	1.590	40.39	1 1/8	1.125	28.58	•	•	•	
5600-16-16-16	1	1-11 1/2	1-11 1/2	1-11 1/2	1.970	50.04	1 3/8	1.375	34.93	•	•	•	
5600-20-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1 1/4-11 1/2	2.380	60.45	1 5/8	1.625	41.28		•		
5600-32-32-32	2	2-11 1/2	2-11 1/2	2-11 1/2	3.000	76.20	2 1/2	2.500	63.50		•		

# MP-MP-FP Tee 5601 Series

SAE # 140427  
(As coded per SAE J846)

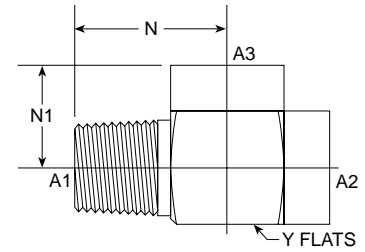


PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	A3 NPTF	N LGTH	M.M.	N1 LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
5601-02-02-02	1/8	1/8-27	1/8-27	1/8-27	.78	19.81	0.66	16.76	9/16	0.562	14.27	•	•	•	
5601-04-04-04	1/4	1/4-18	1/4-18	1/4-18	1.110	28.19	0.890	22.61	3/4	0.750	19.05	•	•	•	
5601-06-06-06	3/8	3/8-18	3/8-18	3/8-18	1.230	31.24	1.020	25.91	7/8	0.875	22.23	•	•	•	
5601-08-08-08	1/2	1/2-14	1/2-14	1/2-14	1.560	39.62	1.240	31.50	1 1/8	1.125	28.58	•	•	•	
5601-12-12-12	3/4	3/4-14	3/4-14	3/4-14	1.600	40.64	1.360	34.54	1 3/8	1.375	34.93	•	•	•	
5601-16-16-16	1	1-11 1/2	1-11 1/2	1-11 1/2	1.980	50.29	1.630	41.40	1 5/8	1.625	41.28	•	•	•	
5601-20-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1 1/4-11 1/2	2.370	60.20	1.690	42.93	2	2.000	50.80	•	•		
5601-24-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.620	66.55	2.130	54.10	2 1/2	2.500	63.50	•	•		

# Tube Fittings & Adapters

## MP-FP-FP Street Tee 5602 Series

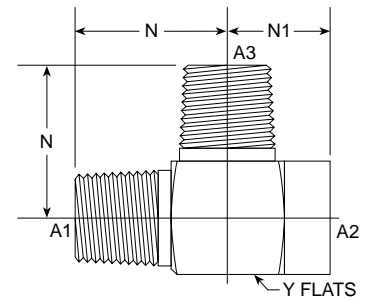
SAE # 140424



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	A3 NPTF	N LGTH	M.M.	N1 LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
5602-02-02-02	1/8	1/8-27	1/8-27	1/8-27	0.780	19.81	0.660	16.76	5/8	0.625	15.88	•	•	•	•
5602-02-04-04	1/8	1/8-27	1/4-18	1/4-18	0.900	22.86	0.880	22.35	3/4	0.750	19.05	•	•	•	•
5602-04-04-04	1/4	1/4-18	1/4-18	1/4-18	1.090	27.69	0.880	22.35	3/4	0.750	19.05	•	•	•	•
5602-06-06-06	3/8	3/8-18	3/8-18	3/8-18	1.220	30.99	1.020	25.91	7/8	0.875	22.23	•	•	•	•
5602-08-08-08	1/2	1/2-14	1/2-14	1/2-14	1.470	37.34	1.230	31.24	1 1/8	1.125	28.58	•	•	•	•
5602-12-12-12	3/4	3/4-14	3/4-14	3/4-14	1.590	40.39	1.360	34.54	1 3/8	1.375	34.93	•	•	•	•
5602-16-16-16	1	1-11 1/2	1-11 1/2	1-11 1/2	1.970	50.04	1.630	41.40	1 5/8	1.625	41.28	•	•	•	•
5602-20-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1 1/4-11 1/2	2.380	60.45	1.700	43.18	2	2.000	50.80	•	•	•	•
5602-24-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.640	67.06	2.080	52.83	2 3/8	2.375	60.33	•	•	•	•
5602-32-32-32	2	2-11 1/2	2-11 1/2	2-11 1/2	3.000	76.20	2.390	60.71	2 7/8	2.875	73.03	•	•	•	•

## MP-FP-MP Tee 5603 Series

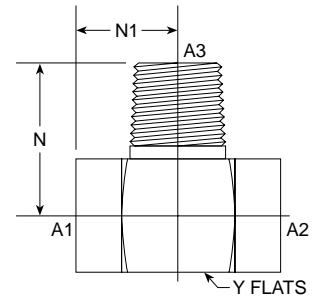
SAE # 140426  
(As coded per SAE J846)



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	A3 NPTF	N LGTH	M.M.	N1 LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
NEW 5603-02-02-02	1/8	1/8-27	1/8-27	1/8-27	0.780	19.81	0.660	16.76	5/8	0.625	15.88	•	•	•	•
5603-02-04-02	1/8	1/8-27	1/4-18	1/4-18	0.900	22.86	0.880	22.35	3/4	0.750	19.05	•	•	•	•
5603-04-04-04	1/4	1/4-18	1/4-18	1/4-18	1.090	27.69	0.880	22.35	3/4	0.750	19.05	•	•	•	•
5603-06-06-06	3/8	3/8-18	3/8-18	3/8-18	1.220	30.99	1.020	25.91	7/8	0.875	22.23	•	•	•	•
5603-08-08-08	1/2	1/2-14	1/2-14	1/2-14	1.470	37.34	1.230	31.24	1 1/8	1.125	28.58	•	•	•	•
NEW 5603-12-12-08	3/4	3/4-14	3/4-14	3/4-14	1.590	40.39	1.360	34.54	1 3/8	1.375	34.93	•	•	•	•
5603-12-12-12	1	1-11 1/2	1-11 1/2	1-11 1/2	1.970	50.04	1.630	41.40	1 5/8	1.625	41.28	•	•	•	•
5603-16-16-16	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1 1/4-11 1/2	2.380	60.45	1.700	43.18	2	2.000	50.80	•	•	•	•
5603-20-20-20	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.640	67.06	2.080	52.83	2 3/8	2.375	60.33	•	•	•	•

# FP-FP-MP Branch Tee 5604 Series

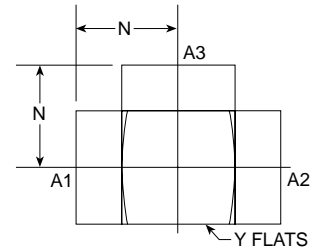
SAE # 140425



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	A3 NPTF	N LGTH M.M.	N1 LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
										S	FG	SS	B		
5604-02-02-02	1/8	1/8-27	1/8-27	1/8-27	0.780	19.81	0.660	16.76	5/8	0.625	15.88	•	•	•	•
5604-04-04-04	1/4	1/4-18	1/4-18	1/4-18	1.090	27.69	0.880	22.35	3/4	0.750	19.05	•	•	•	•
5604-06-06-06	3/8	3/8-18	3/8-18	3/8-18	1.220	30.99	1.020	25.91	7/8	0.875	22.23	•	•	•	•
5604-08-08-08	1/2	1/2-14	1/2-14	1/2-14	1.470	37.34	1.230	31.24	1 1/8	1.125	28.58	•	•	•	•
5604-12-12-08	3/4	3/4-14	3/4-14	1/2-14	1.690	42.93	1.370	34.80	1 3/8	1.375	34.93	•	•	•	•
5604-12-12-12	3/4	3/4-14	3/4-14	3/4-14	1.590	40.39	1.360	34.54	1 3/8	1.375	34.93	•	•	•	•
5604-16-16-16	1	1-11 1/2	1-11 1/2	1-11 1/2	1.970	50.04	1.630	41.40	1 5/8	1.625	41.28	•	•	•	•
5604-20-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1 1/4-11 1/2	2.380	60.45	1.700	43.18	2	2.000	50.80	•	•	•	•
5604-24-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.640	67.06	2.080	52.83	2 3/8	2.375	60.33	•	•	•	•

# FP-FP-FP Tee 5605 Series

SAE # 140438



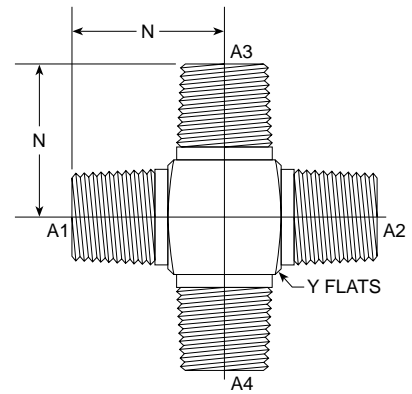
PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	A3 NPTF	N LGTH M.M.	N1 LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
										S	FG	SS	B
5605-02-02-02	1/8	1/8-27	1/8-27	1/8-27	0.660	16.76	5/8	0.625	15.88	•	•	•	•
5605-04-04-02	1/4	1/4-18	1/4-18	1/4-18	0.880	22.35	3/4	0.750	19.05	•	•	•	•
5605-04-04-04	1/4	1/4-18	1/4-18	3/8-18	1.220	30.99	7/8	0.875	22.23	•	•	•	•
5605-06-06-06	3/8	3/8-18	3/8-18	3/8-18	1.020	25.91	7/8	0.875	22.23	•	•	•	•
5605-06-06-08	3/8	3/8-18	3/8-18	1/2-14	1.140	28.96	1 1/8	1.125	28.58	•	•	•	•
5605-08-08-08	1/2	1/2-14	1/2-14	1/2-14	1.230	31.24	1 1/8	1.125	28.58	•	•	•	•
5605-12-12-12	3/4	3/4-14	3/4-14	3/4-14	1.360	34.54	1 3/8	1.375	34.93	•	•	•	•
5605-16-16-16	1	1-11 1/2	1-11 1/2	1-11 1/2	1.630	41.40	1 5/8	1.625	41.28	•	•	•	•
5605-20-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1 1/4-11 1/2	1.700	43.18	2	2.000	50.80	•	•	•	•
5605-24-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.080	52.83	2 3/8	2.375	60.33	•	•	•	•
5605-32-32-32	2	2-11 1/2	2-11 1/2	2-11 1/2	2.390	60.71	2 7/8	2.875	73.03	•	•	•	•

NEW

# Tube Fittings & Adapters

## MP-MP-MP-MP Cross 5650 Series

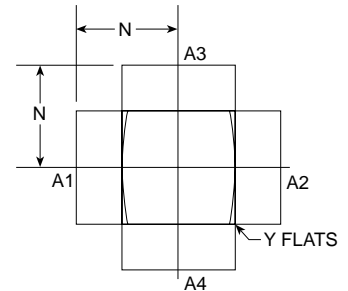
SAE # 140537  
(As coded per SAE J846)



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	A3 NPTF	A4 NPTF	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
5650-04-04-04-04	1/4	1/4-18	1/4-18	1/4-18	1/4-18	1.090	27.69	3/4	0.750	19.00	•			
5650-16-16-16-16	1	1-11 1/2	1-11 1/2	1-11 1/2	1-11 1/2	1.970	50.00	1 5/8	1.625	41.30			•	

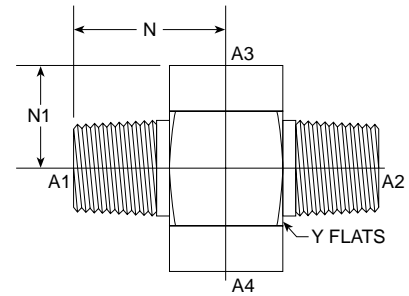
## FP-FP-FP-FP Cross 5652 Series

SAE # 140538  
(As coded per SAE J846)



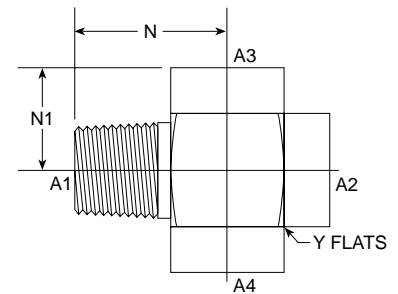
PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	A3 NPTF	A4 NPTF	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
5652-02-02-02-02	1/8	1/8-27	1/8-27	1/8-27	1/8-27	0.660	16.76	5/8	0.625	15.88	•	•	•	
5652-04-04-04-04	1/4	1/4-18	1/4-18	1/4-18	1/4-18	0.880	22.35	3/4	0.750	19.05	•	•	•	
5652-06-06-06-06	3/8	3/8-18	3/8-18	3/8-18	3/8-18	1.020	25.91	7/8	0.875	22.23	•	•	•	
5652-08-08-08-08	1/2	1/2-14	1/2-14	1/2-14	1/2-14	1.230	31.24	1 1/8	1.125	28.58	•	•	•	
5652-12-12-12-12	3/4	3/4-14	3/4-14	3/4-14	3/4-14	1.360	34.54	1 3/8	1.375	34.93	•	•	•	
5652-16-16-16-16	1	1-11 1/2	1-11 1/2	1-11 1/2	1-11 1/2	1.630	41.40	1 5/8	1.625	41.28	•	•	•	
5652-20-20-20-20	1 1/4	1 1/4-11 1/2	1 1/4-11 1/2	1 1/4-11 1/2	1 1/4-11 1/2	1.700	43.18	2	2.000	50.80	•	•	•	
5652-24-24-24-24	1 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1 1/2-11 1/2	1 1/2-11 1/2	2.080	52.83	2 3/8	2.375	60.33	•		•	
5652-32-32-32-32	2	2-11 1/2	2-11 1/2	2-11 1/2	2-11 1/2	2.390	60.71	2 7/8	2.875	73.03	•		•	

# MP-MP-FP-FP Cross 5653 Series



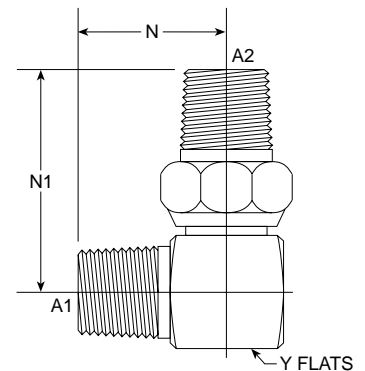
PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	A3 NPTF	A4 NPTF	N LGTH M.M.	N1 LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
											S	FG	SS	B		
5653-04-04-04-04	1/4	1/4-18	1/4-18	1/4-18	1/4-18	1.170	29.72	0.880	22.35	7/8	0.875	22.23	•			
5653-06-06-06-06	3/8	3/8-18	3/8-18	3/8-18	3/8-18	1.22	30.99	1.02	25.91	7/8	0.875	22.23	•	•		

# MP-FP-FP-FP Cross 5655 Series



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	A3 NPTF	A4 NPTF	N LGTH M.M.	N1 LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
											S	FG	SS	B		
5655-04-04-04-04	1/4	1/4-18	1/4-18	1/4-18	1/4-18	1.070	27.18	0.880	22.35	3/4	0.750	19.05	•			
5655-06-06-06-06	3/8	3/8-18	3/8-18	3/8-18	3/8-18	1.220	30.99	1.020	25.91	7/8	0.875	22.23	•			
5655-08-08-08-08	1/2	1/2-14	1/2-14	1/2-14	1/2-14	1.470	37.34	1.240	31.50	1 1/8	1.125	28.58	•			
5655-12-12-12-12	3/4	3/4-14	3/4-14	3/4-14	3/4-14	1.580	40.13	1.370	34.80	1 3/8	1.375	34.93	•		•	
5655-16-16-16-16	1	1-11 1/2	1-11 1/2	1-11 1/2	1-11 1/2	1.97	50.04	1.63	41.40	1 5/8	1.625	41.28	•	•		

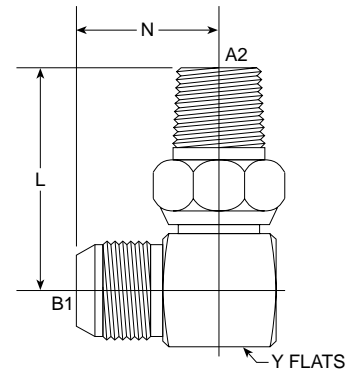
# MP-MPS 90° 5700 Series



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	N LGTH M.M.	N1 LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
									S	FG	SS	B		
5700-04-04	1/4	1/4-18	1/4-18	1.070	27.18	1.155	29.34	5/8	0.625	15.88	•			
5700-06-06	3/8	9/16-18	3/8-18	1.220	30.99	1.640	41.66	3/4	0.750	19.05	•	•		
5700-08-08	1/2	1/2-14	1/2-14	1.490	37.85	2.000	50.80	7/8	0.875	22.23	•	•		
5700-12-12	3/4	1 1/16-12	3/4-14	1.520	38.61	2.140	54.36	1 1/8	1.125	28.58	•			

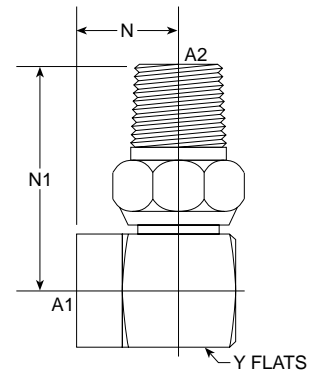
# Tube Fittings & Adapters

## MJ-MPS 90° 5701 Series



PART NO. SIZE	PIPE O.D.	B1 NPTF	A2 NPTF	L LGTH	M.M.	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
5701-06-04	3/8	9/16-18	1/4-18	1.080	27.43	1.590	40.39	11/16	0.687	17.45	•			
5701-06-06	3/8	9/16-18	3/8-18	1.140	28.96	1.660	42.16	11/16	0.687	17.45	•			
5701-08-06	1/2	3/4-16	3/8-18	1.260	32.00	1.660	42.16	13/16	0.812	20.62	•	•		
5701-08-08	1/2	3/4-16	1/2-14	1.250	31.75	1.800	45.72	13/16	0.812	20.62	•			
5701-10-08	5/8	7/8-14	1/2-14	1.470	37.34	2.000	50.80	1	1.000	25.40	•	•		
5701-12-12	3/4	1 1/16-12	3/4-14	1.670	42.42	2.140	54.36	1 1/8	1.125	28.58	•			

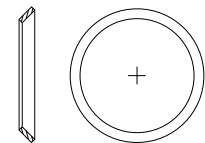
## FP-MPS 90° 5702 Series



PART NO. SIZE	PIPE O.D.	A1 NPTF	A2 NPTF	N LGTH	M.M.	N1 LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
5702-04-04	1/4	1/4-18	1/4-18	0.890	22.61	1.590	40.39	3/4	0.750	19.05		•		
5702-06-06	3/8	3/8-18	3/8-18	1.030	26.16	1.700	43.18	7/8	0.875	22.23		•		
5702-08-08	1/2	1/2-14	1/2-14	1.240	31.50	2.010	51.05	1 1/16	1.125	28.58		•		
5702-12-12	3/4	3/4-14	3/4-14	1.370	34.80	2.250	57.15	1 3/8	1.375	34.93		•		

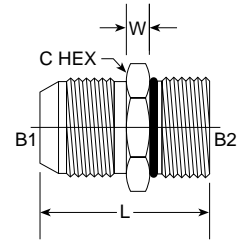
PART NO. SIZE	TUBE O.D.	Standard Material From Stock			
		S	FG	SS	B
6000-02	1/8	•		•	
6000-03	3/16	•		•	
6000-04	1/4	•		•	
6000-05	5/16	•		•	
6000-06	3/8	•		•	
6000-08	1/2	•		•	
6000-10	5/8	•		•	
6000-12	3/4	•		•	
6000-14	7/8	•		•	
6000-16	1	•		•	
6000-20	1 1/4	•		•	
6000-24	1 1/2	•		•	
6000-32	2	•		•	

## Back-Up Washer 6000 Series



# MJ-MORB Straight 6400-O Series

SAE# 070120 / MS# 51525



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE ORB	L LGTH	M.M.	W WIDTH	C HEX	C HEX	M.M.	Standard Material From Stock			
										S	FG	SS	B
6400-02-02-O	1/8	5/16-24	5/16-24	1.060	26.92	0.316	7/16	0.438	11.13	•			
6400-03-02-O	3/16	3/8-24	5/16-24	1.110	28.19	0.320	7/16	0.438	11.13	•			
6400-03-03-O	3/16	3/8-24	3/8-24	1.110	28.19	0.320	1/2	0.500	12.70	•			
6400-04-02-O	1/4	7/16-20	5/16-24	1.130	28.70	0.280	1/2	0.500	12.70	•			
6400-04-03-O	1/4	7/16-20	3/8-24	1.170	29.72	0.320	1/2	0.500	12.70	•			
6400-04-04-O	1/4	7/16-20	7/16-20	1.230	31.24	0.281	9/16	0.562	14.27	•			
6400-04-05-O	1/4	7/16-20	1/2-20	1.230	31.24	0.281	5/8	0.625	15.88	•			
6400-04-06-O	1/4	7/16-20	9/16-18	1.300	33.02	0.312	11/16	0.687	17.45	•			
6400-04-08-O	1/4	7/16-20	3/4-16	1.370	34.80	0.343	7/8	0.875	22.23	•			
6400-04-10-O	1/4	7/16-20	7/8-14	1.490	37.85	0.420	1	1.000	25.40	•			
6400-04-12-O	1/4	7/16-20	1 1/16-12	1.650	41.91	0.510	1 1/4	1.250	31.75	•			
6400-05-04-O	5/16	1/2-20	7/16-20	1.240	31.50	0.281	9/16	0.562	14.27	•			
6400-05-05-O	5/16	1/2-20	1/2-20	1.210	30.73	0.281	5/8	0.625	15.88	•			
6400-05-06-O	5/16	1/2-20	9/16-18	1.360	34.54	0.312	11/16	0.687	17.45	•			
6400-05-08-O	5/16	1/2-20	3/4-16	1.370	34.80	0.380	7/8	0.875	22.23	•			
6400-05-10-O	5/16	1/2-20	7/8-14	1.540	39.12	0.470	1	1.000	25.40	•			
6400-06-03-O	3/8	9/16-18	3/8-24	1.212	30.78	0.340	5/8	0.625	15.88	•			
6400-06-04-O	3/8	9/16-18	7/16-20	1.330	33.78	0.312	5/8	0.625	15.88	•			
6400-06-05-O	3/8	9/16-18	1/2-20	1.290	32.77	0.312	5/8	0.625	15.88	•			
6400-06-06-O	3/8	9/16-18	9/16-18	1.300	33.02	0.312	11/16	0.687	17.45	•			
6400-06-08-O	3/8	9/16-18	3/4-16	1.375	34.93	0.343	7/8	0.875	22.23	•			
6400-06-10-O	3/8	9/16-18	7/8-14	1.500	38.10	0.406	1	1.000	25.40	•			
6400-06-12-O	3/8	9/16-18	1 1/16-12	1.650	41.91	0.500	1 1/4	1.250	31.75	•			
6400-06-16-O	3/8	9/16-18	1 5/16-12	1.690	42.93	0.530	1 1/2	1.500	38.10	•			
6400-08-04-O	1/2	3/4-16	7/16-20	1.490	37.85	0.350	13/16	0.812	20.62	•			
6400-08-05-O	1/2	3/4-16	1/2-20	1.520	38.61	0.410	13/16	0.812	20.62	•			
6400-08-06-O	1/2	3/4-16	9/16-18	1.450	36.83	0.343	13/16	0.812	20.62	•			
6400-08-08-O	1/2	3/4-16	3/4-16	1.490	37.85	0.343	7/8	0.875	22.23	•			
6400-08-10-O	1/2	3/4-16	7/8-14	1.590	40.39	0.406	1	1.000	25.40	•			
6400-08-12-O	1/2	3/4-16	1 1/16-12	1.770	44.96	0.468	1 1/4	1.250	31.75	•			
6400-08-14-O	1/2	3/4-16	1 3/16-12	1.770	44.96	0.510	1 3/8	1.375	34.93	•			
6400-08-16-O	1/2	3/4-16	1 5/16-12	1.760	44.70	0.500	1 1/2	1.500	38.10	•			
6400-10-04-O	5/8	7/8-14	7/16-20	1.680	42.67	0.410	15/16	0.937	23.80	•			
6400-10-06-O	5/8	7/8-14	9/16-18	1.690	42.93	0.430	15/16	0.937	23.80	•			
6400-10-08-O	5/8	7/8-14	3/4-16	1.670	42.42	0.406	15/16	0.937	23.80	•			
6400-10-10-O	5/8	7/8-14	7/8-14	1.700	43.18	0.406	1	1.000	25.40	•			
6400-10-12-O	5/8	7/8-14	1 1/16-12	1.860	47.24	0.468	1 1/4	1.250	31.75	•			
6400-10-14-O	5/8	7/8-14	1 3/16-12	1.860	47.24	0.500	1 3/8	1.375	34.93	•			
6400-10-16-O	5/8	7/8-14	1 5/16-12	1.890	48.01	0.500	1 1/2	1.500	38.10	•			
6400-10-20-O	5/8	7/8-14	1 5/8-12	1.960	49.78	0.610	1 7/8	1.875	47.63	•			
6400-12-06-O	3/4	1 1/16-12	9/16-18	1.860	47.24	0.520	1 1/8	1.125	28.58	•			
6400-12-08-O	3/4	1 1/16-12	3/4-16	1.840	46.74	0.468	1 1/8	1.125	28.58	•			
6400-12-10-O	3/4	1 1/16-12	7/8-14	1.910	48.51	0.468	1 1/8	1.125	28.58	•			
6400-12-12-O	3/4	1 1/16-12	1 1/16-12	1.970	50.04	0.468	1 1/4	1.250	31.75	•			
6400-12-14-O	3/4	1 1/16-12	1 3/16-12	1.970	50.04	0.470	1 3/8	1.375	34.93	•			
6400-12-16-O	3/4	1 1/16-12	1 5/16-12	1.980	50.29	0.500	1 1/2	1.500	38.10	•			
6400-12-20-O	3/4	1 1/16-12	1 5/8-12	2.080	52.83	0.578	1 7/8	1.875	47.63	•			
<b>NEW</b> 6400-12-24-O										•			
6400-14-08-O	7/8	1 3/16-12	3/4-16	1.896	48.16	0.445	1 1/4	1.250	31.75	•			
6400-14-10-O	7/8	1 3/16-12	7/8-14	1.950	49.53	0.430	1 1/4	1.250	31.75	•			
6400-14-12-O	7/8	1 3/16-12	1 1/16-12	1.980	50.29	0.500	1 1/4	1.250	31.75	•			
6400-14-14-O	7/8	1 3/16-12	1 3/16-12	1.980	50.29	0.468	1 3/8	1.375	34.93	•			
6400-14-16-O	7/8	1 3/16-12	1 5/16-12	2.020	51.31	0.530	1 1/2	1.500	38.10	•			
6400-16-06-O	1	1 5/16-12	9/16-18	1.850	46.99	0.450	1 3/8	1.375	34.93	•			

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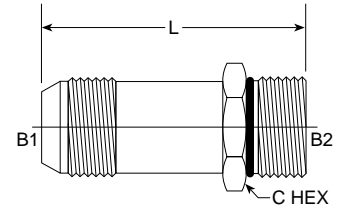
# Tube Fittings & Adapters

## 6400-O Series *continued*

PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE ORB	L LGTH	M.M.	W WIDTH	C HEX	C HEX	M.M.	Standard Material From Stock			
										S	FG	SS	B
6400-16-08-O	1	1 5/16-12	3/4-16	1.890	48.01	0.410	1 3/8	1.375	34.93	•		•	
6400-16-10-O	1	1 5/16-12	7/8-14	1.950	49.53	0.500	1 3/8	1.375	34.93	•		•	
6400-16-12-O	1	1 5/16-12	1 1/16-12	2.050	52.07	0.500	1 3/8	1.375	34.93	•		•	
6400-16-14-O	1	1 5/16-12	1 3/16-12	2.040	51.82	0.540	1 3/8	1.375	34.93	•		•	
6400-16-16-O	1	1 5/16-12	1 5/16-12	2.050	52.07	0.500	1 1/2	1.500	38.10	•		•	
6400-16-20-O	1	1 5/16-12	1 5/8-12	2.130	54.10	0.578	1 7/8	1.875	47.63	•		•	
6400-16-24-O	1	1 5/16-12	1 7/8-12	2.220	56.39	0.690	2 1/8	2.125	53.98	•		•	
6400-20-12-O	1 1/4	1 5/8-12	1 1/16-12	2.300	58.42	0.610	1 11/16	1.688	42.86	•		•	
6400-20-16-O	1 1/4	1 5/8-12	1 5/16-12	2.200	55.88	0.578	1 11/16	1.688	42.86	•		•	
6400-20-20-O	1 1/4	1 5/8-12	1 5/8-12	2.170	55.12	0.578	1 7/8	1.875	47.63	•		•	
6400-20-24-O	1 1/4	1 5/8-12	1 7/8-12	2.250	57.15	0.656	2 1/8	2.125	53.98	•		•	
NEW 6400-20-40-O										•			
6400-24-20-O	1 1/2	1 7/8-12	1 5/8-12	2.340	59.44	0.540	2	2.000	50.80	•		•	
6400-24-24-O	1 1/2	1 7/8-12	1 7/8-12	2.380	60.45	0.656	2 1/8	2.125	53.98	•		•	
6400-24-32-O	1 1/2	1 7/8-12	2 1/2-12	2.530	64.26	0.812	2 3/4	2.750	69.85	•		•	
6400-32-24-O	2	2 1/2-12	1 7/8-12	2.810	71.37	0.812	2 5/8	2.625	66.68	•		•	
6400-32-32-O	2	2 1/2-12	2 1/2-12	2.780	70.61	0.812	2 3/4	2.750	69.85	•		•	
NEW 6400-32-40-O										•			

## MJ-MORB Straight Long 6400-L-O Series

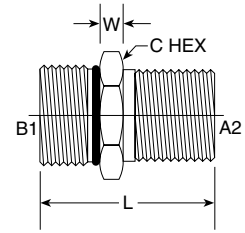
SAE# 070122 / MS# 51526



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE ORB	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
									S	FG	SS	B
6400-L-04-04-O	1/4	7/16-20	7/16-20	2.080	52.83	9/16	0.562	14.27	•		•	
6400-L-05-05-O	5/16	1/2-20	1/2-20	2.140	54.36	5/8	0.625	15.88	•		•	
6400-L-06-06-O	3/8	9/16-18	9/16-18	2.310	58.67	11/16	0.687	17.45	•		•	
6400-L-06-08-O	3/8	9/16-18	3/4-16	2.380	60.45	7/8	0.875	22.23	•		•	
6400-L-08-08-O	1/2	3/4-16	3/4-16	2.700	68.58	7/8	0.875	22.23	•		•	
6400-L-08-10-O	1/2	3/4-16	7/8-14	2.810	71.37	1	1.000	25.40	•		•	
6400-L-10-10-O	5/8	7/8-14	7/8-14	3.040	77.22	1	1.000	25.40	•		•	
6400-L-10-16-O	5/8	7/8-14	1 5/16-12	3.210	81.53	1 1/2	1.500	38.10	•		•	
6400-L-12-12-O	3/4	1 1/16-12	1 1/16-12	3.610	91.69	1 1/4	1.250	31.75	•		•	
6400-L-12-16-O	3/4	1 1/16-12	1 5/16-12	3.610	91.69	1 1/2	1.500	38.10	•		•	
6400-L-14-14-O	7/8	1 3/16-12	1 3/16-12	3.800	96.52	1 3/8	1.375	34.93	•		•	
6400-L-16-16-O	1	1 5/16-12	1 5/16-12	3.980	101.09	1 1/2	1.500	38.10	•		•	
6400-L-20-20-O	1 1/4	1 5/8-12	1 5/8-12	4.690	119.13	1 7/8	1.875	47.63	•		•	
NEW 6400-L-24-24-O									•			



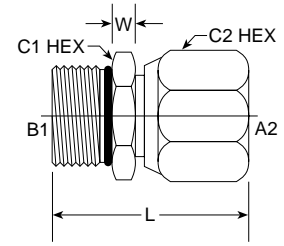
# MORB-MP Straight 6401-O Series



PART NO. SIZE	TUBE SIZE	B1 ORB	A2 NPTF	L LGTH	M.M.	W WIDTH	C HEX	C HEX	M.M.	Standard Material From Stock			
										S	FG	SS	B
<b>NEW</b> <b>NEW</b> 6401-02-02-O										•			
6401-03-02-O										•			
6401-04-02-O	1/4	7/16-20	1/8-27	1.070	27.18	0.280	9/16	0.562	14.27	•			
6401-04-04-O	1/4	7/16-20	1/4-18	1.230	31.24	0.310	9/16	0.562	14.27	•		•	
6401-05-02-O	5/16	1/2-20	1/8-27	1.050	26.67	0.290	5/8	0.625	15.88	•			
6401-05-04-O	5/16	1/2-20	1/8-27	1.152	29.26	0.210	5/8	0.625	15.88	•		•	
6401-06-02-O	3/8	9/16-18	1/8-27	1.110	28.19	0.340	11/16	0.687	17.45	•			
6401-06-04-O	3/8	9/16-18	1/4-18	1.290	32.77	0.310	11/16	0.687	17.45	•		•	
6401-06-06-O	3/8	9/16-18	3/8-18	1.300	33.02	0.330	11/16	0.687	17.45	•		•	
6401-06-08-O	3/8	9/16-18	1/2-14	1.390	35.31	0.240	7/8	0.875	22.23	•		•	
6401-08-04-O	1/2	3/4-16	1/4-18	1.240	31.50	0.240	7/8	0.875	22.23	•		•	
6401-08-06-O	1/2	3/4-16	3/8-18	1.360	34.54	0.340	7/8	0.875	22.23	•		•	
6401-08-08-O	1/2	3/4-16	1/2-14	1.550	39.37	0.410	7/8	0.875	22.23	•		•	
6401-08-12-O	1/2	3/4-16	3/4-14	1.590	40.39	0.260	1 1/8	1.125	28.58	•		•	
6401-10-04-O	5/8	7/8-14	1/4-18	1.450	36.83	0.400	1	1.000	25.40	•			
6401-10-06-O	5/8	7/8-14	3/8-18	1.560	39.62	0.450	1	1.000	25.40	•			
6401-10-08-O	5/8	7/8-14	1/2-14	1.690	42.93	0.410	1	1.000	25.40	•		•	
6401-10-12-O	5/8	7/8-14	3/4-14	1.770	44.96	0.410	1 1/8	1.125	28.58	•		•	
6401-12-06-O	3/4	1 1/16-12	3/8-18	1.680	42.67	0.500	1 1/4	1.250	31.75	•			
6401-12-08-O	3/4	1 1/16-12	1/2-14	1.840	46.74	0.500	1 1/4	1.250	31.75	•		•	
6401-12-12-O	3/4	1 1/16-12	3/4-14	1.730	43.94	0.380	1 1/4	1.250	31.75	•		•	
6401-12-16-O	3/4	1 1/16-12	1-11 1/2	2.120	53.85	0.460	1 3/8	1.375	34.93	•		•	
6401-14-12-O	7/8	1 3/16-12	3/4-14	1.850	46.99	0.490	1 3/8	1.375	34.93	•			
6401-14-16-O	7/8	1 3/16-12	1-11 1/2	1.980	50.29	0.440	1 3/8	1.375	34.93	•			
6401-16-12-O	1	1 5/16-12	3/4-14	2.070	52.58	0.540	1 1/2	1.500	38.10	•		•	
6401-16-16-O	1	1 5/16-12	1-11 1/2	1.900	48.26	0.500	1 1/2	1.500	38.10	•		•	
6401-16-20-O	1	1 5/16-12	1 1/4-11 1/2	2.340	59.44	0.540	1 3/4	1.750	44.45	•			
6401-20-12-O	1 1/4	1 5/8-12	3/4-14	1.900	48.26	0.540	1 7/8	1.875	47.63	•			
<b>NEW</b> 6401-20-16-O										•			
6401-20-20-O	1 1/4	1 5/8-12	1 1/4-11 1/2	2.170	55.12	0.580	1 7/8	1.875	47.63	•		•	
6401-20-24-O	1 1/4	1 5/8-12	1 1/2-11 1/2	2.277	57.84	0.675	2	2.000	50.80	•		•	
6401-24-16-O	1 1/2	1 7/8-12	1-11 1/2	2.210	56.13	0.670	2 1/8	2.125	53.98	•			
6401-24-16-O	1 1/2	1 7/8-12	1-11 1/2	2.220	56.39	0.670	2 1/8	2.125	53.98	•			
6401-24-20-O	1 1/2	1 7/8-12	1 1/4-11 1/2	2.250	57.15	0.670	2 1/8	2.125	53.98	•			
6401-24-24-O	1 1/2	1 7/8-12	1 1/2-11 1/2	2.280	57.91	0.650	2 1/8	2.125	53.98	•		•	
6401-32-32-O	2	2 1/2-12	2-11 1/2	2.480	62.99	0.810	2 3/4	2.750	69.85	•		•	

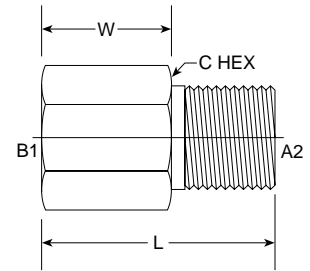
# Tube Fittings & Adapters

## MORB-FJS Straight 6402-O Series



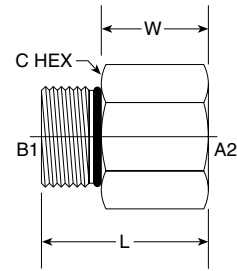
PART NO. SIZE	TUBE O.D.	B1 SAE ORB	B2 JIC	L		W	C1 HEX	C1 HEX	C2 HEX	C1 HEX	M.M.	Standard Material From Stock				
				LGTH	M.M.							S	FG	SS	B	
6402-04-04-O	1/4	7/16-20	7/16-20	1.470	37.34	0.330	9/16	0.562	14.27	9/16	0.562	14.27	•		•	
6402-04-06-O	1/4	7/16-20	9/16-18	1.410	35.81	0.330	9/16	0.562	14.27	9/16	0.562	14.27	•		•	
6402-06-04-O	3/8	9/16-18	7/16-20	1.350	34.29	0.330	11/16	0.687	17.45	9/16	0.562	14.27	•		•	
6402-06-06-O	3/8	9/16-18	9/16-18	1.480	37.59	0.330	11/16	0.687	17.45	11/16	0.687	17.45	•		•	
6402-06-08-O	1/2	9/16-18	3/4-16	1.620	41.15	0.390	11/16	0.687	17.45	11/16	0.687	17.45	•		•	
6402-08-08-O	1/2	3/4-16	3/4-16	1.600	40.64	0.350	7/8	0.875	22.23	7/8	0.875	22.23	•		•	
6402-10-08-O	5/8	7/8-14	3/4-16	1.705	43.31	0.410	1	1.00	25.40	7/8	0.875	22.23	•		•	
6402-10-10-O	5/8	7/8-14	7/8-14	1.970	50.04	0.430	1	1.000	25.40	1	1.000	25.40	•		•	
6402-12-12-O	3/4	1 1/16-12	1 1/16-12	2.160	54.86	0.500	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
6402-16-16-O	1	1 5/16-12	1 5/16-12	2.280	57.91	0.520	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•		•	
6402-20-20-O	1 1/4	1 5/8-12	1 5/8-12	2.415	61.34	0.600	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•		•	
6402-24-24-O	1 1/2	1 7/8-12	1 1/2-11 1/2	2.610	66.29	0.690	2 1/8	2.125	53.98	2 1/8	2.125	53.98	•		•	
6402-32-32-O	2	2 1/2-12	2-11 1/2	2.905	73.79	0.845	2 3/4	2.75	69.85	2 7/8	2.875	73.03	•		•	

## FORB-MP Straight 6404 Series



PART NO. SIZE	TUBE O.D.	B1 SAE ORB	A2 NPTF	L		W	C HEX	C HEX	M.M.	Standard Material From Stock			
				LGTH	M.M.					S	FG	SS	B
NEW 6404-03-06										•			
6404-04-02	1/4	7/16-20	1/8-27	1.130	28.70	1.000	11/16	0.687	17.45	•		•	
6404-04-04	1/4	7/16-20	1/4-18	1.320	33.53	0.750	11/16	0.687	17.45	•		•	
6404-04-06	1/4	7/16-20	3/8-18	1.130	28.70	1.000	11/16	0.687	17.45	•		•	
6404-05-02	5/16	1/2-20	1/8-27	1.370	34.80	0.800	3/4	0.750	19.05	•		•	
6404-05-04	5/16	1/2-20	1/4-18	1.390	35.31	0.800	3/4	0.750	19.05	•		•	
6404-05-06	5/16	1/2-20	3/8-18	1.380	35.05	0.800	3/4	0.750	19.05	•		•	
6404-06-04	3/8	9/16-18	1/4-18	1.390	35.31	0.984	7/8	0.875	22.23	•		•	
6404-06-06	3/8	9/16-18	3/8-18	1.395	35.43	0.800	7/8	0.875	22.23	•		•	
6404-06-08	3/8	9/16-18	1/2-14	1.420	36.07	0.650	7/8	0.875	22.23	•		•	
NEW 6404-08-04										•			
6404-08-06	1/2	3/4-16	3/8-18	1.500	38.10	0.937	1	1.000	25.40	•		•	
6404-08-08	1/2	3/4-16	1/2-14	1.700	43.18	0.937	1	1.000	25.40	•		•	
6404-08-12	1/2	3/4-16	3/4-14	1.690	42.93	0.930	1 1/8	1.125	28.58	•		•	
6404-10-06	5/8	7/8-14	3/8-18	1.620	41.15	1.060	1 1/4	1.250	31.75	•		•	
6404-10-08	5/8	7/8-14	1/2-14	1.820	46.23	1.062	1 1/4	1.250	31.75	•		•	
6404-10-12	5/8	7/8-14	3/4-14	1.720	43.69	0.960	1 1/8	1.125	28.58	•		•	
6404-12-08	3/4	1 1/16-12	1/2-14	1.960	49.78	1.210	1 3/8	1.375	34.93	•		•	
6404-12-12	3/4	1 1/16-12	3/4-14	1.960	49.78	1.218	1 3/8	1.375	34.93	•		•	
6404-14-12	7/8	1 3/16-12	3/4-14	2.040	51.82	1.218	1 1/2	1.500	38.10	•		•	
6404-16-12	1	1 5/16-12	3/4-14	2.060	52.32	1.300	1 5/8	1.625	41.28	•		•	
6404-16-16	1	1 5/16-12	1-11 1/2	2.220	56.39	1.218	1 5/8	1.625	41.28	•		•	
6404-16-20	1	1 5/16-12	1 1/4-11 1/2	1.900	48.26	0.930	2	2.000	50.80	•		•	
6404-16-24	1 1/4	1 5/16-12	1 1/2-11 1/2	1.9	48.26	.906	2	2.00	50.80	•		•	
6404-20-16	1 1/4	1 5/8-12	1-11 1/2	2.210	56.13	1.250	2	2.000	50.80	•		•	
6404-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	2.340	59.44	1.281	2 1/8	2.125	53.98	•		•	
6404-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	2.300	58.42	1.281	2 1/4	2.250	57.15	•		•	
6404-32-32	2	2 1/2-12	2-11 1/2	2.660	67.56	1.281	2 7/8	2.875	73.03	•		•	

# MORB-FP Straight 6405-O Series

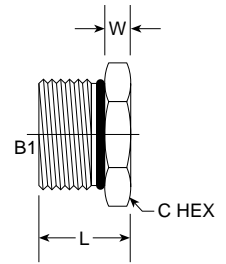


PART NO. SIZE	TUBE O.D.	B1 SAE ORB	A2 NPTF	L LGTH	M.M.	W WIDTH	C HEX	C HEX	M.M.	Standard Material From Stock			
										S	FG	SS	B
6405-02-02-O	1/8	5/16-24	1/8-27	0.882	22.40	0.585	5/8	0.625	15.88	•			
6405-02-04-O	1/8	5/16-24	1/4-18	1.230	31.24	0.847	3/4	0.750	19.05	•			
6405-03-04-O	3/16	3/8-24	1/4-18	1.213	30.81	0.810	3/4	0.750	19.06	•			
6405-04-02-O	1/4	7/16-20	1/8-27	0.968	24.59	0.609	9/16	0.562	14.27	•			
6405-04-04-O	1/4	7/16-20	1/4-18	1.156	29.36	0.703	3/4	0.750	19.05	•		•	
6405-04-06-O	1/4	7/16-20	3/8-18	1.210	30.73	0.770	7/8	0.875	22.23	•		•	
6405-05-02-O	5/16	1/2-20	1/8-27	0.937	23.80	0.640	5/8	0.625	15.88	•		•	
6405-05-04-O	5/16	1/2-20	1/4-18	1.160	29.46	0.720	3/4	0.750	19.05	•		•	
6405-05-06-O	5/16	1/2-20	3/8-18	1.340	34.04	0.880	7/8	0.875	22.23	•		•	
6405-06-02-O	3/8	9/16-18	1/8-27	0.730	18.54	0.330	11/16	0.687	17.45	•			
6405-06-04-O	3/8	9/16-18	1/4-18	1.150	29.21	0.890	3/4	0.750	19.05	•		•	
6405-06-06-O	3/8	9/16-18	3/8-18	1.160	29.46	0.672	7/8	0.875	22.23	•		•	
6405-06-08-O	3/8	9/16-18	1/2-14	1.400	35.56	0.910	1 1/8	1.125	28.58	•		•	
6405-08-02-O	1/2	3/4-16	1/8-27	0.810	20.57	0.370	7/8	0.875	22.23	•		•	
6405-08-04-O	1/2	3/4-16	1/4-18	1.160	29.46	0.730	7/8	0.875	22.23	•		•	
6405-08-06-O	1/2	3/4-16	3/8-18	1.280	32.51	0.875	7/8	0.875	22.23	•		•	
6405-08-08-O	1/2	3/4-16	1/2-14	1.440	36.58	0.900	1 1/8	1.125	28.58	•		•	
6405-08-12-O	1/2	3/4-16	3/4-14	1.540	39.12	0.950	1 3/8	1.375	34.93	•		•	
6405-10-04-O	5/8	7/8-14	1/4-18	0.810	20.57	0.320	1	1.000	25.40	•		•	
6405-10-06-O	5/8	7/8-14	3/8-18	1.550	39.37	0.900	1 1/8	1.125	28.58	•		•	
6405-10-08-O	5/8	7/8-14	1/2-14	1.546	39.27	0.921	1 1/8	1.125	28.58	•		•	
6405-10-12-O	5/8	7/8-14	3/4-14	1.660	42.16	1.010	1 3/8	1.375	34.93	•		•	
6405-12-04-O	3/4	1 1/16-12	1/4-18	1.090	27.69	0.500	1 1/4	1.250	31.75	•		•	
6405-12-06-O	3/4	1 1/16-12	3/8-18	1.090	27.69	0.470	1 1/4	1.250	31.75	•		•	
6405-12-08-O	3/4	1 1/16-12	1/2-14	1.350	34.29	0.875	1 1/4	1.250	31.75	•		•	
6405-12-12-O	3/4	1 1/16-12	3/4-14	1.590	40.39	0.875	1 3/8	1.375	34.93	•		•	
6405-12-16-O	3/4	1 1/16-12	1-11 1/2	1.910	48.51	1.200	1 5/8	1.625	41.28	•		•	
6405-14-08-O	7/8	1 3/16-12	1/2-14	1.090	27.69	0.480	1 3/8	1.375	34.93	•		•	
6405-14-12-O	7/8	1 3/16-12	3/4-14	1.593	40.46	1.000	1 3/8	1.375	34.93	•		•	
6405-14-16-O	7/8	1 3/16-12	1-11 1/2	1.900	48.26	1.180	1 5/8	1.625	41.28	•		•	
6405-16-04-O	1	1 5/16-12	1/4-18	1.136	28.85	0.520	1 1/2	1.500	38.10	•		•	
6405-16-06-O	1	1 5/16-12	3/8-18	1.130	28.70	0.520	1 1/2	1.500	38.10	•		•	
6405-16-08-O	1	1 5/16-12	1/2-14	1.610	40.89	0.900	1 1/2	1.500	38.10	•		•	
6405-16-12-O	1	1 5/16-12	3/4-14	1.510	38.35	0.875	1 1/2	1.500	38.10	•		•	
6405-16-16-O	1	1 5/16-12	1-11 1/2	1.843	46.81	1.080	1 5/8	1.625	41.28	•		•	
6405-16-20-O	1	1 5/16-12	1 1/4-11 1/2	2.270	57.66	1.510	2	2.000	50.80	•		•	
6405-16-24-O	1	1 5/16-12	1 1/2-11 1/2	2.280	57.91	1.520	2 3/8	2.375	60.33	•		•	
6405-20-08-O	1 1/4	1 5/8-12	1/2-14	1.196	30.38	0.605	1 7/8	1.875	47.63	•		•	
6405-20-12-O	1 1/4	1 5/8-12	3/4-14	1.190	30.23	0.620	1 7/8	1.875	47.63	•		•	
6405-20-16-O	1 1/4	1 5/8-12	1-11 1/2	1.000	25.40	0.400	1 7/8	1.875	47.63	•		•	
6405-20-20-O	1 1/4	1 5/8-12	1 1/4-11 1/2	1.875	47.63	1.125	2	2.000	50.80	•		•	
6405-20-24-O	1 1/4	1 5/8-12	1 1/2-11 1/2	2.280	57.91	1.540	2 3/8	2.375	60.33	•		•	
6405-20-32-O	1 1/4	1 5/8-12	2-11 1/2	2.250	57.15	1.500	2 7/8	2.875	73.03	•		•	
<b>NEW</b> 6405-24-04-O										•			
6405-24-12-O	1 1/2	1 7/8-12	3/4-14	1.000	25.40	0.690	2 1/8	2.125	53.98	•		•	
6405-24-16-O	1 1/2	1 7/8-12	1-11 1/2	1.000	25.40	0.420	2 1/8	2.125	53.98	•		•	
6405-24-20-O	1 1/2	1 7/8-12	1 1/4-11 1/2	2.120	53.85	1.520	2 1/8	2.125	53.98	•		•	
6405-24-24-O	1 1/2	1 7/8-12	1 1/2-11 1/2	2.140	54.36	1.390	2 3/8	2.375	60.33	•		•	
6405-32-16-O	2	2 1/2-12	1-11 1/2	1.434	36.42	0.838	2 3/4	2.750	69.85	•		•	
6405-32-20-O	2	2 1/2-12	1 1/4-11 1/2	2.000	50.80	1.400	2 3/4	2.750	69.85	•		•	
6405-32-24-O	2	2 1/2-12	1 1/2-11 1/2	2.000	50.80	1.400	2 3/4	2.750	69.85	•		•	
6405-32-32-O	2	2 1/2-12	2-11 1/2	2.240	56.90	1.640	2 7/8	2.875	73.03	•		•	

# Tube Fittings & Adapters

## MORB External Hex Plug 6408-O Series

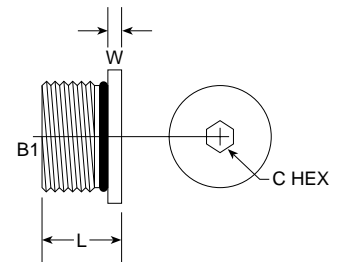
SAE# 090109A



PART NO. SIZE	TUBE O.D.	B1 SAE ORB	L LGTH	M.M.	W WIDTH	C HEX	C HEX	M.M.	Standard Material From Stock			
									S	FG	SS	B
6408-02-O	1/8	5/16-24	0.600	15.24	0.300	7/16	0.438	11.13	•		•	
6408-03-O	3/16	3/8-24	0.600	15.24	0.300	1/2	0.500	12.70	•		•	
6408-04-O	1/4	7/16-20	0.670	17.02	0.280	9/16	0.562	14.27	•		•	
6408-05-O	5/16	1/2-20	0.670	17.02	0.280	5/8	0.625	15.88	•		•	
6408-06-O	3/8	9/16-18	0.730	18.54	0.310	11/16	0.687	17.45	•		•	
6408-08-O	1/2	3/4-16	0.800	20.32	0.340	7/8	0.875	22.23	•		•	
6408-10-O	5/8	7/8-14	0.940	23.88	0.410	1	1.000	25.40	•		•	
6408-12-O	3/4	1 1/16-12	1.090	27.69	0.470	1 1/4	1.250	31.75	•		•	
6408-14-O	7/8	1 3/16-12	1.090	27.69	0.470	1 3/8	1.375	34.93	•		•	
6408-16-O	1	1 5/16-12	1.130	28.70	0.500	1 1/2	1.500	38.10	•		•	
6408-20-O	1 1/4	1 5/8-12	1.200	30.48	0.580	1 7/8	1.875	47.63	•		•	
6408-24-O	1 1/2	1 7/8-12	1.270	32.26	0.650	2 1/8	2.125	53.98	•		•	
6408-32-O	2	2 1/2-12	1.440	36.58	0.810	2 3/4	2.750	69.85	•		•	

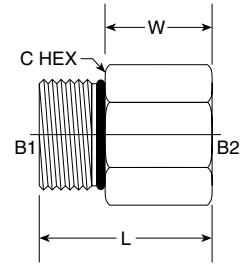
## MORB Hollow Hex Plug 6408-H-O Series

SAE# 090109B



PART NO. SIZE	TUBE O.D.	B1 SAE ORB	L LGTH	M.M.	W WIDTH	C HEX	C HEX	M.M.	Standard Material From Stock			
									S	FG	SS	B
6408-H-02-O	1/8	5/16-24	0.380	9.65	0.108	1/8	0.125	3.18	•		•	
6408-H-03-O	3/16	3/8-24	0.380	9.65	0.108	1/8	0.125	3.18	•		•	
6408-H-04-O	1/4	7/16-20	0.450	11.43	0.115	3/16	0.188	4.76	•		•	
6408-H-05-O	5/16	1/2-20	0.450	11.43	0.115	3/16	0.188	4.76	•		•	
6408-H-06-O	3/8	9/16-18	0.490	12.45	0.115	1/4	0.250	6.35	•		•	
6408-H-08-O	1/2	3/4-16	0.560	14.22	0.147	5/16	0.312	7.92	•		•	
6408-H-10-O	5/8	7/8-14	0.630	16.00	0.155	3/8	0.375	9.53	•		•	
6408-H-12-O	3/4	1 1/16-12	0.760	19.30	0.181	9/16	0.562	14.27	•		•	
6408-H-14-O	7/8	1 3/16-12	0.760	19.30	0.181	9/16	0.562	14.27	•		•	
6408-H-16-O	1	1 5/16-12	0.760	19.30	0.181	7/8	0.875	22.23	•		•	
6408-H-20-O	1 5/8	1 5/8-12	0.760	19.30	0.181	3/4	0.750	19.05	•		•	
6408-H-24-O	1 1/2	1 7/8-12	0.760	19.30	0.181	3/4	0.750	19.05	•		•	
6408-H-32-O	2	2 1/2-12	0.760	19.30	0.181	3/4	0.750	19.05	•		•	

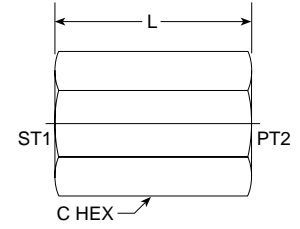
# MORB-FORB Straight Reducer 6410-O Series



PART NO. SIZE	TUBE O.D.	B1 SAE ORB	B2 SAE ORB	L LGTH	M.M.	W WIDTH	C HEX	C HEX	M.M.	Standard Material From Stock			
										S	FG	SS	B
6410-03-04-O	3/16	3/8-24	7/16-20	1.182	30.02	0.80	11/16	0.687	17.46	•			
6410-04-02-O	1/4	7/16-20	5/16-24	0.688	17.48	0.304	9/16	0.562	14.28	•			
6410-04-04-O	1/4	7/16-20	7/16-20	1.085	27.56	0.720	5/8	0.625	15.88	•			
6410-04-05-O	1/4	7/16-20	1/2-20	1.085	27.56	0.630	3/4	0.750	19.05	•		•	
6410-04-06-O	1/4	7/16-20	9/16-18	1.160	29.46	0.687	13/16	0.812	20.62	•		•	
6410-04-08-O	1/4	7/16-20	3/4-16	1.394	35.41	0.943	1 1/16	1.062	26.99	•			
6410-05-04-O	5/16	1/2-20	7/16-20	1.220	30.99	0.860	5/8	0.625	15.88	•			
<b>NEW</b> 6410-05-06-O										•			
6410-06-04-O	3/8	9/16-18	7/16-20	1.030	26.16	0.578	11/16	0.687	17.45	•		•	
6410-06-06-O	3/8	9/16-18	9/16-18	1.219	30.96	0.741	13/16	0.812	20.63	•			
6410-06-08-O	3/8	9/16-18	3/4-16	1.390	35.31	0.787	1 1/16	1.062	26.97	•		•	
6410-08-03-O	1/2	3/4-16	3/8-24	0.800	20.32	0.375	7/8	0.875	22.23	•			
6410-08-04-O	1/2	3/4-16	7/16-20	0.810	20.57	0.375	7/8	0.875	22.23	•		•	
6410-08-05-O	1/2	3/4-16	1/2-20	0.806	20.47	0.367	7/8	0.875	22.22	•			
6410-08-06-O	1/2	3/4-16	9/16-18	1.160	29.46	0.625	7/8	0.875	22.23	•		•	
6410-08-08-O	1/2	3/4-16	3/4-16	1.390	35.31	0.810	1	1.000	25.40	•		•	
6410-08-10-O	1/2	3/4-16	7/8-14	1.480	37.59	0.904	1 1/8	1.125	28.58	•		•	
6410-08-12-O	1/2	3/4-16	1 1/16-12	1.650	41.91	1.040	1 3/8	1.375	34.93	•		•	
6410-10-04-O	5/8	7/8-14	7/16-20	0.940	23.88	0.417	1	1.000	25.40	•			
6410-10-05-O	5/8	7/8-14	1/2-20	0.940	23.88	0.439	1	1.000	25.40	•			
6410-10-06-O	5/8	7/8-14	9/16-18	0.940	23.88	0.317	1	1.000	25.40	•		•	
6410-10-08-O	5/8	7/8-14	3/4-16	1.310	33.27	0.750	1	1.000	25.40	•		•	
6410-10-12-O	5/8	7/8-14	1 1/16-12	1.660	42.16	1.060	1 3/8	1.375	34.93	•		•	
6410-12-04-O	3/4	1 1/16-12	7/16-20	1.090	27.69	0.510	1 1/4	1.250	31.75	•		•	
6410-12-06-O	3/4	1 1/16-12	9/16-18	1.090	27.69	0.510	1 1/4	1.250	31.75	•		•	
6410-12-08-O	3/4	1 1/16-12	3/4-16	1.090	27.69	0.470	1 1/4	1.250	31.75	•		•	
6410-12-10-O	3/4	1 1/16-12	7/8-14	1.560	39.62	0.843	1 1/4	1.250	31.75	•		•	
6410-12-12-O	3/4	1 1/16-12	1 1/16-12	1.770	44.96	1.200	1 3/8	1.375	34.93	•		•	
6410-12-14-O	3/4	1 1/16-12	1 3/16-12	1.710	43.43	0.980	1 1/2	1.500	38.10	•			
6410-12-16-O	3/4	1 1/16-12	1 5/16-12	1.810	45.97	1.200	1 1/2	1.500	38.10	•		•	
6410-12-20-O	3/4 1 1/4	1 1/16-12	1 5/8-12	2.000	50.80	1.280	2	2.000	50.80	•		•	
6410-14-08-O	7/8	13/16-12	3/4-16	1.080	27.43	0.510	1 3/8	1.375	34.93	•			
6410-14-10-O	7/8	1 3/16-12	7/8-14	1.090	27.69	0.487	1 3/8	1.375	34.93	•			
6410-14-12-O	7/8	1 3/16-12	1 1/16-12	1.710	43.43	1.000	1 3/8	1.375	34.93	•		•	
6410-14-16-O	7/8 1	1 3/16-12	1 5/16-12	1.750	44.45	1.150	1 1/2	1.500	38.10	•			
6410-16-04-O	1 1/4	1 5/16-12	7/16-20	1.130	28.70	0.520	1 1/2	1.500	38.10	•		•	
6410-16-06-O	1	1 5/16-12	9/16-18	1.130	28.70	0.520	1 1/2	1.500	38.10	•		•	
6410-16-08-O	1	1 5/16-12	3/4-16	1.730	43.94	0.500	1 1/2	1.500	38.10	•		•	
6410-16-10-O	1	1 5/16-12	7/8-14	1.130	28.70	0.520	1 1/2	1.500	38.10	•			
6410-16-12-O	1	1 5/16-12	1 1/16-12	1.710	43.43	1.000	1 1/2	1.500	38.10	•		•	
6410-16-14-O	1	1 5/16-12	1 3/16-12	1.710	43.43	1.000	1 1/2	1.500	38.10	•			
<b>NEW</b> 6410-16-16-O										•			
6410-16-20-O	1	1 5/16-12	1 5/8-12	2.140	54.36	1.410	2 1/8	2.125	53.98	•		•	
6410-16-24-O	1 1 1/2	1 5/16-12	1 7/8-12	2.090	53.09	1.350	2 1/4	2.250	57.15	•			
6410-20-06-O	1 1/4	1 5/8-12	9/16-18	1.200	30.48	0.580	1 7/8	1.875	47.63	•		•	
6410-20-08-O	1 1/4	1 5/8-12	3/4-16	1.200	30.48	0.580	1 7/8	1.875	47.63	•		•	
6410-20-10-O	1 1/4	1 5/8-12	7/8-14	1.200	30.48	0.580	1 7/8	1.875	47.63	•		•	
6410-20-12-O	1 1/4	1 5/8-12	1 1/16-12	1.000	25.40	0.580	1 7/8	1.875	47.63	•		•	
6410-20-16-O	1 1/4	1 5/8-12	1 5/16-12	1.190	30.23	0.580	1 7/8	1.875	47.63	•		•	
6410-20-24-O	1 1/4	1 5/8-12	1 7/8-12	1.890	48.01	1.120	2 1/4	2.250	57.15	•		•	
6410-24-06-O	1 1/2	1 7/8-12	9/16-18	1.270	32.26	0.625	2 1/8	2.125	53.98	•		•	
6410-24-12-O	1 1/2	1 7/8-12	1 1/16-12	1.000	25.40	0.410	2 1/8	2.125	53.98	•		•	
6410-24-16-O	1 1/2	1 7/8-12	1 5/16-12	1.000	25.40	0.410	2 1/8	2.125	53.98	•		•	
6410-24-20-O	1 1/2	1 7/8-12	1 5/8-12	1.580	40.13	1.000	2 1/8	2.125	53.98	•		•	
6410-32-12-O	2	2 1/2-12	1 1/16-12	1.000	25.40	0.410	2 3/4	2.750	69.85	•			
6410-32-16-O	2	2 1/2-12	1 5/16-12	1.000	25.40	0.410	2 3/4	2.750	69.85	•			
6410-32-20-O	2	2 1/2-12	1 5/8-12	1.000	25.40	0.410	2 3/4	2.750	69.85	•			
6410-32-24-O	2	2 1/2-12	1 7/8-12	1.440	36.58	0.810	2 3/4	2.750	69.85	•		•	
<b>NEW</b> 6410-40-24-O										•			

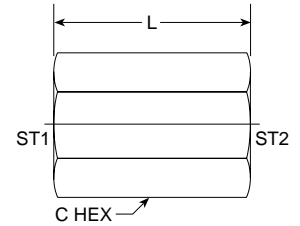
# Tube Fittings & Adapters

## FORB-FP Straight 6420 Series



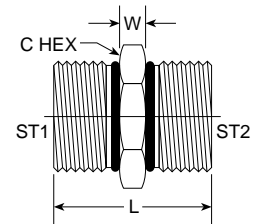
PART NO. SIZE	TUBE O.D.	ST1	PT2	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock				
									S	FG	SS	B	
NEW 6420-06-06													
NEW 6420-08-08													
NEW 6420-10-08													

## FORB-FORB Straight 6425 Series



PART NO. SIZE	TUBE O.D.	ST1	ST2	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock				
									S	FG	SS	B	
NEW 6425-08-08													
NEW 6425-10-10													

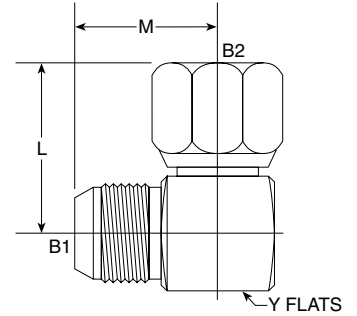
## MORB-MORB Straight 6464 Series



PART NO. SIZE	TUBE O.D.	ST1	ST2	L LGTH	M.M.	W LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
NEW 6464-08-08-0														
NEW 6464-20-20-0														

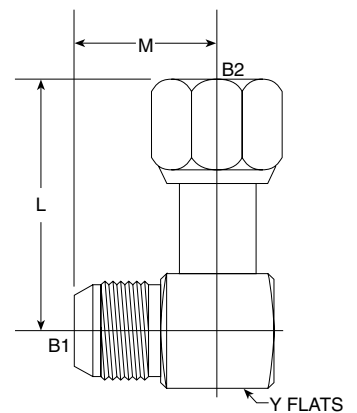
# MJ-FJS 90° 6500 Series

SAE # 070221



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6500-02-02	1/8	5/16-24	5/16-24	0.970	24.64	0.770	19.56	7/16	0.437	11.10				
6500-03-03	3/16	3/8-24	3/8-24	1.000	25.40	0.830	21.08	7/16	0.437	11.10	•		•	
6500-04-04	1/4	7/16-20	7/16-20	1.000	25.40	0.890	22.61	1/2	0.500	12.70	•		•	
6500-06-04	3/8	9/16-18	7/16-20	1.240	31.50	1.060	26.92	9/16	0.560	14.27	•		•	
6500-05-05	5/16	1/2-20	1/2-20	1.060	26.92	0.950	24.13	9/16	0.562	14.27	•		•	
6500-05-06	5/16	1/2-20	9/16-18	1.220	30.99	1.020	25.91	9/16	0.562	14.27	•		•	
6500-06-04	3/8	9/16-18	7/16-20	1.240	31.50	1.060	26.92	9/16	0.560	14.27	•		•	
6500-06-06	3/8	9/16-18	9/16-18	1.250	31.75	1.060	26.92	5/8	0.625	15.88	•		•	
6500-06-08	3/8	9/16-18	3/4-16	1.360	34.54	1.160	29.46	13/16	0.812	20.62	•		•	
6500-08-06	1/2	3/4-16	9/16-18	1.320	33.53	1.250	31.75	13/16	0.812	20.62	•		•	
6500-08-08	1/2	3/4-16	3/4-16	1.380	35.05	1.250	31.75	13/16	0.812	20.62	•		•	
6500-08-10	1/2	3/4-16	7/8-14	1.620	41.15	1.300	33.02	15/16	0.937	23.80	•		•	
6500-08-12	1/2	3/4-16	1 1/16-12	1.740	44.20	1.410	35.81	1 1/8	1.125	28.58	•		•	
6500-10-08	5/8	7/8-14	3/4-16	1.470	37.34	1.450	36.83	13/16	0.812	20.62	•		•	
6500-10-10	5/8	7/8-14	7/8-14	1.620	41.15	1.450	36.83	15/16	0.937	23.80	•		•	
6500-10-12	5/8	7/8-14	1 1/16-12	1.780	45.21	1.530	38.86	1 1/8	1.125	28.58	•		•	
6500-12-08	3/4	1 1/16-12	3/4-16	1.550	39.37	1.650	41.91	1 1/8	1.125	28.58	•		•	
6500-12-10	3/4	1 1/16-12	7/8-14	1.730	43.94	1.650	41.91	1 1/8	1.125	28.58	•		•	
6500-12-12	3/4	1 1/16-12	1 1/16-12	1.750	44.45	1.660	42.16	1 1/8	1.125	28.58	•		•	
6500-12-16	3/4 1	1 1/16-12	1 5/16-12	2.030	51.56	1.780	45.21	1 3/8	1.375	34.93	•		•	
6500-14-14	7/8	1 3/16-12	1 3/16-12	1.780	45.21	1.730	43.94	1 1/4	1.250	31.75	•		•	
6500-16-12	1	1 5/16-12	1 1/16-12	1.950	49.53	1.810	45.97	1 5/16	1.310	33.32	•		•	
6500-16-16	1	1 5/16-12	1 5/16-12	2.000	50.80	1.810	45.97	1 3/8	1.375	34.93	•		•	
6500-20-20	1 1/4	1 5/8-12	1 5/8-12	2.310	58.67	2.000	50.80	1 3/4	1.750	44.45	•		•	
6500-24-24	1 1/2	1 7/8-12	1 7/8-12	2.590	65.79	2.330	84.58	2	2.000	50.80	•		•	
6500-32-32	2	2 1/2-12	2 1/2-12	3.380	85.85	3.060	77.72	2 5/8	2.625	66.68	•		•	

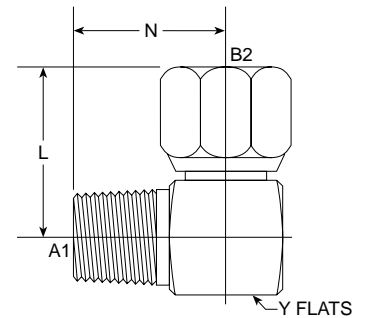
# MJ-FJS 90° Long 6500-L Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6500-L-04-04	1/4	7/16-20	7/16-20	2.160	54.86	0.890	22.61	1/2	0.500	12.70	•		•	
6500-L-06-06	3/8	9/16-18	9/16-18	2.540	64.52	1.060	26.92	5/8	0.625	15.88	•		•	
6500-L-08-08	1/2	3/4-16	3/4-16	2.810	71.37	1.250	31.75	13/16	0.812	20.62	•		•	
6500-L-10-10	5/8	7/8-14	7/8-14	3.070	77.98	1.450	36.83	15/16	0.937	23.80	•		•	
6500-L-12-12	3/4	1 1/16-12	1 1/16-12	4.300	109.22	1.660	42.16	1 1/8	1.125	28.58	•		•	
6500-L-16-16	1	1 5/16-12	1 5/16-12	5.000	127.00	1.810	45.97	1 3/8	1.375	34.93	•		•	

# Tube Fittings & Adapters

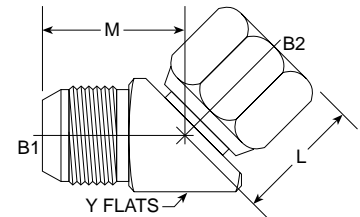
## MP-FJS 90° 6501 Series



PART NO. SIZE	TUBE O.D.	A1 NPTF	B2 SAE 37	L LGTH	M.M.	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6501-02-04	1/4	1/8-27	7/16-20	0.780	19.81	1.000	25.40	1/2	0.500	12.70	•	•	•	
6501-02-05	5/16	1/8-27	1/2-20	0.780	19.81	1.000	25.40	9/16	0.562	14.27	•	•	•	
6501-04-04	1/4	1/18	7/16-20	1.110	28.19	1.110	28.19	5/8	0.625	15.88	•	•	•	
6501-04-05	5/16	1/4-18	7/16-20	1.110	28.19	1.090	27.69	5/8	0.625	15.88	•	•	•	
6501-04-06	3/8	1/4-18	9/16-18	1.090	27.69	1.250	31.75	5/8	0.625	15.88	•	•	•	
6501-06-04	1/4	3/8-18	7/16-20	1.110	28.19	1.130	28.70	5/8	0.625	15.88	•	•	•	
6501-06-06	3/8	3/8-18	9/16-18	1.220	30.99	1.330	33.78	13/16	0.812	20.62	•	•	•	
6501-06-08	1/2	3/8-18	3/4-16	1.220	30.99	1.380	35.05	13/16	0.812	20.62	•	•	•	
6501-08-06	3-8	1/2-14	9/16-18	1.470	37.34	1.370	34.80	15/16	0.937	23.80	•	•	•	
6501-08-08	1/2	1/2-14	3/4-16	1.470	37.34	1.470	37.34	15/16	0.937	23.80	•	•	•	
6501-08-10	5/8	1/2-14	7/8-14	1.470	37.34	1.620	41.15	15/16	0.937	23.80	•	•	•	
6501-12-12	3/4	3/4-14	1 1/16-12	1.590	40.39	1.750	44.45	1 1/8	1.125	28.58	•	•	•	
6501-12-14	7/8	3/4-14	1 3/16-12	1.690	42.93	1.780	45.21	1 1/4	1.250	31.75	•	•	•	
6501-16-16	1	1-11 1/2	1 5/16-12	1.970	50.04	2.000	50.80	1 3/8	1.375	34.93	•	•	•	
6501-20-20	1 1/4	1 1/4-11 1/2	1 5/8-12	2.380	60.45	2.310	58.67	1 3/8	1.375	34.93	•	•	•	
6501-24-24	1 1/2	1 1/2-11 1/2	1 7/8-12	2.640	67.06	2.590	65.79	2	2.000	50.80	•	•	•	
6501-32-32	2	2-11 1/2	2 1/2-12	3.000	76.20	3.380	85.85	2 5/8	2.625	66.68	•	•	•	

## MJ-FJS 45° 6502 Series

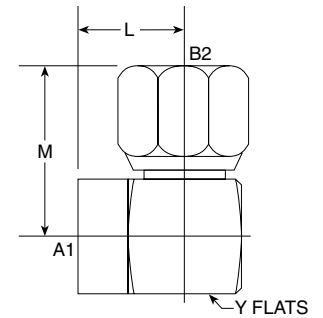
SAE# 070321 / MS# 51522



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6502-02-02	1/8	5/16-24	5/16-24	0.940	23.88	0.690	17.53	7/16	0.437	11.10			•	
6502-04-04	1/4	7/16-20	7/16-20	0.720	18.29	0.940	23.88	1/2	0.500	12.70	•	•	•	
6502-05-05	5/16	1/2-20	1/2-20	0.770	19.56	1.000	25.40	9/16	0.562	14.27	•	•	•	
6502-06-06	3/8	9/16-18	9/16-18	0.830	21.08	1.120	28.45	5/8	0.625	15.88	•	•	•	
6502-08-08	1/2	3/4-16	3/4-16	0.980	24.89	1.280	32.51	1 3/16	1.188	30.16	•	•	•	
6502-10-08	5/8	7/8-14	3/4-16	1.220	30.99	1.210	30.73	15/16	0.937	23.80	•	•	•	
6502-10-10	5/8	7/8-14	7/8-14	1.110	28.19	1.440	36.58	15/16	0.937	23.80	•	•	•	
6502-12-12	3/4	1 1/16-12	1 1/16-12	1.280	32.51	1.500	38.10	1 1/8	1.125	28.58	•	•	•	
6502-14-14	7/8	1 3/16-12	1 3/16-12	1.390	35.31	1.620	41.15	1 1/4	1.250	31.75	•	•	•	
6502-16-16	1	1 5/16-12	1 5/16-12	1.470	37.34	1.750	44.45	1 3/8	1.375	34.93	•	•	•	
6502-20-20	1 1/4	1 5/8-12	1 5/8-12	1.590	40.39	2.030	51.56	1 3/4	1.750	44.45	•	•	•	
6502-24-24	1 1/2	1 7/8-12	1 7/8-12	1.780	45.21	2.250	57.15	2	2.000	50.80	•	•	•	
6502-32-32	2	2 1/2-12	2 1/2-12	2.220	56.39	2.910	73.91	2 5/8	2.625	66.68	•	•	•	

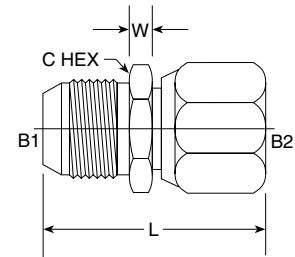


# FP-FJS 90° 6503 Series



PART NO. SIZE	TUBE O.D.	A1 SAE 37	B2 SAE 37	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6503-04-04	1/4	1/4-18	7/16-20	0.870	22.10	1.130	28.70	3/4	0.750	19.05	•	•	•	
6503-04-05	5/16	1/4-18	1/2-20	0.840	21.34	1.390	35.31	3/4	0.750	19.05	•	•	•	
6503-04-06	3/8	1/4-18	9/16-18	0.870	22.10	1.290	32.77	3/4	0.750	19.05	•	•	•	
6503-06-06	3/8	3/8-18	9/16-18	1.020	25.91	1.360	34.54	7/8	0.875	22.23	•	•	•	
6503-06-08	1/2	3/8-18	3/4-16	1.020	25.91	1.430	36.32	7/8	0.875	22.23	•	•	•	
6503-08-08	1/2	1/2-14	3/4-16	1.240	31.50	1.540	39.12	1 1/8	1.125	28.58	•	•	•	
6503-08-10	5/8	1/2-14	7/8-14	1.240	31.50	1.730	43.94	1 1/8	1.125	28.58	•	•	•	
6503-12-12	3/4	3/4-14	1 1/16-12	1.360	34.54	1.860	47.24	1 3/8	1.375	34.93	•	•	•	

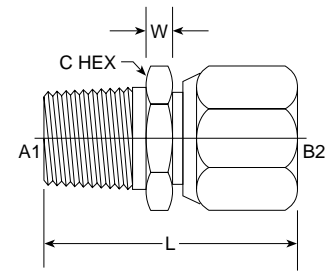
# MJ-FJS Straight 6504 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH	M.M.	W WIDTH	C HEX	C HEX	M.M.	Standard Material From Stock			
										S	FG	SS	B
<b>NEW</b> 6504-04-04	1/4	7/16-20	7/16-20	1.440	36.58	0.258	1/2	0.500	12.70	•		•	
6504-05-05										•			
6504-06-06	3/8	9/16-18	9/16-18	1.590	40.39	0.279	5/8	0.625	15.88	•		•	
6504-08-08	1/2	3/4-16	3/4-16	1.750	44.45	0.279	13/16	0.812	20.62	•		•	
6504-10-10	5/8	7/8-14	7/8-14	2.170	55.12	0.379	15/16	0.937	23.80	•		•	
6504-12-12	3/4	1 1/16-12	1 1/16-12	2.270	57.66	0.390	1 1/8	1.125	28.58	•		•	
6504-16-16	1	1 5/16-12	1 5/16-12	2.500	63.50	0.421	1 3/8	1.375	34.90	•		•	
6504-20-20	1 1/4	1 5/8-12	1 5/8-12	2.700	68.58	0.500	1 11/16	1.687	42.86	•		•	
<b>NEW</b> 6504-24-24										•			

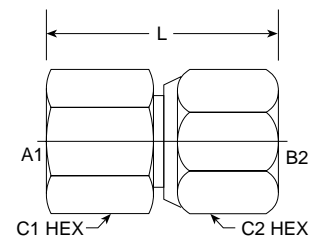
# Tube Fittings & Adapters

## MP-FJS Straight 6505 Series



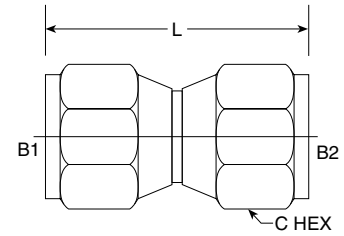
PART NO. SIZE	TUBE O.D.	A1 NPTF	B2 SAE 37	L LGTH	M.M.	W WIDTH	C HEX	C HEX	M.M.	Standard Material From Stock			
										S	FG	SS	B
NEW 6505-02-04	1/4	1/8-27	7/16-20	1.350	34.29	0.360	7/16	0.438	11.13	•		•	
6505-02-05	1/4	1/4-18	7/16-20	1.450	36.83	0.270	9/16	0.562	14.27	•		•	
6505-04-04	1/4	1/4-18	7/16-20	1.410	35.81	0.270	5/8	0.625	15.88	•		•	
6505-04-06	3/8	1/4-18	9/16-18	1.600	40.64	0.270	11/16	0.687	17.45	•		•	
6505-06-06	3/8	3/8-18	9/16-18	1.720	43.69	0.400	3/4	0.750	19.05	•		•	
6505-06-08	1/2	3/8-18	3/4-16	1.730	43.94	0.350	7/8	0.875	22.23	•		•	
6505-06-10	5/8	3/8-18	7/8-14	1.793	45.54	0.380	1	1.000	25.40	•		•	
6505-08-08	1/2	1/2-14	3/4-16	1.910	48.51	0.340	7/8	0.875	22.23	•		•	
6505-08-10	5/8	1/2-14	7/8-14	2.280	57.91	0.470	1	1.000	25.40	•		•	
6505-08-12	3/4	1/2-14	1 1/16-12	2.174	55.22	0.430	1	1.000	25.40	•		•	
6505-12-10	5/8	3/4-14	7/8-14	1.930	49.02	0.340	1 1/16	1.062	26.97	•		•	
6505-12-12	3/4	3/4-14	1 1/16-12	2.270	57.66	0.430	1 1/8	1.125	28.58	•		•	
NEW 6505-12-14	1	3/4-14	1 5/16-12	2.400	60.96	0.390	1 1/4	1.250	31.75	•		•	
6505-12-16	1	1-11 1/2	1 5/16-12	2.550	64.77	0.440	1 1/2	1.500	38.10	•		•	
6505-16-16	1 1/4	1 1/4-11 1/2	1 5/8-12	2.650	67.31	0.400	1 11/16	1.688	42.86	•		•	
6505-20-20	1 1/2	1 1/2-11 1/2	1 7/8-12	2.930	74.42	0.580	2	2.000	50.80	•		•	
6505-32-32	2	2-11 1/2	2 1/2-12	3.320	84.33	0.720	2 1/2	2.500	63.50	•		•	

## FP-FJS Straight 6506 Series



PART NO. SIZE	TUBE O.D.	A1 NPTF	B2 SAE 37	L LGTH	M.M.	C1 HEX	C1 HEX	M.M.	C2 HEX	C2 HEX	M.M.	Standard Material From Stock			
												S	FG	SS	B
6506-02-04	1/4	1/8-27	7/16-20	1.200	30.48	9/16	0.562	14.29	9/16	0.562	14.28	•		•	
6506-04-04	1/4	1/4-18	7/16-20	1.320	33.53	11/16	0.687	17.45	9/16	0.562	14.28	•		•	
6506-04-05	5/16	1/4-18	1/2-20	1.660	42.16	3/4	0.750	19.05	5/8	0.625	15.87	•		•	
6506-04-06	3/8	1/4-18	9/16-18	1.480	37.59	11/16	0.687	17.45	11/16	0.687	20.63	•		•	
NEW 6506-06-04	3/8	3/8-18	9/16-18	1.630	41.40	7/8	0.875	22.23	11/16	0.687	20.63	•		•	
6506-06-06	1/2	3/8-18	3/4-16	1.700	43.18	7/8	0.875	22.23	7/8	0.875	22.22	•		•	
6506-06-08	5/8	3/8-18	7/8-14	2.000	50.80	1	1.000	25.40	1	1.000	25.40	•		•	
6506-08-06	3/8	1/2-14	9/16-18	1.810	45.97	1 1/16	1.062	26.98	11/16	0.687	20.63	•		•	
6506-08-08	1/2	1/2-14	3/4-16	1.810	45.97	1	1.000	25.40	7/8	0.875	22.22	•		•	
6506-08-10	5/8	1/2-14	7/8-14	2.080	52.83	1 1/8	1.125	28.58	1	1.000	25.40	•		•	
6506-08-12	3/4	1/2-14	1 1/16-12	2.170	55.12	1 1/8	1.125	28.58	1 1/4	1.250	31.75	•		•	
6506-12-10	5/8	3/4-14	7/8-14	1.940	49.28	1 1/4	1.250	31.75	1	1.000	25.40	•		•	
6506-12-12	3/4	3/4-14	1 1/16-12	2.080	52.83	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
6506-12-14	7/8	3/4-14	1 3/16-12	2.120	53.85	1 5/16	1.312	33.32	1 3/8	1.375	34.93	•		•	
6506-12-16	1	3/4-14	1 5/16-12	2.330	59.18	1 3/8	1.375	34.92	1 1/2	1.500	38.10	•		•	
6506-16-16	1	1-11 1/2	1 5/16-12	2.620	66.55	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•		•	
6506-20-20	1 1/4	1 1/4-11 1/2	1 5/8-12	2.740	69.60	2	2.000	50.80	2	2.000	50.80	•		•	
6506-24-24	1 1/2	1 1/2-11 1/2	1 7/8-12	2.820	71.63	2 3/8	2.375	60.33	2 1/4	2.250	57.15	•		•	
6506-32-32	2	2-11 1/2	2 1/2-12	3.150	80.01	2 7/8	2.875	73.03	2 7/8	2.875	73.02	•		•	

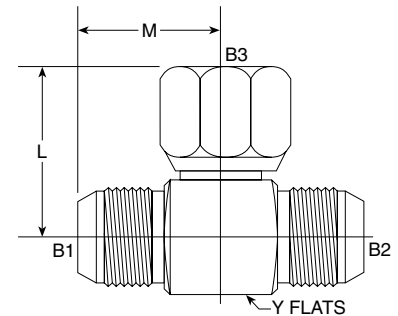
# FJS-FJS Straight 6565 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock				
								S	FG	SS	B	
6565-04-04	1/4	7/16-20	7/16-20	1.260	32.00	9/16	0.562	14.28	•		•	
6565-06-06	3/8	9/16-18	9/16-18	1.330	33.78	11/16	0.688	17.46	•			
6565-08-08	1/2	3/4-16	3/4-16	1.660	42.16	7/8	0.875	22.22	•			
6565-10-10	5/8	7/8-14	7/8-14	1.900	48.26	1	1.000	25.40	•			
6565-12-12	3/4	1 1/16-12	1 1/16-12	2.330	59.18	1 1/4	1.250	31.75	•			
6565-16-16	1	1 5/16-12	1 5/16-12	2.630	66.80	1 1/2	1.500	38.10	•			
6565-20-20	1 1/4	1 5/8-12	1 5/8-12	2.660	67.56	2	2.000	50.80	•			
6565-24-24	1 1/2	1 7/8-12	1 7/8-12	2.880	73.15	2 1/4	2.250	57.15	•			

# MJ-MJ-FJS Tee 6600 Series

SAE # 070433 / MS # 51524

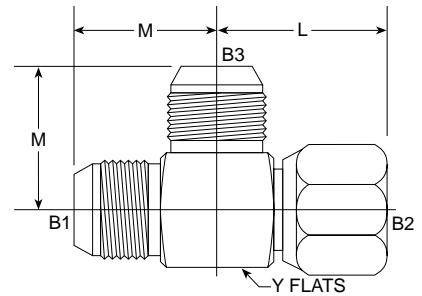


PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	B3 SAE 37	L LGTH M.M.	M LGTH M.M.	Y FLATS M.M.	Y FLATS M.M.	Standard Material From Stock						
									S	FG	SS	B			
6600-02-02-02	1/8	5/16-24	5/16-24	5/16-24	0.970	24.64	0.770	19.56	7/16	0.437	11.10			•	
6600-03-03-03	3/16	3/8-24	3/8-24	3/8-24	1.000	25.40	0.830	21.08	7/16	0.438	11.13			•	
6600-04-04-04	1/4	7/16-20	7/16-20	7/16-20	1.000	25.40	0.890	22.61	1/2	0.500	12.70	•	•	•	
6600-05-05-05	5/16	1/2-20	1/2-20	1/2-20	1.060	26.92	0.950	24.13	9/16	0.562	14.27	•	•	•	
6600-06-06-06	3/8	9/16-18	9/16-18	9/16-18	1.250	31.75	1.060	26.92	5/8	0.625	15.88	•	•	•	
<b>NEW</b> 6600-06-06-08												•			
6600-08-08-08	1/2	3/4-16	3/4-16	3/4-16	1.380	35.05	1.250	31.75	13/16	0.812	20.62	•	•	•	
6600-10-10-10	5/8	7/8-14	7/8-14	7/8-14	1.620	41.15	1.450	36.83	15/16	0.937	23.80	•	•	•	
<b>NEW</b> 6600-12-12-10												•			
6600-12-12-12	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1.750	44.45	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
6600-14-14-14	7/8	1 3/16-12	1 3/16-12	1 3/16-12	1.780	45.21	1.730	43.94	1 1/4	1.250	31.75	•			
6600-16-16-16	1	1 5/16-12	1 5/16-12	1 5/16-12	2.000	50.80	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
6600-20-20-20	1 1/4	1 5/8-12	1 5/8-12	1 5/8-12	2.310	58.67	2.060	52.32	1 3/4	1.750	44.45	•	•	•	
6600-24-24-24	1 1/2	1 7/8-12	1 7/8-12	1 7/8-12	2.590	65.79	2.330	59.18	2	2.000	50.80	•	•	•	
6600-32-32-32	2	2 1/2-12	2 1/2-12	2 1/2-12	3.380	85.85	3.060	77.72	2 5/8	2.625	66.68	•	•	•	

# Tube Fittings & Adapters

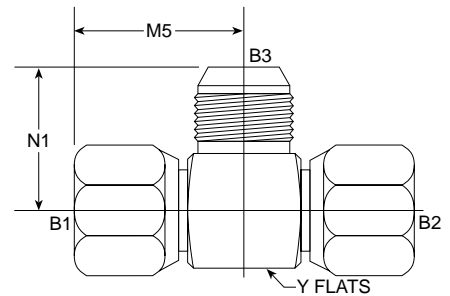
## MJ-FJS-MJ Tee 6602 Series

SAE# 070432 / MS# 51523



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	B3 SAE 37	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
6602-03-03-03	3/16	3/8-24	3/8-24	3/8-24	1.000	25.40	0.830	21.08	7/16	0.438	11.13		•		
6602-04-04-04	1/4	7/16-20	7/16-20	7/16-20	1.000	25.40	0.890	22.61	1/2	0.500	12.70	•	•	•	
6602-05-05-04	5/16 1/4	1/2-20	1/2-20	7/16-20	1.000	25.40	.91 .95	23.1 24.1	9/16	0.562	14.27	•	•		
6602-05-05-05	5/16	1/2-20	1/2-20	1/2-20	1.060	26.92	0.950	24.13	9/16	0.562	14.27	•	•	•	
6602-06-06-06	3/8	9/16-18	9/16-18	9/16-18	1.250	31.75	1.060	26.92	5/8	0.625	15.88	•	•	•	
6602-08-08-04	1/2	3/4-16	3/4-16	7/16-20	1.380	35.05	1.250	31.75	3/4	0.750	19.05	•	•		
6602-08-08-08	1/2	3/4-16	3/4-16	3/4-16	1.380	35.05	1.250	31.75	13/16	0.812	20.62	•	•	•	
6602-08-08-12	1/2	3/4-16	3/4-16	1 1/16-12	1.750	44.45	1.420	36.07	1 1/16	1.060	26.97	•	•		
6602-10-10-10	5/8	7/8-14	7/8-14	7/8-14	1.620	41.15	1.450	36.83	15/16	0.937	23.80	•	•	•	
<b>NEW</b> 6602-10-10-12												•	•		
6602-12-12-04	3/4	1 1/16-12	1 1/16-12	7/16-20	1.440	36.58	1.660	42.16	1 1/16	1.062	26.97	•	•		
6602-12-12-12	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1.750	44.45	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
6602-14-14-14	7/8	1 3/16-12	1 3/16-12	1 3/16-12	1.780	45.21	1.730	43.94	1 1/4	1.250	31.75	•	•		
6602-16-16-10	1	1 5/16-12	1 5/16-12	7/8-14	1.850	46.99	1.810	45.97	1 5/16	1.310	33.32	•	•		
6602-16-16-12	1	1 5/16-12	1 5/16-12	1 1/16-12	1.950	49.53	1.810	45.97	1 5/16	1.312	33.32	•	•		
6602-16-16-16	1	1 5/16-12	1 5/16-12	1 5/16-12	2.000	50.80	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
6602-20-20-20	1 1/4	1 5/8-12	1 5/8-12	1 5/8-12	2.310	58.67	2.060	52.32	1 3/4	1.750	44.45	•	•	•	
6602-24-24-24	1 1/2	1 7/8-12	1 7/8-12	1 7/8-12	2.590	65.79	2.330	59.18	2	2.000	50.80	•	•	•	
6602-32-32-32	2	2 1/2-12	2 1/2-12	2 1/2-12	3.380	85.85	3.060	77.72	2 5/8	2.625	66.68	•	•	•	

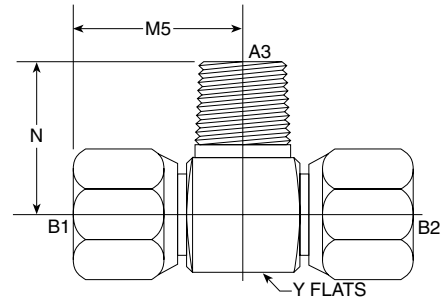
## FJS-FJS-MJ Tee 6603 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	B3 SAE 37	M5 LGTH	M.M.	N1 LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
6603-04-04-04	1/4	7/16-20	7/16-20	7/16-20	0.997	25.32	0.889	22.58	1/2	0.500	12.70		•		
6603-08-08-08	1/2	3/4-16	3/4-16	3/4-16	1.380	35.05	1.250	31.75	13/16	0.812	20.62	•	•		
6603-10-10-10	5/8	7/8-14	7/8-14	7/8-14	1.550	39.37	1.457	37.01	1 5/16	0.937	23.81	•	•		
6603-12-12-12	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1.750	44.45	1.660	42.16	1 1/8	1.125	28.58	•	•		
6603-16-16-16	1	1 5/16-12	1 5/16-12	1 5/16-12	2.010	51.05	1.794	45.57	1 3/8	1.375	34.93	•	•		

# FJS-FJS-MP Tee

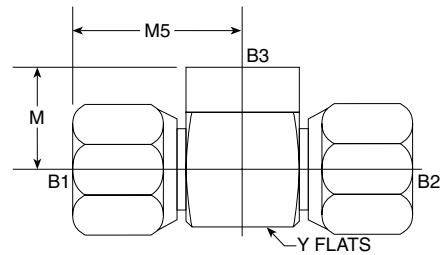
## 6604 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	A3 NPTF	M5 LGTH	M.M.	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
6604-06-06-06	3/8	9/16-18	9/16-18	3/8-18	1.310	33.27	1.210	30.73	13/16	0.812	20.62	•			
6604-12-12-12	3/4	1 1/6-12	1 1/6-12	1 1/6-12	1.718	43.64	1.600	40.64	1 1/8	1.125	28.58	•			

# FJS-FJS-FP Tee

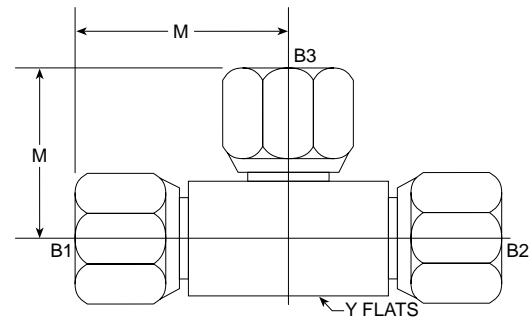
## 6605 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	B3 NPTF	M LGTH	M.M.	M5 LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
6605-04-04-04	1/4	7/16-20	7/16-20	1/4-18	0.870	22.10	1.150	29.21	3/4	0.750	19.05	•	•		

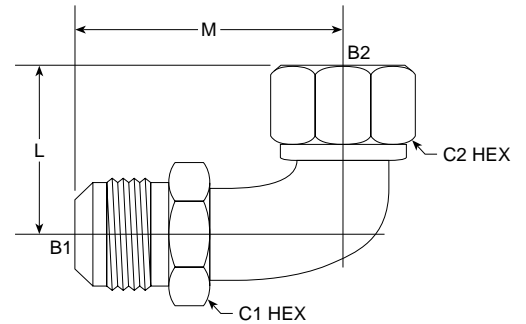
# Tube Fittings & Adapters

## FJS-FJS-FJS Tee 6606 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	B3 SAE 37	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
										S	FG	SS	B
6606-04-04-04	1/4	7/16-20	7/16-20	7/16-20	1.000	25.40	1/2	0.500	12.70	•	•	•	
6606-06-06-06	3/8	9/16-18	9/16-18	9/16-18	1.250	31.75	5/8	0.625	15.88	•	•	•	
6606-08-08-08	1/2	3/4-16	3/4-16	3/4-16	1.380	35.05	13/16	0.812	20.62	•	•	•	
6606-10-10-10	5/8	7/8-14	7/8-14	7/8-14	1.620	41.15	15/16	0.937	23.80	•	•	•	
6606-12-12-12	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1.750	44.45	1 1/16	1.625	41.27	•	•	•	
6606-16-16-16	1	1 5/16-12	1 5/16-12	1 5/16-12	2.000	50.80	1 3/8	1.375	34.92	•	•	•	

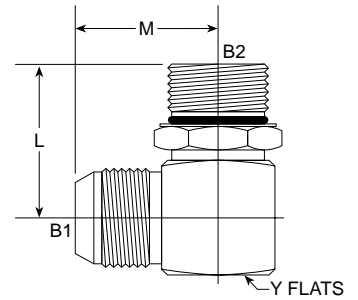
## MJ-FJS Swept 90° 6701 Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	L LGTH	M LGTH	M.M.	C1 HEX	C1 HEX	M.M.	C2 HEX	C2 HEX	M.M.	Standard Material From Stock				
													S	FG	SS	B	
6701-04-04	1/4	7/16-20	7/16-20	1.090	27.69	1.250	31.75	1/2	0.500	12.70	9/16	0.562	14.29	•			
6701-06-06	3/8	9/16-18	9/16-18	1.220	30.99	1.350	34.29	5/8	0.625	15.87	11/16	0.687	17.46	•			
6701-08-08	1/2	3/4-16	3/4-16	1.520	38.61	1.770	44.96	13/16	0.812	20.64	7/8	0.875	22.22	•			
6701-10-10	5/8	7/8-14	7/8-14	1.800	45.72	1.940	49.28	15/16	0.937	23.81	1	1.000	25.40	•			
6701-12-12	3/4	1 1/16-12	1 1/16-12	2.400	60.96	2.500	63.50	1 1/4	1.125	28.57	1 1/4	1.125	28.57	•			
6701-16-16	1	1 5/16-12	1 5/16-12	3.150	80.01	3.100	78.74	1 3/4	1.750	44.45	2	2.000	50.80	•			
NEW 6701-20-20														•			

# MJ-MAORB 90° 6801-NWO Series

SAE# 070220 / MS# 51527



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE ORB	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6801-02-02-NWO	1/8	5/16-24	5/16-24	0.940	23.88	0.770	19.56	7/16	0.437	11.11	•	•	•	
6801-02-04-NWO	1/8	5/16-24	7/16-20	1.030	26.16	0.780	19.81	1/2	0.500	12.70	•	•	•	
6801-03-03-NWO	3/16	3/8-24	3/8-24	0.940	23.88	0.830	21.08	7/16	0.437	11.11	•	•	•	
6801-04-02-NWO	1/4	7/16-20	5/16-24	0.920	23.37	0.890	22.61	7/16	0.438	11.13	•	•		
6801-04-03-NWO	1/4	7/16-20	3/8-24	1.030	26.16	0.950	24.13	7/16	0.438	11.13	•	•	•	
6801-04-04-NWO	1/4	7/16-20	7/16-20	1.030	26.16	0.890	22.61	1/2	0.500	12.70	•	•	•	
6801-04-05-NWO	1/4	7/16-20	1/2-20	1.130	28.70	0.950	24.13	5/8	0.625	15.88	•	•	•	
6801-04-06-NWO	1/4	7/16-20	9/16-18	1.250	31.75	1.050	26.67	5/8	0.625	15.88	•	•	•	
6801-04-08-NWO	1/4	7/16-20	3/4-16	1.450	36.83	1.120	28.45	13/16	0.812	20.62	•	•	•	
6801-05-04-NWO	5/16	1/2-20	7/16-20	1.130	28.70	0.950	24.13	9/16	0.562	14.27	•	•	•	
6801-05-05-NWO	5/16	1/2-20	1/2-20	1.130	28.70	0.950	24.13	9/16	0.562	14.27	•	•	•	
6801-05-06-NWO	5/16	1/2-20	9/16-18	1.250	31.75	1.050	26.67	5/8	0.625	15.88	•	•		
6801-05-08-NWO	5/16	1/2-20	3/4-16	1.450	36.83	1.120	28.45	13/16	0.812	20.62	•	•	•	
6801-05-10-NWO	5/16	1/2-20	7/8-14	1.700	43.18	1.210	30.73	15/16	0.937	23.80	•	•		
6801-06-02-NWO	3/8	9/16-18	5/16-24	1.150	29.21	1.120	28.45	9/16	0.562	14.27	•	•	•	
6801-06-04-NWO	3/8	9/16-18	7/16-20	1.190	30.23	1.060	26.92	5/8	0.625	15.88	•	•	•	
6801-06-05-NWO	3/8	9/16-18	1/2-20	1.130	28.70	1.060	26.92	5/8	0.625	15.88	•	•	•	
6801-06-06-NWO	3/8	9/16-18	9/16-18	1.250	31.75	1.060	26.92	5/8	0.625	15.88	•	•	•	
6801-06-08-NWO	3/8	9/16-18	3/4-16	1.450	36.83	1.140	28.96	13/16	0.812	20.62	•	•	•	
6801-06-10-NWO	3/8	9/16-18	7/8-14	1.700	43.18	1.220	30.99	15/16	0.937	23.80	•	•	•	
6801-06-12-NWO	3/8	9/16-18	1 1/16-12	1.940	49.28	1.290	32.77	1 1/8	1.125	28.58	•	•		
6801-08-04-NWO	1/2	3/4-16	7/16-20	1.260	32.00	1.250	31.75	13/16	0.812	20.62	•	•	•	
6801-08-05-NWO	1/2	3/4-16	1/2-20	1.260	32.00	1.250	31.75	13/16	0.812	20.62	•	•	•	
6801-08-06-NWO	1/2	3/4-16	9/16-18	1.320	33.53	1.250	31.75	13/16	0.812	20.62	•	•	•	
6801-08-08-NWO	1/2	3/4-16	3/4-16	1.450	36.83	1.250	31.75	13/16	0.812	20.62	•	•	•	
6801-08-10-NWO	1/2	3/4-16	7/8-14	1.700	43.18	1.330	33.78	15/16	0.937	23.80	•	•	•	
6801-08-12-NWO	1/2	3/4-16	1 1/16-12	1.940	49.28	1.410	35.81	1 1/8	1.125	28.58	•	•	•	
6801-08-16-NWO	1/2	3/4-16	1 5/16-12	2.060	52.32	1.550	39.37	1 3/8	1.375	34.93	•	•	•	
6801-10-06-NWO	5/8	7/8-14	9/16-18	1.400	35.56	1.450	36.83	15/16	0.937	23.80	•	•		
6801-10-08-NWO	5/8	7/8-14	3/4-16	1.520	38.61	1.450	36.83	15/16	0.937	23.80	•	•	•	
6801-10-10-NWO	5/8	7/8-14	7/8-14	1.700	43.18	1.450	36.83	15/16	0.937	23.80	•	•	•	
6801-10-12-NWO	5/8	7/8-14	1 1/16-12	1.940	49.28	1.550	39.37	1 1/8	1.125	28.58	•	•	•	
6801-10-16-NWO	5/8	7/8-14	1 5/16-12	2.050	52.07	1.660	42.16	1 3/8	1.375	34.93	•	•		
6801-10-20-NWO	5/8	7/8-14	1 5/8-12	2.250	57.15	1.860	47.24	1 3/4	1.750	44.45	•	•		
6801-12-06-NWO	3/4	1 1/16-12	9/16-18	1.510	38.35	1.650	41.91	1 1/8	1.125	28.58	•	•	•	
6801-12-08-NWO	3/4	1 1/16-12	3/4-16	1.610	40.89	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
6801-12-10-NWO	3/4	1 1/16-12	7/8-14	1.780	45.21	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
6801-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1.940	49.28	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
6801-12-14-NWO	3/4	1 1/16-12	1 3/16-12	2.000	50.80	1.770	44.96	1 1/4	1.250	31.75	•	•	•	
6801-12-16-NWO	3/4	1 1/16-12	1 5/16-12	2.050	52.07	1.780	45.21	1 3/8	1.375	34.93	•	•	•	
6801-12-20-NWO	3/4	1 1/16-12	1 5/8-12	2.250	57.15	1.950	49.53	1 3/4	1.750	44.45	•	•	•	
6801-14-12-NWO	7/8	1 3/16-12	1 1/16-12	1.990	50.55	1.740	44.20	1 1/4	1.250	31.75	•	•		
6801-14-14-NWO	7/8	1 3/16-12	1 3/16-12	2.000	50.80	1.800	43.69	1 1/4	1.250	31.75	•	•		
6801-14-16-NWO	7/8	1 3/16-12	1 5/16-12	2.060	52.32	1.281	32.54	1 3/8	1.375	34.93	•	•	•	
6801-16-08-NWO	1	1 5/16-12	3/4-16	1.740	44.20	1.810	45.97	1 3/8	1.375	34.93	•	•		
6801-16-10-NWO	1	1 5/16-12	7/8-14	1.930	49.02	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
6801-16-12-NWO	1	1 5/16-12	1 1/16-12	2.060	52.32	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
6801-16-14-NWO	1	1 5/16-12	1 3/16-12	2.050	52.07	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
6801-16-16-NWO	1	1 5/16-12	1 5/16-12	2.050	52.07	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
6801-16-20-NWO	1	1 5/16-12	1 5/8-12	2.250	57.15	2.000	50.80	1 3/4	1.750	44.45	•	•	•	
6801-16-24-NWO	1	1 5/16-12	1 7/8-12	2.160	54.86	2.390	60.71	1 7/8	1.875	47.63	•	•		
6801-20-12-NWO	1 1/4	1 5/8-12	1 1/16-12	2.250	57.15	2.060	52.32	1 3/4	1.750	44.45	•	•		
6801-20-14-NWO	1 1/4	1 5/8-12	1 3/16-12	2.250	57.15	2.060	52.32	1 3/4	1.750	44.45	•	•		

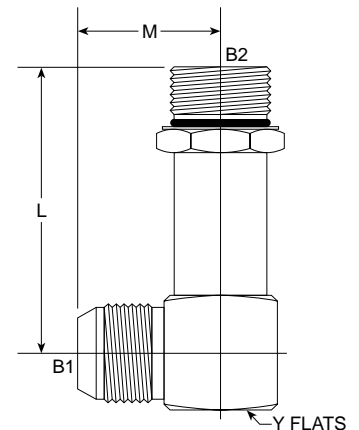
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# Tube Fittings & Adapters

## 6801-NWO Series *Continued*

PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE ORB	L LGTH	M.M. M.	M.M. LGTH	Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
										S	FG	SS	B	
6801-20-16-NWO	1 1/4	1 5/8-12	1 5/16-12	2.230	56.64	2.060	52.32	1 3/4	1.750	44.45	•	•	•	
6801-20-20-NWO	1 1/4	1 5/8-12	1 5/8-12	2.250	57.15	2.060	52.32	1 3/4	1.750	44.45	•	•	•	
6801-20-24-NWO	1 1/4	1 5/8-12	1 7/8-12	2.420	61.47	2.280	57.91	1 7/8	1.875	47.63	•	•	•	
6801-24-16-NWO	1 1/2	1 7/8-12	1 5/16-12	2.340	59.44	2.330	59.18	2	2.000	50.80	•	•	•	
6801-24-20-NWO	1 1/2	1 7/8-12	1 5/8-12	2.380	60.45	2.330	59.18	2	2.000	50.80	•	•	•	
6801-24-24-NWO	1 1/2	1 7/8-12	1 7/8-12	2.390	60.71	2.330	59.18	2	2.000	50.80	•	•	•	
6801-32-24-NWO	2	2 1/2-12	1 7/8-12	2.890	73.41	3.060	77.72	2 1/2	2.500	63.50	•	•	•	
6801-32-32-NWO	2	2 1/2-12	2 1/2-12	2.890	73.41	3.060	77.72	2 5/8	2.625	66.68	•	•	•	

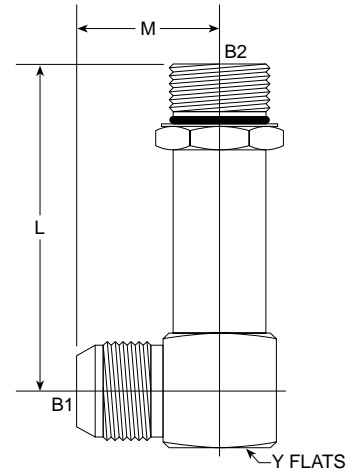
## MJ-MAORB 90° Long 6801-L-NWO Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE ORB	L LGTH	M.M. M.	M.M. LGTH	Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
										S	FG	SS	B	
6801-L-04-04-NWO	1/4	7/16-20	7/16-20	1.190	30.23	0.890	22.61	1/2	0.500	12.70	•	•	•	
6801-L-06-06-NWO	3/8	9/16-18	9/16-18	1.660	42.16	1.060	26.92	5/8	0.625	15.88	•	•	•	
6801-L-06-08-NWO	3/8	9/16-18	3/4-16	1.810	45.97	1.140	28.96	13/16	0.812	20.62	•	•	•	
6801-L-08-06-NWO	1/2	3/4-16	9/16-18	1.750	44.45	1.250	31.75	5/8	0.812	15.87	•	•	•	
6801-L-08-08-NWO	1/2	3/4-16	3/4-16	1.810	45.97	1.250	31.75	13/16	0.812	20.62	•	•	•	
6801-L-08-10-NWO	1/2	3/4-16	7/8-14	1.710	43.43	1.330	33.78	15/16	0.937	23.80	•	•	•	
6801-L-10-08-NWO	5/8	7/8-14	3/4-16	1.810	45.97	1.450	36.83	7/8	0.875	22.23	•	•	•	
6801-L-10-10-NWO	5/8	7/8-14	7/8-14	2.160	54.86	1.450	36.83	15/16	0.937	23.80	•	•	•	
6801-L-10-12-NWO	5/8	7/8-14	1 1/16-12	2.250	57.15	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
6801-L-12-10-NWO	3/4	1 1/16-12	7/8-14	2.470	62.74	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
6801-L-12-12-NWO	3/4	1 1/16-12	1 1/16-12	2.470	62.74	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
6801-L-16-12-NWO	1	1 5/16-12	1 1/16-12	2.590	65.79	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
6801-L-16-16-NWO	1	1 5/16-12	1 5/16-12	3.060	77.72	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
6801-L-20-20-NWO	1 1/4	1 5/8-12	1 5/8-12	4.400	111.73	2.060	52.31	1 3/4	1.750	44.44	•	•	•	

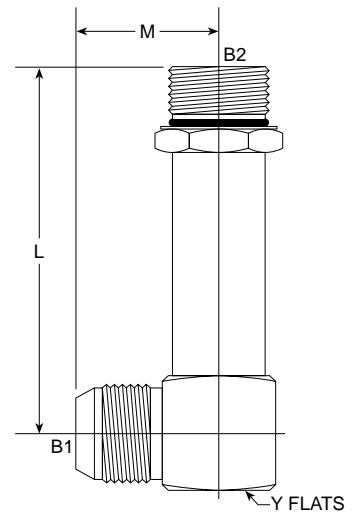


# MJ-MAORB 90° X-Long 6801-LL-NWO Series



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE ORB	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6801-LL-04-04-NWO	1/4	7/16-20	7/16-20	1.830	46.48	0.890	22.61	1/2	0.500	12.70	•	•		
6801-LL-06-06-NWO	3/8	9/16-18	9/16-18	2.080	52.83	1.060	26.92	5/8	0.625	15.88	•	•	•	
6801-LL-06-08-NWO	3/8	9/16-18	3/4-16	2.490	63.25	1.140	28.96	13/16	0.812	20.62	•	•		
6801-LL-08-06-NWO	1/2	3/4-16	9/16-18	2.180	55.37	1.250	31.75	13/16	0.812	20.62	•	•		
6801-LL-08-08-NWO	1/2	3/4-16	3/4-16	2.490	63.25	1.250	31.75	13/16	0.812	20.62	•	•	•	
6801-LL-08-10-NWO	1/2	3/4-16	7/8-14	3.230	82.04	1.330	33.78	15/16	0.937	23.80	•			
6801-LL-10-08-NWO	5/8	7/8-14	3/4-16	2.560	65.02	1.450	36.83	15/16	0.937	23.82	•			
6801-LL-10-10-NWO	5/8	7/8-14	7/8-14	3.230	82.04	1.450	36.83	15/16	0.937	23.80	•	•	•	
6801-LL-12-12-NWO	3/4	1 1/16-12	1 1/16-12	3.340	84.84	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
6801-LL-12-16-NWO	3/4	1 1/16-12	1 5/16-12	3.720	94.49	1.780	45.21	1 3/8	1.375	34.93	•			
6801-LL-14-14-NWO	7/8	1 3/16-12	1 3/16-12	3.570	90.68	1.770	44.96	1 1/4	1.250	31.75	•			
6801-LL-16-12-NWO	1	1 5/16-12	1 1/16-12	3.460	87.88	1.810	45.97	1 3/8	1.375	34.92	•			
6801-LL-16-16-NWO	1	1 5/16-12	1 5/16-12	3.710	94.23	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
6801-LL-20-20-NWO	1 1/4	1 5/8-12	1 5/8-12	4.400	111.76	2.060	52.32	1 3/4	1.750	44.45	•			

# MJ-MAORB 90° XX-Long 6801-LLL-NWO Series

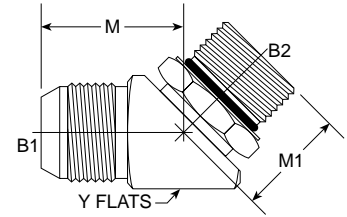


PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE ORB	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6801-LLL-06-06-NWO	3/8	9/16-18	9/16-18	3.070	77.98	1.060	26.92	5/8	0.625	15.88	•			
6801-LLL-06-08-NWO	6/16	9/16-18	3/4-16	3.570	90.68	1.140	28.96	3/4	0.750	19.05		•		
6801-LLL-08-08-NWO	1/2	3/4-16	3/4-16	3.570	90.69	1.250	31.75	7/8	0.875	22.22	•	•		
6801-LLL-16-16-NWO	1	1 5/16-12	1 5/8-12	5.200	132.08	1.810	45.97	1 3/8	1.375	34.92	•			

# Tube Fittings & Adapters

## MJ-MAORB 45° 6802-NWO Series

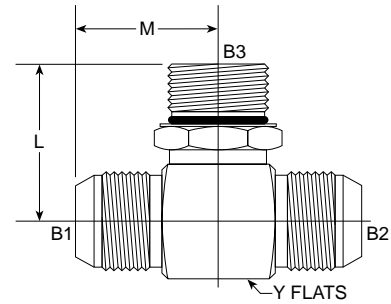
SAE# 070320 / MS# 51528



PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE ORB	M LGTH	M.M.	M1 LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6802-02-02-NWO	1/8	5/16-24	5/16-24	0.770	19.56	0.880	22.35	7/16	0.437	11.10				
6802-04-04-NWO	1/4	7/16-20	7/16-20	0.720	18.29	1.050	26.67	1/2	0.500	12.70	•	•	•	
6802-04-05-NWO	1/4	7/16-20	1/2-20	0.770	19.56	1.050	26.67	9/16	0.562	14.27	•	•	•	
6802-04-06-NWO	1/4	7/16-20	9/16-18	0.820	20.83	1.140	28.96	5/8	0.625	15.88	•	•	•	
6802-04-08-NWO	1/4	7/16-20	3/4-16	0.900	22.86	1.290	32.77	13/16	0.812	20.62	•	•	•	
6802-05-04-NWO	5/16	1/2-20	7/16-20	0.770	19.56	1.050	26.67	9/16	0.562	14.27	•	•	•	
6802-05-05-NWO	5/16	1/2-20	1/2-20	0.770	19.56	1.050	26.67	9/16	0.562	14.27	•	•	•	
6802-05-06-NWO	5/16	1/2-20	9/16-18	0.820	20.83	1.140	28.96	5/8	0.625	15.88	•	•	•	
6802-06-04-NWO	3/8	9/16-18	7/16-20	0.830	21.08	1.080	27.43	5/8	0.625	15.88	•	•	•	
6802-06-05-NWO	3/8	9/16-18	1/2-20	0.830	21.08	1.080	27.43	5/8	0.625	15.88	•	•	•	
6802-06-06-NWO	3/8	9/16-18	9/16-18	0.830	21.08	1.140	28.96	5/8	0.625	15.88	•	•	•	
6802-06-08-NWO	3/8	9/16-18	3/4-16	0.870	22.10	1.300	33.02	13/16	0.812	20.62	•	•	•	
6802-06-10-NWO	3/8	9/16-18	7/8-14	0.730	18.54	1.520	38.61	15/16	0.937	23.80	•	•	•	
6802-06-12-NWO	3/8	9/16-18	1 1/16-12	0.930	23.62	1.730	43.94	1 1/8	1.125	28.58	•	•	•	
6802-08-04-NWO	1/2	3/4-16	7/16-20	0.980	24.89	1.110	28.19	13/16	0.812	20.62	•	•	•	
6802-08-06-NWO	1/2	3/4-16	9/16-18	0.980	24.89	1.170	29.72	13/16	0.812	20.62	•	•	•	
6802-08-08-NWO	1/2	3/4-16	3/4-16	0.980	24.89	1.300	33.02	13/16	0.812	20.62	•	•	•	
6802-08-10-NWO	1/2	3/4-16	7/8-14	1.110	28.19	1.360	34.54	15/16	0.937	23.80	•	•	•	
6802-08-12-NWO	1/2	3/4-16	1 1/16-12	1.070	27.18	1.740	44.20	1 1/8	1.125	28.58	•	•	•	
6802-10-08-NWO	5/8	7/8-14	3/4-16	1.090	27.69	1.410	35.81	15/16	0.937	23.80	•	•	•	
6802-10-10-NWO	5/8	7/8-14	7/8-14	1.110	28.19	1.520	38.61	15/16	0.937	23.80	•	•	•	
6802-10-12-NWO	5/8	7/8-14	1 1/16-12	1.160	29.46	1.730	43.94	1 1/8	1.125	28.58	•	•	•	
6802-12-08-NWO	3/4	1 1/16-12	3/4-16	1.280	32.51	1.410	35.81	1 1/8	1.125	28.58	•	•	•	
6802-12-10-NWO	3/4	1 1/16-12	7/8-14	1.280	32.51	1.570	39.88	1 1/8	1.125	28.58	•	•	•	
6802-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1.280	32.51	1.730	43.94	1 1/8	1.125	28.58	•	•	•	
6802-12-14-NWO	3/4	1 1/16-12	1 3/16-12	1.420	36.07	1.860	47.24	1 1/4	1.250	31.75	•	•	•	
6802-12-16-NWO	3/4	1 1/16-12	1 5/16-12	1.450	36.83	1.860	47.24	1 3/8	1.375	34.93	•	•	•	
6802-14-14-NWO	5/8	1 3/16-12	1 3/16-12	1.450	36.83	1.860	47.24	1 1/4	1.250	31.75	•	•	•	
6802-16-12-NWO	1	1 5/16-12	1 1/16-12	1.470	37.34	1.860	47.24	1 3/8	1.375	34.93	•	•	•	
6802-16-14-NWO	1	1 5/16-12	1 3/16-12	1.470	47.24	1.860	37.34	1 5/16	1.312	33.32	•	•	•	
6802-16-16-NWO	1	1 5/16-12	1 5/16-12	1.470	37.34	1.860	47.24	1 3/8	1.375	34.93	•	•	•	
6802-16-20-NWO	1	1 5/16-12	1 5/8-12	1.550	39.37	1.910	47.24	1 3/4	1.750	44.45	•	•	•	
6802-20-16-NWO	1 1/4	1 5/8-12	1 5/16-12	1.590	40.39	2.070	52.58	1 3/4	1.750	44.45	•	•	•	
6802-20-20-NWO	1 1/4	1 5/8-12	1 5/8-12	1.590	40.39	1.910	48.51	1 3/4	1.750	44.45	•	•	•	
6802-20-24-NWO	1 1/4	1 5/8-12	1 7/8-12	1.650	41.91	1.910	48.51	1 7/8	1.875	47.62	•	•	•	
6802-24-20-NWO	1 1/2	1 7/8-12	1 5/8-12	1.780	45.21	1.910	45.21	1 7/8	1.875	47.63	•	•	•	
6802-24-24-NWO	1 1/2	1 7/8-12	1 7/8-12	1.780	45.21	1.910	48.51	2	2.000	50.80	•	•	•	
6802-32-32-NWO	2	2 1/2-12	2 1/2-12	2.220	56.39	1.860	47.24	2 5/8	2.625	66.68	•	•	•	

# MJ-MJ-MAORB Branch Tee 6803-NWO Series

SAE# 070429 / MS# 51529



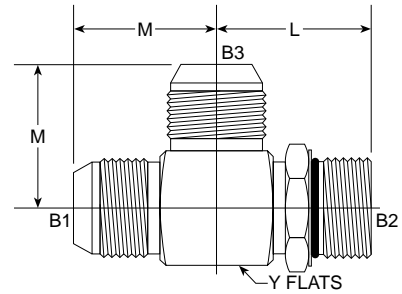
NEW

PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE 37	B3 SAE ORB	L LGTH M.M.	M LGTH M.M.	Y FLATS M.M.	Y FLATS M.M.	Standard Material From Stock						
									S	FG	SS	B			
6803-02-02-02-NWO	1/8	5/16-24	5/16-24	5/16-24	0.940	23.88	0.770	19.56	7/16	0.437	11.10			•	
6803-04-04-04-NWO	1/4	7/16-20	7/16-20	7/16-20	1.030	26.16	0.890	22.61	1/2	0.500	12.70	•	•	•	
6803-04-04-06-NWO	1/4	7/16-20	7/16-20	9/16-18	1.260	32.00	0.950	24.13	5/8	0.625	15.88	•	•	•	
6803-05-05-05-NWO	5/16	1/2-20	1/2-20	1/2-20	1.130	28.70	0.950	24.13	9/16	0.562	14.27	•	•	•	
6803-06-06-04-NWO	3/8	9/16-18	9/16-18	7/16-20	1.250	31.75	1.060	26.92	9/16	0.562	14.27	•	•		
6803-06-06-05-NWO	3/8	9/16-18	9/16-18	9/16-18	1.250	31.75	1.060	26.92	5/8	0.625	15.88	•	•	•	
6803-06-06-08-NWO	3/8	9/16-18	9/16-18	3/4-16	1.450	36.83	1.140	28.96	13/16	0.812	20.62	•	•		
6803-06-06-12-NWO	3/8	9/16-18	9/16-18	1 1/16-12	1.940	49.28	1.290	32.77	1 1/8	1.125	28.58	•	•		
6803-08-08-06-NWO	1/2	3/4-16	3/4-16	9/16-18	1.320	33.53	1.250	31.75	15/16	0.937	23.80	•	•		
6803-08-08-08-NWO	1/2	3/4-16	3/4-16	3/4-16	1.450	36.83	1.250	31.75	13/16	0.812	20.62	•	•	•	
6803-08-08-10-NWO	1/2	3/4-16	3/4-16	7/8-14	1.700	43.18	1.320	33.53	15/16	0.937	23.80	•	•		
6803-08-08-12-NWO	1/2	3/4-16	3/4-16	1 1/16-12	1.940	49.28	1.420	36.07	1 1/8	1.125	28.58	•	•		
6803-10-10-08-NWO	5/8	7/8-14	7/8-14	3/4-16	1.520	38.61	1.450	36.83	15/16	0.937	23.80	•	•		
6803-10-10-10-NWO	5/8	7/8-14	7/8-14	7/8-14	1.700	43.18	1.450	36.83	15/16	0.937	23.80	•	•	•	
6803-10-10-12-NWO	5/8	7/8-14	7/8-14	1 1/16-12	1.940	49.28	1.550	39.37	1 1/8	1.125	28.58	•	•		
6803-10-10-16-NWO	5/8	7/8-14	7/8-14	1 5/16-12	2.040	51.82	1.670	42.42	1 3/8	1.375	34.93	•	•	•	
6803-12-12-08-NWO	3/4	1 1/16-12	1 1/16-12	3/4-16	1.610	40.89	1.660	42.16	1 1/8	1.125	28.58	•	•		
6803-12-12-10-NWO	3/4	1 1/16-12	1 1/16-12	7/8-14	1.810	45.97	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
6803-12-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1.940	49.28	1.660	42.16	1 1/8	1.125	28.58	•	•	•	
6803-12-12-16-NWO	3/4	1 1/16-12	1 1/16-12	1 5/16-12	2.050	52.07	1.790	45.47	1 3/8	1.375	34.93	•	•		
6803-14-14-14-NWO	7/8	1 3/16-12	1 3/16-12	1 3/16-12	2.000	50.80	1.800	45.72	1 1/4	1.250	31.75	•	•		
6803-16-16-12-NWO	1	1 5/16-12	1 5/16-12	1 1/16-12	2.050	52.07	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
6803-16-16-16-NWO	1	1 5/16-12	1 5/16-12	1 5/16-12	2.050	52.07	1.810	45.97	1 3/8	1.375	34.93	•	•	•	
6803-20-20-20-NWO	1 1/4	1 5/8-12	1 5/8-12	1 5/8-12	2.250	57.15	2.060	52.32	1 3/4	1.750	44.45	•	•	•	
6803-24-24-24-NWO	1 1/2	1 7/8-12	1 7/8-12	1 7/8-12	2.390	60.71	2.330	59.18	2	2.000	50.80	•	•	•	
6803-32-32-32-NWO	2	2 1/2-12	2 1/2-12	2 1/2-12	3.060	77.72	2.890	73.41	2 1/2	2.500	63.50	•	•		

# Tube Fittings & Adapters

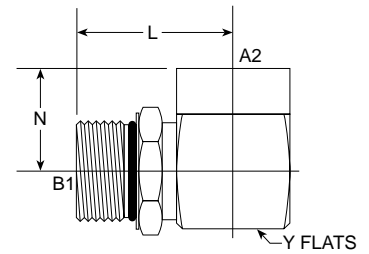
## MJ-MAORB-MJ Run Tee 6804-NWO Series

SAE# 070428 / MS# 51530



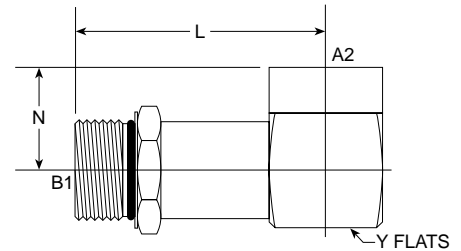
PART NO. SIZE	TUBE O.D.	B1 SAE 37	B2 SAE ORB	B3 SAE 37	L LGTH M.M.	M LGTH M.M.	Y FLATS M.M.	Y FLATS M.M.	Standard Material From Stock						
									S	FG	SS	B			
6804-02-02-02-NWO	1/8	5/16-24	5/16-24	5/16-24	0.940	23.88	0.770	19.56	7/16	0.438	11.11			•	
6804-02-04-02-NWO	1/8	5/16-24	5/16-24	7/16-20	1.030	26.16	0.780	19.81	9/16	0.562	14.27			•	
6804-04-04-04-NWO	1/4	7/16-20	7/16-20	7/16-20	1.030	26.16	0.890	22.60	1/2	0.500	12.70	•	•	•	
6804-04-06-04-NWO	1/4	7/16-20	9/16-20	7/16-18	1.250	31.75	0.890	22.60	5/8	0.625	15.87	•	•	•	
6804-05-04-05-NWO	1/2	1/2-20	7/16-20	1/2-20	1.130	28.70	0.950	24.10	9/16	0.562	14.28	•		•	
6804-05-05-05-NWO	1/2	1/2-20	1/2-20	1/2-20	1.130	28.70	0.950	24.10	9/16	0.562	14.28	•	•	•	
6804-06-04-06-NWO	3/8	9/16-18	7/16-20	9/16-18	1.190	30.23	1.060	26.92	5/8	0.625	15.87	•	•		
NEW 6804-06-06-04-NWO	3/8	9/16-18	9/16-20	9/16-18	1.250	31.75	1.060	26.92	5/8	0.625	15.87	•		•	
6804-06-06-06-NWO	3/8	9/16-18	3/4-16	9/16-18	1.450	36.83	1.060	26.92	13/16	0.812	20.64	•	•	•	
6804-06-08-06-NWO	1/2	3/4-16	9/16-20	7/16-20	1.350	34.29	1.250	31.75	13/16	0.812	20.64	•			
6804-08-06-08-NWO	1/2	3/4-16	9/16-18	3/4-16	1.330	33.78	1.250	31.75	13/16	0.812	20.64	•	•		
6804-08-08-08-NWO	1/2	3/4-16	3/4-16	3/4-16	1.450	36.80	1.250	31.75	13/16	0.812	20.64	•	•	•	
6804-08-10-08-NWO	1/2	3/4-16	7/8-14	3/4-16	1.700	43.18	1.250	31.75	15/16	0.937	23.81	•	•		
6804-08-12-08-NWO	1/2	3/4-16	1 1/16-12	3/4-16	1.940	49.28	1.420	36.07	1 1/16	1.062	26.97	•			
6804-10-08-10-NWO	5/8	7/8-14	3/4-16	7/8-14	1.520	38.61	1.450	36.83	15/16	0.937	23.81	•			
6804-10-10-10-NWO	5/8	7/8-14	7/8-14	7/8-14	1.700	43.18	1.450	36.83	15/16	0.937	23.81	•	•	•	
NEW 6804-10-12-06-NWO	5/8	7/8-14	1 5/16-12	3/4-16	2.080	52.83	1.650	41.91	1 3/8	1.375	34.92	•			
6804-10-16-08-NWO	3/4	1 1/16-12	3/4-16	1 1/16-12	1.610	40.89	1.660	42.16	1 1/4	1.250	31.75	•			
NEW 6804-12-10-12-NWO	3/4	1 1/16-12	1 1/16-12	9/16-18	1.940	49.28	1.660	42.16	1 1/4	1.250	31.75	•			
6804-12-12-06-NWO	3/4	1 1/16-12	1 1/16-12	7/8-14	1.950	45.53	1.630	42.40	1 1/4	1.250	31.75	•			
6804-12-12-10-NWO	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1.940	49.28	1.660	42.16	1 1/4	1.250	31.75	•	•	•	
6804-12-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1 5/16-12	2.060	52.32	1.780	45.21	1 3/8	1.375	34.92	•	•		
NEW 6804-12-16-12-NWO	7/8	1 3/16-12	1 3/16-12	1 3/16-12	2.000	50.80	1.800	45.72	1 1/4	1.250	31.75	•			
6804-14-14-14-NWO	1	1 5/16-12	1 1/16-12	1 5/16-12	2.050	52.07	1.800	45.72	1 3/8	1.375	34.92	•	•		
6804-16-12-16-NWO	1	1 5/16-12	1 5/16-12	1 5/16-12	2.050	52.07	1.810	45.97	1 3/8	1.375	34.92	•	•	•	
NEW 6804-16-16-12-NWO	1 1/4	1 5/8-12	1 5/8-12	1 5/8-12	2.250	57.15	2.060	52.32	1 3/4	1.750	44.45	•	•	•	
6804-20-20-20-NWO	1 1/2	1 7/8-12	1 7/8-12	1 7/8-12	2.390	60.71	2.330	59.18	2	2.000	50.80	•	•	•	
6804-24-24-24-NWO	2	2 1/2-12	2 1/2-12	2 1/2-12	2.890	73.41	3.060	77.72	2 1/2	2.500	63.50	•	•	•	

# MAORB-FP 90° 6805-NWO Series



PART NO. SIZE	PORT O.D.	B1 THREAD	A2 NPTF	L LGTH	M.M.	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6805-04-02-NWO	1/4	7/16-20	1/8-27	1.090	27.69	0.660	16.76	5/8	0.625	15.88	•	•	•	
6805-04-04-NWO	1/4	7/16-20	1/4-18	1.160	29.46	0.870	22.10	3/4	0.750	19.05	•	•	•	
6805-05-02-NWO	5/16	1/2-20	1/8-27	1.130	28.70	0.660	16.76	5/8	0.625	15.88	•	•	•	
6805-06-04-NWO	3/8	9/16-18	1/4-18	1.310	33.27	0.880	22.35	3/4	0.750	19.05	•	•	•	
6805-06-06-NWO	3/8	9/16-18	3/8-18	1.360	34.54	1.010	25.65	7/8	0.875	22.23	•	•	•	
6805-08-06-NWO	1/2	3/4-16	3/8-18	1.480	37.59	1.020	25.91	7/8	0.875	22.23	•	•	•	
6805-08-08-NWO	1/2	3/4-16	1/2-14	1.590	40.39	1.240	31.50	1 1/8	1.125	28.58	•	•	•	
6805-10-06-NWO	5/8	7/8-14	3/8-18	1.660	42.16	1.020	25.91	7/8	0.875	22.23	•	•	•	
6805-10-08-NWO	5/8	7/8-14	1/2-14	1.800	45.72	1.230	31.24	1 1/8	1.125	28.58	•	•	•	
6805-12-08-NWO	3/4	1 1/16-12	1/2-14	1.940	49.28	1.240	31.50	1 1/8	1.125	28.58	•	•	•	
6805-12-12-NWO	3/4	1 1/16-12	3/4-14	2.060	52.32	1.360	34.54	1 3/8	1.375	34.93	•	•	•	
6805-14-12-NWO	7/8	1 3/16-12	3/4-14	2.060	52.32	1.420	36.07	1 3/8	1.375	34.93	•	•	•	
6805-16-12-NWO	1	1 5/16-12	3/4-14	2.030	51.56	1.370	34.80	1 3/8	1.375	34.93	•	•	•	
6805-16-16-NWO	1	1 5/16-12	1-11 1/2	2.170	55.12	1.630	41.40	1 5/8	1.625	41.28	•	•	•	
6805-20-20-NWO	1 1/4	1 5/8-12	1 1/4-11 1/2	2.380	60.45	1.700	43.18	2	2.000	50.80	•	•	•	
6805-24-24-NWO	1 1/2	1 7/8-12	1 1/2-11 1/2	2.580	65.53	2.080	52.83	2 3/8	2.375	60.33	•	•	•	
6805-32-32-NWO	2	2 1/2-12	2-11 1/2	3.020	76.71	2.390	60.71	2 7/8	2.875	73.03	•	•	•	

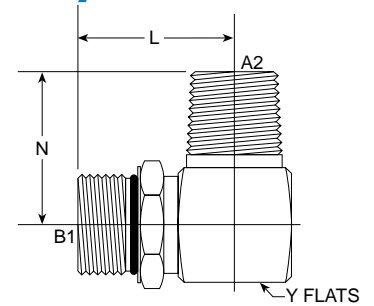
# MAORB-FP 90° Long 6805-L-NWO Series



PART NO. SIZE	PORT O.D.	B1 THREAD	A2 NPTF	L LGTH	M.M.	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6805-L-08-06-NWO	1/2	3/4-16	3/8-18	2.930	74.42	0.660	16.76	7/8	0.875	22.23	•	•	•	
6805-L-10-08-NWO	5/8	7/8-14	1/2-14	3.530	89.66	0.790	20.07	1 1/16	1.062	26.98	•	•	•	
6805-L-12-12-NWO	3/4	1 1/16-12	3/4-14	4.050	102.87	0.840	21.34	1 5/16	1.312	33.32	•	•	•	
6805-L-16-16-NWO	1	1 5/16-12	1-11 1/2	4.620	117.35	1.010	25.65	1 5/8	1.625	41.28	•	•	•	

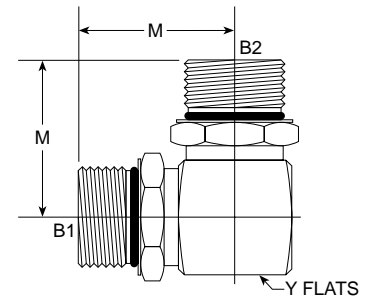
# Tube Fittings & Adapters

## MAORB-MP 90° 6806-NWO Series



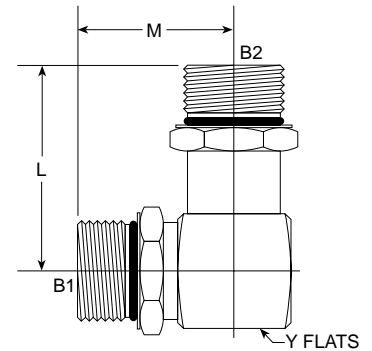
PART NO. SIZE	PORT O.D.	B1 THREAD	A2 THREAD	L LGTH	M.M.	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6806-04-02-NWO	1/4	7/16-20	1/8-27	1.030	26.16	0.780	19.81	1/2	0.500	12.70	•			
6806-04-04-NWO	1/4	7/16-20	1/4-18	1.090	27.69	1.090	27.69	5/8	0.625	15.88	•	•	•	
6806-05-02-NWO	5/16	1/2-20	1/8-27	1.090	27.69	0.780	19.81	9/16	0.562	14.27	•			
6806-06-04-NWO	3/8	9/16-18	1/4-18	1.250	31.75	1.090	27.69	5/8	0.625	15.88	•	•	•	
6806-06-06-NWO	3/8	9/16-18	3/8-18	1.350	34.29	1.220	30.99	13/16	0.812	20.62	•	•	•	
6806-08-06-NWO	1/2	3/4-16	3/8-18	1.450	36.83	1.220	30.99	13/16	0.812	20.62	•	•	•	
6806-08-08-NWO	1/2	3/4-16	1/2-14	1.520	38.61	1.470	37.34	15/16	0.937	23.80	•	•	•	
6806-10-08-NWO	5/8	7/8-14	1/2-14	1.700	43.18	1.470	37.34	15/16	0.937	23.80	•		•	
6806-12-12-NWO	3/4	1 1/16-12	3/4-14	1.940	49.28	1.590	40.39	1 1/8	1.125	28.58	•		•	
6806-12-16-NWO	3/4	1 1/16-12	1-11 1/2	2.060	52.32	1.960	49.78	1 3/8	1.375	34.93	•			
6806-14-12-NWO	7/8	1 3/16-12	3/4-14	2.000	50.80	1.690	42.93	1 1/4	1.250	31.75	•			
6806-16-12-NWO	1	1 5/16-12	3/4-14	2.040	51.82	1.700	43.18	1 3/8	1.375	34.93	•			
6806-16-16-NWO	1	1 5/16-12	1-11 1/2	2.050	52.07	1.970	50.04	1 3/8	1.375	34.93	•	•		
6806-20-20-NWO	1 1/4	1 5/8-12	1 1/4-11 1/2	2.250	57.15	2.380	60.45	1 3/4	1.750	44.45	•			
6806-24-24-NWO	1 1/2	1 7/8-12	1 1/2-11 1/2	2.390	60.71	2.640	67.06	2	2.000	50.80	•	•		
6806-32-32-NWO	2	2 1/2-12	2-11 1/2	2.890	73.41	3.000	76.20	2 5/8	2.625	66.68	•	•		

## MAORB-MAORB 90° 6807-NWO Series



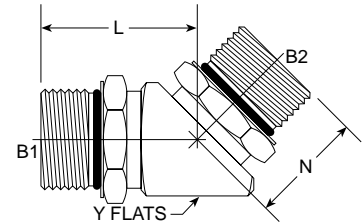
PART NO. SIZE	PORT O.D.	B1 THREAD	B2 THREAD	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
									S	FG	SS	B	
6807-04-04-NWO	1/4	7/16-20	7/16-20	1.090	27.69	5/8	0.625	15.88	•	•	•		
6807-06-06-NWO	3/8	9/16-18	9/16-18	1.220	30.99	13/16	0.937	23.80	•	•	•		
6807-08-08-NWO	1/2	3/4-16	3/4-16	1.470	37.34	15/16	0.937	23.80	•	•	•		
6807-10-08-NWO	5/8	7/8-14	3/4-16	1.512	38.40	15/16	0.937	23.81	•	•	•		
6807-10-10-NWO	5/8	7/8-14	7/8-14	1.470	37.34	15/16	0.937	23.80	•	•	•		
6807-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1.590	40.39	1 1/8	1.125	28.58	•	•	•		
6807-16-16-NWO	1	1 5/16-12	1 5/16-12	1.970	50.04	1 3/8	1.375	34.93	•	•	•		
6807-20-20-NWO	1 1/4	1 5/8-12	1 5/8-12	2.380	60.45	1 3/4	1.750	44.45	•	•	•		
6807-24-24-NWO	1 1/2	1 7/8-12	1 7/8-12	2.640	67.06	2	2.000	50.80	•	•	•		

# MAORB-MAORB 90° X-Long 6807-LL-NWO Series



PART NO. SIZE	PORT O.D.	B1 THREAD	B2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6807-LL-06-06-NWO	3/8	9/16-18	9/16-18	2.060	52.30	1.250	31.80	5/8	0.625	15.87	•			

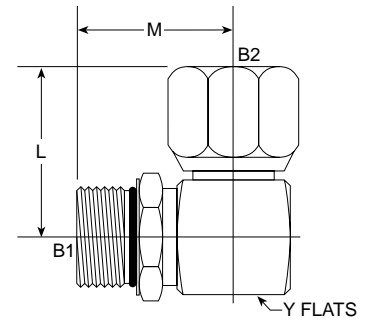
# MAORB-MAORB 45° 6808-NWO Series



PART NO. SIZE	PORT O.D.	B1 THREAD	B2 THREAD	L LGTH	M.M.	N LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6808-16-16-NWO	1	1 5/16-12	1 5/16-12	1.900	48.26	1.720	43.69	1 3/8	1.375	34.93	•	•		

# Tube Fittings & Adapters

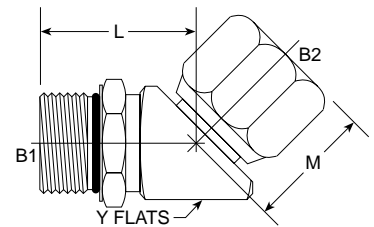
## MAORB-FJS 90° 6809-NWO Series



NEW

PART NO. SIZE	PORT O.D.	B1 THREAD	B2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6809-04-04-NWO	1/4	7/16-20	7/16-20	1.038	26.35	1.000	25.40	1/2	0.500	12.70	•	•		•
6809-06-04-NWO	3/8	9/16-18	7/16-20	1.123	28.51	1.250	31.75	5/8	0.625	15.88	•	•		
6809-06-06-NWO	3/8	9/16-18	9/16-18	1.250	31.75	1.250	31.75	5/8	0.625	15.88	•	•		•
6809-08-06-NWO	1/2	3/4-16	9/16-18	1.310	33.27	1.460	37.08	13/16	0.812	20.62	•	•		
6809-08-08-NWO	1/2	3/4-16	3/4-16	1.390	35.31	1.450	36.83	13/16	0.812	20.62	•	•	•	
6809-08-12-NWO											•			
6809-10-10-NWO	5/8	7/8-14	7/8-14	1.600	40.64	1.700	43.18	15/16	0.937	23.80	•	•	•	
6809-12-10-NWO	3/4	1 1/16-12	7/8-14	1.710	43.43	1.940	49.28	1 1/8	1.125	28.58	•			
6809-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1.740	44.20	1.940	49.28	1 1/8	1.125	28.58	•	•		
6809-16-16-NWO	1	1 5/16-12	1 5/16-12	2.010	51.05	2.040	51.82	1 3/8	1.375	34.93	•	•		
6809-20-20-NWO	1 1/4	1 5/8-12	1 5/8-12	2.300	58.42	2.260	57.40	1 3/4	1.750	44.45	•		•	

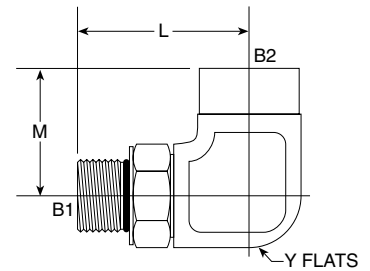
## MAORB-FJS 45° 6810-NWO Series



PART NO. SIZE	PORT O.D.	B1 THREAD	B2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6810-04-04-NWO	1/4	7/16-20	7/16-20	1.050	26.67	0.890	22.61	1/2	0.500	12.70	•			
6810-06-06-NWO	3/8	9/16-18	9/16-18	1.060	26.92	1.150	29.21	7/8	0.875	22.23	•			
6810-08-08-NWO	1/2	3/4-16	3/4-16	1.230	31.24	1.260	32.00	13/16	0.812	20.62	•			
6810-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1.740	44.20	1.450	36.83	1 1/8	1.125	28.58	•			



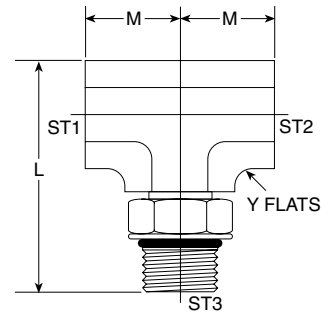
# MAORB-FORB 90° 6815-NWO Series



PART NO. SIZE	PORT O.D.	B1 THREAD	B2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
6815-04-04-NWO	1/4	7/16-20	7/16-20	1.145	29.08	0.830	21.08	3/4	0.750	19.05		•		
6815-06-06-NWO	3/8	9/16-18	3/8-18	1.41	35.81	1.02	25.91	7/8	.875	22.23		•		
6815-08-08-NWO											•	•		
6815-10-10-NWO											•	•		
6815-16-16-NWO	1	1 1/16-12	1-11 1/2	2.25	57.15	1.62	41.15	1 5/8	1.625	41.28		•		

**NEW  
NEW**

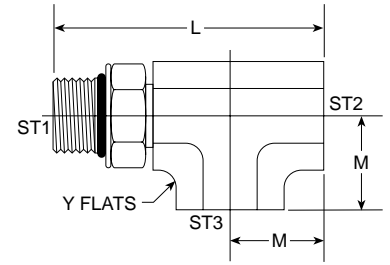
# FORB-FORB-MAORB Tee 6832-NWO Series



PART NO. SIZE	TUBE O.D.	ST1 FORB	ST2 FORB	ST3 MADJ	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
6832-04-04-04-NWO	1/4	7/16-20	7/16-20	7/16-20	1.230	31.24	0.630	16.00	3/4	0.750	19.05		•		
6832-06-06-06-NWO	3/8	9/16-18	9/16-18	9/16-18	1.380	35.05	0.750	19.05	7/8	0.875	22.23		•		
6832-08-08-08-NWO	1/2	3/4-16	3/4-16	3/4-16	1.590	40.39	0.880	22.35	1 1/16	1.062	26.97		•		
6832-10-10-10-NWO	5/8	7/8-14	7/8-14	7/8-14	1.810	45.97	1.020	25.91	1 1/16	1.062	26.97		•		
6832-12-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1 1/16-12	2.000	50.80	1.210	30.73	1 5/16	1.312	33.32		•		
6832-16-16-16-NWO	1	1 5/16-12	1 5/16-12	1 5/16-12	2.250	57.15	1.330	33.78	1 5/8	1.625	41.28		•		

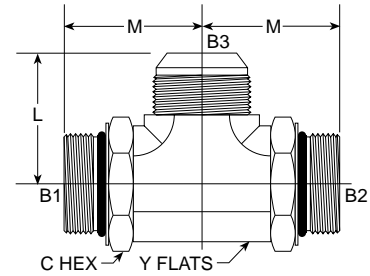
# Tube Fittings & Adapters

## MAORB-FORB-FORB Tee 6835-NWO Series



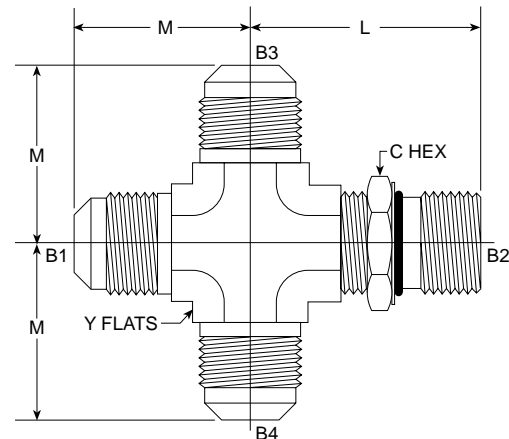
PART NO. SIZE	TUBE O.D.	ST1 MADJ	ST2 FORB	ST3 FORB	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
6835-04-04-04-NWO	1/4	7/16-20	7/16-20	7/16-20	1.230	31.24	0.740	18.80	3/4	0.750	19.05		•		
6835-06-06-06-NWO	3/8	9/16-18	9/16-18	9/16-18	1.380	35.05	0.860	21.84	7/8	0.875	22.23		•		
6835-08-08-08-NWO	1/2	3/4-16	3/4-16	3/4-16	1.590	40.39	1.030	26.16	1 1/16	1.062	26.97		•		
6835-10-10-10-NWO	5/8	7/8-14	7/8-14	7/8-14	1.810	45.97	1.180	29.97	1 1/16	1.062	26.97		•		
6835-12-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1 1/16-12	2.000	50.80	1.390	35.31	1 5/16	1.312	33.32		•		
6835-16-16-16-NWO	1	1 5/16-12	1 5/16-12	1 5/16-12	2.250	57.15	1.520	38.61	1 5/8	1.625	41.28		•		

## MAORB-MAORB-MJ Tee 6840-NWO Series



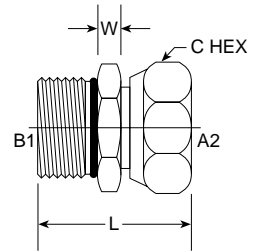
PART NO. SIZE	PORT O.D.	B1 THREAD	B2 THREAD	B3 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
NEW 6840-20-20-20-NWO												•			

## MJ-MJ-MB-MJ Cross 6850-NWO Series



PART NO. SIZE	PORT O.D.	B1 THREAD	B2 THREAD	B3 THREAD	B4 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
													S	FG	SS	B
NEW 6850-06-06-06-06-NWO													•			

# MORB-FPS Straight 6900-O Series

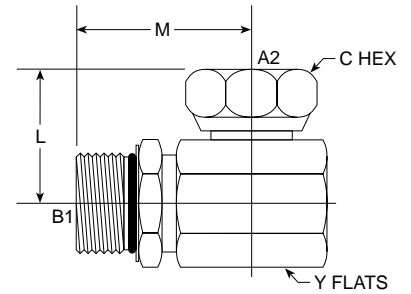


PART NO. SIZE	PORT O.D.	B1 SAE ORB	A2 NPSM	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
6900-04-02-O	1/4	7/16-20	1/8-27	1.060	26.92	0.363	9.22	9/16	0.562	14.27	•		•	
6900-04-04-O	1/4	7/16-20	1/4-18	1.109	28.17	0.280	7.11	9/16	0.562	14.27	•		•	
6900-04-06-O	1/4	7/16-20	3/8-18	1.150	29.21	0.340	8.64	11/16	0.687	17.45	•		•	
6900-04-08-O	1/4	7/16-20	1/2-14	1.210	30.73	0.310	7.87	7/8	0.875	22.23	•			
6900-05-04-O	5/16	1/2-20	1/4-18	1.092	27.74	0.280	7.11	5/8	0.625	15.88	•			
6900-05-08-O	5/16	1/2-20	1/2-14	1.210	30.73	0.310	7.87	7/8	0.875	22.23	•			
6900-06-04-O	3/8	9/16-18	1/4-18	1.062	26.97	0.310	7.87	11/16	0.687	17.45	•			
6900-06-06-O	3/8	9/16-18	3/8-18	1.171	29.74	0.310	7.87	11/16	0.687	17.45	•		•	
6900-06-08-O	3/8	9/16-18	1/2-14	1.234	31.34	0.310	7.87	7/8	0.875	22.23	•			
6900-08-04-O	1/2	3/4-16	1/4-18	1.217	30.91	0.340	8.64	7/8	0.875	22.23	•			
6900-08-06-O	1/2	3/4-16	3/8-18	1.234	31.34	0.340	8.64	7/8	0.875	22.23	•			
6900-08-08-O	1/2	3/4-16	1/2-14	1.240	31.50	0.340	8.64	7/8	0.875	22.23	•		•	
6900-08-12-O	1/2	3/4-16	3/4-14	1.406	35.71	0.340	8.64	1	1.000	25.40	•			
6900-10-06-O	5/8	7/8-14	3/8-18	1.358	34.49	0.410	10.41	1	1.000	25.40	•		•	
6900-10-08-O	5/8	7/8-14	1/2-14	1.330	33.78	0.410	10.41	1	1.000	25.40	•		•	
6900-10-12-O	5/8	7/8-14	3/4-14	1.482	37.64	0.410	10.41	1	1.000	25.40	•		•	
6900-12-06-O	3/4	1 1/16-12	3/8-18	1.530	38.86	0.500	12.70	1 1/4	1.250	31.75	•			
6900-12-08-O	3/4	1 1/16-12	1/2-14	1.438	36.53	0.470	11.94	1 1/4	1.250	31.75	•		•	
6900-12-12-O	3/4	1 1/16-12	3/4-14	1.578	40.08	0.470	11.94	1 1/4	1.250	31.75	•		•	
6900-12-16-O	3/4	1 1/16-12	1-11 1/2	1.630	41.40	0.470	11.94	1 1/2	1.500	38.10	•			
6900-14-12-O	7/8	1 3/16-12	3/4-14	1.683	42.75	0.470	11.94	1 3/8	1.375	34.93	•			
6900-14-16-O	7/8	1 3/16-12	1-11 1/2	1.733	44.02	0.500	12.70	1 3/8	1.375	34.93	•			
6900-16-08-O	1	1 5/16-12	1/2-14	1.610	40.89	0.530	13.46	1 1/2	1.500	38.10	•			
6900-16-12-O	1	1 5/16-12	3/4-14	1.710	43.43	0.500	12.70	1 1/2	1.500	38.10	•			
6900-16-16-O	1	1 5/16-12	1-11 1/2	1.710	43.43	0.500	12.70	1 1/2	1.500	38.10	•		•	
6900-16-20-O	1	1 5/16-12	1 1/4-11 1/2	1.900	48.26	0.580	14.73	1 7/8	1.875	47.63	•			
6900-20-12-O	1 1/4	1 5/8-12	3/4-14	1.780	45.21	0.650	16.51	1 7/8	1.875	47.63	•			
6900-20-16-O	1 1/4	1 5/8-12	1 1/4-11 1/2	1.828	46.43	0.580	14.73	1 7/8	1.875	47.63	•		•	
6900-20-20-O	1 1/4	1 5/8-12	1 1/4-11 1/2	1.710	43.43	0.580	14.73	1 7/8	1.875	47.63	•		•	
6900-24-20-O	1 1/2	1 7/8-12	1 1/4-11 1/2	1.980	50.29	0.650	16.51	2 1/8	2.125	53.98	•			
6900-24-24-O	1 1/2	1 7/8-12	1 1/2-11 1/2	1.953	49.61	0.650	16.51	2 1/8	2.125	53.98	•		•	
6900-32-32-O	2	2 1/2-12	2-11 1/2	2.156	54.76	0.810	20.57	2 3/4	2.750	69.85	•			

# Tube Fittings & Adapters

## MAORB-FPS 90° 6901-NWO Series

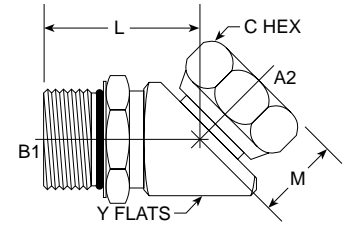
SAE # 140257



PART NO. SIZE	TUBE O.D.	B1 SAE ORB	A2 NPSM	L LGTH	M		C		Y		Standard Material From Stock						
					M.M.	LGTH	M.M.	HEX	M.M.	FLATS	FLATS	M.M.	S	FG	SS	B	
6901-04-02-NWO	1/4	7/16-20	1/8-27	0.730	18.54	1.110	28.19	9/16	0.562	14.27	11/16	0.687	17.45	•			
6901-04-04-NWO	1/4	7/16-20	1/4-18	0.781	19.84	1.109	28.17	11/16	0.687	17.45	11/16	0.687	17.45	•		•	
6901-04-06-NWO	1/4	7/16-20	3/8-18	0.930	23.62	1.250	31.75	7/8	0.875	22.23	7/8	0.875	22.23	•			
6901-04-08-NWO	1/4	7/16-20	1/2-14	1.010	25.65	1.280	32.51	1	1.000	25.40	1	1.000	25.40	•			
6901-05-04-NWO	5/16	1/2-20	1/4-18	0.790	20.07	1.130	28.70	11/16	0.687	17.45	1/2	0.500	12.70	•			
6901-06-04-NWO	3/8	9/16-18	1/4-18	0.781	19.84	1.187	30.15	11/16	0.687	17.45	7/8	0.875	22.23	•	•		
6901-06-06-NWO	3/8	9/16-18	3/8-18	0.937	23.80	1.296	32.92	7/8	0.875	22.23	7/8	0.875	22.23	•	•	•	
6901-06-08-NWO	3/8	9/16-18	1/2-14	1.000	25.40	1.484	37.69	1	1.000	25.40	1	1.000	25.40	•			
6901-08-04-NWO	1/2	3/4-16	1/4-18	0.919	23.34	1.486	37.74	11/16	0.687	17.45	1	1.000	25.40	•			
6901-08-06-NWO	1/2	3/4-16	3/8-18	1.000	25.40	1.515	38.48	7/8	0.875	22.23	1	1.000	25.40	•			
6901-08-08-NWO	1/2	3/4-16	1/2-14	1.000	25.40	1.515	38.48	1	1.000	25.40	1	1.000	25.40	•			
6901-08-12-NWO	1/2	3/4-16	3/4-14	1.250	31.75	1.656	42.06	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
6901-10-04-NWO	5/8	7/8-14	1/4-18	0.920	23.37	1.640	41.66	11/16	0.687	17.45	1 1/8	1.125	28.57	•			
6901-10-06-NWO	5/8	7/8-14	3/8-18	1.000	25.40	1.640	41.66	7/8	0.875	22.23	1 1/8	1.125	28.57	•			
6901-10-08-NWO	5/8	7/8-14	1/2-14	1.000	25.40	1.640	41.66	1	1.000	25.40	1 1/8	1.125	28.57	•			
6901-10-12-NWO	5/8	7/8-14	3/4-14	1.250	31.75	1.781	45.24	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
6901-12-06-NWO	3/4	1 1/16-12	3/8-18	1.120	28.45	1.920	48.77	7/8	0.875	22.23	1 1/4	1.250	31.75	•			
6901-12-08-NWO	3/4	1 1/16-12	1/2-14	1.125	28.58	1.921	48.79	1	1.000	25.40	1 1/4	1.250	31.75	•	•	•	
6901-12-12-NWO	3/4	1 1/16-12	3/4-14	1.250	31.75	1.921	48.79	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
6901-12-16-NWO	3/4	1 1/16-12	1-11 1/2	1.250	31.75	2.000	50.80	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•			
6901-14-12-NWO	7/8	1 3/16-12	3/4-14	1.250	31.75	1.921	48.79	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•			
6901-14-16-NWO	7/8	1 3/16-12	1-11 1/2	1.240	31.50	2.093	53.16	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•			
6901-16-12-NWO	1	1 5/16-12	3/4-14	1.000	25.40	2.093	53.16	1 1/4	1.250	31.75	1 1/2	1.500	38.10	•			
6901-16-16-NWO	1	1 5/16-12	1-11 1/2	1.390	35.31	2.093	53.16	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•	•		
6901-16-20-NWO	1	1 5/16-12	1 1/4-11 1/2	1.610	40.89	2.350	59.69	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•			
6901-20-12-NWO	1 1/4	1 5/8-12	3/4-14	2.000	50.80	2.484	63.09	1 1/4	1.250	31.75	1 7/8	1.875	47.63	•			
6901-20-16-NWO	1 1/2	1-11 1/2	1-11 1/2	1.824	46.33	2.309	58.65	1 1/2	1.500	38.10	1 5/8	1.625	41.28	•			
6901-20-20-NWO	1 1/4	1 5/8-12	1 1/4-11 1/2	1.656	42.06	2.484	63.09	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•		•	
NEW 6901-24-20-NWO														•	•		
6901-24-24-NWO	1 1/2	1 7/8-12	1 1/2-11 1/2	1.734	44.04	2.609	66.27	2 1/8	2.125	53.98	2 1/8	2.125	53.98	•		•	
6901-32-32-NWO	2	2 1/2-12	2-11 1/2	2.312	58.72	3.250	82.55	2 5/8	2.625	66.68	2 5/8	2.625	66.68	•			

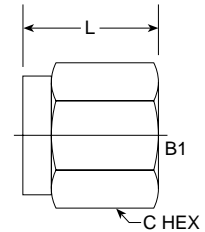
# MAORB-FPS 45° 6902-NWO Series

SAE # 140357



PART NO. SIZE	TUBE O.D.	B1 SAE ORB	A2 NPSM	L LGTH M.M.	M LGTH M.M.	C HEX	C HEX	Y FLATS	Y FLATS	Standard Material From Stock							
										S	FG	SS	B				
6902-04-04-NWO	1/4	7/16-20	1/4-18	1.062	26.97	0.656	16.66	11/16	0.687	17.45	11/16	0.687	17.45	•			
6902-04-06-NWO	1/4 3/8	7/16-20	3/8-18	1.062	26.97	0.780	19.81	7/8	0.875	22.23	7/8	0.875	22.23	•			
6902-06-04-NWO	3/8 1/4	9/16-18	1/4-18	1.062	26.97	0.656	16.66	11/16	0.687	17.45	7/8	0.875	22.23	•			
6902-06-06-NWO	3/8	9/16-18	3/8-18	1.062	26.97	0.703	17.86	7/8	0.875	22.23	7/8	0.875	22.23	•		•	
6902-06-08-NWO	3/8 1/2	9/16-18	1/2-14	1.062	26.97	0.812	20.62	1	1.000	25.40	1	1.000	25.40	•			
6902-08-04-NWO	1/2 1/4	3/4-16	1/4-18	1.125	28.58	0.810	20.57	11/16	0.687	17.45	1	1.000	25.40	•			
6902-08-06-NWO	1/2 3/8	3/4-16	3/8-18	1.125	28.58	0.875	22.23	7/8	0.875	22.23	1	1.000	25.40	•			
6902-08-08-NWO	1/2	3/4-16	1/2-14	1.125	28.58	0.812	20.62	1	1.000	25.40	1	1.000	25.40	•		•	
6902-08-12-NWO	1/2 3/4	3/4-16	3/4-14	1.220	30.99	1.080	27.43	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•			
6902-10-06-NWO	5/8 3/8	7/8-14	3/8-18	1.500	38.10	0.932	23.67	7/8	0.875	22.23	1 1/8	1.125	28.57	•			
6902-10-08-NWO	5/8 1/2	7/8-14	1/2-14	1.500	38.10	0.781	19.84	1	1.000	25.40	1 1/8	1.125	28.57	•			
6902-10-12-NWO	5/8 3/4	7/8-14	3/4-14	1.359	34.52	1.050	26.67	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•			
6902-12-06-NWO	3/4 3/8	1 1/16-12	3/8-18	1.500	38.10	1.020	25.91	7/8	0.875	22.23	1 1/4	1.250	31.75	•			
6902-12-08-NWO	3/4 1/2	1 1/16-12	1/2-14	1.500	38.10	0.950	24.13	1	1.000	25.40	1 1/4	1.250	31.75	•		•	
6902-12-12-NWO	3/4	1 1/16-12	3/4-14	1.500	38.10	1.046	26.57	1 1/4	1.250	31.75	1 1/4	1.250	31.75	•		•	
6902-12-16-NWO	3/4 1	1 1/16-12	1-11 1/2	1.680	42.67	1.050	26.67	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•			
6902-16-12-NWO	1 3/4	1 5/16-12	3/4-14	1.625	41.28	1.050	26.67	1 1/4	1.250	31.75	1 1/2	1.500	38.10	•		•	
6902-16-16-NWO	1	1 5/16-12	1-11 1/2	1.625	41.28	1.060	26.92	1 1/2	1.500	38.10	1 1/2	1.500	38.10	•		•	
6902-16-20-NWO	1	1 5/16-12	1 1/4-11 1/2	1.850	46.99	0.820	20.83	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•			
6902-20-16-NWO	1 1/4 1	1 5/8-12	1-11 1/2	1.840	46.74	1.450	36.83	1 1/2	1.500	38.10	1 7/8	1.875	47.63	•			
6902-20-20-NWO	1 1/4	1 5/8-12	1 1/4-11 1/2	2.281	57.94	1.171	29.74	1 7/8	1.875	47.63	1 7/8	1.875	47.63	•	•		
6902-24-24-NWO	1 1/2	1 7/8-12	1 1/2-11 1/2	2.609	66.27	1.343	34.11	2 1/8	2.125	53.98	2 1/8	2.125	53.98	•			

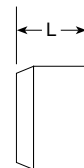
# JIC-Flareless Nut V0318 Series

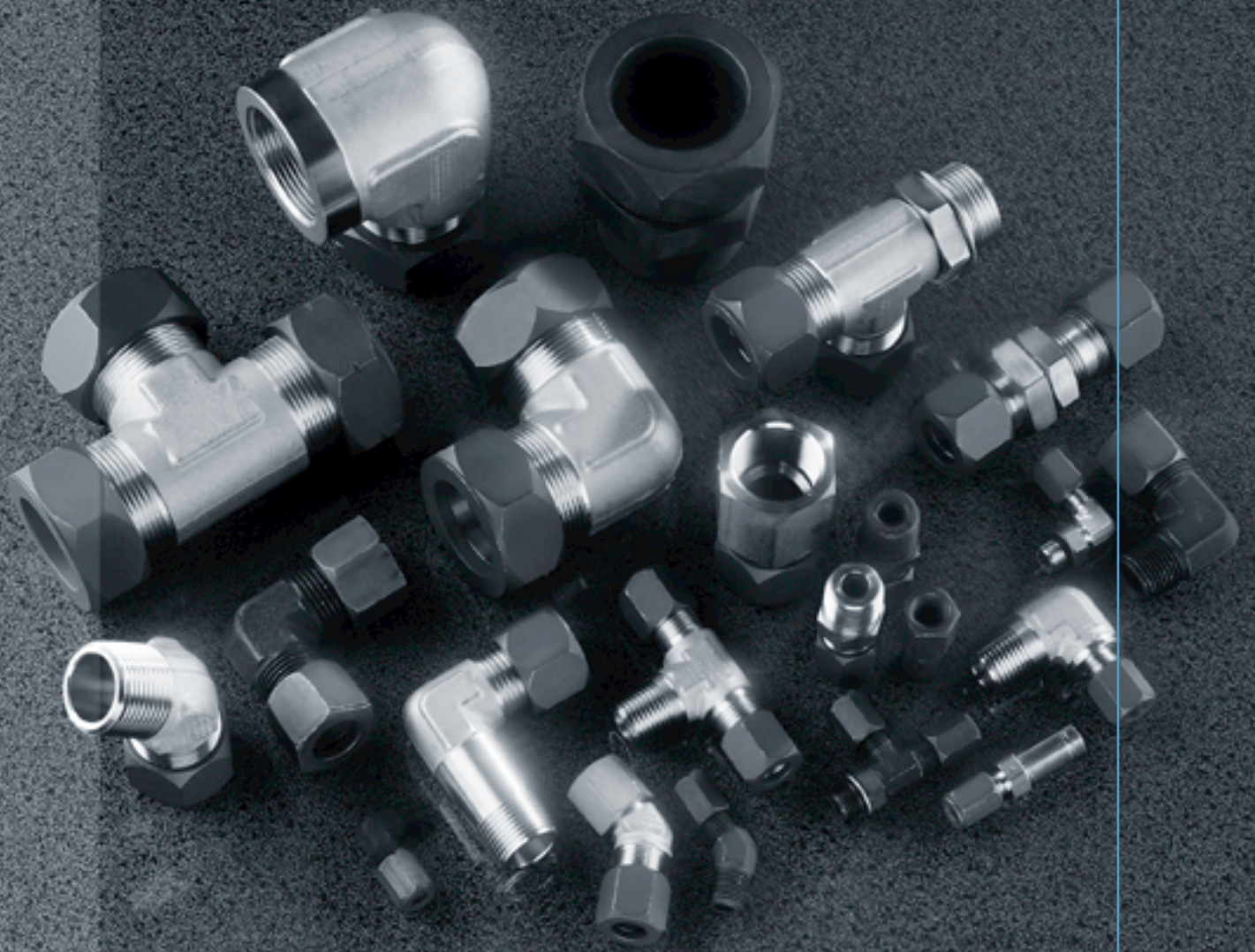


PART NO. SIZE	TUBE O.D.	THREAD B1	L LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock				
							S	FG	SS	B	
V0318-04	1/4	7/16-20	0.830	21.08	9/16	0.562	14.28	•			
V0318-05	5/16	1/2-20	0.830	21.08	5/8	0.625	15.87	•			
V0318-06	3/8	3/8-18	0.860	21.84	11/16	0.687	17.46	•			
V0318-08	1/2	3/4-16	1.085	27.56	7/8	0.875	22.23	•			
V0318-10	5/8	7/8-14	1.125	28.57	1	1.000	25.40	•			
V0318-12	3/4	1 1/16-12	1.365	34.67	1 1/4	1.125	28.57	•			
V0318-16	1	1 5/8-12	1.400	35.56	1 1/2	1.500	38.10	•			
V0318-20	1 1/4	1 5/8-12	1.800	45.72	2	2.000	50.80	•			

PART NO. SIZE	TUBE O.D.	L LGTH	M.M.	Standard Material From Stock			
				S	FG	SS	B
V0319-04	1/4	0.400	10.16	•			
V0319-05	1/4	0.415	10.54	•			
V0319-06	1/4	0.465	11.81	•			
V0319-08	1/2	0.570	14.78	•			
V0319-10	5/8	0.570	14.78	•			
V0319-12	3/4	0.700	17.78	•			
V0319-16	1	1.000	25.40	•			
V0319-20	1 1/4	1.000	25.40	•			

# JIC-Flareless Sleeve V0319 Series




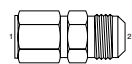
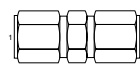
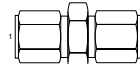
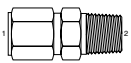
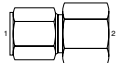
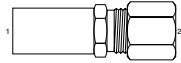

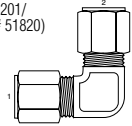
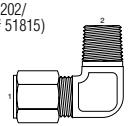
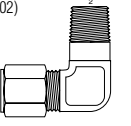
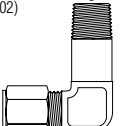
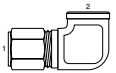
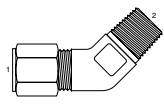
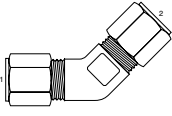
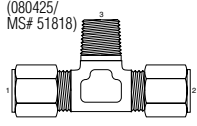

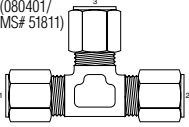
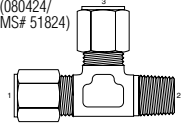
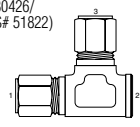
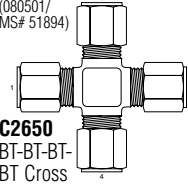
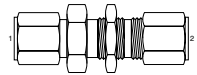
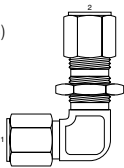
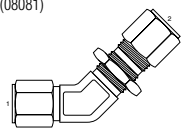
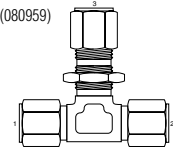
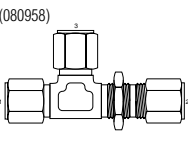
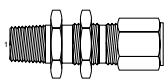
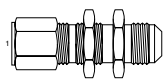
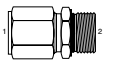
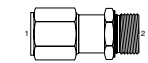
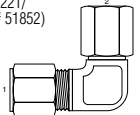
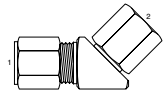
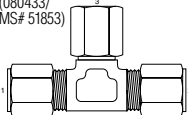
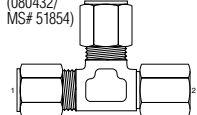
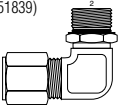
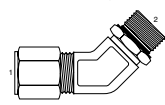
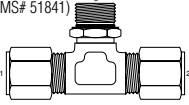
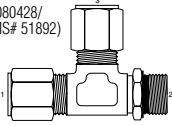




*Flareless Bite Type Fittings*

## Flareless Bite Type Fittings

Brennan Industries, Inc.'s steel and stainless steel bite type fittings meet all design and performance requirements for hydraulic flareless tube fittings in Standard J514 published by the Society of Automotive Engineers (SAE).

(080112/MS# 51590)  <b>C0304-C</b> Cap Nut	(080110/MS# 51823)  <b>C0318</b> Nut	(080115A/MS# 51825A)  <b>C0319</b> Ferrule	 <b>C2402</b> BT-MJ	(080101/MS# 51814)  <b>C2403</b> BT-BT Tube Union Straight	(080119/MS# 51856)  <b>C2403-LH</b> BT-BT Tube Union Large Hex Straight
(080102/MS# 51819)  <b>C2404</b> BT-MP Adapter Straight	(080103)  <b>C2405</b> BT-FP Adapter Straight	 <b>C2406</b> Tube-BT Reducer	(080109)  <b>C2408</b> Plug	(080201/MS# 51820)  <b>C2500</b> BT-BT Elbow 90°	(080202/MS# 51815)  <b>C2501</b> BT-MP Elbow 90°
(071502)  <b>C2501-L</b> BT-MP Elbow 90° Long	(081602)  <b>C2501-LL</b> BT-MP Elbow 90° X-Long	(080203/MS# 51813)  <b>C2502</b> BT-FP Elbow 90°	(080302/MS# 51817)  <b>C2503</b> BT-MP Elbow 45°	 <b>C2504</b> BT-BT Elbow 45°	(080425/MS# 51818)  <b>C2601</b> BT-BT-MP Tee
(080427/MS# 51821)  <b>C2602</b> BT-BT-FP Tee	(080401/MS# 51811)  <b>C2603</b> BT-BT-BT Tee	(080424/MS# 51824)  <b>C2605</b> BT-MP-BT Tee	(080426/MS# 51822)  <b>C2606</b> BT-FP-BT Tee	(080501/MS# 51894)  <b>C2650</b> BT-BT-BT-BT Cross	 <b>C2700</b> BT-BT Bulkhead Union
(080701/MS# 51855)  <b>C2701</b> BT-BT Bulkhead Union 90°	(08081)  <b>C2702</b> BT-BT Bulkhead Union 45°	(080959)  <b>C2703</b> BT-BT-BT Bulkhead Branch Tee	(080958)  <b>C2704</b> BT-BT-BT Bulkhead Tee	 <b>C2706</b> BT-MP Bulkhead	 <b>C2707</b> BT-MJ Bulkhead
(08120/MS# 51843)  <b>C6400-O</b> BT-MORB	(080122)  <b>C6400-L-O</b> BT-MORB Long	(080221/MS# 51852)  <b>C6500</b> BT-BTS 90°	(080321)  <b>C6502</b> BT-BTS 45°	(080433/MS# 51853)  <b>C6600</b> BT-BT-BTS Tee	(080432/MS# 51854)  <b>C6602</b> BT-BTS-BT Tee
(080220/MS# 51839)  <b>C6801-NWO</b> BT-MAORB 90°	(080320/MS# 51842)  <b>C6802-NWO</b> BT-MAORB 45°	(080429/MS# 51841)  <b>C6803-NWO</b> BT-BT-MAORB Tee	(080428/MS# 51892)  <b>C6804-NWO</b> BT-MAORB-BT Tee		

# Flareless Bite Type Fittings

## Assembly Instructions

The assembly of Brennan Steel and Stainless Steel Bite-Type Fittings involves four steps:

1) cutting, deburring and cleaning; 2) pre-setting the ferrule to the tubing; 3) ferrule bite inspection; and 4) installation.

### 1 Cutting, Deburring & Cleaning

1. Square-cut the seamless or welded-and-drawn tubing using a hacksaw with a fine-tooth blade, or a circular-toothed cut-off saw. Use only tubing that is fully annealed for bending and flaring.
2. Remove all burrs and sharp edges on the tube by lightly deburring the I.D. and O.D. Emery paper may be used to perform this task.
3. Wipe the tube end completely with a clean cloth. Be sure to remove all metal chips from the tube end.

### 2 Pre-Setting Ferrule to the Tubing

This procedure must be followed to ensure the proper location of the ferrule to the tubing.

1. Lubricate the fitting body thread and the thread of the nut.
2. Slip the nut and ferrule over the deburred end of the tube. The long, straight end of the ferrule must point toward the deburred tube end.
3. Lubricate the ferrule.
4. Position the deburred tube end squarely on the shoulder of the fitting body.
5. Manually screw the nut onto the fitting body until it is finger-tight.
6. Put a reference mark on the nut and the tube.
7. Hold the tube firmly on the fitting body and tighten the nut an additional  $1\frac{1}{4}$  turns. Proper

assembly of bite-type fittings is dependent upon the ferrule traveling a prescribed distance into the fitting throat. This allows it to "bite" into the tube, creating a strong grip and seal.

8. The use of a Ferulset tool is recommended for sizes -08 through -32".

### 3 Ferrule Bite Inspection

The following inspection procedures must be completed prior to final assembly.

1. Disassemble the fitting.
2. The tube surface must have a raised ridge of metal that is at least 50% of the thickness of the leading edge of the ferrule.
3. There must be a slight bow to the pilot section of the ferrule.
4. The tail of the ferrule should be snug against the tube.
5. A slight indentation around the deburred end of the tube indicates that the tube was bottomed in the fitting. If this indentation is not visible, the ferrule may not be properly seated.
6. Do not rotate the ferrule.

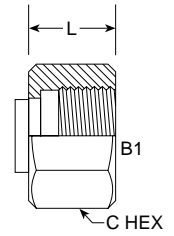
### 4 Installation

1. Finger-tighten the nut.
2. Wrench-tighten the nut another  $\frac{1}{3}$  to  $\frac{1}{2}$  turn.



# Cap Nut C0304-C Series

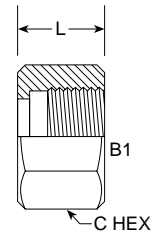
SAE# 080112 / MS# 51590



PART NO. SIZE	TUBE O.D.	B1 THREAD	L LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock				
							S	FG	SS	B	
C0304-C-02	1/8	5/16-24	0.500	12.70	3/8	0.375	9.52	•		•	
C0304-C-04	1/4	7/16-20	0.590	14.99	9/16	0.562	15.87	•		•	
C0304-C-05	5/16	1/2-20	0.610	15.49	5/8	0.625	15.87	•		•	
C0304-C-06	3/8	9/16-18	0.630	16.00	11/16	0.688	17.47	•		•	
C0304-C-08	1/2	3/4-16	0.750	19.05	7/8	0.875	22.22	•		•	
C0304-C-10	5/8	7/8-14	0.840	21.34	1	1.000	25.40	•		•	
C0304-C-12	3/4	1 1/16-12	0.910	23.11	1 1/4	1.250	31.75	•		•	
C0304-C-16	1	1 5/16-12	1.020	25.91	1 1/2	1.500	38.10	•		•	
C0304-C-20	1 1/4	1 5/8-12	1.060	26.92	2	2.000	50.80	•		•	

# Nut C0318 Series

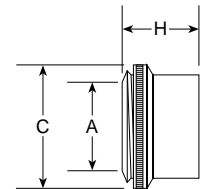
SAE# 080110 / MS# 51823



PART NO. SIZE	TUBE O.D.	B1 THREAD	L LGTH M.M.	C HEX	C HEX	M.M.	Standard Material From Stock				
							S	FG	SS	B	
C0318-02	1/8	5/16-24	0.540	13.72	3/8	0.375	9.52	•		•	
C0318-03	3/16	3/8-24	0.600	15.24	7/16	0.438	11.12	•		•	
C0318-04	1/4	7/16-20	0.610	15.49	9/16	0.562	14.27	•		•	•
C0318-05	5/16	1/2-20	0.670	17.02	5/8	0.625	15.87	•		•	
C0318-06	3/8	9/16-18	0.720	18.29	11/16	0.688	17.47	•		•	•
C0318-08	1/2	3/4-16	0.840	21.34	7/8	0.875	22.22	•		•	
C0318-10	5/8	7/8-14	0.970	24.64	1	1.000	25.40	•		•	
C0318-12	3/4	1 1/16-12	1.020	25.91	1 1/4	1.250	31.75	•		•	
C0318-14	7/8	1 3/16-12	1.080	27.43	1 3/8	1.375	34.92	•		•	
C0318-16	1	1 5/16-12	1.120	28.45	1 1/2	1.500	38.10	•		•	
C0318-20	1 1/4	1 5/8-12	1.220	30.99	2	2.000	50.80	•		•	
C0318-24	1 1/2	1 7/8-12	1.410	35.81	2 1/4	2.250	57.15	•		•	
C0318-32	2	2 1/2-12	1.740	44.20	2 7/8	2.875	73.02	•		•	

# Ferrule C0319 Series

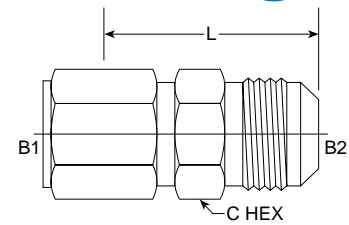
SAE# 080115A / MS# 51825A



PART NO. SIZE	TUBE O.D.	A	C	H	Standard Material From Stock			
					S	FG	SS	B
C0319-02	1/8	0.130	0.240	0.290	•		•	
C0319-03	3/16	0.190	0.310	0.330	•		•	
C0319-04	1/4	0.260	0.370	0.360	•		•	•
C0319-05	5/16	0.320	0.430	0.370	•		•	
C0319-06	3/8	0.380	0.500	0.390	•		•	•
C0319-08	1/2	0.510	0.660	0.430	•		•	
C0319-10	5/8	0.630	0.780	0.440	•		•	
C0319-12	3/4	0.760	0.930	0.480	•		•	
C0319-14	7/8	0.880	1.060	0.480	•		•	
C0319-16	1	1.010	1.190	0.480	•		•	
C0319-20	1 1/4	1.260	1.450	0.480	•		•	
C0319-24	1 1/2	1.510	1.690	0.480	•		•	
C0319-32	2	2.010	2.210	0.051	•		•	

# Flareless Bite Type Fittings

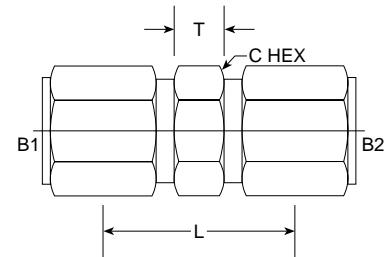
## BT-MJ C2402 Series



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
									S	FG	SS	B
C2402-04-04	1/4	7/16-20	1/4-18	1.1875	30.00	1/2	0.50	12.70			•	
C2402-06-06	3/8	9/16-18	9/16-18	1.280	32.51	5/8	0.625	15.87	•		•	
C2402-08-08	1/2	3/4-16	3/4-16	1.470	37.34	13/16	0.812	20.62	•		•	
<b>NEW</b> C2402-08-12											•	
C2402-12-12	3/4	1 1/16-12	1 1/16-12	1.940	49.28	1 1/8	1.125	28.57	•		•	
C2402-16-16	1	1 5/16-12	1-11 1/2	1.970	50.00	1 5/8	1.625	41.28	•			
C2402-20-20	1 1/4	1 5/8-12	1 1/2-11 1/2	2.000	51.00	1 3/4	1.75	44.45	•			

## BT-BT Tube Union Straight C2403 Series

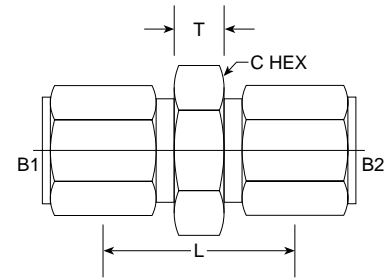
SAE# 080101 / MS# 51814



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	L LGTH	M.M.	T WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
C2403-02-02	1/8	5/16-24	5/16-24	1.020	25.91	0.220	5.59	7/16	0.438	11.12	•		•	
C2403-03-03	3/16	3/8-24	3/8-24	1.110	28.19	0.220	5.59	7/16	0.438	11.12	•		•	
C2403-04-04	1/4	7/16-20	7/16-20	1.190	30.23	0.220	5.59	1/2	0.500	12.70	•		•	
C2403-05-05	5/16	1/2-20	1/2-20	1.190	30.23	0.220	5.59	9/16	0.562	14.27	•		•	
C2403-06-04	3/8 1/4	9/16-18	7/16-20	1.240	31.50	0.250	6.35	5/8	0.625	15.87	•		•	
C2403-06-06	3/8	9/16-18	9/16-18	1.220	30.99	0.250	6.35	5/8	0.625	15.87	•		•	
C2403-08-08	1/2	3/4-16	3/4-16	1.420	36.07	0.250	6.35	13/16	0.812	20.62	•		•	
C2403-10-10	5/8	7/8-14	7/8-14	1.610	40.89	0.310	7.87	15/16	0.038	23.82	•		•	
C2403-12-08	3/4	1 1/16-12	1/2-14	1.690	42.93	0.380	9.65	1 1/4	1.125	28.58			•	
C2403-12-12	3/4	1 1/16-12	1 1/16-12	1.810	45.97	0.380	9.65	1 1/8	1.125	28.57	•		•	
C2403-14-14	7/8	1 3/16-12	1 3/16-12	1.810	45.97	0.380	9.65	1 1/8	1.125	28.57	•		•	
C2403-16-16	1	1 5/16-12	1 5/16-12	1.810	45.97	0.380	9.65	1 3/8	1.375	34.92	•		•	
C2403-20-20	1 1/4	1 5/8-12	1 5/8-12	1.890	48.01	0.460	11.68	1 11/16	1.688	42.87	•		•	
C2403-24-24	1 1/2	1 7/8-12	1 7/8-12	1.960	49.78	0.530	13.46	2	2.000	50.80	•		•	
C2403-32-32	2	2 1/2-12	2 1/2-12	2.110	53.59	0.680	17.27	2 5/8	2.625	66.67	•		•	

# BT-BT Tube Union Large Hex Straight C2403-LH Series

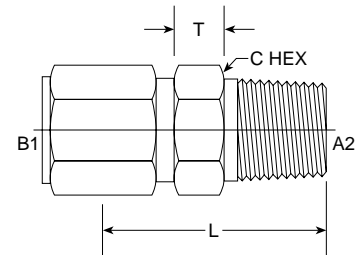
SAE# 080119 / MS# 51856



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	L LGTH	M.M.	T WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
C2403-LH-04-04	1/4	7/16-20	7/16-20	1.190	30.23	0.220	5.588	11/16	0.688	17.47	•		•	
C2403-LH-06-06	3/8	9/16-18	9/16-18	1.230	31.24	0.250	6.350	13/16	0.812	20.62	•		•	
C2403-LH-08-06	1/2 3/8	3/4-16	9/16-18	1.220	30.99	0.250	6.350	1	1.000	25.40	•		•	
C2403-LH-08-08	1/2	3/4-16	3/4-16	1.420	36.07	0.250	6.350	1	1.000	25.40	•		•	
C2403-LH-10-10	5/8	7/8-14	7/8-14	1.330	33.78	0.310	7.874	1 1/8	1.125	28.57	•		•	
C2403-LH-12-12	3/4	1 1/16-12	1 1/16-12	1.610	40.89	0.380	9.652	1 3/8	1.375	34.92	•		•	
C2403-LH-16-16	1	1 5/16-12	1 5/16-12	1.810	45.97	0.380	9.652	1 5/8	1.625	41.27			•	

# BT-MP Adapter Straight C2404 Series

SAE# 080102 / MS# 51819

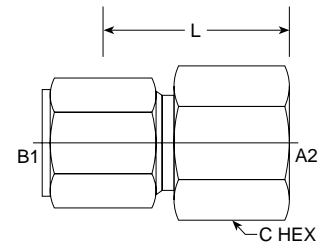


PART NO. SIZE	TUBE O.D.	B1 THREAD	A2 NPTF	L LGTH	M.M.	T WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
C2404-02-02	1/8	5/16-24	1/8-27	1.040	26.42	0.220	5.59	7/16	0.438	11.12	•		•	
C2404-02-04	1/8	5/16-24	1/4-18	1.250	31.75	0.250	6.35	9/16	0.562	14.27	•		•	
NEW C2404-03-02											•		•	
C2404-04-02	1/4	7/16-20	1/8-27	1.120	28.45	0.250	6.35	1/2	0.500	12.70	•		•	•
C2404-04-04	1/4	7/16-20	1/4-18	1.330	33.78	0.250	6.35	9/16	0.562	14.27	•		•	•
C2404-04-06	1/4	7/16-20	3/8-18	1.330	33.78	0.250	6.35	3/4	0.750	19.05	•		•	
C2404-04-08	1/4	7/16-20	1/2-14	1.580	40.13	0.250	6.35	7/8	0.875	22.22	•		•	
C2404-05-02	5/16	1/2-20	1/8-27	1.120	28.45	0.250	6.35	9/16	0.562	14.27	•		•	
C2404-05-04	5/16	1/2-20	1/4-18	1.330	33.78	0.250	6.35	9/16	0.562	14.27	•		•	
C2404-05-06	5/16	1/2-20	3/8-18	1.420	36.09	0.250	6.35	3/4	0.750	19.05	•		•	
C2404-06-02	3/8	9/16-18	1/8-27	1.160	29.46	0.250	6.35	5/8	0.625	15.87	•		•	
C2404-06-04	3/8	9/16-18	1/4-18	1.340	34.04	0.250	6.35	5/8	0.625	15.87	•		•	
C2404-06-06	3/8	9/16-18	3/8-18	1.340	34.04	0.250	6.35	13/16	0.812	20.62	•		•	•
C2404-06-08	3/8	9/16-18	1/2-14	1.600	40.65	0.250	6.35	15/16	0.938	23.82	•		•	
C2404-08-04	1/2	3/4-16	1/4-18	1.440	36.58	0.250	6.35	13/16	0.812	20.62	•		•	
C2404-08-06	1/2	3/4-16	3/8-18	1.440	36.58	0.250	6.35	13/16	0.812	20.62	•		•	
C2404-08-08	1/2	3/4-16	1/2-14	1.690	42.93	0.310	7.87	15/16	0.938	23.82	•		•	
C2404-08-12	1/2	3/4-16	3/4-14	1.750	44.45	0.380	9.65	1-1/8	1.125	28.57	•		•	
C2404-10-06	5/8	7/8-14	3/8-16	1.560	39.62	0.380	9.65	15/16	0.938	23.82	•		•	
C2404-10-08	5/8	7/8-14	1/2-14	1.750	44.45	0.310	7.87	15/16	0.938	23.82	•		•	
C2404-10-12	5/8	7/8-14	3/4-14	1.830	46.48	0.380	9.65	1 1/8	1.125	28.57	•		•	
C2404-12-08	3/4	1 1/16-12	1/2-14	1.880	47.75	0.380	9.65	1 1/8	1.125	28.57	•		•	
C2404-12-12	3/4	1 1/16-12	3/4-14	1.880	47.75	0.380	9.65	1 1/8	1.125	28.57	•		•	
C2404-12-16	3/4	1 1/16-12	1-11 1/2	2.080	52.83	0.380	9.65	1 3/8	1.375	34.92	•		•	
NEW C2404-14-12											•		•	
C2404-16-12	1	1 5/16-12	3/4-14	1.880	47.75	0.380	9.65	1 3/8	1.375	34.92	•		•	
C2404-16-16	1	1 5/16-12	1-11 1/2	2.070	52.58	0.380	9.65	1 3/8	1.375	34.92	•		•	
C2404-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	2.180	55.37	0.460	11.68	1 11/16	1.688	42.93	•		•	
C2404-24-20	1 1/2	1 7/8-12	1 1/4-11 1/2	2.280	57.91	0.562	14.22	2	2.000	50.80	•		•	
C2404-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	2.280	57.91	0.530	13.46	2	2.000	50.80	•		•	
C2404-32-32	2	2 1/2-12	2-11 1/2	2.460	62.48	0.680	17.27	2 5/8	2.625	66.80	•		•	

# Flareless Bite Type Fittings

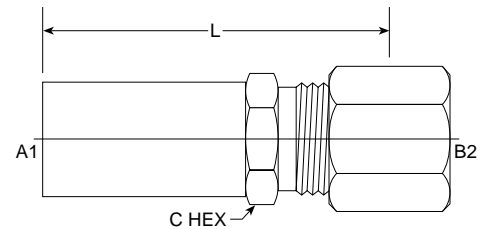
## BT-FP Adapter Straight C2405 Series

SAE # 080103



PART NO. SIZE	TUBE O.D.	B1 THREAD	A2 NPTF	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
									S	FG	SS	B
C2405-02-02	1/8	5/16-24	1/8-27	1.050	26.67	9/16	0.562	14.27	•		•	
C2405-04-02	1/4	7/16-20	1/8-27	1.090	27.70	9/16	0.562	14.27	•		•	
C2405-04-04	1/4	7/16-20	1/4-18	1.290	32.77	3/4	0.750	19.05	•		•	
C2405-05-02	5/16	1/2-20	1/8-27	1.080	27.45	9/16	0.562	14.27	•		•	
<b>NEW</b> C2405-05-04											•	
C2405-06-04	3/8	9/16-18	1/4-28	1.310	33.27	3/4	0.750	19.05	•		•	
C2405-06-06	3/8	9/16-18	3/8-18	1.340	34.04	7/8	0.875	22.22	•		•	
C2405-06-08	3/8	9/16-18	1/2-14	1.590	40.39	1 1/8	1.125	28.57	•		•	
C2405-08-04	1/2	3/4-16	1/4-18	1.460	37.08	13/16	0.812	20.62	•		•	
C2405-08-06	1/2	3/4-16	3/8-18	1.470	37.34	7/8	0.875	22.22	•		•	
C2405-08-08	1/2	3/4-16	1/2-14	1.690	42.93	1 1/8	1.125	28.57	•		•	
<b>NEW</b> C2405-10-06											•	
C2405-10-08	5/8	7/8-14	1/2-14	1.770	44.96	1 1/8	1.125	28.57	•		•	
C2405-12-12	3/4	1 1/16-12	3/4-14	1.890	48.01	1 3/8	1.375	34.92	•		•	
<b>NEW</b> C2405-14-12											•	
C2405-16-16	1	1 15/16-12	1-11 1/2	2.130	54.10	1 5/8	1.625	41.27	•		•	
C2405-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	2.220	56.39	2	2.000	50.80	•		•	
C2405-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	2.230	56.64	2 3/8	2.375	60.32	•		•	

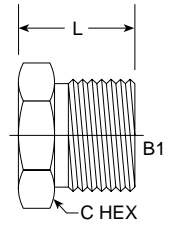
## Tube-BT Reducer C2406 Series



PART NO. SIZE	TUBE O.D.	A1 TUBE	B2 THREAD	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
									S	FG	SS	B
C2406-06-04	3/8	0.375	7/16-20	1.610	40.89	1/2	0.500	12.70	•		•	
C2406-08-04	1/2	0.500	7/16-20	1.730	43.94	9/16	0.562	14.27	•		•	
C2406-08-06	1/2	0.500	9/16-18	1.770	44.96	9/16	0.562	14.27	•		•	
C2406-10-08	5/8	0.625	7/8-14	1.950	49.53	13/16	0.812	20.62	•		•	
C2406-12-06	3/4	0.750	1 1/16-12	1.940	49.28	13/16	0.812	20.62	•		•	
C2406-12-08	3/4	0.750	1 1/16-12	2.030	51.56	13/16	0.812	20.62	•		•	
C2406-16-08	1	1.000	1 5/16-12	2.050	52.07	1 1/16	1.062	26.97	•		•	
C2406-16-12	1	1.000	1 5/16-12	2.250	57.15	1 1/8	1.125	28.57	•		•	
C2406-20-16	1 1/4	1.250	1 5/8-12	2.280	57.91	1 3/8	1.375	34.92	•		•	

# Plug C2408 Series

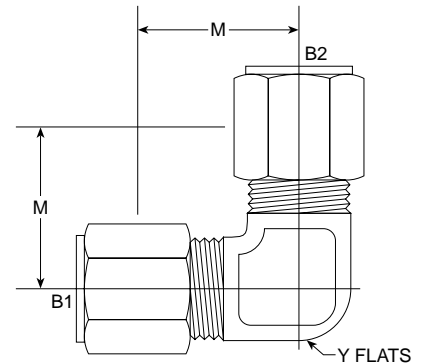
SAE # 080109



PART NO. SIZE	TUBE O.D.	B1 THREAD	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
								S	FG	SS	B
C2408-02	1/8	5/16-24	0.630	16.00	7/16	0.438	11.12	•			
C2408-04	1/4	7/16-20	0.710	18.03	1/2	0.500	12.70	•		•	
C2408-06	3/8	9/16-18	0.750	19.05	5/8	0.625	15.87	•		•	
C2408-08	1/2	3/4-16	0.850	21.59	13/16	0.812	20.62	•		•	
C2408-10	5/8	7/8-14	0.970	24.64	15/16	0.938	23.82	•		•	
C2408-12	3/4	1 1/16-12	1.100	27.94	1 1/8	1.125	28.57	•		•	
C2408-16	1	1 5/16-12	1.100	27.94	1 3/8	1.375	34.92	•		•	
C2408-20	1 1/4	1 5/8-12	1.180	29.97	1 11/16	1.688	42.87			•	

# BT-BT Elbow 90° C2500 Series

SAE # 080201 / MS # 51820

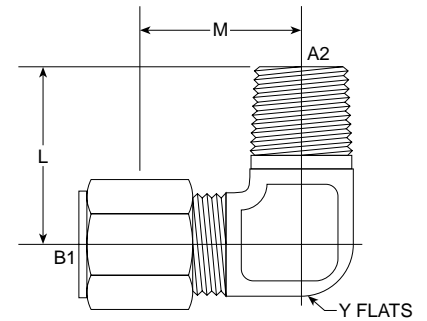


PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
									S	FG	SS	B
C2500-02-02	1/8	5/16-24	5/16-24	0.770	19.56	7/16	0.438	11.12			•	
C2500-04-04	1/4	7/16-20	7/16-20	0.890	22.61	7/16	0.438	11.12		•	•	
C2500-05-05	5/16	1/2-20	1/2-20	0.950	24.13	9/16	0.562	14.27		•	•	
C2500-06-06	3/8	9/16-18	9/16-18	1.050	26.67	9/16	0.562	14.27		•	•	
C2500-08-08	1/2	3/4-16	3/4-16	1.250	31.75	3/4	0.750	19.05		•	•	
C2500-10-10	5/8	7/8-14	7/8-14	1.420	36.07	7/8	0.875	22.22		•	•	
C2500-12-12	3/4	1 1/16-12	1 1/16-12	1.580	40.13	1 1/16	1.062	26.97		•	•	
C2500-16-16	1	1 5/16-12	1 5/16-12	1.730	43.94	1 5/16	1.312	33.32		•	•	
C2500-20-20	1 1/4	1 5/8-12	1 5/8-12	1.890	48.01	1 5/8	1.625	41.27		•	•	
C2500-24-24	1 1/2	1 7/8-12	1 7/8-12	2.020	51.31	1 7/8	1.875	47.62			•	

# Flareless Bite Type Fittings

## BT-MP Elbow 90° C2501 Series

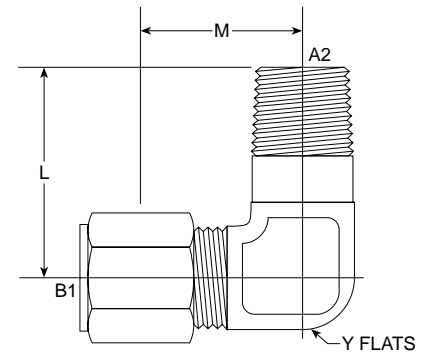
SAE# 080202 / MS# 51815



PART NO. SIZE	TUBE O.D.	B1 THREAD	A2 NPTF	L LGTH M.M.	M LGTH M.M.	Y FLATS M.M.	Y FLATS M.M.	Standard Material From Stock						
								S	FG	SS	B			
C2501-02-02	1/8	5/16-24	1/8-27	0.720	18.29	0.780	19.81	7/16	0.438	11.12		•	•	
C2501-03-02	3/16	3/8-24	1/8-27	0.720	18.29	0.840	21.34	7/16	0.438	11.12		•	•	
C2501-04-02	1/4	7/16-20	1/8-27	0.780	19.81	0.890	22.61	7/16	0.438	11.12		•	•	
C2501-04-04	1/4	7/16-20	1/4-18	1.090	27.69	1.030	26.16	9/16	0.562	14.27		•	•	
C2501-04-06	1/4	7/16-20	3/8-18	1.220	30.99	1.130	28.70	13/16	0.812	20.62		•	•	
C2501-04-08	1/4	7/16-20	3/4-16	1.470	37.34	1.220	30.99	7/8	0.875	22.22		•	•	
C2501-05-02	5/16	1/2-20	1/8-27	0.810	20.57	0.950	24.13	9/16	0.562	14.27		•	•	
C2501-05-04	5/16	1/2-20	1/4-18	1.090	27.69	1.030	26.16	9/16	0.562	14.27		•	•	
C2501-06-02	3/8	9/16-18	1/8-27	0.880	22.35	1.050	26.67	9/16	0.562	14.27		•	•	
C2501-06-04	3/8	9/16-18	1/4-18	1.090	27.69	1.050	26.67	9/16	0.562	14.27		•	•	
C2501-06-06	3/8	9/16-18	3/8-18	1.220	30.99	1.140	28.96	3/4	0.750	19.05		•	•	
C2501-06-08	3/8	9/16-18	1/2-14	1.470	37.34	1.230	31.24	7/8	0.875	22.22		•	•	
C2501-08-04	1/2	3/4-16	1/4-18	1.160	29.46	1.250	31.75	3/4	0.750	19.05		•	•	
C2501-08-06	1/2	3/4-16	3/8-18	1.220	30.99	1.250	31.75	3/4	0.750	19.05		•	•	
C2501-08-08	1/2	3/4-16	1/2-14	1.470	37.34	1.340	34.04	7/8	0.875	22.22		•	•	
C2501-08-12	1/2	3/4-16	3/4-14	1.590	40.39	1.420	36.07	1 1/16	1.062	26.97		•	•	
C2501-10-06	5/8	7/8-14	3/8-18	1.300	33.02	1.420	36.07	7/8	0.875	22.22		•	•	
C2501-10-08	5/8	7/8-14	1/2-14	1.470	37.34	1.420	36.07	7/8	0.875	22.22		•	•	
C2501-10-12	5/8	7/8-14	3/4-14	1.590	40.39	1.430	36.32	1 1/16	1.062	26.97		•	•	
C2501-12-08	3/4	1 1/16-12	1/2-14	1.590	40.39	1.580	40.13	1 1/16	1.062	26.97		•	•	
C2501-12-12	3/4	1 1/16-12	3/4-14	1.590	40.39	1.580	40.13	1 1/16	1.062	26.97		•	•	
C2501-16-12	1	1 5/16-12	3/4-14	1.780	45.21	1.730	43.95	1 3/8	1.375	34.92		•	•	
C2501-16-16	1	1 5/16-12	1-11 1/2	1.970	50.04	1.730	43.94	1 5/16	1.312	33.32		•	•	
C2501-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	2.380	60.45	1.890	48.01	1 5/8	1.625	41.27		•	•	
C2501-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	2.640	67.06	2.020	51.31	1 7/8	1.875	47.62		•	•	
C2501-32-32	2	2 1/2-12	2-11 1/2	3.000	76.20	2.450	62.23	2 9/16	2.562	65.07		•	•	

# BT-MP Elbow 90° Long C2501-L Series

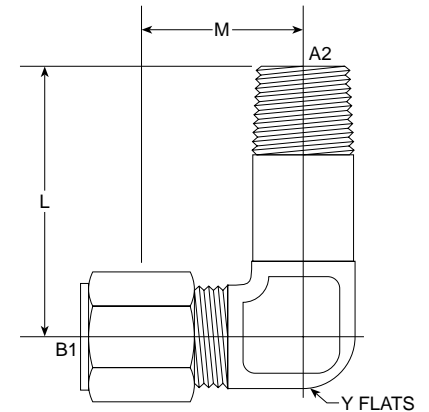
SAE # 071502



PART NO. SIZE	TUBE O.D.	B1 THREAD	A2 NPTF	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
C2501-L-04-02	1/4	7/16-20	1/8-27	1.170	29.72	0.890	22.61	7/16	0.438	11.12				•
C2501-L-04-04	1/4	7/16-20	1/4-18	1.580	40.13	1.030	26.16	9/16	0.562	14.27				•
C2501-L-05-04	5/16	1/2-20	1/4-18	1.440	36.58	1.030	26.16	9/16	0.562	14.27				•
C2501-L-06-06	3/8	9/16-18	3/8-18	1.830	46.48	1.140	28.96	3/4	0.750	19.05				•
C2501-L-12-12	3/4	1 1/16-12	3/4-14	2.440	61.98	1.580	40.13	1 1/16	1.062	26.97				•
C2501-L-16-16	1	1 5/16-12	1-11 1/2	3.010	76.45	1.730	43.94	1 5/16	1.312	33.32				•
C2501-L-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	3.690	93.73	1.890	48.01	1 5/8	1.625	41.27				•
C2501-L-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	4.100	104.14	2.020	51.31	1 7/8	1.875	47.62				•
C2501-L-32-32	2	2 1/2-12	2-11 1/2	4.810	122.17	2.450	62.23	2 1/2	2.500	63.50				•

# BT-MP Elbow 90° X-Long C2501-LL Series

SAE # 081602

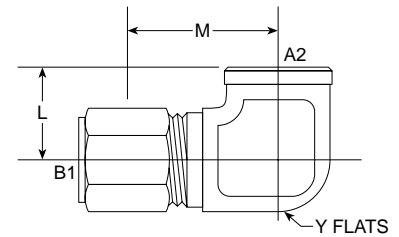


PART NO. SIZE	TUBE O.D.	B1 THREAD	A2 NPTF	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
C2501-LL-04-02	1/4	7/16-20	1/8-27	1.560	39.62	0.890	22.61	7/16	0.438	11.12				•
C2501-LL-04-04	1/4	7/16-20	1/4-18	2.030	51.56	1.030	26.16	9/16	0.562	14.27				•
C2501-LL-05-02	5/16	1/2-20	1/8-27	1.630	41.40	0.950	24.13	9/16	0.562	14.27				•
C2501-LL-06-04	3/8	9/16-18	1/4-18	2.070	52.58	1.050	26.67	9/16	0.562	14.27				•
C2501-LL-08-06	1/2	3/4-16	3/8-18	2.420	61.47	1.250	31.75	3/4	0.750	19.05				•
C2501-LL-10-08	5/8	7/8-14	1/2-14	2.870	72.90	1.420	36.07	7/8	0.875	22.22				•
C2501-LL-12-12	3/4	1 1/16-12	3/4-14	3.280	83.31	1.580	40.13	1 1/16	1.062	26.97				•
C2501-LL-16-16	1	1 5/16-12	1-11 1/2	4.050	102.82	1.730	43.94	1 5/16	1.312	33.32				•
C2501-LL-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	5.000	127.00	1.890	48.01	1 5/8	1.625	41.27				•
C2501-LL-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	5.550	140.97	2.020	51.32	1 7/8	1.875	47.62				•
C2501-LL-32-32	2	2 1/2-12	2-11 1/2	6.630	168.40	2.450	62.23	2 1/2	2.500	63.50				•

# Flareless Bite Type Fittings

## BT-FP Elbow 90° C2502 Series

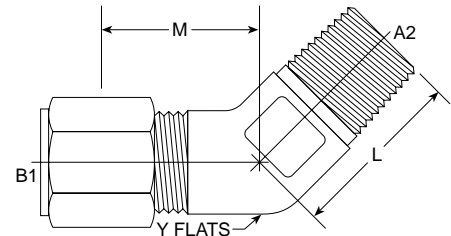
SAE# 080203 / MS# 51813



PART NO. SIZE	TUBE O.D.	B1 THREAD	A2 NPTF	L LGTH M.M.	M LGTH M.M.	Y FLATS M.M.	Y FLATS M.M.	Y FLATS M.M.	Standard Material From Stock					
									S	FG	SS	B		
C2502-04-02	1/4	7/16-20	1/8-27	0.660	16.76	0.890	22.61	9/16	0.562	14.27		•	•	
C2502-04-04	1/4	7/16-20	1/4-18	0.880	22.35	1.030	26.16	3/4	0.750	19.05		•	•	
C2502-05-02	5/16	1/2-20	1/8-27	0.660	16.76	0.950	24.13	9/16	0.562	14.27		•	•	
C2502-06-04	3/8	9/16-18	1/4-18	0.880	22.35	1.050	26.67	3/4	0.750	19.05		•	•	
C2502-06-06	3/8	9/16-18	3/8-18	1.020	25.91	1.130	28.70	7/8	0.875	22.22		•	•	
C2502-08-04	3/8	3/4-16	1/4-18	0.880	22.35	1.230	31.24	3/4	0.750	19.05		•	•	
C2502-08-06	3/8	3/4-16	3/8-18	1.020	25.91	1.230	31.24	7/8	0.875	22.22		•	•	
C2502-08-08	1/2	3/4-16	1/2-14	1.230	31.24	1.340	34.04	1 1/16	1.062	26.97		•	•	
C2502-10-08	5/8	7/8-14	1/2-14	1.230	31.24	1.420	36.07	1 1/16	1.062	26.97		•	•	
C2502-12-12	3/4	1 1/16-12	3/4-14	1.360	34.54	1.580	40.13	1 5/16	1.312	33.32		•	•	
C2502-16-16	1	1 5/16-12	1-11 1/2	1.620	41.15	1.730	43.94	1 5/8	1.625	41.27		•	•	
C2502-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	1.700	43.18	2.080	52.83	1 7/8	1.875	47.62		•	•	
C2502-24-24	1 1/2	1 7/8-12	1 1/2-11 1/2	2.080	52.83	2.580	65.53	1 1/2	2.500	63.50		•	•	

## BT-MP Elbow 45° C2503 Series

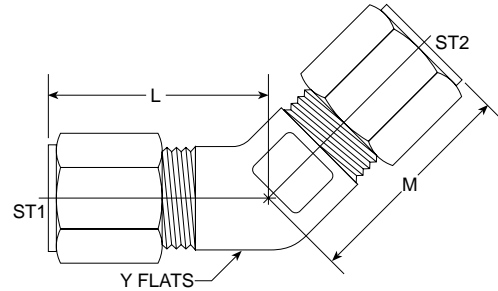
SAE# 080302 / MS# 51817



PART NO. SIZE	TUBE O.D.	B1 THREAD	A2 NPTF	L LGTH M.M.	M LGTH M.M.	Y FLATS M.M.	Y FLATS M.M.	Y FLATS M.M.	Standard Material From Stock					
									S	FG	SS	B		
C2503-04-02	1/4	7/16-20	1/8-27	0.640	16.26	0.700	17.78	7/16	0.438	11.12		•	•	
C2503-04-04	1/4	7/16-20	1/4-18	0.860	21.84	0.810	20.57	9/16	0.562	14.27		•	•	
C2503-06-04	3/8	9/16-18	1/4-18	0.860	21.84	0.830	21.08	9/16	0.562	14.27		•	•	
C2503-06-06	3/8	9/16-18	3/8-18	0.950	24.13	0.830	21.08	3/4	0.750	19.05		•	•	
C2503-06-08	3/8	9/16-18	1/2-14	1.170	29.72	0.900	22.86	7/8	0.875	22.22		•	•	
C2503-08-06	1/2	3/4-16	3/8-18	0.950	24.13	0.980	24.89	3/4	0.750	19.05		•	•	
C2503-08-08	1/2	3/4-16	1/2-14	1.170	29.72	0.980	24.89	7/8	0.875	22.22		•	•	
C2503-08-12	1/2	3/4-16	3/4-14	1.200	30.48	1.120	28.45	1 1/16	1.062	26.97		•	•	
C2503-10-06	5/8	7/8-14	3/8-18	0.980	24.89	1.080	27.43	7/8	0.875	22.22		•	•	
C2503-10-08	5/8	7/8-14	1/2-14	1.170	29.72	1.080	27.43	7/8	0.875	22.22		•	•	
C2503-12-08	3/4	1 1/16-12	1/2-14	1.200	30.48	1.270	32.26	1 1/16	1.062	26.97		•	•	
C2503-12-12	3/4	1 1/16-12	3/4-14	1.200	30.48	1.270	32.26	1 1/16	1.062	26.97		•	•	
C2503-16-16	1	1 5/16-12	1-11 1/2	1.480	37.59	1.360	34.54	1 5/16	1.312	33.32		•	•	
C2503-20-20	1 1/4	1 5/8-12	1 1/4-11 1/2	1.670	42.42	1.450	36.83	1 5/8	1.625	41.27		•	•	



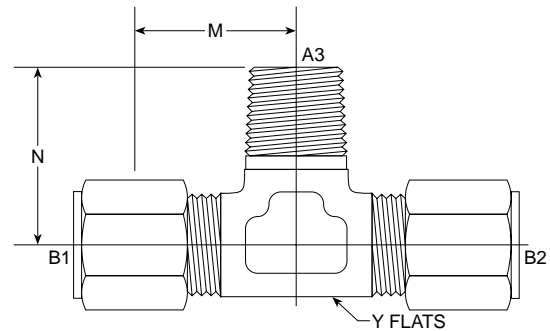
# BT-BT Elbow 45° C2504 Series



PART NO. SIZE	TUBE O.D.	ST1 THREAD	ST2 NPTF	L LGTH M.M.	M LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
									S	FG	SS	B		
NEW C2504-12-12														
NEW C2504-16-16														
NEW C2504-20-20														

# BT-BT-MP Tee C2601 Series

SAE# 080425 / MS# 51818

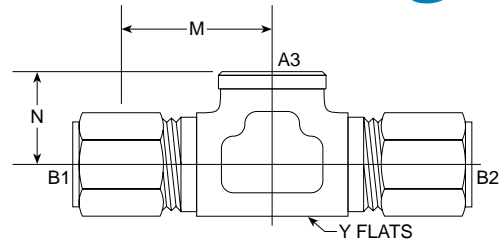


PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	A3 NPTF	M LGTH M.M.	N LGTH M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock					
										S	FG	SS	B		
C2601-02-02-02	1/8	5/16-24	5/16-25	1/8-27	0.780	19.81	0.720	18.29	7/16	0.438	11.12				
C2601-04-04-02	1/4	7/16-20	7/16-20	1/8-27	0.890	22.61	0.780	19.81	7/16	0.438	11.12		•	•	
C2601-04-04-04	1/4	7/16-20	6/16-20	1/4-18	1.030	26.16	1.090	27.69	9/16	0.562	14.27		•	•	
C2601-05-05-02	5/16	1/2-20	1/2-20	1/8-27	0.950	24.13	0.810	20.57	9/16	0.562	14.27		•	•	
C2601-06-06-04	3/8	9/16-18	9/16-18	1/4-18	1.050	26.67	1.090	27.69	9/16	0.562	14.27		•	•	
C2601-06-06-06	3/8	9/16-18	9/16-18	3/8-18	1.140	28.96	1.220	30.99	3/4	0.750	19.05		•	•	
C2601-08-08-06	1/2	3/4-16	3/4-16	3/8-18	1.250	31.75	1.220	30.99	3/4	0.750	19.05		•	•	
C2601-08-08-08	1/2	3/4-16	3/4-16	1/2-14	1.340	34.04	1.470	37.34	3/4	0.750	19.05		•	•	
C2601-10-10-08	5/8	7/8-14	7/8-14	1/2-14	1.420	36.07	1.470	37.34	7/8	0.875	22.22		•	•	
C2601-12-12-12	3/4	1 1/16-12	1 1/16-12	3/4-14	1.580	40.13	1.590	40.39	1 1/16	1.062	26.97		•	•	
C2601-16-16-16	1	1 5/16-12	1 5/16-12	1-11 1/2	1.730	43.94	1.970	50.04	1 5/16	1.312	33.32		•	•	

# Flareless Bite Type Fittings

## BT-BT-FP Tee C2602 Series

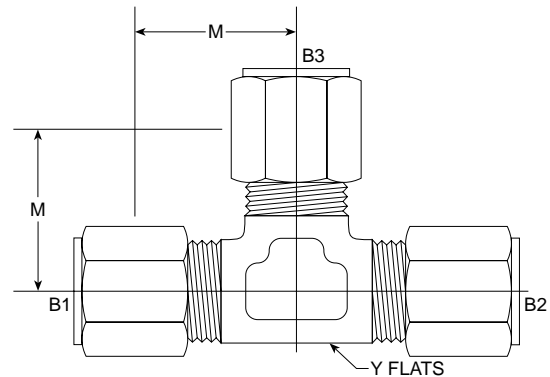
SAE# 080427 / MS# 51821



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	A3 NPTF	M		N LGTH	Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
					LGTH	M.M.					S	FG	SS	B	
C2602-04-04-02	1/4	7/16-20	7/16-20	1/8-27	0.890	22.61	0.660	16.76	9/16	0.562	14.27		•	•	
C2602-04-04-04	1/4	7/16-20	7/16-20	1/4-18	1.030	26.16	0.880	22.35	3/4	0.750	19.05		•	•	
C2602-06-06-04	3/8	9/16-18	9/16-18	1/4-18	1.050	26.67	0.880	22.35	3/4	0.750	19.05		•	•	
C2602-08-08-06	1/2	3/4-16	3/4-16	3/8-18	1.230	31.24	1.020	25.91	7/8	0.875	22.22		•	•	
C2602-08-08-08	1/2	3/4-16	3/4-16	3/4-16	1.350	34.29	1.230	31.24	1 1/16	1.062	26.97		•	•	
C2602-10-10-08	5/8	7/8-14	7/8-14	1/2-14	1.420	36.07	1.230	31.24	1 1/16	1.062	26.97		•	•	
C2602-12-12-12	3/4	1 1/16-12	1 1/16-12	3/4-14	1.580	40.13	1.360	34.54	1 5/16	1.312	33.32		•	•	
C2602-16-16-16	1	1 5/16-12	1 5/16-12	1-11 1/2	1.730	43.94	1.620	41.15	1 5/8	1.625	41.27		•	•	
C2602-20-20-20	1 1/4	1 5/8-12	1 5/8-12	1 1/4-11 1/2	2.080	52.83	1.700	43.18	1 7/8	1.875	47.62		•	•	

## BT-BT-BT Tee C2603 Series

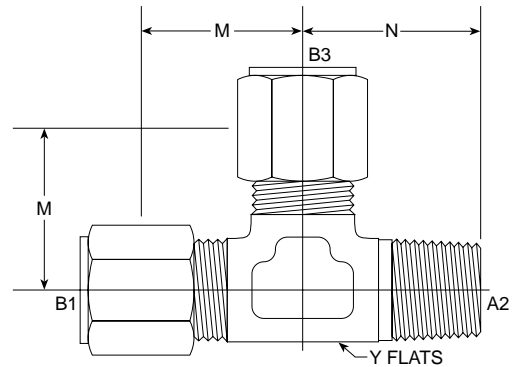
SAE# 080401 / MS# 51811



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	B3 THREAD	M		Y FLATS	Y FLATS	M.M.	Standard Material From Stock				
					LGTH	M.M.				S	FG	SS	B	
C2603-02-02-02	1/8	5/16-24	5/16-24	5/16-24	0.770	19.56	5/16	0.312	7.92		•	•		
C2603-03-03-03	3/16	3/8-24	3/8-24	3/8-24	0.840	21.34	7/16	0.438	11.12		•	•		
C2603-04-04-04	1/4	7/16-20	7/16-20	7/16-20	0.890	22.61	7/16	0.438	11.12		•	•		
C2603-05-05-05	5/16	1/2-20	1/2-20	1/2-20	0.950	24.13	9/16	0.562	14.27		•	•		
C2603-06-06-06	3/8	9/16-18	9/16-18	9/16-18	1.050	26.67	9/16	0.562	14.27		•	•		
C2603-08-08-08	1/2	3/4-16	3/4-16	3/4-16	1.250	31.75	3/4	0.750	19.05		•	•		
C2603-10-10-10	5/8	7/8-14	7/8-14	7/8-14	1.420	36.07	7/8	0.875	22.22		•	•		
C2603-12-12-12	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1.580	40.13	1 1/16	1.062	26.97		•	•		
NEW C2603-14-14-14												•	•	
C2603-16-16-16	1	1 5/16-12	1 5/16-12	1 5/16-12	1.730	43.94	1 5/16	1.312	33.32		•	•		
NEW C2603-20-20-16												•	•	
C2603-20-20-20	1 1/4	1 5/8-12	1 5/8-12	1 5/8-12	1.890	48.01	1 5/8	1.625	41.27		•	•		
C2603-24-24-24	1 1/2	1 7/8-12	1 7/8-12	1 7/8-12	2.020	51.31	1 7/8	1.875	47.62		•	•		
C2603-32-32-32	2	2 1/2-12	2 1/2-12	2 1/2-12	2.450	62.23	2 1/2	2.500	63.50		•	•		

# BT-MP-BT Tee C2605 Series

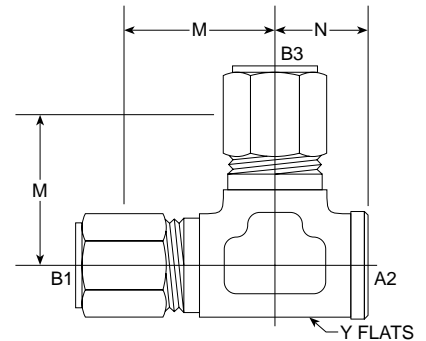
SAE# 080424 / MS# 51824



PART NO. SIZE	TUBE O.D.	B1 THREAD	A2 NPTF	B3 THREAD	M		N		Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
					LGTH	M.M.	LGTH	M.M.				S	FG	SS	B
C2605-04-02-04	1/4	7/16-20	1/8-27	7/16-20	0.890	22.62	0.780	19.81	7/16	0.438	11.12		•	•	
C2605-04-04-04	1/4	7/16-20	1/4-18	7/16-20	1.030	26.16	1.090	28.69	9/16	0.562	14.27		•	•	
C2605-05-02-05	5/16	1/2-20	1/8-27	1/2-20	0.950	24.13	0.810	20.57	1/2	0.500	12.70		•	•	
C2605-06-04-06	3/8	9/16-18	1/4-18	9/16-18	1.050	26.67	1.090	27.69	9/16	0.562	14.27		•	•	
C2605-06-06-06	3/8	9/16-18	3/8-18	9/16-18	1.250	31.75	1.270	32.26	3/4	0.750	19.05		•	•	
C2605-08-06-08	1/2	3/4-16	3/8-18	3/4-16	1.250	31.75	1.220	30.99	3/4	0.750	19.05		•	•	
C2605-08-08-08	1/2	3/4-16	1/2-14	3/4-16	1.340	34.04	1.470	37.34	7/8	0.875	22.22		•	•	
C2605-10-08-10	5/8	7/8-14	1/2-14	7/8-14	1.420	36.07	1.470	37.34	7/8	0.875	22.22		•	•	
C2605-12-12-12	3/4	1 1/16-12	3/4-14	1 1/16-12	1.580	40.13	1.590	40.39	1 1/16	1.062	26.97		•	•	
C2605-16-16-16	1	1 5/16-12	1-11 1/2	1 5/16-12	1.730	43.94	1.970	50.04	1 5/16	1.312	33.32		•	•	

# BT-FP-BT Tee C2606 Series

SAE# 080426 / MS# 51822

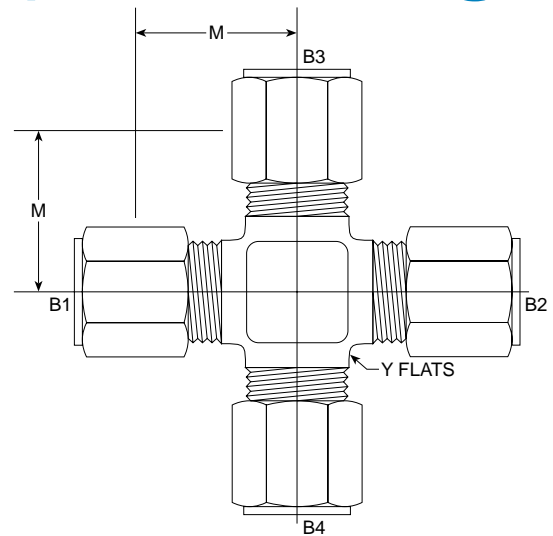


PART NO. SIZE	TUBE O.D.	B1 THREAD	A2 NPTF	B3 THREAD	M		N		Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
					LGTH	M.M.	LGTH	M.M.				S	FG	SS	B
C2606-04-02-04	1/4	7/16-20	1/8-27	7/16-20	0.890	22.61	0.660	16.76	9/16	0.562	14.27		•	•	
C2606-06-04-06	3/8	9/16-18	1/4-18	9/16-18	1.050	26.67	0.880	22.35	3/4	0.750	19.05		•	•	
C2606-08-06-08	1/2	3/4-16	3/8-18	3/4-16	1.230	31.24	1.020	25.91	7/8	0.875	22.22		•	•	
C2606-10-08-10	5/8	7/8-14	1/2-14	7/8-14	1.420	36.07	1.230	31.24	1 1/16	1.062	26.97		•	•	
C2606-12-12-12	3/4	1 1/16-12	3/4-14	1 1/16-12	1.580	40.13	1.360	34.54	1 5/16	1.312	33.32		•	•	
C2606-16-16-16	1	1 5/16-12	1-11 1/2	1 5/16-12	1.730	43.94	1.620	41.15	1 5/8	1.625	41.27		•	•	

# Flareless Bite Type Fittings

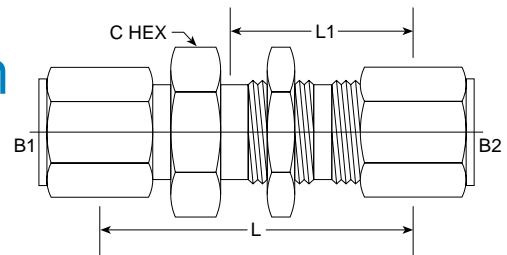
## BT-BT-BT-BT Cross C2650 Series

SAE# 080501 / MS# 51894



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	B3 THREAD	B4 THREAD	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
C2650-04-04-04-04	1/4	7/16-20	7/16-20	7/16-20	7/16-20	0.890	22.62	7/16	0.438	11.12		•	•	
C2650-06-06-06-06	3/8	9/16-18	9/16-18	9/16-18	9/16-18	1.050	26.67	9/16	0.562	14.27		•	•	
C2650-08-08-08-08	1/2	3/4-16	3/4-16	3/4-16	3/4-16	1.250	31.75	3/4	0.750	19.05		•	•	
C2650-10-10-10-10	5/8	7/8-14	7/8-14	7/8-14	7/8-14	1.420	36.07	7/8	0.875	22.22		•	•	
C2650-16-16-16-16	1	1 5/16-12	1 5/16-12	1 5/16-12	1 5/16-12	1.730	43.94	1 5/16	1.312	33.32			•	
C2650-20-20-20-20	1 1/4	1 5/8-12	1 5/8-12	1 5/8-12	1 5/8-12	1.890	48.01	1 5/8	1.625	41.27			•	
C2650-24-24-24-24	1 1/2	1 7/8-12	1 7/8-12	1 7/8-12	1 7/8-12	2.020	51.31	1 7/8	1.875	47.62			•	
C2650-32-32-32-32	2	2 1/2-12	2 1/2-12	2 1/2-12	2 1/2-12	2.450	62.23	2 1/2	2.500	63.50			•	

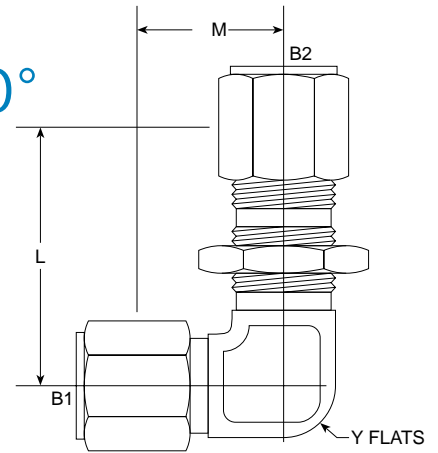
## BT-BT Bulkhead Union C2700 Series



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	L LGTH	M.M.	L1 LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
C2700-04-04	1/4	7/16-20	7/16-20	1.130	28.70	1.890	48.01	11/16	0.688	17.47	•		•	
C2700-06-06	3/8	9/16-18	9/16-18	1.170	29.72	1.980	50.29	13/16	0.812	20.62	•		•	
C2700-08-08	1/2	3/4-16	3/4-16	1.310	33.27	2.220	56.39	1	1.000	25.40	•		•	
C2700-10-10	5/8	7/8-14	7/8-14	1.450	36.83	2.480	62.99	1 1/8	1.125	28.57	•		•	
C2700-12-12	3/4	1 1/16-12	1 1/16-12	1.560	39.62	2.720	69.09	1 3/8	1.375	34.92	•		•	
C2700-16-16	1	1 5/16-12	1 5/16-12	1.560	39.62	2.720	69.09	1 5/8	1.625	41.27			•	

# BT-BT Bulkhead Union 90° C2701 Series

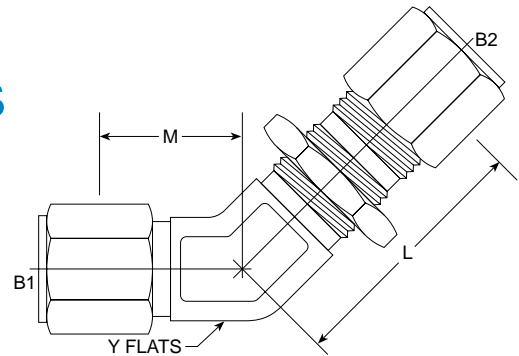
SAE# 080701 / MS# 51855



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
C2701-03-03	3/16	3/8-24	3/8-24	1.410	35.81	0.920	23.37	7/16	0.438	11.12			•	
C2701-04-04	1/4	7/16-20	7/16-20	1.520	38.61	0.950	24.13	7/16	0.438	11.12			•	
C2701-06-06	3/8	9/16-18	9/16-18	1.700	43.18	1.080	27.43	9/16	0.562	14.27			•	
C2701-08-08	1/2	3/4-16	3/4-16	1.970	50.04	1.330	33.78	3/4	0.750	19.05			•	
C2701-10-10	5/8	7/8-14	7/8-14	2.270	57.66	1.520	38.61	7/8	0.875	22.22			•	
C2701-12-12	3/4	1 1/16-12	1 1/16-12	2.480	62.99	1.640	41.66	1 1/16	1.062	26.97			•	
C2701-16-16	1	1 5/16-12	1 5/16-12	2.610	66.29	1.730	43.94	1 5/16	1.312	33.32			•	
C2701-20-20	1 1/4	1 5/8-12	1 5/8-12	2.890	73.41	2.020	51.31	1 5/8	1.625	41.27			•	

# BT-BT Bulkhead Union 45° C2702 Series

SAE# 080801

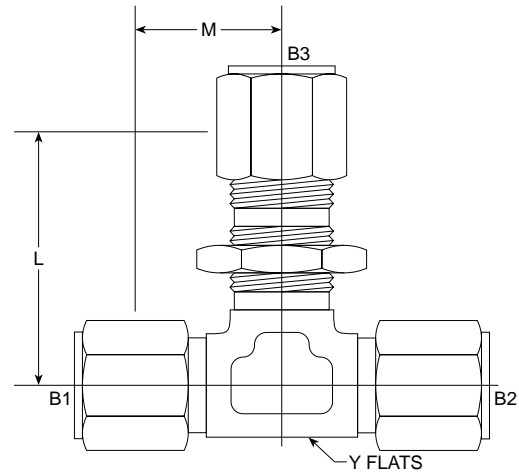


PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
C2702-04-04	1/4	7/16-20	7/16-20	1.450	36.83	0.700	17.78	7/16	0.438	11.12			•	
C2702-06-06	3/8	9/16-18	9/16-18	1.560	39.62	0.830	21.08	9/16	0.562	14.27			•	
C2702-08-08	1/2	3/4-16	3/4-16	1.810	45.97	0.980	24.89	3/4	0.750	19.05			•	
C2702-12-12	3/4	1 1/16-12	1 1/16-12	2.250	57.15	1.270	32.26	1 1/16	1.062	26.97			•	

# Flareless Bite Type Fittings

## BT-BT-BT Bulkhead Branch Tee C2703 Series

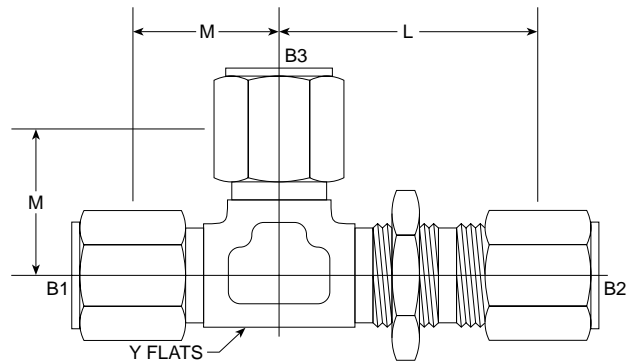
SAE# 080959



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	B3 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
C2703-04-04-04	1/4	7/16-20	7/16-20	7/16-20	1.520	38.61	0.950	24.13	7/16	0.438	11.12			•	
C2703-05-05-05	5/16	1/2-20	1/2-20	1/2-20	1.550	39.37	1.050	26.67	9/16	0.562	14.27			•	
C2703-06-06-06	3/8	9/16-18	9/16-18	8/16-18	1.700	43.18	1.080	27.43	9/16	0.562	14.27			•	
C2703-10-10-10	1/2	3/4-16	3/4-16	3/4-16	1.970	50.04	1.330	33.78	3/4	0.750	19.05			•	
C2703-12-12-12	3/4	1 1/16-12	1 1/16-12	1 1/16-12	2.480	62.99	1.640	41.66	1 1/16	1.062	26.97			•	

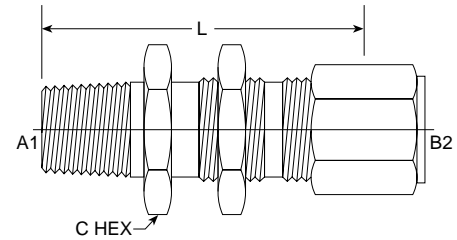
## BT-BT-BT Bulkhead Tee C2704 Series

SAE# 080958



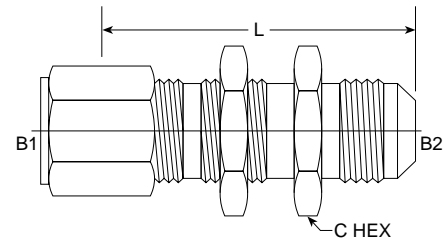
PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	B3 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
C2704-04-04-04	1/4	7/16-20	7/16-20	7/16-20	1.520	38.61	0.950	24.13	7/16	0.438	11.12			•	
C2704-06-06-06	3/8	9/16-18	9/16-18	9/16-18	1.700	43.18	1.080	27.43	9/16	0.562	14.27			•	
C2704-08-08-08	1/2	3/4-16	3/4-16	3/4-16	1.970	50.04	1.330	33.78	3/4	0.750	19.05			•	
C2704-12-12-12	3/4	1 1/16-12	1 1/16-12	1 1/16-12	2.480	62.99	1.640	41.66	1 1/16	1.062	26.97			•	

# BT-MP Bulkhead C2706 Series



PART NO. SIZE	TUBE O.D.	A1 THREAD	B2 THREAD	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
									S	FG	SS	B
C2706-02-04	1/4	1/8-27	7/16-20	1.820	46.23	11/16	0.688	17.45			•	
C2706-04-04	1/4	1/4-18	7/16-20	2.080	52.83	3/4	0.750	19.05			•	
C2706-04-06	3/8	1/4-18	9/16-18	2.100	53.34	13/16	0.812	20.62			•	
C2706-06-06	3/8	3/8-18	9/16-18	2.140	54.36	13/16	0.812	20.62			•	
C2706-08-06	1/2	3/8-18	3/4-16	2.300	58.42	1	1.000	25.40			•	
C2706-08-08	1/2	1/2-14	3/4-16	2.560	65.02	1	1.000	25.40			•	
C2706-12-12	3/4	3/4-14	1 1/16-12	2.760	70.10	1 3/8	1.375	34.92			•	
C2706-16-16	1	1-11 1/2	1 5/16-12	3.100	78.74	1 5/8	1.625	41.27			•	

# BT-MJ Bulkhead C2707 Series

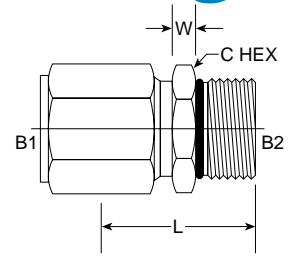


PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	L LGTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
									S	FG	SS	B
C2707-04-04	1/4	7/16-20	7/16-20	1.940	49.28	11/16	0.688	17.45			•	
C2707-06-06	3/8	9/16-18	9/16-18	2.080	52.83	13/16	0.812	20.62			•	
C2707-08-08	1/2	3/4-16	3/4-16	2.310	58.67	1	1.000	25.40			•	
C2707-12-12	3/4	1 1/16-12	1 1/16-12	2.940	74.68	1 3/8	1.375	34.92			•	
C2707-16-16	1	1 5/16-12	1 5/16-12	2.950	74.93	1 5/8	1.625	41.27			•	

# Flareless Bite Type Fittings

## BT-MORB C6400-O Series

SAE# 080120 / MS# 51843

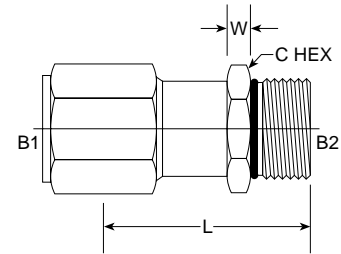


PART NO. SIZE	TUBE/PORT	B1 THREAD	B2 THREAD	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
C6400-02-02-O	1/8	5/16-12	5/16-12	0.990	25.15	0.280	7.11	7/16	0.438	11.12			•	
C6400-03-03-O	3/8	3/8-24	3/8-24	1.040	26.42	0.280	7.11	1/2	0.500	12.70	•			
C6400-04-04-O	1/4	7/16-20	7/16-20	1.130	28.70	0.280	7.11	9/16	0.562	14.27	•			
C6400-04-05-O	1/4 5/16	7/16-20	1/2-20	1.130	28.70	0.280	7.11	5/8	0.625	15.87	•		•	
C6400-04-06-O	1/4 3/8	7/16-20	9/16-18	1.200	30.48	0.280	7.11	11/16	0.688	17.47	•		•	
C6400-05-05-O	5/16	1/2-20	1/2-20	1.130	28.70	0.280	7.11	5/8	0.625	15.87	•		•	
C6400-06-04-O	3/8 1/4	9/16-18	7/16-20	1.180	29.97	0.340	8.64	5/8	0.625	15.87	•		•	
C6400-06-05-O	3/8 5/16	9/16-18	1/2-20	1.180	29.97	0.340	8.64	11/16	0.688	17.47	•		•	
C6400-06-06-O	3/8	9/16-18	9/16-18	1.210	30.73	0.340	8.64	11/16	0.688	17.47	•		•	
C6400-06-08-O	3/8 1/2	9/16-18	3/4-16	1.290	32.77	0.340	8.64	7/8	0.875	22.22	•		•	
C6400-08-06-O	1/2 3/8	3/4-16	9/16-18	1.340	34.04	0.340	8.64	13/16	0.812	20.62	•		•	
C6400-08-08-O	1/2	3/4-16	3/4-16	1.380	35.05	0.340	8.64	7/8	0.875	22.22	•		•	
C6400-08-10-O	1/2 5/8	3/4-16	7/8-14	1.510	38.35	0.400	10.16	1	1.000	25.40	•		•	
C6400-08-12-O	1/2 3/4	3/4-16	1 1/16-12	1.670	42.42	0.470	11.94	1 1/4	1.250	31.75	•		•	
C6400-10-10-O	5/8	7/8-14	7/8-14	1.570	39.88	0.400	10.16	1	1.000	25.40	•		•	
C6400-12-08-O	3/4 1/2	1 1/16-12	3/4-16	1.750	44.45	0.470	11.94	1 1/8	1.125	28.57	•		•	
C6400-12-12-O	3/4	1 1/16-12	1 1/16-12	1.790	45.47	0.470	11.94	1 1/4	1.250	31.75	•		•	
C6400-12-16-O	3/4 1	1 1/16-12	1 5/16-12	1.820	46.23	0.500	12.70	1 1/2	1.500	38.10	•		•	
C6400-16-12-O	1 3/4	1 5/16-12	1 5/16-12	1.820	46.23	0.500	12.70	1 1/2	1.500	38.10	•		•	
C6400-16-16-O	1	1 5/16-12	1 5/16-12	1.820	46.23	0.500	12.70	1 1/2	1.500	38.10	•		•	
C6400-20-20-O	1 1/4	1 5/8-12	1 5/8-12	1.900	48.26	0.580	14.73	1 7/8	1.875	47.62	•		•	
C6400-24-24-O	1 1/2	1 1/2-12	1 1/2-12	1.970	50.04	0.580	14.73	2 1/8	2.125	53.97	•		•	
C6400-32-32-O	2	1 1/2-12	1 1/2-12	2.130	54.10	0.650	16.50	2 3/4	2.750	69.85	•		•	



# BT-MORB Long C6400-L-O Series

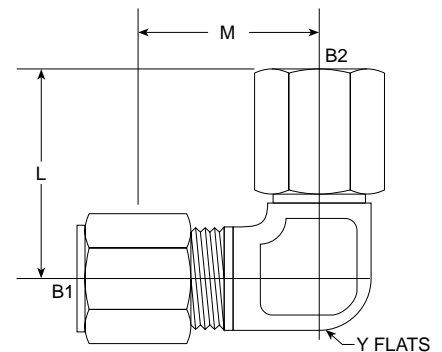
SAE# 080122



PART NO. SIZE	TUBE/PORT	B1 THREAD	B2 THREAD	L LGTH	M.M.	W WIDTH	M.M.	C HEX	C HEX	M.M.	Standard Material From Stock			
											S	FG	SS	B
C6400-L-04-04-O	1/4	7/16-20	7/16-20	2.020	51.31	0.280	7.11	9/16	0.562	14.27	•			
C6400-L-06-06-O	3/8	9/16-18	9/16-18	2.230	56.64	0.340	8.64	11/16	0.688	17.47	•		•	
C6400-L-08-08-O	1/2	3/4-16	3/4-16	2.620	66.55	0.340	8.64	7/8	0.875	22.22	•		•	
C6400-L-10-10-O	5/8	7/8-14	7/8-14	2.980	75.69	0.400	10.16	1	1.000	25.40			•	
C6400-L-12-12-O	3/4	1 1/16-12	1 1/16-12	3.530	89.66	0.470	11.94	1 1/4	1.250	31.75			•	
C6400-L-16-16-O	1	1 5/16-12	1 5/16-12	3.910	99.31	0.500	12.70	1 1/2	1.500	38.10			•	

# BT-BTS 90° C6500 Series

SAE# 080221 / MS# 51852

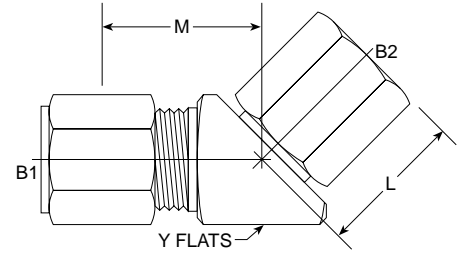


PART NO. SIZE	TUBE O.D.	B1 THREAD	B2	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
C6500-04-04	1/4	7/16-20	7/16-20	0.890	22.61	0.890	22.61	7/16	0.438	11.12			•	
C6500-06-06	3/8	9/16-18	9/16-18	1.050	26.67	1.050	26.67	9/16	0.562	14.27			•	
C6500-08-08	1/2	3/4-16	3/4-16	1.230	31.24	1.250	31.75	3/4	0.750	19.05			•	
C6500-10-10	5/8	7/8-14	7/8-14	1.420	36.07	1.420	36.07	7/8	0.875	22.22			•	
C6500-12-12	3/4	1 1/16-12	1 1/16-12	1.580	40.13	1.580	40.13	1 1/16	1.062	26.97		•	•	
C6500-16-16	1	1 5/16-12	1 5/16-12	1.730	43.94	1.730	43.94	1 5/16	1.312	33.32			•	
C6500-20-20	1 1/4	1 5/8-12	1 5/8-12	1.890	48.01	1.890	48.01	1 5/8	1.625	41.27			•	

# Flareless Bite Type Fittings

## BT-BTS 45° C6502 Series

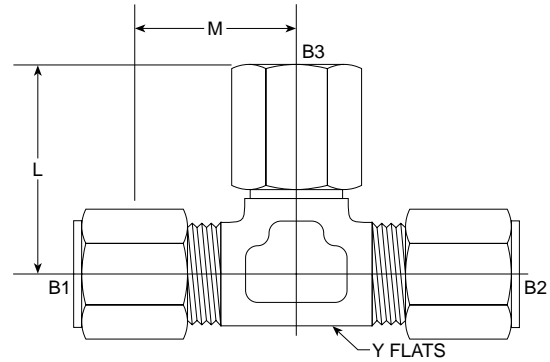
SAE# 080321



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
C6502-04-04	1/4	7/16-20	7/16-20	0.980	24.89	0.700	17.78	7/16	0.438	11.12			•	
C6502-06-06	3/8	9/16-18	9/16-18	1.200	30.48	0.830	21.08	9/16	0.562	14.27			•	
C6502-08-08	1/2	3/4-16	3/4-16	1.330	33.78	0.980	24.89	3/4	0.750	19.05			•	
C6502-12-12	3/4	1 1/16-12	1 1/16-12	1.610	40.89	1.270	32.26	1 1/16	1.062	26.97			•	
C6502-16-16	1	1 5/16-12	1 5/16-12	1.700	43.18	1.360	34.54	1 5/16	1.312	33.32			•	
C6502-20-20	1 1/4	1 5/8-12	1 5/8-12	1.800	45.72	1.450	36.83	1 5/8	1.625	41.27			•	
C6502-24-24	1 1/2	1 7/8-12	1 7/8-12	1.920	48.77	1.520	38.61	1 7/8	1.875	47.62			•	

## BT-BT-BTS Tee C6600 Series

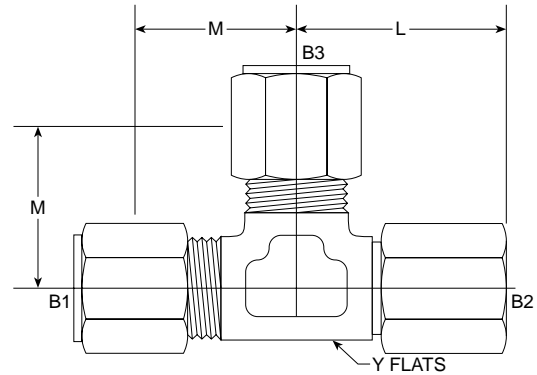
SAE# 080433 / MS# 51853



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	B3	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
C6600-04-04-04	1/4	7/16-20	7/16-20	7/16-20	1.050	26.67	0.890	22.61	7/16	0.438	11.12			•	
C6600-06-06-06	3/8	9/16-18	9/16-18	9/16-18	1.280	32.50	1.050	26.67	9/16	0.562	14.27			•	
C6600-08-08-08	1/2	3/4-16	3/4-16	3/4-16	1.470	37.34	1.250	31.75	3/4	0.750	19.05			•	
C6600-12-12-12	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1.770	45.96	1.580	40.13	1 1/16	1.062	26.97			•	

# BT-BTS-BT Tee C6602 Series

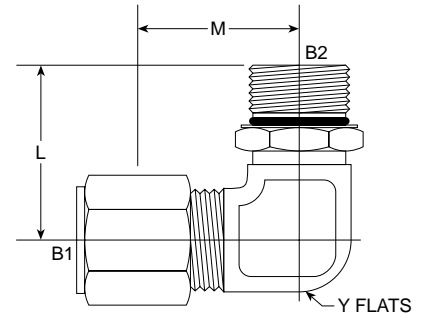
SAE# 080432 / MS# 51854



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2	B3 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
C6602-04-04-04	1/4	7/16-20	7/16-20	7/16-20	1.050	26.67	0.890	22.61	7/16	0.438	11.12				•
C6602-06-06-06	3/8	9/16-18	9/16-18	9/16-18	1.280	32.52	1.050	26.67	9/16	0.562	14.27				•
C6602-08-08-08	1/2	3/4-16	3/4-16	3/4-16	1.470	37.34	1.250	31.75	3/4	0.750	19.05				•
C6602-12-12-12	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1.770	44.96	1.580	40.13	1 1/16	1.062	26.97				•
C6602-16-16-16	1	1 5/16-12	1 5/16-12	1 5/16-12	1.860	47.24	1.730	43.94	1 5/16	1.312	33.32				•

# BT-MAORB 90° C6801-NWO Series

SAE# 080220 / MS# 51839

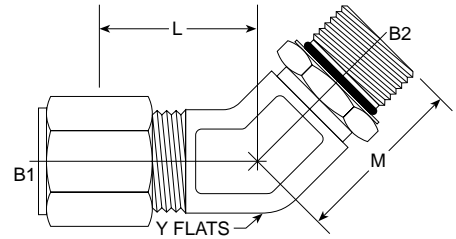


PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 ORB	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
C6801-03-03-NWO	3/16	3/8-24	3/16-24	0.940	23.88	0.830	21.08	7/16	0.438	11.12				•
C6801-04-04-NWO	1/4	7/16-20	7/16-20	1.030	26.16	0.890	22.61	7/16	0.438	11.12		•	•	
C6801-05-05-NWO	5/16	1/2-20	1/2-20	1.130	28.70	0.950	24.13	1/2	0.500	12.70		•	•	
NEW C6801-06-04-NWO														
C6801-06-06-NWO	3/8	9/16-18	9/16-18	1.250	31.75	1.060	26.92	9/16	0.562	14.27		•	•	
C6801-06-08-NWO	3/8	9/16-18	3/4-16	1.450	36.83	1.150	29.21	3/4	0.750	19.05		•	•	
C6801-08-06-NWO	1/2	3/4-16	9/16-18	1.330	33.78	1.250	31.75	3/4	0.750	19.05		•	•	
C6801-08-08-NWO	1/2	3/4-16	3/4-16	1.450	36.83	1.250	31.75	3/4	0.750	19.05		•	•	
C6801-08-10-NWO	1/2	3/4-16	7/8-14	1.700	43.18	1.340	34.04	7/8	0.875	22.22		•	•	
C6801-08-12-NWO	1/2	3/4-16	1 1/16-12	1.940	49.27	1.410	35.81	1 1/16	1.062	26.97		•	•	
C6801-10-10-NWO	5/8	7/8-14	7/8-14	1.700	43.18	1.420	36.07	7/8	0.875	22.22		•	•	
C6801-12-08-NWO	3/4	1 1/16-12	3/4-16	1.640	41.66	1.580	40.13	1 1/16	1.062	26.97		•	•	
C6801-12-10-NWO	3/4	1 1/16-12	7/8-14	1.780	45.21	1.580	40.13	1 1/16	1.062	26.97		•	•	
C6801-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1.940	49.28	1.580	40.13	1 1/16	1.062	26.97		•	•	
C6801-12-16-NWO	3/4	1 1/16-12	1 5/16-12	2.050	52.07	1.730	43.94	1 5/16	1.312	33.32		•	•	
C6801-16-12-NWO	1	1 5/16-12	1 5/16-12	2.050	52.07	1.730	43.94	1 5/16	1.312	33.32		•	•	
C6801-16-16-NWO	1	1 5/16-12	1 5/16-12	2.050	52.07	1.730	43.94	1 5/16	1.312	33.32		•	•	
NEW C6801-20-20-NWO												•	•	
NEW C6801-24-24-NWO												•	•	

# Flareless Bite Type Fittings

## BT-MAORB 45° C6802-NWO Series

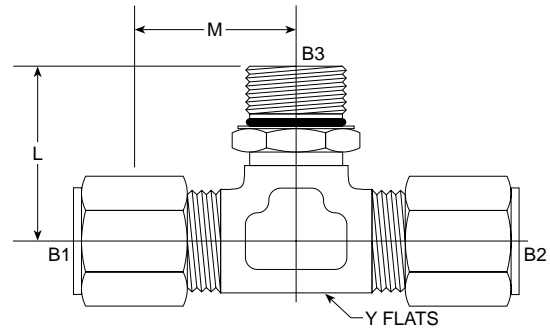
SAE# 080320 / MS# 51842



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 ORB	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
											S	FG	SS	B
C6802-04-04-NWO	1/4	7/16-20	7/16-20	1.050	26.67	0.700	17.78	7/16	0.438	11.12		•	•	
C6802-06-06-NWO	3/8	9/16-18	9/16-18	1.140	28.96	0.830	21.08	9/16	0.562	14.27		•	•	
C6802-08-08-NWO	1/2	3/4-16	3/4-16	1.300	33.02	0.980	24.89	3/4	0.750	19.05		•	•	
<b>NEW</b> C6802-10-10-NWO												•	•	
C6802-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1.730	43.94	1.270	32.26	1 1/16	1.062	26.97		•	•	
C6802-16-16-NWO	1	1 5/16-12	1 5/16-12	1.860	47.24	1.360	35.54	1 5/16	1.312	33.32		•	•	

## BT-BT-MAORB Tee C6803-NWO Series

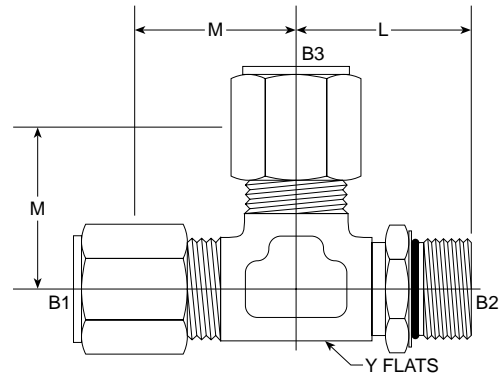
SAE# 080429 / MS# 51841



PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 THREAD	B3 ORB	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
C6803-04-04-04-NWO	1/4	7/16-20	7/16-20	7/16-20	1.030	26.16	0.890	22.61	7/16	0.438	11.12		•	•	
C6803-06-06-06-NWO	3/8	9/16-18	9/16-18	9/16-18	1.250	31.75	1.050	26.67	9/16	0.562	14.27		•	•	
C6803-08-08-08-NWO	1/2	3/4-16	3/4-16	3/4-16	1.450	36.83	1.250	31.75	3/4	0.750	19.05		•	•	
C6803-12-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1.940	49.28	1.580	40.13	1 1/16	1.062	26.97		•	•	
C6803-16-16-16-NWO	1	1 5/16-12	1 5/16-12	1 5/16-12	2.050	52.07	1.730	43.94	1 5/16	1.312	33.32		•	•	

# BT-MAORB-BT Tee C6804-NWO Series

SAE # 080428 / MS # 51892



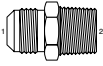
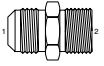
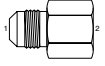
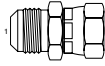
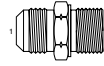
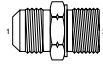
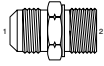
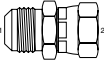

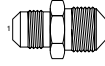
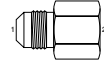
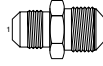
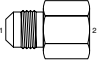
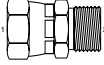
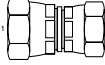

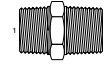
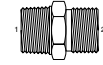

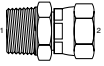
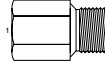
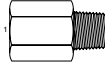
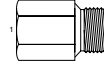
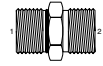
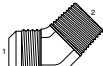

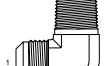
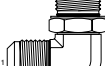
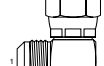
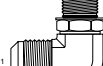
PART NO. SIZE	TUBE O.D.	B1 THREAD	B2 ORB	B3 THREAD	L LGTH	M.M.	M LGTH	M.M.	Y FLATS	Y FLATS	M.M.	Standard Material From Stock			
												S	FG	SS	B
C6804-04-04-04-NWO	1/4	7/16-20	7/16-20	7/16-20	1.030	26.16	0.890	22.61	7/16	0.438	11.12		•	•	
C6804-06-06-06-NWO	3/8	9/16-18	9/16-18	9/16-18	1.250	31.75	1.050	26.67	9/16	0.562	14.27		•	•	
C6804-08-08-08-NWO	1/2	3/4-16	3/4-16	3/4-16	1.450	36.83	1.250	31.75	3/4	0.750	19.05		•	•	
C6804-10-10-10-NWO	5/8	7/8-14	7/8-14	7/8-14	1.700	43.18	1.430	36.32	7/8	0.875	22.22		•	•	
C6804-12-12-12-NWO	3/4	1 1/16-12	1 1/16-12	1 1/16-12	1.940	49.28	1.580	40.13	1 1/16	1.062	26.97		•	•	
C6804-16-16-16-NWO	1	1 5/16-12	1 5/16-12	1 5/16-12	2.050	52.07	1.730	43.94	1 5/16	1.312	33.32			•	



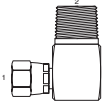
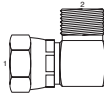





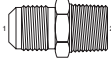
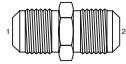

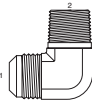



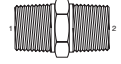

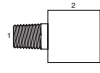



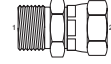


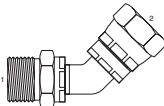

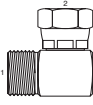
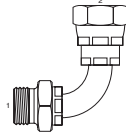
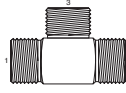
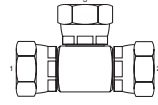




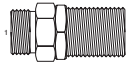


*International Fittings*

## International Fittings

Brennan Industries, Inc.'s steel and stainless steel international fittings are designed for the hydraulic systems using threads that are the standard throughout the world. These include British (BSPP, BSPT), Japanese (JIS, Komatsu) and German (DIN) threads. Brennan currently offers these fittings in a wide range of sizes and configurations.

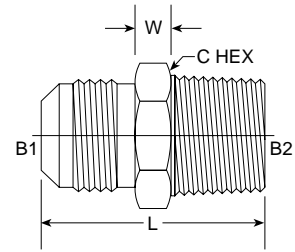
 <b>7000 MJ-MBSPT</b>	 <b>7002 MJ-MBSPP</b>	 <b>7003 MJ-FBSPP</b>	 <b>7004 MJ-FBSPPS</b>	 <b>7005 MJ-MM Port Metric</b>	 <b>7005-L MJ-MM Light Metric (Dual Purpose)</b>
 <b>7005-S MJ-MM Heavy Metric (Dual Purpose)</b>	 <b>7007-L MJ-FMS Light Metric</b>	 <b>7007-S MJ-FMS Heavy Metric</b>	 <b>7008 MJ-MJIS Union</b>	 <b>7008-F MJ-FJIS</b>	 <b>7009 Komatsu MJ-MK Union</b>
 <b>7009-F Komatsu MJ-FK</b>	 <b>7022 FJS-MBSPP</b>	 <b>7023 FJS-FBSPP</b>	 <b>7025 FJS-MM Metric</b>	 <b>7030 MP-MBSPT Nipple</b>	 <b>7032 MP-MBSPP Nipple</b>
 <b>7033 MP-FBSPP</b>	 <b>7034 MP-FBSPPS</b>	 <b>7042 FP-MBSPP</b>	 <b>7040 FNPT/MBSPT</b>	 <b>7045 FP-MM Metric</b>	 <b>7062 MORB-MBSPP</b>
 <b>7100 MJ-MBSPT 45° Elbow</b>	 <b>7102-NWO MJ-MBSPPADJ 45° Elbow</b>	 <b>7200 MJ-MBSPT 90° Elbow</b>	 <b>7202-NWO MJ-MBSPPADJ 90° Elbow</b>	 <b>7204-NWO MJ-FBSPPS 90° Elbow</b>	 <b>7205-NWO MJ-MMADJ 90° Elbow</b>

# International Fittings

 <p><b>7220</b> FJS-MBSPT 90° Elbow</p>	 <p><b>7222</b> FJS-MBSPP 90° Elbow</p>	 <p><b>7588-P</b> MJIS Plug</p>	 <p><b>7599-P</b> Komatsu MK Plug</p>	 <p><b>7688-C</b> FJIS Cap</p>	 <p><b>7699-C</b> Komatsu FK Cap</p>
 <p><b>8055</b> Metric MM-MM Nipple</p>	 <p><b>8080</b> MJIS-MBSPT</p>	 <p><b>8088</b> MJIS-MJIS Union</p>	 <p><b>8180</b> MJIS-MBSPT 45° Elbow</p>	 <p><b>8280</b> MJIS-MBSPT 90° Elbow</p>	 <p><b>8555-H</b> Metric MM Hollow Hex Plug</p>
 <p><b>8555-P</b> Metric MM Plug 1.5 Pitch</p>	 <p><b>8800</b> Metric Bonded Seal</p>	 <p><b>9000</b> MBSPT-MBSPT Nipple</p>	 <p><b>9001</b> MBSPT-FBSPT Bushing</p>	 <p><b>9002</b> MBSPT-FBSPT 90° Elbow</p>	 <p><b>9020</b> MBSPP-MBSPT Straight</p>
 <p><b>9022</b> MBSPP-MBSPP Nipple</p>	 <p><b>9023</b> MBSPP-FBSPP</p>	 <p><b>9024</b> MBSPP-FBSPPS</p>	 <p><b>9025</b> Metric MBSPP-MM Nipple</p>	 <p><b>9033</b> FBSPP-FBSPP Coupling</p>	 <p><b>9124</b> MBSPP-FBSPPS Swept 45°</p>
 <p><b>9222</b> MBSPP-MBSPP 90°</p>	 <p><b>9224</b> MBSPP-FBSPPS 90°</p>	 <p><b>9224-L</b> MBSPP-FBSPPS 90° Long</p>	 <p><b>9322</b> MBSPP-MBSPP-MBSPP Tee</p>	 <p><b>9344</b> FBSPP-FBSPP-FBSPP Tee</p>	 <p><b>9500-P</b> MBSPT Plug</p>
 <p><b>9522-H</b> MBSPP Hollow Hex Plug</p>	 <p><b>9522-P</b> MBSPP Hollow Hex Plug</p>	 <p><b>9644-C</b> FBSPP Cap</p>	 <p><b>9722-LN</b> MBSPP-MBSPP Bulkhead</p>	 <p><b>9900</b> British Bonded Seal</p>	 <p><b>9925</b> BSPP Locknut</p>



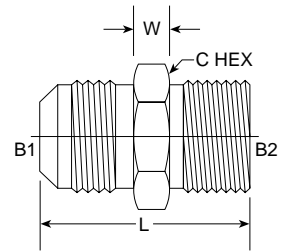
# MJ-MBSPT 7000 Series



PART NO. SIZE	TUBE O.D.	B1 JIC	B2 BSPT	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
							S	FG	SS	B
7000-04-02	1/4	7/16-20	1/8-28	30.48	5.58	12.70	•			
7000-04-04	1/4	7/16-20	1/4-19	38.23	7.64	14.28	•			
7000-04-06	1/4	7/16-20	3/8-19	38.83	7.64	17.46	•			
7000-05-04	5/16	1/2-20	1/4-19	37.83	7.60	14.28	•			
7000-06-04	3/8	9/16-18	1/4-19	38.10	7.64	15.88	•			
7000-06-06	3/8	9/16-18	3/8-19	39.89	7.64	17.46	•			
7000-06-08	3/8	9/16-18	1/2-14	44.07	7.64	22.22	•			
7000-08-06	1/2	3/4-16	3/8-19	41.41	8.28	20.63	•			
7000-08-08	1/2	3/4-16	1/2-14	47.88	7.64	22.22	•			
7000-10-08	5/8	7/8-14	1/2-14	50.05	8.65	25.40	•			
7000-10-12	5/8	7/8-14	3/4-14	51.83	10.17	28.16	•			
NEW 7000-12-08							•			
7000-12-12	3/4	1 1/16-12	3/4-14	53.95	10.17	28.59	•			
7000-12-16	3/4	1 1/16-12	1-11	60.65	10.17	34.93	•			
7000-16-12	1	1 5/16-12	3/4-14	55.17	10.17	35.01	•			
7000-16-16	1	1 5/16-12	1-11	61.21	10.17	34.93	•			
7000-20-20	1 1/4	1 5/8-12	1 1/4-11	65.02	12.70	47.64	•			
7000-24-24	1 1/2	1 7/8-12	1 1/2-11	70.09	12.70	52.38	•			

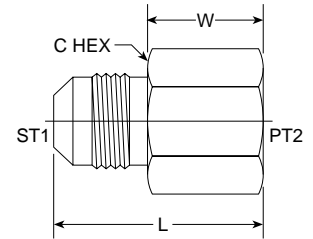
# International Fittings

## MJ-MBSPP 7002 Series



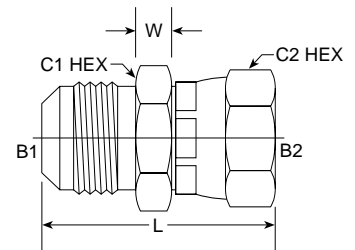
PART NO. SIZE	TUBE O.D.	B1 JIC	B2 BSPP	L M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
							S	FG	SS	B
7002-04-02	1/4	7/16-20	1/8-28	39.00	8.00	16.00	•			
7002-04-04	1/4	7/16-20	1/4-19	32.00	5.00	19.00	•			
7002-04-06	1/4	7/16-20	3/8-19	33.00	5.00	22.00	•			
7002-04-08	1/4	7/16-20	1/2-14	39.00	5.00	30.00	•			
7002-05-02	5/16	1/2-20	1/8-28	32.00	7.00	15.21	•			
7002-05-04	5/16	1/2-20	1/4-19	31.00	6.00	18.00	•			
7002-05-06	5/16	1/2-20	3/8-19	34.00	6.00	23.33	•			
7002-05-12	5/16	1/2-20	3/4-14	41.00	8.00	33.00	•			
7002-06-02	3/8	9/16-18	1/8-28	33.00	7.00	16.00	•			
7002-06-04	3/8	9/16-18	1/4-19	33.00	7.00	18.00	•			
7002-06-06	3/8	9/16-18	3/8-19	33.00	7.00	22.00	•			
7002-06-08	3/8	9/16-18	1/2-14	37.00	8.00	26.00	•			
7002-06-10	3/8	9/16-18	5/8-14	40.00	8.00	28.00	•			
7002-06-12	3/8	9/16-18	3/4-14	41.00	9.00	33.00	•			
7002-08-04	1/2	3/4-16	1/4-19	36.00	8.00	21.00	•			
7002-08-06	1/2	3/4-16	3/8-19	36.00	8.00	22.00	•			
7002-08-08	1/2	3/4-16	1/2-14	40.00	8.00	26.00	•			
7002-08-10	1/2	3/4-16	5/8-14	43.00	8.00	28.00	•			
7002-08-12	1/2	3/4-16	3/4-14	44.00	8.00	33.00	•			
7002-08-16	1/2	3/4-16	1-11	46.30	8.50	43.00	•			
7002-10-04	5/8	7/8-14	1/4-19	39.40	8.50	26.00	•			
7002-10-06	5/8	7/8-14	3/8-19	40.00	8.00	26.00	•			
7002-10-08	5/8	7/8-14	1/2-14	40.00	8.00	26.00	•			
7002-10-10	5/8	7/8-14	5/8-14	45.00	8.00	28.00	•			
7002-10-12	5/8	7/8-14	3/4-14	46.50	8.50	33.00	•			
7002-10-16	5/8	7/8-14	1-11	48.50	8.50	43.00	•			
7002-12-06	3/4	1 1/16-12	3/8-19	45.30	10.00	29.00	•			
7002-12-08	3/4	1 1/16-12	1/2-14	47.10	10.00	29.00	•			
7002-12-10	3/4	1 1/16-12	5/8-14	49.41	9.50	28.60	•			
7002-12-12	3/4	1 1/16-12	3/4-14	50.80	9.50	33.00	•			
7002-12-16	3/4	1 1/16-12	1-11	52.60	10.50	43.00	•			
7002-12-20	3/4	1 1/16-12	1 1/4-11	52.80	10.50	53.00	•			
7002-14-12	5/8	1 3/16-12	3/4-14	51.30	9.50	33.00	•			
7002-16-08	1	1 5/16-12	1/2-14	48.93	10.50	35.00	•			
7002-16-12	1	1 5/16-12	3/4-14	53.50	10.50	35.00	•			
7002-16-16	1	1 5/16-12	1-11	54.40	11.50	43.00	•			
7002-16-20	1	1 5/16-12	1 1/4-11	53.30	10.50	52.00	•			
7002-16-24	1	1 5/16-12	1 1/2-11	58.50	13.50	56.00	•			
7002-20-12	1 1/4	1 5/8-12	3/4-14	53.90	10.50	47.00	•			
7002-20-16	1-1/4	1 5/8-12	1-11	56.20	11.40	47.00	•			
7002-20-20	1 1/4	1 5/8-12	1 1/4-11	57.30	12.50	52.00	•			
7002-20-24	1 1/4	1 5/8-12	1 1/2-11	58.20	12.50	57.00	•			
7002-24-16	1 1/2	1 7/8-12	1-11	61.80	13.50	52.00	•			
7002-24-20	1 1/2	1 7/8-12	1 1/4-11	62.14	14.18	52.00	•			
7002-24-24	1 1/2	1 7/8-12	1 1/2-11	61.90	12.50	57.00	•			
7002-24-32	1 1/2	1 7/8-12	2-11	67.20	14.50	70.00	•			
7002-32-32	2	2 1/2-12	2-11	76.80	17.50	70.00	•			

# MJ-FBSPP 7003 Series



PART NO. SIZE	TUBE O.D.	ST1 JIC	PT2 BSPP	L LGTH M.M.	W WIDTH M.M.	C1 HEX M.M.	Standard Material From Stock			
							S	FG	SS	B
NEW 7003-04-02										
NEW 7003-04-04										
NEW 7003-04-06										
NEW 7003-06-04										
NEW 7003-06-06										
NEW 7003-06-08										
NEW 7003-08-06										
NEW 7003-08-08										
NEW 7003-08-10										
NEW 7003-08-12										
NEW 7003-10-08										
NEW 7003-10-10										
NEW 7003-10-12										
NEW 7003-12-12										
NEW 7003-12-16										
NEW 7003-16-16										
NEW 7003-20-20										
NEW 7003-24-24										
NEW 7003-32-32										

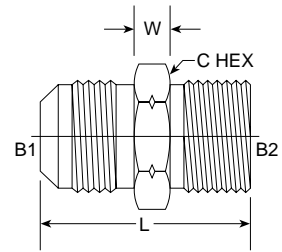
# MJ-FBSPPS 7004 Series



PART NO. SIZE	TUBE O.D.	B1 JIC	B2 BSPP	L LGTH M.M.	W WIDTH M.M.	C1 HEX M.M.	C2 HEX M.M.	Standard Material From Stock			
								S	FG	SS	B
7004-04-02	1/4	7/16-20	1/4-19	36.16	6.90	14.28	15.00	•			
7004-04-04	1/4	7/16-20	1/4-19	36.50	8.50	18	18	•			
7004-04-06	1/4	7/16-20	1/4-19	43.50	8.50	24	22	•			
7004-06-04	3/8	9/16-18	1/4-19	36.00	6.00	18	18	•			
7004-06-06	3/8	9/16-18	3/8-19	40.50	6.50	21	22	•			
7004-06-08	3/8	9/16-18	3/8-19	43.10	7.00	26	26	•			
7004-08-06	1/2	3/4-16	3/8-19	44.70	7.50	21	22	•			
7004-08-08	1/2	3/4-16	1/2-14	49.00	9.50	26	26	•			
7004-08-10	1/2	3/4-16	5/8-14	48.20	8.00	26	28	•			
7004-08-12	1/2	3/4-16	3/4-14	50.50	10.00	29	33	•			
7004-10-08	5/8	7/8-14	1/2-14	51.60	10.00	26	26	•			
7004-10-10	5/8	7/8-14	5/8-14	53.20	9.50	28	28	•			
NEW 7004-12-12								•			
7004-12-16	3/4	1 1/16-12	1-11	58.80	11.00	38	38	•			
7004-16-12	1	1 5/16-12	3/4-14	58.01	11.10	34.90	33.00	•			
NEW 7004-16-16								•			
7004-20-20	1 1/4	1 7/8-12	1 1/4-11	64.60	13.50	48	48	•			
NEW 7004-32-32								•			

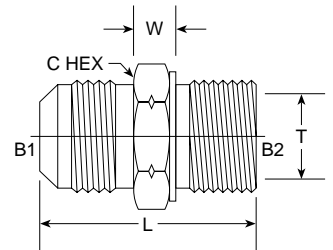
# International Fittings

## MJ-MM Port Metric 7005 Series



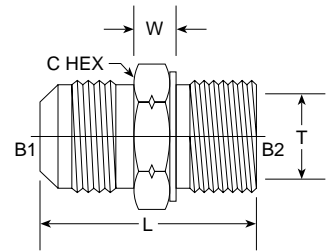
PART NO. SIZE	TUBE O.D.	B1 JIC	B2 MM	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
							S	FG	SS	B
7005-04-10	1/4	7/16-20	10 x 1.0	30.30	4.00	14	•			
7005-04-12	1/4	7/16-20	12 x 1.5	32.520	6.10	15.25	•			
NEW 7005-04-14							•			
NEW 7005-05-12							•			
7005-06-12	3/8	9/16-18	12 x 1.5	32.60	6.00	15	•			
7005-06-14	3/8	9/16-18	14 x 1.5	32.80	6.50	18	•			
7005-06-16	3/8	9/16-18	16 x 1.5	34.10	6.50	22	•			
7005-06-18	3/8	9/16-18	18 x 1.5	34.20	6.50	22	•			
7005-08-12	1/2	3/4-16	12 x 1.5	36.92	8.05	20.80	•			
7005-08-14	1/2	3/4-16	14 x 1.5	37.30	8.40	21	•			
7005-08-16	1/2	3/4-16	16 x 1.5	38.00	8.00	22	•			
7005-08-18	1/2	3/4-16	18 x 1.5	37.80	8.00	22	•			
7005-08-20	1/2	3/4-16	20 x 1.5	37.85	8.10	25.65	•			
7005-08-22	1/2	3/4-16	22 x 1.5	37.40	7.00	27	•			
NEW 7005-10-18							•			
7005-10-20	5/8	7/8-14	20 x 1.5	40.00	8.00	26	•			
7005-10-22	5/8	7/8-14	22 x 1.5	40.30	7.50	27	•			
7005-12-22	3/4	1 1/16-16	22 x 1.5	45.80	10.00	27	•			
7005-12-27	3/4	1 1/16-12	27 x 2	52.45	9.00	31.91	•			
7005-16-33	1	1 5/16-12	33 x 1.5	54.54	9.55	40.90	•			
NEW 7005-24-48							•			

## MJ-MM Light Metric (Dual Purpose) 7005-L Series



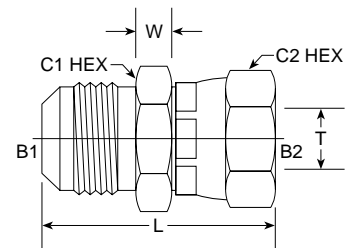
PART NO. SIZE	TUBE O.D.	B1 JIC	B2 MM	L LGTH M.M.	T WIDTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
								S	FG	SS	B
7005-04-L06-12	1/4	7/16-20	12 x 1.5	31.50	6	7.50	16.00	•			
7005-04-L08-14	1/4	7/16-20	14 x 1.5	32.83	8	6.40	18.00	•			
7005-06-L08-14	3/8	9/16-18	14 x 1.5	32.10	8	7.75	18.98	•			
7005-06-L10-16	3/8	9/16-18	16 x 1.5	33.73	10	9.52	22.22	•			
7005-06-L12-18	3/8	9/16-18	18 x 1.5	36.40	12	8.80	23.00	•			
7005-08-L10-16	1/2	3/4-16	16 x 1.5	38.38	10	8.00	22.00	•			
7005-08-L12-18	1/2	3/4-16	18 x 1.5	38.30	12	10.00	23.00	•			
7005-12-L18-24	3/4	1 1/16-12	24 x 1.5	51.95	18	12.12	31.75	•			
7005-10-L15-22	5/8	7/8-14	22 x 1.5	43.00	15	10.00	27.00	•			
7005-12-L18-26	3/4	1 1/16-12	26 x 1.5	51.00	18	12.50	31.70	•			
7005-12-L22-30	3/4	1 1/16-12	30 x 2.0	52.60	22	12.50	38.20	•			
7005-16-L28-36	1	1 5/16-12	36 x 2.0	53.70	28	14.00	41.20	•			
NEW 7005-20-L35-45								•			

# MJ-MM Heavy Metric (Dual Purpose) 7005-S Series



PART NO. SIZE	TUBE O.D.	B1 JIC	B2 MM	L LGTH M.M.	T WIDTH M.M.	W WIDTH M.M.	C1 HEX M.M.	Standard Material From Stock				
								S	FG	SS	B	
7005-04-S06-14	1/4	7/16-20	14 x 1.5	33.40	6	8.00	19	•				
7005-04-S08-16	1/4	7/16-20	16 x 1.5	34.50	8	8.50	23	•				
7005-06-S10-18	3/8	9/16-18	18 x 1.5	37.40	10	8.50	23	•				
7005-06-S12-20	3/8	9/16-18	20 x 1.5	36.90	12	10.50	27	•				
7005-08-S10-18	1/2	3/4-16	18 x 1.5	37.50	10	9.00	24	•				
7005-08-S12-20	1/2	3/4-16	20 x 1.5	41.50	12	10.00	26	•				
7005-08-S14-22	1/2	3/4-16	22 x 1.5	41.70	14	11.50	27	•				
7005-10-S12-20	5/8	7/8-14	20 x 1.5	42.60	12	10.00	29	•				
7005-10-S16-24	5/8	7/8-14	24 x 1.5	44.80	16	10.00	29	•				
NEW 7005-12-S16-24								•				
7005-12-S20-30	3/4	1 1/16-12	30 x 1.5	53.51	20	14.00	38.10	•				
7005-12-S25-36	3/4	1 1/16-12	36 x 2.0	53.00	25	13.50	45	•				
7005-16-S30-42	1	1 5/16-12	42 x 2.0	42.30	30	13.50	48	•				
7005-24-S38-52	1 1/2	1 7/8-12	52 x 2.0	66.20	38	16.50	57	•				

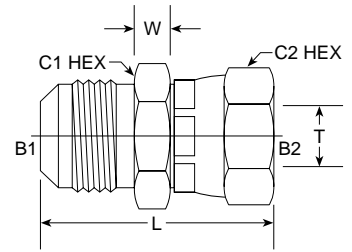
# MJ-FMS Light Metric 7007-L Series



PART NO. SIZE	TUBE O.D.	B1 JIC	B2 MS	L LGTH M.M.	T WIDTH M.M.	W WIDTH M.M.	C1 HEX M.M.	C2 HEX M.M.	Standard Material From Stock				
									S	FG	SS	B	
7007-05-L06-12	5/16	1/2-20	12 x 1.5	38.00	6	6.50	15	18	•				
7007-06-L08-14	3/8	9/16-18	14 x 1.5	39.00	8	6.50	16	18	•				
7007-06-L10-16	3/8	9/16-18	16 x 1.5	40.60	10	8.15	18	20.80	•				
7007-06-L12-18	3/8	9/16-18	18 x 1.5	41.00	12	7.00	18	24	•				
7007-06-L15-22	3/8	9/16-18	22 x 1.5	42.00	15	8.15	20.80	26.95	•				
7007-08-L10-16	1/2	3/4-16	16 x 1.5	43.80	16	8.05	20.60	20.80	•				
7007-08-L12-18	1/2	3/4-16	18 x 1.5	44.30	12	8.00	21	26	•				
7007-08-L15-22	1/2	3/4-16	22 x 1.5	44.50	15	7.50	21	27	•				
7007-10-L15-22	5/8	7/8-14	22 x 1.5	47.60	15	8.00	26	27	•				

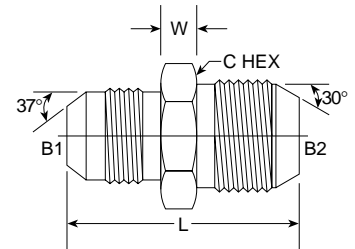
# International Fittings

## MJ-FMS Heavy Metric 7007-S Series



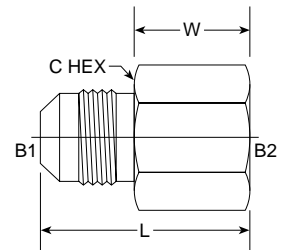
PART NO. SIZE	TUBE O.D.	B1 JIC	B2 MS	L LGTH M.M.	T WIDTH M.M.	W WIDTH M.M.	C1 HEX M.M.	C2 HEX M.M.	Standard Material From Stock			
									S	FG	SS	B
7007-06-S12-20	3/8	9/16-18	20 x 1.5	44.30	12	7.50	18	26	•			
7007-08-S12-20	1/2	3/4-16	20 x 1.5	44.30	12	8.00	21	26	•			
NEW 7007-10-S12-20									•			
NEW 7007-20-S30-42									•			

## MJ-MJIS Union 7008 Series



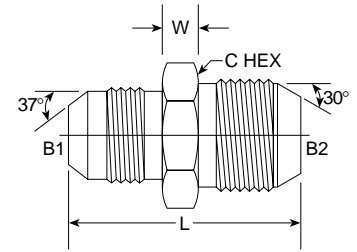
PART NO. SIZE	TUBE O.D.	B1 JIC	B2 JIS	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
							S	FG	SS	B
7008-04-02	1/4	7/16-20	1/8-28	33.70	7	16	•			
7008-04-04	3/4	7/16-20	1/4-19	37.30	7	19	•			
7008-06-06	3/8	3/8-18	3/8-19	38.20	7	23	•			
7008-08-08	1/2	3/4-16	1/2-14	48.20	11	26	•			

## MJ-FJIS 7008-F Series



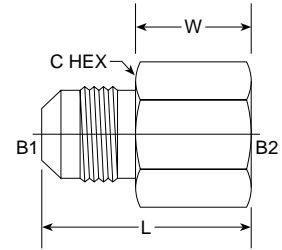
PART NO. SIZE	TUBE O.D.	B1 JIC	B2 JIS	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
							S	FG	SS	B
7008-F-04-04	1/4	7/16-20	1/4-19	31.8	17.5	19	•			
7008-F-06-06	3/8	9/16-18	3/8-19	34.7	20.5	23	•			
7008-F-08-08	1/2	3/4-16	1/2-14	43.4	26.2	27	•			
7008-F-12-12	3/4	1 1/16-12	3/4-14	49.22	27.4	31.75	•			
NEW 7008-F-16-16	1	1 5/16-12	1-11				•			

# Komatsu MJ-MK Union 7009 Series



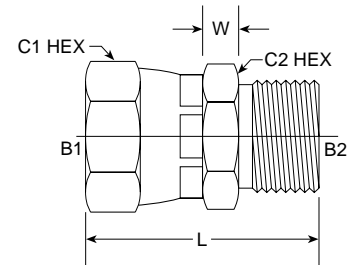
PART NO. SIZE	TUBE O.D.	B1 JIC	B2 MK	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
							S	FG	SS	B
7009-04-14	1/4	7/16-20	14 x 1.5	36.20	6.50	19	•			
7009-06-18	3/8	9/16-18	18 x 1.5	41.20	7.00	23	•			
7009-08-22	1/2	3/4-16	22 x 1.5	47.80	10.00	24	•			
7009-10-24	5/8	7/8-14	24 x 1.5	51.30	10.00	27	•			
7009-12-30	3/4	1 1/16-12	30 x 1.5	60.80	11.50	35	•			
NEW 7009-16-33							•			

# Komatsu MJ-FK Union 7009-F Series



PART NO. SIZE	TUBE O.D.	B1 JIC	B2 FK	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
							S	FG	SS	B
7009-F-04-14	1/4	7/16-20	14 x 1.5	36.92	23.20	19	•			
7009-F-06-18	3/8	9/16-18	18 x 1.5	36.80	22.50	24	•			
7009-F-08-22	1/2	3/4-16	22 x 1.5	42.50	25.50	27	•			
7009-F-10-24	5/8	7/8-14	24 x 1.5	41.80	22.50	32	•			
7009-F-12-30	3/4	1 1/16-12	30 x 1.5	52.50	27.50	39	•			

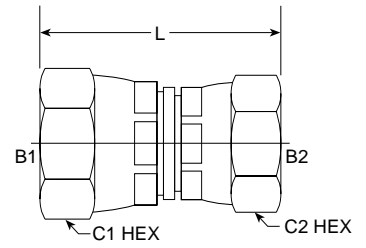
# FJS-MBSPP 7022 Series



PART NO. SIZE	TUBE O.D.	B1 JIC	B2 BSPP	L LGTH M.M.	W WIDTH M.M.	C1 HEX M.M.	C2 HEX M.M.	Standard Material From Stock			
								S	FG	SS	B
7022-04-04	1/4	7/16-20	1/4-19	34.60	6.00	14.28	15	•			
7022-04-06	1/4	7/16-20	3/8-19	36.80	6.50	14.28	24	•			
NEW 7022-05-04								•			
7022-06-04	3/8	9/16-18	1/4-19	37.20	6.50	17.46	18	•			
7022-06-06	3/8	9/16-18	3/8-19	38.60	6.50	17.46	24	•			
7022-06-08	3/8	9/16-18	1/2-14	42.70	8.50	17.46	26	•			
7022-08-06	1/2	3/4-18	3/8-19	43.80	7.50	22.23	24	•			
7022-08-08	1/2	3/4-18	1/2-14	47.30	8.50	22.23	26	•			
7022-10-08	5/8	7/8-14	1/2-14	50.30	9.00	25.40	26	•			
7022-10-10	5/8	7/8-14	5/8-14	51.60	7.50	25.40	28	•			
7022-12-12	3/4	1 1/16-12	3/4-14	51.10	11.00	31.75	36	•			
7022-16-16	1	1 5/16-12	1-11	60.10	10.30	38.00	42.42	•			
7022-20-20	1 1/4	1 5/8-12	1 1/4-11	62.00	11.40	47.60	52.00	•			
7022-24-24	1 1/2	1 7/8-12	1 1/2-11	69.20	13.00	56.30	56.30	•			

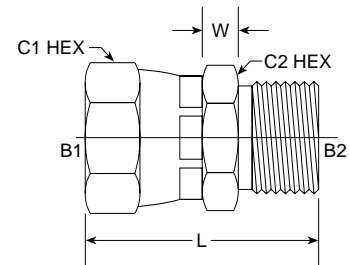
# International Fittings

## FJS-FBSPP 7023 Series



PART NO. SIZE	TUBE O.D.	B1 JIC	B2 BSPP	L LGTH M.M.	C1 HEX M.M.	C2 HEX M.M.	Standard Material From Stock			
							S	FG	SS	B
7023-04-04	1/4	7/16-20	1/4-19	36.00	14.28	18	•			
7023-06-06	3/8	9/16-18	3/8-19	41.30	17.46	21	•			
7023-06-08	3/8	9/16-18	1/2-14	44.80	17.46	26	•			
7023-08-06	1/2	3/4-16	3/8-19	46.20	22.23	22	•			
7023-08-08	1/2	3/4-16	1/2-14	47.80	22.23	26	•			

## FJS-MM Metric 7025 Series

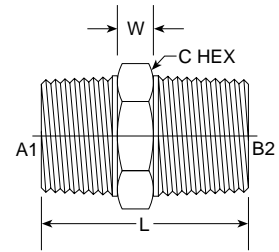


PART NO. SIZE	TUBE O.D.	B1 JIC	B2 MM	L LGTH M.M.	W WIDTH M.M.	C1 HEX M.M.	C2 HEX M.M.	Standard Material From Stock			
								S	FG	SS	B
7025-05-12	5/16	1/2-20	12 x 1.5	40.20	19.50	15.87	17	•			
7025-06-14	3/8	9/16-18	14 x 1.5	38.40	6.50	17.46	18	•			
7025-06-16	3/8	9/16-18	16 x 1.5	39.50	6.50	17.46	22	•			
7025-06-18	3/8	9/16-18	18 x 1.5	39.00	6.50	17.46	22	•			
7025-08-16	1/2	3/4-16	16 x 1.5	41.62	6.86	22.22	21.91	•			
NEW 7025-08-18								•			
7025-08-22	1/2	3/4-16	22 x 1.5	41.69	6.70	22.22	25.60	•			
7025-10-22	5/8	7/8-14	22 x 1.5	45.12	7.00	25.65	27.00	•			



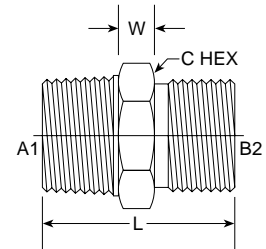
# MP-MBSPT Nipple 7030 Series

PART NO. SIZE	A1 NPTF	B2 BSPT	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
7030-04-04	1/4-18	1/4-19	38.30	7.50	14.20	•			
7030-04-06	1/4-18	3/8-19	39.00	7.90	17.45	•			
7030-06-04	3/8-18	1/4-19	38.40	7.50	17.40	•			
7030-06-06	3/8-18	3/8-19	40.10	8.50	17.40	•			
7030-08-08	1/2-14	1/2-14	49.90	8.50	22.20	•			
7030-12-12	3/4-14	3/4-14	51.70	10.00	27.70	•			
7030-16-16	1-11 1/2	1-11	66.20	13.00	34.80	•			
7030-20-20	1-1/4-11 1/2	1 1/4-11	65.80	12.50	47.60	•			
7030-24-24	1-1/2-11 1/2	1 1/2-11	69.80	14.00	57.15	•			
7030-32-32	2-11 1/2	2-11	70.60	14.00	69.80	•			



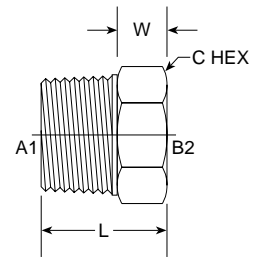
# MP-MBSPP Nipple 7032 Series

PART NO. SIZE	A1 MP	B2 BSPP	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
7032-02-02	1/8-27	1/8-28	27.00	6.00	15.00	•			
7032-02-04	1/8-27	1/4-19	28.20	6.50	18.00	•			
7032-04-02	1/4-18	1/8-28	33.20	7.70	15.20	•			
7032-04-04	1/4-18	1/4-19	33.80	8.50	18.00	•			
7032-04-06	1/4-18	3/8-19	35.30	7.50	24.00	•			
7032-04-08	1/4-18	1/2-14	38.10	8.50	26.00	•			
7032-06-04	3/8-18	1/4-19	33.80	8.00	18.00	•			
7032-06-06	3/8-18	3/8-19	35.40	7.50	24.00	•			
7032-06-08	3/8-18	1/2-14	37.90	7.75	25.65	•			
NEW 7032-06-12						•			
7032-08-04	1/2-14	1/4-19	38.30	8.00	22.00	•			
7032-08-06	1/2-14	3/8-19	40.40	8.00	24.00	•			
7032-08-08	1/2-14	1/2-14	42.80	8.00	26.00	•			
7032-08-10	1/2-14	5/8-14	46.00	9.10	27.90	•			
7032-08-12	1/2-14	3/4-14	46.12	7.80	33.00	•			
7032-08-16	1/2-14	1-11	50.10	10.00	43.00	•			
7032-12-08	3/4-14	1/2-14	44.40	9.50	28.00	•			
7032-12-12	3/4-14	3/4-14	46.70	9.00	33.00	•			
7032-12-16	3/4-14	1-11	49.50	9.50	43.00	•			
NEW 7032-16-08						•			
7032-16-12	1-11 1/2	3/4-14	55.30	10.85	34.90	•			
NEW 7032-16-16						•			
NEW 7032-16-20						•			
7032-20-16	1 1/4-11 1/2	1-11	58.40	12.75	47.25	•			
7032-20-20	1 1/4-11 1/2	1-11	57.90	13.00	52.00	•			
NEW 7032-20-24						•			
NEW 7032-24-20						•			
7032-24-24	1 1/2-11 1/2	1 1/2-11	60.20	13.00	56.30	•			
NEW 7032-24-32						•			
7032-32-20	2-12	1 1/4-11	61.12	14.30	70.00	•			
7032-32-32	2-11 1/2	2-11	66.20	14.00	70.00	•			



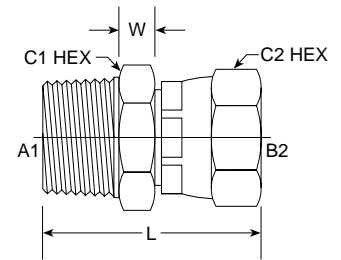
# International Fittings

## MP-FBSPP 7033 Series



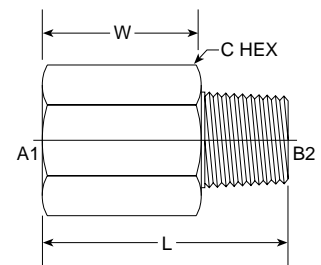
PART NO. SIZE	A1 MP	B2 BSPP	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
7033-04-04	1/4-18	1/4-19	38.20	23.70	18	•		•	
7033-08-06	1/2-14	3/8-19	25.30	6.50	22	•			
7033-08-08	1/2-14	1/2-14	47.68	28.00	26	•			
7033-12-12	3/4-14	3/4-14	52.05	32.70	33	•			
7033-16-16	1-11 1/2	1-11	61.50	37.00	43	•			
7033-20-20	1 1/4-11 1/2	1 1/4-11	58.47	33.20	50.75	•			
7033-24-24	1 1/2-11 1/2	1 1/2-11	56.60	32.00	57	•			
7033-32-32	2-11 1/2	2-11	71.30	44.60	70.10	•			

## MP-FBSPPS 7034 Series



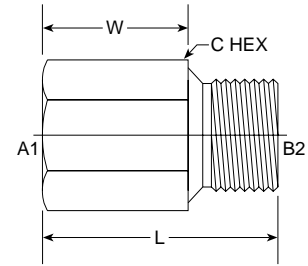
PART NO. SIZE	A1 MP	B2 BSPPS	L LGTH M.M.	W WIDTH M.M.	C1 HEX M.M.	C2 HEX M.M.	Standard Material From Stock			
							S	FG	SS	B
7034-02-02	1/8-27	18-28	32.40	7.00	15	15	•			
7034-02-04	1/8-27	1/4-19	33.00	7.00	16	18	•			
7034-04-04	1/4-18	1/4-19	38.00	7.00	15	18	•			
<b>NEW</b> 7034-04-06							•			
7034-06-04	3/8-18	1/4-19	39.00	8.80	18	18	•			
7034-06-06	3/8-18	3/8-19	43.60	8.50	18	22	•			
7034-06-08	3/8-18	1/2-14	45.20	8.50	24	26	•			
7034-08-06	1/2-14	3/8-19	48.40	10.00	22	21	•			
7034-08-08	1/2-14	1/2-14	51.20	9.50	22	26	•			
7034-12-08	3/4-14	1/2-14	52.72	10.50	28	26	•			
7034-12-12	3/4-14	3/4-14	52.40	9.50	28	33	•			
7034-16-16	1-11 1/2	1-11	63.34	11.00	38	38	•			

## FNPT-MBSPT 7040 Series



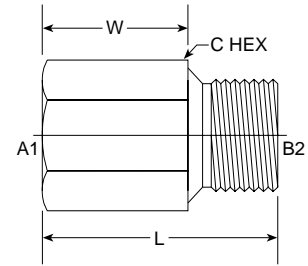
PART NO. SIZE	A1 MP	B2 BSPP	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
<b>NEW</b> 7040-02-02						•			
<b>NEW</b> 7040-04-04						•			
<b>NEW</b> 7040-06-06						•			
<b>NEW</b> 7040-08-08						•			
<b>NEW</b> 7040-12-12						•			

## FP-MBSPP 7042 Series



PART NO. SIZE	A1 FP	B2 BSPP	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
7042-02-02	1/8-27	1/8-28	27.37	16.13	15.20	•			
7042-02-04	1/8-27	1/4-19	30.80	19.30	19.00	•			
7042-02-06	1/2-27	3/8-19	34.40	20.20	24.00	•			
7042-04-02	1/4-18	1/8-28	30.90	22.10	19.05	•			
7042-04-04	1/4-18	1/4-19	31.91	20.70	18.00	•		•	
7042-04-06	1/4-18	3/8-19	36.90	25.50	24.00	•			
7042-04-08	1/4-18	1/2-14	24.80	10.00	26.00	•			
7042-06-04	3/8-18	1/4-19	38.30	26.60	24.00	•			
7042-06-06	3/8-18	3/8-19	35.22	23.70	23.80	•			
7042-06-08	3/8-18	1/2-14	42.50	25.70	26.00	•			
7042-08-08	1/2-14	1/2-14	44.30	27.10	26.00	•			
NEW 7042-08-12						•			
7042-12-12	3/4-12	3/4-12	56.52	37.44	33.00	•			
7042-16-16	1-11 1/2	1-11	55.25	36.30	41.30	•			
NEW 7042-16-20						•			
7042-20-16	1 1/4-11 1/2	1-11	50.00	27.90	50.80	•			
7042-20-20	1 1/4-11 1/2	1 1/4-11	62.90	39.80	50.85	•			
NEW 7042-20-24						•			
7042-24-20	1 1/2-11 1/2	1 1/4-11	60.70	37.90	57.00	•			
7042-24-24	1 1/2-11 1/2	1 1/2-11	60.20	38.40	57.20	•			
7042-32-32	2-11 1/2	2-11	61.80	35.30	69.70	•			

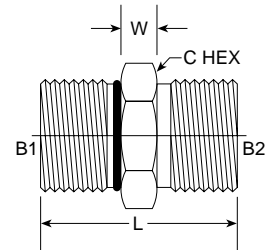
## FP-MM Metric 7045 Series



PART NO. SIZE	A1 FP	B2 MM	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
NEW 7045-02-06						•			
NEW 7045-02-14						•			
NEW 7045-02-16						•			
NEW 7045-02-18						•			
NEW 7045-02-20						•			
7045-04-10	1/4-18	10X1.0	32.75	21.95	19.05	•			
7045-04-12	1/4-18	12X1.5	33.22	21.85	19.06	•			
7045-02-10	1/8-27	10 x 1.0	29.90	20.00	14.20	•			
7045-04-14	1/4-18	14 x 1.5	35.00	25.00	19.00	•			
7045-06-16	3/8-18	16X1.5	38.50	27.20	22.30	•			
NEW 7045-06-18						•			
NEW 7045-06-20						•			
7045-08-16	1/2-14	16 x 1.5	42.40	29.70	28.60	•			
7045-08-18	1/2-14	18 x 1.5	42.90	28.90	28.50	•			
7045-08-22	1/2-14	22 x 1.5	45.00	28.50	29.00	•			
7045-12-26	3/4-14	26 x 1.5	45.60	26.90	35.00	•			
7045-12-27	3/4-14	27 x 2.0	45.70	26.70	35.00	•			
7045-16-33	1-11 1/2	33 x 2.0	50.10	30.30	42.00	•			
NEW 7045-16-42						•			

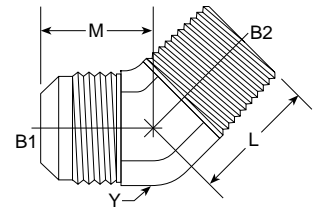
# International Fittings

## MORB-MBSPP 7062 Series



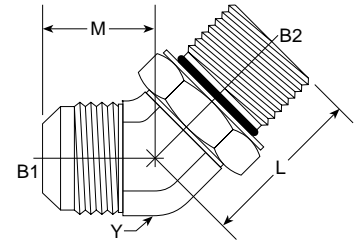
PART NO. SIZE	B1 SAE	B2 BSPP	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
7062-03-04	3/8-27	1/4-19	25.30	6.50	18	•			
7062-04-04	7/16-20	1/4-19	27.20	6.50	18	•			
7062-04-06	7/16-20	3/8-19	28.70	6.60	24	•			
7062-05-04	1/2-20	1/4-19	28.10	7.50	18	•			
7062-06-04	9/16-18	1/4-19	27.50	6.70	18	•			
7062-06-06	9/16-18	3/8-19	28.40	5.50	24	•			
7062-06-08	9/16-18	1/2-14	32.90	8.00	26	•			
7062-08-06	3/4-16	3/8-19	31.80	7.50	24	•			
7062-08-08	3/4-16	1/2-14	34.00	7.60	26	•			
7062-08-12	3/4-16	3/4-14	37.20	7.50	33	•			
7062-10-06	7/8-14	3/8-19	33.70	7.80	26	•			
7062-10-08	7/8-14	1/2-14	35.30	7.70	26	•			
7062-12-08	1 1/16-12	1/2-14	39.40	9.30	32	•			
7062-12-12	1 1/16-12	3/4-14	43.80	9.50	34	•			
7062-12-16	1 1/16-12	1-11	44.50	10.00	43	•			
7062-16-12	1 5/16-12	3/4-14	44.10	10.00	38	•			
7062-16-16	1 5/16-12	1-11	46.15	11.00	42.40	•			
7062-20-20	1 5/8-12	1 1/4-11	48.40	12.50	52	•			
NEW 7062-24-24						•			

## MJ-MBSPT 45° Elbow 7100 Series



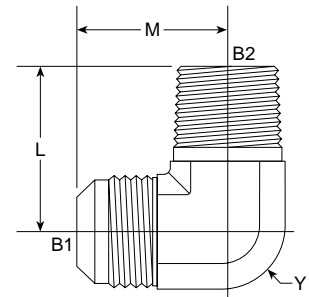
PART NO. SIZE	B1 JIC	B2 BSPT	L LGTH M.M.	M LGTH M.M.	Y FLATS M.M.	Standard Material From Stock			
						S	FG	SS	B
7100-04-04	7/16-20	1/4-19	21.50	21.00	14		•		
7100-06-04	9/16-18	1/4-19	21.50	21.00	14	•	•		
7100-06-06	9/16-18	3/8-19	24.00	22.00	19	•	•		
7100-08-06	3/4-16	3/8-19	24.00	25.00	19	•	•		
7100-08-08	3/4-16	1/2-14	30.00	25.00	22	•	•		
7100-10-08	7/8-14	1/2-14	29.50	28.00	22	•	•		
7100-12-12	1 1/16-12	3/4-14	30.50	32.50	27	•	•		
7100-16-16	1 5/16-12	1-11	37.50	37.00	33		•		

# MJ-MBSPPADJ 45° Elbow 7102-NWO Series



PART NO. SIZE	B1 JIC	B2 BSPP	L LGTH M.M.	M LGTH M.M.	Y FLATS M.M.	Standard Material From Stock			
						S	FG	SS	B
7102-04-04-NWO	7/16-20	1/4-19	29.00	21.00	11		•		
NEW 7102-06-04-NWO							•		
7102-06-06-NWO	9/16-18	3/8-19	33.00	22.00	14		•		
NEW 7102-08-06-NWO							•		
7102-08-08-NWO	3/4-16	1/2-14	38.50	25.50	19		•		
7102-12-12-NWO	1 1/16-12	3/4-14	44.00	32.50	27		•		
7102-16-16-NWO	1 5/16-12	1-11	47.00	37.00	33		•		
7102-20-20-NWO	1 5/8-12	1 1/4-11	48.50	40.50	41		•		

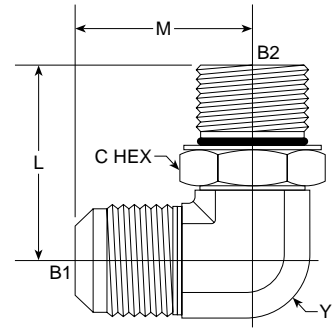
# MJ-MBSPT 90° Elbow 7200 Series



PART NO. SIZE	B1 JIC	B2 BSPT	L LGTH M.M.	M LGTH M.M.	Y FLATS M.M.	Standard Material From Stock			
						S	FG	SS	B
7200-04-02	7/16-20	1/8-28	20.55	23.55	11.50		•		
7200-04-04	7/16-20	1/4-19	27.50	27.00	14		•		
7200-06-04	9/16-18	1/4-19	27.50	27.00	14		•		
7200-06-06	9/16-18	3/8-19	31.00	28.50	19		•		
7200-08-06	3/4-16	3/8-19	31.00	31.50	19		•		
7200-08-08	3/4-16	1/2-14	37.00	24.00	22		•		
7200-12-12	1 1/16-12	3/4-14	40.50	42.00	27		•		
7200-16-16	1 5/16-12	1-11	50.00	46.00	33		•		
7200-20-20	1 5/8-12	1 1/4-11	60.00	52.00	41		•		

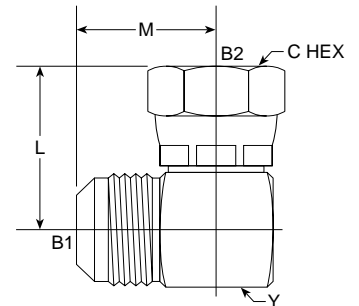
# International Fittings

## MJ-MBSPPADJ 90° Elbow 7202-NWO Series



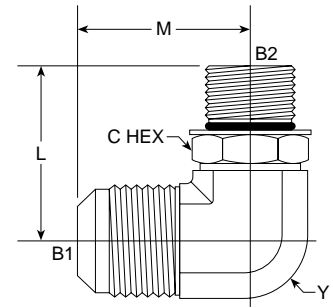
PART NO. SIZE	B1 JIC	B2 BSPP	L LGTH M.M.	M LGTH M.M.	C HEX M.M.	Y FLATS M.M.	Standard Material From Stock				
							S	FG	SS	B	
NEW 7202-04-02-NWO								•			
7202-04-04-NWO	7/16-20	1/4-19	31.50	27.00	19.50	11		•			
7202-05-04-NWO	1/2-20	1/4-19	31.40	27.40	19.00	14.28		•			
7202-06-04-NWO	9/16-18	1/4-19	36.50	28.50	19.50	14		•			
7202-06-06-NWO	9/16-18	3/8-19	36.50	28.50	24.00	14		•			
7202-06-08-NWO	9/16-18	1/2-14	43.00	31.00	28.50	19		•			
7202-08-06-NWO	3/4-16	3/8-19	36.50	31.50	24.00	19		•			
7202-08-08-NWO	3/4-16	1/2-14	43.00	34.00	28.50	19		•			
NEW 7202-08-12-NWO								•			
7202-10-08-NWO	7/8-14	1/2-14	43.00	36.50	28.50	22		•			
7202-10-12-NWO	7/8-14	3/4-14	49.00	39.50	35.00	22		•			
NEW 7202-12-08-NWO								•			
7202-12-12-NWO	1 1/16-12	3/4-14	49.00	42.00	35.00	27		•			
7202-12-16-NWO	1 1/16-12	1-11	52.70	44.50	41.00	33.50		•			
7202-16-12-NWO	1 5/16-12	3/4-14	52.52	46.20	36.00	34.00		•			
7202-16-16-NWO	1 5/16-12	1-11	52.00	46.00	43.00	33		•			
NEW 7202-16-20-NWO								•			
7202-20-20-NWO	1 5/8-12	1 1/4-11	57.00	52.00	52.50	41		•			
7202-24-24-NWO	1 1/2-12	1 1/2-12	61.70	59.00	60.00	48.00		•			

## MJ-FBSPPS 90° Elbow 7204 Series



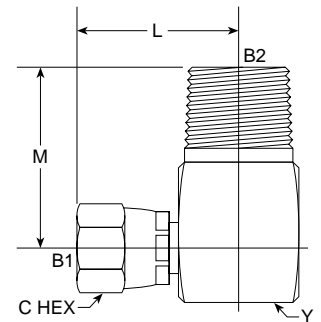
PART NO. SIZE	B1 JIC	B2 BSPP	L LGTH M.M.	M LGTH M.M.	C HEX M.M.	Y FLATS M.M.	Standard Material From Stock				
							S	FG	SS	B	
NEW 7204-06-06								•			
7204-08-08	3/4-16	1/2-14	25.00	33	25.40	22.23		•			
7204-12-12	1 1/16-12	1 1/16-12	27.80	41	31.75	33.33		•			

# MJ-MMADJ 90° Elbow 7205-NWO Series



PART NO. SIZE	B1 JIC	B2 MM	L LGTH M.M.	M LGTH M.M.	C HEX M.M.	Y FLATS M.M.	Standard Material From Stock			
							S	FG	SS	B
7205-04-10-NWO	7/16-20	10 x 1.0	27.50	22.50	14.50	11		•		
7205-04-12-NWO	7/16-20	12 x 1.5	31.50	27.00	17.50	14		•		
7205-04-14-NWO	7/16-20	14 x 1.5	32.00	27.00	19.50	14		•		
7205-06-14-NWO	9/16-18	14 x 1.5	32.50	27.00	19.50	14		•		
7205-08-16-NWO	3/4-16	16 x 1.5	36.50	31.50	22.50	19		•		
7205-08-18-NWO	3/4-16	18 x 1.5	39.50	31.50	24.50	19		•		
7205-10-18-NWO	7/8-14	18 x 1.5	41.50	36.50	24.50	22		•		
7205-10-20-NWO	7/8-14	20 x 1.5	43.00	36.50	27.50	23		•		
7205-10-22-NWO	7/8-14	22 x 1.5	43.00	36.50	27.50	22		•		
NEW 7205-12-22-NWO								•		
7205-12-27-NWO	1 1/16-12	27 x 2.0	51.50	42.00	32.50	27		•		
7205-12-33-NWO	1 1/16-12	33 x 2.0	52.00	43.00	52.00	33		•		
7205-16-33-NWO	1 5/16-12	33 x 2.0	55.00	46.00	41.50	33		•		

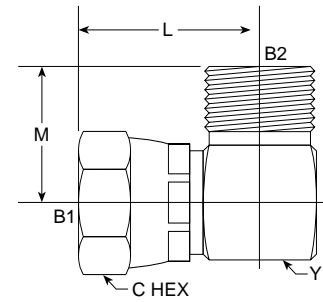
# FJS-MBSPT 90° Elbow 7220 Series



PART NO. SIZE	B1 JIC	B2 BSPP	L LGTH M.M.	M LGTH M.M.	C HEX M.M.	Y FLATS M.M.	Standard Material From Stock			
							S	FG	SS	B
7220-06-08	9/16-18	1/2-14	31.75	37	18	22.23	•			

# International Fittings

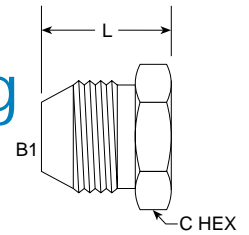
## FJS-MBSPP 90° Elbow 7222 Series



PART NO. SIZE	B1 JIC	B2 BSPP	L LGTH M.M.	M LGTH M.M.	C HEX M.M.	Y FLATS M.M.	Standard Material From Stock			
							S	FG	SS	B
7222-04-04	7/16-20	1/4-19	25	25	14	16	•			
7222-06-06	9/16-18	3/8-19	28.00	29.40	17.46	19.00	•			
7222-08-08	3/4-16	1/2-14	35.30	35.00	22.22	22.22	•			
7222-12-12	1 1/16-12	3/4-14	44.00	37.30	32.00	28.60	•			

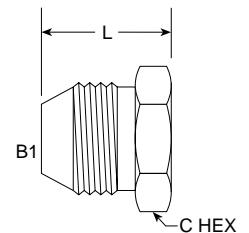
PART NO. SIZE	B1 JIS	L LGTH M.M.	C HEX M.M.	Standard Material From Stock			
				S	FG	SS	B
7588-P-02	1/8-27	19.65	14.28	•			
7588-P-04	1/4-19	23.80	19.05	•			
7588-P-06	3/8-19	23.80	23.80	•			
7588-P-08	1/2-14	28.35	25.60	•			
7588-P-12	3/4-14	36.20	31.75	•			
7588-P-16	1-11	33.15	36.00	•			

## MJIS Plug 7588-P Series



PART NO. SIZE	B1 MK	L LGTH M.M.	C HEX M.M.	Standard Material From Stock			
				S	FG	SS	B
7599-P-14	14 x 1.5	22.90	19.00	•			
7599-P-18	18 x 1.5	24.70	24	•			
7599-P-22	22 x 1.5	31.70	27.00	•			
7599-P-24	24 x 1.5	32.50	31.90	•			
7599-P-30	30 x 2.0	37.00	36.00	•			
7599-P-33	33 x 1.5	44.00	42	•			

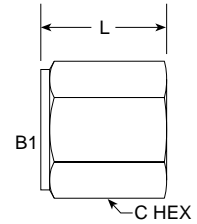
## Komatsu MK Plug 7599-P Series





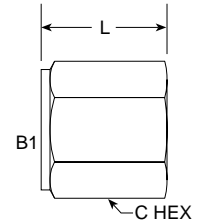
PART NO. SIZE	B1 JIS	L LGTH M.M.	C HEX M.M.	Standard Material From Stock			
				S	FG	SS	B
7688-C-02	1/8-28	17.88	15.87	•			
7688-C-04	1/4-19	22	19.05	•			
7688-C-06	3/8-19	22.4	22.22	•			
7688-C-08	1/2-14	27.4	26.99	•			
7688-C-12	3/4-14	31.5	31.75	•			
7688-C-16	1-11	28.55	38.20	•			

## FJIS Cap 7688-C Series

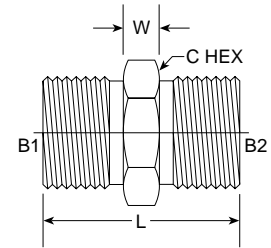


PART NO. SIZE	B1 FK	L LGTH M.M.	C HEX M.M.	Standard Material From Stock			
				S	FG	SS	B
7699-C-14	14 x 1.5	19.98	18.00	•			
7699-C-18	18 x 1.5	23.80	24.00	•			
7699-C-22	22 x 1.5	28.10	26.00	•			
NEW 7699-C-24				•			
7699-C-30	30 x 1.5	29.90	41.00	•			
7699-C-33	33 x 1.5	39.90	41.20	•			

## Komatsu FK Cap 7699-C Series

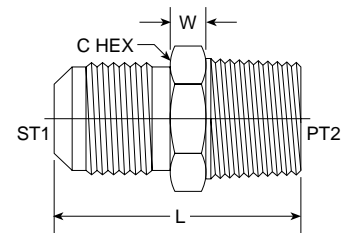


## Metric MM-MM Nipple 8055 Series



PART NO. SIZE	B1 MM	B2 MM	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
NEW 8055-16-16	16 x 1.5	16 x 1.5	27	7	17	•			
NEW 8055-18-18						•			
8055-20-20						•			

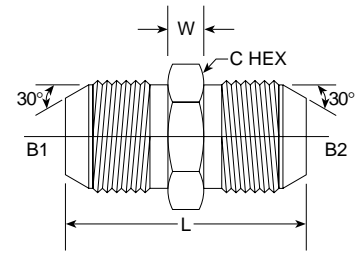
## MJIS-MBSPT Union 8080 Series



PART NO. SIZE	B1 JIS	B2 JIS	L LGTH M.M.	C HEX M.M.	Standard Material From Stock			
					S	FG	SS	B
NEW 8080-04-04								
NEW 8080-04-06								
NEW 8080-06-04								
NEW 8080-06-06								
NEW 8080-08-06								
NEW 8080-08-08								
NEW 8080-12-12								
NEW 8080-16-16								

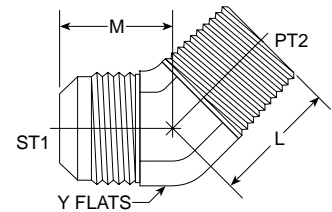
# International Fittings

## MJIS-MJIS Union 8088 Series



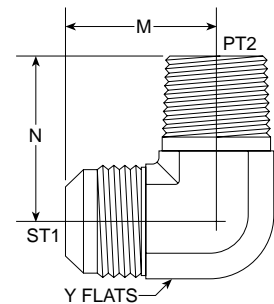
PART NO. SIZE	B1 JIS	B2 JIS	L LGTH M.M.	C HEX M.M.	Standard Material From Stock			
					S	FG	SS	B
8088-04-04	1/4-19	1/4-19	38.00	20	•			
8088-06-06	3/8-19	3/8-19	39.70	24	•			
8088-08-08	1/2-14	1/2-14	47.00	26	•			
8088-12-12	3/4-14	3/4-14	55.90	32	•			

## MJIS-MBSPT Union 8180 Series



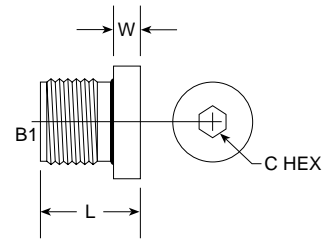
PART NO. SIZE	ST1 JIS	PT2 JIS	L LGTH M.M.	M LGTH M.M.	Y FLATS M.M.	Standard Material From Stock			
						S	FG	SS	B
<i>NEW</i> 8180-04-04									
<i>NEW</i> 8180-06-06									
<i>NEW</i> 8180-08-08									
<i>NEW</i> 8180-12-12									
<i>NEW</i> 8180-16-16									

## MJIS-MBSPT Union 8280 Series



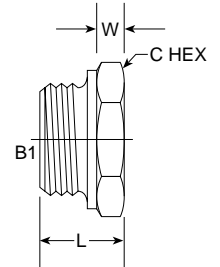
PART NO. SIZE	ST1 JIS	PT2 JIS	N LGTH M.M.	C HEX M.M.	Y FLATS M.M.	Standard Material From Stock			
						S	FG	SS	B
<i>NEW</i> 8280-04-04									
<i>NEW</i> 8280-06-06									
<i>NEW</i> 8280-08-08									
<i>NEW</i> 8280-12-12									
<i>NEW</i> 8280-16-16									

# Metric MM Hollow Hex Plug 8555-H Series



PART NO. SIZE	B1 MM	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
					S	FG	SS	B
NEW 8555-H10-0					•			
NEW 8555-H12-0					•			
NEW 8555-H14-0					•			
NEW 8555-H16-0					•			
8555-H18-0	18 x 1.5	17.00	5	8	•			
8555-H22-0	22 x 1.5	19.10	5	10	•			
NEW 8555-H24-0					•			
NEW 8555-H26-0					•			

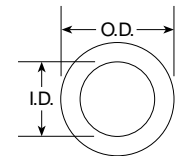
# Metric MM Plug 1.5 Pitch 8555-P Series



PART NO. SIZE	B1 MM	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
					S	FG	SS	B
8555-P-10	10 x 1.0	12.00	4	11	•			
8555-P-12	12 x 1.5	16.70	7	18	•			
8555-P-14	14 x 1.5	17.40	8	19	•			
8555-P-16	14 x 1.5	16.40	8	22	•			
8555-P-18	18 x 1.5	17.10	8	23	•			
8555-P-20	20 x 1.5	16.80	8	26	•			
8555-P-24	24 x 1.5	17.60	8	33	•			
8555-P-26	26 x 1.5	17.60	8	33	•			
NEW 8555-P-36					•			

PART NO. SIZE	I.D. M.M.	O.D. M.M.	Standard Material From Stock			
			S	FG	SS	B
8800-06	6	10	•			
8800-08	8	13	•			
8800-10	10	18	•			
8800-12	12	20	•			
8800-14	14	22	•			
8800-16	16	24	•			
8800-18	18	26	•			
8800-20	20	28	•			
8800-22	22	30	•			
NEW 8800-24			•			
8800-26	26	35	•			
8800-27	27	36	•			
8800-30	30	39	•			
8800-33	33	43	•			
8800-36	36	46	•			
8800-42	42	53	•			
8800-52	52	64	•			

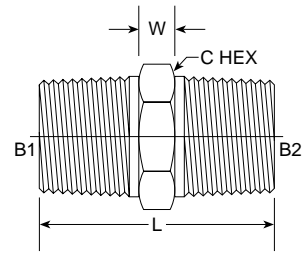
# Metric Bonded Seal 8800 Series



For metric threads.

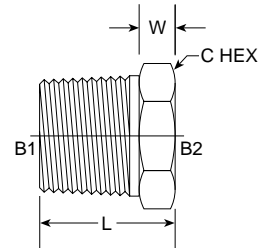
# International Fittings

## MBSPT-MBSPT Nipple 9000 Series



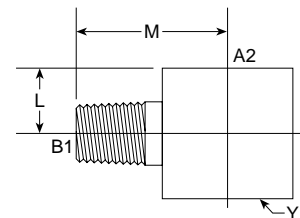
PART NO. SIZE	B1 BSPT	B2 BSPT	L LGTH M.M.	W LGTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
9000-02-02	1/8-27	1/8-28	27.30	5	11.11	•			
9000-04-02	1/4-19	1/8-28	33.10	8	15.00	•			
9000-04-04	1/4-19	1/4-19	40.50	8	14.28	•			
9000-06-02	3/8-19	1/8-28	36.40	8	17.46	•			
9000-06-04	3/8-19	1/4-19	40.60	8	17.46	•			
9000-06-06	3/8-19	3/8-19	42.40	8	17.40	•			
9000-08-04	1/2-14	1/4-19	46.30	8	22.00	•			
9000-08-06	1/2-14	3/8-19	46.70	8	22.22	•			
9000-08-08	1/2-14	1/2-14	52.20	8	22.22	•			
9000-10-10	5/8-14	5/8-14	53.70	9	26.00	•			
9000-12-08	3/4-14	1/2-14	54.80	11	28.00	•			
9000-12-12	3/4-14	3/4-14	55.10	11	28.00	•			
9000-16-12	1-11	3/4-14	62.10	12.35	35.00	•			
9000-16-16	1-11	1-11	66.90	12	34.92	•			
9000-20-20	1 1/4-11	1 1/4-11	69.10	13	47.00	•			
9000-24-24	1 1/2-11	1 1/2-11	73.40	14	52.00	•			
9000-32-32	2-11	2-11	73.80	14	70.00	•			

## MBSPT-FBSPT Bushing 9001 Series



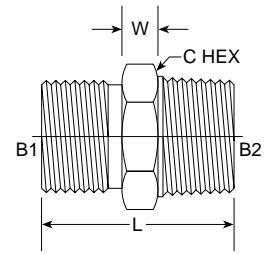
PART NO. SIZE	B1 BSPT	B2 BSPT	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
9001-04-02	1/4-19	1/8-28	23.80	8	14.28	•			
9001-06-04	3/8-19	1/4-19	25.85	8.57	17.46	•			
9001-08-06	1/2-14	3/8-19	25.30	6	22.02	•			
9001-12-08	3/4-14	1/2-14	31.90	10	28.00	•			
NEW 9001-16-12						•			
9001-20-16	1 1/4-11	1-11	40.60	12.70	47.22	•			

## MBSPT-FBSPT 90° Elbow 9002 Series



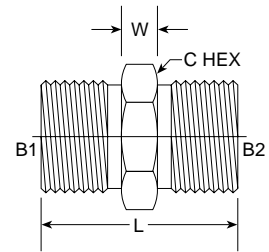
PART NO. SIZE	B1 BSPT	A2 BSPT	L LGTH M.M.	M LGTH M.M.	Y FLATS M.M.	Standard Material From Stock			
						S	FG	SS	B
9002-02-02	1/8-28	1/8-28	8	19	17.46	•			

# MBSPP-MBSPT Straight 9020 Series



PART NO. SIZE	B1 BSPP	B2 BSPT	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
NEW 9020-04-04	3/8-19	1/4-19	37.10	8	24	•			
NEW 9020-04-06						•			
9020-06-04						•			
NEW 9020-06-06	1-11	1-11	59.30	11.30	42.35	•			
9020-16-16						•			
NEW 9020-20-20						•			

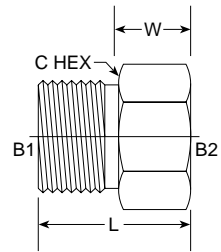
# MBSPP-MBSPP Nipple 9022 Series



PART NO. SIZE	B1 BSPP	B2 BSPP	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
9022-02-02	1/8-28	1/2-28	27.20	5	15	•			
9022-04-02	1/4-19	1/8-28	29.40	6.25	18.00	•			
9022-04-04	1/4-19	1/4-19	30.70	7	18	•			
9022-06-04	3/8-19	1/4-19	32.10	7	24	•			
9022-06-06	3/8-19	3/8-19	32.30	6	24	•			
9022-08-04	1/2-14	1/4-19	32.80	7	26	•			
9022-08-06	1/2-14	3/8-19	34.80	7	26	•			
9022-08-08	1/2-14	1/2-14	36.80	7	26	•			
9022-10-06	5/8-14	3/8-19	37.80	7.30	28.00	•			
9022-10-08	5/8-14	1/2-14	39.80	7	28	•			
9022-10-10	5/8-14	5/8-14	42.20	7	28	•			
9022-12-06	3/4-14	3/8-19	40.00	8	33	•			
9022-12-08	3/4-14	1/2-14	41.80	8.00	33.00	•			
9022-12-10	3/4-14	5/8-14	45.50	9	33	•			
9022-12-12	3/4-14	3/4-14	45.90	8	33	•			
9022-16-08	1-11	1/2-14	45.30	9.50	42.40	•			
9022-16-12	1-11	3/4-14	49.15	10.05	42.50	•			
9022-16-16	1-11	1-11	49.70	9.50	42.40	•			
9022-20-16	1 1/4-11	1-11	50.80	10.30	52.00	•			
9022-20-20	1 1/4-11	1 1/4-11	51.30	11	52	•			
NEW 9022-24-20						•			
9022-24-24	1 1/2-11	1 1/2-11	54.60	12	57	•			
9022-32-24	2-11	1 1/2-11	60.00	13	70	•			
9022-32-32	2 1/2-11	2 1/2-11	63.60	12.80	70.20	•			

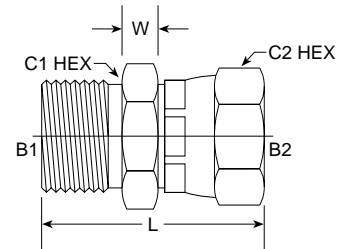
# International Fittings

## MBSPP-FBSPP 9023 Series



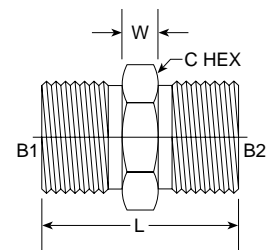
PART NO. SIZE	B1 BSPP	B2 BSPP	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
9023-04-06	1/4-19	3/8-19	35.20	23.70	23.34	•			
9023-06-04	3/8-19	1/4-19	36.60	23.40	24	•			
9023-06-06	3/8-19	3/8-19	36.95	23.60	23.35	•			
9023-06-08	3/8-19	1/2-14	40.20	27.25	25.70	•			
9023-08-04	1/2-14	1/4-19	24.65	9.70	25.70	•			
9023-08-06	1/2-14	3/8-19	42.60	27.75	25.70	•			
NEW 9023-12-06						•			
9023-12-08	3/4-14	1/2-14	52.40	33.50	33	•			
9023-12-12	3/4-12	3/4-012	52.40	33.55	33.00	•			
9023-16-08	1-11	1/2-14	32.30	12.20	42.50	•			
9023-32-16	2-11	1-11	43.10	18.00	70	•			

## MBSPP-FBSPPS 9024 Series



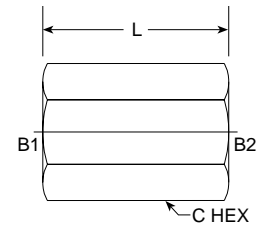
PART NO. SIZE	B1 BSPP	B2 BSPP	L LGTH M.M.	W WIDTH M.M.	C1 HEX M.M.	C2 HEX M.M.	Standard Material From Stock			
							S	FG	SS	B
9024-02-02	1/8-28	1/8-28	34.50	8	16	16	•			
9024-04-04	1/4-19	1/4-19	35.20	8	18	18	•			
9024-06-06	3/8-19	3/8-19	41.60	8	24	22	•			
9024-08-08	1/2-14	1/2-14	47.10	10	26	26	•			
NEW 9024-08-12							•			
NEW 9024-10-10							•			
9024-12-08	3/4-14	1/2-14	51.10	11	33	26	•			
9024-12-12	3/4-14	3/4-14	53.30	11	33	33	•			
9024-16-16	1-11	1-11	58.70	13	43	38	•			
NEW 9024-20-20							•			

## Metric MBSPP-MM Nipple 9025 Series



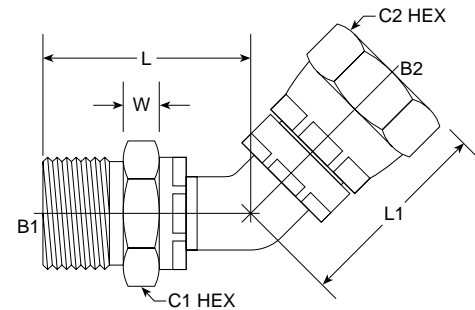
PART NO. SIZE	B1 BSPP	B2 MM	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
						S	FG	SS	B
9025-04-14	1/4-19	14 x 1.5	28.80	6	19	•			
9025-06-12	3/8-19	12 x 1.5	32.20	7	24	•			
9025-06-16	3/8-19	16 x 1.5	33.00	7.05	23.35	•			
9025-06-18	3/8-19	18 x 1.5	33.60	7.05	23.35	•			
NEW 9025-06-20						•			
NEW 9025-08-18						•			
NEW 9025-12-18						•			
9025-12-20	3/4-14	20 x 1.5	40.70	9	33	•			
NEW 9025-12-22						•			

# FBSP- FBSP Coupling 9033 Series



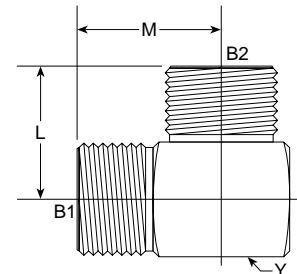
PART NO. SIZE	B1 BSPP	B2 BSPP	L LGTH M.M.	C HEX M.M.	Standard Material From Stock			
					S	FG	SS	B
9033-02-02	1/8-28	1/8-28	25.40	15	•			
9033-04-02	1/4-19	1/8-28	25.60	18.00	•			
9033-04-04	1/4-19	1/4-19	25.40	18	•			
9033-06-04	3/8-19	1/4-19	28.60	24	•			
9033-06-06	3/8-19	3/8-19	28.70	24	•			
9033-08-06	1/2-14	3/8-19	32.30	26	•			
9033-08-08	1/2-14	1/2-14	32.50	26	•			
9033-10-10	5/8-14	5/8-14	38.20	28	•			
9033-12-12	3/4-14	3/4-14	42.80	33	•			
9033-16-16	1-11	1-11	50.80	42.42	•			
9033-20-20	1 1/4-11	1 1/4-11	55.80	52	•			
9033-32-32	2 1/2-11	2 1/2-11	69.85	70.10	•			

# MBSPP- FBSPPS Swept 45° 9124 Series



PART NO. SIZE	B1 BSPP	B2 BSPP	L LGTH M.M.	L1 LGTH M.M.	W WIDTH M.M.	C1 HEX M.M.	C2 HEX M.M.	Standard Material From Stock			
								S	FG	SS	B
NEW 9124-06-06								•			
9124-08-08	1/2-14	1/2-14	38	40	9	26	26	•			

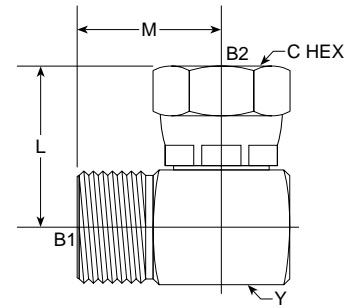
# MBSPP- MBSPP 90° 9222 Series



PART NO. SIZE	B1 BSPP	B2 BSPP	L LGTH M.M.	M LGTH M.M.	Y FLATS M.M.	Standard Material From Stock			
						S	FG	SS	B
9222-04-04	1/4-19	1/4-19	25.20	26.10	15.87	•			
9222-06-06	3/8-19	3/8-19	28.25	30.60	19.00	•			
9222-08-08	1/2-14	1/2-14	34.00	33.40	22.20	•			

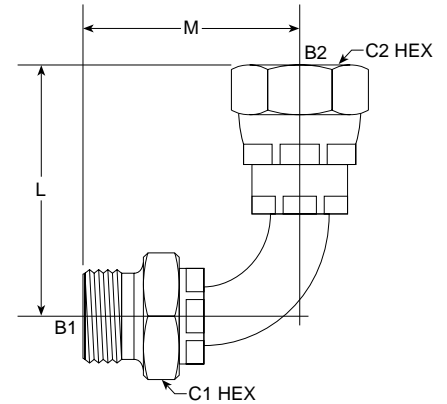
# International Fittings

## MBSPP-FBSPPS 90° 9224 Series



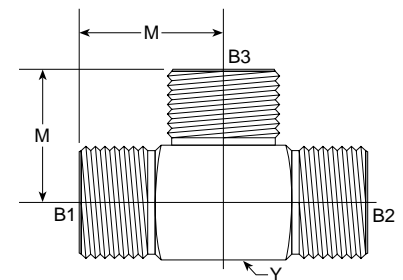
PART NO. SIZE	B1 BSPP	B2 BSPP	L LGTH M.M.	M LGTH M.M.	C HEX M.M.	Y FLATS M.M.	Standard Material From Stock			
							S	FG	SS	B
NEW 9224-02-02							•			
9224-04-04	1/4-19	1/4-19	24	24	18	16	•			
9224-06-06	3/8-19	3/8-19	30	28	22	19	•			
9224-08-08	1/2-14	1/2-14	32	33	26	22	•			
9224-12-12	3/4-14	3/4-14	40.00	36.50	33.00	28.60	•			
9224-16-16	1-11	1-11	44.50	44.80	37.60	35.00	•			
9224-24-24	1 1/2-11	1 1/2-11	59.30	61.60	56.46	50.71	•			

## MBSPP-FBSPPS 90° Long 9224-L Series



PART NO. SIZE	B1 BSPP	B2 BSPP	L LGTH M.M.	M LGTH M.M.	C1 HEX M.M.	C2 HEX M.M.	Standard Material From Stock			
							S	FG	SS	B
NEW 9224-L-08-08							•			
9224-L-12-12							•			
9224-L-16-16	1-11	1-11	75	72.00	43	38	•			
9224-L-24-24	1 1/2-11	1 1/2-11	104	100.00	57	57	•			

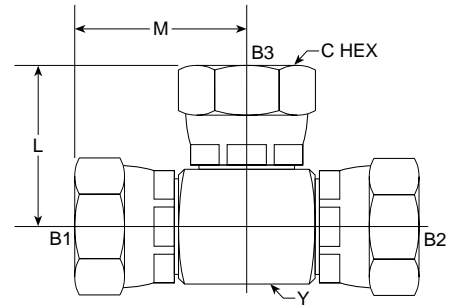
## MBSPP-MBSPP-MBSPP Tee 9322 Series



PART NO. SIZE	B1 BSPP	B2 BSPP	B3 BSPP	M LGTH M.M.	Y FLATS M.M.	Standard Material From Stock			
						S	FG	SS	B
9322-04-04-04	1/4-19	1/4-19	1/4-19	23.00	18.00	•			
9322-06-06-06	3/8-19	3/8-19	3/8-19	24.00	19.00	•			
9322-08-08-08	1/2-14	1/2-14	1/2-14	30.00	25.63	•			
9322-12-12-12	3/4-14	3/4-14	3/4-14	40.00	33.05	•			

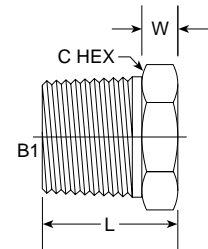


# FBSPP-FBSPP-FBSPP Tee 9344 Series



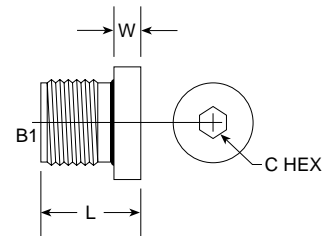
PART NO. SIZE	B1 BSPP	B2 BSPP	B3 BSPP	L LGTH M.M.	M LGTH M.M.	C HEX M.M.	Y FLATS M.M.	Standard Material From Stock				
								S	FG	SS	B	
9344-04-04-04	1/4-19	1/4-19	1/4-19	24	24	18	16	•				
9344-06-06-06	3/8-19	3/8-19	3/8-19	30	32	22	19	•				

# MBSPT Plug 9500-P Series



PART NO. SIZE	B1 BSPT	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
					S	FG	SS	B
9500-P-02	1/8-28	17.12	5.70	11	•			
9500-P-04	1/4-19	20.00	8	16	•			
9500-P-06	3/8-19	25.40	8	18	•			
9500-P-08	1/2-14	30.00	8	22	•			
9500-P-10	5/8-14	31.10	9	26	•			
9500-P-12	3/4-14	32.60	10	28	•			
9500-P-16	1-11	39.50	12	35	•			
9500-P-20	1 1/4-11	40.70	13	48	•			
9500-P-24	1 1/2-11	43.60	14	57	•			
9500-P-32	2 1/2-11	46.40	16.40	70	•			

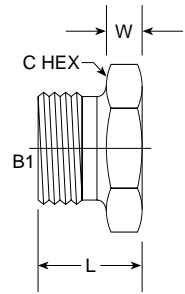
# MBSPP Hollow Hex Plug 9522-H Series



PART NO. SIZE	B1 BSPP	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
					S	FG	SS	B
9522-H-02-0	1/2-28	12.10	4.20	5	•			
9522-H-04-0	1/4-19	16.60	5	6	•			
9522-H-06-0	3/8-19	17.00	5.00	8	•			
9522-H-08-0	1/2-14	19.00	5.20	10	•			
9522-H-12-0	3/4-14	21.20	6	12	•			

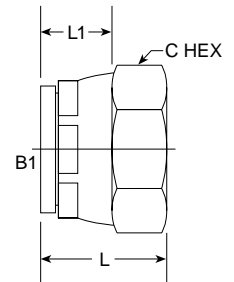
# International Fittings

## MBSPP Hex Plug 9522-P Series



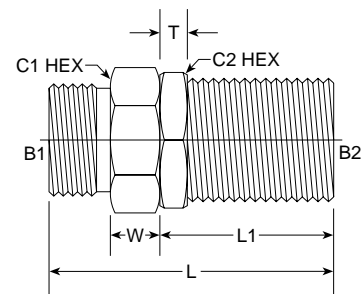
PART NO. SIZE	B1 BSPP	L LGTH M.M.	W WIDTH M.M.	C HEX M.M.	Standard Material From Stock			
					S	FG	SS	B
9522-P-02	1/8-28	15.50	5.00	15.00	•			
9522-P-04	1/4-19	17.00	7.00	18.00	•			
9522-P-06	3/8-19	18.50	7.00	24.00	•			
9522-P-08	1/2-14	20.00	8.00	26.00	•			
9522-P-10	5/8-14	26.70	9.00	28.00	•			
9522-P-12	3/4-14	22.80	9.00	33.00	•			
9522-P-16	1-11	26.00	10.00	43.00	•			
NEW 9522-P-20					•			
9522-P-24	1 1/2-11	34.00	12.60	56.40	•			
9522-P-32	2-11	44.80	17.80	70.00	•			
9522-P-48	3-11	41.90	16.50	94.80	•			

## FBSPP Cap 9644-C Series



PART NO. SIZE	B1 BSPP	L LGTH M.M.	L1 LGTH M.M.	C HEX M.M.	Standard Material From Stock			
					S	FG	SS	B
9644-C-02	1/8-19	17	11	15	•			
9644-C-04	1/4-19	18	13	13	•			
9644-C-06	3/8-19	22	15	15	•			
9644-C-08	1/2-14	25	16	17	•			
9644-C-10	5/8-14	25	15	17	•			
9644-C-12	3/4-14	27	16	33	•			
9644-C-16	1-11	28.35	14.50	37.52	•			
9644-C-20	1 1/4-11	29.50	14.80	47.28	•			
9644-C-24	1 1/2-11	23	23	44	•			
9644-C-32	2 1/2-11	41.80	21.40	70.12	•			

## MBSPP-MBSPP Bulkhead 9722-LN Series

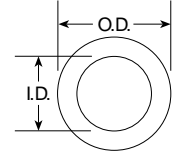


PART NO. SIZE	B1 BSPP	B2 BSPP	L LGTH M.M.	L1 LGTH M.M.	T WIDTH M.M.	W WIDTH M.M.	C1 HEX M.M.	C2 HEX M.M.	Standard Material From Stock			
									S	FG	SS	B
9722-04-04-LN	1/4-19	1/4-19	45.00	26.00	5.68	7.40	18.00	18.00	•			
9722-06-06-LN	3/8-19	3/8-19	50.00	28.00	5.50	9.00	23.40	23.40	•			
9722-08-08-LN	1/2-14	1/2-14	59.00	32.30	6.50	11.14	25.62	25.70	•			
9722-10-10-LN	5/8-14	5/8-14	61.50	33.50	6.50	10.30	28.00	28.00	•			
9722-12-12-LN	3/4-14	3/4-14	61.50	33.50	6.60	9.00	33.00	33.00	•			
NEW 9722-16-16-LN									•			

PART NO. SIZE	I.D.	O.D.	Standard Material From Stock			
			S	FG	SS	B
9900-02	0.408	0.625	•			
9900-04	0.540	0.809	•			
9900-06	0.682	0.937	•			
9900-08	0.850	1.125	•			
9900-10	0.925	1.250	•			
9900-12	1.062	1.375	•			
9900-16	1.338	1.687	•			
9900-20	1.699	2.063	•			
9900-24	1.910	2.310	•			
9900-32	2.389	2.875	•			

## British Bonded Seal 9900 Series

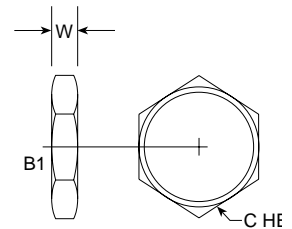
For British threads.



## BSPB Locknut 9925 Series

For British threads.

PART NO. SIZE	I.D.	O.D.	Standard Material From Stock			
			S	FG	SS	B
NEW 9925-20			•			
NEW 9925-24			•			
NEW 9925-32			•			





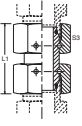
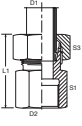
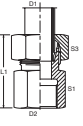
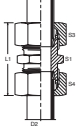
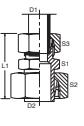
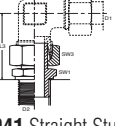
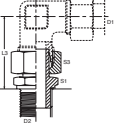
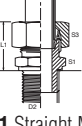
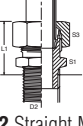
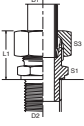
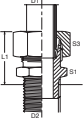
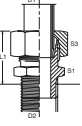
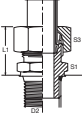
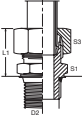
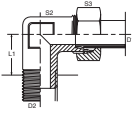
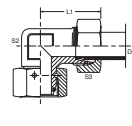
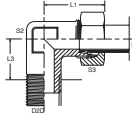
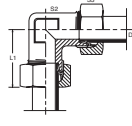
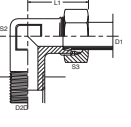
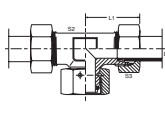
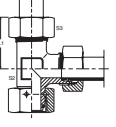
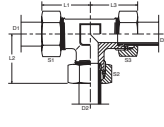
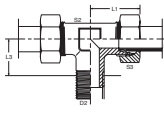
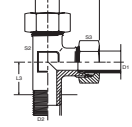
*DIN Metric Fittings*

## DIN Metric Fittings

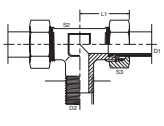
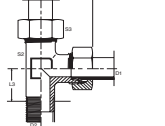
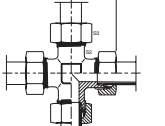
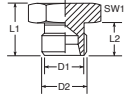
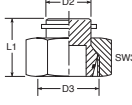
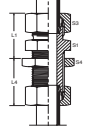
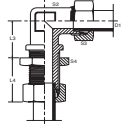



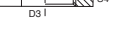

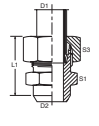
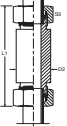
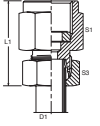
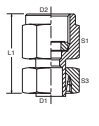
### Brennan Expands Its Line...With DIN fittings.

The company that offers more hydraulic fittings than anyone else is now your source for DIN fittings. Brennan has all of the styles and sizes you need—with more than 260 popular DIN models in stock and available for immediate delivery.

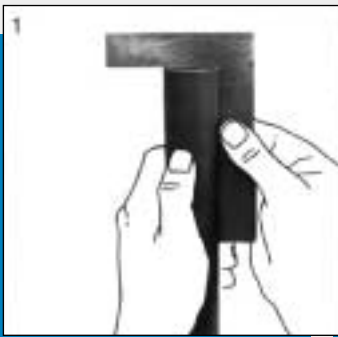
Built for extreme pressure applications, DIN fittings have always been manufactured to the highest standards and are approved by all major certification agencies. All feature the same consistent quality you have come to expect from Brennan.

 <p><b>VS8000</b> Straight Adjustable Coupling</p>	 <p><b>VS8003</b> Female Stud Coupling Metric</p>	 <p><b>VS8006</b> Female Stud Coupling BSPP</p>	 <p><b>VS8010</b> Straight Coupling</p>	 <p><b>VS8014</b> Reducing Adjustable Coupling</p>	 <p><b>VS8041</b> Straight Stud Standpipe Adapter Metric Parallel</p>
 <p><b>VS8045</b> Straight Stud Standpipe Adapter BSPP</p>	 <p><b>VS8051</b> Straight Male Stud Coupling Metric Parallel</p>	 <p><b>VS8052</b> Straight Male Stud Coupling Metric Taper</p>	 <p><b>VS8055</b> Straight Male Stud Coupling BSPP</p>	 <p><b>VS8057</b> Straight Male Stud Coupling BSPT</p>	 <p><b>VS8058</b> Straight Male Stud Coupling NPTF</p>
 <p><b>VS8059</b> Straight Male Stud Coupling ORB</p>	 <p><b>VS8060</b> Straight Male Stud Coupling ISO</p>	 <p><b>VS8202</b> Male Stud Elbow Metric Taper</p>	 <p><b>VS8204</b> Adjustable Elbow Body</p>	 <p><b>VS8207</b> Male Stud Elbow BSPT</p>	 <p><b>VS8210</b> Elbow Coupling</p>
 <p><b>VS8258</b> Male Stud Elbow NPTF</p>	 <p><b>VS8304-B</b> Adjustable Branch Tee Body</p>	 <p><b>VS8304-R</b> Adjustable Barrel Tee Body</p>	 <p><b>VS8310</b> Tee Coupling</p>	 <p><b>VS8352-B</b> Male Stud Branch Tee Metric Taper</p>	 <p><b>VS8352-R</b> Male Stud Barrel Tee Metric Taper</p>

# DIN Metric Fittings

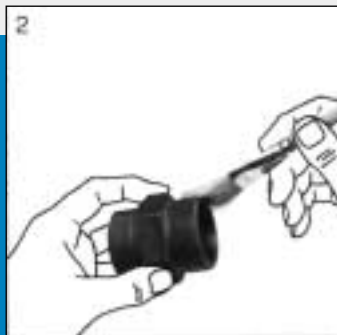
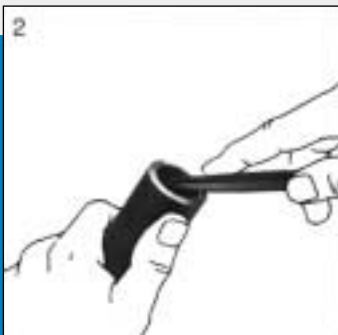
 <p><b>VS8357-B</b> Male Stud Branch Tee BSPT</p>	 <p><b>VS8357-R</b> Male Stud Barrel Tee BSPT</p>	 <p><b>VS8410</b> Cross Coupling</p>	 <p><b>VS8510</b> Tube Cap</p>	 <p><b>VS8511</b> Tube Plug</p>	 <p><b>VS8710</b> Straight Bulkhead Coupling</p>
 <p><b>VS8720</b> Bulkhead Elbow</p>	 <p><b>VS8860</b> Bite Ring</p>	 <p><b>VS8890</b> Reinforcing Sleeve</p>	 <p><b>VS8900</b> Nut</p>	 <p><b>VS8970</b> Hexagonal Bulkhead Nut</p>	 <p><b>VS9000</b> Internal Coupling Nut</p>
 <p><b>VS9500</b> Welding Boss</p>	 <p><b>VS9501</b> Welding Bulkhead Connection</p>	 <p><b>VS9600</b> Gauge Coupling BSP</p>	 <p><b>VS9601</b> Gauge Coupling Male Stud Type</p>		

# Assembly Instructions for DIN Tube Couplings with Cutting Ring.



## Preparations

1. Saw off the tube square. Do not use roll cutters, as they will reduce the tube cross-section and will generate extensive burr. When determining the tube length, the depth of the cone has to be added.



2. Deburr slightly the ends of the metal tube inside and outside (do not point), and then remove dirt and chips. Oil coupling thread, body cone and outside cone of cutting ring lightly.

## Pre-Assembly in the coupling body

3. Place the nut and the cutting ring on the tube. The cutting edge of the cutting ring faces the tube end.
4. Clamp the coupling body in a vice. Press tube against the stop in the coupling body and tighten nut as much as possible by hand. The ring will now be firmly gripped between tube, nut and inner cone.

After tightening by hand, tighten nut with a spanner (if necessary provided with a tube extension).

– up to tube O.D. 18 mm approx. 1-1/2 turns

– above tube O.D. 20 mm approx. 1-1/4 turns

A mark facilitates the observation of the prescribed number of turns.

The ring will cut during assembly into the tube causing a clearly visible wall of metal ahead of it.



# DIN Metric Fittings

**5/6.** Loosen nut and inspect cut. The wall of metal should cover approx. 80%-90% of the ring face thickness. It is possible to rotate the cutting ring in this position.



## Final Assembly

**7.** For final installation take the pre-assembled tube always with the coupling, in which it has been pre-assembled. Then, tighten the nut with the spanner, until a clear increase of force results. For final tightening, continue to tighten by another 1/4 turn. If possible, counter-hold the coupling by means of a spanner during final assembly.



## Repeated Assemblies

In case a coupling shall be loosened and then be reassembled, again the nut has to be tightened, until a clear increase of force results.

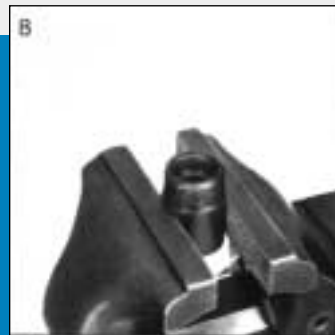
Repeated assemblies can be performed as frequently as desired on the tube connection.

Please request our Assembly Poster for your workshop.

## Quantity-Production Assemblies

If larger quantities of tubes have to be assembled, we recommend the utilization of:

**8.** DIN Manual Pre-Assembly Tools for vice assembly. The assembly procedure is the same as described under items 4-6. The manual pre-assembly tools are hardened and are toleranced within the optimum range so that efficient tube connections are always achieved.

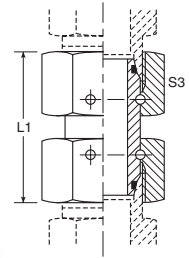


**9.** DIN Pre-Assembly Device for electrical drive (400 volts). Detailed assembly instructions are available upon request.



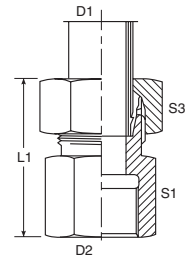


# Straight Adjustable Coupling VS8000 Series



PRODUCT ID	DESCRIPTION	D1	L1	S3	Standard Material From Stock			
					S	FG	SS	B
VS8000-L06-06	Straight Adjustable Coupling	6	39	14	•			
VS8000-L08-08	Straight Adjustable Coupling	8	39.5	17	•			
VS8000-L10-10	Straight Adjustable Coupling	10	39.5	19	•			
VS8000-L12-12	Straight Adjustable Coupling	12	39.5	22	•			
VS8000-L15-15	Straight Adjustable Coupling	15	42.5	27	•			
VS8000-L18-18	Straight Adjustable Coupling	18	45	32	•			
VS8000-L22-22	Straight Adjustable Coupling	22	39.5	36	•			
VS8000-L28-28	Straight Adjustable Coupling	28	51.5	41	•			
VS8000-L35-35	Straight Adjustable Coupling	35	61	50	•			
VS8000-L42-42	Straight Adjustable Coupling	42	62.5	60	•			
VS8000-S06-06	Straight Adjustable Coupling	6	40.5	17	•			
VS8000-S08-08	Straight Adjustable Coupling	8	40.5	19	•			
VS8000-S10-10	Straight Adjustable Coupling	10	43.5	22	•			
VS8000-S12-12	Straight Adjustable Coupling	12	44	24	•			
VS8000-S14-14	Straight Adjustable Coupling	14	48.5	27	•			
VS8000-S16-16	Straight Adjustable Coupling	16	49	60	•			
VS8000-S20-20	Straight Adjustable Coupling	20	60.5	36	•			
VS8000-S25-25	Straight Adjustable Coupling	25	67.5	46	•			
VS8000-S30-30	Straight Adjustable Coupling	30	72.5	50	•			
VS8000-S38-38	Straight Adjustable Coupling	38	83	60	•			

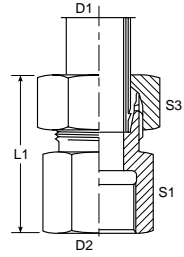
# Female Stud Coupling Metric VS8003 Series



PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S3	Standard Material From Stock			
							S	FG	SS	B
VS8003-L06-10	Female Stud Coupling Metric	6	M 10X1	34.5	14	14	•			
VS8003-L08-12	Female Stud Coupling Metric	8	M 12X1.5	39	17	17	•			
VS8003-L10-14	Female Stud Coupling Metric	10	M 14X1.5	40	19	19	•			
VS8003-L12-16	Female Stud Coupling Metric	12	M 16X1.5	41	22	22	•			
VS8003-L15-18	Female Stud Coupling Metric	15	M 18X1.5	43	24	27	•			
VS8003-L18-22	Female Stud Coupling Metric	18	M 22X1.5	46	30	32	•			
VS8003-L22-26	Female Stud Coupling Metric	22	M 26X1.5	51	32	36	•			
VS8003-L28-33	Female Stud Coupling Metric	28	M 33X2	54	41	41	•			
VS8003-L35-42	Female Stud Coupling Metric	35	M 42X2	62	55	50	•			
VS8003-L42-48	Female Stud Coupling Metric	42	M 48X2	65	60	60	•			
VS8003-S06-12	Female Stud Coupling Metric	6	M 12X1.5	41	17	17	•			
VS8003-S08-14	Female Stud Coupling Metric	8	M 14X1.5	41	19	19	•			
VS8003-S10-16	Female Stud Coupling Metric	10	M 16X1.5	43	22	22	•			
VS8003-S12-18	Female Stud Coupling Metric	12	M 18X1.5	44	24	24	•			
VS8003-S14-20	Female Stud Coupling Metric	14	M 20X1.5	49	27	27	•			
VS8003-S16-22	Female Stud Coupling Metric	16	M 22X1.5	49	30	30	•			
VS8003-S20-27	Female Stud Coupling Metric	20	M 27X2	56	36	36	•			
VS8003-S25-33	Female Stud Coupling Metric	25	M 33X2	61	41	46	•			
VS8003-S30-42	Female Stud Coupling Metric	30	M 42X2	69	55	50	•			
VS8003-S38-48	Female Stud Coupling Metric	38	M 38X2	74	60	60	•			
VS8006-L06-02	Female Stud Coupling Metric	6	G 1/8	34	14	14	•			

# DIN Metric Fittings

## Female Stud Coupling BSPP VS8006 Series

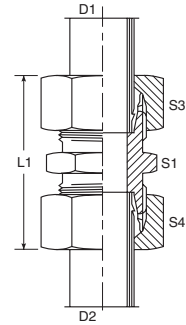


Standard Material  
From Stock

PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S3	S	FG	SS	B
VS8006-L08-04	Female Stud Coupling BSPP	8	G 1/4	39	19	17	•			
VS8006-L08-06	Female Stud Coupling BSPP	8	G 3/8	40	24	17	•			
VS8006-L08-08	Female Stud Coupling BSPP	8	G 1/2	44	27	17	•			
VS8006-L10-04	Female Stud Coupling BSPP	10	G 1/4	40	19	19	•			
VS8006-L10-06	Female Stud Coupling BSPP	10	G 3/8	41	24	19	•			
VS8006-L10-08	Female Stud Coupling BSPP	10	G 1/2	45	27	19	•			
VS8006-L12-06	Female Stud Coupling BSPP	12	G 3/8	41	24	22	•			
VS8006-L12-08	Female Stud Coupling BSPP	12	G 1/2	45.5	27	22	•			
VS8006-L15-08	Female Stud Coupling BSPP	15	G 1/2	46	27	27	•			
VS8006-L18-08	Female Stud Coupling BSPP	18	G 1/2	47	27	32	•			
VS8006-L22-12	Female Stud Coupling BSPP	22	G 3/4	52	36	36	•			
VS8006-L28-16	Female Stud Coupling BSPP	28	G 1	54.5	41	41	•			
VS8006-L35-20	Female Stud Coupling BSPP	35	G 1 1/4	62.5	55	50	•			
VS8006-L42-24	Female Stud Coupling BSPP	42	G 1 1/2	65.5	60	60	•			
VS8006-S06-04	Female Stud Coupling BSPP	6	G 1/4	41	19	17	•			
VS8006-S08-04	Female Stud Coupling BSPP	8	G 1/4	41	19	19	•			
VS8006-S10-06	Female Stud Coupling BSPP	10	G 3/8	43	24	22	•			
VS8006-S12-06	Female Stud Coupling BSPP	12	G 3/8	43	24	24	•			
VS8006-S12-08	Female Stud Coupling BSPP	12	G 1/2	45.5	27	22	•			
VS8006-S14-08	Female Stud Coupling BSPP	14	G 1/2	50	27	27	•			
VS8006-S16-08	Female Stud Coupling BSPP	16	G 1/2	50	27	30	•			
VS8006-S20-12	Female Stud Coupling BSPP	20	G 3/4	56	36	36	•			
VS8006-S25-16	Female Stud Coupling BSPP	25	G 1	61.5	41	46	•			
VS8006-S30-20	Female Stud Coupling BSPP	30	G 1 1/4	68.5	55	50	•			
VS8006-S38-24	Female Stud Coupling BSPP	38	G 1 1/2	74.5	60	60	•			

# Straight Coupling

## VS8010 Series

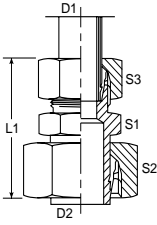


Standard Material  
From Stock

PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S3	S4	Standard Material From Stock			
								S	FG	SS	B
VS8010-L06	Straight Coupling	6	6	30	11	12	12	•			
VS8010-L08	Straight Coupling	8	8	35	12	14	14	•			
VS8010-L08-06	Straight Coupling	8	6	40.5	12	14	12	•			
VS8010-L10	Straight Coupling	10	10	42	17	19	19	•			
VS8010-L10-06	Straight Coupling	10	6	41.5	17	19	12	•			
VS8010-L10-08	Straight Coupling	10	8	42	17	19	14	•			
VS8010-L12	Straight Coupling	12	12	43	19	22	22	•			
VS8010-L12-06	Straight Coupling	12	6	42	19	22	14	•			
VS8010-L12-08	Straight Coupling	12	8	42.5	19	22	17	•			
VS8010-L12-10	Straight Coupling	12	10	43.5	19	22	19	•			
VS8010-L15	Straight Coupling	15	15	46	24	27	27	•			
VS8010-L15-10	Straight Coupling	15	10	45	24	27	19	•			
VS8010-L15-12	Straight Coupling	15	12	44.5	24	27	22	•			
VS8010-L18	Straight Coupling	18	18	48	27	32	32	•			
VS8010-L18-10	Straight Coupling	18	10	47	27	32	19	•			
VS8010-L18-12	Straight Coupling	18	12	46.5	27	32	22	•			
VS8010-L18-15	Straight Coupling	18	15	48	27	32	27	•			
VS8010-L22	Straight Coupling	22	22	52	32	36	36	•			
VS8010-L22-12	Straight Coupling	22	12	48.5	32	36	22	•			
VS8010-L22-15	Straight Coupling	22	15	50	32	36	27	•			
VS8010-L22-18	Straight Coupling	22	18	51	32	36	32	•			
VS8010-L28	Straight Coupling	28	28	54	41	41	41	•			
VS8010-L28-18	Straight Coupling	28	18	52	41	41	32	•			
VS8010-L28-22	Straight Coupling	28	22	41	41	41	36	•			
VS8010-L35	Straight Coupling	35	36	63	46	50	50	•			
VS8010-L35-22	Straight Coupling	35	22	59	46	50	36	•			
VS8010-L35-28	Straight Coupling	35	28	59	46	50	41	•			
VS8010-L42	Straight Coupling	42	42	66	55	60	60	•			
VS8010-S06	Straight Coupling	6	6	45	14	17	17	•			
VS8010-S08	Straight Coupling	8	8	47	17	19	19	•			
VS8010-S08-06	Straight Coupling	8	6	48	17	19	17	•			
VS8010-S10	Straight Coupling	10	10	49	19	22	22	•			
VS8010-S10-06	Straight Coupling	10	6	48.5	19	22	17	•			
VS8010-S10-08	Straight Coupling	10	8	48.5	19	22	19	•			
VS8010-S12	Straight Coupling	12	12	51	22	24	24	•			
VS8010-S12-06	Straight Coupling	12	6	50.5	22	24	17	•			
VS8010-S12-08	Straight Coupling	12	8	50.5	22	24	19	•			
VS8010-S12-10	Straight Coupling	12	10	51	22	24	22	•			
VS8010-S14	Straight Coupling	14	14	57	24	27	27	•			
VS8010-S14-10	Straight Coupling	14	10	54.5	24	27	22	•			
VS8010-S14-12	Straight Coupling	14	12	54.6	24	27	24	•			
VS8010-S16	Straight Coupling	17	16	57	27	30	30	•			
VS8010-S16-12	Straight Coupling	17	12	54.6	27	30	24	•			
VS8010-S16-14	Straight Coupling	17	14	58	27	30	27	•			
VS8010-S20	Straight Coupling	20	20	66	32	36	36	•			
VS8010-S20-10	Straight Coupling	20	10	56.5	32	36	22	•			
VS8010-S20-12	Straight Coupling	20	12	56.5	32	36	24	•			
VS8010-S20-16	Straight Coupling	20	16	60	32	36	30	•			
VS8010-S25	Straight Coupling	25	25	74	41	46	46	•			
VS8010-S25-16	Straight Coupling	25	16	68	41	46	30	•			
VS8010-S25-20	Straight Coupling	25	20	68	41	46	36	•			
VS8010-S30	Straight Coupling	30	30	80	46	50	50	•			
VS8010-S30-20	Straight Coupling	30	20	71	46	50	36	•			
VS8010-S30-25	Straight Coupling	30	25	77	46	50	46	•			
VS8010-S38	Straight Coupling	38	38	90	55	60	60	•			
VS8010-S38-30	Straight Coupling	38	30	87	55	60	50	•			

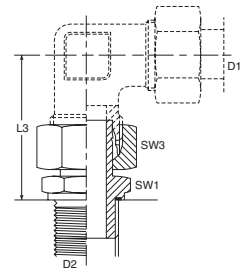
# DIN Metric Fittings

## Reducing Adjustable Coupling VS8014 Series



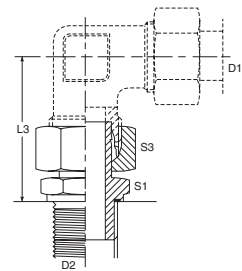
PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S2	S3	Standard Material From Stock			
								S	FG	SS	B
VS8014-L08-L06	Reducing Adjustable Coupling	6	8	40.5	12	17	14	•			
VS8014-L10-L06	Reducing Adjustable Coupling	6	10	41.5	12	19	14	•			
VS8014-L10-L08	Reducing Adjustable Coupling	8	10	42.5	14	19	17	•			
VS8014-L12-10	Reducing Adjustable Coupling	10	12	45.5	17	22	19	•			
VS8014-L12-L06	Reducing Adjustable Coupling	6	12	44.5	14	22	14	•			
VS8014-L12-L08	Reducing Adjustable Coupling	8	12	44.5	14	22	17	•			
VS8014-L15-L06	Reducing Adjustable Coupling	6	15	46	17	27	14	•			
VS8014-L15-L08	Reducing Adjustable Coupling	8	15	46	17	27	17	•			
VS8014-L15-L10	Reducing Adjustable Coupling	10	15	47	17	27	19	•			
VS8014-L15-L12	Reducing Adjustable Coupling	12	15	48	19	27	22	•			
VS8014-L18-L06	Reducing Adjustable Coupling	6	18	45.5	19	32	14	•			
VS8014-L18-L08	Reducing Adjustable Coupling	8	18	45.5	19	32	17	•			
VS8014-L18-L10	Reducing Adjustable Coupling	10	18	46.5	19	32	19	•			
VS8014-L18-L12	Reducing Adjustable Coupling	12	18	46.5	19	32	22	•			
VS8014-L18-L15	Reducing Adjustable Coupling	15	18	47.5	24	32	27	•			
VS8014-L22-L10	Reducing Adjustable Coupling	10	22	47.5	24	36	19	•			
VS8014-L22-L12	Reducing Adjustable Coupling	12	22	47.5	24	36	22	•			
VS8014-L22-L18	Reducing Adjustable Coupling	18	22	50.5	27	36	32	•			
VS8014-L28-L12	Reducing Adjustable Coupling	12	28	49	30	41	22	•			
VS8014-L28-L15	Reducing Adjustable Coupling	15	28	50	30	41	27	•			
VS8014-L28-L18	Reducing Adjustable Coupling	18	28	52	30	41	32	•			
VS8014-L28-L22	Reducing Adjustable Coupling	22	28	54	32	41	36	•			
VS8014-L35-L15	Reducing Adjustable Coupling	15	35	56.5	36	50	27	•			
VS8014-L35-L18	Reducing Adjustable Coupling	18	35	58.5	36	50	32	•			
VS8014-L35-L22	Reducing Adjustable Coupling	22	35	60.5	36	50	36	•			
VS8014-L35-L28	Reducing Adjustable Coupling	28	35	61.5	41	50	41	•			
VS8014-L42-L15	Reducing Adjustable Coupling	15	42	60	46	60	27	•			
VS8014-L42-L18	Reducing Adjustable Coupling	18	42	61	46	60	32	•			
VS8014-L42-L22	Reducing Adjustable Coupling	22	42	63	46	60	36	•			
VS8014-L42-L28	Reducing Adjustable Coupling	28	42	64	46	60	41	•			
VS8014-L42-L35	Reducing Adjustable Coupling	35	42	69	46	60	50	•			
VS8014-LSS-L15	Reducing Adjustable Coupling	15	22	48.5	24	36	27	•			
VS8014-S08-S06	Reducing Adjustable Coupling	6	8	45	14	19	17	•			
VS8014-S10-S06	Reducing Adjustable Coupling	6	10	47	14	22	17	•			
VS8014-S10-S08	Reducing Adjustable Coupling	8	10	49	17	22	19	•			
VS8014-S12-S06	Reducing Adjustable Coupling	6	12	47	14	24	17	•			
VS8014-S12-S08	Reducing Adjustable Coupling	8	12	49	17	24	19	•			
VS8014-S12-S10	Reducing Adjustable Coupling	10	12	50	19	24	22	•			
VS8014-S14-S06	Reducing Adjustable Coupling	6	14	50	17	27	17	•			
VS8014-S14-S08	Reducing Adjustable Coupling	8	14	52	17	27	19	•			
VS8014-S14-S10	Reducing Adjustable Coupling	10	14	53	19	27	22	•			
VS8014-S14-S12	Reducing Adjustable Coupling	12	14	55	22	27	24	•			
VS8014-S16-S06	Reducing Adjustable Coupling	6	16	50	17	30	17	•			
VS8014-S16-S08	Reducing Adjustable Coupling	8	16	52	17	30	19	•			
VS8014-S16-S10	Reducing Adjustable Coupling	10	16	53	19	30	22	•			
VS8014-S16-S12	Reducing Adjustable Coupling	12	16	55	22	30	24	•			
VS8014-S16-S14	Reducing Adjustable Coupling	14	16	58	24	30	27	•			
VS8014-S20-S08	Reducing Adjustable Coupling	8	20	56	22	36	19	•			
VS8014-S20-S10	Reducing Adjustable Coupling	10	20	57	22	36	22	•			
VS8014-S20-S12	Reducing Adjustable Coupling	12	20	59	22	36	24	•			
VS8014-S20-S14	Reducing Adjustable Coupling	14	20	62	24	36	27	•			
VS8014-S20-S16	Reducing Adjustable Coupling	16	20	62	27	36	30	•			
VS8014-S25-S10	Reducing Adjustable Coupling	10	25	60	27	46	22	•			
VS8014-S25-S12	Reducing Adjustable Coupling	12	25	62	27	46	24	•			
VS8014-S25-S14	Reducing Adjustable Coupling	14	25	65	27	46	27	•			
VS8014-S25-S16	Reducing Adjustable Coupling	16	25	65	32	46	30	•			
VS8014-S25-S20	Reducing Adjustable Coupling	20	25	70	32	46	36	•			
VS8014-S30-S12	Reducing Adjustable Coupling	12	30	65	32	50	24	•			
VS8014-S30-S14	Reducing Adjustable Coupling	14	30	68	32	50	27	•			
VS8014-S30-S16	Reducing Adjustable Coupling	16	30	68	32	50	30	•			
VS8014-S30-S20	Reducing Adjustable Coupling	20	30	73	32	50	36	•			
VS8014-S30-S25	Reducing Adjustable Coupling	25	30	78	41	50	46	•			
VS8014-S38-S16	Reducing Adjustable Coupling	16	38	74	41	60	30	•			
VS8014-S38-S20	Reducing Adjustable Coupling	20	38	79	41	60	36	•			
VS8014-S38-S25	Reducing Adjustable Coupling	25	38	84	41	60	46	•			
VS8014-S38-S30	Reducing Adjustable Coupling	30	38	87	46	60	50	•			

# Straight Stud Standpipe Adapter Metric Parallel VS8041 Series



PRODUCT ID	DESCRIPTION	D1	D2	L3	SW1	SW3	Standard Material From Stock			
							S	FG	SS	B
VS8041-L06-10-PO	Straight Stud Standpipe Adapter Metric Parallel	6	M 10X1	36.5	14	14	•			
VS8041-L08-12-PO	Straight Stud Standpipe Adapter Metric Parallel	8	M 12X1.5	40.5	17	17	•			
VS8041-L10-14-PO	Straight Stud Standpipe Adapter Metric Parallel	10	M 14X1.5	42.5	19	19	•			
VS8041-L12-16-PO	Straight Stud Standpipe Adapter Metric Parallel	12	M 16X1.5	47.5	22	22	•			
VS8041-L15-18-PO	Straight Stud Standpipe Adapter Metric Parallel	15	M 18X1.5	52.5	24	27	•			
VS8041-L18-22-PO	Straight Stud Standpipe Adapter Metric Parallel	18	M 22X1.5	55	27	32	•			
VS8041-L22-26-PO	Straight Stud Standpipe Adapter Metric Parallel	22	M 26X1.5	60	32	36	•			
VS8041-L28-33-PO	Straight Stud Standpipe Adapter Metric Parallel	28	M 33X2	65.5	41	41	•			
VS8041-L35-42-PO	Straight Stud Standpipe Adapter Metric Parallel	35	M 42X2	77	50	50	•			
VS8041-L42-48-PO	Straight Stud Standpipe Adapter Metric Parallel	42	M 42X2	86.5	55	60	•			
VS8041-S0-12-PO	Straight Stud Standpipe Adapter Metric Parallel	6	M 12X1.5	43	17	17	•			
VS8041-S08-14-PO	Straight Stud Standpipe Adapter Metric Parallel	8	M 14X1.5	46.5	19	19	•			
VS8041-S10-16-PO	Straight Stud Standpipe Adapter Metric Parallel	10	M 16X1.5	49.5	22	22	•			
VS8041-S12-18-PO	Straight Stud Standpipe Adapter Metric Parallel	12	M 18X1.5	55.5	24	24	•			
VS8041-S14-20-PO	Straight Stud Standpipe Adapter Metric Parallel	14	M 20X1.5	58.5	27	27	•			
VS8041-S16-22-PO	Straight Stud Standpipe Adapter Metric Parallel	16	M 22x1.5	61.5	27	30	•			
VS8041-S20-27-PO	Straight Stud Standpipe Adapter Metric Parallel	20	M 27X2	69.5	32	36	•			
VS8041-S25-33-PO	Straight Stud Standpipe Adapter Metric Parallel	25	M 33x2	78	41	46	•			
VS8041-S30-42-PO	Straight Stud Standpipe Adapter Metric Parallel	30	M 42x2	86.5	50	50	•			
VS8041-S38-48-PO	Straight Stud Standpipe Adapter Metric Parallel	38	M 48x2	101	55	60	•			

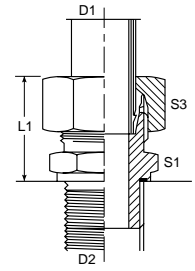
# Straight Stud Standpipe Adapter BSPP VS8045 Series



PRODUCT ID	DESCRIPTION	D1	D2	L3	S1	S3	Standard Material From Stock			
							S	FG	SS	B
VS8045-L06-02-PO	Straight Stud Standpipe Adapter BSPP	6	G 1/8A	36.5	14	14	•			
VS8045-L08-04-PO	Straight Stud Standpipe Adapter BSPP	8	G 1/4A	43.5	19	17	•			
VS8045-L10-04-PO	Straight Stud Standpipe Adapter BSPP	10	G 1/4A	42.5	19	19	•			
VS8045-L12-06-PO	Straight Stud Standpipe Adapter BSPP	12	G 3/8A	51	22	22	•			
VS8045-L15-08-PO	Straight Stud Standpipe Adapter BSPP	15	G 1/2A	53	27	27	•			
VS8045-L18-08-PO	Straight Stud Standpipe Adapter BSPP	18	G 1/2A	55	27	32	•			
VS8045-L22-12-PO	Straight Stud Standpipe Adapter BSPP	22	GA 3/4A	60	32	36	•			
VS8045-L28-16-PO	Straight Stud Standpipe Adapter BSPP	28	G 1A	65.5	41	41	•			
VS8045-L35-20-PO	Straight Stud Standpipe Adapter BSPP	35	G 1 1/4A	77	50	50	•			
VS8045-L42-24-PO	Straight Stud Standpipe Adapter BSPP	42	G 1 1/2A	86.5	55	60	•			
VS8045-S06-04-PO	Straight Stud Standpipe Adapter BSPP	6	G 1/4A	43	19	17	•			
VS8045-S08-04-PO	Straight Stud Standpipe Adapter BSPP	8	G 1/4A	46.35	19	19	•			
VS8045-S10-06-PO	Straight Stud Standpipe Adapter BSPP	10	G 3/8A	49.5	22	22	•			
VS8045-S12-06-PO	Straight Stud Standpipe Adapter BSPP	12	G 3/8A	55.5	22	24	•			
VS8045-S14-08-PO	Straight Stud Standpipe Adapter BSPP	14	G 1/2A	58.5	27	27	•			
VS8045-S16-08-PO	Straight Stud Standpipe Adapter BSPP	16	G 1/2A	61.5	27	30	•			
VS8045-S20-12-PO	Straight Stud Standpipe Adapter BSPP	20	G 3/4A	69.5	32	36	•			
VS8045-S25-16-PO	Straight Stud Standpipe Adapter BSPP	25	G 1A	78	41	46	•			
VS8045-S30-20-PO	Straight Stud Standpipe Adapter BSPP	30	G 1 1/4A	86.5	50	50	•			
VS8045-S38-24-PO	Straight Stud Standpipe Adapter BSPP	38	G 1 1/2	101	55	60	•			

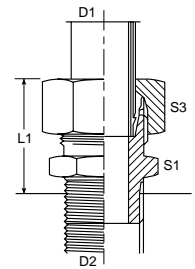
# DIN Metric Fittings

## Straight Male Stud Coupling Metric Parallel VS8051 Series



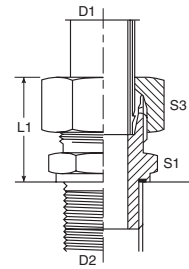
PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S3	Standard Material From Stock			
							S	FB	SS	B
VS8051-L06-10-PO	Straight Male Stud Coupling Metric Parallel	6	M 10X1	23	14	14	•			
VS8051-L08-12-PO	Straight Male Stud Coupling Metric Parallel	8	M 12X1.5	25	17	17	•			
VS8051-L10-14-PO	Straight Male Stud Coupling Metric Parallel	10	M 14X1.5	26	19	19	•			
VS8051-L12-16-PO	Straight Male Stud Coupling Metric Parallel	12	M 16X1.5	27	22	22	•			
VS8051-L15-18-PO	Straight Male Stud Coupling Metric Parallel	15	M 18X1.5	29	24	27	•			
VS8051-L18-22-PO	Straight Male Stud Coupling Metric Parallel	18	M 22X1.5	31	27	32	•			
VS8051-L22-26-PO	Straight Male Stud Coupling Metric Parallel	22	M 26X1.5	33	32	36	•			
VS8051-L28-33-PO	Straight Male Stud Coupling Metric Parallel	28	M 33X2	34	41	41	•			
VS8051-L35-42-PO	Straight Male Stud Coupling Metric Parallel	35	M 42X2	39	50	50	•			
VS8051-L42-48-PO	Straight Male Stud Coupling Metric Parallel	42	M 48X2	42	55	60	•			
VS8051-S06-12-PO	Straight Male Stud Coupling Metric Parallel	6	M 12X1.5	28	17	17	•			
VS8051-S08-14-PO	Straight Male Stud Coupling Metric Parallel	8	M 14X1.5	30	19	19	•			
VS8051-S10-16-PO	Straight Male Stud Coupling Metric Parallel	10	M 16X1.5	?	31	22	•			
VS8051-S12-18-PO	Straight Male Stud Coupling Metric Parallel	12	M 18x1.5	33	24	24	•			
VS8051-S14-20-PO	Straight Male Stud Coupling Metric Parallel	14	M 20x1.5	37	27	27	•			
VS8051-S16-22-PO	Straight Male Stud Coupling Metric Parallel	16	M 22x1.5	37	27	30	•			
VS8051-S20-27-PO	Straight Male Stud Coupling Metric Parallel	20	M 27x2	42.5	32	36	•			
VS8051-S25-33-PO	Straight Male Stud Coupling Metric Parallel	25	M 33x2	47	41	46	•			
VS8051-S30-42-PO	Straight Male Stud Coupling Metric Parallel	30	M 42x2	50	50	52	•			
VS8051-S38-48-PO	Straight Male Stud Coupling Metric Parallel	38	M 48x2	57	55	60	•			

## Straight Male Stud Coupling Metric Taper VS8052 Series



PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S3	Standard Material From Stock			
							S	FB	SS	B
VS8052-L06-10	Straight Male Stud Coupling Metric Taper	6	M 10x1 KEG	24.5	14	14	•			
VS8052-L08-12	Straight Male Stud Coupling Metric Taper	8	M 12x1.5 KEG	27	17	17	•			
VS8052-L10-14	Straight Male Stud Coupling Metric Taper	10	M 14x1.5 KEG	28	17	19	•			
VS8052-L12-16	Straight Male Stud Coupling Metric Taper	12	M 16x1.5 KEG	28.5	19	22	•			
VS8052-L15-18	Straight Male Stud Coupling Metric Taper	15	M 18x1.5 KEG	30	24	27	•			
VS8052-L18-22	Straight Male Stud Coupling Metric Taper	18	M 22x1.5 KEG	32	27	32	•			
VS8052-LL04-08	Straight Male Stud Coupling Metric Taper	4	M 8x1 KEG	20	10	10	•			
VS8052-S06-12	Straight Male Stud Coupling Metric Taper	3	M 12x1.5 KEG	30	17	17	•			
VS8052-S08-14	Straight Male Stud Coupling Metric Taper	8	M 14x1.5 KEG	32	17	19	•			
VS8052-S10-16	Straight Male Stud Coupling Metric Taper	10	M 16x1.5 KEG	32.5	19	22	•			
VS8052-S12-18	Straight Male Stud Coupling Metric Taper	12	M 18x1.5 KEG	34.5	22	24	•			
VS8052-S14-20	Straight Male Stud Coupling Metric Taper	14	M 20x1.5 KEG	38.5	27	27	•			
VS8052-S16-22	Straight Male Stud Coupling Metric Taper	16	M 22x1.5 KEG	38.5	27	30	•			

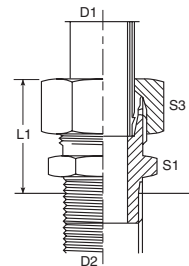
# Straight Male Stud Coupling BSPP VS8055 Series



Standard Material From Stock

PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S	Standard Material From Stock			
							S	FG	SS	B
VS8055-L06-02-PO	Straight Male Stud Coupling BSPP	6	G 1/8A	23	14	14	•			
VS8055-L08-04-PO	Straight Male Stud Coupling BSPP	8	G 1/4A	25	19	17	•			
VS8055-L10-04-PO	Straight Male Stud Coupling BSPP	10	G 1/4A	26	19	19	•			
VS8055-L12-04-PO	Straight Male Stud Coupling BSPP	12	G 1/4A	27	27	22	•			
VS8055-L12-06-PO	Straight Male Stud Coupling BSPP	12	G 3/8A	27	22	22	•			
VS8055-L12-08-PO	Straight Male Stud Coupling BSPP	12	G 1/2A	27.5	27	22	•			
VS8055-L15-08-PO	Straight Male Stud Coupling BSPP	15	G 1/2A	29	27	27	•			
VS8055-L18-08-PO	Straight Male Stud Coupling BSPP	18	G 1A	31	27	32	•			
VS8055-L22-12-PO	Straight Male Stud Coupling BSPP	22	G 3/8A	33	32	36	•			
VS8055-S18-16-PO	Straight Male Stud Coupling BSPP	28	G 1A	34	41	41	•			
VS8055-L35-20-PO	Straight Male Stud Coupling BSPP	35	G 1 1/4A	39	50	50	•			
VS8055-L42-24-PO	Straight Male Stud Coupling BSPP	42	G 1 1/2A	42	55	60	•			
VS8055-S06-04-PO	Straight Male Stud Coupling BSPP	6	G 1/4A	28	19	17	•			
VS8055-S08-04-PO	Straight Male Stud Coupling BSPP	8	G 1/4A	39	19	19	•			
VS8055-S10-04-PO	Straight Male Stud Coupling BSPP	10	G 1/4A	30.5	19	22	•			
VS8055-S10-06-PO	Straight Male Stud Coupling BSPP	10	G 3/8A	31	22	22	•			
VS8055-S12-06-PO	Straight Male Stud Coupling BSPP	12	G 3/8A	33	22	24	•			
VS8055-S14-08-PO	Straight Male Stud Coupling BSPP	14	G 1/2A	37	27	27	•			
VS8055-S16-08-PO	Straight Male Stud Coupling BSPP	16	G 1/2A	37	27	30	•			
VS8055-S20-12-PO	Straight Male Stud Coupling BSPP	20	G 3/4A	42	32	36	•			
VS8055-S25-12-PO	Straight Male Stud Coupling BSPP	25	G 3/4A	47	41	46	•			
VS8055-S25-16-PO	Straight Male Stud Coupling BSPP	25	G 1A	47	41	46	•			
VS8055-S30-20-PO	Straight Male Stud Coupling BSPP	30	G 1 1/4A	50	50	50	•			
VS8055-S38-24-PO	Straight Male Stud Coupling BSPP	38	G 1 1/2A	57	55	60	•			

# Straight Male Stud Coupling BSPT VS8057 Series

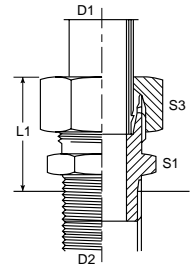


Standard Material From Stock

PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S3	Standard Material From Stock			
							S	FG	SS	B
VS8057-L06-02	Straight Male Stud Coupling BSPT	6	R 1/8 KEG	24.5	14	14	•			
VS8057-L08-04	Straight Male Stud Coupling BSPT	8	R 1/4 KEG	27	17	17	•			
VS8057-L10-04	Straight Male Stud Coupling BSPT	10	R 1/4 KEG	28	17	19	•			
VS8057-L12-04	Straight Male Stud Coupling BSPT	12	R 1/4 KEG	28.35	19	22	•			
VS8057-L12-06	Straight Male Stud Coupling BSPT	12	R 3/8 KEG	28.5	19	22	•			
VS8057-L12-08	Straight Male Stud Coupling BSPT	12	R 1/2 KEG	29	24	22	•			
VS8057-L15-06	Straight Male Stud Coupling BSPT	15	R 3/8 KEG	30	24	27	•			
VS8057-L15-08	Straight Male Stud Coupling BSPT	15	R 1/2 KEG	30.5	24	27	•			
VS8057-L18-08	Straight Male Stud Coupling BSPT	18	R 1/2 KEG	32.5	27	32	•			
VS8057-LL04-02	Straight Male Stud Coupling BSPT	4	R 1/8 KEG	20	10	10	•			
VS8057-LL06-02	Straight Male Stud Coupling BSPT	6	R 1/8 KEG	20.5	11	12	•			
VS8057-LL08-02	Straight Male Stud Coupling BSPT	8	R 1/8 KEG	23.5	12	14	•			
VS8057-S06-04	Straight Male Stud Coupling BSPT	3	R 1/4 KEG	30	17	17	•			
VS8057-S08-04	Straight Male Stud Coupling BSPT	8	R 1/4 KEG	32	17	19	•			
VS8057-S10-06	Straight Male Stud Coupling BSPT	10	R 3/8 KEG	32.5	19	22	•			
VS8057-S12-06	Straight Male Stud Coupling BSPT	12	R 3/8 KEG	34.5	22	24	•			
VS8057-S14-08	Straight Male Stud Coupling BSPT	14	R 1/2 KEG	38.5	27	27	•			
VS8057-S16-08	Straight Male Stud Coupling BSPT	16	R 1/2 KEG	38.5	27	30	•			

# DIN Metric Fittings

## Straight Male Stud Coupling NPTF VS8058 Series

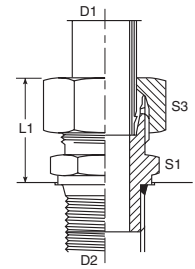


Standard Material  
From Stock

PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S3	Standard Material From Stock			
							S	FG	SS	B
VS8058-L06-02	Straight Male Stud Coupling NPTF	6	1/8 NPTF	25	12	14	•			
VS8058-L06-04	Straight Male Stud Coupling NPTF	6	1/4 NPTF	25.5	17	14	•			
VS8058-L08-04	Straight Male Stud Coupling NPTF	8	1/4 NPTF	28	17	17	•			
VS8058-L08-06	Straight Male Stud Coupling NPTF	8	3/8 NPTF	29	19	17	•			
VS8058-L10-04	Straight Male Stud Coupling NPTF	10	1/4 NPTF	29	17	19	•			
VS8058-L10-06	Straight Male Stud Coupling NPTF	10	3/8 NPTF	30	19	19	•			
VS8058-L12-04	Straight Male Stud Coupling NPTF	12	1/4 NPTF	29.5	19	22	•			
VS8058-L12-06	Straight Male Stud Coupling NPTF	12	3/8 NPTF	29.5	19	22	•			
VS8058-L12-08	Straight Male Stud Coupling NPTF	12	1/2 NPTF	31	24	22	•			
VS8058-L15-08	Straight Male Stud Coupling NPTF	15	1/2 NPTF	32.5	24	27	•			
VS8058-L18-08	Straight Male Stud Coupling NPTF	18	1/2 NPTF	34.5	27	32	•			
VS8058-L22-12	Straight Male Stud Coupling NPTF	22	3/4 NPTF	36.5	32	36	•			
VS8058-L28-16	Straight Male Stud Coupling NPTF	28	1 NPTF	39.5	41	41	•			
VS8058-L35-20	Straight Male Stud Coupling NPTF	35	1 1/4 NPTF	45	46	50	•			
VS8058-L42-24	Straight Male Stud Coupling NPTF	42	1 1/2 NPTF	48	55	60	•			
VS8058-LL04-02	Straight Male Stud Coupling NPTF	4	1/8 NPTF	21	11	10	•			
VS8058-LL06-02	Straight Male Stud Coupling NPTF	6	1/8 NPTF	21.5	11	12	•			
VS8058-LL08-02	Straight Male Stud Coupling NPTF	8	1/8 NPTF	24.5	12	14	•			
VS8058-S06-04	Straight Male Stud Coupling NPTF	6	1/4 NPTF	31	17	17	•			
VS8058-S08-04	Straight Male Stud Coupling NPTF	8	1/4 NPTF	33	17	19	•			
VS8058-S10-04	Straight Male Stud Coupling NPTF	10	1/4 NPTF	33.5	19	22	•			
VS8058-S10-06	Straight Male Stud Coupling NPTF	10	3/8 NPTF	33.5	19	22	•			
VS8058-S12-08	Straight Male Stud Coupling NPTF	12	1/2 NPTF	37	24	24	•			
VS8058-S14-06	Straight Male Stud Coupling NPTF	14	3/8 NPTF	39	24	27	•			
VS8058-S14-08	Straight Male Stud Coupling NPTF	14	1/2 NPTF	40.5	27	27	•			
VS8058-S16-06	Straight Male Stud Coupling NPTF	16	3/8 NPTF	39	27	30	•			
VS8058-S16-08	Straight Male Stud Coupling NPTF	16	1/2 NPTF	40.5	27	30	•			
VS8058-S16-12	Straight Male Stud Coupling NPTF	16	3/4 NPTF	40.5	30	30	•			
VS8058-S20-12	Straight Male Stud Coupling NPTF	20	3/4 NPTF	45.5	32	36	•			
VS8058-S25-16	Straight Male Stud Coupling NPTF	25	1 NPTF	52.5	41	46	•			
VS8058-S30-20	Straight Male Stud Coupling NPTF	30	1 1/4 NPTF	56	46	50	•			
VS8058-S38-24	Straight Male Stud Coupling NPTF	38	1 1/2 NPTF	63	55	60	•			



# Straight Male Stud Coupling ORB VS8059 Series

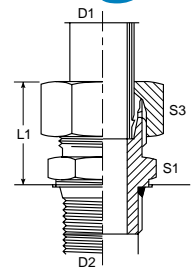


Standard Material  
From Stock

PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S3	Standard Material From Stock			
							S	FG	SS	B
VS8059-L06-04-0	Straight Male Stud Coupling ORB	6	04 ORB	23.5	17	14	•			
VS8059-L08-04-0	Straight Male Stud Coupling ORB	8	04 ORB	25	17	17	•			
VS8059-L08-05-0	Straight Male Stud Coupling ORB	8	05 ORB	25	17	17	•			
VS8059-L08-06-0	Straight Male Stud Coupling ORB	8	06 ORB	25	19	17	•			
VS8059-L10-06-0	Straight Male Stud Coupling ORB	10	06 ORB	26	19	19	•	•		
VS8059-L12-06-0	Straight Male Stud Coupling ORB	12	06 ORB	27	19	22	•			
VS8059-L12-08-0	Straight Male Stud Coupling ORB	12	08 ORB	27	24	22	•			
VS8059-L12-10-0	Straight Male Stud Coupling ORB	12	10 ORB	27.5	27	22	•			
VS8059-L15-06-0	Straight Male Stud Coupling ORB	15	06 ORB	29	24	27	•			
VS8059-L15-08-0	Straight Male Stud Coupling ORB	15	08 ORB	29	24	27	•			
VS8059-L15-10-0	Straight Male Stud Coupling ORB	15	10 ORB	29	27	27	•			
VS8059-L18-08-0	Straight Male Stud Coupling ORB	18	08 ORB	31	27	32	•			
VS8059-L18-10-0	Straight Male Stud Coupling ORB	18	10 ORB	31	27	32	•			
VS8059-L18-12-0	Straight Male Stud Coupling ORB	18	12 ORB	31	32	32	•			
VS8059-L22-10-0	Straight Male Stud Coupling ORB	22	10 ORB	33	32	36	•			
VS8059-L22-12-0	Straight Male Stud Coupling ORB	22	12 ORB	33	32	36	•			
VS8059-L22-16-0	Straight Male Stud Coupling ORB	22	16 ORB	33	41	36	•			
VS8059-L28-10-0	Straight Male Stud Coupling ORB	28	10 ORB	34	41	41	•			
VS8059-L28-12-0	Straight Male Stud Coupling ORB	28	12 ORB	34	41	41	•			
VS8059-L28-16-0	Straight Male Stud Coupling ORB	28	16 ORB	34	41	41	•			
VS8059-L28-20-0	Straight Male Stud Coupling ORB	28	20 ORB	34	50	41	•			
VS8059-L35-16-0	Straight Male Stud Coupling ORB	35	16 ORB	34	50	50	•			
VS8059-L42-24-0	Straight Male Stud Coupling ORB	42	24 ORB	42	55	60	•			
VS8059-S06-04-0	Straight Male Stud Coupling ORB	6	04 ORB	28	17	17	•			
VS8059-S08-04-0	Straight Male Stud Coupling ORB	8	04 ORB	30	17	19	•			
VS8059-S08-05-0	Straight Male Stud Coupling ORB	8	05 ORB	30	17	19	•			
VS8059-S10-06-0	Straight Male Stud Coupling ORB	10	06 ORB	31	19	22	•			
VS8059-S10-08-0	Straight Male Stud Coupling ORB	10	08 ORB	31	24	22	•			
VS8059-S12-08-0	Straight Male Stud Coupling ORB	12	08 ORB	33.5	24	24	•			
VS8059-S12-10-0	Straight Male Stud Coupling ORB	12	10 ORB	32.5	27	24	•			
VS8059-S14-08-0	Straight Male Stud Coupling ORB	14	08 ORB	37	24	27	•			
VS8059-S16-08-0	Straight Male Stud Coupling ORB	16	08 ORB	37	30	30	•			
VS8059-S16-10-0	Straight Male Stud Coupling ORB	16	10 ORB	33.5	30	30	•			
VS8059-S16-12-0	Straight Male Stud Coupling ORB	16	12 ORB	37	32	30	•			
VS8059-S20-10-0	Straight Male Stud Coupling ORB	20	10 ORB	42	32	36	•			
VS8059-S20-12-0	Straight Male Stud Coupling ORB	20	12 ORB	42	32	36	•			
VS8059-S25-12-0	Straight Male Stud Coupling ORB	25	12 ORB	47	41	46	•			
VS8059-S25-16-0	Straight Male Stud Coupling ORB	25	16 ORB	47	41	46	•			
VS8059-S30-12-0	Straight Male Stud Coupling ORB	30	12 ORB	50	46	50	•			
VS8059-S30-16-0	Straight Male Stud Coupling ORB	30	16 ORB	50	46	50	•			
VS8059-S30-20-0	Straight Male Stud Coupling ORB	30	20 ORB	50	50	50	•			
VS8059-S38-20-0	Straight Male Stud Coupling ORB	38	20 ORB	57	55	60	•			
VS8059-S38-24-0	Straight Male Stud Coupling ORB	38	24 ORB	57	55	60	•			

# DIN Metric Fittings

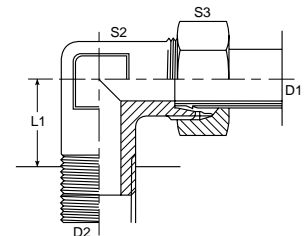
## Straight Male Stud Coupling ISO VS8060 Series



Standard Material From Stock

PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S3	Standard Material From Stock			
							S	FB	SS	B
VS8060-L08-12-ISO	Straight Male Stud Coupling ISO	8	M 12X1.5	25	17	17	•			
VS8060-L10-14-ISO	Straight Male Stud Coupling ISO	10	M 14X1.5	26	19	19	•			
VS8060-L28-33-ISO	Straight Male Stud Coupling ISO	28	M 33x2	34	41	41	•			
VS8060-S12-18-ISO	Straight Male Stud Coupling ISO	12	M 18x1.5	33	24	24	•			
VS8060-S20-27-ISO	Straight Male Stud Coupling ISO	20	M 27x2	42	27	30	•			
VS8060-S25-33-ISO	Straight Male Stud Coupling ISO	25	M 33x2	47	41	46	•			

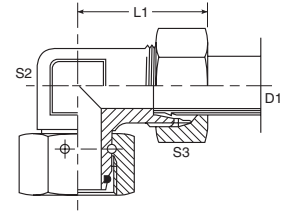
## Male Stud Elbow Metric Taper VS8202 Series



Standard Material From Stock

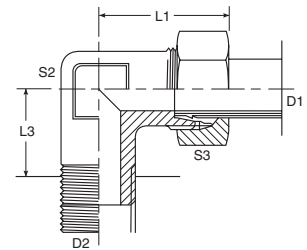
PRODUCT ID	DESCRIPTION	D1	D2	L1	S2	S3	Standard Material From Stock			
							S	FB	SS	B
VS8202-L06-10	Male Stud Elbow Metric Taper	6	M 10x1 KEG	21	14	12	•			
VS8202-L08-12	Male Stud Elbow Metric Taper	8	M 12x1.5 KEG	29	17	14	•			
VS8202-L10-14	Male Stud Elbow Metric Taper	10	M 14x1.5 KEG	30	19	17	•			
VS8202-L12-16	Male Stud Elbow Metric Taper	12	M 16x1.5 KEG	32	22	19	•			
VS8202-L15-18	Male Stud Elbow Metric Taper	15	M 18x1.5 KEG	36	27	19	•			
VS8202-L18-22	Male Stud Elbow Metric Taper	18	M 22x1.5 KEG	40	32	24	•			
VS8202-LL04-08	Male Stud Elbow Metric Taper	4	M 08x1.5 KEG	21	10	9	•			
VS8202-LL06-10	Male Stud Elbow Metric Taper	6	M 10x1.5 KEG	21	12	11	•			
VS8202-LL08-10	Male Stud Elbow Metric Taper	8	M 10x1.5 KEG	23	14	12	•			
VS8202-S06-12	Male Stud Elbow Metric Taper	6	M 12x1.5 KEG	31	17	14	•			
VS8202-S08-14	Male Stud Elbow Metric Taper	8	M 14x1.5 KEG	32	19	17	•			
VS8202-S10-16	Male Stud Elbow Metric Taper	10	M 16x1.5 KEG	34	22	19	•			
VS8202-S12-18	Male Stud Elbow Metric Taper	12	M 18x1.5 KEG	38	24	22	•			
VS8202-S14-20	Male Stud Elbow Metric Taper	14	M 20x1.5 KEG	40	27	19	•			
VS8202-S16-22	Male Stud Elbow Metric Taper	16	M 22x1.5 KEG	43	30	24	•			

# Adjustable Elbow Body VS8204 Series



PRODUCT ID	DESCRIPTION	D1	L1	S2	S3	Standard Material From Stock			
						S	FB	SS	B
VS8204-L06	Adjustable Elbow Body	6	27	14	12	•			
VS8204-L08	Adjustable Elbow Body	8	29	17	12	•			
VS8204-L10	Adjustable Elbow Body	10	30	19	14	•			
VS8204-L12	Adjustable Elbow Body	12	32	22	18	•			
VS8204-L15	Adjustable Elbow Body	15	36	27	19	•			
VS8204-L18	Adjustable Elbow Body	18	40	32	24	•			
VS8204-L22	Adjustable Elbow Body	22	44	36	27	•			
VS8204-L28	Adjustable Elbow Body	28	47	41	36	•			
VS8204-L35	Adjustable Elbow Body	35	56	50	41	•			
VS8204-L42	Adjustable Elbow Body	42	63	60	50	•			
VS8204-S06	Adjustable Elbow Body	6	31	17	12	•			
VS8204-S08	Adjustable Elbow Body	8	32	19	14	•			
VS8204-S10	Adjustable Elbow Body	10	34	22	17	•			
VS8204-S12	Adjustable Elbow Body	12	38	24	17	•			
VS8204-S14	Adjustable Elbow Body	14	40	27	19	•			
VS8204-S16	Adjustable Elbow Body	16	43	30	24	•			
VS8204-S20	Adjustable Elbow Body	20	48	36	27	•			
VS8204-S25	Adjustable Elbow Body	25	54	46	36	•			
VS8204-S30	Adjustable Elbow Body	30	62	50	41	•			
VS8204-S38	Adjustable Elbow Body	38	72	60	50	•			

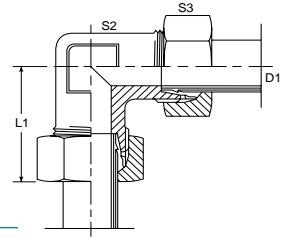
# Male Stud Elbow BSPT VS8207 Series



PRODUCT ID	DESCRIPTION	D1	D2	L1	L3	S2	S3	Standard Material From Stock			
								S	FB	SS	B
VS8207-L06-02	Male Stud Elbow BSPT	6	R 1/8 KEG	27	15	12	14	•			
VS8207-L08-04	Male Stud Elbow BSPT	8	R 1/4 KEG	29	18	14	17	•			
VS8207-L10-04	Male Stud Elbow BSPT	10	R 1/4 KEG	30	19	17	19	•			
VS8207-L10-06	Male Stud Elbow BSPT	10	R 3/8 KEG	31	20	19	19	•			
VS8207-L12-06	Male Stud Elbow BSPT	12	R 3/8 KEG	32	20	19	22	•			
VS8207-L12-08	Male Stud Elbow BSPT	12	R 1/2 KEG	35	24	19	22	•			
VS8207-L15-08	Male Stud Elbow BSPT	15	R 1/2 KEG	36	24	19	27	•			
VS8207-L18-08	Male Stud Elbow BSPT	18	R 1/2 KEG	40	26.5	24	32	•			
VS8207-L22-12	Male Stud Elbow BSPT	22	R 3/4 KEG	44	31	27	36	•			
VS8207-LL04-02	Male Stud Elbow BSPT	4	R 1/8 KEG	21	12	11	10	•			
VS8207-LL06-02	Male Stud Elbow BSPT	6	R 1/8 KEG	21	12	11	12	•			
VS8207-LL08-02	Male Stud Elbow BSPT	8	R 1/8 KEG	23	15	12	14	•			
VS8207-S06-04	Male Stud Elbow BSPT	3	R 1/4 KEG	31	18	14	17	•			
VS8207-S08-04	Male Stud Elbow BSPT	8	R 1/4 KEG	31	19	17	19	•			
VS8207-S10-06	Male Stud Elbow BSPT	10	R 3/8 KEG	34	20	19	22	•			
VS8207-S12-06	Male Stud Elbow BSPT	12	R 3/8 KEG	38	20	22	24	•			
VS8207-S14-08	Male Stud Elbow BSPT	14	R 1/2 KEG	40	22.5	19	27	•			
VS8207-S16-08	Male Stud Elbow BSPT	16	R 1/2 KEG	43	22.5	24	30	•			
VS8207-S20-12	Male Stud Elbow BSPT	20	R 3/4 KEG	48	31	27	36	•			

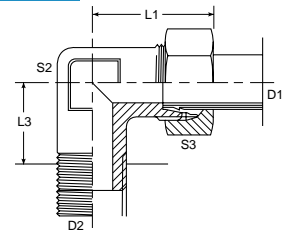
# DIN Metric Fittings

## Elbow Coupling VS8210 Series



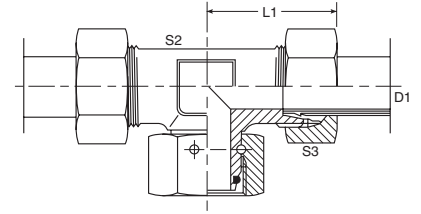
PRODUCT ID	DESCRIPTION	D1	L1	S2	S3	Standard Material From Stock			
						S	FB	SS	B
VS8210-L06	Elbow Coupling	6	27	14	12	•			
VS8210-L08	Elbow Coupling	8	29	17	14	•			
VS8210-L10	Elbow Coupling	10	30	19	17	•			
VS8210-L12	Elbow Coupling	12	32	22	19	•			
VS8210-L15	Elbow Coupling	15	36	27	19	•			
VS8210-L18	Elbow Coupling	18	40	32	24	•			
VS8210-L22	Elbow Coupling	22	44	36	27	•			
VS8210-L28	Elbow Coupling	28	47	41	36	•			
VS8210-L35	Elbow Coupling	32	56	50	41	•			
VS8210-L42	Elbow Coupling	42	63	60	50	•			
VS8210-LL04	Elbow Coupling	4	21	10	9	•			
VS8210-LL06	Elbow Coupling	6	21	12	11	•			
VS8210-LL08	Elbow Coupling	8	23	14	12	•			
VS8210-S06	Elbow Coupling	6	31	17	14	•			
VS8210-S08	Elbow Coupling	8	3	19	17	•			
VS8210-S10	Elbow Coupling	10	34	22	19	•			
VS8210-S12	Elbow Coupling	12	38	24	22	•			
VS8210-S14	Elbow Coupling	14	40	27	19	•			
VS8210-S16	Elbow Coupling	16	43	30	24	•			
VS8210-S20	Elbow Coupling	20	48	36	27	•			
VS8210-S25	Elbow Coupling	25	54	46	36	•			
VS8210-S30	Elbow Coupling	30	62	50	41	•			
VS8210-S38	Elbow Coupling	38	72	60	50	•			

## Male Stud Elbow NPTF VS8258 Series



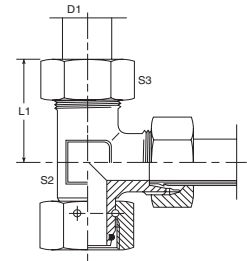
PRODUCT ID	DESCRIPTION	D1	D2	L1	L3	S2	S3	Standard Material From Stock			
								S	FB	SS	B
VS8258-L06-02	Male Stud Elbow NPTF	6	1/8 NPT	27	15.9	12	14	•			
VS8258-L06-04	Male Stud Elbow NPTF	6	1/4 NPT	29	20.2	14	14	•			
VS8258-L08-04	Male Stud Elbow NPTF	8	1/4 NPT	29	20.2	14	17	•			
VS8258-L10-04	Male Stud Elbow NPTF	10	1/4 NPT	30	21.2	17	19	•			
VS8258-L12-04	Male Stud Elbow NPTF	12	1/4 NPT	32	22.2	19	22	•			
VS8258-L12-06	Male Stud Elbow NPTF	12	3/8 NPT	32	21.9	19	22	•			
VS8258-L12-08	Male Stud Elbow NPTF	12	1/2 NPT	36	19.5	24	22	•			
VS8258-L15-08	Male Stud Elbow NPTF	15	1/2 NPT	39	22.5	24	27	•			
VS8258-L18-08	Male Stud Elbow NPTF	18	1/2 NPT	47	32.5	36	41	•			
VS8258-L22-12	Male Stud Elbow NPTF	22	3/4 NPT	44	28.5	27	36	•			
VS8258-L28-16	Male Stud Elbow NPTF	28	1 NPT	47	32.5	36	41	•			
VS8258-L35-20	Male Stud Elbow NPTF	35	1-1/4 NPT	56	37	41	50	•			
VS8258-L42-24	Male Stud Elbow NPTF	42	1-1/2 NPT	63	44	50	60	•			
VS8258-LL04-02	Male Stud Elbow NPTF	4	1/8 NPT	21	11.5	11	10	•			
VS8258-LL06-02	Male Stud Elbow NPTF	6	1/8 NPT	21	11.5	11	12	•			
VS8258-LL08-02	Male Stud Elbow NPTF	8	1/8 NPT	23	15.9	12	14	•			
VS8258-S06-04	Male Stud Elbow NPTF	6	1/4 NPT	31	20.2	14	17	•			
VS8258-S08-04	Male Stud Elbow NPTF	8	1/4 NPT	32	21.2	17	19	•			
VS8258-S10-06	Male Stud Elbow NPTF	10	3/8 NPT	34	21.9	19	22	•			
VS8258-S12-06	Male Stud Elbow NPTF	12	3/8 NPT	38	22.9	22	24	•			
VS8258-S14-08	Male Stud Elbow NPTF	14	1/2 NPT	43	19.5	24	27	•			
VS8258-S16-08	Male Stud Elbow NPTF	16	1/2 NPT	43	19.5	24	30	•			
VS8258-S20-12	Male Stud Elbow NPTF	20	3/4 NPT	48	28.5	27	36	•			
VS8258-S25-16	Male Stud Elbow NPTF	25	1 NPT	54	32.5	36	46	•			
VS8258-S30-20	Male Stud Elbow NPTF	30	1-1/4 NPT	62	37	41	50	•			
VS8258-S38-24	Male Stud Elbow NPTF	38	1-1/2 NPT	72	44	50	60	•			

# Adjustable Branch Tee Body VS8304-B Series



PRODUCT ID	DESCRIPTION	D1	L1	S2	S3	Standard Material From Stock			
						S	FB	SS	B
VS8304-B-L06	Adjustable Branch Tee Body	6	27	14	12	•			
VS8304-B-L08	Adjustable Branch Tee Body	8	29	17	12	•			
VS8304-B-L10	Adjustable Branch Tee Body	10	30	19	14	•			
VS8304-B-L12	Adjustable Branch Tee Body	12	32	22	17	•			
VS8304-B-L15	Adjustable Branch Tee Body	15	36	2	19	•			
VS8304-B-L18	Adjustable Branch Tee Body	18	40	32	24	•			
VS8304-B-L22	Adjustable Branch Tee Body	22	44	36	27	•			
VS8304-B-L28	Adjustable Branch Tee Body	28	47	41	36	•			
VS8304-B-L35	Adjustable Branch Tee Body	35	56	50	41	•			
VS8304-B-L42	Adjustable Branch Tee Body	42	63	60	50	•			
VS8304-B-S06	Adjustable Branch Tee Body	6	31	17	12	•			
VS8304-B-S08	Adjustable Branch Tee Body	8	32	19	14	•			
VS8304-B-S10	Adjustable Branch Tee Body	10	34	22	17	•			
VS8304-B-S12	Adjustable Branch Tee Body	12	38	24	17	•			
VS8304-B-S14	Adjustable Branch Tee Body	14	40	27	19	•			
VS8304-B-S16	Adjustable Branch Tee Body	16	43	30	24	•			
VS8304-B-S20	Adjustable Branch Tee Body	20	48	36	27	•			
VS8304-B-S25	Adjustable Branch Tee Body	25	54	46	36	•			
VS8304-B-S30	Adjustable Branch Tee Body	30	62	50	41	•			
VS8304-B-S38	Adjustable Branch Tee Body	38	72	60	50	•			

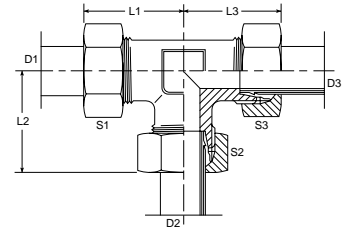
# Adjustable Barrel Tee Body VS8304-R Series



PRODUCT ID	DESCRIPTION	D1	L1	S2	S3	Standard Material From Stock			
						S	FB	SS	B
VS8304-R-L06	Adjustable Barrel Tee Body	6	27	14	12	•			
VS8304-R-L08	Adjustable Barrel Tee Body	8	29	17	12	•			
VS8304-R-L10	Adjustable Barrel Tee Body	10	30	19	14	•			
VS8304-R-L12	Adjustable Barrel Tee Body	12	32	22	17	•			
VS8304-R-L15	Adjustable Barrel Tee Body	15	36	27	19	•			
VS8304-R-L18	Adjustable Barrel Tee Body	18	40	32	24	•			
VS8304-R-L18	Adjustable Barrel Tee Body	18	40	32	24	•			
VS8304-R-L22	Adjustable Barrel Tee Body	22	44	36	27	•			
VS8304-R-L28	Adjustable Barrel Tee Body	28	47	41	36	•			
VS8304-R-L35	Adjustable Barrel Tee Body	35	56	50	41	•			
VS8304-R-L42	Adjustable Barrel Tee Body	42	63	60	50	•			
VS8304-R-S06	Adjustable Barrel Tee Body	6	31	17	12	•			
VS8304-R-S08	Adjustable Barrel Tee Body	8	32	19	14	•			
VS8304-R-S10	Adjustable Barrel Tee Body	10	34	22	17	•			
VS8304-R-S12	Adjustable Barrel Tee Body	12	38	24	17	•			
VS8304-R-S14	Adjustable Barrel Tee Body	14	41	27	19	•			
VS8304-R-S16	Adjustable Barrel Tee Body	16	43	30	24	•			
VS8304-R-S20	Adjustable Barrel Tee Body	20	48	36	27	•			
VS8304-R-S25	Adjustable Barrel Tee Body	25	54	46	36	•			
VS8304-R-S30	Adjustable Barrel Tee Body	30	62	50	41	•			
VS8304-R-S38	Adjustable Barrel Tee Body	38	72	60	50	•			

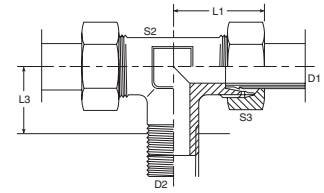
# DIN Metric Fittings

## Tee Coupling VS8310 Series



PRODUCT ID	DESCRIP.	D1	D2	D3	L1	L2	L3	S1 HEX	S2 HEX	S3 HEX	S2 FLATS	Standard Material From Stock			
												S	FB	SS	B
VS8310-L06	Tee Coupling	6	6	6	27	27	27	14	14	14	12	•			
VS8310-L08	Tee Coupling	8	8	8	29	29	29	17	17	17	14	•			
VS8310-L08-06-08	Tee Coupling	8	6	8	29	28.5	29	17	14	17	14	•			
VS8310-L10	Tee Coupling	10	10	10	30	30	30	19	19	19	17	•			
VS8310-L10-06-10	Tee Coupling	10	6	10	30	29.5	30	19	14	19	17	•			
VS8310-L10-08-10	Tee Coupling	10	8	10	30	30	30	19	17	19	17	•			
VS8310-L10-10-06	Tee Coupling	10	10	6	30	30	29.5	19	19	14	17	•			
VS8310-L10-12-10	Tee Coupling	10	10	10	30	30	30	19	22	19	17	•			
VS8310-L12	Tee Coupling	12	12	12	32	32	32	22	22	22	19	•			
VS8310-L12-06-12	Tee Coupling	12	6	12	31.5	31.5	31.5	22	14	22	19	•			
VS8310-L12-08-12	Tee Coupling	12	8	12	31.5	32	31.5	22	17	22	19	•			
VS8310-L15	Tee Coupling	15	15	15	36	36	36	27	27	27	19	•			
VS8310-L15-06-15	Tee Coupling	15	6	15	36	36	36	27	14	27	19	•			
VS8310-L15-08-15	Tee Coupling	15	8	15	36	36	36	27	17	27	19	•			
VS8310-L15-10-15	Tee Coupling	15	10	15	36	36	36	27	19	27	19	•			
VS8310-L15-12-15	Tee Coupling	15	12	15	36	35.5	35.5	27	22	27	19	•			
VS8310-L18	Tee Coupling	18	18	18	40	40	40	32	32	32	24	•			
VS8310-L18-10-18	Tee Coupling	18	10	18	40	39	40	32	19	32	24	•			
VS8310-L18-12-18	Tee Coupling	18	12	18	40	38.5	40	32	22	32	24	•			
VS8310-L18-15-18	Tee Coupling	18	15	18	40	39	40	32	27	32	24	•			
VS8310-L22	Tee Coupling	22	22	22	44	44	44	36	36	36	27	•			
VS8310-L22-10-22	Tee Coupling	22	10	22	44	43	44	36	19	36	27	•			
VS8310-L22-12-22	Tee Coupling	22	12	22	44	42.5	44	36	22	36	27	•			
VS8310-L22-15-22	Tee Coupling	22	15.8	22	44	43	44	36	27	36	27	•			
VS8310-L22-18-18	Tee Coupling	22	18	18	44	44	44	36	32	32	27	•			
VS8310-L22-18-22	Tee Coupling	22	18	22	44	44	44	36	32	36	27	•			
VS8310-L22-22-18	Tee Coupling	22	22	18	44	44	44	36	36	32	27	•			
VS8310-L28	Tee Coupling	28	28	28	47	47	47	41	41	41	36	•			
VS8310-L28-12-28	Tee Coupling	28	12	28	47	45.5	47	41	22	41	36	•			
VS8310-L28-15-28	Tee Coupling	28	15	28	47	46	47	41	27	41	36	•			
VS8310-L28-18-28	Tee Coupling	28	18	28	47	47	47	41	32	41	36	•			
VS8310-L28-22-28	Tee Coupling	28	22	28	47	47	47	41	36	41	36	•			
VS8310-L42	Tee Coupling	42	42	42	63	63	63	60	60	60	50	•			
VS8310-LL04	Tee Coupling	4	4	4	21	21	21	10	10	10	9	•			
VS8310-LL06	Tee Coupling	6	6	6	21	21	21	12	12	12	11	•			
VS8310-LL08	Tee Coupling	8	8	8	23	23	23	14	14	14	12	•			
VS8310-S06	Tee Coupling	6	6	6	31	31	31	17	17	17	14	•			
VS8310-S10	Tee Coupling	10	10	10	34	34	34	22	22	22	19	•			
VS8310-S10-06-10	Tee Coupling	10	6	10	33.5	33	33.6	22	17	22	19	•			
VS8310-S12	Tee Coupling	12	12	12	38	38	38	24	24	24	22	•			
VS8310-S12-08-12	Tee Coupling	12	8	12	37.5	37	37.5	24	19	24	22	•			
VS8310-S12-10-12	Tee Coupling	12	10	12	37.5	37.5	37.5	24	22	24	22	•			
VS8310-S14	Tee Coupling	14	14	14	40	40	40	27	27	27	19	•			
VS8310-S16	Tee Coupling	16	16	16	43	43	43	30	30	30	24	•			
VS8310-S16-08-16	Tee Coupling	16	8	16	43	41	43	30	19	30	24	•			
VS8310-S16-10-16	Tee Coupling	16	10	16	43	41.5	43	30	22	30	24	•			
VS8310-S16-12-16	Tee Coupling	16	12	16	43	41.5	43	30	24	30	24	•			
VS8310-S20	Tee Coupling	20	20	20	48	48	48	36	36	36	27	•			
VS8310-S20-10-20	Tee Coupling	20	10	20	45	45.5	45.5	36	22	36	27	•			
VS8310-S20-12-20	Tee Coupling	20	12	20	45	45.5	45	36	24	36	27	•			
VS8310-S20-16-20	Tee Coupling	20	16	20	45	47	45	36	30	36	27	•			
VS8310-S25	Tee Coupling	25	25	25	54	54	54	46	46	46	36	•			
VS8310-S25-16-25	Tee Coupling	25	16	25	54	52	54	46	30	46	36	•			
VS8310-S25-20-25	Tee Coupling	25	20	25	54	50	54	46	36	46	36	•			
VS8310-S30	Tee Coupling	30	30	30	62	62	62	50	50	50	41	•			
VS8310-S38	Tee Coupling	38	38	38	72	72	72	60	60	60	50	•			

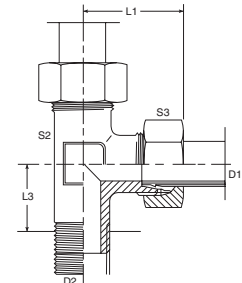
# Male Stud Branch Tee Metric Taper VS8352-B Series



Standard Material  
From Stock

PRODUCT ID	DESCRIPTION	D1	D2	L1	L3	S2	S3	Standard Material From Stock			
								S	FB	SS	B
VS8352-B-L06-10	Male Stud Branch Tee Metric Taper	6	M 10x1A	27	15	14	12	•			
VS8352-B-L08-12	Male Stud Branch Tee Metric Taper	8	M 12x1.5	29	18	17	14	•			
VS8352-B-L10-14	Male Stud Branch Tee Metric Taper	10	M 14x1.5	30	19	19	17	•			
VS8352-B-L12-16	Male Stud Branch Tee Metric Taper	12	M 16x1.5	32	20	22	19	•			
VS8352-B-L15-18	Male Stud Branch Tee Metric Taper	15	M 18x1.5	36	24	27	19	•			
VS8352-B-L18-22	Male Stud Branch Tee Metric Taper	18	M 22x1.5	40	26.5	32	24	•			
VS8352-B-LL04-08	Male Stud Branch Tee Metric Taper	4	M 8x1	21	12	10	9	•			
VS8352-B-LL06-10	Male Stud Branch Tee Metric Taper	6	M 10x1A	21	12	12	11	•			
VS8352-B-LL08-10	Male Stud Branch Tee Metric Taper	8	M 10x1A	23	15	14	12	•			
VS8352-B-S06-12	Male Stud Branch Tee Metric Taper	6	M 12x1.5	31	18	17	14	•			
VS8352-B-S10-16	Male Stud Branch Tee Metric Taper	10	M 16x1.5	34	20	22	19	•			
VS8352-B-S12-18	Male Stud Branch Tee Metric Taper	12	M 18x1.5	38	20	24	22	•			
VS8352-B-S14-20	Male Stud Branch Tee Metric Taper	14	M 20x1.5	40	22.5	27	19	•			
VS8352-B-S16-22	Male Stud Branch Tee Metric Taper	16	M 22x1.5	43	22.5	30	24	•			

# Male Stud Barrel Tee Metric Taper VS8352-R Series

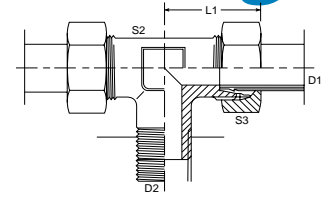


Standard Material  
From Stock

PRODUCT ID	DESCRIPTION	D1	D2	L1	L3	S2	S3	Standard Material From Stock			
								S	FB	SS	B
VS8352-R-L06-10	Male Stud Barrel Tee Metric Taper	6	M 10x1 KEG	27	15	14	12	•			
VS8352-R-L10-14	Male Stud Barrel Tee Metric Taper	10	M 14x1.5 KEG	30	19	19	17	•			
VS8352-R-L12-16	Male Stud Barrel Tee Metric Taper	12	M 16x1.5 KEG	32	20	22	19	•			
VS8352-R-L15-18	Male Stud Barrel Tee Metric Taper	15	M 18x1.5 KEG	36	24	27	19	•			
VS8352-R-L18-22	Male Stud Barrel Tee Metric Taper	18	M 22x1.5 KEG	40	26.5	32	24	•			
VS8352-R-LL04-08	Male Stud Barrel Tee Metric Taper	4	M 8x1 KEG	21	12	10	9	•			
VS8352-R-LL06-10	Male Stud Barrel Tee Metric Taper	6	M 10x1 KEG	21	12	12	11	•			
VS8352-R-LL08-10	Male Stud Barrel Tee Metric Taper	8	M 10x1 KEG	23	15	14	12	•			
VS8352-R-S06-12	Male Stud Barrel Tee Metric Taper	6	M 12x1.5 KEG	31	18	17	14	•			
VS8352-R-S08-14	Male Stud Barrel Tee Metric Taper	8	M 14x1.5 KEG	32	19	19	17	•			
VS8352-R-S10-16	Male Stud Barrel Tee Metric Taper	10	M 16x1.5 KEG	34	20	22	19	•			
VS8352-R-S12-18	Male Stud Barrel Tee Metric Taper	12	M 18x1.5 KEG	38	20	24	22	•			
VS8352-R-S14-20	Male Stud Barrel Tee Metric Taper	14	M 20x1.5 KEG	40	22.5	27	19	•			
VS8352-R-S16-SS	Male Stud Barrel Tee Metric Taper	16	M 22x1.5 KEG	43	22.5	30	24	•			
VS8352R-L08-12	Male Stud Barrel Tee Metric Taper	8	M 12x1.5 KEG	29	18	17	14	•			

# DIN Metric Fittings

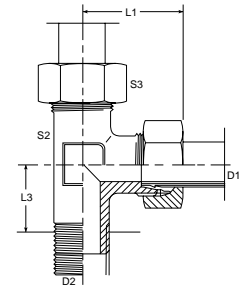
## Male Stud Branch Tee BSPT VS8357-B Series



Standard Material  
From Stock

PRODUCT ID	DESCRIPTION	D1	D2	L1	L3	S2	S3	Standard Material From Stock				
								S	FB	SS	B	
VS8357-B-L06-02	Male Stud Branch Tee BSPT	6	R 1/8 KEG	27	15	14	12	•				
VS8357-B-L08-04	Male Stud Branch Tee BSPT	8	R 1/4 KEG	29	18	17	14	•				
VS8357-B-L10-04	Male Stud Branch Tee BSPT	10	R 1/4 KEG	30	19	19	17	•				
VS8357-B-L12-06	Male Stud Branch Tee BSPT	12	R 3/8 KEG	32	20	22	19	•				
VS8357-B-L15-08	Male Stud Branch Tee BSPT	15	R 1/2 KEG	36	24	27	19	•				
VS8357-B-L18-08	Male Stud Branch Tee BSPT	18	R 1/2 KEG	40	26.5	32	24	•				
VS8357-B-LL04-02	Male Stud Branch Tee BSPT	4	R 1/8 KEG	21	12	10	11	•				
VS8357-B-LL06-02	Male Stud Branch Tee BSPT	6	R 1/8 KEG	21	12	12	11	•				
VS8357-B-LL08-02	Male Stud Branch Tee BSPT	8	R 1/8 KEG	23	15	14	12	•				
VS8357-B-S06-04	Male Stud Branch Tee BSPT	6	R 1/4 KEG	31	18	17	14	•				
VS8357-B-S08-04	Male Stud Branch Tee BSPT	8	R 1/4 KEG	32	19	19	17	•				
VS8357-B-S10-06	Male Stud Branch Tee BSPT	10	R 3/8 KEG	34	20	22	19	•				
VS8357-B-S12-06	Male Stud Branch Tee BSPT	12	R 3/8 KEG	38	20	24	22	•				
VS8357-B-S14-08	Male Stud Branch Tee BSPT	14	R 1/2 KEG	40	22.5	27	19	•				
VS8357-B-S16-08	Male Stud Branch Tee BSPT	16	R 1/2 KEG	43	22.5	30	24	•				

## Male Stud Barrel Tee BSPT VS8357-R Series

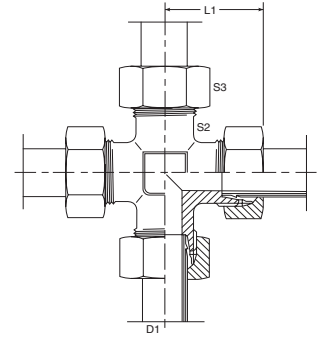


Standard Material  
From Stock

PRODUCT ID	DESCRIPTION	D1	D2	L1	L3	S2	S3	Standard Material From Stock				
								S	FB	SS	B	
VS8357-R-L06-02	Male Stud Barrel Tee BSPT	6	R 1/8 KEG	27	15	12	14	•				
VS8357-R-L08-04	Male Stud Barrel Tee BSPT	8	R 1/4 KEG	29	18	14	17	•				
VS8357-R-L10-04	Male Stud Barrel Tee BSPT	10	R 1/4 KEG	30	19	17	19	•				
VS8357-R-L12-06	Male Stud Barrel Tee BSPT	12	R 3/8 KEG	32	20	19	22	•				
VS8357-R-L15-08	Male Stud Barrel Tee BSPT	15	R 1/2 KEG	36	24	19	27	•				
VS8357-R-L18-08	Male Stud Barrel Tee BSPT	18	R 1/2 KEG	40	26.5	24	32	•				
VS8357-R-LL04-02	Male Stud Barrel Tee BSPT	4	R 1/8 KEG	21	12	11	12	•				
VS8357-R-LL06-02	Male Stud Barrel Tee BSPT	6	R 1/8 KEG	21	12	11	12	•				
VS8357-R-LL08-02	Male Stud Barrel Tee BSPT	8	R 1/8 KEG	23	15	12	14	•				
VS8357-R-S06-04	Male Stud Barrel Tee BSPT	6	R 1/4 KEG	31	18	14	17	•				
VS8357-R-S08-04	Male Stud Barrel Tee BSPT	8	R 1/4 KEG	32	19	17	19	•				
VS8357-R-S10-06	Male Stud Barrel Tee BSPT	10	R 3/8 KEG	34	20	19	22	•				
VS8357-R-S12-06	Male Stud Barrel Tee BSPT	12	R 3/8 KEG	38	20	22	24	•				
VS8357-R-S14-08	Male Stud Barrel Tee BSPT	14	R 1/2 KEG	40	22.5	19	27	•				
VS8357-R-S16-08	Male Stud Barrel Tee BSPT	16	R 1/2 KEG	43	-	24	30	•				



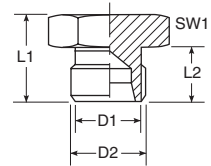
# Cross Coupling VS8410 Series



Standard Material  
From Stock

PRODUCT ID	DESCRIPTION	D1	L1	S2	S3	Standard Material From Stock			
						S	FB	SS	B
VS8410-L06-06-06-06	Cross Coupling	6	27	14	12	•			
VS8410-L08-08-08-08	Cross Coupling	8	29	17	12	•			
VS8410-L10-10-10-10	Cross Coupling	10	30	19	14	•			
VS8410-L12-12-12-12	Cross Coupling	12	32	22	17	•			
VS8410-L15-15-15-15	Cross Coupling	15	36	27	19	•			
VS8410-L18-18-18-18	Cross Coupling	18	40	32	24	•			
VS8410-L22-22-22-22	Cross Coupling	22	44	36	27	•			
VS8410-L28-28-28-28	Cross Coupling	28	47	41	36	•			
VS8410-L35-35-35-35	Cross Coupling	35	56	50	41	•			
VS8410-LL04-04-04-04	Cross Coupling	4	21	10	7	•			
VS8410-LL06-06-06-06	Cross Coupling	6	21	12	9	•			
VS8410-LL08-08-08-08	Cross Coupling	8	23	14	12	•			
VS8410-S06-06-06-06	Cross Coupling	6	31	17	12	•			
VS8410-S08-08-08-08	Cross Coupling	8	32	19	14	•			
VS8410-S10-10-10-10	Cross Coupling	10	34	22	17	•			
VS8410-S12-12-12-12	Cross Coupling	12	39	24	17	•			
VS8410-S14-14-14-14	Cross Coupling	14	40	27	19	•			
VS8410-S16-16-16-16	Cross Coupling	16	43	30	24	•			
VS8410-S20-20-20-20	Cross Coupling	20	48	36	27	•			
VS8410-S25-25-25-25	Cross Coupling	25	54	46	36	•			

# Tube Cap VS8510 Series

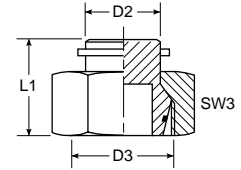


Standard Material  
From Stock

PRODUCT ID	DESCRIP.	D1	D2	L1	SW1	Standard Material From Stock			
						S	FB	SS	B
VS8510-L06	Tube Cap	6	M 12x1.5	14	12	•			
VS8510-L08	Tube Cap	8	M 14x1.5	15	14	•			
VS8510-L10	Tube Cap	10	M 16x1.5	16	17	•			
VS8510-L12	Tube Cap	12	M 18x1.5	17	19	•			
VS8510-L15	Tube Cap	15	M 22x1.5	18	24	•			
VS8510-L18	Tube Cap	18	M 26x1.5	19	27	•			
VS8510-L22	Tube Cap	22	M 30x2	21	32	•			
VS8510-L28	Tube Cap	28	M 36x2	22	41	•			
VS8510-L35	Tube Cap	35	M 45x2	25	46	•			
VS8510-L42	Tube Cap	42	M 52x2	27	55	•			
VS8510-S06	Tube Cap	6	M 14x1.5	18	14	•			
VS8510-S08	Tube Cap	8	M 16x1.5	20	17	•			
VS8510-S10	Tube Cap	10	M 18x1.5	20	19	•			
VS8510-S12	Tube Cap	12	M 20x1.5	22	22	•			
VS8510-S14	Tube Cap	14	M 22x1.5	24	24	•			
VS8510-S16	Tube Cap	16	M 24x1.5	24	27	•			
VS8510-S20	Tube Cap	20	M 30x2	28	32	•			
VS8510-S25	Tube Cap	25	M 36x2	32	41	•			
VS8510-S30	Tube Cap	30	M 42x2	34	46	•			
VS8510-S38	Tube Cap	38	M 52x2	39	55	•			

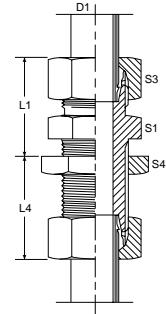
# DIN Metric Fittings

## Tube Plug VS8511 Series



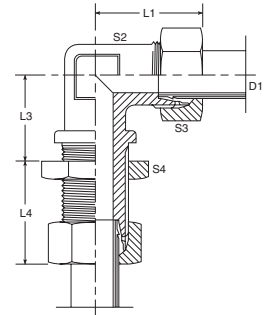
PRODUCT ID	DESCRIPTION	D2	D3	L1	SW3	Standard Material From Stock			
						S	FB	SS	B
VS8511-L06	Tube Plug	6	M 12x1	18	14	•			
VS8511-L08	Tube Plug	8	M 14x1	19	17	•			
VS8511-L10	Tube Plug	10	M 16x1	2.5	19	•			
VS8511-L12	Tube Plug	12	M 18x1	22.5	22	•			
VS8511-L15	Tube Plug	15	M 22x1	22.5	27	•			
VS8511-L18	Tube Plug	18	M 26x1	24	32	•			
VS8511-L22	Tube Plug	22	M 30x2	26	36	•			
VS8511-L28	Tube Plug	28	M 36x2	28	41	•			
VS8511-L35	Tube Plug	35	M 42x2	31	50	•			
VS8511-L42	Tube Plug	42	M 52x2	31	60	•			
VS8511-S06	Tube Plug	6	M 14x1	18	17	•			
VS8511-S08	Tube Plug	8	M 16x1	19	19	•			
VS8511-S10	Tube Plug	10	M 18x1	22.5	22	•			
VS8511-S12	Tube Plug	12	M 20x1	22.5	24	•			
VS8511-S14	Tube Plug	14	M 22x1	22.5	27	•			
VS8511-S16	Tube Plug	16	M 24x1	24	30	•			
VS8511-S20	Tube Plug	20	M 30x2	31	36	•			
VS8511-S25	Tube Plug	25	M 36x2	31	46	•			
VS8511-S30	Tube Plug	30	M 42x2	31	50	•			
VS8511-S38	Tube Plug	38	M 52x2	31.5	60	•			

## Straight Bulkhead Coupling VS8710 Series



PRODUCT ID	DESCRIPTION	D1	L1	L4	S1	S3	S4	Standard Material From Stock			
								S	FB	SS	B
VS8710-L06-06	Straight Bulkhead Coupling	6	22	42	17	14	17	•			
VS8710-L08-08	Straight Bulkhead Coupling	8	23	42	19	17	19	•			
VS8710-L10-10	Straight Bulkhead Coupling	10	25	43	22	19	22	•			
VS8710-L12-12	Straight Bulkhead Coupling	12	25	44	24	22	24	•			
VS8710-L15-15	Straight Bulkhead Coupling	15	27	46	27	27	30	•			
VS8710-L18-18	Straight Bulkhead Coupling	18	30	49	32	32	36	•			
VS8710-L22-22	Straight Bulkhead Coupling	22	33	51	36	36	41	•			
VS8710-L28-28	Straight Bulkhead Coupling	18	35	52	41	41	46	•			
VS8710-L35-35	Straight Bulkhead Coupling	35	40	58	50	50	55	•			
VS8710-L42-42	Straight Bulkhead Coupling	42	42	59	60	60	65	•			
VS8710-S06-06	Straight Bulkhead Coupling	6	27	44	19	17	19	•			
VS8710-S08-08	Straight Bulkhead Coupling	8	28	44	22	19	22	•			
VS8710-S10-10	Straight Bulkhead Coupling	10	31	46	24	22	24	•			
VS8710-S12-12	Straight Bulkhead Coupling	12	31	47	27	24	27	•			
VS8710-S14-14	Straight Bulkhead Coupling	14	35	50	30	27	30	•			
VS8710-S16-16	Straight Bulkhead Coupling	16	35	50	32	30	32	•			
VS8710-S20-20	Straight Bulkhead Coupling	20	39	55	41	36	41	•			
VS8710-S25-25	Straight Bulkhead Coupling	25	44	59	46	46	46	•			
VS8710-S30-30	Straight Bulkhead Coupling	30	48	64	50	50	50	•			
VS8710-S38-38	Straight Bulkhead Coupling	38	53	68	65	60	65	•			

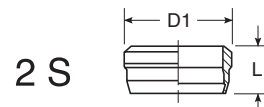
# Bulkhead Elbow VS8720 Series



Standard Material  
From Stock

PRODUCT ID	DESCRIPTION	D1	L1	L3	L4	S2	S3	S4	Standard Material From Stock			
									S	FG	SS	B
VS8720-L06-06	Bulkhead Elbow	6	27	14	42	12	14	17	•			
VS8720-L08-08	Bulkhead Elbow	8	29	17	42	12	17	19	•			
VS8720-L10-10	Bulkhead Elbow	10	30	18	43	14	19	22	•			
VS8720-L12-12	Bulkhead Elbow	12	32	20	44	17	22	24	•			
VS8720-L15-15	Bulkhead Elbow	15	36	23	46	19	27	30	•			
VS8720-L18-18	Bulkhead Elbow	18	40	24	49	24	36	32	•			
VS8720-L22-22	Bulkhead Elbow	22	44	30	51	27	36	41	•			
VS8720-L28-28	Bulkhead Elbow	28	47	34	52	36	41	46	•			
VS8720-L35-35	Bulkhead Elbow	35	56	39	58	41	50	55	•			
VS8720-L42-42	Bulkhead Elbow	42	63	43	59	50	60	65	•			
VS8720-S06-06	Bulkhead Elbow	6	31	17	44	12	17	19	•			
VS8720-S08-08	Bulkhead Elbow	8	32	18	44	14	19	22	•			
VS8720-S10-10	Bulkhead Elbow	10	34	20	46	17	22	24	•			
VS8720-S12-12	Bulkhead Elbow	12	38	21	47	17	24	27	•			
VS8720-S14-14	Bulkhead Elbow	14	40	23	50	19	27	30	•			
VS8720-S16-16	Bulkhead Elbow	16	43	24	50	24	30	32	•			
VS8720-S20-20	Bulkhead Elbow	20	48	30	55	27	36	41	•			
VS8720-S25-25	Bulkhead Elbow	25	54	34	59	46	46	36	•			
VS8720-S30-30	Bulkhead Elbow	30	62	39	64	41	51	50	•			
VS8720-S38-38	Bulkhead Elbow	38	72	43	68	50	60	65	•			

# Bite Ring VS8860 Series

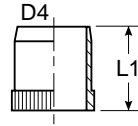


Standard Material  
From Stock

PRODUCT ID	DESCRIP.	D1	L	Standard Material From Stock			
				S	FG	SS	B
VS8860-L06	Bite Ring	6	8.5	•			
VS8860-L08	Bite Ring	8	8.5	•			
VS8860-L10	Bite Ring	10	9.5	•			
VS8860-L12	Bite Ring	12	9.5	•			
VS8860-L15	Bite Ring	15	10	•			
VS8860-L18	Bite Ring	18	10	•			
VS8860-L22	Bite Ring	22	11.5	•			
VS8860-L28	Bite Ring	28	11.5	•			
VS8860-L35	Bite Ring	35	13.5	•			
VS8860-L42	Bite Ring	42	13.5	•			
VS8860-LL04	Bite Ring	4	6.5	•			
VS8860-LL06	Bite Ring	6	7.5	•			
VS8860-LL08	Bite Ring	8	7.5	•			
VS8860-S14	Bite Ring	14	10	•			
VS8860-S16	Bite Ring	16	10	•			
VS8860-S20	Bite Ring	20	11.5	•			
VS8860-S25	Bite Ring	25	11.5	•			
VS8860-S30	Bite Ring	30	13.5	•			
VS8860-S38	Bite Ring	38	13.5	•			

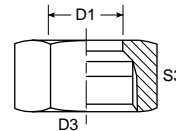
# DIN Metric Fittings

## Reinforcing Sleeve VS8890 Series



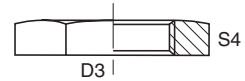
PRODUCT ID	DESCRIPTION	D4	L1	Standard Material From Stock			
				S	FG	SS	B
VS8890-04	Reinforcing Sleeve	4	15.5	•			
VS8890-04-5	Reinforcing Sleeve	4.5	12.5	•			
VS8890-05	Reinforcing Sleeve	5	12.5	•			
VS8890-06	Reinforcing Sleeve	6	15.5	•			
VS8890-06-5	Reinforcing Sleeve	6.5	12.5	•			
VS8890-07	Reinforcing Sleeve	7	17	•			
VS8890-08	Reinforcing Sleeve	8	16.5	•			
VS8890-08-5	Reinforcing Sleeve	8.5	16.5	•			
VS8890-09	Reinforcing Sleeve	9	16.5	•			
VS8890-10	Reinforcing Sleeve	10	16.5	•			
VS8890-10-5	Reinforcing Sleeve	10.5	16.5	•			
VS8890-12	Reinforcing Sleeve	12	18	•			
VS8890-12X15	Reinforcing Sleeve	12x15	17	•			
VS8890-13	Reinforcing Sleeve	13	17	•			
VS8890-15	Reinforcing Sleeve	15	17.5	•			
VS8890-16	Reinforcing Sleeve	16	17.5	•			
VS8890-18	Reinforcing Sleeve	18	22	•			
VS8890-19	Reinforcing Sleeve	19	18	•			
VS8890-20	Reinforcing Sleeve	20	18	•			
VS8890-24	Reinforcing Sleeve	24	18	•			
VS8890-25	Reinforcing Sleeve	25	18	•			
VS8890-31	Reinforcing Sleeve	31	22.5	•			

## Nut VS8900 Series



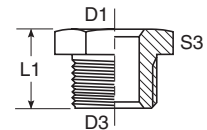
PRODUCT ID	DESC.	D1	D3	S3	Standard Material From Stock			
					S	FG	SS	B
VS8900-L06	Nut	6	M 12x1.5	14	•			
VS8900-L08	Nut	8	M 14x1.5	17	•			
VS8900-L10	Nut	10	M 16x1.5	19	•			
VS8900-L12	Nut	12	M 18x1.5	22	•			
VS8900-L15	Nut	15	M 22x1.5	27	•			
VS8900-L18	Nut	18	M 26x1.5	32	•			
VS8900-L22	Nut	22	M 30x2	36	•			
VS8900-L28	Nut	28	M 36x2	41	•			
VS8900-L35	Nut	35	M 45x2	50	•			
VS8900-L42	Nut	42	M 52x2	60	•			
VS8900-LL04	Nut	4	M 8x1	10	•			
VS8900-LL06	Nut	6	M 10x1	12	•			
VS8900-LL08	Nut	8	M 12x1	14	•			
VS8900-S06	Nut	8	M 16x1.5	19	•			
VS8900-S10	Nut	10	M 18x1.5	22	•			
VS8900-S12	Nut	14	M 22x1.5	27	•			
VS8900-S14	Nut	14	M 22x1.5	27	•			
VS8900-S16	Nut	16	M 24x1.5	30	•			
VS8900-S20	Nut	20	M 20x2	36	•			
VS8900-S25	Nut	25	M 36x2	46	•			
VS8900-S30	Nut	30	M 42x2	50	•			
VS8900-S38	Nut	38	M 52x2	60	•			

# Hexagonal Bulkhead Nut VS8970 Series



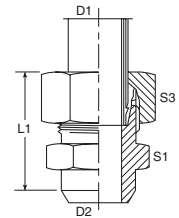
PRODUCT ID	DESCRIPTION	Tube OD	D3	S4	Standard Material From Stock			
					S	FB	SS	B
VS8970-L06	Hexagonal Bulkhead Nut	6	M 12x1.5	17	•			
VS8970-L08	Hexagonal Bulkhead Nut	8	M 14x1.5	19	•			
VS8970-L10	Hexagonal Bulkhead Nut	10	M 16x1.5	22	•			
VS8970-L12	Hexagonal Bulkhead Nut	12	M 18x1.5	24	•			
VS8970-L15	Hexagonal Bulkhead Nut	15	M 20x1.5	27	•			
VS8970-L18	Hexagonal Bulkhead Nut	18	M 22x1.5	30	•			
VS8970-L22	Hexagonal Bulkhead Nut	22	M 24x1.5	32	•			
VS8970-L28	Hexagonal Bulkhead Nut	28	M 26x1.5	36	•			
VS8970-L35	Hexagonal Bulkhead Nut	35	M 30x2	41	•			
VS8970-L42	Hexagonal Bulkhead Nut	42	M 36x2	46	•			
VS8970-S12	Hexagonal Bulkhead Nut	12	M 42x2	50	•			
VS8970-S16	Hexagonal Bulkhead Nut	16	M 45x2	55	•			
VS8970-S30	Hexagonal Bulkhead Nut	30	M 52x2	65	•			

# Internal Coupling Nut VS9000 Series



PRODUCT ID	DESCRIPTION	D1	D3	L1	S3	Standard Material From Stock			
						S	FB	SS	B
VS9000-L06	Internal Coupling Nut	6	M 12x1.5	16	12	•			
VS9000-L08	Internal Coupling Nut	8	M 14x1.5	16	14	•			
VS9000-L10	Internal Coupling Nut	10	M 16x1.5	17	17	•			
VS9000-L12	Internal Coupling Nut	12	M 18x1.5	18	19	•			
VS9000-LL04	Internal Coupling Nut	4	M 8x1	12	8	•			
VS9000-LL06	Internal Coupling Nut	6	M 10x1	13	10	•			
VS9000-LL08	Internal Coupling Nut	8	M 12x1	14	12	•			

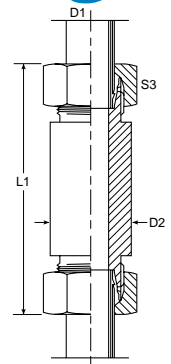
# Welding Boss VS9500 Series



PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S3	Standard Material From Stock			
							S	FB	SS	B
VS9500-L06 ES4	Welding Boss	6	10	29	12	14	•			
VS9500-L08 ES4	Welding Boss	8	12	31	14	17	•			
VS9500-L10 ES4	Welding Boss	10	14	33	17	19	•			
VS9500-L12 ES4	Welding Boss	12	16	33	19	22	•			
VS9500-L18 ES4	Welding Boss	12	16	33	19	22	•			
VS9500-L22 ES4	Welding Boss	22	27	45	32	36	•			
VS9500-L28 ES4	Welding Boss	28	32	47	41	41	•			
VS9500-L42 ES4	Welding Boss	42	46	58	55	60	•			
VS9500-S12 ES4	Welding Boss	12	17	41	22	24	•			
VS9500-S20 ES4	Welding Boss	20	26	51	32	36	•			

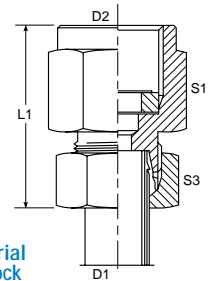
# DIN Metric Fittings

## Welding Bulkhead Connection VS9501 Series



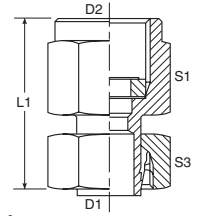
PRODUCT ID	DESCRIPTION	D1	D2	L1	S3	Standard Material From Stock			
						S	FG	SS	B
VS9501-L06	Welding Bulkhead Connection	6	18	85	14	•			
VS9501-L08	Welding Bulkhead Connection	8	20	85	17	•			
VS9501-L10	Welding Bulkhead Connection	10	22	87	19	•			
VS9501-L12	Welding Bulkhead Connection	12	25	87	22	•			
VS9501-L15	Welding Bulkhead Connection	15	28	100	27	•			
VS9501-L18	Welding Bulkhead Connection	18	32	101	32	•			
VS9501-L22	Welding Bulkhead Connection	22	36	105	36	•			
VS9501-L28	Welding Bulkhead Connection	28	40	106	41	•			
VS9501-L35	Welding Bulkhead Connection	35	50	114	50	•			
VS9501-L42	Welding Bulkhead Connection	42	60	115	60	•			
VS9501-S06	Welding Bulkhead Connection	6	20	89	17	•			
VS9501-S08	Welding Bulkhead Connection	8	22	89	19	•			
VS9501-S10	Welding Bulkhead Connection	10	25	91	22	•			
VS9501-S12	Welding Bulkhead Connection	12	28	91	24	•			
VS9501-S14	Welding Bulkhead Connection	14	30	107	27	•			
VS9501-S16	Welding Bulkhead Connection	16	35	107	30	•			
VS9501-S20	Welding Bulkhead Connection	20	38	114	36	•			
VS9501-S25	Welding Bulkhead Connection	25	45	120	46	•			
VS9501-S30	Welding Bulkhead Connection	30	50	126	50	•			
VS9501-S38	Welding Bulkhead Connection	38	60	133	60	•			

## Gauge Coupling BSP VS9600 Series

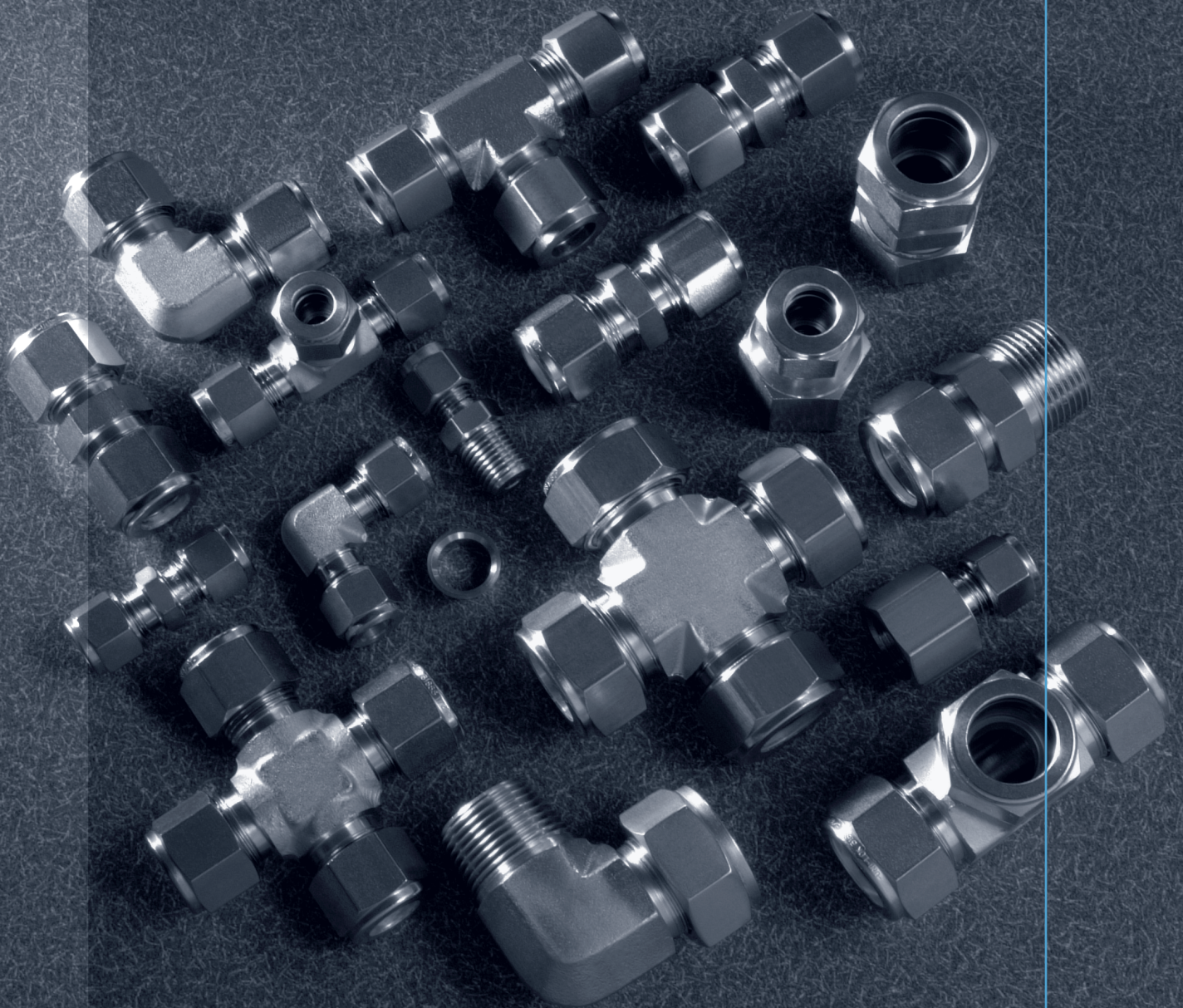


PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S3	Standard Material From Stock			
							S	FG	SS	B
VS9600-L06-04	Gauge Coupling BSP	6	G 1/4	37	19	14	•			
VS9600-L08-04	Gauge Coupling BSP	8	G 1/4	37	19	17	•			
VS9600-L10-04	Gauge Coupling BSP	10	G 1/4	38	19	19	•			
VS9600-L12-04	Gauge Coupling BSP	12	G 1/4	38	19	22	•			
VS9600-S06-08	Gauge Coupling BSP	6	G 1/2	46	27	17	•			
VS9600-S08-08	Gauge Coupling BSP	8	G 1/2	46	27	19	•			
VS9600-S10-08	Gauge Coupling BSP	10	G 1/2	47	27	22	•			
VS9600-S12-08	Gauge Coupling BSP	12	G 1/2	47	27	24	•			

# Gauge Coupling Male Stud Type VS9601 Series



PRODUCT ID	DESCRIPTION	D1	D2	L1	S1	S3	Standard Material From Stock			
							S	FG	SS	B
VS9601-L06-04	Gauge Coupling Male Stud Type	8	G 1/4	38	19	17	•			
VS9601-L08-04	Gauge Coupling Male Stud Type	8	G 1/4	38	19	17	•			
VS9601-L10-04	Gauge Coupling Male Stud Type	10	G 1/4	39.5	19	19	•			
VS9601-L12-04	Gauge Coupling Male Stud Type	12	G 1/4	40.5	19	22	•			
VS9601-S06-08	Gauge Coupling Male Stud Type	6	G 1/2	45	27	17	•			
VS9601-S08-08	Gauge Coupling Male Stud Type	8	G 1/2	45	27	19	•			
VS9601-S10-08	Gauge Coupling Male Stud Type	10	G 1/2	47	27	22	•			
VS9601-S12-08	Gauge Coupling Male Stud Type	12	G 1/2	47.5	27	24	•			



***Double-Ferrule Tube Fittings***



# Interchangeability

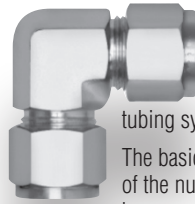
## **Brennan Double-Ferrule Compression**

**Tube Fittings are manufactured to be totally interchangeable and fully component intermixable with the Swagelok® and Parker A-LOK® tube fitting brands.**

## **Brennan Double-Ferrule Compression**

**Tube Fittings are totally interchangeable with tube fittings of certain other manufacturers including Parker CPI™ and HOKE Gyrolok®.**

# Introduction



## **Brennan's Double-Ferrule Compression Tube Fittings**

provide leak-proof, torque-free seals at all tubing connections. They eliminate potentially hazardous and expensive leaks in instrumentation, process, pneumatic, hydraulic, gas and other tubing systems.

The basic Double-Ferrule Tube Fitting is a four-piece fitting consisting of the nut, back ferrule, front ferrule and the body. When installed, it becomes a five-piece connection with the addition of the tubing to provide a solid leak-free joint.

The two ferrules grasp tightly around the tube with no damage to the tube wall. Exhaustive tests have proved that the tubing will yield before a Brennan Double-Ferrule joint starts leaking.

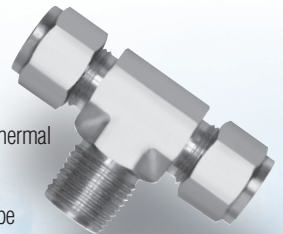
The secret behind the success of the Brennan Double-Ferrule Tube Fitting lies in the two-ferrule design, which combines geometry and metallurgy. All action in the fitting is an axial movement along the tube instead of a rotary motion to create the joint. This axial movement prevents transmission of any torque from a fitting to the tubing. Since there is no initial strain in the tubing, the making of the joint does not weaken the tubing.

Another advantage of the Brennan Double-Ferrule Tube Fitting is that the swaging action of the twin ferrules overcomes variations in tubing wall thickness, hardness and dimensional tolerance.

Brennan's Double-Ferrule Tube Fittings are easy to install and require no special tools. They are reusable several times and can withstand heavy impulse and vibration in both vacuum and pressure systems.

## **Brennan Double-Ferrule Compression Tube Fitting Features:**

- Self-aligning
- Work on thick and thin wall tubing
- Resist vibration
- Work on a variety of tube materials
- All components are made of the same material for thermal compatibility and corrosion resistance
- Resist temperature cycling
- Compensate for the variables encountered in the tube and materials
- Do not significantly reduce flow area



## **Performance**

- Work in vacuums, as well as at low and high pressures
- Seal at low cryogenic temperatures, as well as elevated temperatures rated for the tube
- Seal consistently over a wide range of temperature cycling
- Seal repeatedly under both make and remake conditions
- Resist pressure beyond the tubing burst point






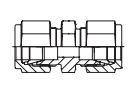
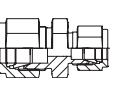
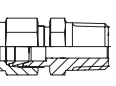
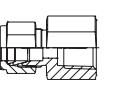
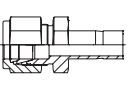
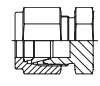
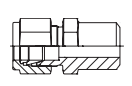
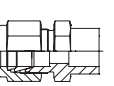
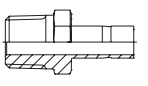
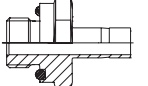
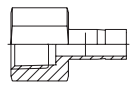
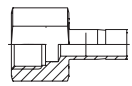
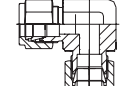
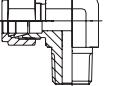
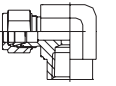
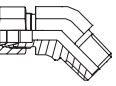
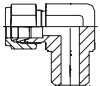
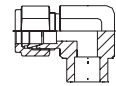
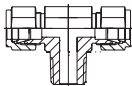
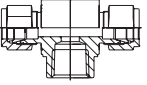
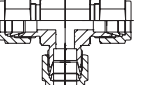
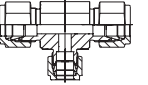
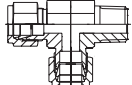
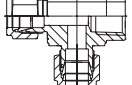
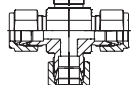
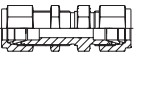

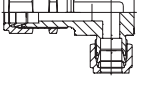
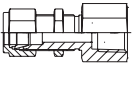
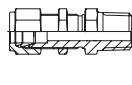
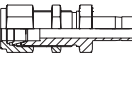
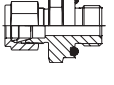
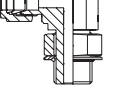
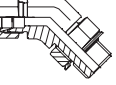
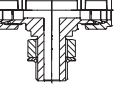
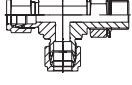
## **Assembly**

- Use geometry rather than torque for uniformity of make-up. (To complete the joint, it requires only a 1-1/4 turn after snug-tightening.)
- Do not require disassembly and inspection of ferrule swaging at every make-up
- Do not require any special tools for assembly

## **Service**

Brennan's Double-Ferrule Tube Fittings are available in a wide range of materials, sizes, connections and configurations from our local distributors and supported by substantial inventories at our distribution centers.

## Product Gallery

Plug  <b>N0304</b>	Nut  <b>N0318</b>	Back Ferrule  <b>N0319-B</b>	Front Ferrule  <b>N0319-F</b>	Ferrule Set  <b>N0319-S</b>	Union  <b>N2403</b>
Reducing Union  <b>N2403</b>	Male Connector  <b>N2404</b>	Female Connector  <b>N2405</b>	Reducer  <b>N2406</b>	Cap  <b>N2408</b>	Butt Weld Male Connector  <b>N2425</b>
Socket Weld Male Connector  <b>N2426</b>	Male Adapter  <b>N2428</b>	O-Seal Male Adapter  <b>N2429</b>	Female Adapter  <b>N2430</b>	Female Gage Adapter  <b>N2431</b>	Union Elbow  <b>N2500</b>
Male Elbow  <b>N2501</b>	Female Elbow  <b>N2502</b>	45 Degree Male Elbow  <b>N2503</b>	Butt Weld Male Elbow  <b>N2525</b>	Socket Weld Male Elbow  <b>N2526</b>	Male Branch Tee  <b>N2601</b>
Female Branch Tee  <b>N2602</b>	Union Tee  <b>N2603</b>	Reducing Union Tee  <b>N2603</b>	Male Run Tee  <b>N2605</b>	Female Run Tee  <b>N2606</b>	Cross  <b>N2650</b>
Bulkhead Union  <b>N2700-LN</b>	Bulkhead Reducing Union  <b>N2700-LN</b>	Bulkhead Union Elbow  <b>N2701-LN</b>	Bulkhead Female Connector  <b>N2705</b>	Bulkhead Male Connector  <b>N2706</b>	Bulkhead Reducer  <b>N2709</b>
O-Seal Male Connector  <b>N6400</b>	Positionable Male Elbow  <b>N6801</b>	45 Degree Pos. Male Elbow  <b>N6802</b>	Positionable Male Branch Tee  <b>N6803</b>	Positionable Male Run Tee  <b>N6804</b>	

- **Interchangeability**
- **Brennan Double-Ferrule Tube Fittings**
- **Product Gallery**
- **Tubing Selection**
  - Tubing Hardness
  - Tubing Wall Thickness
  - Tubing For Gas Service
  - Tubing Handling
- **Tubing Specifications**
- **Thread Specifications**
- **Assembly**
- **Pre-Swaging**
- **Brennan's Gap Inspections Gages**
- **Ordering Codes**
- **Fitting Type Designators**
- **Sizing Chart**
- **Cross Reference Chart**

## Tubing Selection

Proper selection, handling and installation of tubing are essential for reliable tubing system performance. While Brennan Industries is not a tubing manufacturer or supplier, we must stress the importance of carefully selecting high-quality tubing. Proper tubing selection is necessary to ensure safe and leak-free systems. Brennan Industries is happy to assist in tubing selection upon request.

Tubing selection is based on the material, hardness, wall thickness and surface finish. The ASTM specifications for various tubes cover material, hardness and wall thickness. They do not give details on the surface finish.

### Tubing Hardness

Tubing must always be softer than the fitting material. To achieve leak-free connections, it is important to use the recommended tubing hardness as explained in the Tubing Specifications section, leak-free connections will be achieved.

The biggest misunderstanding about tubing hardness is in the area of stainless steel tubing. Brennan's Stainless Steel Double-Ferrule Tube Fittings have been tested successfully with tubing hardness up to RB 90, the maximum hardness allowable under ASTM A 213 and A 269.

Although such tubing hardnesses are permissible and Brennan's Double-Ferrule Tube Fittings will perform satisfactorily on them, they will not provide the maximum advantage and performance for tubes with hardnesses above RB 80. It is suggested that, when purchasing stainless steel tubes to ASTM A 213/A 269, you specify that the hardness of the tubes should not exceed RB 80.

The best results are obtained where the stainless steel tubing hardness is in the range RB 70-74. Such tubing lowers installation costs because it is more easily bent and installed.

Tubing installers should perform the full 1-1/4 turn after snug-tightening to ensure proper joints. This will provide the best performance and is especially true in the case of harder tubing where higher torque is required.

RB 80 maximum hardness is a suggestion and not a restriction against the use of harder tubing. However, if the tubing hardness exceeds RB 90, special fittings should be considered.

### Tubing Wall Thickness

The allowable pressure rating of tubing for the wide range of wall thickness is calculated from "S" values as specified by ANSI Code B 31.1. The range of tubing wall thicknesses varies from 0.028" to 0.109" in the inch OD series. These wall thicknesses are generally preferred for tube sizes up to 1". For higher tube sizes, these wall thicknesses may be increased to 0.125 and 0.167".

Upon request, Brennan Industries will provide working pressure ratings as per ANSI Code B31.1 for various wall thicknesses in the above-mentioned ranges for inch size tubing.

# General Technical

## Tubing For Gas Service

For maximum safety and the prevention of surface defects in any gas system, it is recommended that tubing wall thicknesses are not less than those shown in this table:

Tube O.D.	Suggested Minimum Wall Thickness
1/16"	.028"
1/8"	.028"
1/4"	.028"
5/16"	.035"
3/8"	.035"
1/2"	.041"
5/8"	.052"
3/4"	.062"
7/8"	.073"
1"	.083"
1-1/4"	.104"
1-1/2"	.125"
2"	.167"

Light gases such as helium, hydrogen, nitrogen, etc. have very small molecules, which can escape through even the smallest leak path created by surface defects on the tubing. As the tube OD increases, so does the likelihood of a scratch or other surface defect interfering with proper sealing.

For the most successful connection for gas service, all installation instructions should be followed carefully and the heavier permissible wall thickness of tubing should be selected. A heavy wall thickness resists ferrule action more than a thin wall thickness. This allows the ferrules to coin out minor surface imperfections. A thin wall tube will collapse, offering little resistance to ferrule action during assembly. This reduces the chance of coining out surface defects, which is essential for gas service.

## Tubing Handling

Scratches on tube OD are a potential source of problems in leak-tight tubing systems. Good handling practices can greatly reduce scratches and protect tubing surface finishes.

Tubing should never be dragged out of a tubing rack. Particularly in sizes 3/4" and larger, the weight of the tubing being retrieved is sufficient to gouge the OD if there are any burrs on the ends of the other tubes in the rack.

Tubing should never be dragged across cement, asphalt, gravel or any other surface, which could scratch the surface and create potential leak paths.

Sharp tube cutters should be maintained and tube ends should always be deburred. This allows easier entrance of the tube into the fitting bore and helps to assure that the tubing will go all the way through the ferrules without damaging the ferrule's sealing edge.

## Tubing Specifications

### Carbon Steel Tubing

Seamless, soft annealed carbon steel tubing to ASTM A 179, Din 2391 or equivalent. 4-1 safety factor considering tensile strength of 47,000 psi at room temperature. For higher temperature service, apply the reducing factors for elevated temperature operation as specified in Table 302.3 1A and 304.1.2 of the code for pressure piping in ANSI B31.3.

Recommended tube hardness is RB 72 or less.

The tubing should be suitable for bending and flaring and free of all surface defects and imperfections.

### Stainless Steel Tubing

Seamless, annealed 304 or 316 Stainless Steel tubing to ASTM A 269 or A 213 or equivalent. 4-1 safety factor considering tensile strength of 75,000 psi at room temperature.

Tube hardness should not exceed RB 80. The preferable hardness range is RB 70-74.

Tubing should be suitable for bending and flaring, and should be free of any surface defects and imperfections. A derating factor must be used for drawn and welded tubing.

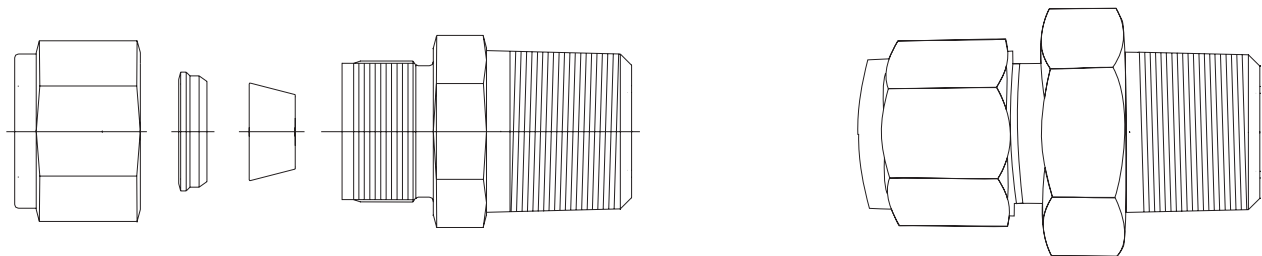
### Copper Tubing

Annealed, soft, seamless copper tubing to ASTM B 75 or equivalent. 5-1 safety factor considering tensile strength of 30,000 psi at room temperature. Maximum hardness of the tubing is not to exceed RB 50. Preferred hardness range is RB 40-45.

## Thread Specifications

Brennan's connectors have one or more tubing end connections and there are a variety of pipe threads for which Brennan's Double-Ferrule Tube Fittings are available. Two of the most popular thread connections are the American National Pipe Thread (NPT) and the British Standard Pipe Threads (BSP). These threads meet the standards of individual countries as well as the codified ISO standards. All Brennan fittings with pipe threads or stud end threads conform to the specifications below:

- American National Pipe Thread (NPT): Reference specification ASA B2.1; 1960
- ISO Parallel Pipe Thread (British Standard Pipe Thread): Reference specifications BS 2779, ISO 228/1, DIN 259, JIS B 0202, IS 2643
- ISO Taper Pipe Thread (British Standard Pipe Taper Thread): Reference specifications BS 21, ISO 7/1, DIN 2999, JIS B0203, IS 554
- Unified National Pipe Threads: Reference specifications ASA B1.1; 1964



## Assembly

Brennan Tube Fittings are shipped completely assembled and finger-tightened. They are ready for immediate use. Disassembly before use can result in dirt or foreign material getting into the fitting, which can cause leaks. Brennan Tube Fittings are installed in three easy steps:

### Step 1

Insert the tubing into the Brennan Tube Fitting. Make sure that the tubing rests firmly on the shoulders of the fitting and that the nut is snug-tight. In this position, the tube does not rotate by hand.

### Step 2

Before tightening the Brennan nut, scribe the nut at the 6 o'clock position.

### Step 3

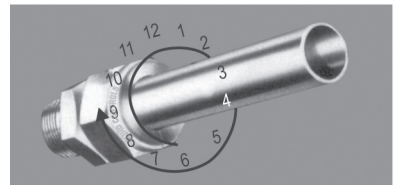
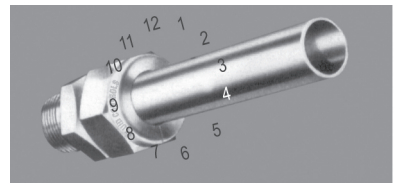
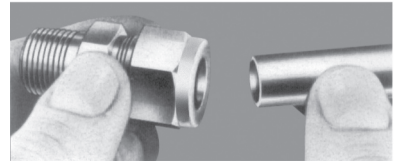
While holding the fitting body steady with a backup wrench, tighten the nut 1-1/4 turns\*.

Watch the scribe mark and make one complete revolution. Then continue turning to the 9 o'clock position.

\* For 1/8" and 3/16" size tube fittings, only 3/4 turns from finger-tight is required.

### Reassembly Instructions

Insert tube into fitting body and hand tighten. Using wrench, rotate the nut approximately 1/4 turn to original 1-1/4 turns position. Then snug slightly with wrench.



## Pre-Swaging

Sometimes, Brennan Tube Fittings must be installed in cramped quarters or overhead where ladders must be used. It is usually advantageous to use a pre-swaging tool on the tubing in an open ground area, thus pre-swaging the ferrules onto the tubing. The tubing is then removed from the pre-swaging tool. The tubing (with nut and pre-swaged ferrules) can now be attached to the fitting merely by following the reassembly instructions.

### Step 1

Assemble the Brennan nut and ferrules to the pre-swaging tool. Insert the tubing until it bottoms out in the fitting body. Then tighten the nut 1-1/4 turns.

### Step 2

Loosen the nut and remove the tubing with the pre-swaged ferrules from the pre-swaging tool.

### Step 3

The connection can now be made simply by snug-tightening the nut as described in the retightening instructions.

Brennan hydraulic swaging units are now available in 1/2", 5/8", 3/4" and 1" sizes. For further information, consult your local Brennan sales and service representative.

## Brennan Gap Inspection Gages

Brennan Gap Inspection Gages are designed to assure that a fitting has been sufficiently pulled up. They are particularly applicable to systems where fittings are to be tightened in difficult or inaccessible locations, as well as systems where insufficient pull-up could cause potentially dangerous or expensive consequences.

Brennan Gap Inspection Gages are inserted between the nut and body of a tube fitting after pull-up. If the gage will fit in the gap between the nut and body hex, the fitting nut has not been tightened sufficiently.



## Ordering Codes

Example →

**N2404-04-04-SS**

**Fitting Type**  
(Male Connector)

**Tube O.D.**  
in six-  
teenths  
of an inch  
1/4" O.D.

**Pipe Size**  
in six-  
teenths  
of an inch  
1/4" NPT

**Material**  
SS = stainless steel, type 316  
B = brass

- The largest tube end size is first. The smaller tube end or pipe thread size follows.
- Additional fitting materials and thread specifications are available upon request.

NOTE: No suffix is required for Carbon Steel fittings.

## Fitting Type Designators

Designator	Description	Designator	Description
N0304	Plug	N2525	Butt Weld Male Elbow
N0318	Nut	N2526	Socket Weld Male Elbow
N0319-B	Back Ferrule	N2601	Male Branch Tee
N0319-F	Front Ferrule	N2602	Female Branch Tee
N0319-S	Ferrule Set	N2603	Union Tee
N2403	Union	N2603	Reducing Union Tee
N2403	Reducing Union	N2605	Male Run Tee
N2404	Male Connector	N2606	Female Run Tee
N2405	Female Connector	N2650	Cross
N2406	Reducer	N2700-LN	Bulkhead Union
N2408	Cap	N2700-LN	Bulkhead Reducing Union
N2425	Butt Weld Male Connector	N2701-LN	Bulkhead Union Elbow
N2426	Socket Weld Male Connector	N2705	Bulkhead Female Connector
N2428	Male Adapter	N2706	Bulkhead Male Connector
N2429	O-Seal Male Adapter	N2709	Bulkhead Reducer
N2430	Female Adapter	N6400	O-Seal Male Connector
N2431	Female Gage Adapter	N6801	Positionable Male Elbow
N2500	Union Elbow	N6802	45 Degree Pos. Male Elbow
N2501	Male Elbow	N6803	Positionable Male Branch Tee
N2502	Female Elbow	N6804	Positionable Male Run Tee
N2503	45 Degree Male Elbow		

- Additional Fitting Types Are Available Upon Request.

# General Technical

## Sizing Chart

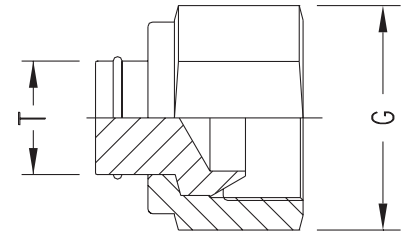
Size No.	Tube-To-Pipe or Tube-To-Tube	
	Tube O.D.	Pipe Thread or Tube O.D.
1-1	1/16	1/16
1-2	1/16	1/8
2-1	1/8	1/16
2-2	1/8	1/8
2-4	1/8	1/4
3-2	3/16	1/8
3-4	3/16	1/4
4-2	1/4	1/8
4-4	1/4	1/4
4-6	1/4	3/8
4-8	1/4	1/2
5-2	5/16	1/8
5-4	5/16	1/4
6-2	3/8	1/8
6-4	3/8	1/4
6-6	3/8	3/8
6-8	3/8	1/2
8-4	1/2	1/4
8-6	1/2	3/8
8-8	1/2	1/2
8-12	1/2	3/4
10-6	5/8	3/8
10-8	5/8	1/2
10-12	5/8	3/4
12-8	3/4	1/2
12-12	3/4	3/4
14-12	7/8	3/4
14-16	7/8	1
16-12	1	3/4
16-16	1	1
20-20	1-1/4	1-1/4
24-24	1-1/2	1-1/2
32-32	2	2

- Additional sizes are available upon request.

# Plug NO304

## INCH OD Tubes

Part No.	T Tube OD	G A/F
NO304-C-01	1/16	8
NO304-C-02	1/8	11
NO304-C-04	1/4	14
NO304-C-05	5/16	16
NO304-C-06	3/8	17
NO304-C-08	1/2	22
NO304-C-10	5/8	25
NO304-C-12	3/4	28.5
NO304-C-14	7/8	32
NO304-C-16	1	38
NO304-C-20	1-1/4	50
NO304-C-24	1-1/2	57
NO304-C-32	2	76



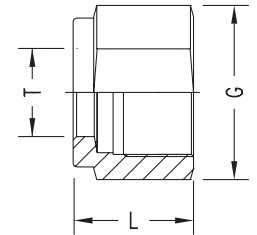
### Special Installation Instructions For Adapters And Plugs

From finger-tight, tighten nut 1/4 turn only. Further connections are made by wrench tightening slightly after snugging nut by hand.

# Nut NO318

## INCH OD Tubes

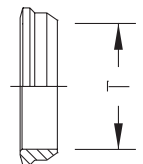
Part No.	T Tube OD	L	G A/F
NO318-01	1/16	8.0	8
NO318-02	1/8	12.0	11
NO318-04	1/4	12.7	14
NO318-05	5/16	14.0	16
NO318-06	3/8	14.5	17
NO318-08	1/2	17.5	22
NO318-10	5/8	17.5	25
NO318-12	3/4	17.5	28.5
NO318-14	7/8	17.5	32
NO318-16	1	20.6	38
NO318-20	1-1/4	31.8	50
NO318-24	1-1/2	38.0	57
NO318-32	2	52.5	76



# Back Ferrule NO319-B

## INCH OD Tubes

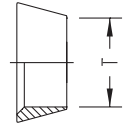
Part No.	T Tube OD
NO319-B-01	1/16
NO319-B-02	1/8
NO319-B-04	1/4
NO319-B-05	5/16
NO319-B-06	3/8
NO319-B-08	1/2
NO319-B-10	5/8
NO319-B-12	3/4
NO319-B-14	7/8
NO319-B-16	1
NO319-B-20	1-1/4
NO319-B-24	1-1/2
NO319-B-32	2



# Double-Ferrule Tube Fittings

## Front Ferrule NO319-F

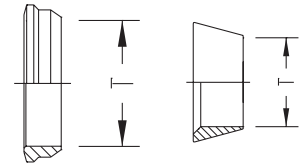
INCH OD Tubes



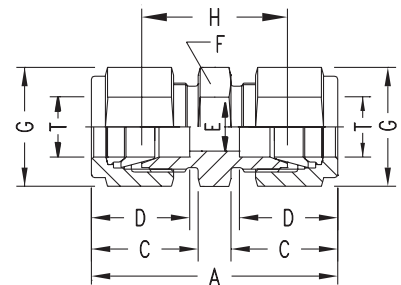
Part No.	T Tube OD
N0319-F-01	1/16
N0319-F-02	1/8
N0319-F-04	1/4
N0319-F-05	5/16
N0319-F-06	3/8
N0319-F-08	1/2
N0319-F-10	5/8
N0319-F-12	3/4
N0319-F-14	7/8
N0319-F-16	1
N0319-F-20	1-1/4
N0319-F-24	1-1/2
N0319-F-32	2

## Ferrule Set NO319-S

INCH OD Tubes



Part No.	T Tube OD
N0319-S-01	1/16
N0319-S-02	1/8
N0319-S-04	1/4
N0319-S-05	5/16
N0319-S-06	3/8
N0319-S-08	1/2
N0319-S-10	5/8
N0319-S-12	3/4
N0319-S-14	7/8
N0319-S-16	1
N0319-S-20	1-1/4
N0319-S-24	1-1/2
N0319-S-32	2



## Union N2403

INCH OD Tubes

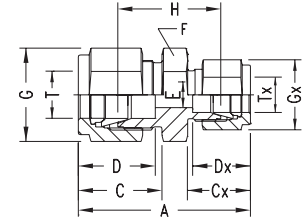
Part No.	T Tube OD	A	C	D	E min.	F A/F	G A/F	H
N2403-01-01	1/16	25.1	11.0	8.6	1.3	8	8	17.5
N2403-02-02	1/8	35.6	15.3	12.7	2.4	11	11	22.4
N2403-04-04	1/4	40.9	17.8	15.3	4.8	14	14	26.2
N2403-05-05	5/16	42.9	18.5	16.3	6.3	14	16	28.2
N2403-06-06	3/8	45.0	19.3	16.8	7.1	16	17	30.2
N2403-08-08	1/2	51.3	21.8	22.9	10.4	22	22	31.0
N2403-10-10	5/8	52.0	21.8	24.4	12.7	24	25	31.8
N2403-12-12	3/4	53.6	21.8	24.4	15.8	27	28.5	33.3
N2403-14-14	7/8	55.2	21.8	25.9	18.2	30	32	34.8
N2403-16-16	1	64.8	26.4	31.2	22.3	35	38	40.4
N2403-20-20	1-1/4	92.2	38.9	41.2	27.6	46	50	48.0
N2403-24-24	1-1/2	108.0	45.2	50.0	34.0	55	57	53.6
N2403-32-32	2	149.4	62.7	67.6	46.0	70	76	74.7

**BRENNAN INDUSTRIES**

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# Reducing Union N2403

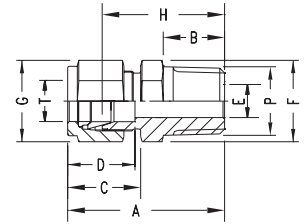
INCH OD Tubes



Part No.	T Tube OD	Tx Tube OD	A	C	Cx	D	Dx	E min.	F A/F	G A/F	Gx A/F	H
N2403-04-02	1/4	1/8	38.6	17.8	15.3	15.3	12.7	2.4	14	14	11	24.6
N2403-05-02	5/16	1/8	39.6	18.6	15.3	16.3	12.7	2.4	14	16	11	25.7
N2403-05-04	5/16	1/4	42.2	18.6	17.8	16.3	15.3	4.8	14	16	14	27.5
N2403-06-02	3/8	1/8	40.9	19.3	15.3	16.8	12.7	2.4	16	17	11	26.9
N2403-06-04	3/8	1/4	43.2	19.3	17.8	16.8	15.3	4.8	16	17	14	28.5
N2403-08-02	1/2	1/8	45.2	21.8	15.3	22.9	12.7	2.4	22	22	11	28.5
N2403-08-04	1/2	1/4	47.0	21.8	17.8	22.9	15.3	4.8	22	22	14	29.5
N2403-08-06	1/2	3/8	48.5	21.8	19.3	22.9	16.8	7.1	22	22	17	31.0
N2403-10-06	5/8	3/8	49.3	21.8	19.3	24.4	16.8	7.1	24	25	17	31.8
N2403-10-08	5/8	1/2	52.0	21.8	21.8	24.4	22.9	10.4	24	25	22	31.8
N2403-12-04	3/4	1/4	49.3	21.8	17.8	24.4	15.3	4.8	27	28.5	14	31.8
N2403-12-06	3/4	3/8	50.8	21.8	19.3	24.4	16.8	7.1	27	28.5	17	33.3
N2403-12-08	3/4	1/2	53.6	21.8	21.8	24.4	22.9	10.4	27	28.5	22	33.3
N2403-16-08	1	1/2	60.5	26.5	21.8	31.2	22.9	10.4	35	38	22	38.1
N2403-16-12	1	3/4	60.5	26.5	21.8	31.2	24.4	15.8	35	38	28.5	38.1
N2403-20-16	1-1/4	1	92.2	38.9	26.4	41.2	31.2	22.3	45	50	38	48.0
N2403-24-20	1-1/2	1-1/4	60.5	26.5	21.8	31.2	24.4	15.8	55	57	50	53.6

# Male Connector N2404

INCH OD Tubes x Male NPT Threads



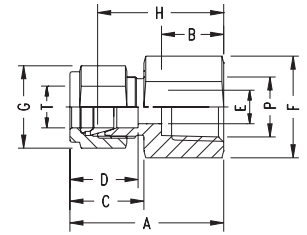
Part No.	T Tube OD	P NPT Male	A	B	C	D	E min.	F A/F	G A/F	H
N2404-01-01	1/16	1/16	23.9	9.6	11.0	8.6	1.3	8	8	20.0
N2404-01-02	1/16	1/8	26.2	9.6	11.0	8.6	1.3	14	8	22.4
N2404-02-02	1/8	1/8	30.5	9.6	15.3	12.7	2.4	11	11	23.9
N2404-02-04	1/8	1/4	35.6	14.3	15.3	12.7	2.4	14	11	29.0
N2404-04-02	1/4	1/8	32.8	9.6	17.8	15.3	4.8	14	14	25.4
N2404-04-04	1/4	1/4	37.8	14.3	17.8	15.3	4.8	14	14	30.5
N2404-04-06	1/4	3/8	38.4	14.3	17.8	15.3	4.8	19	14	31.0
N2404-04-08	1/4	1/2	44.7	19.1	17.8	15.3	4.8	22	14	37.4
N2404-05-04	5/16	1/4	38.6	14.3	18.5	16.3	6.3	14	16	31.2
N2404-06-02	3/8	1/8	35.3	9.6	19.3	16.8	4.8	16	17	27.9
N2404-06-04	3/8	1/4	39.8	14.3	19.3	16.8	7.1	16	17	32.5
N2404-06-06	3/8	3/8	39.8	14.3	19.3	16.8	7.1	19	17	32.5
N2404-06-08	3/8	1/2	41.2	19.1	19.3	16.8	7.1	22	17	38.9
N2404-08-04	1/2	1/4	43.4	14.3	21.8	22.9	7.1	22	22	33.3
N2404-08-06	1/2	3/8	43.4	14.3	21.8	22.9	9.6	22	22	33.3
N2404-08-08	1/2	1/2	49.0	19.1	21.8	22.9	10.4	22	22	38.9
N2404-08-12	1/2	3/4	50.5	19.1	21.8	22.9	10.4	27	22	40.4
N2404-08-16	1/2	1	57.1	23.8	21.8	22.9	10.4	35	22	47.0
N2404-10-06	5/8	3/8	44.2	14.3	21.8	24.4	9.6	24	25	34.0
N2404-10-08	5/8	1/2	49.0	19.1	21.8	24.4	10.4	24	25	38.9
N2404-12-08	3/4	1/2	50.5	19.1	21.8	24.4	10.4	27	28.5	40.4
N2404-12-12	3/4	3/4	50.5	19.1	21.8	24.4	15.8	27	28.5	40.4
N2404-12-16	3/4	1	57.1	23.8	21.8	24.4	15.8	35	28.5	47.0
N2404-14-12	7/8	3/4	50.5	19.1	21.8	26.0	15.8	30	32	40.4
N2404-16-08	1	1/2	57.4	19.1	26.4	31.2	10.4	35	38	45.2
N2404-16-12	1	3/4	57.4	19.1	26.4	31.2	15.8	35	38	45.2
N2404-16-16	1	1	62.2	23.8	26.4	31.2	22.3	35	38	50.0
N2404-20-16	1-1/4	1	77.2	23.8	38.9	41.2	22.3	46	50	55.2
N2404-20-20	1-1/4	1-1/4	77.2	23.8	38.9	41.2	27.6	46	50	55.2
N2404-24-24	1-1/2	1-1/2	88.9	26.2	45.2	50.0	34.0	55	57	61.7
N2404-32-32	2	2	113.5	26.9	62.7	67.6	46.0	70	76	76.2

Bored-Through Connectors available in all of these sizes. Add suffix "BT" to the above part numbers to designate bored-through male connector.

# Double-Ferrule Tube Fittings

## Female Connector N2405

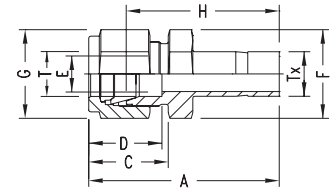
INCH OD Tubes x Female NPT Threads



Part No.	T Tube OD	P NPT Female	A	B	C	D	E min.	F A/F	G A/F	H
N2405-01-01	1/16	1/16	23.6	9.9	11.0	8.6	1.3	11	8	19.8
N2405-01-02	1/16	1/8	24.4	10.4	11.0	8.6	1.3	14	8	20.6
N2405-02-02	1/8	1/8	28.7	10.4	15.3	12.7	2.4	14	11	22.1
N2405-02-04	1/8	1/4	33.6	15.0	15.3	12.7	2.4	19	11	26.9
N2405-04-02	1/4	1/8	31.2	9.9	17.8	15.3	4.8	14	14	23.9
N2405-04-04	1/4	1/4	35.8	15.0	17.8	15.3	4.8	19	14	28.5
N2405-04-06	1/4	3/8	37.6	15.0	17.8	15.3	4.8	22	14	30.2
N2405-04-08	1/4	1/2	42.4	19.8	17.8	15.3	4.8	27	14	35.0
N2405-05-02	5/16	1/8	32.0	10.4	18.5	16.3	6.3	14	16	24.6
N2405-05-04	5/16	1/4	36.8	15.0	18.5	16.3	6.3	19	16	29.5
N2405-06-02	3/8	1/8	32.8	10.4	19.3	16.8	7.1	16	17	25.4
N2405-06-04	3/8	1/4	37.6	15.0	19.3	16.8	7.1	19	17	30.2
N2405-06-06	3/8	3/8	39.1	15.0	19.3	16.8	7.1	22	17	31.8
N2405-06-08	3/8	1/2	43.9	19.8	19.3	16.8	7.1	27	17	36.6
N2405-08-04	1/2	1/4	40.4	15.0	21.8	22.9	10.4	22	22	30.2
N2405-08-06	1/2	3/8	41.9	15.0	21.8	22.9	10.4	22	22	30.2
N2405-08-08	1/2	1/2	46.7	19.8	21.8	22.9	10.4	27	22	36.6
N2405-08-12	1/2	3/4	48.3	20.6	21.8	22.9	10.4	32	22	38.1
N2405-10-06	5/8	3/8	41.9	15.0	21.8	24.4	12.7	24	25	31.8
N2405-10-08	5/8	1/2	46.7	19.8	21.8	24.4	12.7	27	25	36.6
N2405-12-08	3/4	1/2	46.7	19.8	21.8	24.4	15.8	27	28.5	36.6
N2405-12-12	3/4	3/4	48.3	20.6	21.8	24.4	15.8	35	28.5	38.1
N2405-14-12	7/8	3/4	49.8	20.6	21.8	25.9	18.3	35	32	39.6
N2405-16-12	1	3/4	53.4	20.6	26.4	31.2	22.3	35	38	41.2
N2405-16-16	1	1	62.3	25.4	26.4	31.2	22.3	41	38	50.0
N2405-20-20	1-1/4	1-1/4	74.6	25.4	38.9	41.2	27.6	55	50	52.6
N2405-24-24	1-1/2	1-1/2	83.3	27.6	45.2	50.0	34.0	60	60	56.2

## Reducer N2406

INCH OD Tubes To INCH OD Ports



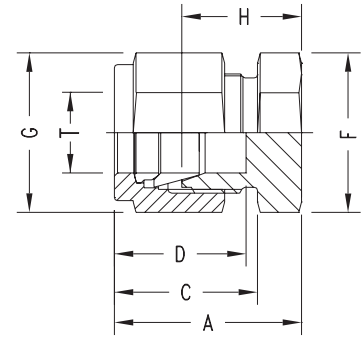
Part No.	T Tube OD	Tx Tube OD	A	C	D	E min.	F A/F	G A/F	H
N2406-02-02	1/8	1/8	33.5	15.3	12.7	2.0	11	11	26.9
N2406-02-04	1/8	1/4	36.0	15.3	12.7	4.8	11	11	29.5
N2406-04-02	1/4	1/8	36.8	17.8	15.3	2.0	14	14	29.5
N2406-04-04	1/4	1/4	39.1	17.8	15.3	4.8	14	14	31.8
N2406-04-06	1/4	3/8	40.6	17.8	15.3	4.8	14	14	33.3
N2406-04-08	1/4	1/2	46.3	17.8	15.3	4.8	14	14	38.9
N2406-05-06	5/16	3/8	41.9	18.6	16.3	6.3	14	16	34.6
N2406-05-08	5/16	1/2	46.5	18.6	16.3	6.3	14	16	40.2
N2406-06-04	3/8	1/4	41.4	19.3	16.8	7.1	16	17	34.0
N2406-06-06	3/8	3/8	43.2	19.3	16.8	7.1	16	17	35.8
N2406-06-08	3/8	1/2	48.5	19.3	16.8	7.1	16	17	41.2
N2406-08-04	1/2	1/4	45.0	21.8	22.9	4.8	22	22	34.8
N2406-08-06	1/2	3/8	46.7	21.8	22.9	7.1	22	22	36.6
N2406-08-08	1/2	1/2	52.3	21.8	22.9	9.9	22	22	42.2
N2406-08-12	1/2	3/4	53.8	21.8	22.9	10.4	22	22	43.7
N2406-08-16	1/2	1	60.2	21.8	22.9	10.4	22	22	50.0
N2406-10-12	10-12	3/4	54.6	21.8	24.4	12.7	24	25	44.5
N2406-10-14	10-12	7/8	56.2	21.8	24.4	12.7	24	25	46.0
N2406-12-08	3/4	1/2	54.6	21.8	24.4	9.9	27	28.5	44.5
N2406-12-16	12-16	1	62.5	21.8	24.4	15.8	27	28.5	52.3
N2406-16-20	16-20	1-1/4	80.5	26.4	31.2	22.3	35	38	68.3
N2406-16-24	16-24	1-1/2	89.2	26.4	31.2	22.3	41	38	77.0

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# Cap N2408

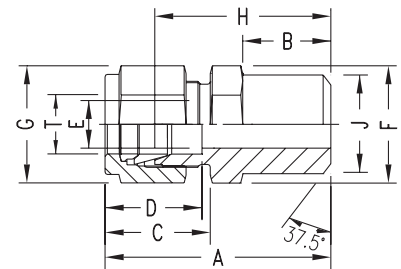
INCH OD Tubes



Part No.	T Tube OD	A	C	D	F A/F	G A/F	H
N2408-01	1/16	13.0	11.0	8.6	11	8	11.2
N2408-02	1/8	20.0	15.3	12.7	11	11	13.5
N2408-04	1/4	23.4	17.8	15.3	14	14	16.0
N2408-05	5/16	24.4	18.5	16.3	16	16	17.0
N2408-06	3/8	25.7	19.3	16.8	17	17	18.3
N2408-08	1/2	29.2	21.8	22.9	22	22	19.0
N2408-10	5/8	30.0	21.8	24.4	24	25	19.8
N2408-12	3/4	31.5	21.8	24.4	27	28.5	21.4
N2408-14	7/8	34.0	21.8	25.9	35	32	23.9
N2408-16	1	38.4	26.4	31.2	35	38	26.2
N2408-20	1-1/4	53.3	38.9	41.2	46	50	31.2
N2408-24	1-1/2	64.5	45.2	50.0	55	57	37.4
N2408-32	2	88.6	62.7	67.6	70.0	76.0	49.3

# Butt Weld Male Connector N2425

INCH OD Tubes To Pipe

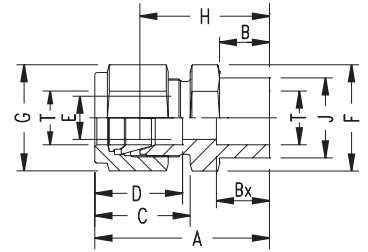


Part No.	T Tube OD	Pipe Weld Male	A	B	C	D	E min.	F A/F	G A/F	H	J
N2425-02-02	1/8	1/8	30.5	9.6	15.3	12.7	2.4	11	11	23.9	10.3
N2425-04-02	1/4	1/8	32.8	9.6	17.8	15.3	4.8	14	14	25.4	10.3
N2425-04-04	1/4	1/4	37.8	14.3	17.8	15.3	4.8	14	14	30.5	13.7
N2425-05-02	5/16	1/8	34.0	9.6	18.5	16.3	5.1	14	16	26.7	10.3
N2425-05-04	5/16	1/4	38.6	14.3	18.5	16.3	6.3	16	16	31.2	13.7
N2425-06-04	3/8	1/4	39.9	14.3	19.3	16.8	7.1	16	17	32.5	13.7
N2425-06-06	3/8	3/8	39.9	14.3	19.3	16.8	7.1	17	17	32.5	17.2
N2425-06-08	3/8	1/2	46.3	19.1	19.3	16.8	7.1	22	17	38.9	21.3
N2425-08-06	1/2	3/8	43.4	14.3	21.8	22.9	10.4	22	22	33.3	17.2
N2425-08-08	1/2	1/2	49.0	19.1	21.8	22.9	10.4	22	22	38.9	21.3
N2425-08-12	1/2	3/4	50.5	19.1	21.8	22.9	10.4	27	22	40.4	26.7
N2425-10-08	5/8	1/2	49.0	19.1	21.8	24.4	12.7	24	25	38.9	21.3
N2425-12-12	3/4	3/4	50.5	19.1	21.8	24.4	15.8	27	29	40.4	26.7
N2425-16-16	1	1	62.2	23.8	26.4	31.2	22.3	35	38	50.0	33.4
N2425-20-20	1-1/4	1-1/4	77.2	23.8	38.9	41.2	27.6	46	50	55.2	42.2
N2425-24-24	1-1/2	1-1/2	88.9	26.2	45.2	50.0	34	55	60	61.7	48.3

# Double-Ferrule Tube Fittings

## Socket Weld Male Connector N2426

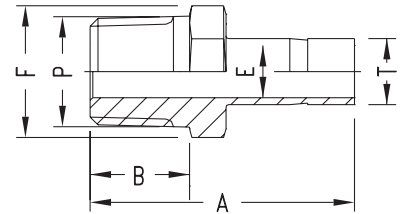
INCH OD Tubes



Part No.	T Tube OD	A	B	Bx	C	D	E min.	F A/F	G A/F	H	J
N2426-02-02	1/8	29.0	8.6	6.4	15.3	12.7	2.4	11	11	22.9	7.9
N2426-04-04	1/4	33.5	10.4	7.9	17.8	5.3	4.8	14	14	26.2	11.2
N2426-06-06	3/8	37.6	12.0	9.6	19.3	16.8	7.1	16	17	30.3	15.8
N2426-08-08	1/2	41.2	12.0	12.7	21.8	22.9	10.4	22	22	31.0	19.1
N2426-12-12	3/4	43.4	12.0	14.3	21.8	24.4	15.8	27	28.5	33.3	26.7
N2426-16-16	1	52.6	14.3	19.1	26.4	31.2	22.3	35	38	40.4	33.3
N2426-20-20	1-1/4	72.4	19.1	19.1	38.9	41.2	27.6	45	50	50.3	42.0
N2426-24-24	1-1/2	81.8	19.1	23.8	45.2	50.0	34.0	55	57	54.6	50.0

## Male Adapter N2428

INCH OD Tubes x Male NPT Threads

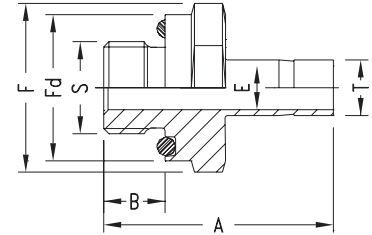


Part No.	T Tube OD	P NPT Male	A	B	E min.	F A/F
N2428-02-02	1/8	1/8	29.5	9.6	4.8	11
N2428-02-04	1/8	1/4	34.8	14.4	7.1	14
N2428-04-02	1/4	1/8	31.8	9.6	4.8	11
N2428-04-04	1/4	1/4	37.0	14.3	4.8	14
N2428-04-06	1/4	3/8	37.8	14.3	4.8	19
N2428-04-08	1/4	1/2	43.4	19.1	4.8	22
N2428-05-04	5/16	1/4	38.1	14.3	6.3	14
N2428-06-04	3/8	1/4	38.9	14.3	7.1	14
N2428-06-06	3/8	3/8	39.6	14.3	7.1	19
N2428-06-08	3/8	1/2	45.2	19.1	7.1	22
N2428-08-04	1/2	1/4	44.5	14.3	7.1	14
N2428-08-06	1/2	3/8	45.2	14.3	9.9	19
N2428-08-08	1/2	1/2	50.8	19.1	9.9	22
N2428-10-08	5/8	1/2	52.3	19.1	11.9	22
N2428-12-08	3/4	1/2	52.3	19.1	11.9	22
N2428-12-12	3/4	3/4	52.3	19.1	15.0	27
N2428-16-12	1	3/4	58.7	19.1	15.7	27
N2428-16-16	1	1	66.0	23.8	20.3	35
N2428-20-20	1-1/4	1-1/4	80.3	23.8	27.6	45
N2428-24-24	1-1/2	1-1/2	94.5	26.2	33.2	55



# O-Seal Male Adapter N2429

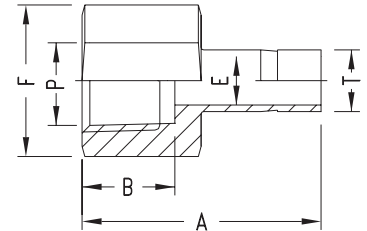
INCH OD Tubes x Male Straight Threads - UNF



Part No.	T Tube OD	S UNF Male	A	B	E min.	F	Fd A/F	O Ring Part No.
N2429-02-02	1/8	5/16-24	32.5	8.6	2.4	14	13.8	1 OPU
N2429-04-04	1/4	7/16-24	39.2	10.4	4.8	19	18.8	2 OPU
N2429-05-05	5/16	1/2-24	41.7	11.2	6.3	22	21.8	3 OPU
N2429-06-06	3/8	9/16-24	43.2	12.0	7.1	24	23.6	4 OPU
N2429-08-08	1/2	3/4-24	49.5	12.0	9.9	27	26.8	6 OPU
N2429-12-12	3/4	1-1/16-12	55.0	14.3	15.0	38	37.8	12 OPU
N2429-16-16	1	1-5/16-12	62.5	14.3	19.8	45	44.0	16 OPU
N2429-20-20	1-1/4	1-5/8-12	79.5	18.3	27.4	55	54.0	20 OPU
N2429-24-24	1-1/2	1-7/8-12	92.2	19.8	33.3	60	58.0	24 OPU

# Female Adapter N2430

INCH OD Tubes X Female NPT Threads

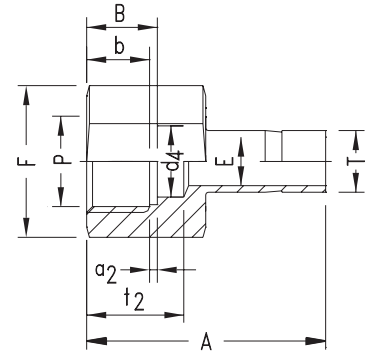


Part No.	T Tube OD	P NPT Female	A	B	E min.	F A/F
N2430-02-02	1/8	1/8	31.5	10.4	2.4	14
N2430-02-04	1/8	1/4	35.3	15.0	2.4	19
N2430-04-02	1/4	1/8	33.0	10.4	4.8	14
N2430-04-04	1/4	1/4	37.0	15.0	4.8	19
N2430-04-06	1/4	3/8	39.4	15.0	4.8	22
N2430-04-08	1/4	1/2	45.5	19.8	4.8	27
N2430-05-04	5/16	1/4	37.6	15.0	6.3	19
N2430-06-04	3/8	1/4	38.1	15.0	7.1	19
N2430-06-06	3/8	3/8	40.4	15.0	7.1	22
N2430-06-08	3/8	1/2	46.7	19.8	7.1	27
N2430-08-04	1/2	1/4	43.5	15.0	9.9	19
N2430-08-06	1/2	3/8	45.5	15.0	9.9	22
N2430-08-08	1/2	1/2	51.8	19.8	9.9	27
N2430-10-08	5/8	1/2	53.0	19.8	12.7	27
N2430-12-08	3/4	1/2	52.8	19.8	15.0	27
N2430-12-12	3/4	3/4	52.8	20.6	15.0	35
N2430-12-16	3/4	1	58.4	25.4	15.0	41
N2430-16-12	1	3/4	60.7	20.6	20.3	35
N2430-16-16	1	1	64.3	25.4	20.3	41
N2430-20-20	1-1/4	1-1/4	77.7	25.4	27.6	55
N2430-24-24	1-1/2	1-1/2	88.9	27.6	33.2	60

# Double-Ferrule Tube Fittings

## Female Gage Adapter N2431

INCH OD Ports X Female ISO Parallel Threads (gage)

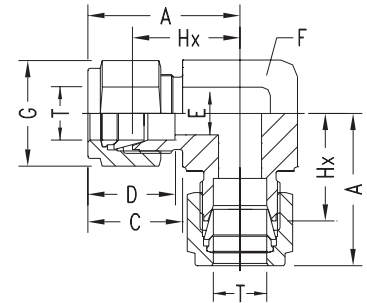


Part No.	T Tube OD	P ISO Female	A	B	E min.	F A/F	a2	d4	b	t2
N2431-04-04	1/4	1/4	35.3	13.0	4.8	19	1.6	5.8	9.4	17.0
N2431-06-06	3/8	3/8	39.4	14.2	6.6	24	1.6	—	9.9	—
N2431-08-08	1/2	1/2	45.7	18.8	7.1	27	1.6	—	14.5	—

No seal is made around the male thread. Instead, a gasket is dropped into the flat bottom in the female thread, and the end of the male threaded end exerts a load on the gasket to seal.

## Union Elbow N2500

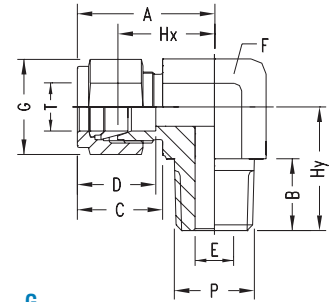
INCH OD Tubes



Part No.	T Tube OD	A	C	D	E min.	F A/F	G	Hx
N2500-01-01	1/16	17.8	11.0	8.6	1.3	11	8	14.0
N2500-02-02	1/8	22.4	15.3	12.7	2.4	11	11	15.8
N2500-04-04	1/4	26.9	17.8	15.3	4.8	14	14	19.6
N2500-05-05	5/16	28.7	18.5	16.3	6.3	16	16	21.3
N2500-06-06	3/8	30.5	19.3	16.8	7.1	17	17	23.2
N2500-08-08	1/2	36.0	21.8	22.9	10.4	22	22	25.9
N2500-10-10	5/8	38.1	21.8	24.4	12.7	24	25	27.9
N2500-12-12	3/4	39.9	21.8	24.4	15.8	27	28.5	29.7
N2500-14-14	7/8	44.7	21.8	25.9	18.2	35	32	34.6
N2500-16-16	1	49.0	26.4	31.2	22.3	35	38	36.8
N2500-20-20	1-1/4	66.6	38.9	41.2	27.6	46	50	44.5
N2500-24-24	1-1/2	78.0	45.2	50.0	34.0	55	57	50.8
N2500-32-32	2	107.2	62.7	67.6	46.0	70	76	69.9

# Male Elbow N2501

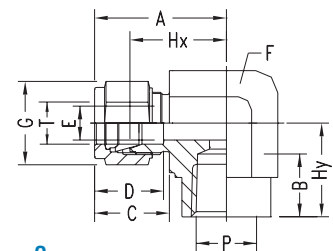
INCH OD Tubes x Male NPT Thread



Part No.	T Tube OD	P NPT Male	A	B	C	D	E min.	F A/F	G A/F	Hx	Hy
N2501-01-01	1/16	1/16	19.0	9.6	10.9	8.6	1.3	11	11	15.3	17.8
N2501-01-02	1/16	1/8	19.0	9.6	10.9	8.6	1.3	11	11	15.3	17.8
N2501-02-02	1/8	1/8	23.6	9.6	15.3	12.7	2.4	11	11	17.0	17.8
N2501-02-04	1/8	1/4	24.6	14.3	15.3	12.7	2.4	14	11	18.0	23.4
N2501-04-02	1/4	1/8	26.9	9.6	17.8	5.3	4.8	14	14	19.6	18.8
N2501-04-04	1/4	1/4	26.9	14.3	17.8	15.3	4.8	14	14	19.6	23.4
N2501-04-06	1/4	3/8	29.7	14.3	17.8	15.3	4.8	17	14	22.4	26.2
N2501-04-08	1/4	1/2	31.8	19.1	17.8	15.3	4.8	22	14	24.4	33.0
N2501-05-04	5/16	1/4	28.7	9.6	18.5	16.3	6.3	14	16	21.3	24.4
N2501-06-02	3/8	1/8	30.5	9.6	19.3	16.8	4.8	14	17	23.1	20.9
N2501-06-04	3/8	1/4	30.5	14.3	19.3	16.8	7.1	17	17	23.1	25.4
N2501-06-06	3/8	3/8	31.2	14.3	19.3	16.8	7.1	17	17	23.9	26.2
N2501-06-08	3/8	1/2	33.3	19.1	19.3	16.8	7.1	22	17	25.9	33.0
N2501-08-04	1/2	1/4	36.0	14.3	21.8	22.9	4.8	22	22	25.9	28.2
N2501-08-06	1/2	3/8	36.0	14.3	21.8	22.9	9.6	22	22	25.9	28.2
N2501-08-08	1/2	1/2	36.0	19.1	21.8	22.9	10.4	22	22	25.9	33.0
N2501-08-12	1/2	3/4	39.9	19.1	21.8	22.9	10.4	27	22	29.7	36.8
N2501-10-08	5/8	1/2	38.1	19.1	21.8	24.4	11.9	24	25	27.9	35.0
N2501-12-08	3/4	1/2	39.9	19.1	21.8	24.4	11.9	27	28.5	29.7	36.8
N2501-12-12	3/4	3/4	39.9	19.1	21.8	24.4	15.8	27	28.5	29.7	36.8
N2501-14-12	7/8	3/4	44.7	19.1	21.8	25.9	15.8	35	32	34.5	41.6
N2501-16-12	1	3/4	49.0	19.1	26.4	31.2	15.8	35	38	36.8	41.6
N2501-16-16	1	1	49.0	23.8	26.4	31.2	22.3	35	38	36.8	46.5
N2501-20-20	1-1/4	1-1/4	66.5	23.8	38.8	41.1	27.6	46	50	44.5	47.8
N2501-24-24	1-1/2	1-1/2	78.0	26.2	45.2	50.0	34.0	55	57	50.8	60.4
N2501-32-32	2	2	107.2	26.9	62.7	67.6	46.0	70	76	69.9	70.6

# Female Elbow N2502

INCH OD Tubes x Female NPT Threads

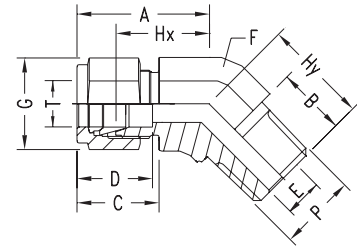


Part No.	T Tube OD	P NPT Female	A	B	C	D	E min.	F A/F	G A/F	Hx	Hy
N2502-02-02	1/8	1/8	24.6	10.4	15.3	12.7	2.4	14	11	18.0	19.0
N2502-02-04	1/8	1/4	27.4	15.0	15.3	12.7	2.4	19	11	20.8	22.4
N2502-04-02	1/4	1/8	26.9	10.4	17.8	15.3	4.8	14	14	19.6	19.0
N2502-04-04	1/4	1/4	29.7	15.0	17.8	15.3	4.8	19	14	22.4	22.4
N2502-04-06	1/4	3/8	31.8	15.0	17.8	15.3	4.8	22	14	24.4	22.4
N2502-04-08	1/4	1/2	34.6	19.8	17.8	15.3	4.8	27	14	27.2	28.5
N2502-05-02	5/16	1/8	28.7	10.4	17.8	15.3	6.3	19	14	21.4	19.1
N2502-05-04	5/16	1/4	30.5	15.0	18.5	16.3	6.3	22	16	23.2	22.4
N2502-06-02	3/8	1/8	30.5	10.4	19.3	16.8	7.1	17	17	23.2	19.1
N2502-06-04	3/8	1/4	31.2	15.0	19.3	16.8	7.1	19	17	23.9	22.4
N2502-06-06	3/8	3/8	33.3	15.0	19.3	16.8	7.1	22	17	25.9	22.4
N2502-06-08	3/8	1/2	36.0	19.8	19.3	16.8	7.1	27	17	28.7	28.5
N2502-08-04	1/2	1/4	36.0	15.0	21.8	22.9	7.1	22	22	25.9	22.4
N2502-08-06	1/2	3/8	36.0	15.0	21.8	22.9	10.4	22	22	25.9	22.4
N2502-08-08	1/2	1/2	38.9	19.8	21.8	22.9	10.4	27	22	28.7	28.5
N2502-10-06	5/8	3/8	38.1	15.0	21.8	22.9	12.7	24	22	28.0	22.4
N2502-10-08	5/8	1/2	39.9	19.8	21.8	24.4	12.7	27	25	29.7	28.5
N2502-12-08	3/4	1/2	39.9	19.8	21.8	24.4	15.8	27	28.5	29.7	28.5
N2502-12-12	3/4	3/4	44.7	20.6	21.8	24.4	15.8	35	28.5	34.6	31.8
N2502-14-12	7/8	3/4	44.7	20.6	21.8	25.9	18.2	35	32	34.6	31.8
N2502-16-12	1	3/4	49.0	20.6	26.4	31.2	22.3	35	38	36.8	31.8
N2502-16-16	1	1	53.6	25.4	26.4	31.2	22.3	41	38	41.4	38.1

# Double-Ferrule Tube Fittings

## 45° Male Elbow N2503

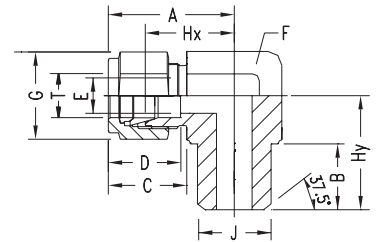
INCH OD Tubes x Male NPT Threads



Part No.	T Tube OD	P NPT Male	A	B	C	D	E min.	F A/F	G A/F	Hx	Hy
N2503-04-02	1/4	1/8	24.6	9.6	17.8	15.3	4.8	14	14	17.3	16.5
N2503-04-04	1/4	1/4	24.6	14.3	17.8	15.3	4.8	14	14	17.3	21.0
N2503-06-02	3/8	1/8	27.9	9.6	19.3	16.8	4.8	14	17	20.6	18.3
N2503-06-04	3/8	1/4	27.9	14.3	19.3	16.8	7.1	17	17	20.6	22.9
N2503-06-06	3/8	3/8	29.2	14.3	19.3	16.8	7.1	17	17	21.8	24.1
N2503-08-06	1/2	3/8	32.0	14.3	21.8	22.9	9.6	22	22	21.8	24.1
N2503-08-08	1/2	1/2	32.0	19.1	21.8	22.9	10.4	22	22	21.8	29.0
N2503-12-12	3/4	3/4	34.0	19.1	21.8	24.4	15.8	27	28.5	23.9	31.8
N2503-16-16	1	1	40.4	23.8	26.4	31.2	22.3	35	38	26.2	37.8

## Butt Weld Male Elbow N2525

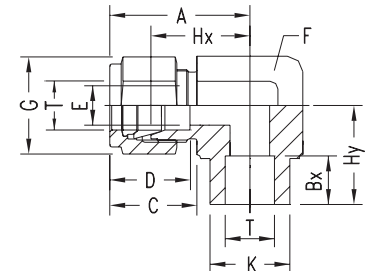
INCH OD Tubes to Pipe



Part No.	T Tube OD	Pipe Weld Male	A	B	C	D	E min.	F A/F	G A/F	Hx	Hy	J
N2525-04-02	1/4	1/8	27.0	9.6	17.8	15.3	4.8	14	14	19.6	18.8	10.3
N2525-04-04	1/4	1/4	27.0	14.3	17.8	15.3	4.8	14	14	19.6	23.4	13.7
N2525-06-04	3/8	1/4	30.5	14.3	19.3	16.8	7.1	16	17	23.1	25.9	13.7
N2525-08-08	1/2	1/2	36.0	19.1	21.8	22.9	10.4	22	22	25.9	33.0	21.3
N2525-12-12	3/4	3/4	39.9	19.1	21.8	24.4	15.8	27	29	29.7	36.8	26.7
N2525-16-16	1	1	49.0	23.8	26.4	31.2	22.3	35	38	36.8	46.5	33.4
N2525-20-20	1-1/4	1-1/4	66.5	23.8	38.9	41.2	27.6	45	50	44.5	47.8	42.2
N2525-24-24	1-1/2	1-1/2	78.0	26.2	45.2	50.0	34.0	50	57	50.8	60.5	48.3

## Socket Weld Male Elbow N2526

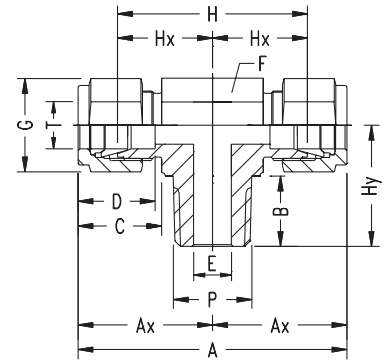
INCH OD Tubes



Part No.	T Tube OD	A	Bx	C	D	E min.	F A/F	G A/F	Hx	Hy	K
N2526-04-04	1/4	27.0	7.9	17.8	15.3	4.8	14	14	19.6	19.6	12.7
N2526-06-06	3/8	30.5	9.6	19.3	16.8	7.1	16	17	23.1	23.1	15.8
N2526-08-08	1/2	36.0	12.7	21.8	22.9	10.4	22	22	25.9	25.9	20.6
N2526-12-12	3/4	39.9	14.3	21.8	24.4	15.8	27	28.5	29.7	29.7	27.0
N2526-16-16	1	49.0	19.1	26.4	31.2	22.3	35	38	36.8	36.8	35.0
N2526-20-20	1-1/4	66.5	19.1	38.9	41.2	27.6	45	50	44.5	47.8	43.0
N2526-24-24	1-1/2	78.0	23.8	45.2	50.0	34.0	50	57	50.8	60.4	48.0

# Male Branch Tee N2601

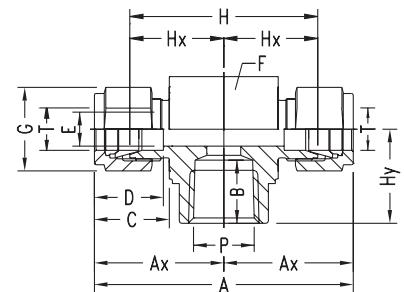
INCH OD Tubes x Male NPT Threads



Part No.	T Tube OD	P NPT Male	A	Ax	B	C	D	E min.	F	G A/F	H A/F	Hx	Hy
N2601-02-02-02	1/8	1/8	47.2	23.6	9.6	15.3	12.7	2.4	11	11	34.0	17.0	17.8
N2601-02-02-04	1/8	1/4	49.2	24.6	14.3	15.3	12.7	2.4	14	11	36.0	18.0	23.4
N2601-04-04-02	1/4	1/8	53.8	26.9	9.6	17.8	15.3	4.8	14	14	39.2	19.6	18.8
N2601-04-04-04	1/4	1/4	53.8	26.9	14.3	17.8	15.3	4.8	14	14	39.2	19.6	23.4
N2601-04-04-06	1/4	3/8	59.4	29.7	14.3	17.8	15.3	4.8	17	14	44.8	22.4	26.2
N2601-04-04-08	1/4	1/2	63.6	31.8	19.1	17.8	15.3	4.8	22	14	44.8	24.4	33.0
N2601-06-06-04	3/8	1/4	61.0	30.5	14.3	19.3	16.8	7.1	17	17	46.2	23.1	25.4
N2601-06-06-06	3/8	3/8	62.4	31.2	14.3	19.3	16.8	7.1	17	17	47.8	23.9	26.2
N2601-06-06-08	3/8	1/2	66.0	33.0	19.1	19.3	16.8	7.1	22	17	51.8	25.9	33.0
N2601-08-08-04	1/2	1/4	72.0	36.0	14.3	21.8	22.9	4.8	22	22	51.8	25.9	28.2
N2601-08-08-06	1/2	3/8	72.0	36.0	14.3	21.8	22.9	9.6	22	22	51.8	25.9	28.2
N2601-08-08-08	1/2	1/2	72.0	36.0	19.1	21.8	22.9	10.4	22	22	51.8	25.9	33.0
N2601-10-10-08	5/8	1/2	76.2	38.1	19.1	21.8	24.4	11.9	22	25	55.8	27.9	35.0
N2601-12-12-08	3/4	1/2	79.8	39.9	19.1	21.8	24.4	11.9	27	29	59.4	29.7	36.8
N2601-12-12-12	3/4	3/4	79.8	39.9	19.1	21.8	24.4	15.8	27	29	59.4	29.7	36.8
N2601-16-16-12	1	3/4	98.0	49.0	19.1	26.4	31	15.8	35	38	73.6	36.8	41.6
N2601-16-16-16	1	1	98.0	49.0	23.8	26.4	31	22.3	35	38	73.6	36.8	46.5
N2601-20-20-20	1-1/4	1-1/4	133.0	66.5	23.8	38.8	41.1	27.6	46	50	89.0	44.5	47.6
N2601-24-24-24	1-1/2	1-1/2	156.0	78.0	26.2	45.2	50.0	34.0	55	57	101.6	50.8	60.4

# Female Branch Tee N2602

INCH OD Tubes x Female NPT Threads

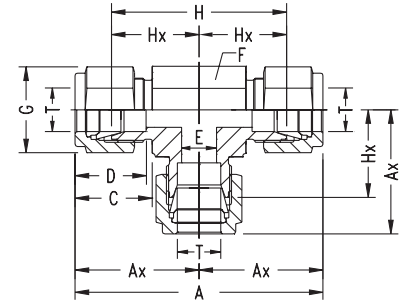


Part No.	T Tube OD	P NPT Female	A	Ax	B	C	D	E min.	F A/F	G A/F	H	Hx	Hy
N2602-02-02-02	1/8	1/8	49.2	24.6	10.4	15.3	12.7	2.4	14	11	36.0	18.0	19.0
N2602-04-04-02	1/4	1/8	53.8	26.9	10.4	17.8	15.3	4.8	14	14	39.2	19.6	19.0
N2602-04-04-04	1/4	1/4	59.4	27.9	15.0	17.8	15.3	4.8	19	14	44.8	22.4	22.4
N2602-06-06-04	3/8	1/4	62.4	31.2	15.0	19.3	16.8	7.1	16	16	47.8	23.9	22.4
N2602-06-06-06	3/8	3/8	66.6	33.3	15.0	19.3	16.8	7.1	19	16	51.8	25.9	22.4
N2602-08-08-06	1/2	3/8	72.0	36.0	15.0	21.8	22.9	10.4	19	19	51.8	25.9	22.4
N2602-08-08-08	1/2	1/2	77.8	38.9	19.8	21.8	22.9	10.4	22	22	57.4	28.7	28.5
N2602-12-12-12	3/4	3/4	89.4	44.7	20.6	21.8	24.4	15.8	35	22	69.2	34.6	31.8
N2602-16-16-12	1	3/4	98.0	49.0	20.6	26.4	31.2	22.3	35	25	73.6	36.8	31.8
N2602-16-16-16	1	1	107.2	53.6	25.4	26.4	31.2	22.3	41	38	82.8	41.4	38.1

# Double-Ferrule Tube Fittings

## Union Tee N2603

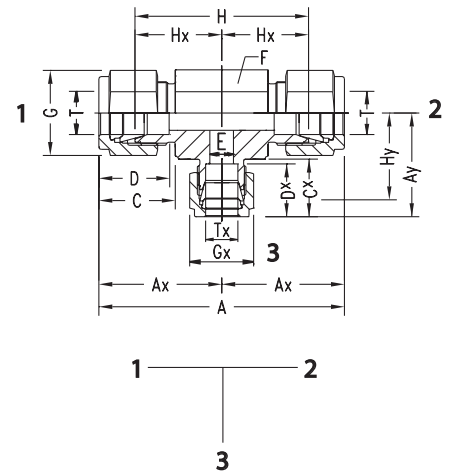
INCH OD Tubes



Part No.	T Tube OD	A	Ax	C	D	E min.	F A/F	G A/F	H	Hx
N2603-01-01-01	1/16	35.6	17.8	11.0	8.6	1.3	11	8	28.0	14.0
N2603-02-02-02	1/8	44.8	22.4	15.3	12.7	2.4	11	11	31.6	15.8
N2603-04-04-04	1/4	53.8	26.9	17.8	15.3	4.8	14	14	39.2	19.6
N2603-05-05-05	5/16	57.4	28.7	18.5	16.3	6.3	16	16	42.6	21.3
N2603-06-06-06	3/8	61.0	30.5	19.3	16.8	7.1	17	17	46.4	23.2
N2603-08-08-08	1/2	72.0	36.0	21.8	22.9	10.4	22	22	51.8	25.9
N2603-10-10-10	5/8	76.2	38.1	21.8	24.4	12.7	24	25	55.8	27.9
N2603-12-12-12	3/4	79.8	39.9	21.8	24.4	15.8	27	28.5	59.4	29.7
N2603-14-14-14	7/8	89.4	44.7	21.8	25.9	18.2	35	32	69.2	34.6
N2603-16-16-16	1	98.0	49.0	26.4	31.2	22.3	35	38	73.6	36.8
N2603-20-20-20	1-1/4	133.2	66.6	38.9	41.2	27.6	46	50	89.0	44.5
N2603-24-24-24	1-1/2	156.0	78.0	45.2	50.0	34.0	55	57	101.6	50.8
N2603-32-32-32	2	214.4	107.4	62.7	67.9	46.0	70	76	139.8	69.9

## Reducing Union Tee N2603

INCH OD Tubes

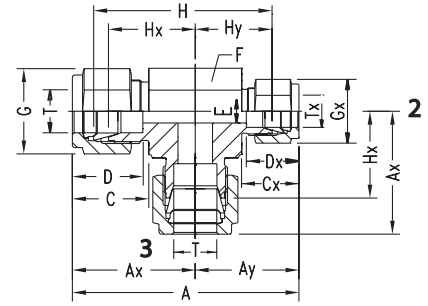


Part No.	T Tube OD	Tx Tube OD	A	Ax	Ay	C	Cx	D	Dx	E min.	F A/F	G A/F	Gx A/F	H	Hx	Hy
N2603-06-06-04	3/8	1/4	61.0	30.5	29.0	19.3	17.8	16.8	15.3	4.8	16	17	14	46.2	23.1	21.6
N2603-08-08-04	1/2	1/4	72.2	36.0	31.8	21.8	17.8	22.9	15.3	4.8	22	22	14	51.8	25.9	24.4
N2603-08-08-06	1/2	3/8	72.2	36.0	33.3	21.8	19.3	22.9	16.8	7.1	22	22	17	51.8	25.9	25.9
N2603-12-12-06	3/4	3/8	79.8	39.9	37.0	21.8	19.3	24.4	16.8	7.1	27	28.5	17	59.4	29.7	29.7
N2603-12-12-08	3/4	1/2	79.8	39.9	39.9	21.8	21.8	24.4	22.9	10.4	27	28.5	22	59.4	29.7	29.7
N2603-16-16-06	1	3/8	98.0	49.0	41.9	26.4	19.3	31.2	16.8	7.1	35	38	17	73.6	36.8	34.5
N2603-16-16-08	1	1/2	98.0	49.0	44.7	26.4	22.9	31.2	21.8	10.4	35	38	22	73.6	36.8	34.5
N2603-16-16-12	1	3/4	98.0	49.0	44.7	26.4	24.4	31.2	24.4	15.8	35	38	28.5	73.6	36.8	34.5
N2603-20-20-16	1-1/4	1	135.6	67.8	55.1	38.9	26.4	41.2	31.2	22.3	46	50	38	91.4	45.7	42.9
N2603-24-24-16	1-1/2	1	157.5	78.7	60.0	44.7	26.4	50.0	31.2	22.3	55	57	38	103.2	51.6	47.8

continued on next page

# Reducing Union Tee N2603 *Continued*

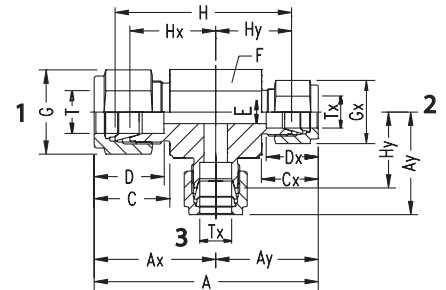
INCH OD Tubes



Part No.	T Tube OD	Tx Tube OD	A	Ax	Ay	C	Cx	D	Dx	E min.	F A/F	G A/F	Gx A/F	H	Hx	Hy
N2603-06-04-06	3/8	1/4	59.4	30.5	29.0	19.3	17.8	16.8	15.3	4.8	16	17	14	44.7	23.1	21.6
N2603-08-04-08	1/2	1/4	67.7	36.0	31.7	21.8	17.8	22.9	15.3	4.8	22	22	14	50.2	25.9	24.3
N2603-08-06-08	1/2	3/8	69.3	36.0	33.3	21.8	19.3	22.9	16.8	7.1	22	22	17	51.8	25.9	25.9
N2603-12-06-12	3/4	3/8	77.0	39.9	37.1	21.8	19.3	24.4	16.8	7.1	27	28.5	17	59.4	29.7	29.7
N2603-12-08-12	3/4	1/2	79.8	39.9	39.9	21.8	21.8	24.4	22.9	10.4	27	28.5	22	59.4	29.7	29.7
N2603-16-06-16	1	3/8	98.9	49.0	41.9	26.4	19.3	31.2	16.8	7.1	35	38	17	71.3	36.8	34.5
N2603-16-08-16	1	1/2	93.7	49.0	44.7	26.4	21.8	31.2	21.8	10.4	35	38	22	71.3	36.8	34.5
N2603-16-12-16	1	3/4	93.7	49.0	44.7	26.4	21.8	31.2	24.4	15.8	35	38	28.5	71.3	36.8	34.5
N2603-20-16-20	1-1/4	1	119.6	67.8	53.0	38.9	26.4	41.2	31.2	18.2	46	50	38	85.3	45.7	40.8
N2603-24-20-24	1-1/2	1	150.9	78.7	72.9	45.2	38.9	50.0	41.3	27.6	55	57	38	101.6	50.8	50.8

# Reducing Union Tee N2603 *Continued*

INCH OD Tubes



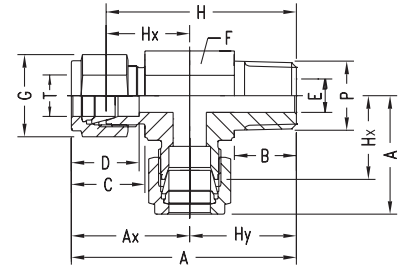
Part No.	T Tube OD	Tx Tube OD	A	Ax	Ay	C	Cx	D	Dx	E min.	F A/F	G A/F	Gx A/F	H	Hx	Hy
N2603-06-04-04	3/8	1/4	59.6	30.6	29.0	19.3	17.8	16.8	15.3	4.8	16	17	14	44.8	23.2	21.6
N2603-08-04-04	1/2	1/4	67.7	36.0	31.7	21.8	17.8	22.9	15.3	4.8	22	22	14	50.2	25.9	24.3
N2603-08-06-06	1/2	3/8	69.3	36.0	33.2	21.8	19.3	22.9	16.8	7.1	22	22	17	51.8	25.9	25.9
N2603-12-06-06	3/4	3/8	77.0	38.9	37.0	21.8	19.3	24.4	16.8	7.1	27	28.5	17	59.4	29.7	29.7
N2603-12-08-08	3/4	1/2	79.8	39.9	39.9	21.8	21.8	24.4	22.9	10.4	27	28.5	22	59.4	29.7	29.7
N2603-16-06-06	1	3/8	99.9	39.9	41.9	26.4	19.3	31.2	16.8	7.1	35	38	17	71.3	36.8	34.5
N2603-16-08-08	1	1/2	93.7	49.0	44.7	26.4	22.9	31.2	21.8	10.4	35	38	22	71.3	36.8	34.5
N2603-16-12-12	1	3/4	93.7	49.0	44.7	26.4	24.4	31.2	24.4	15.8	35	38	28.5	71.3	36.8	34.5
N2603-20-16-16	1-1/4	1	122.9	67.8	55.1	38.9	26.4	41.2	31.2	22.3	46	50	38	88.6	45.7	42.9
N2603-24-16-16	1-1/2	1	138.7	78.7	60.0	44.7	26.4	50.0	31.2	22.3	50	57	38	99.4	51.6	47.8

NOTE: The order of the sizes is as per the designation (1-2-3) in figure shown above.

# Double-Ferrule Tube Fittings

## Male Run Tee N2605

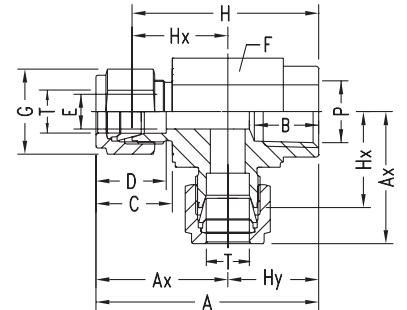
INCH OD Tubes x Male NPT Threads



Part No.	T Tube OD	P NPT Male	A	Ax	B	C	D	E min.	F	G A/F	H A/F	Hx	Hy
N2605-02-02-02	1/8	1/8	41.4	23.6	9.6	15.3	12.7	2.4	11	11	34.8	17.0	17.8
N2605-02-04-02	1/8	1/4	48.0	24.6	14.3	15.3	12.7	2.4	14	11	41.4	18.0	23.4
N2605-04-02-04	1/4	1/8	45.7	26.9	9.6	17.8	15.3	4.8	14	14	38.4	19.6	18.8
N2605-04-04-04	1/4	1/4	50.3	26.9	14.3	17.8	15.3	4.8	14	14	43	19.6	23.4
N2605-04-06-04	1/4	3/8	55.9	29.7	14.3	17.8	15.3	4.8	17	14	48.8	22.4	26.2
N2605-04-08-04	1/4	1/2	64.8	31.8	19.1	17.8	15.3	4.8	22	14	57.4	24.4	33.0
N2605-06-04-06	3/8	1/4	55.9	30.5	14.3	19.3	16.8	7.1	17	17	48.5	23.1	25.4
N2605-06-06-06	3/8	3/8	57.4	31.2	14.3	19.3	16.8	7.1	17	17	50.1	23.9	26.2
N2605-06-08-06	3/8	1/2	66.0	33.0	19.1	19.3	16.8	7.1	22	17	58.9	25.9	33.0
N2605-08-04-08	1/2	1/4	64.2	36.0	14.3	21.8	22.9	4.8	22	22	54.1	25.9	28.2
N2605-08-06-08	1/2	3/8	64.2	36.0	14.3	21.8	22.9	9.6	22	22	54.1	25.9	28.2
N2605-08-08-08	1/2	1/2	69.0	36.0	19.1	21.8	22.9	10.4	22	22	58.9	25.9	33.0
N2605-10-08-08	5/8	1/2	73.1	38.1	19.1	21.8	24.4	11.9	22	25	62.9	27.9	35.0
N2605-12-08-12	3/4	1/2	76.7	39.9	19.1	21.8	24.4	11.9	27	29	66.5	29.7	36.8
N2605-12-12-12	3/4	3/4	76.7	39.9	19.1	21.8	24.4	15.8	27	29	66.5	29.7	36.8
N2605-16-12-16	1	3/4	90.6	49.0	19.1	26.4	31.2	15.8	35	38	78.4	36.8	41.6
N2605-16-16-16	1	1	95.5	49.0	23.8	26.4	31.2	22.3	35	38	83.3	36.8	46.5
N2605-20-20-20	1-1/4	1-1/4	114.1	66.5	23.8	38.8	41.1	27.6	46	50	92.1	44.5	47.6
N2605-24-24-24	1-1/2	1-1/2	138.4	78.0	26.2	45.2	50.0	34.0	55	57	111.2	50.8	60.4

## Female Run Tee N2606

INCH OD Tubes x Female NPT Threads

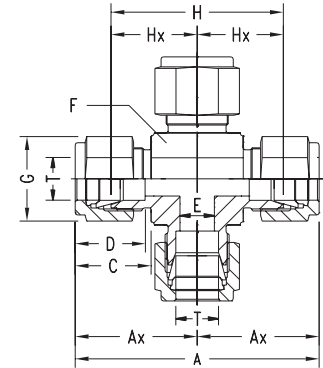


Part No.	T Tube OD	P NPT Female	A	Ax	B	C	D	E min.	F A/F	G A/F	H	Hx	Hy
N2606-02-02-02	1/8	1/8	43.6	24.6	10.4	15.3	12.7	2.4	14	11	37.0	18.0	19.0
N2606-04-02-04	1/4	1/8	45.9	26.9	10.4	17.8	15.3	4.8	14	14	38.6	19.6	19.0
N2606-04-04-04	1/4	1/4	52.1	29.7	15.0	17.8	15.3	4.8	19	14	44.8	22.4	22.4
N2606-06-04-06	3/8	1/4	53.6	31.2	15.0	19.3	16.8	7.1	19	17	46.3	23.9	22.4
N2606-06-06-06	3/8	3/8	55.7	33.3	15.0	19.3	16.8	7.1	22	17	48.3	25.9	22.4
N2606-08-06-08	1/2	3/8	58.4	36.0	15.0	21.8	22.9	10.4	22	22	48.3	25.9	22.4
N2606-08-08-08	1/2	1/2	67.4	38.9	19.8	21.8	22.9	10.4	27	22	57.2	28.7	28.5
N2606-12-12-12	3/4	3/4	76.5	44.7	20.6	21.8	24.4	15.8	35	29	66.4	34.6	31.8
N2606-16-12-16	1	3/4	80.8	49.0	20.6	26.4	31	22.3	35	38	68.6	36.8	31.8
N2606-16-16-16	1	1	91.7	53.6	25.4	26.4	31	22.3	41	38	79.5	41.4	38.1



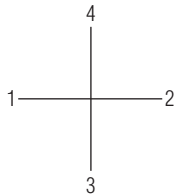
# Cross N2650

INCH OD Tubes



Part No.	T Tube OD	A	Ax	C	D	E min.	F A/F	G A/F	H	Hx
N2650-02-02	1/8	44.8	22.4	15.3	12.7	2.4	11	11	31.6	15.8
N2650-04-04	1/4	53.8	26.9	17.8	15.3	4.8	14	14	39.2	19.6
N2650-06-06	3/8	61.0	30.5	19.3	16.8	7.1	17	17	46.4	23.2
N2650-08-08	1/2	72.0	36.0	21.8	22.9	10.4	22	22	51.8	25.9
N2650-12-12	3/4	79.8	39.9	21.8	24.4	15.8	27	28.5	59.4	29.7
N2650-16-16	1	98.0	49.0	26.4	31.2	22.3	35	38	73.6	36.8

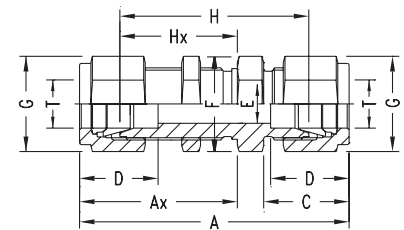
NOTE: Reducing Cross with variation in the tube sizes are available. The tube sizes are designated in the order given below.



The tube sizes are indicated in the part number in the same order above.

# Bulkhead Union N2700-LN

INCH OD Tubes

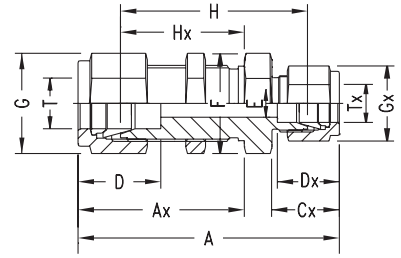


Part No.	T Tube OD	A	Ax	C	D	E min.	F A/F	G A/F	H	Hx	Panel Hole Drill Size	Max. Panel Thickness
N2700-LN-01-01	1/16	31.5	17.3	11.0	8.6	1.3	11	8	23.8	13.5	5.2	3.0
N2700-LN-02-02	1/8	51.3	31.2	15.3	12.7	2.4	11	11	38.1	24.6	8.3	12.7
N2700-LN-04-04	1/4	57.6	33.6	17.8	15.3	4.8	16	14	43.0	26.2	11.5	10.1
N2700-LN-05-05	5/16	60.7	35.8	18.5	16.3	6.3	17	16	46.0	28.5	13.0	11.1
N2700-LN-06-06	3/8	62.2	36.8	19.3	7.1	7.1	22	17	47.5	29.5	14.6	11.1
N2700-LN-08-08	1/2	71.1	41.9	21.8	22.9	10.4	24	22	50.8	31.8	19.5	12.7
N2700-LN-10-10	5/8	72.6	42.7	21.8	24.4	12.7	27	25	52.3	32.5	22.6	12.7
N2700-LN-12-12	3/4	79.0	47.5	21.8	24.4	16.0	30	28.5	58.6	37.4	25.8	16.8
N2700-LN-16-16	1	95.6	57.4	26.4	31.2	22.3	35	38	71.3	45.2	33.7	19.0
N2700-LN-20-20	1-1/4	123.2	69.9	38.9	41.2	27.6	50	50	79.0	47.7	41.6	19.0
N2700-LN-24-24	1-1/2	139.2	76.4	45.2	50.0	34.0	60	57	84.8	49.3	49.6	19.0
N2700-LN-32-32	2	180.4	93.7	62.7	67.6	46.0	70	76	105.6	56.4	67.0	19.0

# Double-Ferrule Tube Fittings

## Bulkhead Reducing Union N2700-LN

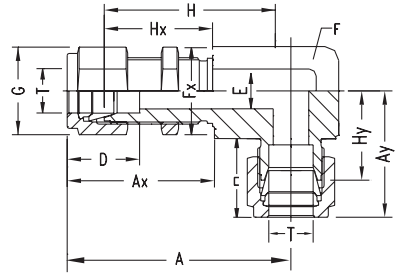
INCH OD Tubes



Part No.	T Tube OD	Tx Tube OD	A	Ax	Cx	D	Dx	E min.	F A/F	G A/F	Gx A/F	H	Hx	Panel Hole Drill Size	Max. Panel Thickness
N2700-LN-04-02	1/4	1/8	55.2	33.5	15.3	15.3	12.7	2.4	16	14	11	41.2	26.2	11.5	10.2
N2700-LN-06-04	3/8	1/4	60.7	36.6	17.8	16.8	15.3	4.8	22	17	14	46.0	29.5	14.6	11.2
N2700-LN-08-04	1/2	1/4	66.8	41.9	17.8	22.4	15.3	4.8	24	22	14	49.2	31.8	19.5	12.7
N2700-LN-08-06	1/2	3/8	66.8	41.9	17.8	22.4	16.8	7.1	24	22	17	49.2	31.8	19.5	12.7

## Bulkhead Union Elbow N2701-LN

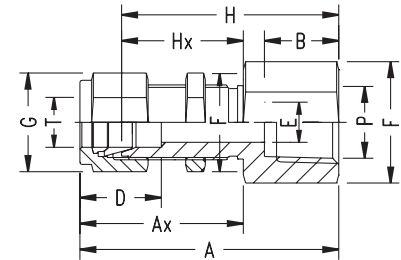
INCH OD Tubes



Part No.	T Tube OD	A	Ax	Ay	C	D	E min.	F A/F	G A/F	H	Hx	Hy	Panel Hole Drill Size	Max. Panel Thickness
N2701-LN-02-02	1/8	43.1	31.2	22.4	15.3	12.7	2.4	11	11	36.5	24.6	15.8	8.3	12.7
N2701-LN-04-04	1/4	48.9	33.6	26.9	17.8	15.3	4.8	16	14	41.5	26.2	19.6	11.5	10.1
N2701-LN-06-06	3/8	54.1	36.8	30.5	19.3	16.8	7.1	22	17	46.8	29.5	23.2	14.6	11.1
N2701-LN-08-08	1/2	63.5	41.9	36.0	21.8	22.9	10.4	24	22	53.4	31.8	25.9	19.5	12.7
N2701-LN-12-12	3/4	75.3	47.5	39.9	21.8	24.4	16.0	30	29	65.2	37.4	29.7	25.8	16.8
N2701-LN-16-16	1	91.8	57.4	49.0	26.4	31.2	22.3	35	38	79.6	45.2	36.8	33.7	19.0

## Bulkhead Female Connector N2705

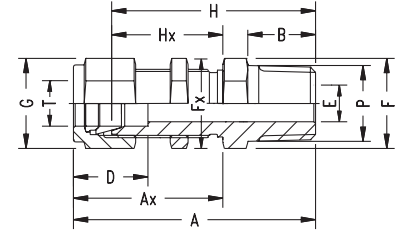
INCH OD Tubes x Female NPT Threads



Part No.	T Tube OD	P NPT Female	A	Ax	B	D	E min.	F A/F	G A/F	H	Hx	Panel Hole Drill Size	Max. Panel Thickness
N2705-02-02	1/8	1/8	44.7	31.2	10.4	12.7	2.4	14	11	38.1	24.6	8.3	12.7
N2705-04-02	1/4	1/8	47.0	33.5	10.4	15.3	4.8	16	14	39.7	26.2	11.5	10.2
N2705-04-04	1/4	1/4	51.5	33.5	15.0	15.3	4.8	19	14	44.2	26.2	11.5	10.2
N2705-06-04	3/8	1/4	54.8	36.8	15.0	16.8	7.1	19	17	47.5	29.5	14.7	11.2
N2705-08-06	1/2	3/8	61.7	41.9	15.0	22.9	10.4	22	22	51.6	31.0	19.5	12.7
N2705-08-08	1/2	1/2	66.7	41.9	19.8	22.9	10.4	27	22	56.6	31.0	19.5	12.7
N2705-10-08	5/8	1/2	67.6	42.7	19.8	22.9	12.7	27	25	57.4	32.5	22.6	12.7
N2705-12-12	3/4	3/4	72.4	47.5	19.8	24.4	16.0	35	28.5	62.3	37.4	25.8	16.8
N2705-L-12-12	3/4	3/4	74.7	47.5	20.6	24.4	16.0	35	28.5	64.3	37.4	25.8	16.8
N2705-16-16	1	1	84.3	57.4	20.6	31.2	16.0	35	38	72.1	45.2	33.7	19.0
N2705-20-20	1-1/4	1-1/4	105.7	69.9	25.4	41.2	27.6	50	50	83.5	47.7	41.6	19.0
N2705-24-24	1-1/2	1-1/2	144.5	76.4	27.6	50.0	34.0	60	57	87.4	49.3	49.6	19.0

# Bulkhead Male Connector N2706

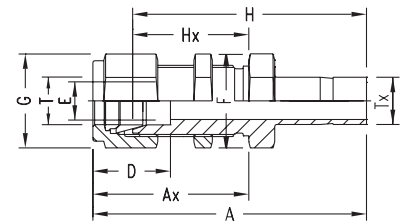
INCH OD Tubes x Male NPT Threads



Part No.	T Tube OD	P NPT Male	A	Ax	B	D	E min.	F A/F	G A/F	H	Hx	Panel Hole Drill Size	Max. Panel Thickness
N2706-02-02	1/8	1/8	46.4	31.2	9.6	12.7	2.4	14	11	39.8	24.6	8.3	12.7
N2706-04-02	1/4	1/8	49.5	33.5	9.6	15.3	4.8	16	14	42.2	26.2	11.5	10.2
N2706-04-04	1/4	1/4	54.1	33.5	14.3	15.3	4.8	16	14	46.7	26.2	11.5	10.2
N2706-06-04	3/8	1/4	57.4	36.8	14.3	16.8	7.1	19	17	50.0	29.5	14.7	11.2
N2706-06-06	3/8	3/8	57.4	36.8	14.3	16.8	7.1	19	17	50.0	29.5	14.7	11.2
N2706-06-08	3/8	1/2	63.7	36.8	19.1	16.8	7.1	22	17	56.5	29.5	14.7	11.2
N2706-08-06	1/2	3/8	63.3	41.9	14.3	22.9	9.6	24	22	53.0	31.8	19.5	12.7
N2706-08-08	1/2	1/2	68.8	41.9	19.1	22.9	10.4	24	22	58.8	31.8	19.5	12.7
N2706-12-12	3/4	3/4	76.2	47.5	19.1	24.4	15.8	30	28.5	66.9	37.4	25.8	16.8
N2706-16-16	1	1	93.2	57.4	23.9	31.2	22.3	41	38	81.0	45.2	33.7	19.0
N2706-20-20	1-1/4	1-1/4	110.5	72.5	23.9	41.2	27.6	50	50	87.5	49.5	42.5	19.0
N2706-24-24	1-1/2	1-1/2	122.8	79.1	26.2	50.0	34.0	60	57	95.5	51.5	50.5	19.0

# Bulkhead Reducer N2709

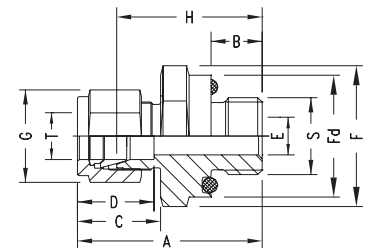
INCH OD Tubes



Part No.	T Tube OD	Tx Tube OD	A	Ax	D	E min.	F A/F	G A/F	H D	Hx	Panel Hole Drill Size	Max. Panel Thickness
N2709-02-02	1/8	1/8	49.5	31.3	12.7	2.0	11	11	43.0	24.6	8.3	12.7
N2709-04-04	1/4	1/4	55.9	33.5	15.3	4.8	16	14	48.5	26.2	11.5	10.2
N2709-06-06	3/8	3/8	60.8	36.8	16.8	7.1	19	17	53.8	29.5	14.7	11.2
N2709-08-08	1/2	1/2	72.9	41.9	22.9	9.9	24	22	62.7	31.8	19.5	12.7
N2709-10-10	5/8	5/8	75.2	42.7	23.6	12.7	27	25	65.0	32.5	22.6	12.7
N2709-16-16	1	1	100.4	57.4	31.2	20.3	35	38	88.1	45.2	33.7	19.1
N2709-20-20	1-1/4	1-1/4	120.7	69.9	41.2	27.4	50	50	89.9	47.7	41.6	19.1
N2709-24-24	1-1/2	1-1/2	127.2	76.4	50.0	33.0	60	60	100.1	49.3	49.6	19.1

# O Seal Male Connector N6400

INCH OD Tube x Male Straight Threads - UNF

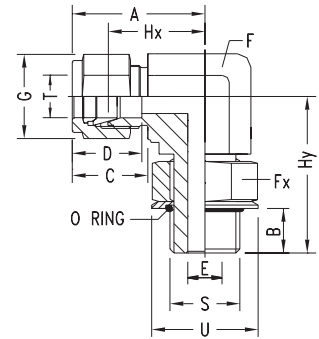


Part No.	T Tube OD	S Thread Male	A	B	C	D	E min.	F A/F	Fd	G A/F	H	O Ring Part No.
N6400-02-02-0	1/8	5/16-24	32.8	8.6	15.3	12.7	2.4	14	13.8	11	26.2	1 OPU
N6400-04-04-0	1/4	7/16-20	38.4	10.4	17.8	15.3	4.8	19	18.8	14	31.0	2 OPU
N6400-05-05-0	5/16	1/2-20	40.6	11.2	18.5	16.3	6.3	22	21.8	16	33.3	3 OPU
N6400-06-06-0	3/8	9/16-18	42.4	12.0	19.3	16.8	7.1	24	23.6	17	35.0	4 OPU
N6400-08-08-0	1/2	3/4-16	46.0	12.0	21.8	22.9	10.4	28.5	28.0	22	35.8	6 OPU
N6400-12-12-0	3/4	1-1/16-12	52.4	14.3	21.8	24.4	15.8	38	37.8	28.5	42.2	12 OPU
N6400-16-16-0	1	1-5/16-12	58.2	14.3	26.4	31.2	22.3	45	44.0	38	46.0	16 OPU
N6400-20-20-0	1-1/4	1-5/8-12	76.2	18.3	38.9	41.4	27.6	55	54.0	50	54.1	20 OPU
N6400-24-24-0	1-1/2	1-7/8-12	86.6	19.8	45.2	50.0	34.0	60	58.0	57	59.4	24 OPU

# Double-Ferrule Tube Fittings

## Positionable Male Elbow N6801

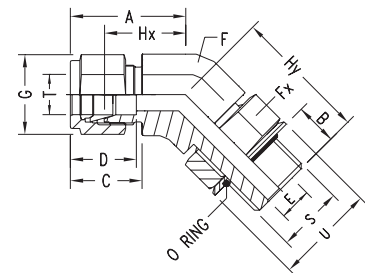
INCH OD Tube x SAE/MS Straight Threads



Part No.	T Tube OD	P ISO Male	Ax	B	C	D	E min.	F	Fx A/F	G A/F	Hx	Hy	U	O Ring Part No.
N6801-04-04-NWO	1/4	7/16-20	28.5	9.9	17.8	15.3	4.8	14	14	14	21.0	28.5	16.5	4 OPU
N6801-04-06-NWO	1/4	9/16-18	30.5	11.2	17.8	15.3	4.8	16	17	14	23.1	32.3	20.0	6 OPU
N6801-06-06-NWO	3/8	9/16-18	32.0	11.2	19.3	16.8	7.1	16	17	17	24.6	32.3	20.0	6 OPU
N6801-06-08-NWO	3/8	3/4-16	34.8	12.7	19.3	16.8	7.1	22	22	17	27.4	37.8	25.6	8 OPU
N6801-08-08-NWO	1/2	3/4-16	37.6	12.7	21.8	22.9	10.4	22	22	22	27.4	37.8	25.6	8 OPU
N6801-10-10-NWO	5/8	7/8-14	39.6	14.3	21.8	24.4	12.7	24	25	25	29.5	43.4	29.5	10 OPU
N6801-12-12-NWO	3/4	1-1/16-12	41.4	16.8	21.8	24.4	15.8	27	32	28.5	31.2	48.8	36.6	12 OPU
N6801-14-14-NWO	7/8	1-1/16-12	43.2	16.8	21.8	25.9	18.3	30	32	32	33	50.5	40.4	14 OPU
N6801-16-16-NWO	1	1-5/8-12	50.5	16.8	26.4	31.2	22.3	35	35	38	38.4	53.6	44.0	16 OPU
N6801-20-20-NWO	1-1/4	1-5/8-12	67.8	16.8	38.9	41.2	27.6	46	50	50	45.7	58.2	54.9	20 OPU
N6801-24-24-NWO	1-1/2	1-7/8-12	78.0	16.8	45.2	50.0	34.0	50	55	60	50.8	60.4	62.5	24 OPU

## 45° Positionable Male Elbow N6802

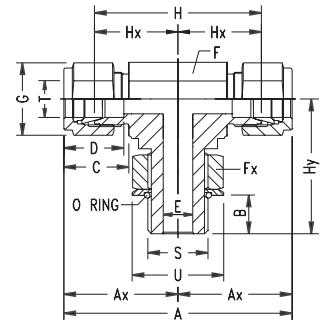
INCH OD Tube x SAE/MS Straight Threads



Part No.	T Tube OD	P SAE/MS Male	A	B	C	D	E min.	F	Fx A/F	G A/F	Hx A/F	Hy	U	O Ring Part No.
N6802-04-04-NWO	1/4	7/16-20	25.7	9.9	17.8	15.3	4.8	14	14	14	18.3	25.6	16.5	4 OPU
N6802-06-06-NWO	3/8	9/16-18	27.9	11.2	19.3	16.8	7.1	16	17	17	20.6	28.2	20.0	6 OPU
N6802-08-08-NWO	1/2	3/4-16	32.0	12.7	21.8	22.9	10.4	22	22	22	21.8	32.3	25.7	8 OPU
N6802-12-12-NWO	3/4	1-1/16-12	39.9	16.8	21.8	24.4	15.8	27	32	28.5	29.7	47.3	36.6	12 OPU
N6802-16-16-NWO	1	1-5/8-12	47.5	16.8	26.4	31.2	19.8	35	38	38	35.3	50.6	44.0	16 OPU

# Positionable Male Branch Tee N6803

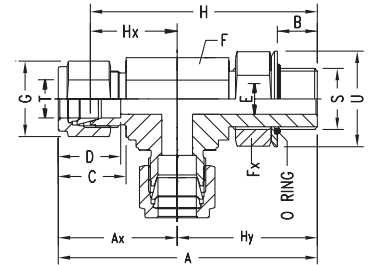
INCH OD Tubes x SAE/MS Straight Threads



Part No.	T Tube OD	S SAE/MS Male	A	Ax	B	C	D	E min.	F A/F	Fx A/F	G A/F	H	Hx	Hy	U	O Ring Part No.
N6803-04-04-04-NWO	1/4	7/16-20	57.0	28.5	9.9	17.8	15.3	4.8	14	14	14	42.0	21.0	28.5	16.5	4 OPU
N6803-06-06-06-NWO	3/8	9/16-18	64.0	32.0	11.2	19.3	16.8	7.1	16	17	17	49.2	24.6	32.3	20.0	6 OPU
N6803-08-08-08-NWO	1/2	3/4-16	75.2	37.6	12.7	21.8	22.9	10.4	22	22	22	54.8	27.4	37.8	25.6	8 OPU
N6803-12-12-12-NWO	3/4	1-1/16-12	82.8	41.4	16.8	21.8	24	15.8	27	32	28.5	62.4	31.2	48.8	36.6	12 OPU
N6803-16-16-16-NWO	1	1-5/16-12	101.1	50.5	16.8	26.4	31.2	22.3	35	35	38	76.8	38.4	53.6	44.0	16 OPU
N6803-20-20-20-NWO	1-1/4	1-5/8-12	135.6	68	16.8	38.9	41.2	27.6	46	50	50	91.4	46	58	55	20 OPU
N6803-24-24-24-NWO	1-1/2	1-7/8-12	156.0	78.0	16.8	45.2	50.0	34.0	50	55	60	101.6	51	60	63	24 OPU

# Positionable Male Run Tee N6804

INCH OD Tubes x SAE/MS Straight Threads



Part No.	T Tube OD	S SAE/MS Male	A	Ax	B	C	D	E min.	F A/F	Fx A/F	G A/F	H	Hx	Hy	U	O Ring Part No.
N6804-04-04-04-NWO	1/4	7/16-20	57.0	28.5	9.9	17.9	15.3	4.8	14	14	14	49.5	21.0	28.5	16.5	4 OPU
N6804-06-06-06-NWO	3/8	9/16-18	64.3	32.0	11.2	19.3	16.8	7.1	16	17	17	56.9	24.6	32.3	20.0	6 OPU
N6804-08-08-08-NWO	1/2	3/4-16	75.4	37.6	12.7	21.8	22.9	10.4	22	22	22	65.2	27.4	37.8	25.6	8 OPU
N6804-12-12-12-NWO	3/4	1-1/16-12	90.2	41.4	16.8	21.8	24.4	15.8	27	32	28.5	80.0	31.2	48.8	36.6	12 OPU
N6804-16-16-16-NWO	1	1-5/16-12	104.1	50.5	16.8	26.4	31.2	22.3	35	35	38	92.0	38.4	53.6	44.0	16 OPU
N6804-20-20-20-NWO	1-1/4	1-5/8-12	126.0	67.8	16.8	38.9	41.2	27.6	46	50	50	103.9	45.7	58.2	54.9	20 OPU
N6804-24-24-24-NWO	1-1/2	1-7/8-12	138.4	78.0	16.8	45.2	50.0	34.0	50	55	60	111.2	50.8	60.4	62.5	24 OPU

# Cross Reference Chart

Brennan No.	Description	Swagelok	Parker CPI	Parker A-LOK	BI-LOK	GYROLOK	LET-LOK
N0304-C-01	IN PLUG	100-P	1 FNZ	1BLP1	DBA 1	1P	7121L-1/16-1/16
N0304-C-02	IN PLUG	200-P	2 FNZ	2BLP2	DBA 2	2P	7121L-1/8-1/8
N0304-C-04	IN PLUG	400-P	4 FNZ	4BLP4	DBA 4	4P	7121L-1/4-1/4
N0304-C-05	IN PLUG	500-P	5 FNZ	5BLP5	DBA 5	5P	7121L-5/16-5/16
N0304-C-06	IN PLUG	600-P	6 FNZ	6BLP6	DBA 6	6P	7121L-3/8-3/8
N0304-C-08	IN PLUG	810-P	8 FNZ	8BLP8	DBA 8	8P	7121L-1/2-1/2
N0304-C-10	IN PLUG	1010-P	10 FNZ	10BLP10	DBA 10	10P	7121L-5/8-5/8
N0304-C-12	IN PLUG	1210-P	12 FNZ	12BLP12	DBA 12	12P	7121L-3/4-3/4
N0304-C-14	IN PLUG	1410-P	14 FNZ	14BLP14	DBA 14	14P	7121L-7/8-7/8
N0304-C-16	IN PLUG	1610-P	16 FNZ	16BLP16	DBA 16	16P	7121L-1-1
N0304-C-20	IN PLUG	2000-P	20 FNZ	20BLP20	DBA 20	20P	7121L-1-1/4-1-1/4
N0304-C-24	IN PLUG	2400-P	24 FNZ	24BLP24	DBA 24	24P	7121L-1-1/2-1-1/2
N0304-C-32	IN PLUG	3200-P	32 FNZ	32BLP32	DBA 32	32P	7121L-2-2
N0318-01	IN NUT	102-1	1 BZ	1NU1	DNA 1	1N	761L-1/16
N0318-02	IN NUT	202-1	2 BZ	2NU2	DNA 2	2N	761L-1/8
N0318-04	IN NUT	402-1	4 BZ	4NU4	DNA 4	4N	761L-1/4
N0318-05	IN NUT	502-1	5 BZ	5NU5	DNA 5	5N	761L-5/16
N0318-06	IN NUT	602-1	6 BZ	6NU6	DNA 6	6N	761L-3/8
N0318-08	IN NUT	812-1	8 BZ	8NU8	DNA 8	8N	761L-1/2
N0318-10	IN NUT	1012-1	10 BZ	10NU10	DNA 10	10N	761L-5/8
N0318-12	IN NUT	1212-1	12 BZ	12NU12	DNA 12	12N	761L-3/4
N0318-14	IN NUT	1412-1	14 BZ	14NU14	DNA 14	14N	761L-7/8
N0318-16	IN NUT	1612-1	16 BZ	16NU16	DNA 16	16N	761L-1
N0318-20	IN NUT	2002-1	20 BZ	20NU20	DNA 20	20N	761L-1-1/4
N0318-24	IN NUT	2402-1	24 BZ	24NU24	DNA 24	24N	761L-1-1/2
N0318-32	IN NUT	3202-1	32 BZ	32NU32	DNA 32	32N	761L-2
N0319-B-01	BACK FERRULE	104-1		1BF1	DOB 1	1FR	760LB-1/16-1/16
N0319-B-02	BACK FERRULE	204-1		2BF2	DOB 2	2FR	760LB-1/8-1/8
N0319-B-04	BACK FERRULE	404-1		4BF4	DOB 4	4FR	760LB-1/4-1/4
N0319-B-05	BACK FERRULE	504-1		5BF5	DOB 5	5FR	760LB-5/16-5/16
N0319-B-06	BACK FERRULE	604-1		6BF6	DOB 6	6FR	760LB-3/8-3/8
N0319-B-08	BACK FERRULE	814-1		8BF8	DOB 8	8FR	760LB-1/2-1/2
N0319-B-10	BACK FERRULE	1014-1		10BF10	DOB 10	10FR	760LB-5/8-5/8
N0319-B-12	BACK FERRULE	1214-1		12BF12	DOB 12	12FR	760LB-3/4-3/4
N0319-B-14	BACK FERRULE	1414-1		14BF14	DOB 14	14FR	760LB-7/8-7/8
N0319-B-16	BACK FERRULE	1614-1		16BF16	DOB 16	16FR	760LB-1-1
N0319-B-20	BACK FERRULE	2004-1		20BF20	DOB 20	20FR	760LB-1-1/4-1-1/4
N0319-B-24	BACK FERRULE	2404-1		24BF24	DOB 24	24FR	760LB-1-1/2-1-1/2
N0319-B-32	BACK FERRULE	3204-1		32BF32	DOB 32	32FR	760LB-2-2
N0319-F-01	FRONT FERRULE	103-1	1 TZ	1FF1	DOF 1	1FF	760LF-1/16-1/16
N0319-F-02	FRONT FERRULE	203-1	2 TZ	2FF2	DOF 2	2FF	760LF-1/8-1/8
N0319-F-04	FRONT FERRULE	403-1	4 TZ	4FF4	DOF 4	4FF	760LF-1/4-1/4
N0319-F-05	FRONT FERRULE	503-1	5 TZ	5FF5	DOF 5	5FF	760LF-5/16-5/16
N0319-F-06	FRONT FERRULE	603-1	6 TZ	6FF6	DOF 6	6FF	760LF-3/8-3/8
N0319-F-08	FRONT FERRULE	813-1	8 TZ	8FF8	DOF 8	8FF	760LF-1/2-1/2
N0319-F-10	FRONT FERRULE	1013-1	10 TZ	10FF10	DOF 10	10FF	760LF-5/8-5/8
N0319-F-12	FRONT FERRULE	1213-1	12 TZ	12FF12	DOF 12	12FF	760LF-3/4-3/4
N0319-F-14	FRONT FERRULE	1413-1	14 TZ	14FF14	DOF 14	14FF	760LF-7/8-7/8
N0319-F-16	FRONT FERRULE	1613-1	16 TZ	16FF16	DOF 16	16FF	760LF-1-1
N0319-F-20	FRONT FERRULE	2003-1	20 TZ	20FF20	DOF 20	20FF	760LF-1-1/4-1-1/4
N0319-F-24	FRONT FERRULE	2413-1	24 TZ	24FF24	DOF 24	24FF	760LF-1-1/2-1-1/2
N0319-F-32	FRONT FERRULE	3213-1	32 TZ	32FF32	DOF 32	32FF	760LF-2-2
N0319-S-01	FERRULE SET	100 SET	1CPI-SET	1ALOK-SET	DOS 1	1SF	
N0319-S-02	FERRULE SET	200 SET	2CPI-SET	2ALOKK-SET	DOS 2	2SF	
N0319-S-04	FERRULE SET	400 SET	4CPI-SET	4ALOKK-SET	DOS 4	4SF	
N0319-S-05	FERRULE SET	500 SET	5CPI-SET	5ALOKK-SET	DOS 5	5SF	
N0319-S-06	FERRULE SET	600 SET	6CP-SET	6ALOKK-SET	DOS 6	6SF	
N0319-S-08	FERRULE SET	810 SET	8CPI-SET	8ALOKK-SET	DOS 8	8SF	
N0319-S-10	FERRULE SET	1010 SET	10CPI-SET	10ALOKK-SET	DOS 10	10SF	
N0319-S-12	FERRULE SET	1210 SET	12CP-SET	12ALOKK-SET	DOS 12	12SF	
N0319-S-14	FERRULE SET	1410 SET	14CP-SET	14ALOKK-SET	DOS 14	14SF	
N0319-S-16	FERRULE SET	1610 SET	16CPI-SET	16ALOKK-SET	DOS 16	16SF	

Brennan No.	Description	Swagelok	Parker CPI	Parker A-LOK	BI-LOK	GYROLOK	LET-LOK
N0319-S-20	FERRULE SET	2000 SET	20CPI-SET	20ALOKK-SET	DOS 20	20SF	
N0319-S-24	FERRULE SET	2400 SET	24CP-SET	24ALOKK-SET	DOS 24	24SF	
N0319-S-32	FERRULE SET	3200 SET	32CPI-SET	32ALOKK-SET	DOS 32	32SF	
N2403-01-01	IN-IN	100-6	1-1 HBZ	1SC1	DUA 1	1U	762L-1/16-1/16
N2403-02-02	IN-IN	200-6	2-2 HBZ	2SC2	DUA 2	2U	762L-1/8-1/8
N2403-04-02	IN-IN	400-6-2	4-2 HBZ	4RU2	DUR 4-2	4RU2	763L-1/4-1/8
N2403-04-04	IN-IN	400-6	4-4 HBZ	4SC4	DUA 4	4U	762L-1/4-1/4
N2403-05-02	IN-IN	500-6-2	5-2 HBZ	5RU2	DUR 5-2	5RU2	763L-5/16-1/8
N2403-05-04	IN-IN	500-6-4	5-4 HBZ	5RU4	DUA 5-4	5U4	763L-5/16-1/4
N2403-05-05	IN-IN	500-6	5-5 HBZ	5SC5	DUA 5	5U	762L-5/16-5/16
N2403-06-02	IN-IN	600-6-2	6-2 HBZ	6RU2	DUR 6-2	6RU2	763L-3/8-1/8
N2403-06-04	IN-IN	600-6-4	6-4 HBZ		DUR 6-4	6RU4	763L-3/8-1/4
N2403-06-06	IN-IN	600-6	6-6 HBZ	6SC6	DUA 6	6U	762L-3/8-3/8
N2403-08-02	IN-IN	810-6-2	8-2 HBZ	8RU2	DUR 8-2	8RU2	763L-1/2-1/8
N2403-08-04	IN-IN	810-6-4	8-4 HBZ	8RU4	DUR 8-4	8RU4	763L-1/2-1/4
N2403-08-06	IN-IN	810-6-6	8-6 HBZ	8RU6	DUR 8-6	8RU6	763L-1/2-3/8
N2403-08-08	IN-IN	810-6	8-8 HBZ	8SC8	DUA 8	8U	762L-1/2-1/2
N2403-10-06	IN-IN	1010-6-6	10-6 HBZ	10RU6	DUR 10-6	10RU6	763L-5/8-3/8
N2403-10-08	IN-IN	1010-6-8	10-8 HBZ	10RU8	DUR 10-8	10RU8	763L-5/8-1/2
N2403-10-10	IN-IN	1010-6	10-10 HBZ	10SC10	DUA 10	10U	762L-5/8-5/8
N2403-12-04	IN-IN	1210-6-4	12-4 HBZ	12RU4	DUR 12-4	12RU4	763L-3/4-1/4
N2403-12-06	IN-IN	1210-6-6	12-6 HBZ	12RU6	DUR 12-6	12RU6	763L-3/4-3/8
N2403-12-08	IN-IN	1210-6-8	12-8 HBZ	12RU8	DUR 12-8	12RU8	763L-3/4-1/2
N2403-12-12	IN-IN	1210-6	12-12 HBZ	12SC12	DUA 12	12U	762L-3/4-3/4
N2403-14-14	IN-IN	1410-6	14-14 HBZ	14SC14	DUA 14	14U	762L-7/8-7/8
N2403-16-08	IN-IN	1610-6-8	16-8 HBZ	16RU8	DUR 16-8	16RU8	763L-1-1/2
N2403-16-12	IN-IN	1610-6-12	16-12 HBZ	16RU12	DUR 16-12	16RU12	763L-1-3/4
N2403-16-16	IN-IN	1610-6	16-16 HBZ	16SC16	DUA 16	16U	762L-1-1
N2403-20-16	IN-IN	2000-6-20	20-16 HBZ	20RU16	DUR 20-16	20RU16	763L-1-1/4-1
N2403-20-20	IN-IN	2000-6	20-20 HBZ	20SC20	DUA 20	20U	762L-1-1/4-1-1/4
N2403-24-20	IN-IN	2400-6-20	24-20 HBZ	24RU20	DUR 24-20	24RU20	763L-1-1/2-1-1/4
N2403-24-24	IN-IN	2400-6	24-24 HBZ	24SC24	DUA 24	24U	762L-1-1/2-1/1/2
N2403-32-32	IN-IN	3200-6	32-32 HBZ	32SC32	DUA 32	32U	762L-2-2
N2404-01-01	IN-MNPT	100-1-1	1-1 FBZ	1MSC1N	DCT 1-1	1CM1	768L-1/16-1/16
N2404-01-02	IN-MNPT	100-1-2	1-2 FBZ	1MSC2N	DCT 1-2	1CM2	768L-1/16-1/8
N2404-02-02	IN-MNPT	200-1-2	2-2 FBZ	2MSC2N	DCT 2-2	2CM2	768L-1/8-1/8
N2404-02-04	IN-MNPT	200-1-4	2-4 FBZ	2MSC4N	DCT 2-4	2CM4	768L-1/8-1/4
N2404-04-02	IN-MNPT	400-1-2	4-2 FBZ	4MSC2N	DCT 4-2	4CM2	768L-1/4-1/8
N2404-04-04	IN-MNPT	400-1-4	4-4 FBZ	4MSC4N	DCT 4-4	4CM4	768L-1/4-1/4
N2404-04-06	IN-MNPT	400-1-6	4-6 FBZ	4MSC6N	DCT 4-6	4CM6	768L-1/4-3/8
N2404-04-08	IN-MNPT	400-1-8	4-8 FBZ	4MSC8N	DCT 4-8	4CM8	768L-1/4-1/2
N2404-05-04	IN-MNPT	500-1-4	5-4 FBZ	5MSC4N	DCT 5-4	5CM4	768L-5/16-1/4
N2404-06-02	IN-MNPT	600-1-2	6-2 FBZ	6MSC2N	DCT 6-2	6CM2	768L-3/8-1/8
N2404-06-04	IN-MNPT	600-1-4	6-4 FBZ	6MSC4N	DCT 6-4	6CM4	768L-3/8-1/4
N2404-06-06	IN-MNPT	600-1-6	6-6 FBZ	6MSC6N	DCT 6-6	6CM6	768L-3/8-3/8
N2404-06-08	IN-MNPT	600-1-8	6-8 FBZ	6MSC8N	DCT 6-8	6CM8	768L-3/8-1/2
N2404-08-04	IN-MNPT	810-1-4	8-4 FBZ	8MSC4N	DCT 8-4	8CM4	768L-1/2-1/4
N2404-08-06	IN-MNPT	810-1-6	8-6 FBZ	8MSC6N	DCT 8-6	8CM6	768L-1/2-3/8
N2404-08-08	IN-MNPT	810-1-8	8-8 FBZ	8MSC8N	DCT 8-8	8CM8	768L-1/2-1/2
N2404-08-12	IN-MNPT	810-1-12	8-12 FBZ	8MSC12N	DCT 8-12	8CM12	768L-1/2-3/4
N2404-08-16	IN-MNPT	810-1-16	8-16 FBZ	8MSC16N	DCT 8-16	8CM16	768L-1/2-1
N2404-10-06	IN-MNPT	1010-1-6	10-6 FBZ	10MSC6N	DCT 10-6	10CM6	768L-5/8-3/8
N2404-10-08	IN-MNPT	1010-1-8	10-8 FBZ	10MSC8N	DCT 10-8	10CM8	768L-5/8-1/2
N2404-12-08	IN-MNPT	1210-1-8	12-8 FBZ	12MSC8N	DCT 12-8	12CM8	768L-3/4-1/2
N2404-12-12	IN-MNPT	1210-1-12	12-12 FBZ	12MSC12N	DCT 12-12	12CM12	768L-3/4-3/4
N2404-12-16	IN-MNPT	1210-1-16	12-16 FBZ	2MSC16N	DCT 12-16	12CM16	768L-3/4-1
N2404-14-12	IN-MNPT	1410-1-12	14-12 FBZ	14MSC12N	DCT 14-12	14CM12	768L-7/8-3/4
N2404-16-08	IN-MNPT	1610-1-8	16-8 FBZ	16MSC8N	DCT 16-8	16CM8	768L-1-1/2
N2404-16-12	IN-MNPT	1610-1-12	16-12 FBZ	16MSC12N	DCT 16-12	16CM12	768L-1-3/4
N2404-16-16	IN-MNPT	1610-1-16	16-16 FBZ	16MSC16N	DCT 16-16	16CM16	768L-1-1
N2404-20-16	IN-MNPT	2000-1-16	20-16 FBZ	20MSC16N	DCT 20-16	20CM16	768L-1-1/4-1
N2404-20-20	IN-MNPT	2000-1-20	20-20 FBZ	20MSC20N	DCT 20-20	20CM20	768L-1-1/4-1-1/4

# Cross Reference Chart

Brennan No.	Description	Swagelok	Parker CPI	Parker A-LOK	BI-LOK	GYROLOK	LET-LOK
N2404-24-24	IN-MNPT	2400-1-24	24-24 FBZ	24MSC24N	DCT 24-24	24CM24	768L-1-1/2-1/2
N2404-32-32	IN-MNPT	3200-1-32	32-32 FBZ	32MSC32N	DCT 32-32	32CM32	768L-2-2
N2405-01-01	IN-FNPT	100-7-1	1-1 GBZ	1FSC1N	DSA 1-1	1CF1	766L-1/16-1/16
N2405-01-02	IN-FNPT	100-7-2	1-1 GBZ	1FSC1N	DSA 1-2	1CF1	766L-1/16-1/16
N2405-02-02	IN-FNPT	200-7-2	2-2 GBZ	2FSC2N	DSA 2-2	2CF2	766L-1/8-1/8
N2405-02-04	IN-FNPT	200-7-4	2-4 GBZ	2FSC4N	DSA 2-4	2CF4	766L-1/8-1/4
N2405-04-02	IN-FNPT	400-7-2	4-2 GBZ	4FSC2N	DSA 4-2	4CF2	766L-1/4-1/8
N2405-04-04	IN-FNPT	400-7-4	4-4 GBZ	4FSC4N	DSA 4-4	4CF4	766L-1/4-1/4
N2405-04-06	IN-FNPT	400-7-6	4-6 GBZ	4FSC6N	DSA 4-6	4CF6	766L-1/4-3/8
N2405-04-08	IN-FNPT	400-7-8	4-8 GBZ	4FSC8N	DSA 4-8	4CF8	766L-1/4-1/2
N2405-05-02	IN-FNPT	500-7-2	5-2 GBZ	5FSC2N	DSA 5-2	5CF2	766L-5/16-1/8
N2405-05-04	IN-FNPT	500-7-4	5-4 GBZ	5FSC4N	DSA 5-4	5CF4	766L-5/16-1/4
N2405-06-02	IN-FNPT	600-7-2	6-2 GBZ	6FSC2N	DSA 6-2	6CF2	766L-3/8-1/8
N2405-06-04	IN-FNPT	600-7-4	6-4 GBZ	6FSC4N	DSA 6-4	6CF4	766L-3/8-1/4
N2405-06-06	IN-FNPT	600-7-6	6-6 GBZ	6FSC6N	DSA 6-6	6CF6	766L-3/8-3/8
N2405-06-08	IN-FNPT	600-7-8	6-8 GBZ	6FSC8N	DSA 6-8	6CF8	766L-3/8-1/2
N2405-08-04	IN-FNPT	810-7-4	8-4 GBZ	8FSC4N	DSA 8-4	8CF4	766L-1/2-1/4
N2405-08-06	IN-FNPT	810-7-6	8-6 GBZ	8FSC6N	DSA 8-6	8CF6	766L-1/2-3/8
N2405-08-08	IN-FNPT	810-7-8	8-8 GBZ	8FSC8N	DSA 8-8	8CF8	766L-1/2-1/2
N2405-08-12	IN-FNPT	810-7-12	8-2 GBZ	8FSC2N	DSA 8-12	8CF2	766L-1/2-3/4
N2405-10-06	IN-FNPT	1010-7-6	10-6 GBZ	10FSC6N	DSA 10-6	10CF6	766L-5/8-3/8
N2405-10-08	IN-FNPT	1010-7-8	10-8 GBZ	10FSC8N	DSA 10-8	10CF8	766L-5/8-1/2
N2405-12-08	IN-FNPT	1210-7-8	12-8 GBZ	12FSC8N	DSA 12-8	12CF8	766L-3/4-1/2
N2405-12-12	IN-FNPT	1210-7-12	12-12 GBZ	12FSC12N	DSA 12-12	12CF12	766L-3/4-3/4
N2405-14-12	IN-FNPT	1410-7-12	14-12 GBZ	14FSC12N	DSA 14-12	14CF12	766L-7/8-3/4
N2405-16-12	IN-FNPT	1610-7-12	16-12 GBZ	16FSC12N	DSA 16-12	16CF12	766L-1-3/4
N2405-16-16	IN-FNPT	1610-7-16	16-16 GBZ	16FSC16N	DSA 16-16	16CF16	766L-1-1
N2405-20-20	IN-FNPT	2000-7-20	20-20 GBZ	20FSC20N	DSA 20-20	20CF20	766L-1-1/4-1-1/4
N2405-24-24	IN-FNPT	2400-7-24	24-24 GBZ	24FSC24N	DSA 24-24	24CF24	766L-1-1/2-1/1/2
N2406-02-02	TUBE RED	200-R-2	2-2 TRBZ	2TUR2	DRE 2-2	2R2	767LT-1/8-1/8
N2406-02-04	TUBE RED	200-R-4	2-4 TRBZ	2TUR4	DRE 2-4	2R4	767LT-1/8-1/4
N2406-04-02	TUBE RED	400-R-2	4-2 TRBZ	4TUR2	DRE 4-2	4R2	767LT-1/4-1/8
N2406-04-04	TUBE RED	400-R-4	4-4 TRBZ	4TUR4	DRE 4-4	4R4	767LT-1/4-1/4
N2406-04-06	TUBE RED	400-R-6	4-6 TRBZ	4TUR6	DRE 4-6	4R6	767LT-1/4-3/8
N2406-04-08	TUBE RED	400-R-8	4-8 TRBZ	4TUR8	DRE 4-8	4R8	767LT-1/4-1/2
N2406-05-06	TUBE RED	500-R-6	5-6 TRBZ	5TUR6	DRE 5-6	5R6	767LT-5/16-3/8
N2406-05-08	TUBE RED	500-R-8	5-8 TRBZ	5TUR8	DRE 5-8	5R8	767LT-5/16-1/2
N2406-06-04	TUBE RED	600-R-4	6-4 TRBZ	6TUR4	DRE 6-4	6R4	767LT-3/8-1/4
N2406-06-06	TUBE RED	600-R-6	6-6 TRBZ	6TUR6	DRE 6-6	6R6	767LT-3/8-3/8
N2406-06-08	TUBE RED	600-R-8	6-8 TRBZ	6TUR8	DRE 6-8	6R8	767LT-3/8-1/2
N2406-08-04	TUBE RED	810-R-4	8-4 TRBZ	8TUR4	DRE 8-4	8R4	767LT-1/2-1/4
N2406-08-06	TUBE RED	810-R-6	8-6 TRBZ	8TUR6	DRE 8-6	8R6	767LT-1/2-3/8
N2406-08-08	TUBE RED	810-R-8	8-8 TRBZ	8TUR8	DRE 8-8	8R8	767LT-1/2-1/2
N2406-08-12	TUBE RED	810-R-12	8-12 TRBZ	8TUR12	DRE 8-12	8R12	767LT-1/2-3/4
N2406-08-16	TUBE RED	810-R-16	8-16 TRBZ	8TUR16	DRE 8-16	8R16	767LT-1/2-1
N2406-10-12	TUBE RED	1010-R-12	10-12 TRBZ	10TUR12	DRE 10-12	10R12	767LT-5/8-3/4
N2406-10-14	TUBE RED	1010-R-14	10-14 TRBZ	10TUR14	DRE 10-14	10R14	767LT-5/8-7/8
N2406-12-08	TUBE RED	1210-R-8	12-8 TRBZ	12TUR8	DRE 12-8	12R8	767LT-3/4-1/2
N2406-12-16	TUBE RED	1210-R-16	12-16 TRBZ	12TUR16	DRE 12-16	12R16	767LT-3/4-1
N2406-16-20	TUBE RED	1610-R-20	16-20 TRBZ	16TUR20	DRE 16-20	16R20	767LT-1-1-1/4
N2406-16-24	TUBE RED	1610-R-24	16-24 TRBZ	16TUR24	DRE 16-24	16R24	767LT-1-1/1/2
N2408-01	IN CAP	100-C	1 PNZB	1BLEN1	DCA 1	1CP	7108L-1/16-1/16
N2408-02	IN CAP	200-C	2 PNZB	2BLEN2	DCA 2	2CP	7108L-1/8-1/8
N2408-04	IN CAP	400-C	4 PNZB	4BLEN4	DCA 4	4CP	7108L-1/4-1/4
N2408-05	IN CAP	500-C	5 PNZB	5BLEN5	DCA 5	5CP	7108L-5/16-5/16
N2408-06	IN CAP	600-C	6 PNZB	6BLEN6	DCA 6	6CP	7108L-3/8-3/8
N2408-08	IN CAP	810-C	8 PNZB	8BLEN8	DCA 8	8CP	7108L-1/2-1/2
N2408-10	IN CAP	1010-C	10 PNZB	10BLEN10	DCA 10	10CP	7108L-5/8-5/8
N2408-12	IN CAP	1210-C	12 PNZB	12BLEN12	DCA 12	12CP	7108L-3/4-3/4
N2408-14	IN CAP	1410-C	14 PNZB	14BLEN14	DCA 14	14CP	7108L-7/8-7/8
N2408-16	IN CAP	1610-C	16 PNZB	16BLEN16	DCA 16	16CP	7108L-1-1
N2408-20	IN CAP	2000-C	20 PNZB	20BLEN20	DCA 20	20CP	7108L-1-1/4-1-1/4



Brennan No.	Description	Swagelok	Parker CPI	Parker A-LOK	BI-LOK	GYROLOK	LET-LOK
N2408-24	IN CAP	2400-C	24 PNZB	24BLEN24	DCA 24	24CP	7108L-1-1/2-1/1/2
N2408-32	IN CAP	3200-C	32 PNZB	32BLEN32	DCA 32	32CP	7108L-2-2
N2425-02-02	IN-BW	200-1-2W	2-1/8 ZHBW2	ZHLW2 2-1/8	DCB 2-2	2CBW2	768LN-1/8-1/8
N2425-04-02	IN-BW	400-1-2W	4-1/8 ZHBW2	ZHLW2 4-1/8	DCB 4-2	4CBW2	768LN-1/4-1/8
N2425-04-04	IN-BW	400-1-4W	4-1/4 ZHBW2	ZHLW2 4-1/4	DCB 4-4	4CBW4	768LN-1/4-1/4
N2425-05-02	IN-BW	500-1-2W	5-1/8 ZHBW2	ZHLW2 5-1/8	DCB 5-2	5CBW2	768LN-5/16-1/8
N2425-05-04	IN-BW	500-1-4W	5-1/4 ZHBW2	ZHLW2 5-1/4	DCB 5-4	5CBW4	768LN-5/16-1/4
N2425-06-04	IN-BW	600-1-4W	6-1/4 ZHBW2	ZHLW2 6-1/4	DCB 6-4	6CBW4	768LN-3/8-1/4
N2425-06-06	IN-BW	600-1-6W	6-3/8 ZHBW2	ZHLW2 6-3/8	DCB 6-6	6CBW6	768LN-3/8-3/8
N2425-06-08	IN-BW	600-1-8W	6-1/2 ZHBW2	ZHLW2 6-1/2	DCB 6-8	6CBW8	768LN-3/8-1/2
N2425-08-06	IN-BW	810-1-6W	8-3/8 ZHBW2	ZHLW2 8-3/8	DCB 8-6	8CBW6	768LN-1/2-3/8
N2425-08-08	IN-BW	810-1-8W	8-1/2 ZHBW2	ZHLW2 8-1/2	DCB 8-8	8CBW8	768LN-1/2-1/2
N2425-08-12	IN-BW	810-1-12W	8-3/4 ZHBW2	ZHLW2 8-3/4	DCB 8-12	8CBW12	768LN-1/2-3/4
N2425-10-08	IN-BW	1010-1-8W	10-1/2 ZHBW2	ZHLW2 10-1/2	DCB 10-8	10CBW8	768LN-5/8-1/2
N2425-12-12	IN-BW	1210-1-12W	12-3/4 ZHBW2	ZHLW2 12-3/4	DCB 12-12	12CBW12	768LN-3/4-3/4
N2425-16-16	IN-BW	1610-1-16W	16-1 ZHBW2	ZHLW2 16-1	DCB 16-16	16CBW16	768LN-1-1
N2425-20-20	IN-BW	2000-1-20W	20-1-1/4 ZHBW2	ZHLW2 20-1-1/4	DCB 20-20	20CBW20	768LN-1-1/4-1-1/4
N2425-24-24	IN-BW	2400-1-24W	24-1-1/2 ZHBW2	ZHLW2 24-1-1/2	DCB 24-24	24CBW24	768LN-1-1/2-1-1/2
N2426-02-02	IN-SW	200-6-2W	2-2 ZHBW	2-2 ZHLW	DCW 2	2CW2	768LW-1/8-1/8
N2426-04-04	IN-SW	400-6-4W	4-4 ZHBW	4-4 ZHLW	DCW 4	4CW4	768LW-1/4-1/4
N2426-06-06	IN-SW	600-6-6W	6-6 ZHBW	6-6 ZHLW	DCW 6	6CW6	768LW-3/8-3/8
N2426-08-08	IN-SW	810-6-8W	8-8 ZHBW	8-8 ZHLW	DCW 8	8CW8	768LW-1/2-1/2
N2426-12-12	IN-SW	1210-6-12W	12-12 ZHBW	12-12 ZHLW	DCW 12	12CW12	768LW-3/4-3/4
N2426-16-16	IN-SW	1610-6-16W	16-16 ZHBW	16-16 ZHLW	DCW 16	16CW16	768LW-1-1
N2426-20-20	IN-SW	2000-6-20W	20-20 ZHBW	20-20 ZHLW	DCW 20	20CW20	768LW-1-1/4-1-1/4
N2426-24-24	IN-SW	2400-6-20W	24-24 ZHBW	24-24 ZHLW	DCW 24	24CW24	768LW-1-1/2-1-1/2
N2428-02-02	MNPT-STDPIPE	2-TA-1-2	2-2 T2HF	2MA2N	DHA 2-2	2AM2	739LM-1/8-1/8
N2428-02-04	MNPT-STDPIPE	2-TA-1-4	2-4 T2HF	2MA4N	DHA 2-4	2AM4	739LM-1/8-1/4
N2428-03-02	MNPT-STDPIPE	3-TA-1-2	3-2 T2HF	3MA2N	DHA 3-2	3AM2	739LM-3/16-1/8
N2428-03-04	MNPT-STDPIPE	3-TA-1-4	3-4 T2HF	3MA4N	DHA 3-4	3AM4	739LM-3/16-1/4
N2428-04-02	MNPT-STDPIPE	4-TA-1-2	4-2 T2HF	4MA2N	DHA 4-2	4AM2	739LM-1/4-1/8
N2428-04-04	MNPT-STDPIPE	4-TA-1-4	4-4 T2HF	4MA4N	DHA 4-4	4AM4	739LM-1/4-1/4
N2428-04-06	MNPT-STDPIPE	4-TA-1-6	4-6 T2HF	4MA6N	DHA 4-6	4AM6	739LM-1/4-3/8
N2428-04-08	MNPT-STDPIPE	4-TA-1-8	4-8 T2HF	4MA8N	DHA 4-8	4AM8	739LM-1/4-1/2
N2428-05-04	MNPT-STDPIPE	5-TA-1-4	5-4 T2HF	5MA4N	DHA 5-4	5AM4	739LM-5/16-1/4
N2428-06-04	MNPT-STDPIPE	6-TA-1-4	6-1 T2HF	6MA4N	DHA 6-4	6AM4	739LM-3/8-1/4
N2428-06-06	MNPT-STDPIPE	6-TA-1-6	6-6 T2HF	6MA6N	DHA 6-6	6AM6	739LM-3/8-3/8
N2428-06-08	MNPT-STDPIPE	6-TA-1-8	6-8 T2HF	6MA8N	DHA 6-8	6AM8	739LM-3/8-1/2
N2428-08-04	MNPT-STDPIPE	8-TA-1-4	8-4 T2HF	8MA4N	DHA 8-4	8AM4	739LM-1/2-1/4
N2428-08-06	MNPT-STDPIPE	8-TA-1-6	8-6 T2HF	8MA6N	DHA 8-6	8AM6	739LM-1/2-3/8
N2428-08-08	MNPT-STDPIPE	8-TA-1-8	8-8 T2HF	8MA8N	DHA 8-8	8AM8	739LM-1/2-1/2
N2428-10-08	MNPT-STDPIPE	10-TA-1-8	10-8 T2HF	10MA8N	DHA 10-8	10AM8	739LM-5/8-1/2
N2428-12-08	MNPT-STDPIPE	12-TA-1-8	12-8 T2HF	12MA8N	DHA 12-8	12AM8	739LM-3/4-1/2
N2428-12-12	MNPT-STDPIPE	12-TA-1-12	12-12 T2HF	12MA12N	DHA 12-12	12AM12	739LM-3/4-3/4
N2428-16-12	MNPT-STDPIPE	16-TA-1-12	16-12 T2HF	16MA12N	DHA 16-12	16AM12	739LM-1-3/4
N2428-16-16	MNPT-STDPIPE	16-TA-1-16	16-16 T2HF	16MA16N	DHA 16-16	16AM16	739LM-1-1
N2428-20-20	MNPT-STDPIPE	20-TA-1-20	20-20 T2HF	20MA20N	DHA 20-20	20AM20	739LM-1-1/4-1-1/4
N2428-24-24	MNPT-STDPIPE	24-TA-1-24	24-24 T2HF	24MA24N	DHA 24-24	24AM24	739LM-1-1/2-1-1/2
N2429-02-02	MORB-STDPIPE						
N2429-04-04	MORB-STDPIPE						
N2429-05-05	MORB-STDPIPE						
N2429-06-06	MORB-STDPIPE						
N2429-08-08	MORB-STDPIPE						
N2429-12-12	MORB-STDPIPE						
N2429-16-16	MORB-STDPIPE						
N2429-20-20	MORB-STDPIPE						
N2429-24-24	MORB-STDPIPE						
N2430-02-02	FNPT-STDPIPE	2-TA7-2	2-2 T2HG	2FA2N	DHC 2-2	2AF2	739LF-1/8-1/8
N2430-02-04	FNPT-STDPIPE	2-TA7-4	2-4 T2HG	2FA4N	DHC 2-4	2AF4	739LF-1/8-1/4
N2430-04-02	FNPT-STDPIPE	4-TA7-2	4-2 T2HG	4FA2N	DHC 4-2	4AF2	739LF-1/4-1/8
N2430-04-04	FNPT-STDPIPE	4-TA7-4	4-4 T2HG	4FA4N	DHC 4-4	4AF4	739LF-1/4-1/4
N2430-04-06	FNPT-STDPIPE	4-TA7-6	4-6 T2HG	4FA6N	DHC 4-6	4AF6	739LF-1/4-3/8

# Cross Reference Chart

Brennan No.	Description	Swagelok	Parker CPI	Parker A-LOK	BI-LOK	GYROLOK	LET-LOK
N2430-04-08	FNPT-STDPIPE	4-TA7-8	4-8 T2HG	4FA8N	DHC 4-8	4AF8	739LF-1/4-1/2
N2430-05-04	FNPT-STDPIPE	5-TA7-4	5-4 T2HG	5FA4N	DHC 5-4	5AF4	739LF-5/16-1/4
N2430-06-04	FNPT-STDPIPE	6-TA7-4	6-4 T2HG	6FA4N	DHC 6-4	6AF4	739LF-3/8-1/4
N2430-06-06	FNPT-STDPIPE	6-TA7-6	6-6 T2HG	6FA6N	DHC 6-6	6AF6	739LF-3/8-3/8
N2430-06-08	FNPT-STDPIPE	6-TA7-8	6-8 T2HG	6FA8N	DHC 6-8	6AF8	739LF-3/8-1/2
N2430-08-04	FNPT-STDPIPE	8-TA7-4	8-4 T2HG	8FA4N	DHC 8-4	8AF4	739LF-1/2-1/4
N2430-08-06	FNPT-STDPIPE	8-TA7-6	8-6 T2HG	8FA6N	DHC 8-6	8AF6	739LF-1/2-3/8
N2430-08-08	FNPT-STDPIPE	8-TA7-8	8-8 T2HG	8FA8N	DHC 8-8	8AF8	739LF-1/2-1/2
N2430-10-08	FNPT-STDPIPE	10-TA7-8	10-8 T2HG	10FA8N	DHC 10-8	10AF8	739LF-5/8-1/2
N2430-12-08	FNPT-STDPIPE	12-TA7-8	12-8 T2HG	12FA8N	DHC 12-8	12AF8	739LF-3/4-1/2
N2430-12-12	FNPT-STDPIPE	12-TA7-12	12-12 T2HG	12FA12N	DHC 12-12	12AF12	739LF-3/4-3/4
N2430-12-16	FNPT-STDPIPE	12-TA7-16	12-16 T2HG	12FA16N	DHC 12-16	12AF16	739LF-3/4-1
N2430-16-12	FNPT-STDPIPE	16-TA7-16	16-16 T2HG	16FA16N	DHC 16-16	16AF16	739LF-1-1
N2430-16-16	FNPT-STDPIPE	16-TA7-12	16-12 T2HG	16FA12N	DHC 16-12	16AF12	739LF-1-3/4
N2430-20-20	FNPT-STDPIPE	20-TA7-20	20-20 T2HG	20FA20N	DHC 20-20	20AF20	739LF-1-1/4-1-1/4
N2430-24-24	FNPT-STDPIPE	24-TA7-24	24-24 T2HG	24FA24N	DHC 24-24	24AF24	739LF-1-1/2-1/2
N2431-04-04	FGA-STDPIPE						
N2431-06-06	FGA-STDPIPE						
N2431-08-08	FGA-STDPIPE						
N2500-01-01	IN-IN 90	100-9	1-1 EBZ	1EE1	DLA 1	1LU	765L-1/16-1/16
N2500-02-02	IN-IN 90	200-9	2-2 EBZ	2EE2	DLA 2	2LU	765L-1/8-1/8
N2500-04-04	IN-IN 90	400-9	4-4 EBZ	4EE4	DLA 4	4LU	765L-1/4-1/4
N2500-05-05	IN-IN 90	500-9	5-5 EBZ	5EE5	DLA 5	5LU	765L-5/16-5/16
N2500-06-06	IN-IN 90	600-9	6-6 EBZ	6EE6	DLA 6	6LU	765L-3/8-3/8
N2500-08-08	IN-IN 90	810-9	8-8 EBZ	8EE8	DLA 8	8LU	765L-1/2-1/2
N2500-10-10	IN-IN 90	1010-9	10-10 EBZ	10EE10	DLA 10	10LU	765L-5/8-5/8
N2500-12-12	IN-IN 90	1210-9	12-12 EBZ	12EE12	DLA 12	12LU	765L-3/4-3/4
N2500-14-14	IN-IN 90	1410-9	14-14 EBZ	14EE14	DLA 14	14LU	765L-7/8-7/8
N2500-16-16	IN-IN 90	1610-9	16-16 EBZ	16EE16	DLA 16	16LU	765L-1-1
N2500-20-20	IN-IN 90	2000-9	20-20 EBZ	20EE20	DLA 20	20LU	765L-1-1/4-1-1/4
N2500-24-24	IN-IN 90	2400-9	24-24 EBZ	24EE24	DLA 24	24LU	765L-1-1/2-1-1/2
N2500-32-32	IN-IN 90	3200-9	32-32 EBZ	32EE32	DLA 32	32LU	765L-2-2
N2501-01-01	IN-MNPT 90	100-2-1	1-1 CBZ	1MSEL1N	DLN 1-1	1LM1	769L-1/16-1/16
N2501-01-02	IN-MNPT 90	100-2-2	1-2 CBZ	1MSEL2N	DLN 1-2	1LM2	769L-1/16-1/8
N2501-02-02	IN-MNPT 90	200-2-2	2-2 CBZ	2MSEL2N	DLN 2-2	2LM2	769L-1/8-1/8
N2501-02-04	IN-MNPT 90	200-2-4	2-4 CBZ	2MSEL4N	DLN 2-4	2LM4	769L-1/8-1/4
N2501-04-02	IN-MNPT 90	400-2-2	4-2 CBZ	4MSEL2N	DLN 4-2	4LM2	769L-1/4-1/8
N2501-04-04	IN-MNPT 90	400-2-4	4-4 CBZ	4MSEL4N	DLN 4-4	4LM4	769L-1/4-1/4
N2501-04-06	IN-MNPT 90	400-2-6	4-6 CBZ	4MSEL6N	DLN 4-6	4LM6	769L-1/4-3/8
N2501-04-08	IN-MNPT 90	400-2-8	4-8 CBZ	4MSEL8N	DLN 4-8	4LM8	769L-1/4-1/2
N2501-05-04	IN-MNPT 90	500-2-4	5-4 CBZ	5MSEL4N	DLN 5-4	5LM4	769L-5/16-1/4
N2501-06-02	IN-MNPT 90	600-2-2	6-2 CBZ	6MSEL2N	DLN 6-2	6LM2	769L-3/8-1/8
N2501-06-04	IN-MNPT 90	600-2-4	6-4 CBZ	6MSEL4N	DLN 6-4	6LM4	769L-3/8-1/4
N2501-06-06	IN-MNPT 90	600-2-6	6-6 CBZ	6MSEL6N	DLN 6-6	6LM6	769L-3/8-3/8
N2501-06-08	IN-MNPT 90	600-2-8	6-8 CBZ	6MSEL8N	DLN 6-8	6LM8	769L-3/8-1/2
N2501-08-04	IN-MNPT 90	810-2-4	8-4 CBZ	8MSEL4N	DLN 8-4	8LM4	769L-1/2-1/4
N2501-08-06	IN-MNPT 90	810-2-6	8-6 CBZ	8MSEL6N	DLN 8-6	8LM6	769L-1/2-3/8
N2501-08-08	IN-MNPT 90	810-2-8	8-8 CBZ	8MSEL8N	DLN 8-8	8LM8	769L-1/2-1/2
N2501-08-12	IN-MNPT 90	810-2-12	8-12 CBZ	8MSEL12N	DLN 8-12	8LM12	769L-1/2-3/4
N2501-10-08	IN-MNPT 90	1010-2-8	10-8 CBZ	10MSEL8N	DLN 10-8	10LM8	769L-5/8-1/2
N2501-12-08	IN-MNPT 90	1210-2-8	12-8 CBZ	12MSEL8N	DLN 12-8	12LM8	769L-3/4-1/2
N2501-12-12	IN-MNPT 90	1210-2-12	12-12 CBZ	12MSEL12N	DLN 12-12	12LM12	769L-3/4-3/4
N2501-14-12	IN-MNPT 90	1410-2-12	14-12 CBZ	14MSEL12N	DLN 14-12	14LM12	769L-7/8-3/4
N2501-16-12	IN-MNPT 90	1610-2-12	16-12 CBZ	16MSEL12N	DLN 16-12	16LM12	769L-1-3/4
N2501-16-16	IN-MNPT 90	1610-2-16	16-16 CBZ	16MSEL16N	DLN 16-16	16LM16	769L-1-1
N2501-20-20	IN-MNPT 90	2000-2-20	20-20 CBZ	20MSEL20N	DLN 20-20	20LM20	769L-1-1/4-1-1/4
N2501-24-24	IN-MNPT 90	2400-2-24	24-24 CBZ	24MSEL24N	DLN 24-24	24LM24	769L-1-1/2-1-1/2
N2501-32-32	IN-MNPT 90	3200-2-32	32-32 CBZ	32MSEL32N	DLN 32-32	32LM32	769L-2-2
N2502-02-02	IN-FNPT 90	200-8-2	2-2 DBZ	2FEL2N	DLF 2-2	2LF2	770L-1/8-1/8
N2502-02-04	IN-FNPT 90	200-8-4	2-4 DBZ	2FEL4N	DLF 2-4	2LF4	770L-1/8-1/4
N2502-04-02	IN-FNPT 90	400-8-2	4-2 DBZ	4FEL2N	DLF 4-2	4LF2	770L-1/4-1/8
N2502-04-04	IN-FNPT 90	400-8-4	4-4 DBZ	4FEL4N	DLF 4-4	4LF4	770L-1/4-1/4

Brennan No.	Description	Swagelok	Parker CPI	Parker A-LOK	BI-LOK	GYROLOK	LET-LOK
N2502-04-06	IN-FNPT 90	400-8-6	4-6 DBZ	4FEL6N	DLF 4-6	4LF6	770L-1/4-3/8
N2502-04-08	IN-FNPT 90	400-8-8	4-8 DBZ	4FEL8N	DLF 4-8	4LF8	770L-1/4-1/2
N2502-05-02	IN-FNPT 90	500-8-2	5-2 DBZ	5FEL2N	DLF 5-2	5LF2	770L-5/16-1/8
N2502-05-04	IN-FNPT 90	500-8-4	5-4 DBZ	5FEL4N	DLF 5-4	5LF4	770L-5/16-1/4
N2502-06-02	IN-FNPT 90	600-8-2	6-2 DBZ	6FEL2N	DLF 6-2	6LF2	770L-3/8-1/8
N2502-06-04	IN-FNPT 90	600-8-4	6-4 DBZ	6FEL4N	DLF 6-4	6LF4	770L-3/8-1/4
N2502-06-06	IN-FNPT 90	600-8-6	6-6 DBZ	6FEL6N	DLF 6-6	6LF6	770L-3/8-3/8
N2502-06-08	IN-FNPT 90	600-8-8	6-8 DBZ	6FEL8N	DLF 6-8	6LF8	770L-3/8-1/2
N2502-08-04	IN-FNPT 90	810-8-4	8-4 DBZ	8FEL4N	DLF 8-4	8LF4	770L-1/2-1/4
N2502-08-06	IN-FNPT 90	810-8-6	8-6 DBZ	8FEL6N	DLF 8-6	8LF6	770L-1/2-3/8
N2502-08-08	IN-FNPT 90	810-8-8	8-8 DBZ	8FEL8N	DLF 8-8	8LF8	770L-1/2-1/2
N2502-10-06	IN-FNPT 90	1010-8-6	10-6 DBZ	10FEL6N	DLF 10-6	10LF6	770L-5/8-3/8
N2502-10-08	IN-FNPT 90	1010-8-8	10-8 DBZ	10FEL8N	DLF 10-8	10LF8	770L-5/8-1/2
N2502-12-08	IN-FNPT 90	1210-8-8	12-8 DBZ	12FEL8N	DLF 12-8	12LF8	770L-3/4-1/2
N2502-12-12	IN-FNPT 90	1210-8-12	12-12 DBZ	12FEL12N	DLF 12-12	12LF12	770L-3/4-3/4
N2502-14-12	IN-FNPT 90	1410-8-12	14-12 DBZ	14FEL12N	DLF 14-12	14LF12	770L-7/8-3/4
N2502-16-12	IN-FNPT 90	1610-8-12	16-12 DBZ	16FEL12N	DLF 16-12	16LF12	770L-1-3/4
N2502-16-16	IN-FNPT 90	610-8-16	16-16 DBZ	16FEL16N	DLF 16-16	16LF16	770L-1-1
N2503-04-02	IN-MNPT 45	400-5-2	4-2 VBZ	4MVEL2N			
N2503-04-04	IN-MNPT 45	400-5-4	4-4 VBZ	4MVEL4N			
N2503-06-02	IN-MNPT 45	600-5-2	6-2 VBZ	6MVEL2N			
N2503-06-04	IN-MNPT 45	600-5-4	6-4 VBZ	6MVEL4N			
N2503-06-06	IN-MNPT 45	600-5-6	6-6 VBZ	6MVEL6N			
N2503-08-06	IN-MNPT 45	810-5-6	8-6 VBZ	8MVEL6N			
N2503-08-08	IN-MNPT 45	810-5-8	8-8 VBZ	8MVEL8N			
N2503-12-12	IN-MNPT 45	1210-5-12	12-12 VBZ	12MVEL12N			
N2503-16-16	IN-MNPT 45	1610-5-16	16-16 VBZ	16MVEL16N			
N2525-04-02	IN-BW 90	400-2-2W	2-1/8 ZEBW2	4-1/8 ZELW2	DLB 4-2	4LBW2	769LN-1/4-1/8
N2525-04-04	IN-BW 90	400-2-4W	4-1/4 ZEBW2	4-1/4 ZELW2	DLB 4-4	4LBW4	769LN-1/4-1/4
N2525-06-04	IN-BW 90	600-2-4W	6-1/4 ZEBW2	6-1/4 ZELW2	DLB 6-4	6LBW4	769LN-3/8-1/4
N2525-08-08	IN-BW 90	810-2-8W	8-1/2 ZEBW2	8-1/2 ZELW2	DLB 8-8	8LBW8	769LN-1/2-1/2
N2525-12-12	IN-BW 90	1210-2-12W	12-3/4 ZEBW2	12-3/4 ZELW2	DLB 12-12	12LBW12	769LN-3/4-3/4
N2525-16-16	IN-BW 90	1610-2-16W	16-1 ZEBW2	16-1 ZELW2	DLB 16-16	16LBW16	769LN-1-1
N2525-20-20	IN-BW 90	2000-2-20W	20-1-1/4 ZEBW2	20-1-1/4 ZELW2	DLB 20-20	20LBW20	769LN-1-1/4-1-1/4
N2525-24-24	IN-BW 90	2400-2-24W	24-1/2 ZEBW2	24-1-1/2 ZELW2	DLB 24-24	24LBW24	769LN-1-1/2-1-1/2
N2526-04-04	IN-SW 90	400-9-4W	4-4 ZEBW	4-4 ZELW	DLW 4-4	4LW4	769LN-1/4-1/4
N2526-06-06	IN-SW 90	600-9-6W	6-6 ZEBW	6-6 ZELW	DLW 6-6	6LW6	769LN-3/8-3/8
N2526-08-08	IN-SW 90	810-9-8W	8-8 ZEBW	8-8 ZELW	DLW 8-8	8LW8	769LN-1/2-1/2
N2526-12-12	IN-SW 90	1210-9-12W	12-12 ZEBW	12-12 ZELW	DLW 12-12	12LW12	769LW-3/4-3/4
N2526-16-16	IN-SW 90	1610-9-16W	16-16 ZEBW	16-16 ZELW	DLW 16-16	16LW16	769LW-1-1
N2526-20-20	IN-SW 90	2000-9-20W	20-20 ZEBW	20-20 ZELW	DLW 20-20	20LW20	769LW-1-1/4-1-1/4
N2526-24-24	IN-SW 90	2400-9-24W	24-24 ZEBW	24-24 ZELW	DLW 24-24	24LW24	769LW-1-1/2-1-1/2
N2601-02-02-02	IN-IN-MNPT	200-3TTM	2-2-2 SBZ	2MBT2N	DTN 2-2	2TTM2	772L-1/8-1/8
N2601-02-02-04	IN-IN-MNPT	200-3-4TTM	2-2-4 SBZ	2MBT4N	DTN 2-4	2TTM4	772L-1/8-1/4
N2601-04-04-02	IN-IN-MNPT	400-3TTM	4-4-2 SBZ	4MBT2N	DTN 4-2	4TTM2	772L-1/4-1/8
N2601-04-04-04	IN-IN-MNPT	400-3-4TTM	4-4-4 SBZ	4MBT4N	DTN 4-4	4TTM4	772L-1/4-1/4
N2601-04-04-06	IN-IN-MNPT	400-3-6TTM	4-4-6 SBZ	4MBT6N	DTN 4-6	4TTM6	772L-1/4-3/8
N2601-04-04-08	IN-IN-MNPT	400-3-8TTM	4-4-8 SBZ	4MBT8N	DTN 4-8	4TTM8	772L-1/4-1/2
N2601-06-06-04	IN-IN-MNPT	600-3-4TTM	6-6-4 SBZ	6MBT4N	DTN 6-4	6TTM4	772L-3/8-1/4
N2601-06-06-06	IN-IN-MNPT	600-3-6TTM	6-6-6 SBZ	6MBT6N	DTN 6-6	6TTM6	772L-3/8-3/8
N2601-06-06-08	IN-IN-MNPT	600-3-8TTM	6-6-8 SBZ	6MBT8N	DTN 6-8	6TTM8	772L-3/8-1/2
N2601-08-08-04	IN-IN-MNPT	810-3-4TTM	8-8-4 SBZ	8MBT4N	DTN 8-4	8TTM4	772L-1/2-1/4
N2601-08-08-06	IN-IN-MNPT	810-3TTM	8-8-6 SBZ	8MBT6N	DTN 8-6	8TTM6	772L-1/2-3/8
N2601-08-08-08	IN-IN-MNPT	810-3-8TTM	8-8-8 SBZ	8MBT8N	DTN 8-8	8TTM8	772L-1/2-1/2
N2601-10-10-08	IN-IN-MNPT	1010-3TTM	10-10-8 SBZ	10MBT8N	DTN 10-8	10TTM8	772L-5/8-1/2
N2601-12-12-08	IN-IN-MNPT	1210-3-8TTM	12-12-8 SBZ	12MBT8N	DTN 12-8	12TTM8	772L-3/4-1/2
N2601-12-12-12	IN-IN-MNPT	1210-3TTM	12-12-12 SBZ	12MBT12N	DTN 12-12	12TTM12	772L-3/4-3/4
N2601-16-16-12	IN-IN-MNPT	1610-3-12TTM	16-16-12 SBZ	16MBT12N	DTN 16-12	16TTM12	772L-1-3/4
N2601-16-16-16	IN-IN-MNPT	1610-3TTM	16-16-16 SBZ	16MBT16N	DTN 16-16	16TTM16	772L-1-1
N2601-20-20-20	IN-IN-MNPT	2000-3-20TTM	20-20-20 SBZ	20MBT20N	DTN 20-20	20TTM20	772L-1-1/4-1-1/4
N2601-24-24-24	IN-IN-MNPT	2400-3-24TTM	24-24-24 SBZ	24MBT24N	DTN 24-24	24TTM24	772L-1-1/2-1-1/4
N2602-02-02-02	IN-IN-FNPT	200-3TTF	2-2-2 OBZ	2FBT2N	DTH 2-2	2TTF2	772LF-1/8-1/8

# Cross Reference Chart

Brennan No.	Description	Swagelok	Parker CPI	Parker A-LOK	BI-LOK	GYROLOK	LET-LOK
N2602-04-04-02	IN-IN-FNPT	400-3TTF	4-4-2 OBZ	4FBT2N	DTH 4-2	4TTF2	772LF-1/4-1/8
N2602-04-04-04	IN-IN-FNPT	400-3-4TTF	4-4-4 OBZ	4FBT4N	DTH 4-4	4TTF4	772LF-1/4-1/4
N2602-06-06-04	IN-IN-FNPT	600-3TTF	6-6-4 OBZ	6FBT4N	DTH 6-4	6TTF4	772LF-3/8-1/4
N2602-06-06-06	IN-IN-FNPT	600-3-6TTF	6-6-6 OBZ	6FBT6N	DTH 6-6	6TTF6	772LF-3/8-3/8
N2602-08-08-06	IN-IN-FNPT	810-3TTF	8-8-6 OBZ	8FBT6N	DTH 8-6	8TTF6	772LF-1/2-3/8
N2602-08-08-08	IN-IN-FNPT	810-3-8TTF	8-8-8 OBZ	8FBT8N	DTH 8-8	8TTF8	772LF-1/2-1/2
N2602-12-12-12	IN-IN-FNPT	1210-3TTF	12-12-12 OBZ	12FBT12N	DTH 12-12	12TTF12	772LF-3/4-3/4
N2602-16-16-12	IN-IN-FNPT	1610-3TTF	16-16-12 OBZ	16FBT12N	DTH 16-12	16TTF12	772LF-1-3/4
N2602-16-16-16	IN-IN-FNPT	1610-3-16TTF	16-16-16 OBZ	16FBT16N	DTH 16-16	16TTF16	772LF-1-1
N2603-02-02-02	IN-IN-IN	200-3	2-2-2 JBZ	2ET2	DTA 2	2TTT	764L-1/8
N2603-04-04-04	IN-IN-IN	400-3	4-4-4 JBZ	4ET4	DTA 4	4TTT	764L-1/4
N2603-05-05-05	IN-IN-IN	500-3	5-5-5 JBZ	5ET5	DTA 5	5TTT	764L-5/16
N2603-06-04-04	IN-IN-IN	600-3-4-4	6-4-4 JBZ	6-4-4 JLZ	DTR 6-4-4		764LR-3/8-1/4-1/4
N2603-06-04-06	IN-IN-IN	600-3-4-6	6-4-6 JBZ	6-4-6 JLZ	DTR 6-4-6		764LR-3/8-1/4-3/8
N2603-06-06-04	IN-IN-IN	600-3-6-4	6-6-4 JBZ	6-6-4 JLZ	DTR 6-6-4		764LR-3/8-3/8-1/4
N2603-06-06-06	IN-IN-IN	600-3	6-6-6 JBZ	6ET6	DTA 6	6TTT	764L-3/8
N2603-08-04-04	IN-IN-IN	810-3-4-4	8-4-4 JBZ	8-4-4 JLZ	DTR 8-4-4		764LR-1/2-1/4-1/4
N2603-08-04-08	IN-IN-IN	810-3-4-8	8-4-8 JBZ	8-4-8 JLZ	DTR 8-4-8		764LR-1/2-1/4-1/2
N2603-08-06-06	IN-IN-IN	810-3-6-6	8-6-6 JBZ	8-6-6 JLZ	DTR 8-6-6		764LR-1/2-3/8-3/8
N2603-08-06-08	IN-IN-IN	810-3-6-8	8-6-8 JBZ	8-6-8 JLZ	DTR 8-6-8		764LR-1/2-3/8-1/2
N2603-08-08-04	IN-IN-IN	810-3-8-4	8-8-4 JBZ	8-8-4 JLZ	DTR 8-8-4		764LR-1/2-1/2-1/4
N2603-08-08-06	IN-IN-IN	810-3-8-6	8-8-6 JBZ	8-8-6 JLZ	DTR 8-8-6		764LR-1/2-1/2-3/8
N2603-08-08-08	IN-IN-IN	810-3	8-8-8 JBZ	8ET8	DTA 8	8TTT	764L-1/2
N2603-10-10-10	IN-IN-IN	1010-3	10-10-10 JBZ	10 ET10	DTA 10	10TTT	764L-5/8
N2603-12-06-06	IN-IN-IN	1210-3-6-6	12-6-6 JBZ	12-6-6 JLZ	DTR 12-6-6		764LR-3/4-3/8-3/8
N2603-12-06-12	IN-IN-IN	1210-3-6-12	12-6-12 JBZ	12-6-12 JLZ	DTR 12-6-12		764LR-3/4-3/8-3/4
N2603-12-08-08	IN-IN-IN	1210-3-8-8	12-8-8 JBZ	12-8-8 JLZ	DTR 12-8-8		764LR-3/4-1/2-1/2
N2603-12-08-12	IN-IN-IN	1210-3-8-12	12-8-12 JBZ	12-8-12 JLZ	DTR 12-8-12		764LR-3/4-1/2-3/4
N2603-12-12-06	IN-IN-IN	1210-3-12-6	12-12-6 JBZ	12-12-6 JLZ	DTR 12-12-6		764LR-3/4-3/4-3/8
N2603-12-12-08	IN-IN-IN	1210-3-12-8	12-12-8 JBZ	12-12-8 JLZ	DTR 12-12-8		764LR-3/4-3/4-1/2
N2603-12-12-12	IN-IN-IN	1210-3	12-12-12 JBZ	12ET12	DTA 12	12TTT	764L-3/4
N2603-16-06-06	IN-IN-IN	1610-3-6-6	16-6-6 JBZ	16-6-6 JLZ	DTR 16-6-6		764LR-1-3/8-3/8
N2603-16-06-16	IN-IN-IN	1610-3-6-16	16-6-16 JBZ	16-6-16 JLZ	DTR 16-6-16		764LR-1-3/8-1
N2603-16-08-08	IN-IN-IN	1610-3-8-8	16-8-8 JBZ	16-8-8 JLZ	DTR 16-8-8		764LR-1-1/2-1/2
N2603-16-08-16	IN-IN-IN	1610-3-8-16	16-8-16 JBZ	16-8-16 JLZ	DTR 16-8-16		764LR-1-1/2-1
N2603-16-12-12	IN-IN-IN	1610-3-12-12	16-12-12 JBZ	16-12-12 JLZ	DTR 16-12-12		764LR-1-3/4-3/4
N2603-16-12-16	IN-IN-IN	1610-3-12-16	16-12-16 JBZ	16-12-16 JLZ	DTR 16-12-16		764LR-1-3/4-1
N2603-16-16-06	IN-IN-IN	1610-3-16-6	16-16-6 JBZ	16-16-6 JLZ	DTR 16-16-6		764LR-1-1-3/8
N2603-16-16-08	IN-IN-IN	1610-3-16-8	16-16-8 JBZ	16-16-8 JLZ	DTR 16-16-8		764LR-1-1-1/2
N2603-16-16-12	IN-IN-IN	1610-3-16-12	16-16-12 JBZ	16-16-12 JLZ	DTR 16-16-12		764LR-1-1-3/4
N2603-16-16-16	IN-IN-IN	1610-3	16-16-16 JBZ	16ET16	DTA 16	16TTT	764L-1
N2603-20-16-16	IN-IN-IN	2000-3-16-16	20-16-16 JBZ	20-16-16 JLZ	DTR 20-16-16		764LR-1 1/4-1-1
N2603-20-16-20	IN-IN-IN	2000-3-16-20	20-16-20 JBZ	20-16-20 JLZ	DTR 20-16-20		764LR-1 1/4-1-1/80
N2603-20-20-16	IN-IN-IN	2000-3-20-16	20-20-16 JBZ	20-20-16 JLZ	DTR 20-20-16		764LR-1 1/4-1-1/4-1
N2603-20-20-20	IN-IN-IN	2000-3	20-20-20 JBZ	20ET20	DTA 20	20TTT	764L-1 1/4
N2603-24-16-16	IN-IN-IN	2400-3-16-16	24-16-16 JBZ	24-16-16 JLZ	DTR 24-16-16		764LR-1 1/2-1-1
N2603-24-16-24	IN-IN-IN	2400-3-16-24	24-16-24 JBZ	24-16-24 JLZ	DTR 24-16-24		764LR-1 1/2-1-1 1/4
N2603-24-24-16	IN-IN-IN	2400-3-16-16	24-24-16 JBZ	24-24-16 JLZ	DTR 24-24-16		764LR-1 1/2 1/1/2-1
N2603-24-24-24	IN-IN-IN	2400-3	24-24-24 JBZ	24ET24	DTA 24	24TTT	764L-1 1/2
N2603-32-32-32	IN-IN-IN	3200-3	32-32-32 JBZ	32ET32	DTA 32	32TTT	764L-2
N2605-02-02-02	IN-MNPT-IN	200-3TMT	2-2-2 RBZ	2MRT2N	DTK 2-2	2TMT2	771L-1/8-1/8
N2605-02-04-02	IN-MNPT-IN	200-3-4TMT	2-4-2 RBZ	2MRT4N	DTK 2-4	2TMT4	771L-1/8-1/4
N2605-04-02-04	IN-MNPT-IN	400-3TMT	4-2-4 RBZ	4MRT2N	DTK 4-2	4TMT2	771L-1/4-1/8
N2605-04-04-04	IN-MNPT-IN	400-3-4TMT	4-4-4 RBZ	4MRT4N	DTK 4-4	4TMT4	771L-1/4-1/4
N2605-04-06-04	IN-MNPT-IN	400-3-6TMT	4-6-4 RBZ	4MRT6N	DTK 4-6	4TMT6	771L-1/4-3/8
N2605-04-08-04	IN-MNPT-IN	400-3-8TMT	4-8-4 RBZ	4MRT8N	DTK 4-8	4TMT8	771L-1/4-1/2
N2605-06-04-06	IN-MNPT-IN	600-3TMT	6-4-6 RBZ	6MRT4N	DTK 6-4	6TMT4	771L-3/8-1/4
N2605-06-06-06	IN-MNPT-IN	600-3-6TMT	6-6-6 RBZ	6MRT6N	DTK 6-6	6TMT6	771L-3/8-3/8
N2605-06-08-08	IN-MNPT-IN	600-3-8TMT	6-8-8 RBZ	6MRT8N	DTK 6-8	6TMT8	771L-3/8-1/2
N2605-08-04-08	IN-MNPT-IN	810-3-4TMT	8-4-8 RBZ	8MRT4N	DTK 8-4	8TMT4	771L-1/2-1/4
N2605-08-06-08	IN-MNPT-IN	810-3TMT	8-6-8 RBZ	8MRT6N	DTK 8-6	8TMT6	771L-1/2-3/8
N2605-08-08-08	IN-MNPT-IN	810-3-8TMT	8-8-8 RBZ	8MRT8N	DTK 8-8	8TMT8	771L-1/2-1/2

Brennan No.	Description	Swagelok	Parker CPI	Parker A-LOK	BI-LOK	GYROLOK	LET-LOK
N2605-10-08-10	IN-MNPT-IN	1010-3TMT	10-8-10 RBZ	10MRT8N	DTK 10-8	10TMT8	771L-5/8-1/2
N2605-12-08-12	IN-MNPT-IN	1210-3-8TMT	12-8-12 RBZ	12MRT8N	DTK 12-8	12TMT8	771L-3/4-1/2
N2605-12-12-12	IN-MNPT-IN	1210-3TMT	12-12-12 RBZ	12MRT12N	DTK 12-12	12TMT12	771L-3/4-3/4
N2605-16-12-16	IN-MNPT-IN	1610-3-12TMT	16-12-16 RBZ	16MRT12N	DTK 16-12	16TMT12	771L-1-3/4
N2605-16-16-16	IN-MNPT-IN	1610-3TMT	16-16-16 RBZ	16MRT16N	DTK 16-16	16TMT16	771L-1-1
N2605-20-20-20	IN-MNPT-IN	2000-3TMT	20-20-20 RBZ	20MRT20N	DTK 20-20	20TMT20	771L-1 1/4-1 1/4
N2605-24-24-24	IN-MNPT-IN	2400-3TMT	24-24-24 RBZ	24MRT24N	DTK 24-24	24TMT24	771L-1 1/2 1/1/2
N2606-02-02-02	IN-FNPT-IN	200-3-2-TFT	2-2-2 MBZ	2FRT2N	DTF 2-2	2TFT2	771LF-1/8-1/8
N2606-04-02-04	IN-FNPT-IN	400-3TFT	4-2-4 MBZ	4FRT2N	DTF 4-2	4TFT2	771LF-1/4-1/8
N2606-04-04-04	IN-FNPT-IN	400-3-TFT	4-4-4 MBZ	4FRT4N	DTF 4-4	4TFT4	771LF-1/4-1/4
N2606-06-04-06	IN-FNPT-IN	600-3-4TFT	6-4-6 MBZ	6FRT4N	DTF 6-4	6TFT4	771LF-3/8-1/4
N2606-06-06-06	IN-FNPT-IN	600-3-6TFT	6-6-6 MBZ	6FRT6N	DTF 6-6	6TFT6	771LF-3/8-3/8
N2606-08-06-08	IN-FNPT-IN	810-3TFT	8-6-8 MBZ	8FRT6N	DTF 8-6	8TFT6	771LF-1/2-3/8
N2606-08-08-08	IN-FNPT-IN	810-3-8TFT	8-8-8 MBZ	8FRT8N	DTF 8-8	8TFT8	771LF-1/2-1/2
N2606-12-12-12	IN-FNPT-IN	1210-3TFT	12-12-12 MBZ	12FRT12N	DTF 12-12	12TFT12	771LF-3/4-3/4
N2606-16-12-16	IN-FNPT-IN	1610-3-12-TFT	16-12-16 MBZ	16FRT12N	DTF 16-12	16TFT12	771LF-1-3/4
N2606-16-16-16	IN-FNPT-IN	1610-3TFT	16-16-16 MBZ	16FRT16N	DTF 16-16	16TFT16	771LF-1-1
N2650-02-02-02-02	IN-IN-IN-IN	200-4	2 KBZ	2ECR2	DXA 2	2C	7102L-1/8
N2650-04-04-04-04	IN-IN-IN-IN	400-4	4 KBZ	4ECR4	DXA 4	4C	7102L-1/4
N2650-06-06-06-06	IN-IN-IN-IN	600-4	6KBZ	6ECR6	DXA 6	6C	7102L-3/8
N2650-08-08-08-08	IN-IN-IN-IN	810-4	8 KBZ	8ECR8	DXA 8	8C	7102L-1/2
N2650-12-12-12-12	IN-IN-IN-IN	1210-4	12 KBZ	12ECR12	DXA 12	12C	7102L-3/4
N2650-16-16-16-16	IN-IN-IN-IN	1610-4	16 KBZ	16ECR16	DXA 16	16C	7102L-1
N2700-LN-01-01	INBH-IN	100-61	1-1 WBZ	1BC1	DSU 1	1BU	774L-1/16-1/16
N2700-LN-02-02	INBH-IN	200-61	2-2 WBZ	2BC2	DSU 2	2BU	774L-1/8-1/8
N2700-LN-04-02	INBH-IN	400-61-2	4-2 WBZ	4BC2	DSU 4-2	4BU2	774L-1/4-1/8
N2700-LN-04-04	INBH-IN	400-61	4-4 WBZ	4BC4	DSU 4	4BU	774L-1/4-1/4
N2700-LN-05-05	INBH-IN	500-61	5-5 WBZ	5BC5	DSU 5	5BU	774L-5/16-5/16
N2700-LN-06-04	INBH-IN	600-61-4	6-4 WBZ	6BC4	DSU 6-4	6BU4	774L-3/8-1/4
N2700-LN-06-06	INBH-IN	600-61	6-6 WBZ	6BC6	DSU 6	6BU6	774L-3/8-3/8
N2700-LN-08-04	INBH-IN	810-61-4	8-4 WBZ	8BC4	DSU 8-4	8BU4	774L-1/2-1/4
N2700-LN-08-06	INBH-IN	810-61-6	8-6 WBZ	8BC6	DSU 8-6	8BU6	774L-1/2-3/8
N2700-LN-08-08	INBH-IN	810-61	8-8 WBZ	8BC8	DSU 8	8BU	774L-1/2-1/2
N2700-LN-10-10	INBH-IN	1010-61	10-10 WBZ	10BC10	DSU 10	10BU	774L-5/8-5/8
N2700-LN-12-12	INBH-IN	1210-61	12-12 WBZ	12BC12	DSU 12	12BU	774L-3/4-3/4
N2700-LN-16-16	INBH-IN	1610-61	16-16 WBZ	16BC16	DSU 16	16BU	774L-1-1
N2700-LN-20-20	INBH-IN	2000-61	20-20 WBZ	20BC20	DSU 20	20BU	774L-1 1/4-1 1/4
N2700-LN-24-24	INBH-IN	2400-61	24-24 WBZ	24BC24	DSU 24	24BU	774L-1 1/2-1 1/2
N2700-LN-32-32	INBH-IN	3200-61	32-32 WBZ	32BC32	DSU 32	32BU	774L-2-2
N2701-LN-02-02	INBH-IN 90				DSL 2		
N2701-LN-04-04	INBH-IN 90				DSL 4		
N2701-LN-06-06	INBH-IN 90				DSL 6		
N2701-LN-08-08	INBH-IN 90				DSL 8		
N2701-LN-12-12	INBH-IN 90				DSL 12		
N2701-LN-16-16	INBH-IN 90				DSL 16		
N2705-02-02	INBH-FNPT	200-71-2	2-2 GH2BZ	2FBC2N	DSS 2-2	2BCF2	774LF-1/8-1/8
N2705-04-02	INBH-FNPT	400-71-2	4-2 GH2BZ	4FBC2N	DSS 4-2	4BCF2	774LF-1/4-1/8
N2705-04-04	INBH-FNPT	400-71-4	4-4 GH2BZ	4FBC4N	DSS 4-4	4BCF4	774LF-1/4-1/4
N2705-06-04	INBH-FNPT	600-71-4	6-4 GH2BZ	6FBC4N	DSS 6-4	6BCF4	774LF-3/8-1/4
N2705-08-06	INBH-FNPT	810-71-6	8-6 GH2BZ	8FBC6N	DSS 8-6	8BCF6	774LF-1/2-3/8
N2705-08-08	INBH-FNPT	810-71-8	8-8 GH2BZ	8FBC8N	DSS 8-8	8BCF8	774LF-1/2-1/2
N2705-10-08	INBH-FNPT	1010-71-8	10-8 GH2BZ	10FBC8N	DSS 10-8	10BCF8	774LF-5/8-1/2
N2705-12-08	INBH-FNPT	1210-71-8	12-8 GH2BZ	12FBC8N	DSS 12-8	12BCF8	774LF-3/4-1/2
N2705-12-12	INBH-FNPT	1210-71-12	12-12 GH2BZ	12FBC12N	DSS 12-12	12BCF12	774LF-3/4-3/4
N2705-16-12	INBH-FNPT	1610-71-12	16-12 GH2BZ	16FBC12N	DSS 16-12	16BCF12	774LF-1-3/4
N2705-16-16	INBH-FNPT	1610-71-16	16-16 GH2BZ	16FBC16N	DSS 16-16	16BCF16	774LF-1-1
N2705-20-20	INBH-FNPT	2000-71-20	20-20 GH2BZ	20FBC20N	DSS 20-20	20BCF20	774LF-1 1/4-1 1/4
N2705-24-24	INBH-FNPT	2400-71-24	24-24 GH2BZ	24FBC24N	DSS 24-24	24BCF24	774LF-1 1/2-1 1/2
N2706-LN-02-02	INBH-MNPT	200-11-2	2-2 FH2BZ	2MBC2N	DSC 2-2	2BCM2	774LM-1/8-1/8
N2706-LN-04-02	INBH-MNPT	400-11-2	4-2 FH2BZ	4MBC2N	DSC 4-2	4BCM2	774LM-1/4-1/8
N2706-LN-04-04	INBH-MNPT	400-11-4	4-4 FH2BZ	4MBC4N	DSC 4-4	4BCM4	774LM-1/4-1/4
N2706-LN-06-04	INBH-MNPT	600-11-4	6-4 FH2BZ	6MBC4N	DSC 6-4	6BCM4	774LM-3/8-1/4

# Cross Reference Chart

Brennan No.	Description	Swagelok	Parker CPI	Parker A-LOK	BI-LOK	GYROLOK	LET-LOK
N2706-LN-06-06	INBH-MNPT	600-11-6	6-6 FH2BZ	6MBC6N	DSC 6-6	6BCM6	774LM-3/8-3/8
N2706-LN-06-08	INBH-MNPT	600-11-8	6-8 FH2BZ	6MBC8N	DSC 6-8	6BCM8	774LM-3/8-1/2
N2706-LN-08-06	INBH-MNPT	810-11-6	8-6 FH2BZ	8MBC6N	DSC 8-6	8BCM6	774LM-1/2-3/8
N2706-LN-08-08	INBH-MNPT	810-11-8	8-8 FH2BZ	8MBC8N	DSC 8-8	8BCM8	774LM-1/2-1/2
N2706-LN-12-12	INBH-MNPT	1210-11-12	12-12 FH2BZ	12MBC12N	DSC 12-12	12BCM12	774LM-3/4-3/4
N2706-LN-16-16	INBH-MNPT	1610-11-16	16-16 FH2BZ	16MBC16N	DSC 16-16	16BCM16	774LM-1-1
N2706-LN-20-20	INBH-MNPT	2000-11-20	20-20 FH2BZ	20MBC20N	DSC 20-20	20BCM20	774LM-1 1/4-1 1/4
N2706-LN-24-24	INBH-MNPT	2400-11-24	24-24 FH2BZ	24MBC24N	DSC 24-24	24BCM24	774LM-1 1/2-1 1/2
N2709-02-02	INBH-STDPIPE	200-R1-2	2-2 T2H2BZ	2TUBC2	DSE 2	2BA2	774LT-1/8-1/8
N2709-04-04	INBH-STDPIPE	400-R1-4	4-4 T2H2BZ	4TUBC4	DSE 4	4BA4	774LT-1/4-1/4
N2709-06-06	INBH-STDPIPE	600-R1-6	6-6 T2H2BZ	6TUBC6	DSE 6	6BA6	774LT-3/8-3/8
N2709-08-08	INBH-STDPIPE	810-R1-8	8-8 T2H2BZ	8TUBC8	DSE 8	8BA8	774LT-1/2-1/2
N2709-10-10	INBH-STDPIPE	1010-R-10	10-10 T2H2BZ	10TUBC10	DSE 10	10BA10	774LT-5/8-5/8
N2709-16-16	INBH-STDPIPE	1610-R1-16	16-16 T2H2BZ	16TUBC16	DSE 16	16BA16	774LT-1-1
N2709-20-20	INBH-STDPIPE	2000-R1-20	20-20 T2H2BZ	20TUBC20	DSE 20	20BA20	774LT-1 1/4-1 1/4
N2709-24-24	INBH-STDPIPE	2400-R1-24	24-24 T2H2BZ	24TUBC24	DSE 24	24BA24	774LT-1 1/2-1 1/2
N6400-02-02-O	IN-MORB	200-1-2-ST	2-2 ZHBA	2M1SC2	DCU 2-2	2UANO2	768LOB-1/8-1/8
N6400-04-04-O	IN-MORB	400-1-4-ST	4-4 ZHBA	4M1SC4	DCU 4-4	4UANO4	768LOB-1/4-1/4
N6400-05-05-O	IN-MORB	500-1-5-ST	5-5 ZHBA	5M1SC5	DCU 5-5	5UANO5	768LOB-5/16-5/16
N6400-06-06-O	IN-MORB	600-1-6-ST	6-6 ZHBA	6M1SC6	DCU 6-6	6UANO6	768LOB-3/8-3/8
N6400-08-08-O	IN-MORB	810-1-8-ST	8-8 ZHBA	8M1SC8	DCU 8-8	8UANO8	768LOB-1/2-1/2
N6400-12-12-O	IN-MORB	1210-1-12-ST	12-12 ZHBA	12M1SC12	DCU 12-12	12UANO12	768LOB-3/4-3/4
N6400-16-16-O	IN-MORB	1610-1-16-ST	16-16 ZHBA	16M1SC16	DCU 16-16	16UANO16	768LOB-1-1
N6400-20-20-O	IN-MORB	2000-1-20-ST	20-20 ZHBA	20M1SC20	DCU 20-20	20UANO20	768LOB-1 1/4-1 1/4
N6400-24-24-O	IN-MORB	2400-1-24-ST	24-24 ZHBA	24M1SC24	DCU 24-24	24UANO24	768LOB-1 1/2-1 1/2
N6801-04-04-NWO	IN-MAORB 90	400-2-4ST	4-4 C5BZ	4M5SEL4			
N6801-04-06-NWO	IN-MAORB 90	400-2-6ST	4-6 C5BZ	4M5SEL6			
N6801-06-06-NWO	IN-MAORB 90	600-2-6ST	6-6 C5BZ	6M5SEL6			
N6801-06-08-NWO	IN-MAORB 90	600-2-8ST	6-8 C5BZ	6M5SEL8			
N6801-08-08-NWO	IN-MAORB 90	810-2-8ST	8-8 C5BZ	8M5SEL8			
N6801-10-10-NWO	IN-MAORB 90	1010-2-10ST	10-10 C5BZ	10M5SEL10			
N6801-12-12-NWO	IN-MAORB 90	1210-2-12ST	12-12 C5BZ	12M5SEL12			
N6801-14-14-NWO	IN-MAORB 90	1410-2-14ST	14-14 C5BZ	14M5SEL14			
N6801-16-16-NWO	IN-MAORB 90	1610-2-16ST	16-16 C5BZ	16M5SEL16			
N6801-20-20-NWO	IN-MAORB 90	2000-2-20ST	20-20 C5BZ	20M5SEL20			
N6801-24-24-NWO	IN-MAORB 90	2400-2-24ST	24-24 C5BZ	24M5SEL24			
N6802-04-04-NWO	IN-MAORB-45	400-5-4ST	4-4 V5BZ	4M5VEL4			
N6802-06-06-NWO	IN-MAORB-45	600-5-6ST	6-6 V5BZ	6M5VEL6			
N6802-08-08-NWO	IN-MAORB-45	810-5-8ST	8-8 V5BZ	8M5VEL8			
N6802-12-12-NWO	IN-MAORB-45	1210-5-12ST	12-12 V5BZ	12M5VEL12			
N6802-16-16-NWO	IN-MAORB-45	1610-5-16ST	16-16 V5BZ	16M5VEL16			
N6803-04-04-04NWO	IN-IN-MAORB	400-3TTS	4-4 S5BZ	4M5BT4			
N6803-06-06-06NWO	IN-IN-MAORB	600-3TTS	6-6 S5BZ	6M5BT6			
N6803-08-08-08NWO	IN-IN-MAORB	810-3TTS	8-8 S5BZ	8M5BT8			
N6803-12-12-12-NWO	IN-IN-MAORB	1210-3TTS	12-12 S5BZ	12M5BT12			
N6803-16-16-16-NWO	IN-IN-MAORB	1610-3TTS	16-16 S5BZ	16M5BT16			
N6803-20-20-20-NWO	IN-IN-MAORB	2000-3TTS	20-20 S5BZ	20M5BT20			
N6803-24-24-24-NWO	IN-IN-MAORB	2400-3TTS	24-24 S5BZ	24M5BT24			
N6804-04-04-04-NWO	IN-MAORB-IN	400-3TST	4-4-4 R5BZ	4M5RT4			
N6804-06-06-06-NWO	IN-MAORB-IN	600-3TST	6-6-6 R5BZ	6M5RT6			
N6804-08-08-08-NWO	IN-MAORB-IN	810-3TST	8-8-8 R5BZ	8M5RT8			
N6804-12-12-12-NWO	IN-MAORB-IN	1210-3TST	12-12-12 R5BZ	12M5RT12			
N6804-16-16-16-NWO	IN-MAORB-IN	1610-3TST	16-16-16 R5BZ	16M5RT16			
N6804-20-20-20-NWO	IN-MAORB-IN	2000-3TST	20-20-20 R5BZ	20M5RT20			
N6804-24-24-24-NWO	IN-MAORB-IN	2400-3TST	24-24-24 R5BZ	24M5RT24			



*Push-To-Connect*

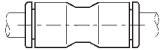

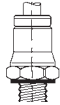



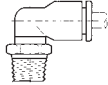
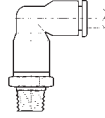
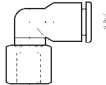
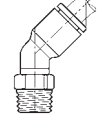
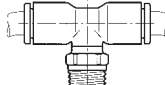
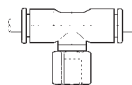
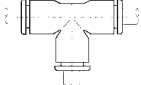
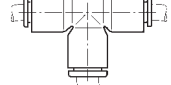
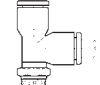

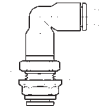

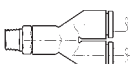
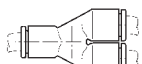
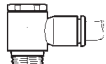
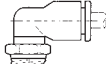
## Push-To-Connect

Brennan's new line of Push-To-Connect pneumatic fittings allows instant connections just by pushing the tube into the fitting. No tools or other operations are necessary, and disconnections are just as easy.

These universally adapted fittings are ideal for both mobile and in-plant applications involving compressed air. The fittings are available in both poly and nickel-plated brass. They're also offered for metric tubes with BSP threads in taper, parallel and metric form.

Brennan offers Push-To-Connect fittings in a wide range of body designs and configurations — from 1/8" to 1/2" diameters. All are in stock now and available for immediate delivery. And all feature the same consistent quality you've come to expect from Brennan.


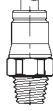

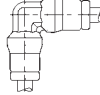
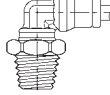
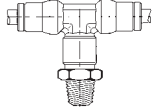
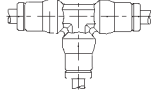
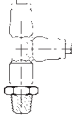
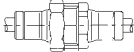

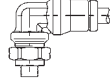
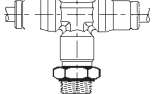
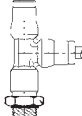

### Nylon Push-To-Connect Fittings For Industrial Applications

 <b>2403</b> Union - Fractional Inch Tube To Tube	 <b>2403</b> Unequal Union - Fractional Inch Tube To Tube	 <b>2404</b> Male Connector - Fractional Inch Tube To Male NPT	 <b>2405</b> Straight Female Connector - Fractional Inch Tube To NPT	 <b>2500</b> Union Elbow - Fractional Inch To Tube	 <b>2500</b> Unequal Union Elbow - Fractional Inch Tube To Tube
 <b>2501</b> Male Elbow - Fractional Inch Tube To Male NPT	 <b>2501</b> Extended Male Elbow - Fractional Inch Tube To Male NPT	 <b>2502</b> Female Elbow - Fractional Inch Tube To NPT	 <b>2503</b> 45° Male Elbow - Fractional Inch Tube To Male NPT or UNF	 <b>2601</b> Male Branch Tee - Fractional Inch Tube To Male NPT or UNF To Tube	 <b>2602</b> Female Branch Tee - Fractional Inch Tube To Male NPT
 <b>2603</b> Tee - Fractional Inch Tube To Tube To Tube	 <b>2603</b> Unequal Tee - Fractional Inch Tube To Tube To Tube	 <b>2605</b> Male Run Tee - Fractional Inch Tube To Tube To Male NPT or UNF	 <b>2700</b> Bulkhead Union - Tube To Tube	 <b>2701</b> Equal Bulkhead Elbow - Tube To Tube	 <b>2705</b> Female Bulkhead Connector - Tube To NPT
 <b>2801</b> "Y" Male - Fractional Inch Tube To NPT	 <b>2803</b> "Y" - Fractional Inch Tube To Tube	 <b>2805</b> Banjo - Fractional Inch Tube To NPT	 <b>6400</b> Male Elbow - Fractional Inch Tube To UNF		

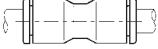
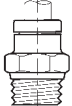

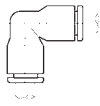
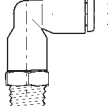
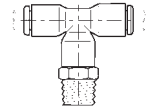
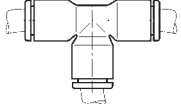
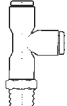
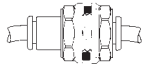
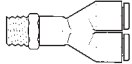
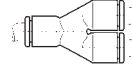


# Push-To-Connect

## Nickel-Plated Brass Push-To-Connect Fittings For Industrial Applications

 <p><b>2403</b> Straight Union - Fractional Inch Tube To Tube</p>	 <p><b>2404</b> Male Connector - Fractional Inch Tube To NPT</p>	 <p><b>2405</b> Female Connector - Fractional Inch Tube To NPT</p>	 <p><b>2500</b> Union Elbow - Fractional Inch Tube To Tube</p>	 <p><b>2501</b> Male Elbow - Fractional Inch Tube To NPT</p>	 <p><b>2601</b> Male Branch Tee - Fractional Inch Tube To NPT To Tube</p>
 <p><b>2603</b> Union Tee - Fractional Inch Tube To Tube To Tube</p>	 <p><b>2605</b> Male Run Tee - Fractional Inch Tube To Tube To NPT</p>	 <p><b>2700</b> Bulkhead Connector - Fractional Inch Tube To Tube</p>	 <p><b>6400</b> Male Connector - Fractional Inch Tube To UNF</p>	 <p><b>6801</b> Male Elbow - Fractional Inch Tube To UNF</p>	 <p><b>6803</b> Male Branch Tee - Fractional Inch Tube To UNF To Tube</p>
 <p><b>6804</b> Male Run Tee - Fractional Inch Tube To Tube To UNF</p>	 <p><b>2406</b> Plug-In Reducer - Fractional Inch</p>				

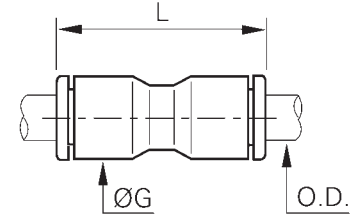
## SAE and DOT Push-To-Connect Fittings For Vehicle Applications

 <p><b>2403</b> Union - Fractional Inch Tube To Tube</p>	 <p><b>2404</b> Male Connector - Fractional Inch Tube To Male NPT</p>	 <p><b>2405</b> Straight Female Connector - Fractional Inch Tube To NPT</p>	 <p><b>2500</b> Union Elbow - Fractional Inch Tube To Tube</p>	 <p><b>2501</b> Male Elbow - Fractional Inch Tube To Male NPT</p>	 <p><b>2601</b> Male Branch Tee - Fractional Inch Tube To Male NPT</p>
 <p><b>2603</b> Union Tee - Fractional Inch Tube To Tube To Tube</p>	 <p><b>2605</b> Male Run Tee - Fractional Inch Tube To Male NPT</p>	 <p><b>2700</b> Bulkhead Union - Fractional Inch</p>	 <p><b>2801</b> "Y" Male Connector - Fractional Inch Tube To NPT</p>	 <p><b>2803</b> Union "Y" - Fractional Inch Tube To Tube</p>	

## Nylon Push-To-Connect Fittings For Industrial Applications

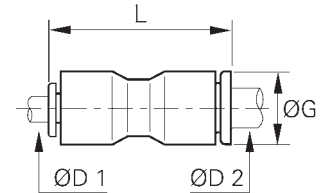
### Union – Fractional Inch Tube To Tube

ØD in	Cat. No.	G in	L in	Scale oz
1/8	PCNY2403-02-02	.34	.97	.11
5/32	PCNY2403-02.5-02.5	.33	.98	.07
3/16	PCNY2403-03-03	.43	1.44	.39
1/4	PCNY2403-04-04	.43	1.16	.14
5/16	PCNY2403-05-05	.53	1.50	.25
3/8	PCNY2403-06-06	.63	1.65	.40
1/2	PCNY2403-08-08	.87	2.17	.95



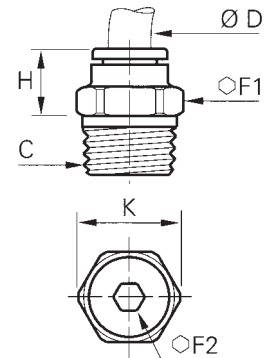
### Unequal Union – Fractional Inch Tube To Tube

ØD1 in	ØD2 in	Cat. No.	G in	L in	Scale oz
1/8	5/32	PCNY2403-02-02.5	.33	.96	.11
1/8	1/4	PCNY2403-02-04	.43	1.32	.34
5/32	1/4	PCNY2403-02.5-04	.43	1.16	.34
1/4	5/16	PCNY2403-04-05	.53	1.44	.40
3/8	1/4	PCNY2403-06-04	.63	1.61	.50
3/8	1/2	PCNY2403-06-08	.87	2.17	.55



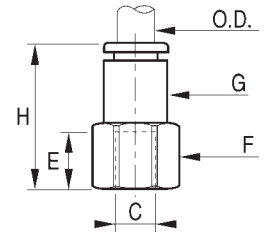
### Male Connector – Fractional Inch Tube To Male NPT

ØD1 in	C NPT	Cat. No.	F1 mm	F2 in	H in	K in	Scale oz
1/8	1/16	PCNY2404-02-01	10	.07	.413	.433	.24
1/8	1/8	PCNY2404-02-02	11	.07	.283	.472	.25
1/8	1/4	PCNY2404-02-04	14	.07	.315	.591	.59
5/32	1/8	PCNY2404-02.5-02	11	7/64	.334	.472	.26
5/32	1/4	PCNY2404-02.5-04	14	7/64	.275	.590	.56
3/16	1/8	PCNY2404-03-02	7/16"	1/8	.61	.51	.49
3/16	1/4	PCNY2404-03-04	9/16"	5/32	.59	.65	.97
1/4	1/8	PCNY2404-04-02	11	5/32	.472	.472	.26
1/4	1/4	PCNY2404-04-04	14	5/32	.374	.590	.50
1/4	3/8	PCNY2404-04-06	18	3/16	.295	.767	.88
5/16	1/8	PCNY2404-05-02	13	3/16	.787	.551	.45
5/16	1/4	PCNY2404-05-04	14	1/4	.661	.590	.58
5/16	3/8	PCNY2404-05-06	18	1/4	.464	.767	.89
3/8	1/8	PCNY2404-06-02	16	5/32	.894	.689	.79
3/8	1/4	PCNY2404-06-04	16	9/32	.807	.689	.73
3/8	3/8	PCNY2404-06-06	18	9/32	.689	.767	.97
3/8	1/2	PCNY2404-06-08	22	9/32	.610	.945	2.00
1/2	1/4	PCNY2404-08-04	22	1/4	1.1	.945	1.62
1/2	3/8	PCNY2404-08-06	22	9/32	1.1	.945	.89
1/2	1/2	PCNY2404-08-08	22	9/32	1.1	.945	2.51



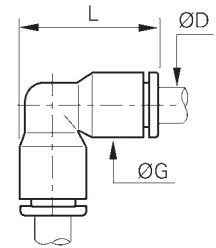
# Push-To-Connect

## Straight Female Connector – Fractional Inch Tube To NPT



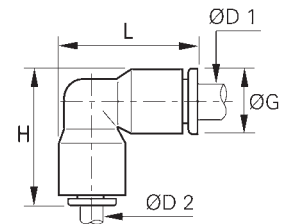
ØD in	C NPT	Cat. No.	F mm	G in	H in	E in	Scale oz
1/8	1/8	PCNY2405-02-02	13	.43	.87	.37	.48
1/8	1/4	PCNY2405-02-04	16	.43	1.05	.55	.74
5/32	1/8	PCNY2405-02.5-02	13	.33	.89	.37	.37
5/32	1/4	PCNY2405-02.5-04	16	.33	1.06	.55	.65
3/16	1/8	PCNY2405-03-02	9/16		1.06		.76
3/16	1/4	PCNY2405-03-04	11/16		1.26		1.01
1/4	1/8	PCNY2405-04-02	13	.42	.98	.37	.44
1/4	1/4	PCNY2405-04-04	16	.42	1.16	.55	.66
5/16	1/8	PCNY2405-05-02	13	.53	1.14	.37	.55
5/16	1/4	PCNY2405-05-04	16	.53	1.32	.55	.85
3/8	1/8	PCNY2405-06-02	16	.61	1.22	.37	.94
3/8	1/4	PCNY2405-06-04	16	.61	1.40	.55	.94
3/8	3/8	PCNY2405-06-06	22	.61	1.52	.65	1.85
1/2	3/8	PCNY2405-08-06	22	.85	1.81	.65	3.25
1/2	1/2	PCNY2405-08-08	24	.85	1.93	.77	4.02

## Union Elbow – Fractional Inch To Tube



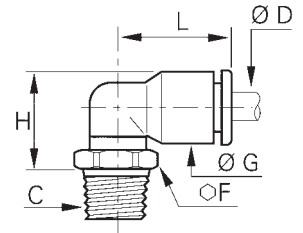
ØD in	Cat. No.	G in	L in	Scale oz
1/8	PCNY2500-02-02	.33	.71	.11
5/32	PCNY2500-02.5-02.5	.33	.75	.07
3/16	PCNY2500-03-03	.43	1.07	.55
1/4	PCNY2500-04-04	.43	.93	.15
5/16	PCNY2500-05-05	.53	1.16	.25
3/8	PCNY2500-06-06	.63	1.33	.41
1/2	PCNY2500-08-08	.87	1.38	.65

## Unequal Union Elbow – Fractional Inch Tube To Tube



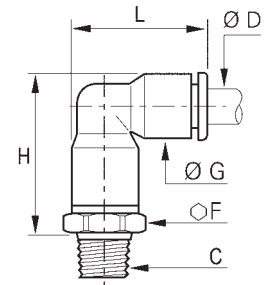
ØD1 in	ØD2 in	Cat. No.	G in	H in	L in	Scale oz
1/8	1/4	PCNY2500-02-04	.43	.93	.93	.20
5/32	1/4	PCNY2500-02.5-04	.43	.93	.93	.25
3/8	1/4	PCNY2500-06-04	.63	1.30	1.33	.50
3/8	1/2	PCNY2500-06-08	.87	1.81	1.81	.65

## Male Elbow – Fractional Inch Tube To Male NPT



ØD in	C NPT	Cat. No.	F1 mm	G in	H in	L in	Scale oz
1/8	1/16	PCNY2501-02-01	10	.34	.53	.57	.23
1/8	1/8	PCNY2501-02-02	11	.34	.53	.57	.29
1/8	1/4	PCNY2501-02-04	14	.34	.55	.57	.63
5/32	1/8	PCNY2501-02.5-02	11	.33	.53	.55	.28
5/32	1/4	PCNY2501-02.5-04	14	.33	.55	.55	.62
3/16	1/8	PCNY2501-03-02	11	.43	.67	.85	.45
1/4	1/8	PCNY2501-04-02	11	.43	.67	.71	.32
1/4	1/4	PCNY2501-04-04	14	.43	.63	.71	.51
1/4	3/8	PCNY2501-04-06	18	.43	.65	.71	.79
5/16	1/8	PCNY2501-05-02	11	.53	.75	.91	.29
5/16	1/4	PCNY2501-05-04	14	.53	.71	.91	.58
5/16	3/8	PCNY2501-05-06	18	.53	.73	.91	.81
3/8	1/8	PCNY2501-06-02	15	.63	.91	1.08	.60
3/8	1/4	PCNY2501-06-04	15	.63	.91	1.08	.74
3/8	3/8	PCNY2501-06-06	18	.63	.87	1.08	.96
3/8	1/2	PCNY2501-06-08	22	.63	.91	1.08	1.69
1/2	1/4	PCNY2501-08-04	20	.87	1.22	1.38	1.42
1/2	3/8	PCNY2501-08-06	20	.87	1.22	1.38	1.44
1/2	1/2	PCNY2501-08-08	24	.87	1.12	1.38	1.89

## Extended Male Elbow – Fractional Inch Tube To Male NPT

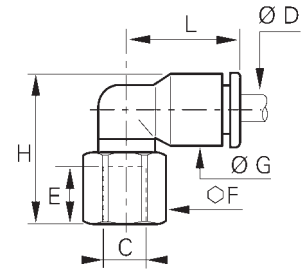


ØD in	C NPT	Cat. No.	F mm	G in	H in	L in	Scale oz
1/8	1/8	PCNY2501-L-02-02	11	.33	.91	.75	.36
1/8	1/4	PCNY2501-L-02-04	14	.33	.93	.75	.68
5/32	1/8	PCNY2501-L-02.5-02	11	.33	.91	.75	.37
5/32	1/4	PCNY2501-L-02.5-04	14	.33	.93	.75	.69
1/4	1/8	PCNY2501-L-04-08	11	.43	1.12	.93	.51
1/4	1/4	PCNY2501-L-04-04	14	.43	1.08	.93	.73
1/4	3/8	PCNY2501-L-04-06	17	.43	1.12	.93	.80
5/16	1/8	PCNY2501-L-05-02	13	.53	1.32	1.16	.73
5/16	1/4	PCNY2501-L-05-04	14	.53	1.28	1.16	.93
3/8	1/8	PCNY2501-L-06-02	17	.63	1.40	1.34	1.30
3/8	1/4	PCNY2501-L-06-04	17	.63	1.41	1.33	1.41
3/8	3/8	PCNY2501-L-06-06	18	.63	1.45	1.33	1.73

# Push-To-Connect

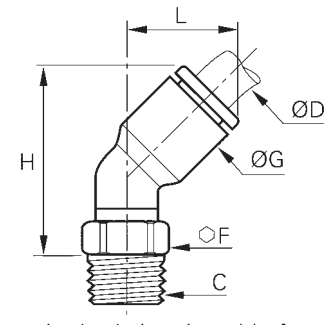
## Female Elbow – Fractional Inch Tube To NPT

ØD in	C NPT	Cat. No.	F mm	G in	H in	E in	L in	Scale oz
1/8	1/8	PCNY2502-02-02	13	.34	.91	.37	.57	.38
5/32	1/8	PCNY2502-02.5-02	13	.33	.91	.37	.55	.41
5/32	1/4	PCNY2502-02.5-04	16	.33	1.08	.55	.55	.14
1/4	1/8	PCNY2502-04-02	13	.43	1.02	.37	.71	.47
1/4	1/4	PCNY2502-04-04	16	.43	1.18	.55	.71	.38
5/16	1/8	PCNY2502-05-02	13	.53	1.12	.37	.91	.50
5/16	1/4	PCNY2502-05-04	16	.53	1.28	.55	.91	.85
3/8	1/4	PCNY2502-06-04	16	.63	1.52	.55	1.04	.90
1/2	3/8	PCNY2502-08-06	22	.87	1.88	.65	1.38	2.47



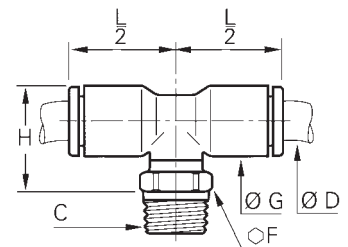
## 45° Male Elbow – Fractional Inch Tube To Male NPT or UNF

ØD in	C UNF/NPT	Cat. No.	F mm	G in	H in	L in	Scale oz
1/8	10-32	PCNY2503-02-10/32	8	.35	.91	.49	.28
1/8	1/8	PCNY2503-02-02	11	.35	.81	.49	.28
1/4	1/8	PCNY2503-04-02	11	.43	.98	.57	.28
1/4	1/4	PCNY2503-04-04	14	.43	.98	.57	.60
1/4	M7	PCNY2503-04-07	9	.43	1.14	.57	.28
3/8	1/4	PCNY2503-06-04	17	.63	1.36	.91	.71
3/8	3/8	PCNY2503-06-06	18	.63	1.36	.91	.81



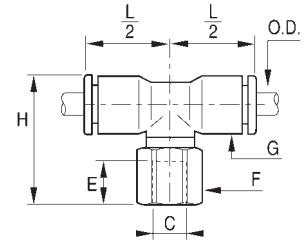
## Male Branch Tee – Fractional Inch Tube To Male NPT or UNF To Tube

ØD in	C UNF/NPT	Cat. No.	F mm	G in	H in	L 2 in	Scale oz
1/8	10-32	PCNY2601-02-02-02.5	8	.33	.61	.57	.23
1/8	1/16	PCNY2601-02-02-01	10	.33	.61	.57	.27
1/8	1/8	PCNY2601-02-02-02	11	.33	.61	.57	.33
1/8	1/4	PCNY2601-02-02-04	14	.33	.63	.57	.66
5/32	10-32	PCNY2601-02.5-02.5-10/32	8	.33	.71	.55	.18
5/32	1/8	PCNY2601-02.5-02.5-02	11	.33	.61	.55	.32
5/32	1/4	PCNY2601-02.5-02.5-04	14	.33	.63	.55	.65
3/16	1/8	PCNY2601-03-03-02	11	.43	.67	.85	.64
1/4	1/8	PCNY2601-04-04-02	11	.43	.67	.71	.39
1/4	1/4	PCNY2601-04-04-04	14	.43	.63	.71	.56
1/4	3/8	PCNY2601-04-04-06	18	.43	.65	.71	.85
5/16	1/8	PCNY2601-05-05-02	11	.53	.87	.91	.49
5/16	1/4	PCNY2601-05-05-04	14	.53	.83	.91	.66
5/16	3/8	PCNY2601-05-05-06	18	.53	.85	.91	.97
3/8	1/8	PCNY2601-06-06-02	15	.63	.99	1.04	.81
3/8	1/4	PCNY2601-06-06-04	15	.63	.99	1.04	.88
3/8	3/8	PCNY2601-06-06-06	18	.63	.95	1.04	1.18
3/8	1/2	PCNY2601-06-06-08	22	.63	.98	1.04	1.86
1/2	1/4	PCNY2601-08-08-04	20	.87	1.22	1.38	1.88
1/2	3/8	PCNY2601-08-08-06	20	.87	1.22	1.38	1.93
1/2	1/2	PCNY2601-08-08-08	24	.87	1.12	1.38	2.35



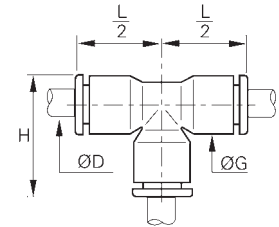
## Female Branch Tee – Fractional Inch Tube To Male NPT

ØD in	C NPT	Cat. No.	F mm	G in	H in	E in	L 2 in	Scale oz
1/8	1/8	PCNY2602-02-02-02	13	.34	.99	.37	.57	1.02
5/32	1/8	PCNY2602-02.5-02.5-02	13	.33	.91	.37	.55	.43
5/32	1/4	PCNY2602-02.5-02.5-04	16	.33	1.08	.55	.55	.74
1/4	1/8	PCNY2602-04-04-02	13	.43	1.02	.37	.71	.55
1/4	1/4	PCNY2602-04-04-04	16	.43	1.18	.55	.71	.84
5/16	1/8	PCNY2602-05-05-02	13	.53	1.24	.37	.91	.66
5/16	1/4	PCNY2602-05-05-04	16	.53	1.40	.55	.91	1.01
3/8	1/4	PCNY2602-06-06-04	16	.63	1.60	.55	1.04	1.13
1/2	3/8	PCNY2602-08-08-06	22	.87	1.88	.65	1.38	2.94



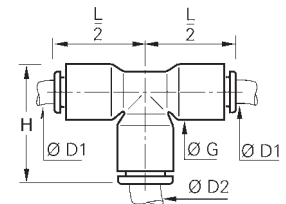
## Tee – Fractional Inch Tube To Tube To Tube

ØD in	Cat. No.	G in	H in	L 2 in	Scale oz
1/8	PCNY2603-02-02-02	.33	.75	.57	.15
5/32	PCNY2603-02.5-02.5-02.5	.33	.75	.57	.14
3/16	PCNY2603-03-03-03	.43	1.07	.85	.58
1/4	PCNY2603-04-04-04	.43	.89	.93	.22
5/16	PCNY2603-05-05-05	.53	1.16	.91	.32
3/8	PCNY2603-06-06-06	.63	1.34	1.02	.64
1/2	PCNY2603-08-08-08	.87	1.81	1.38	1.74



## Unequal Tee – Fractional Inch Tube To Tube To Tube

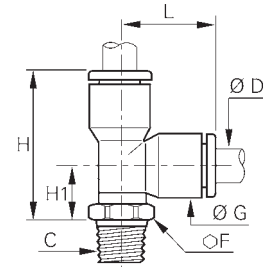
ØD1 in	ØD2 in	Cat. No.	G in	H in	L 2 in	Scale oz
1/8	1/4	PCNY2603-02-02-04	.43	.93	.71	.20
5/32	1/4	PCNY2603-02.5-02.5-04	.43	.93	.71	.28
1/4	1/8	PCNY2603-04-04-02	.43	.93	.73	.35
1/4	5/32	PCNY2603-04-04-02.5	.43	.93	.73	.40
1/4	3/8	PCNY2603-04-04-06	.63	1.32	.96	.60
3/8	1/4	PCNY2603-06-06-04	.63	1.28	1.00	.65
3/8	1/2	PCNY2603-06-06-08	.87	1.81	1.38	.70
1/2	1/4	PCNY2603-08-08-04	.87	1.81	1.38	.73
1/2	3/8	PCNY2603-08-08-06	.87	1.81	1.38	.75



# Push-To-Connect

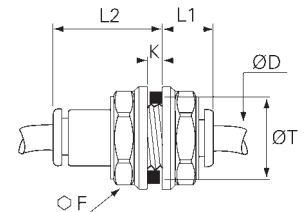
## Male Run Tee – Fractional Inch Tube To Tube To Male NPT or UNF

ØD in	C NPT/UNF	Cat. No.	F mm	G in	H in	H1 in	L in	Scale oz
1/8	10-32	PCNY2605-02-10/32-02	8	.33	.92	.35	.57	.19
1/8	1/16	PCNY2605-02-01-02	10	.33	.93	.35	.57	.24
1/8	1/8	PCNY2605-02-02-02	11	.33	.93	.35	.57	.31
5/32	10-32	PCNY2605-02.5-10/32-02.5	8	.33	1.02	.45	.57	.18
5/32	1/8	PCNY2605-02.5-02-02.5	11	.33	.93	.53	.57	.32
5/32	1/4	PCNY2605-02.5-04-02.5	14	.33	.94	.37	.57	.64
3/16	1/8	PCNY2605-03-02-03	11	.45	1.31	.45	.85	.63
1/4	1/8	PCNY2605-04-02-04	11	.43	1.16	.45	.69	.39
1/4	1/4	PCNY2605-04-04-04	14	.43	1.12	.41	.69	.58
1/4	3/8	PCNY2605-04-06-04	18	.43	1.14	.43	.69	.84
5/16	1/8	PCNY2605-05-02-05	11	.53	1.38	.49	.91	.50
5/16	1/4	PCNY2605-05-04-05	14	.53	1.34	.45	.91	.69
5/16	3/8	PCNY2605-05-06-05	18	.53	1.36	.47	.91	.97
3/8	1/8	PCNY2605-06-02-06	15	.63	1.63	.60	1.04	.81
3/8	1/4	PCNY2605-06-04-06	15	.63	1.63	.60	1.04	.81
3/8	3/8	PCNY2605-06-06-06	18	.63	1.60	.55	1.04	1.19
3/8	1/2	PCNY2605-06-08-06	22	.63	1.63	.59	1.04	1.97
1/2	1/4	PCNY2605-08-04-08	20	.87	2.17	.79	1.38	1.85
1/2	3/8	PCNY2605-08-06-08	20	.87	2.17	.79	1.38	1.93
1/2	1/2	PCNY2605-08-08-08	24	.87	2.07	.79	1.38	2.19



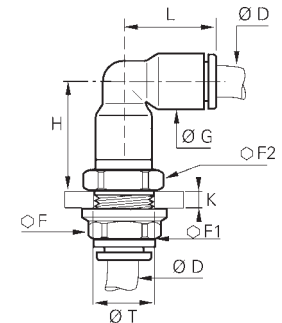
## Bulkhead Union – Tube To Tube

ØD in	Cat. No. (fractional inch)	F mm	K max in	L1 in	L2 in	T min in	Scale oz	Max Torque
1/8	PCNY2700-02-02	13	.22	.37	.61	.41	.64	11 lb. in.
5/32	PCNY2700-02.5-02.5	13	.22	.59	.39	.41	.67	11 lb. in.
1/4	PCNY2700-04-04	16	.35	.37	.81	.53	.24	13 lb. in.
5/16	PCNY2700-05-05	18	.57	.98	.53	.61	1.16	15 lb. in.
3/8	PCNY2700-06-06	22	.57	.51	1.18	.73	.65	22 lb. in.
1/2	PCNY2700-08-08	29	.81	.67	1.61	1.00	3.60	



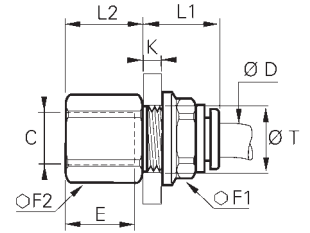
## Equal Bulkhead Elbow – Tube To Tube

ØD in	Cat. No. (fractional inch)	F1 mm	F2 mm	G in	H in	K max in	L in	T min in	Scale oz
1/8	PCNY2701-02-02	13	13	.35	.71	.28	.57	.41	.67
5/32	PCNY2701-02.5-02.5	–	13	.33	.83	.26	.67	.41	.67
1/4	PCNY2701-04-04	18	17	.43	.87	.32	.71	.61	.85
5/16	PCNY2701-05-05	–	18	.53	1.22	.31	.94	.61	1.23
3/8	PCNY2701-06-06	22	22	.63	1.08	.33	1.00	.73	2.80
1/2	PCNY2701-08-08	29	27	.87	1.54	.41	1.38	1.00	4.34



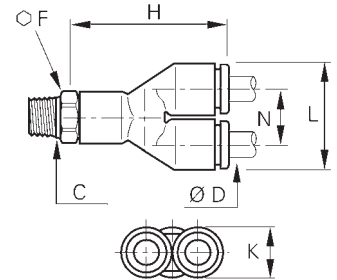
## Female Bulkhead Connector – Tube To NPT

ØD in	C NPT	Cat. No. (fractional inch)	E in	F1 mm	F2 mm	K max in	L1 in	L2 in	T min in	Scale oz
1/8	1/8	PCNY2705-02-02	.37	13	13	.28	.41	.73	.41	.75
5/32	1/8	PCNY2705-02-02.5	.37	13	13	.28	.41	.73	.41	.88
5/32	1/4	PCNY2705-04-02.5	.55	13	16	.32	.41	.73	.41	.99
1/4	1/8	PCNY2705-02-04	.37	18	17	.32	.55	.96	.61	1.23
1/4	1/4	PCNY2705-04-04	.55	18	17	.32	.55	1.18	.61	1.41
3/8	1/4	PCNY2705-04-06	.55	22	22	.33	.57	.89	.73	2.57
3/8	3/8	PCNY2705-06-06	.55	22	22	.33	.57	.89	.73	2.65



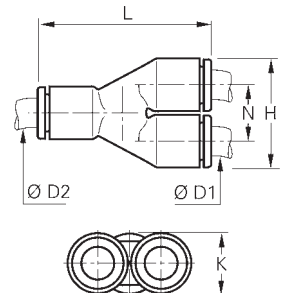
## “Y” Male – Fractional Inch Tube To NPT

ØD in	C NPT	Cat. No.	F mm	H in	K in	L in	N in	Scale oz
5/32	1/8	PCNY2801-02.5-02.5-02	11	1.28	.33	.69	.35	.42
5/32	1/4	PCNY2801-02.5-02.5-04	14	1.30	.33	.69	.35	.79
1/4	1/8	PCNY2801-04-04-02	11	1.61	.43	.87	.45	.59
1/4	1/4	PCNY2801-04-04-04	14	1.56	.43	.87	.45	.80
3/8	1/4	PCNY2801-06-06-04	17	2.24	.63	1.30	.67	1.61
3/8	3/8	PCNY2801-06-06-06	18	2.28	.63	1.30	.67	1.94



## “Y” – Fractional Inch Tube To Tube

ØD1 in	ØD2 in	Cat. No.	H in	K in	L in	N in	Scale oz
1/8	1/8	PCNY2803-02-02	.69	.33	1.12	.35	.16
5/32	5/32	PCNY2803-02.5-02.5	.69	.34	1.12	.35	.14
1/4	1/4	PCNY2803-04-04	.87	.43	1.42	.45	.24
5/16	5/16	PCNY2803-05-05	1.10	.53	1.77	.57	.46
3/8	3/8	PCNY2803-06-06	1.30	.63	2.09	.67	.59
1/8	1/4	PCNY2803-02-04	.87	.43	1.42	.45	.20
5/32	1/4	PCNY2803-02.5-04	.87	.43	1.42	.45	.43
1/4	3/8	PCNY2803-04-06	1.30	.63	1.31	.67	.50
3/8	1/2	PCNY2803-06-08	1.30	.63	2.09	.67	.59

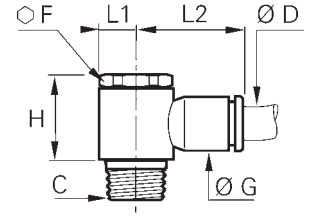




# Push-To-Connect

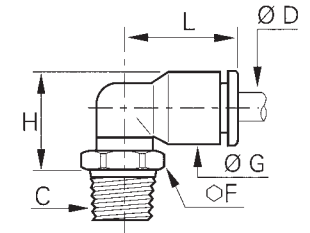
## Banjo – Fractional Inch Tube To NPT

ØD in	C NPT	Cat. No.	F mm	G in	H in	L1 in	L2 in	Scale oz
5/32	1/8	PCNY2805-02.5-02	13	.33	.73	.28	.73	.72
1/4	1/8	PCNY2805-04-02	13	.43	.73	.28	.83	.75
1/4	1/4	PCNY2805-04-04	17	.43	.89	.37	.91	1.41
1/4	3/8	PCNY2805-04-06	21	.43	1.04	.43	1.12	2.60
3/8	1/4	PCNY2805-06-04	17	.63	.89	.37	1.12	2.34
3/8	3/8	PCNY2805-06-06	21	.63	1.04	.43	1.20	2.37



## Male Elbow – Fractional Inch Tube To UNF

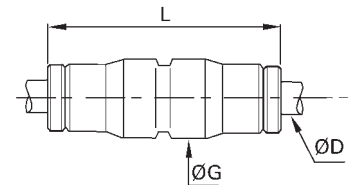
ØD in	C UNF	Cat. No.	F mm	G in	H in	L in	Scale oz
1/8	10-32	PCNY6400-02-10/32-0	8	.34	.52	.57	.14
5/32	10-32	PCNY6400-02.5-10/32-0	8	.33	.53	.55	.14
1/4	10-32	PCNY6400-04-10/32-0	11	.43	.63	.71	.26



## Nickel-Plated Brass Push-To-Connect Fittings For Industrial Applications

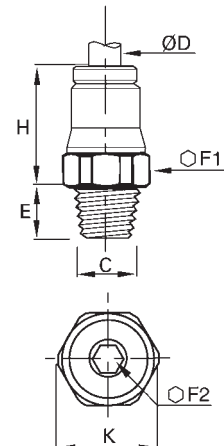
## Straight Union – Fractional Inch Tube To Tube

ØD in	Cat. No.	G in	L in	Scale oz
5/32	PCNB2403-02.5-02.5	.39	1.20	.35
1/4	PCNB2403-04-04	.49	1.44	.58
5/16	PCNB2403-05-05	.59	1.48	.76
3/8	PCNB2403-06-06	.67	1.87	1.31
1/2	PCNB2403-08-08	.79	1.89	1.49



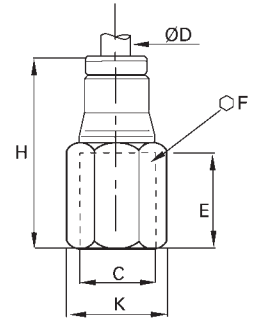
## Male Connector – Fractional Inch Tube To NPT

ØD in	C NPT	Cat. No.	E in	F1 mm	F2 mm	H in	K in	Scale oz
5/32	1/8	PCNB2404-02.5-02	.30	13	3	.59	.47	.34
5/32	1/4	PCNB2404-02.5-04	.43	14	3	.59	.59	.61
1/4	1/8	PCNB2404-04-02	.30	13	4	.67	.55	.42
1/4	1/4	PCNB2404-04-04	.43	14	4	.67	.59	.62
1/4	3/8	PCNB2404-04-06	.45	18	5	.67	.77	1.00
3/8	1/8	PCNB2404-06-02	.30	18	4	.97	.77	.89
3/8	1/4	PCNB2404-06-04	.43	18	7	.95	.77	1.04
3/8	3/8	PCNB2404-06-06	.45	18	8	.91	.77	1.16
3/8	1/2	PCNB2404-06-08	.59	22	8	.95	.94	2.03
1/2	1/4	PCNB2404-08-04	.43	22	7	.95	.94	1.42
1/2	3/8	PCNB2404-08-06	.45	22	9	.95	.94	1.49
1/2	1/2	PCNB2404-08-08	.59	22	10	.95	.94	1.77



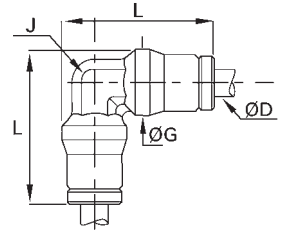
## Female Connector – Fractional Inch Tube To NPT

ØD in	C NPT	Cat. No.	E in	F mm	H in	K in	Scale oz
5/32	1/8	PCNB2405-02.5-02	.37	14	.98	.59	.60
5/32	1/4	PCNB2405-02.5-04	.55	17	1.16	.73	1.02
1/4	1/8	PCNB2405-04-02	.37	14	1.10	.59	.55
1/4	1/4	PCNB2405-04-04	.55	17	1.28	.73	1.15
3/8	1/4	PCNB2405-06-04	.55	17	1.50	.73	1.32
3/8	3/8	PCNB2405-06-06	.55	22	1.50	.94	1.97
1/2	3/8	PCNB2405-08-06	.55	22	1.52	.94	2.42
1/2	1/2	PCNB2405-08-08	.73	24	1.67	1.02	2.42



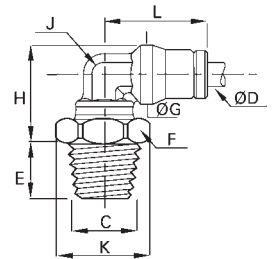
## Union Elbow – Fractional Inch Tube To Tube

ØD in	Cat. No.	G in	J in	L in	Scale oz
5/32	PCNB2500-02.5-02.5	.39	.28	.91	.37
1/4	PCNB2500-04-04	.49	.32	1.12	.60
5/16	PCNB2500-05-05	.59	.39	1.22	.81
3/8	PCNB2500-06-06	.67	.47	1.48	1.39
1/2	PCNB2500-08-08	.79	.59	1.61	1.71



## Male Elbow – Fractional Inch Tube To NPT

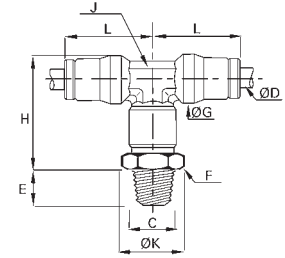
ØD in	C NPT	Cat. No.	E in	F mm	G in	H in	J in	K in	L in	Scale oz
5/32	1/8	PCNB2501-02.5-02	.30	13	.39	.59	.28	.47	.71	.47
5/32	1/4	PCNB2501-02.5-04	.43	14	.39	.67	.28	.59	.71	.71
1/4	1/8	PCNB2501-04-02	.30	13	.49	.69	.32	.47	.87	.62
1/4	1/4	PCNB2501-04-04	.43	14	.49	.75	.32	.59	.87	.81
1/4	3/8	PCNB2501-04-06	.45	18	.49	.75	.32	.77	.87	1.12
3/8	1/8	PCNB2501-06-02	.30	13	.67	.93	.47	.47	1.14	1.29
3/8	1/4	PCNB2501-06-04	.43	15	.67	.93	.47	.63	1.14	1.40
3/8	3/8	PCNB2501-06-06	.45	18	.67	1.02	.47	.77	1.14	1.57
3/8	1/2	PCNB2501-06-08	.59	22	.67	1.06	.47	.94	1.14	2.27
1/2	1/4	PCNB2501-08-04	.43	15	.79	1.14	.59	.63	1.22	1.65
1/2	3/8	PCNB2501-08-06	.45	18	.79	1.14	.59	.77	1.22	1.90
1/2	1/2	PCNB2501-08-08	.59	22	.79	1.14	.59	.94	1.22	2.41



# Push-To-Connect

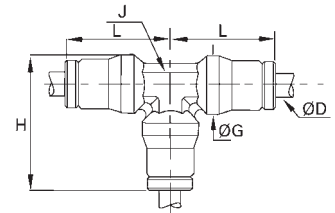
## Male Branch Tee – Fractional Inch Tube To NPT To Tube

ØD in	C NPT	Cat. No.	E in	F mm	G in	H in	J in	K in	L in	Scale oz
5/32	1/8	PCNB2601-02.5-02.5-02	.30	13	.39	.97	.28	.47	.71	.71
5/32	1/4	PCNB2601-02.5-02.5-04	.43	14	.39	1.04	.28	.60	.71	1.07
1/4	1/8	PCNB2601-04-04-02	.30	13	.49	1.18	.32	.55	.87	1.16
1/4	1/4	PCNB2601-04-04-04	.43	14	.49	1.22	.32	.60	.87	1.38
1/4	3/8	PCNB2601-04-04-06	.45	18	.49	1.22	.32	.77	.87	1.60
3/8	1/4	PCNB2601-06-06-04	.43	18	.67	1.54	.47	.77	1.14	2.57
3/8	3/8	PCNB2601-06-06-06	.45	18	.67	1.61	.47	.77	1.14	2.82
3/8	1/2	PCNB2601-06-06-08	.59	22	.67	1.61	.47	.94	1.14	3.29
1/2	1/4	PCNB2601-08-08-04	.43	18	.79	1.61	.59	.94	1.22	3.12
1/2	3/8	PCNB2601-08-08-06	.45	22	.79	1.85	.59	.94	1.22	3.53
1/2	1/2	PCNB2601-08-08-08	.59	22	.79	1.89	.59	.94	1.22	4.00



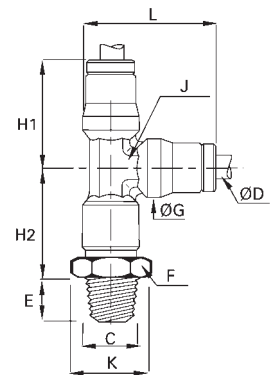
## Union Tee – Fractional Inch Tube To Tube To Tube

ØD in	Cat. No.	G in	H in	J in	L in	Scale oz
5/32	PCNB2603-02.5-02.5-02.5	.39	.91	.28	.71	.52
1/4	PCNB2603-04-04-04	.49	1.12	.32	.87	.89
5/16	PCNB2603-05-05-05	.59	1.22	.39	.93	1.13
3/8	PCNB2603-06-06-06	.67	1.48	.47	1.14	1.99
1/2	PCNB2603-08-08-08	.79	1.61	.59	1.22	2.31



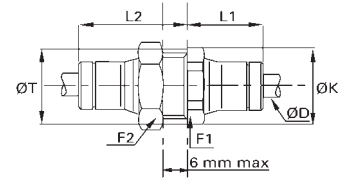
## Male Run Tee – Fractional Inch Tube To Tube To NPT

ØD in	C NPT	Cat. No.	E in	F mm	G in	H1 in	H2 in	J in	K in	L in	Scale oz
5/32	1/8	PCNB2605-02.5-02-02.5	.30	13	.39	.71	.77	.28	.47	.91	.71
5/32	1/4	PCNB2605-02.5-04-02.5	.43	14	.39	.71	.85	.28	.59	.91	1.07
1/4	1/8	PCNB2605-04-02-04	.30	13	.49	.87	.93	.32	.55	1.12	1.16
1/4	1/4	PCNB2605-04-04-04	.43	14	.49	.87	.97	.32	.59	1.12	1.38
1/4	3/8	PCNB2605-04-06-04	.45	18	.49	.87	.97	.32	.77	1.12	1.60
3/8	1/4	PCNB2605-06-04-06	.43	18	.67	1.14	1.20	.47	.77	1.48	2.57
3/8	3/8	PCNB2605-06-06-06	.45	18	.67	1.14	1.28	.47	.77	1.48	2.82
3/8	1/2	PCNB2605-06-08-06	.59	22	.67	1.14	1.28	.47	.94	1.48	3.29
1/2	1/4	PCNB2605-08-04-08	.43	18	.79	1.22	1.46	.59	.94	1.61	3.27
1/2	3/8	PCNB2605-08-06-08	.45	22	.79	1.22	1.46	.59	.94	1.61	3.53
1/2	1/2	PCNB2605-08-08-08	.59	22	.79	1.22	1.50	.59	.94	1.61	4.00



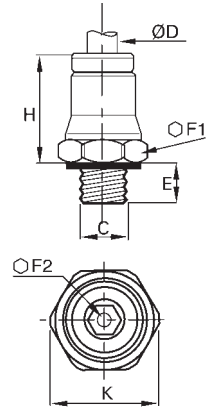
## Bulkhead Connector – Fractional Inch Tube To Tube

ØD in	Cat. No.	F1 mm	F2 mm	K in	L1 in	L2 in	T in	Scale oz
5/32	PCNB2700-02.5-02.5	13	14	.55	.55	.79	.49	.69
1/4	PCNB2700-04-04	16	17	.69	.67	.89	.59	1.00
5/16	PCNB2700-05-05	18	19	.77	.73	.93	.67	1.27
3/8	PCNB2700-06-06	22	27	.95	.87	1.10	.85	2.22
1/2	PCNB2700-08-08	24	24	1.02	.89	1.14	1.04	2.97



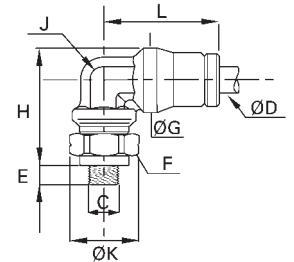
## Male Connector – Fractional Inch Tube To UNF

ØD in	C UNF	Cat. No.	E in	F1 mm	F2 mm	H in	K in	Scale oz
5/32	10-32	PCNB6400-02.5-10/32-0	.13	10	2.5	.63	.43	.28
1/4	10-32	PCNB6400-04-10/32-0	.13	13	2.5	.79	.55	.35



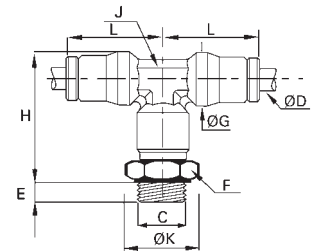
## Male Elbow – Fractional Inch Tube To UNF

ØD in	C UNF	Cat. No.	E in	F mm	G in	H in	J in	K in	L in	Scale oz
5/32	10-32	PCNB6801-02.5-10/32-0	.13	10	.39	.71	.28	.43	.71	.39



## Male Branch Tee – Fractional Inch Tube To UNF To Tube

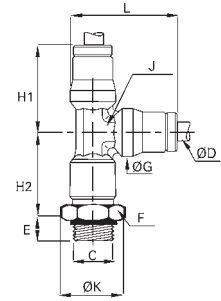
ØD in	C UNF	Cat. No.	E in	F mm	G in	H in	J in	K in	L in	Scale oz
5/32	10-32	PCNB6803-02.5-10/32-0	.13	10	.39	1.00	.28	.47	.71	.69



# Push-To-Connect

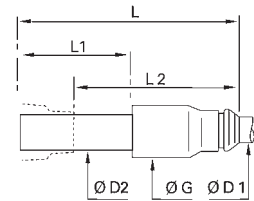
## Male Run Tee – Fractional Inch Tube To Tube To UNF

$\varnothing D$ in	C UNF	Cat. No.	E in	F mm	G in	H1 in	H2 in	J in	K in	L in	Scale oz
5/32	10-32	PCNB6804-02.5-10/32-0	.13	10	.39	.71	.81	.28	.47	.91	.69



## Plug-In Reducer – Fractional Inch

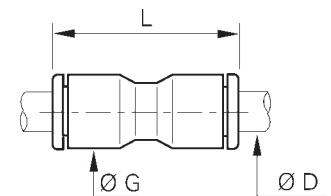
$\varnothing D1$ in	$\varnothing D2$ in	Cat. No.	G in	L in	L1 in	L2 in	Scale oz
5/32	1/4	PCNB2406-02.5-04	.39	1.36	.75	.69	.27
5/32	5/16	PCNB2406-02.5-05	.39	1.40	.79	.71	.35
1/4	3/8	PCNB2406-04-06	.49	1.46	.79	.77	.54
1/4	1/2	PCNB2406-04-08	.49	1.71	.98	.83	.55
3/8	1/2	PCNB2406-06-08	.67	1.97	1.02	1.04	1.26



## SAE and DOT Push-To-Connect Fittings For Vehicle Applications

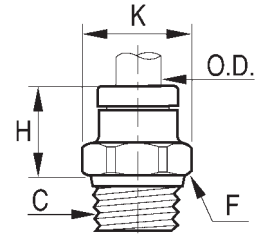
## Union – Fractional Inch Tube To Tube

$\varnothing D$ Tube	Cat. No.	G in	L in	Scale oz
5/32	PCDT2403-02.5-02.5	.334	.98	.070
3/16	PCDT2403-03-03	.427	1.44	.280
1/4	PCDT2403-04-04	.427	1.16	.140
3/8	PCDT2403-06-06	.630	1.69	.950
1/2	PCDT2403-08-08	.87	2.22	1.15



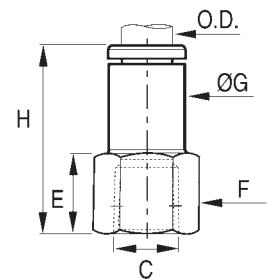
## Male Connector – Fractional Inch Tube To Male NPT

ØD in	C NPT	Cat. No.	F mm	H in	K in	Scale oz
5/32	1/8	PCDT2404-02.5-02	11	.334	.472	.220
5/32	1/4	PCDT2404-02.5-04	14	.275	.590	.510
3/16	1/8	PCDT2404-03-02	7/16"	.610	.490	.230
3/16	1/4	PCDT2404-03-04	9/16"	.590	.628	.480
1/4	1/8	PCDT2404-04-02	11	.472	.472	.230
1/4	1/4	PCDT2404-04-04	14	.374	.590	.480
1/4	3/8	PCDT2404-04-06	18	.295	.768	.860
3/8	1/8	PCDT2404-06-02	16	.914	.690	.660
3/8	1/4	PCDT2404-06-04	16	.827	.690	.680
3/8	3/8	PCDT2404-06-06	18	.710	.768	.930
3/8	1/2	PCDT2404-06-08	22	.630	.945	1.70
1/2	1/4	PCDT2404-08-04	22	1.31	.85	1.40
1/2	3/8	PCDT2404-08-06	22	1.31	.85	1.40
1/2	1/2	PCDT2404-08-08	22	1.31	.85	1.60



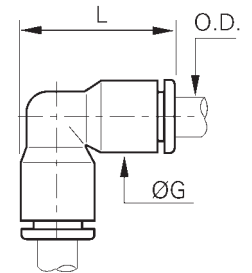
## Straight Female Connector – Fractional Inch Tube To NPT

ØD Tube	C NPT	Cat. No.	F mm	G in	H in	E in	Scale oz
5/32	1/8	PCDT2405-02.5-02	13	.326	.89	.374	.350
5/32	1/4	PCDT2405-02.5-04	16	.326	1.06	.551	.560
3/16	1/8	PCDT2405-03-02	9/16"	.45	1.01	.374	.370
1/4	1/8	PCDT2405-04-02	13	.421	.98	.374	.390
1/4	1/4	PCDT2405-04-04	16	.421	1.16	.551	.560
3/8	1/4	PCDT2405-06-04	16	.610	1.44	.551	2.50
3/8	3/8	PCDT2405-06-06	22	.610	1.56	.650	2.58



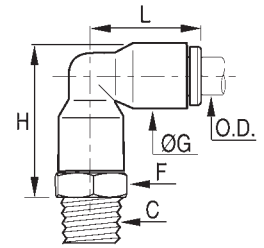
## Union Elbow – Fractional Inch Tube To Tube

ØD Tube	Cat. No.	G in	L in	Scale oz
5/32	PCDT2500-02.5-02.5	.334	.75	.070
3/16	PCDT2500-03-03	.427	1.07	.280
1/4	PCDT2500-04-04	.427	.93	.140
3/8	PCDT2500-06-06	.630	1.36	.950
1/2	PCDT2500-08-08	.87	1.84	1.45



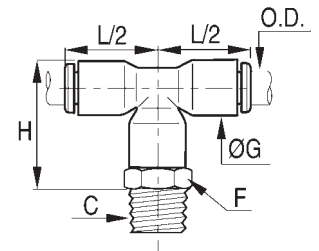
# Push-To-Connect

## Male Elbow – Fractional Inch Tube To Male NPT



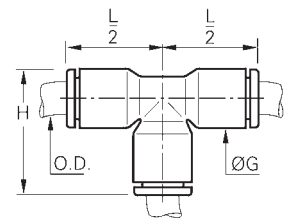
ØD in	C NPT	Cat. No.	F mm	G in	H in	L in	Scale oz
5/32	1/8	PCDT2501-02.5-02	11	.334	.905	.75	.370
3/16	1/8	PCDT2501-03-02	11	.427	1.09	.86	.490
1/4	1/8	PCDT2501-04-02	11	.427	1.09	.93	.490
1/4	1/4	PCDT2501-04-04	14	.427	1.09	.93	.690
1/4	3/8	PCDT2501-04-06	18	.427	1.18	.93	1.01
3/8	1/4	PCDT2501-06-04	17	.630	1.54	1.33	1.09
3/8	3/8	PCDT2501-06-06	18	.630	1.54	1.33	1.60
3/8	1/2	PCDT2501-06-08	22	.630	1.54	1.33	2.80
1/2	1/4	PCDT2501-08-04	7/8"	.87	1.95	1.59	1.80
1/2	3/8	PCDT2501-08-06	7/8"	.87	1.95	1.59	2.00
1/2	1/2	PCDT2501-08-08	1"	.87	1.95	1.59	2.20

## Male Branch Tee – Fractional Inch Tube To Male NPT



ØD in	C NPT	Cat. No.	F mm	G in	H in	L 2 in	Scale oz
5/32	1/8	PCDT2601-02.5-02.5-02	11	.334	.905	.57	.420
5/32	1/4	PCDT2601-02.5-02.5-04	14	.334	.905	.57	.720
3/16	1/8	PCDT2601-03-03-02	11	.427	1.09	.85	.570
1/4	1/8	PCDT2601-04-04-02	11	.427	1.09	.71	.570
1/4	1/4	PCDT2601-04-04-04	14	.427	1.09	.71	.770
1/4	3/8	PCDT2601-04-04-06	18	.427	1.18	.71	1.13
3/8	1/4	PCDT2601-06-06-04	17	.630	1.54	1.04	1.21
3/8	3/8	PCDT2601-06-06-06	18	.630	1.54	1.04	1.78
3/8	1/2	PCDT2601-06-06-08	22	.630	1.54	1.04	2.94
1/2	1/4	PCDT2601-08-08-04	7/8"	.87	1.52	1.41	2.20
1/2	3/8	PCDT2601-08-08-06	7/8"	.87	1.52	1.41	2.70
1/2	1/2	PCDT2601-08-08-08	1"	.87	1.52	1.41	2.80

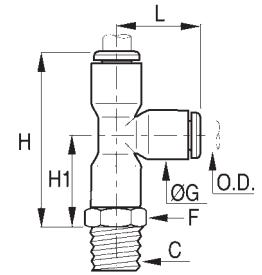
## Union Tee – Fractional Inch Tube To Tube To Tube



ØD Tube	Cat. No.	G in	H in	L/2 in	Scale oz
5/32	PCDT2603-02.5-02.5-02.5	.334	.728	.57	.140
3/16	PCDT2603-03-03-03	.427	1.02	.85	.420
1/4	PCDT2603-04-04-04	.427	.905	.93	.490
3/8	PCDT2603-06-06-06	.630	1.33	1.05	1.48
1/2	PCDT2603-08-08-08	.87	1.81	1.41	2.00

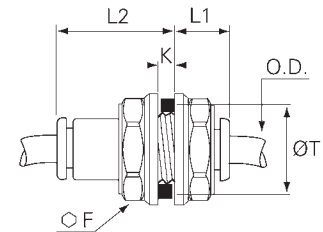
## Male Run Tee – Fractional Inch Tube To Male NPT

ØD Tube	C NPT	Cat. No.	F mm	G in	H in	H1 in	L in	Scale oz
5/32	1/8	PCDT2605-02.5-02-02.5	11	.334	1.34	.736	.57	.420
5/32	1/4	PCDT2605-02.5-04-02.5	14	.334	1.34	.736	.57	.720
3/16	1/8	PCDT2605-03-02-03	11	.427	1.73	.874	.85	.570
1/4	1/8	PCDT2605-04-02-04	11	.427	1.60	.870	.71	.570
1/4	1/4	PCDT2605-04-04-04	14	.427	1.60	.870	.71	.770
1/4	3/8	PCDT2605-04-06-04	18	.427	1.60	.964	.71	1.13
3/8	1/4	PCDT2605-06-04-06	17	.630	2.30	1.22	1.06	1.21
3/8	3/8	PCDT2605-06-06-06	18	.630	2.30	1.22	1.06	1.78
3/8	1/2	PCDT2605-06-08-06	22	.630	2.30	1.22	1.06	2.94
1/2	1/4	PCDT2605-08-04-08	7/8"	.87	2.95	1.51	1.40	2.40
1/2	3/8	PCDT2605-08-06-08	7/8"	.87	2.95	1.51	1.40	2.70
1/2	1/2	PCDT2605-08-08-08	1"	.87	2.95	1.51	1.40	2.80



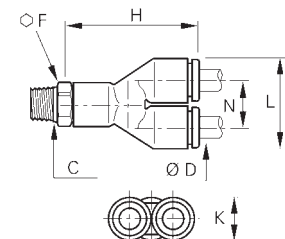
## Bulkhead Union – Fractional Inch

ØD Tube	Cat. No.	F mm	K MAX in	L1 in	L2 in	T min in	Max Torque	Scale oz
5/32	PCDT2700-02.5-02.5	13	.216	.37	.571	.413	11 lb in	.670
1/4	PCDT2700-04-04	15	.334	.37	.768	.492	13 lb in	1.02
3/8	PCDT2700-06-06	22	.571	.53	1.18	.728	22 lb in	2.96
1/2	PCDT2700-08-08	29	.82	.69	1.64	1.02	39 lb in	3.60



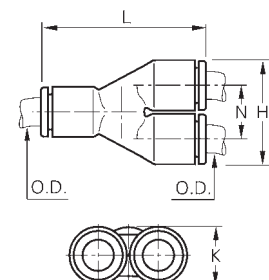
## “Y” Male Connector – Fractional Inch Tube To NPT

ØD Tube	C NPT	Cat. No.	F mm	H in	G in	L in	N in	Scale oz
5/32	1/8	PCDT2801-02.5-02.5-02	11	.689	.334	1.30	.354	.350
5/32	1/4	PCDT2801-02.5-02.5-04	14	.689	.334	1.32	.354	.630
1/4	1/8	PCDT2801-04-04-02	11	.866	.433	1.65	.453	.630
1/4	1/4	PCDT2801-04-04-04	14	.866	.433	1.60	.453	.750



## Union “Y” – Fractional Inch Tube To Tube

ØD Tube	Cat. No.	H in	K in	L in	N in	Scale oz
5/32	PCDT2803-02.5-02.5	.689	.334	1.12	.354	.140
1/4	PCDT2803-04-04	.878	.433	1.42	.453	.350
3/8	PCDT2803-06-06	1.30	.630	2.12	.669	.520







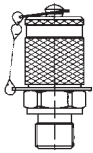
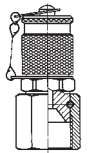
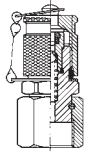
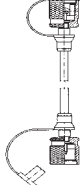
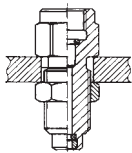
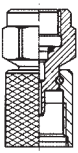


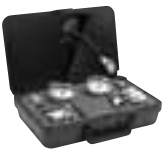

*Test Points*

## Test Points

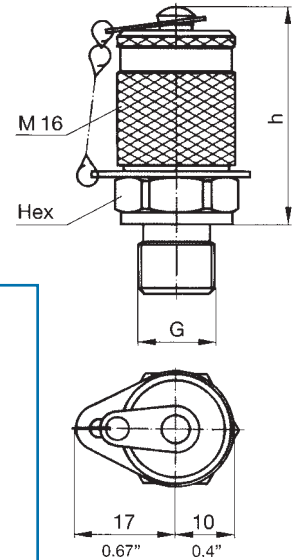
For those times when you need a quick coupling to monitor and control pressure, vent a system or draw samples, look to Brennan. The company that offers more hydraulic fittings than anyone now offers Test Point fittings to let you test systems at working pressures. They're ideal for hydraulic oils and other mineral-based fluids used in off-road mobile equipment.

Test Point fittings connect easily to measurement, control and switching devices, so you can make connections quickly. The connection is leak-proof before the ball check is open to minimize contamination of the hydraulic system. A self-locking metal cap further protects the system.

Brennan offers Test Point fittings in a wide range of styles and sizes. All are in stock now and available for immediate delivery. And all feature the same consistent quality you've come to expect from Brennan.

 <p>Test Coupling DP - Male</p>	 <p>Test Coupling DP - FJIC</p>	 <p>Test Coupling DP - FORFS</p>	 <p>Test Hose DTH</p>	 <p>Gauge Adaptor DGA</p>	 <p>Direct Gauge Adaptor DDGA</p>
 <p>Pressure Gauge DG</p>	 <p>Single Gauge Kit DSGK</p>	 <p>Double Gauge Kit DDGK</p>	 <p>Triple Gauge Kit DTGK</p>		

## Test Coupling with Protective Cap DP

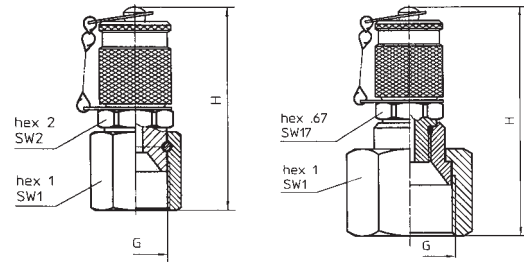


Thread G	h mm/in	Hex mm/in	Brennan Order No.	Description	Seal Type (see below)
1/8 NPT M	36 / 1.42	17 / 0.67	DP2404-02	DTP to MNPT	Taper Type D
1/4 NPT M	35 / 1.38	17 / 0.67	DP2404-04	DTP to MNPT	Taper Type D
5/16-24 UNF	38 / 1.50	17 / 0.67	DP6400-03-0	DTP to MORB	O-Ring Type E
7/16-20 UNF	38 / 1.50	17 / 0.67	DP6400-04-0	DTP to MORB	O-Ring Type E
1/2-20 UNF	38 / 1.50	17 / 0.67	DP6400-05-0	DTP to MORB	O-Ring Type E
9/16-18 UNF	37 / 1.46	19 / 0.75	DP6400-06-0	DTP to MORB	O-Ring Type E
1/8 BSPP M	39 / 1.54	17 / 0.67	DP7002-02-PO	DTP to MBSPP	O-Ring Type C
1/4 BSPP M	37 / 1.46	19 / 0.75	DP7002-04	DTP to MBSPP	Metal Joint Type B
1/4 BSPP M	37 / 1.46	19 / 0.75	DP7002-04-PO	DTP to MBSPP	O-Ring Type C
3/8 BSPP M	37 / 1.46	22 / 0.87	DP7002-06	DTP to MBSPP	Metal Joint Type B
1/8 BSPT M	37 / 1.46	17 / 0.67	DP7000-02	DTP to MBSPT	Taper Type D
1/4 BSPT M	36 / 1.42	17 / 0.67	DP7000-04	DTP to MBSPT	Taper Type D
M08 x 1.0	37 / 1.46	17 / 0.67	DP7005-08	DTP to MMETRIC	O-Ring Type A
M10 x 1.0	37 / 1.46	17 / 0.67	DP7005-10	DTP to MMETRIC	O-Ring Type A
M12 x 1.5	37 / 1.46	17 / 0.67	DP7005-12	DTP to MMETRIC	O-Ring Type C
M14 x 1.5	37 / 1.46	19 / 0.75	DP7005-14	DTP to MMETRIC	Metal Joint Type B
M16 x 1.5	37 / 1.46	22 / 0.87	DP7005-16	DTP to MMETRIC	Metal Joint Type B

### Port Connections and Seals

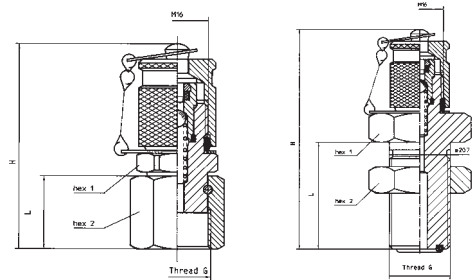
Type A				Type B					Type C					Type D			Type E						
G	d <sub>1</sub> mm in	t <sub>1</sub> mm in	t <sub>2</sub> mm in	G	d <sub>1</sub> mm/ in	t <sub>1</sub> mm/ in	t <sub>2</sub> mm/ in	a mm/ in	G	d <sub>1</sub> mm/ in	t <sub>1</sub> mm/ in	t <sub>2</sub> mm/ in	a mm/ in	G	t <sub>1</sub> mm in	t <sub>2</sub> mm in	G	d <sub>1</sub> mm in	d <sub>2</sub> mm in	t <sub>1</sub> mm in	t <sub>2</sub> mm in	a mm in	
M08 x 1.0	9.5 +0.1 0.37	11 0.43	15.5 0.61	M14 x 1.5	20 0.79	12 0.47	18.5 0.73	1.5 0.06	M12 x 1.5	18 0.71	12 0.47	18.5 0.73	1.5 0.06	1/8 BSPT M	5.5 0.22	9.5 0.37		5/16-24 UNF	9.1 0.36	17 0.67	10 0.39	12 0.47	1.9 0.07
M10 x 1.0	11.5 +0.1 0.45	12 0.47	16.5 0.65	M16 x 1.5	22 0.87	12 0.47	18.5 0.73	1.5 0.06	1/8 BSPP M	15 0.59	8 0.31	13 0.51	1.0 0.04	1/4 BSPT M	8.5 0.33	13.5 0.53		7/16-20 UNF	12.4 0.49	21 0.83	11.5 0.45	14 0.55	2.4 0.09
				1/4 BSPP M	19 0.75	12 0.47	18.5 0.73	1.5 0.06	1/4 BSPP M	19 0.75	12 0.47	18.5 0.73	1.5 0.06	1/8 NPT M	6.9 0.27	11.6 0.46		1/2-20 UNF	14 0.55	23 0.91	11.5 0.45	14 0.55	2.4 0.09
				3/8 BSPP M	23 0.91	12 0.47	18.5 0.73	2 0.08						1/4 NPT M	10 0.39	16.4 0.65		9/16-18 UNF	15.6 0.61	25 0.98	12.7 0.50	15.5 0.61	2.5 0.10

# Test Coupling DP – JIC Connection



Pipe Size Inch	JIC Size	G UNF	H		Hex		Type	Brennan Order No.	Description
			mm	inch	1	2			
1/4"	-4	7/16-20 UNF	52	2.0	17	17	1	DP6504-04	DTP to FJICS
5/16"	-5	1/2-20 UNF	53	2.0	17	17	1	DP6504-05	DTP to FJICS
3/8"	-6	9/16-18 UNF	55	2.1	19	17	1	DP6504-06	DTP to FJICS
1/2"	-8	3/4-16 UNF	56	2.2	22	19	1	DP6504-08	DTP to FJICS
5/8"	-10	7/8-14 UNF	59	2.3	27	22	1	DP6504-10	DTP to FJICS
3/4"	-12	1-1/16-12 UNF	70	2.7	32	–	2	DP6504-12	DTP to FJICS
1"	-16	1-5/16-12 UNF	69	2.7	38	–	2	DP6504-16	DTP to FJICS
1-1/4"	-20	1-5/8-12 UNF	72	2.8	50	–	2	DP6504-20	DTP to FJICS
1-1/2"	-24	1-7/8-12 UNF	75	2.9	60	–	2	DP6504-24	DTP to FJICS

# Test Coupling DPF – ORFS Connection



Brennan Order No.	Description	Thread G	H		L		Hex 1		Hex 2	
			mm	in	mm	in	mm	in	mm	in
DPFS6504-04	DTPS to FFS	9/16-18 UNF	75	2.9	36	1.40	22	0.87	22	0.87
DPFS6504-06	DTPS to FFS	11/16-16 UNF	75	2.9	36	1.40	27	1.06	27	1.06

# Test Hose DTH

Length L <sub>1</sub>	Brennan Order No.	Description	Thread
12"	DTH-12	DTH	M16 X 2.0 (BOTH ENDS)
24"	DTH-24	DTH	M16 X 2.0 (BOTH ENDS)
36"	DTH-36	DTH	M16 X 2.0 (BOTH ENDS)
48"	DTH-48	DTH	M16 X 2.0 (BOTH ENDS)
60"	DTH-60	DTH	M16 X 2.0 (BOTH ENDS)
72"	DTH-72	DTH	M16 X 2.0 (BOTH ENDS)
96"	DTH-96	DTH	M16 X 2.0 (BOTH ENDS)
120"	DTH-120	DTH	M16 X 2.0 (BOTH ENDS)

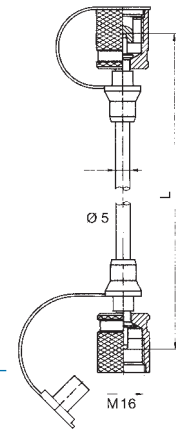
Custom lengths available on request  
Bending protection and other lengths on request

- Max. working pressure: 9000 PSI (630 bar)
- Test hose: Nominal bore 0.08" (2 mm)
- Minimum bending radius: 0.75" (20 mm)
- Nominal bore 0.16", 4 mm also available.

### Pressure / t° factor:

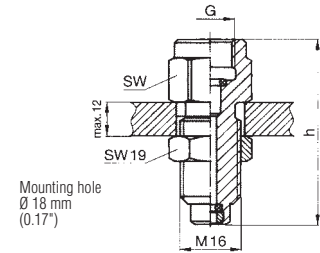
	0°C	122%
to	30°C	110%
at	50°C	100%
at	80°C	86%
at	100°C	77%

- Hose construction: Hose-core and –cover PA.
- Reinforcement: Synthetic fibre.
- Bursting pressure: 27,000 PSI (1900 bar)



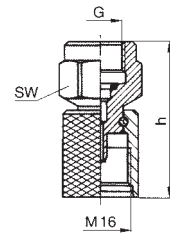
## Gauge Adaptor DGA

G Thread	h mm/in	SW mm/in	Brennan Order No.	Description
1/4 NPT	54 / 2.12	19 / .75	DGA2404-04	DGA – FNPT
1/4 BSPP	54 / 2.12	19 / .75	DGA7002-04	DGA – FBSPP
1/2 BSPP	64 / 2.52	27 / 1.06	DGA7002-08	DGA – FBSPP



## Direct Gauge Adaptor DDG

G Thread	h mm/in	SW mm/in	Brennan Order No.	Description
1/4 NPT	41 / 1.61	19 / .75	DDGA2404-04	DDG – FNPT
1/4 BSPP	41 / 1.61	19 / .75	DDGA7002-04	DDG – FBSPP
1/2 BSPP	51 / 2.0	27 / 1.06	DDGA7002-08	DDG – FBSPP



## Pressure Gauges

### Standard Stock Pressure Ranges

Brennan Order No.	St. Steel 63 Series Stem	St. Steel 63 Series Panel	St. Steel 100 Series Stem	St. Steel 100 Series Panel	Forged Bronze 63 Series Stem
DG-15-30	•	•	•	•	•
DG-600	•	•	•	•	•
DG-1000	•	•	•	•	•
DG-7500	•	•	•	•	•

### Specifications

- Glycerine Filled for Accuracy
- Copper Alloy Bourden Tube
- Dual Scales
- Built-in Relief Valve
- Operating Temperatures  
Ambient: -4°F to 140°F (-20°C to 60°C)  
Media: 140°F (+60°C)
- Acrylic Lens
- Accuracy + 1.5% of Full Scale
- Built-in Snubber



Series	Style	Size	A	B	C	D	E	F	G	
Stainless Steel	Stem Mount	2-1/2"	in 63	2.5 63	2.1 53	1.2 31	0.51 13	0.26 6.5	– –	– –
	Panel Mount U-Bolt	2-1/2"	in 63	2.5 63	2.8 72	2.4 62	1.2 31	0.26 6.5	– –	– –
	Panel Mount Front Flange	2-1/2"	in 85	3.3 85	2.9 75	2.5 63	2.44 62	1.2 31	0.08 2	0.08 2
	Stem Mount	4"	in 107	4.2 107	3.4 86	1.85 47	0.3 7.5	0.64 16.3	– –	– –
	Panel Mount U-Bolt	4"	in 107	4.2 107	4.25 108	3.15 80	1.85 47	0.3 7.5	– –	– –
	Panel Mount Front Flange	2-1/2"	in 132	5.2 132	4.7 118	4.2 107	3.15 80	1.85 47	0.05 1.25	0.3 7.5
Forged Bronze	Stem Mount	2-1/2"	in 63.5	2.5 63.5	2.13 54	1.5 38	0.44 11	0.50 12.2	– –	– –

# Complete Pressure Test Kits

Brennan Test pressure monitoring kits are available pre-assembled with an assortment of our most popular components. Everything required for instant pressure checking is included in one rugged box. Gauges are safely nestled in the Ethafoam® cushion and hoses fit neatly in the lid.



## Single Gauge Kit DSGK

- 1, 60-inch Hose Assembly
- 1, Direct Gauge Adaptor
- 1, Union
- 1, 7500 PSI Gauge
- 2, 1/8 NPT Pressure Test Coupling
- 3, 1/4 NPT Pressure Test Coupling
- 2, 7/16 UNF Pressure Test Coupling
- 2, 9/16 UNF Pressure Test Coupling

## Double Gauge Kit DDGK

- 1, 60-inch Hose Assembly
- 1, Direct Gauge Adaptor
- 1, Union
- 1, 7500 PSI Gauge
- 1, 1000 PSI Gauge
- 2, 1/8 NPT Pressure Test Coupling
- 2, 1/4 NPT Pressure Test Coupling
- 1, 7/16 UNF Pressure Test Coupling
- 1, 9/16 UNF Pressure Test Coupling

## Triple Gauge Kit DTGK

- 2, 60-inch Hose Assembly
- 3, Direct Gauge Adaptor
- 2, Union
- 1, -15" Hg-0-30 PSI Gauge
- 1, 7500 PSI Gauge
- 1, 1000 PSI Gauge
- 2, 1/8 NPT Pressure Test Coupling
- 2, 1/4 NPT Pressure Test Coupling
- 1, 7/16 UNF Pressure Test Coupling
- 1, 9/16 UNF Pressure Test Coupling

Custom Kits are easily supplied to your specific needs. OEMs in particular find this convenient for technicians and as an aftermarket service tool. Custom labels, foam inserts and boxes are available in quantity.