



YMM series



YMP series



YMR series



YMS series



YMT series



YMV series

ORBITAL MOTORS CATALOG

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The **YMM** series motors use the **spool valve** shaft distribution design for simplicity and efficiency. This design integrates the distribution and hydraulic bearing design with the motor shaft.

This motor series uses the “**ROTOR**” gear type manufactured with most advanced technology and quality available to provide high torque and low speed. The gear set of the “rotor” multiplies the output torque without the need of gear reducers that could be required in many applications.

These motors are very compact, economical, powerful, efficient and are designed for medium duty applications.

The large number of displacements, mounting flanges, shafts, valving and other options available for these motors makes them a very flexible unit for many applications.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Spool Valve Distribution	YMM	[in ³ ./rev]	[.50~3.07]	[PSI]	[1450]	RPM	[HP]	[3]
		cm ³ /rev.	80 ~ 375	MPa	10	22~1950	Kw	2.4

QUICK REFERENCE GUIDE

YMM SERIES QUICK REFERENCE:

Displacements				
[in ³ /rev]	cm ³ /rev.			
[.50]	8.2	FLOW UP TO	25 LPM	[6.61 GPM]
[.79]	12.9	PRESSURE UP TO	20 MPa	[2900 PSI]
[1.21]	19.9	TORQUE UP TO	100 Nm	[884 In. Lb.]
[1.93]	31.6	SPEED UP TO	2450	RPM
[2.43]	39.8			
[3.05]	50.03			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated shafts or housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there at start a radial load or not. Check data pages
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

DISTRIBUTION TYPE		YMM 8	YMM 12	YMM 20	YMM 32	YMM 40	YMM 50
GEOMETRIC DISPLACEMENT	[in ³ /rev.]	[.50]	[.79]	[1.21]	[1.93]	[2.43]	[3.07]
	cm³/rev.	8.2	12.9	19.9	31.6	39.8	50.3
MAX. SPEED RPM	RATED	1537	1256	814	513	452	358
	CONT.	1950	1550	1000	630	500	400
	INT.	2450	1940	1250	800	630	500
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[71]	[115]	[168]	[274]	[327]
		N*M	8	13	19	31	33
	CONT.	[LB. IN.]	[97]	[142]	[221]	[354]	[407]
		N*M	11	16	25	40	46
	INT.	[LB. IN.]	[133]	[203]	[310]	[504]	[778]
		N*M	15	23	35	57	88
	PEAK	[LB. IN.]	[186]	[292]	[451]	[566]	[884]
		N*M	21	33	51	64	100
MAX. OUTPUT [HP] KW	RATED	[HP]	[1.7]	[2.3]	[2.3]	[2.3]	[1.6]
		KW	1.3	1.7	1.7	1.7	1.2
	CONT.	[HP]	[2.4]	[3.2]	[3.2]	[3.2]	[2.4]
		KW	1.8	2.4	2.4	2.4	1.8
	INT.	[HP]	[3.4]	[4.3]	[4.3]	[4.3]	[4.3]
		KW	2.6	3.2	3.2	3.2	3.2
MAX. PRES- SURE DROP [PSI] MPa	RATED	[PSI]	[1305]	[1305]	[1305]	[1305]	[1232]
		MPa	9	9	9	9	8.5
	CONT.	[PSI]	[1450]	[1450]	[1450]	[1450]	[1305]
		MPa	10	10	10	10	9
	INT.	[PSI]	[2030]	[2030]	[2030]	[2030]	[2030]
		MPa	14	14	14	14	14
	PEAK	[PSI]	[2900]	[2900]	[2900]	[2320]	[2320]
		MPa	20	20	20	16	16
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[3.7]	[4.7]	[4.7]	[4.7]	[5.2]
		L/MIN	14	18	18	18	20
	CONT.	[GPM]	[4.2]	[5.2]	[5.2]	[5.2]	[5.2]
		L/MIN	16	20	20	20	20
	INT.	[GPM]	[5.2]	[6.6]	[6.6]	[6.6]	[6.6]
		L/MIN	20	25	25	25	25
WEIGHT [LB] KG	[LB]	[4]	[4]	[5]	[5]	[5]	[5]
	KG	1.9	2	2.1	2.2	2.3	2.4

- Rated speed and rated torque:
- Continuous pressure:
- Intermittent pressure:
- Peak pressure:

Output value of speed and torque under rated flow and rated pressure.
 Max. value of operating motor continuously.
 Max. value of operating motor in 6 seconds per minute.
 Max. value of operating motor in 0.6 second per minute.

PERFORMANCE DATA

YMM 8 [0.50 in³/rev] 8.2 cm³/rev.

YMM 8 [0.50 in³/rev] 8.2 cm³/rev.		Max cont.			Max int.		[PSI] MPa		
		[507] 3.5	[725] 5	[1015] 7	[1450] 10	[1740] 12			[2030] 14
GPM	[0.53]	[27] 3	[44] 5	[71] 8	[88] 10	[106] 12	[124] 14	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
L/min	2	228	218	206	156	111	58		
Flow (L/min)	[1.1]	[27] 3	[44] 5	[62] 7	[97] 11	[115] 13	[133] 15		
	4	474	471	463	426	391	331		
	[2.1]	[27] 3	[44] 5	[62] 7	[97] 11	[115] 13	[133] 15		
	8	953	946	926	884	855	816		
Max cont	[3.2]	[18] 2	[44] 5	[62] 7	[88] 10	[115] 13	[133] 15		
	12	1444	1426	1402	1360	1324	1288		
	[3.9]		[35] 4	[62] 7	[88] 10	[106] 12	[124] 14		
	15		1912	1900	1861	1833	1780		
Max int.	[5.3]		[0.00] 0	[53] 6	[88] 10	[97] 11	[124] 14		
	20		2432	2395	2350	2328	2281		

YMM 12.5 [0.79 in³/rev] 12.9 cm³/rev.

YMM 12.5 [0.79 in³/rev] 12.9 cm³/rev.		Max cont.				Max int.	[PSI] MPa			
		[507] 3.5	[725] 5	[1015] 7	[1450] 10	[1740] 12			[2030] 14	
GPM	[0.53]	[53] 6	[71] 8	[97] 11	[142] 16	[168] 19		TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)		
L/min	2	140	136	119	68	35				
Flow (L/min)	[1.1]	[53] 6	[71] 8	[106] 12	[150] 17	[168] 19	[203] 23			
	4	296	289	274	229	200	145			
	[2.1]	[44] 5	[71] 8	[106] 12	[150] 17	[177] 20	[212] 24			
	8	605	596	583	543	514	469			
Max cont	[3.2]	[44] 5	[71] 8	97 11	[141] 16	[177] 20	[212] 24			
	12	912	905	895	859	834	784			
	[3.9]	[44] 5	[62] 7	[389] 44	[407] 46	[168] 19	[203] 23			
	15	1152	1144	1136	1102	1078	1036			
Max int.	[5.3]	[27] 3	[62] 7	[88] 10	[133] 15	[168] 19	[195] 22			Max cont.
	20	1542	1532	1521	1500	1482	1437			
	[6.6]	[18] 2	[53] 6	[80] 9	[124] 14	[159] 18	[195] 22	Max int.		
	25	1910	1891	1878	1848	1828	1788			

YMM 20 [1.21 in³/rev] 19.9 cm³/rev.

YMM 20 [1.21 in³/rev] 19.9 cm³/rev.					Max cont.	Max int.			
		[246] 1.7	[507] 3.5	[725] 5	[1015] 7	[1450] 10	[1740] 12	[2030] 14	[PSI] MPa
GPM	[0.53]	[27] 3	[80] 9	[124] 14	[168] 19	[230] 26	[265] 30		TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
L/min	2	99	96	89	74	42	21		
Flow (L/min)	[1.1]	[35] 4	[80] 9	[124] 14	[168] 19	[230] 26	[274] 31	[318] 36	
	4	197	191	182	178	134	112	74	
	[2.1]	[35] 4	[80] 9	[115] 13	[168] 19	[239] 27	[274] 31	[318] 36	
	8	398	395	391	377	340	319	288	
	[3.2]	[27] 3	[71] 8	[115] 13	[159] 18	[230] 26	[274] 31	[327] 37	
12	596	594	588	579	545	523	493		
Max cont.	[3.9]	[27] 3	[71] 8	[106] 12	[150] 17	[221] 25	[265] 30	[318] 36	
	15	745	741	738	728	695	684	660	
	[5.3]	[9] 1	[53] 6	[97] 11	[168] 19	[212] 24	[256] 29	[310] 35	
20	998	995	991	985	962	1916	1885	Max cont.	
Max int.	[6.6]		[35] 4	[80] 9	[124] 14	[203] 23	[248] 28	[292] 33	Max int.
	25		1247	1245	1242	1189	1180	1176	

YMM 32 [1.93 in³/rev] 31.6 cm³/rev.

YMM 32 [1.93 in³/rev] 31,6 cm³/rev.						Max cont.	Max int.	[PSI] MPa		
		[246] 2	[507] 3.5	[725] 5	[1015] 7	[1450] 10	[1740] 12			[2030] 14
GPM	[0.53]	[62] 7	[133] 15	[186] 21	[248] 28	[354] 40			TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
L/min	2	61	57	52	47	16				
Flow (L/min)	[1.1]	[62] 7	[133] 15	[186] 21	[256] 29	[363] 41	[424] 48	[504] 57		
	4	126	121	114	106	82	67	49		
	[2.1]	[62] 7	[133] 15	[186] 21	[256] 29	[363] 41	[433] 49	[513] 58		
	8	250	244	239	231	207	194	167		
Max cont	[3.2]	[53] 6	[115] 13	[177] 20	[248] 28	[354] 40	[424] 48	[513] 58		
	12	378	374	369	362	338	322	297		
	[3.9]	[35] 4	[106] 12	[159] 18	[239] 27	[345] 39	[415] 47	[504] 57		
	15	476	472	468	462	441	429	406		
Max int.	[5.3]	[27] 3	[88] 10	[150] 17	[221] 25	[327] 37	[407] 46	[486] 55		Max cont.
	20	633	630	627	619	601	585	566		
	[6.6]	[9] 1	[70] 8	[133] 15	[203] 23	[309] 35	[380] 43	[460] 52	Max int.	
	25	791	789	787	783	766	753	732		

PERFORMANCE DATA

YMM 40 [2.43 in³/rev] 39.8 cm³/rev.

Max
cont.

Max
int.

		[435] 3	[725] 5	[1015] 7	[1232] 9	[1450] 10	[1740] 12	[PSI] MPa
GPM	[0.53]	[142]	[239]	[318]	[389]	[451]		
L/min	2	16	27	36	44	51		
		45	40	34	28	17		
	[1.1]	[142]	[239]	[327]	[389]	[460]	[548]	TORQUE [LB-IN]
		16	27	37	44	52	62	TORQUE (N•M)
	4	96	93	85	79	65	52	SPEED (RPM)
Flow (L/min)	[2.1]	[133]	[230]	[319]	[389]	[460]	[557]	
		15	26	36	44	52	63	
	8	197	195	182	176	166	154	
	[3.2]	[124]	[221]	[310]	[380]	[451]	[548]	
		14	25	35	43	51	62	
	12	293	287	282	277	268	257	
	[3.9]	[115]	[212]	[301]	[371]	[442]	[548]	
		13	24	34	42	50	62	
	15	371	365	360	355	347	338	
Max cont	[5.3]	[88]	[186]	[274]	[345]	[425]	[522]	Max cont.
		10	21	31	39	48	59	
	20	497	492	487	480	472	463	
Max int.	[6.6]	[62]	[168]	[256]	[327]	[389]	[495]	Max int.
		7	19	29	37	44	56	
	25	622	617	612	607	600	591	

YMM 50 [3.07 in³/rev] 50.3 cm³/rev.

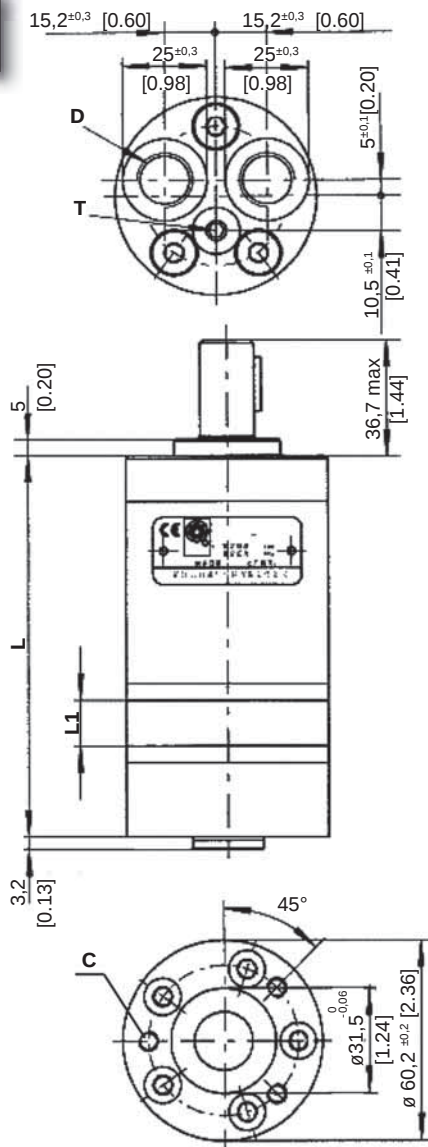
Max
cont.

Max
int.

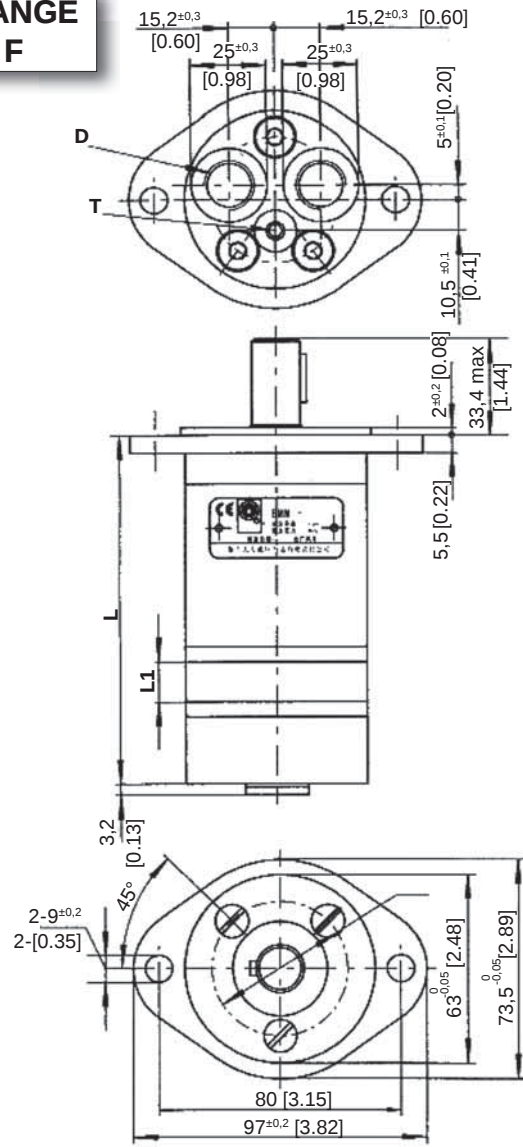
		[217] 1.5	[435] 3	[725] 5	[1015] 7	[1450] 10	[PSI] MPa
GPM	[0.53]	[97]	[203]	[318]	[442]		
L/min	2	11	23	36	50		
		37	33	27	22		
	[1.1]	[97]	[195]	[318]	[442]	[619]	TORQUE [LB-IN]
		11	22	36	50	70	TORQUE (N•M)
	4	76	73	68	63	55	SPEED (RPM)
Flow (L/min)	[2.1]	[97]	[186]	[310]	[442]	[628]	
		11	21	35	50	71	
	8	157	154	149	145	137	
	[3.2]	[97]	[177]	[292]	[433]	[628]	
		11	20	33	49	71	
	12	237	234	231	226	218	
	[3.9]	[88]	[159]	[283]	[416]	[610]	
		10	18	32	47	69	
	15	296	295	294	288	282	
Max cont	[5.3]	[71]	[124]	[256]	[389]	[566]	Max cont.
		8	14	29	44	64	
	20	395	395	393	390	381	
Max int.	[6.6]	[35]	[88]	[221]	[354]	[522]	Max int.
		4	10	25	40	59	
	25	498	496	494	490	484	

YMM END PORT DIMENSIONS AND MOUNTING DATA

FLANGE M - U



FLANGE F

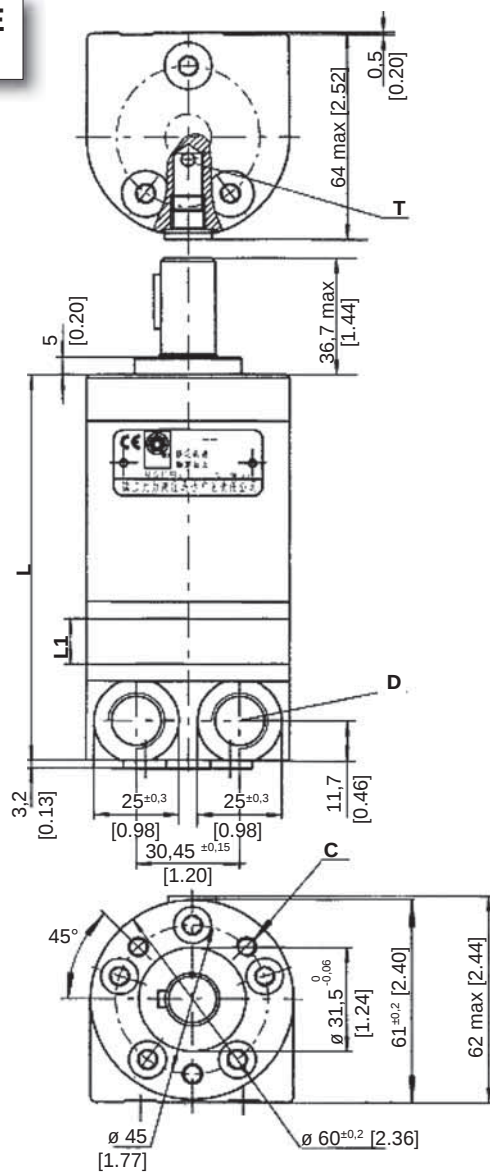


MODEL	M, U				F			
	[INCHES]		MM		[INCHES]		MM	
	L	L1	L	L1	L	L1	L	L1
YMM 8	[4.09]	[.14]	104	3.5	[4.21]	[.14]	107	3.5
YMM 12.5	[4.17]	[.22]	106	5.5	[4.29]	[.22]	109	5.5
YMM 20	[4.29]	[.33]	109	8.5	[4.41]	[.33]	112	8.5
YMM 32	[4.49]	[.53]	114	13.5	[4.61]	[.53]	117	13.5
YMM 40	[4.65]	[.67]	118	17	[4.65]	[.67]	118	17
YMM 50	[4.80]	[.85]	122	21.5	[4.92]	[.85]	125	21.5

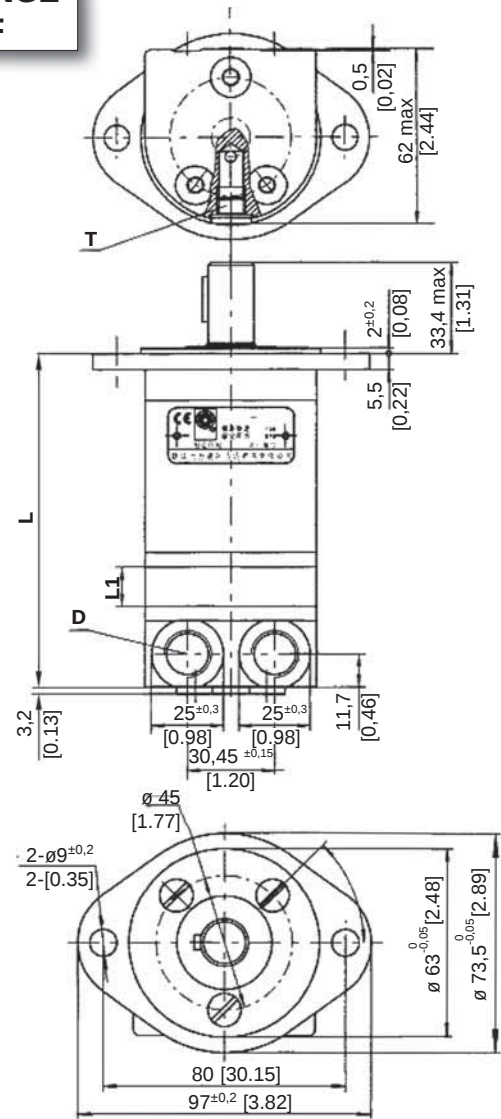
MOUNING CODE		M, U				F			
ORDERING CODE		1E	DEPTH	1U	DEPTH	1E	DEPTH	1U	DEPTH
C		M6	10 MM	1/4-28UNF-2B	10 MM				
D		G 3/8	12 MM	9/16-18 UNF	12 MM	G 3/8	12 MM	9/16-18UNF	12 MM
T		G 1/8	8 MM	3/8-24 UNF	8 MM	G 1/8	8 MM	3/8-24UNF	8 MM

YMM SIDE PORT DIMENSIONS AND MOUNTING DATA

FLANGE M - U



FLANGE F

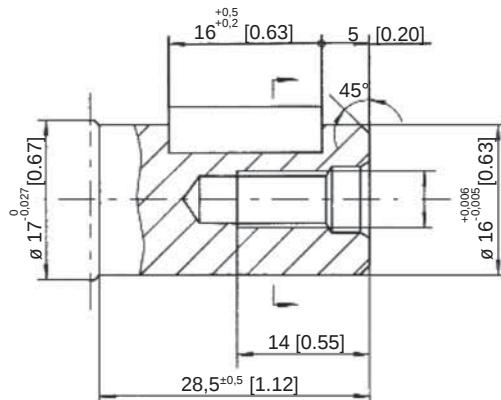


	M, U				F			
	[INCHES]		MM		[INCHES]		MM	
MODEL	L	L1	L	L1	L	L1	L	L1
YMM 8	[4.13]	[.14]	105	3.5	[4.29]	[.14]	109	3.5
YMM 12.5	[4.21]	[.22]	107	5.5	[4.37]	[.22]	111	5.5
YMM 20	[4.33]	[.33]	110	8.5	[4.49]	[.33]	114	8.5
YMM 32	[4.53]	[.53]	115	13.5	[4.69]	[.53]	119	13.5
YMM 40	[4.65]	[.67]	118	17	[4.65]	[.67]	118	17
YMM 50	[4.84]	[.85]	123	21.5	[5.00]	[.85]	127	21.5

MOUNING CODE		M, U				F			
ORDERING CODE	E	DEPTH	U	DEPTH	E	DEPTH	U	DEPTH	
C	M6	10 mm	1/4-28UNF-2B	10 mm					
D	G 3/8	12 mm	9/16-18 UNF	12 mm	G 3/8	12 mm	9/16-18UNF	12 mm	
T	G 1/8	8 mm	3/8-24 UNF	8 mm	G 1/8	8 mm	3/8-24UNF	8 mm	

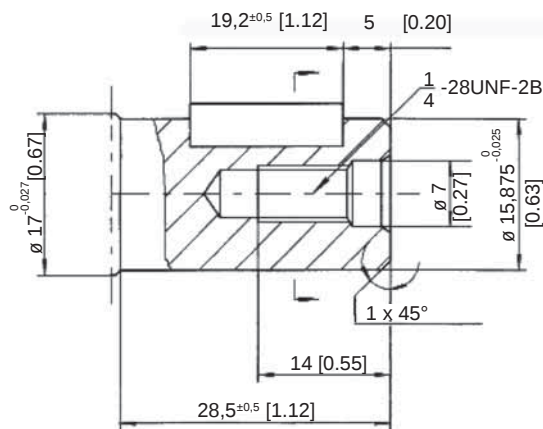
MOTOR SHAFT EXTENSIONS

A



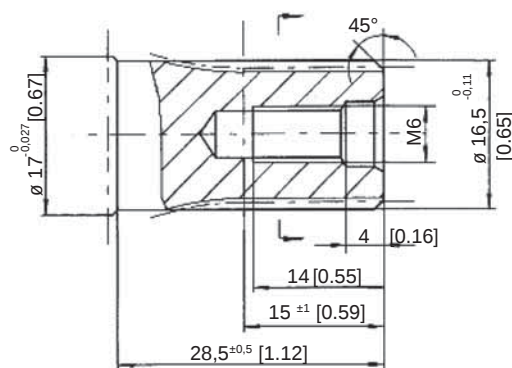
Shaft A: 16 mm Keyed
Parallel key 5x5x16

B



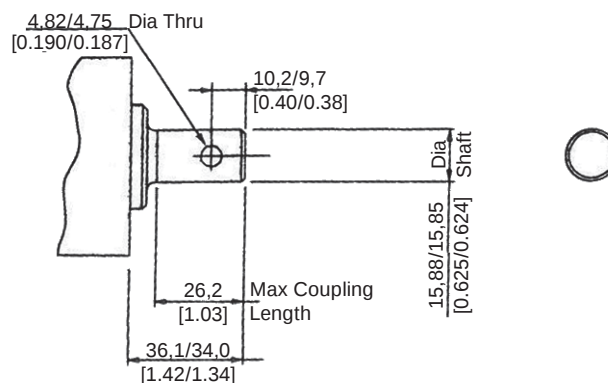
Shaft B: 15.875 mm Keyed
Parallel key 4.8x4.8x19.35

C



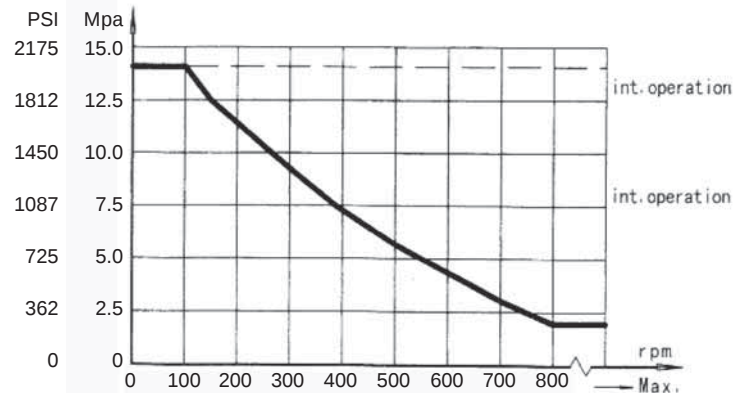
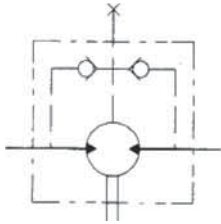
Shaft C: Involute splined shaft
B17x14 DIN5482

H



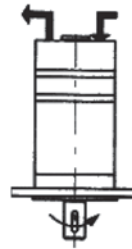
ADDITIONAL INFORMATION

PERMISSIBLE SHAFT SEAL PRESSURE

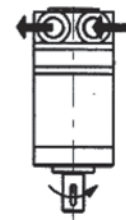


IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE. APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN THE DRAIN LINE.

SHAFT ROTATION DIRECTION



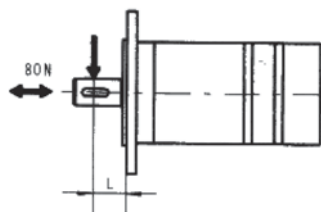
YMM



YMM

STATUS OF THE SHAFT'S RADIAL FORCE

$$F_r = \frac{130400}{61.5 + L} \text{ N}$$



F_r =Radial Force (N)
 L =Distance (mm)
 n =Speed (rpm)
 Rhomb-flange $L=15\text{mm}$
 Square-flange $L=20\text{mm}$

ORDERING INFORMATION

1	2	3	4	5	6	7
YMM						

1	2	3	4	5	6	7
DISP.	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS
8	M 3-M6 Round Flange Pilot Ø 31.5X5	A Shaft Ø 16, Parallel Key 5x5x16	E Side Port G 3/8, G 1/8	NONE STAN- DARD	00 NO PAINT	NONE STANDARD
12.5	U 3-1/4-28 UNF Round Flange Pilot Ø 31.5X5	B Shaft Ø 15.875, Parallel Key 4.8x4.8x19.35	U Side Port 9/16-18 UNF, 3/8-24 UNF	R OPPOSITE	NONE BLUE	FR FREE RUNNING
16	F 2- Ø 9 Rhomb- Flange, Pilot Ø 63x2	C Shaft Ø 16.5 Splined Involute B17x14 Din5482	IE End Port Back Port G 3/8, G 1/8		B BLACK	LL LOW LEAKAGE VALVE
20		H Shaft 15.815 ø Straight w/cross hole 4.82/4.25 (.1901/.187)	IU End Port Back Port 9/16-18 UNF, 3/8-24 UNF		S SILVER GRAY	LSV LOW SPEED VALVE
32						CRS CORROSION RESISTANT SHAFT
40						HPS HIGH PRESSURE SEAL
50						HTS HIGH TEMP SEAL

Ordering code:

All options have been determined with letters, numbers or combinations. All boxes must be filled with proper codes. If specification is not in the table, please contact us with your specific requirements.

YMP



The **YMP** series motors use the **spool valve** shaft distribution design for simplicity and efficiency. This design integrates the distribution and hydraulic bearing design with the motor shaft.

This motor series uses the “**ROTOR**” gear type manufactured with most advanced technology and quality available to provide high torque and low speed. The gear set of the “rotor” multiplies the output torque without the need of gear reducers that could be required in many applications.

These motors are very compact, economical, powerful, efficient and are designed for medium duty applications.

The large number of displacements, mounting flanges, shafts, valving and other options available for these motors makes them a very flexible unit for many applications.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
		[in ³ ./rev]	[2.18~24.41]	[PSI]	[2400]		[HP]	[27]
Spool Valve Distribution	YMP	cm ³ /rev.	36 ~ 400	MPA	16.5	30~879	Kw	10

QUICK REFERENCE GUIDE

YMP SERIES QUICK REFERENCE:

Displacements				
[in ³ ./rev]	cm ³ /rev.			
[2.18]	36			
[3.15]	51.7	FLOW UP TO	75 LPM	[20 GPM]
[4.74]	77.7	PRESSURE UP TO	16.5 MPa	[2392 PSI]
[5.87]	96.2	TORQUE UP TO	533 Nm	[4847 Lb.In.]
[7.19]	117.9	SPEED UP TO	975 RPM	
[9.49]	155.5			
[11.59]	189.9			
[14.10]	231			
[19.00]	311.7			
[23.57]	386.2			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated shafts or housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

DISTRIBUTION TYPE		YMP 36	YMP 50	YMP 80	YMP 100	YMP 125	YMP 160	YMP 200	YMP 250	YMP 315	YMP 400	
GEOMETRIC DISPLACEMENT		[in ³ ./rev.]	[2.20]	[3.15]	[4.74]	[5.87]	[7.19]	[9.49]	[11.59]	[14.10]	[19.01]	[23.57]
		cm³/rev.	36	51.7	77.7	96.2	117.9	155.5	189.9	231	311.7	386.2
MAX. SPEED RPM		RATED	1050	850	650	520	390	310	260	200	156	130
		CONT.	1078	879	740	589	475	370	296	237	189	149
		INT.	1210	975	827	673	594	463	370	297	236	185
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[486]	[716]	[1141]	[1424]	[1786]	[1804]	[2291]	[2874]	[3051]	[3847]
		N*M	55	81	129	161	202	204	259	325	345	435
	CONT.	[LB. IN.]	[486]	[716]	[1141]	[1423]	[1786]	[2167]	[2529]	[3184]	[3591]	[4847]
		N*M	55	81	129	161	202	245	286	360	406	435
	INT.	[LB. IN.]	[672]	[955]	[1512]	[1884]	[2370]	[3025]	[3449]	[4033]	[4466]	[4714]
		N*M	76	108	171	213	268	342	390	456	505	533
MAX. OUTPUT [HP] KW	RATED	[HP]	[8]	[9]	[12]	[12]	[11]	[9]	[9]	[9]	[7]	[8]
		KW	6	7	8.6	8.6	8	6.5	6.9	6.6	5.5	5.8
	CONT.	[HP]	[8]	[9]	[12]	[12]	[12]	[12]	[11]	[11]	[10]	[10]
		KW	6	7	9.1	9	9.1	8.7	8.1	8.2	7.2	6.1
	INT.	[HP]	[10]	[12]	[16]	[16]	[16]	[16]	[15]	[14]	[12]	[10]
		KW	8	8.9	11.8	11.9	11.8	11.9	10.9	10.1	8.6	7.2
MAX. PRES- SURE DROP [PSI] MP _A	RATED	[PSI]	[1812]	[1812]	[1812]	[1812]	[1812]	[1450]	[1450]	[1450]	[1232]	[1232]
		MP _A	12.5	12.5	12.5	12.5	12.5	10	10	10	8.5	8.5
	CONT.	[PSI]	[1812]	[1812]	[1812]	[1812]	[1812]	[1812]	[1595]	[1595]	[1595]	[1450]
		MP _A	12.5	12.5	12.5	12.5	12.5	12.5	11	11	11	10
	INT.	[PSI]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2030]	[1812]	[1522]
		MP _A	16.5	16.5	16.5	16.5	16.5	16.5	16.5	14	12.5	10.5
	PEAK	[PSI]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2030]	[1812]	[1522]
		MP _A	16.5	16.5	16.5	16.5	16.5	16.5	16.5	14	12.5	10.5
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[10.4]	[11.8]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]
		L/MIN	40	45	55	55	55	55	55	55	55	55
	CONT.	[GPM]	[10.4]	[11.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]
		L/MIN	40	45	60	60	60	60	60	60	60	60
	INT.	[GPM]	[11.8]	[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
		L/MIN	45	50	75	75	75	75	75	75	75	75
WEIGHT [LB] KG		[LB]	[12]	[12]	[13]	[13]	[13]	[14]	[14]	[15]	[15]	[16]
		KG	5.6	5.6	5.7	5.9	6	6.2	6.4	6.6	6.9	7.4

- * Rated speed and rated torque:
- * Continuous pressure:
- * Intermittent pressure:
- * Peak pressure:

Output value of speed and torque under rated flow and rated pressure.
 Max. value of operating motor continuously.
 Max. value of operating motor in 6 seconds per minute.
 Max. value of operating motor in 0.6 second per minute.

PERFORMANCE DATA

YMP 36 [2.19 in³/rev] 36 cm³/rev.

		[435]	[870]	[1015]	[1160]	[1450]	[1595]	[1813]	[2493]	[PSI]	Max cont.	Max int.
		3	6	7	8	10	11	12	16.5	MPA		
GPM	[2.1]	[115]	[212]	[256]	[301]	[380]	[424]	[486]	[654]			
	8	13	24	29	34	43	48	55	74			
L/min	[4.0]	[115]	[221]	[256]	[301]	[380]	[424]	[495]	[663]			
	15	13	25	29	34	43	48	56	75			
Flow (L/min)	[5.3]	[115]	[212]	[256]	[301]	[380]	[424]	[495]	[627]			
	20	13	24	29	34	43	48	56	76			
	[7.9]	[106]	[212]	[256]	[301]	[380]	[424]	[495]	[672]			
	30	12	24	29	34	43	48	56	76			
	[9.2]	[106]	[203]	[248]	[301]	[380]	[424]	[495]	[672]			
	35	12	23	28	34	43	48	56	76			
Max cont	[11.9]	[106]	[203]	[248]	[283]	[362]	[415]	[486]	[663]		Max cont.	
	45	10	23	28	32	41	47	55	75			
Max int.	[13.2]	[97]	[194]	[230]	[283]	[362]	[407]	[477]	[654]		Max int.	
	50	11	22	26	32	41	46	54	74			

YMP 50 [3.15 in³/rev] 51.7 cm³/rev.

		[435]	[870]	[1015]	[1160]	[1450]	[1595]	[1813]	[2393]	[PSI]	Max cont.	Max int.
		3	6	7	8	10	11	12	16	MPA		
GPM	[2.1]	[150]	[336]	[389]	[442]	[557]	[619]	[699]	[920]			
	8	17	38	44	50	63	70	79	104			
L/min	[4.0]	[168]	[336]	[389]	[442]	[566]	[628]	[708]	[929]			
	15	19	38	44	50	64	71	80	105			
Flow (L/min)	[5.3]	[150]	[336]	[389]	[451]	[566]	[628]	[708]	[946]			
	20	17	38	44	51	64	71	80	107			
	[7.9]	[142]	[327]	[389]	[442]	[566]	[628]	[716]	[955]			
	30	16	37	44	50	64	71	81	108			
	[9.2]	[133]	[318]	[380]	[442]	[557]	[628]	[708]	[946]			
	35	15	36	43	50	63	71	80	107			
Max cont	[11.9]	[124]	[301]	[371]	[433]	[557]	[619]	[708]	[946]		Max cont.	
	45	14	34	42	49	63	70	80	107			
Max int.	[13.2]	[115]	[292]	[363]	[425]	[548]	[601]	[699]			Max int.	
	50	13	33	41	48	62	68	79				

YMP 80 [4.74 in³/rev] 77.7 cm³/rev.

		[435]	[870]	[1015]	[1160]	[1450]	[1595]	[1814]	[2394]	[PSI]	Max cont.	Max int.
		3	6	7	8	10	11	12	16	MPA		
GPM	[2.1]	[256]	[531]	[619]	[708]	[893]	[982]	[1132]	[1486]			
	8	29	60	70	80	101	111	128	168			
L/min	[4.0]	[256]	[539]	[628]	[716]	[893]	[1008]	[1141]	[1503]			
	15	29	61	71	81	101	114	129	170			
Flow (L/min)	[5.3]	[248]	[531]	[628]	[716]	[893]	[931]	[1141]	[1503]			
	20	28	60	71	81	101	112	129	170			
	[7.9]	[221]	[515]	[610]	[699]	[884]	[982]	[1132]	[1512]			
	30	25	58	69	79	100	111	128	171			
	[9.2]	[212]	[504]	[601]	[690]	[876]	[973]	[1114]	[1512]			
	35	24	57	68	78	99	110	126	171			
Max cont	[11.9]	[195]	[478]	[584]	[681]	[858]	[964]	[1097]	[1495]		Max cont.	
	45	22	54	66	77	97	109	124	169			
Max int.	[13.2]	[177]	[469]	[566]	[633]	[849]	[946]	[1088]	[1486]		Max int.	
	50	20	53	64	75	96	107	123	168			
	[15.8]	[168]	[460]	[557]	[654]	[840]	[946]	[1088]	[1486]			
	60	19	52	63	74	95	107	123	168			
	[19.8]	[142]	[416]	[522]	[637]	[805]	[929]	[1070]				
	75	16	47	59	72	91	105	121				

YMP 100 [5.87 in³/rev] 96.2 cm³/rev.

		[435]	[870]	[1015]	[1160]	[1450]	[1595]	[1813]	[2393]	[PSI]	Max cont.	Max int.
		3	6	7	8	10	11	12	16	MPA		
GPM	[2.1]	[318]	[663]	[778]	[893]	[1114]	[1247]	[1415]	[1857]			
	8	36	75	88	101	126	141	160	210			
L/min	[4.0]	[310]	[663]	[787]	[893]	[1132]	[1247]	[1415]	[1884]			
	15	35	75	89	101	128	141	160	213			
Flow (L/min)	[5.3]	[292]	[654]	[778]	[893]	[1114]	[1238]	[1424]	[1875]			
	20	33	74	88	101	126	140	161	212			
	[7.9]	[274]	[637]	[752]	[867]	[1088]	[1212]	[1386]	[1884]			
	30	31	72	85	98	123	137	157	213			
	[9.2]	[256]	[610]	[734]	[849]	[1070]	[1194]	[1371]	[1875]			
	35	29	69	83	96	121	135	155	212			
Max cont	[11.9]	[248]	[584]	[716]	[831]	[1052]	[1176]	[1353]	[1840]		Max cont.	
	45	28	66	81	94	119	133	153	208			
Max int.	[13.2]	[212]	[575]	[690]	[822]	[1055]	[1167]	[1344]	[1831]		Max int.	
	50	24	65	78	93	117	132	152	207			
	[15.8]	[203]	[557]	[681]	[814]	[1026]	[1158]	[1335]	[1831]			
	60	23	63	77	92	116	131	151	207			
	[19.8]	[177]	[504]	[654]	[778]	[999]	[1141]	[1327]				
	75	20	57	74	88	113	129	150				

PERFORMANCE DATA

YMP 125 [7.19 in³/rev] 117.9 cm³/rev.

		[435] 3	[870] 6	[1015] 7	[1160] 8	[1450] 10	[1595] 11	[1813] 12	[2393] 16	[PSI] MPa	Max cont.	Max int.
GPM	[2.1]	[398]	[831]	[982]	[1123]	[1397]	[1557]	[1778]	[2326]			
L/min	8	45	94	111	127	158	176	201	263			
	[4.0]	[389]	[831]	[982]	[1123]	[1415]	[1565]	[1786]	[2361]	TORQUE [LB-IN]		
	15	118	115	114	113	110	108	105	86	TORQUE (N·M)		
										SPEED (RPM)		
	[5.3]	[371]	[822]	[973]	[1123]	[1406]	[1557]	[1786]	[2370]			
	20	42	93	110	127	159	176	202	268			
		158	156	155	152	150	148	144	129			
Flow (L/min)	[7.9]	[354]	[808]	[955]	[1097]	[1380]	[1539]	[1751]	[2370]			
	30	40	91	108	124	156	174	198	268			
		238	235	233	231	229	225	222	205			
	[9.2]	[336]	[787]	[937]	[1079]	[1362]	[1521]	[1733]	[2361]			
	35	38	89	106	122	154	172	196	267			
		227	274	273	272	268	266	263	247			
	[11.9]	[327]	[752]	[911]	[1061]	[1335]	[1503]	[1716]	[2326]			
	45	37	85	103	120	151	170	194	263			
		356	353	352	349	347	343	341	321			
	[13.2]	[292]	[743]	[884]	[1044]	[1318]	[1477]	[1698]	[2299]			
	50	33	84	100	118	149	167	192	260			
		396	392	390	390	387	383	380	363			
Max cont	[15.8]	[283]	[716]	[876]	[1026]	[1300]	[1468]	[1689]	[2291]		Max cont.	
	60	32	81	99	116	147	166	191	259			
		475	471	469	467	465	461	457	436			
Max int.	[19.8]	[230]	[663]	[822]	[973]	[1256]	[1406]	[1636]			Max int.	
	75	26	75	93	110	142	159	185				
		594	588	587	581	576	584	579				

YMP 160 [9.49 in³/rev] 155.5 cm³/rev.

		[435] 3	[870] 6	[1015] 7	[1160] 8	[1450] 10	[1595] 11	[2030] 14	[2393] 16	[PSI] MPa	Max cont.	Max int.
GPM	[2.1]	[504]	[1070]	[1256]	[1433]	[1786]	[1990]	[2419]	[2954]			
L/min	8	57	121	142	162	202	225	243	334			
	[4.0]	[495]	[1070]	[1256]	[1433]	[1804]	[2008]	[2167]	[3016]	TORQUE [LB-IN]		
	15	56	121	142	162	204	227	245	341	TORQUE (N·M)		
		93	90	90	89	88	86	86	75	SPEED (RPM)		
	[5.3]	[486]	[1061]	[1238]	[1433]	[1795]	[1999]	[2158]	[3025]			
	20	55	120	140	162	203	226	244	342			
		123	122	121	119	117	116	116	104			
Flow (L/min)	[7.9]	[478]	[1035]	[1229]	[1415]	[1778]	[1981]	[2140]	[3007]			
	30	54	117	139	160	201	224	242	340			
		185	183	182	180	178	176	175	163			
	[9.2]	[460]	[1017]	[1212]	[1406]	[1760]	[1946]	[2140]	[2980]			
	35	52	115	137	159	199	220	242	337			
		215	213	213	211	210	208	207	196			
	[11.9]	[442]	[991]	[1185]	[1380]	[1733]	[1946]	[2105]	[2963]			
	45	50	112	134	156	196	220	238	335			
		277	275	275	273	271	169	268	256			
	[13.2]	[398]	[973]	[1167]	[1353]	[1716]	[1910]	[2061]	[2919]			
	50	45	110	132	153	194	216	233	330			
		308	307	305	303	302	299	299	287			
Max cont	[15.8]	[389]	[937]	[1150]	[1335]	[1698]	[1893]	[2043]	[2901]		Max cont.	
	60	44	106	130	151	192	214	231	328			
		370	368	365	364	362	360	359	347			
Max int.	[19.8]	[283]	[849]	[1052]	[1256]	[1610]	[1813]	[1963]			Max int.	
	75	32	96	119	142	182	205	222				
		463	458	457	456	453	451	451				

YMP 200 [11.59 in³/rev] 189.9 cm³/rev.

		[435] 3	[870] 6	[1015] 7	[1160] 8	[1450] 10	[1595] 11	[2175] 15	[PSI] MPa	Max cont.	Max int.
GPM	[2.1]	[646]	[1353]	[1583]	[1804]	[2264]	[2503]	[3405]			
L/min	8	73	153	179	204	256	283	385			
	[4.0]	[646]	[1344]	[1592]	[1813]	[2291]	[2353]	[3449]	TORQUE [LB-IN]		
	15	73	152	180	205	259	266	390	TORQUE (N·M)		
		74	72	71	71	70	68	58	SPEED (RPM)		
	[5.3]	[628]	[1335]	[1574]	[1804]	[2264]	[2521]	[3449]			
	20	71	151	178	204	256	285	390			
		99	98	97	95	94	91	81			
Flow (L/min)	[7.9]	[601]	[1318]	[1548]	[1786]	[2246]	[2503]	[3431]			
	30	68	149	175	202	254	283	388			
		148	147	146	144	142	139	128			
	[9.2]	[575]	[1291]	[1530]	[1769]	[2229]	[2485]	[3414]			
	35	65	146	173	200	252	281	386			
		173	172	171	169	168	165	155			
	[11.9]	[557]	[1256]	[1503]	[1733]	[2184]	[2450]	[3378]			
	45	63	142	170	196	247	259	382			
		222	221	220	218	216	214	203			
	[13.2]	[513]	[1220]	[1468]	[1707]	[2158]	[2406]	[3343]			
	50	58	138	166	193	244	272	378			
		247	245	244	244	242	239	229			
Max cont	[15.8]	[495]	[1203]	[1442]	[1689]	[2131]	[2379]	[3317]		Max cont.	
	60	56	136	163	191	241	269	375			
		296	294	293	292	290	287	277			
Max int.	[19.8]	[371]	[1070]	[1327]	[1565]	[1999]				Max int.	
	75	42	121	150	177	226					
		370	367	367	365	364					

YMP 250 [14.10 in³/rev] 231 cm³/rev.

		[435] 3	[870] 6	[1015] 7	[1160] 8	[1450] 10	[1595] 11	[2030] 14	[PSI] MPa	Max cont.	Max int.
GPM	[2.1]	[822]	[1725]	[1999]	[2291]	[2874]	[3157]				
L/min	8	93	195	226	259	325	357				
	[4.0]	[814]	[1698]	[1999]	[2299]	[2874]	[3184]	[4033]	TORQUE [LB-IN]		
	15	92	192	226	260	325	360	456	TORQUE (N·M)		
		60	58	57	57	55	55	46	SPEED (RPM)		
	[5.3]	[796]	[1689]	[1990]	[2282]	[2848]	[3148]	[4024]			
	20	90	191	225	258	322	356	455			
		79	78	77	76	75	75	65			
Flow (L/min)	[7.9]	[761]	[1663]	[1955]	[2255]	[2821]	[3131]	[3997]			
	30	86	188	221	255	319	354	452			
		119	118	117	116	114	114	103			
	[9.2]	[725]	[1627]	[1919]	[2220]	[2804]	[3095]	[3962]			
	35	82	184	217	251	317	350	448			
		138	138	137	135	133	133	124			
	[11.9]	[699]	[1583]	[1893]	[2176]	[2759]	[3051]	[3909]			
	45	79	179	214	246	312	345	442			
		179	178	177	176	173	173	163			
	[13.2]	[654]	[1539]	[1848]	[2149]	[2706]	[2998]	[3874]			
	50	74	174	209	243	306	339	438			
		198	197	197	195	194	193	185			
Max cont	[15.8]	[628]	[1512]	[1822]	[2113]	[2680]	[2972]	[3829]		Max cont.	
	60	71	171	206	239	303	336	433			
		237	236	236	234	232	232	224			
Max int.	[19.8]	[469]	[1353]	[1672]	[1955]	[2582]	[2759]			Max int.	
	75	53	153	189	221	292	312				
		297	295	295	293	232	291				

PERFORMANCE DATA

YMP 315 [19.02 in³/rev] 311.7 cm³/rev.

Max
cont.

Max
int.

		[435] 3	[870] 6	[1015] 7	[1160] 8	[1450] 10	[1813] 12	[PSI] MPa
GPM L/ min	[2.1] 8	[1026] 116 25	[2149] 243 24	[2494] 282 22	[2768] 313 16	[3431] 388 13		
	[4.0] 15	[1017] 115 47	[2149] 243 46	[2512] 284 45	[2865] 324 43	[3591] 406 41	[4449] 503 20	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
Flow (L/min)	[5.3] 20	[1008] 114 63	[2140] 242 62	[2494] 282 61	[2857] 323 58	[3582] 405 56	[4466] 505 54	
	[7.9] 30	[964] 109 94	[2096] 237 93	[2450] 277 92	[2821] 319 90	[3546] 401 88	[4431] 501 77	
	[9.2] 35	[929] 105 110	[2052] 232 109	[2414] 273 108	[2777] 314 106	[3511] 397 103	[4395] 497 93	
	[11.9] 45	[876] 99 141	[1999] 226 141	[2370] 268 139	[2733] 309 137	[3458] 391 135	[4342] 491 124	
	[13.2] 50	[814] 92 157	[1928] 218 157	[2317] 262 155	[2689] 304 154	[3396] 384 151	[4298] 486 141	
Max cont	[15.8] 60	[787] 89 189	[1901] 215 188	[2282] 258 187	[2644] 299 185	[3352] 379 182	[4236] 479 171	Max cont.
Max int.	[19.8] 75	[610] 69 236	[1716] 194 235	[2097] 237 234	[2459] 278 232	[3140] 355 229		Max int.

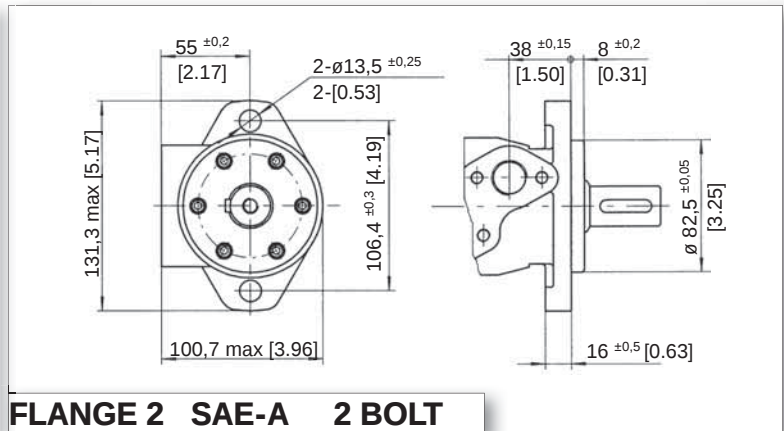
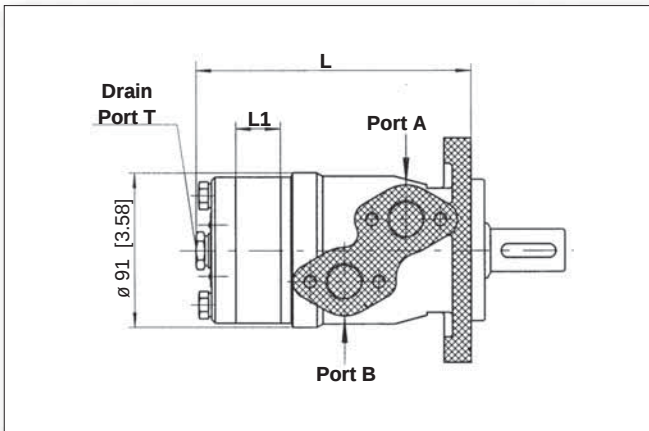
YMP 400 [23.57 in³/rev] 386.2 cm³/rev.

Max
cont.

Max
int.

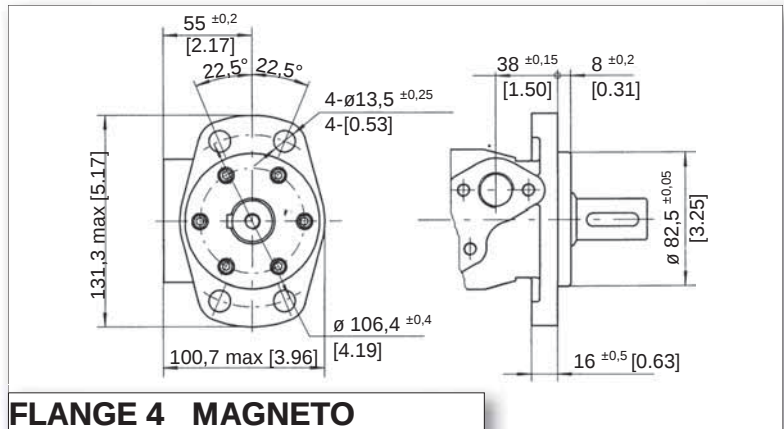
		[435] 3	[870] 6	[1015] 7	[1160] 8	[1232,50] 8	[1812,50] 12	[PSI] MPa
GPM L/ min	[2.1] 8	[1300] 147 20	[2688] 304 19	[3131] 354 16				
	[4.0] 15	[1300] 147 37	[2724] 308 36	[3175] 359 35	[3608] 408 33	[3847] 435 32	[4705] 532 25	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
Flow (L/min)	[5.3] 20	[1273] 144 50	[2697] 305 49	[3166] 358 47	[3599] 407 45	[3847] 435 43	[4714] 533 38	
	[7.9] 30	[1229] 139 74	[2662] 301 73	[3113] 352 72	[3555] 402 70	[3803] 430 68	[4687] 530 62	
	[9.2] 35	[1176] 133 86	[2600] 294 86	[3051] 345 85	[3502] 396 82	[3741] 423 80	[4643] 525 75	
	[11.9] 45	[1105] 125 111	[2538] 287 111	[2998] 339 109	[3440] 389 106	[3679] 416 105	[4572] 517 100	
	[13.2] 50	[1035] 117 124	[2459] 278 124	[2918] 330 122	[3378] 382 120	[3591] 406 119	[4502] 509 113	
Max cont	[15.8] 60	[990] 112 149	[2423] 274 149	[2883] 326 147	[3334] 377 145	[3573] 404 144	[4466] 505 137	Max cont.
Max int.	[19.8] 75	[778] 88 185	[2146] 246 185	[2635] 298 185	[3104] 351 182	[3325] 376 181		Max int.

DIMENSIONS AND MOUNTING DATA

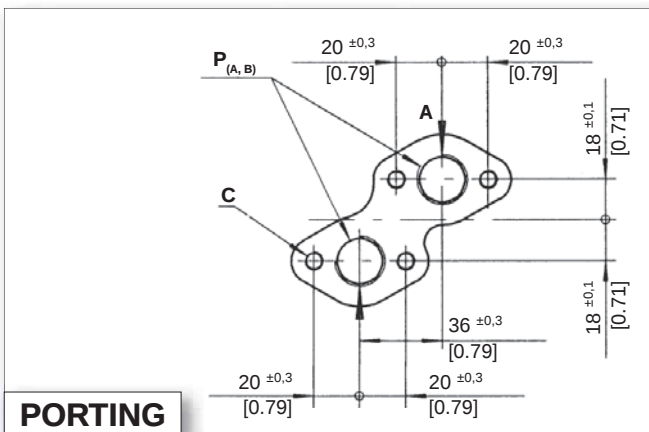


FLANGE 2 SAE-A 2 BOLT

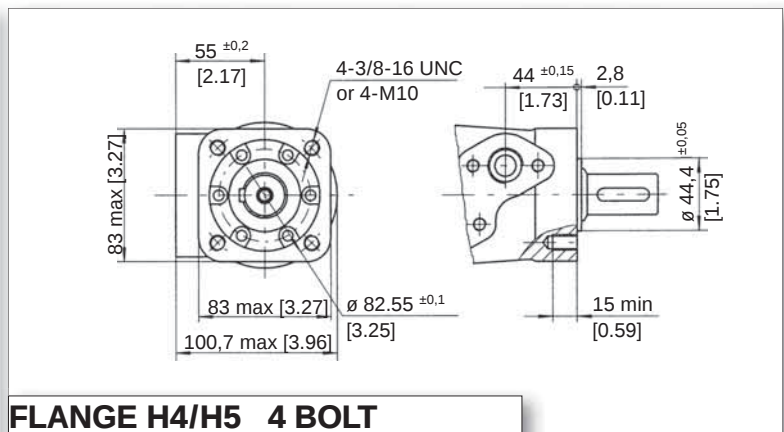
	[INCHES]		MILLIMETERS	
MODEL	L	L1	L	L1
YMP 50	[5.39]	[.28]	137	7
YMP 80	[5.53]	[0.41]	140.5	10.5
YMP 100	[5.63]	[0.51]	143	13
YMP 125	[5.75]	[0.63]	146	16
YMP 160	[5.94]	[0.83]	151	21
YMP 200	[6.18]	[1.02]	157	26
YMP 250	[6.38]	[1.26]	162	32
YMP 315	[6.77]	[1.65]	172	42
YMP 400	[7.17]	[2.05]	182	52



FLANGE 4 MAGNETO



PORTING

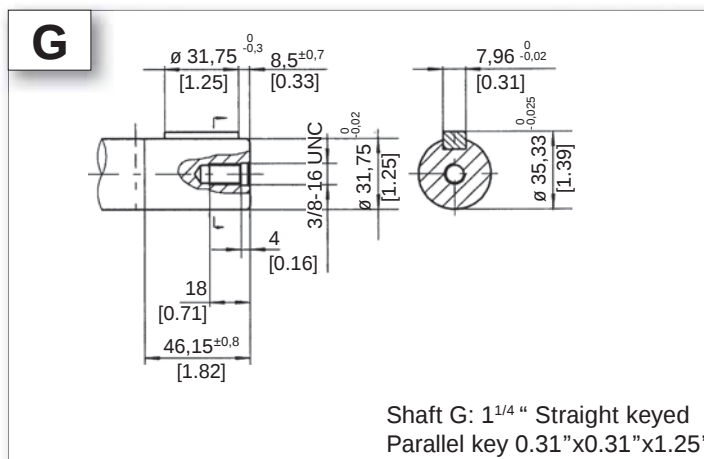
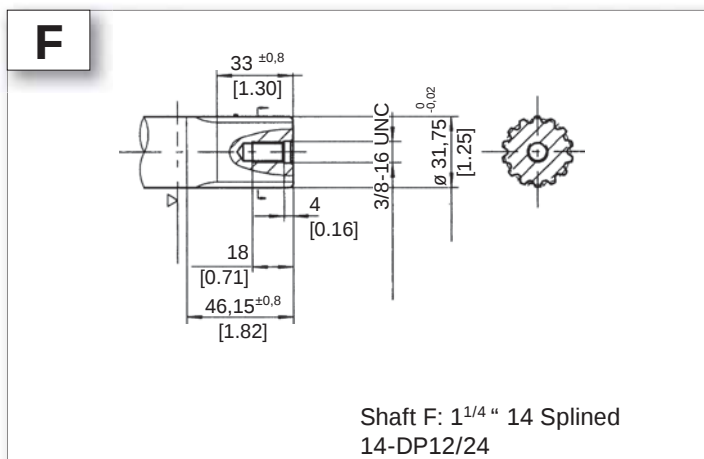
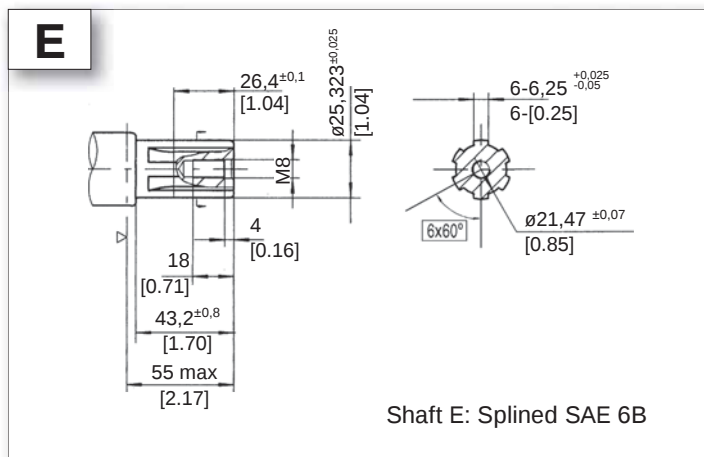
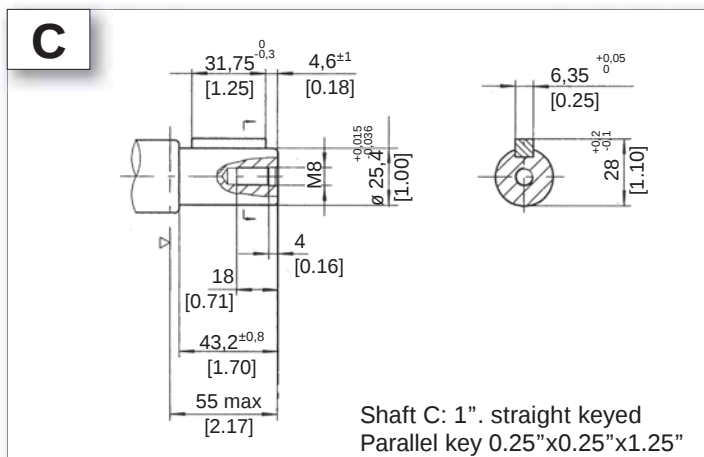
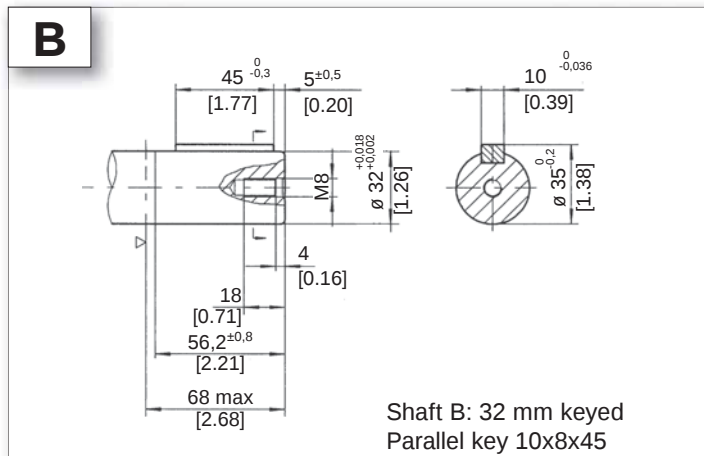
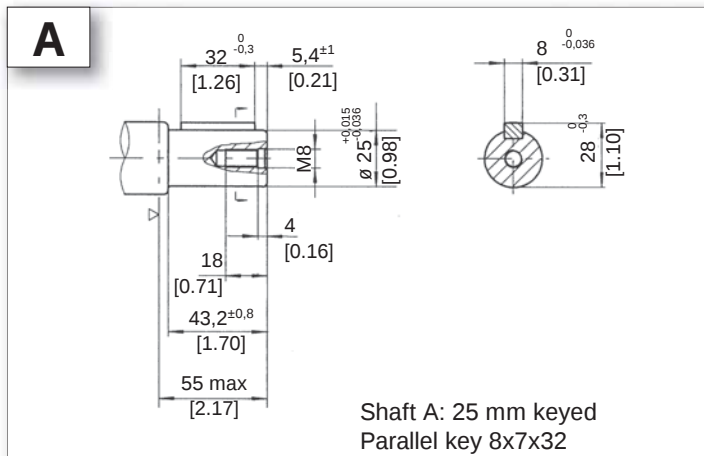


FLANGE H4/H5 4 BOLT

PORT & DRAIN PORT ORDERING CODES

ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	P	DEPTH	R	DEPTH
PORTS - A and B	G 1/2	15 mm	M22 X 1.5	15 mm	7/8-14 O-RING	17 mm	1/2-14NPTF	15 mm	PT(RC)1/2	15 mm
TANK PORT - T	G 1/4	12 mm	M14 X1.5	12 mm	7/16-20UNF	12 mm	7/16-20UNF	12 mm	PT(RC)1/4	9.7 mm
BOLTS - C	4-M8	13 mm	4-M8	13 mm	4-5/16-18UNC	13 mm	4-5/16-18UNC	13 mm	4-M8	13 mm

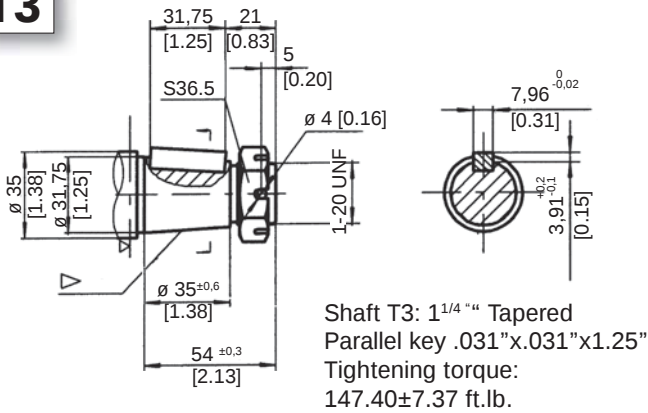
MOTOR SHAFT EXTENSIONS



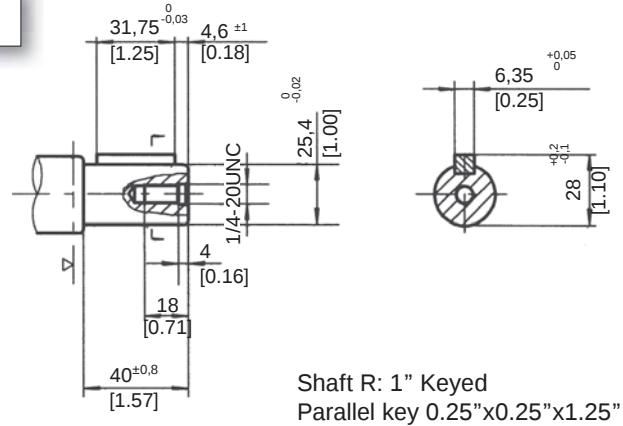
▷ Motor Mounting Surface

MOTOR SHAFT EXTENSIONS

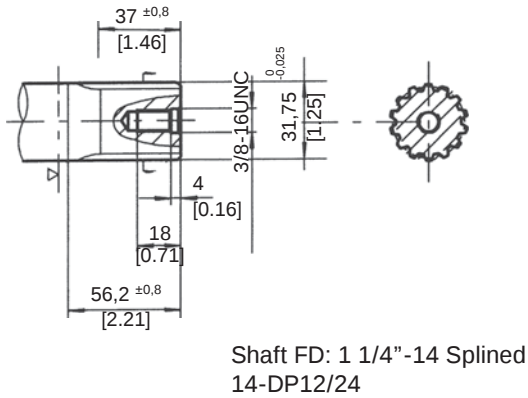
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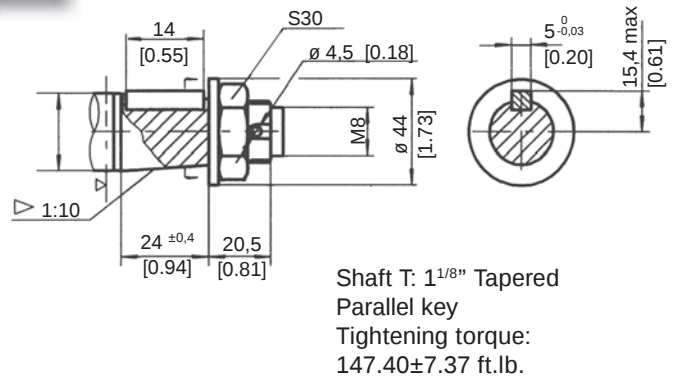
R



FD

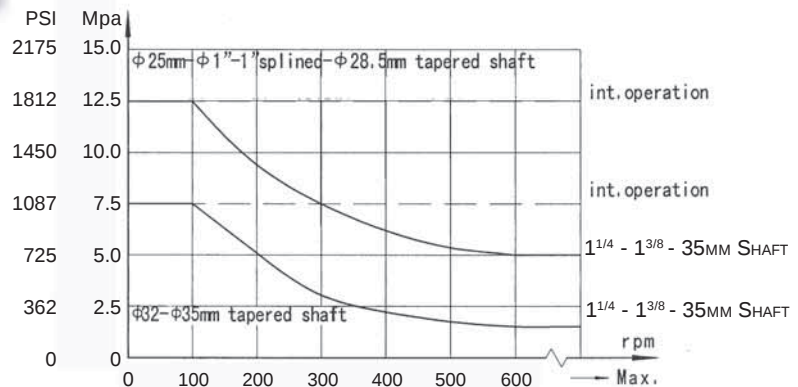
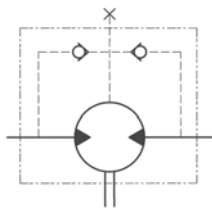


T



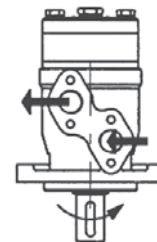
ADDITIONAL INFORMATION

PERMISSIBLE SHAFT SEAL PRESSURE



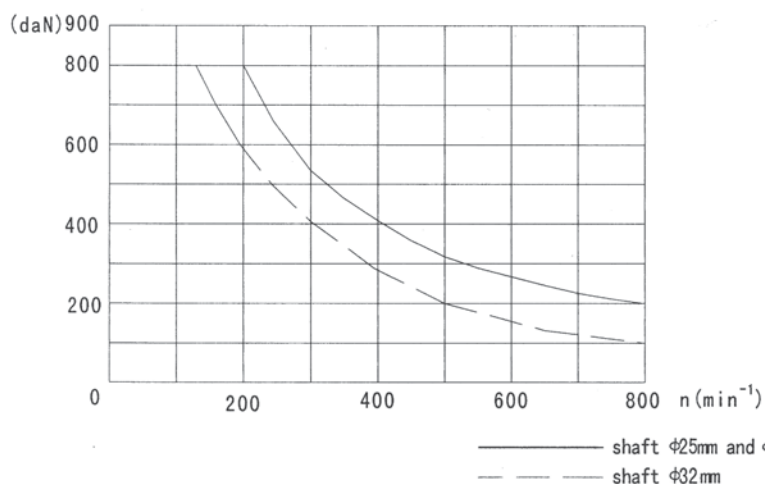
IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE. IN APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN DRAIN LINE.

SHAFT ROTATION DIRECTION



YMP

LOAD CHART RATINGS



$$F_r = \frac{800,2500}{n \cdot 95+1} \text{ daN}$$

F_r = Radial Force (daN)
 L = Distance (mm)
 n = Speed (rpm)
 Rhomb-flange $L=30\text{mm}$
 Square-flange $L=24\text{mm}$

ORDERING INFORMATION

1	2	3	4	5	6	7
YMP						

1	2	3	4	5	6	7
DISP.	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS
36	2 SAE - A 2 Bolt Pilot 3.25"×0.31"	A Shaft 25mm Keyed Parallel key 8×7×32	D Port: G 1/2 Manifold Mount Drain: G 1/4 Bolts: 4 x M8	NONE STANDARD	00 NO PAINT	NONE STANDARD
50	4 4 Bolt Magneto Pilot 3.25"×0.31"	B Shaft 32mm Keyed Parallel key 10×8×45	M Port M22×1.5 Manifold Mount Drain: M14×1.5 Bolts: 4 x M8	R OPPOSITE	NONE BLUE	N BIG RADIAL FORCE
80	H4 SAE - A 4 Bolt Pilot 1.75"×0.11" 4 bolts: 3/8 - 16UNC	C Shaft 1" Straight keyed Parallel key 0.25"×0.25"×1.25"	S Port: 7/8"-14 O-ring anifold Drain: 7/16"-20UNF Bolts: 4 x 5/16"-18UNC,		B BLACK	AX BIG AXIAL FORCE
100	H5 4 Bolt Flange Pilot Ø44.4×2.8 4 x M10	E Splined SAE 6B	P Port: 1/2"-14 NPTF Manifold Drain: 7/16"-20UNF Bolts: 4 x 5/16"-18UNC		S SILVER GRAY	0 NO CASE DRAIN
125		R Short shaft 1" Keyed Parallel key 0.25"×0.25"×1.25"				FR FREE RUNNING
160		F 1 1/4" 14 Splined 14-DP12/24				LL LOW LEAKAGE VALVE
200		FD 1 1/4" 14 Splined (long) 14-DP12/24	R Port: PT(Rc)1/2" Manifold Drain: PT(Rc)1/4" Bolts: 4 x M8			LSV LOW SPEED VALVE
250		G 1 1/4" Straight keyed Parallel key 0.31"×0.31"×1.25"				CRS CORROSION RESISTANT SHAFT
315		T 1 1/8" Tapered Parallel key 0.20"×0.20"×0.55"				HPS HIGH PRESSURE SEAL
400		T3 1 1/4" Tapered Parallel key 0.31"×0.31"×1.00"				HTS HIGH TEMP SEAL

Ordering Code:

All options have been determined with letters, numbers or combinations. All boxes must be filled with proper codes. If specification is not in the table, please contact us with your requirements.

YMPH



The **YMPH** series motor uses the spool valve shaft distribution design for simplicity, efficiency and compactness. This design integrates the distribution and hydraulic bearing design with the motor shaft.

This design has identical displacement and performance of the YMP series with a few different options.

The inlet and outlet ports (A & B) are parallel with the mounting flange to meet certain application requirements. The SAE flange is available for these ports.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Spool Valve Distribution	YMPH	[in ³ ./rev]	[2.18~24.41]	[PSI]	[2400]	RPM	[HP]	[14]
		cm ³ /rev.	36 ~ 400	MPa	16.5	30~879	Kw	10

QUICK REFERENCE GUIDE

YMPH SERIES QUICK REFERENCE:

Displacements				
[in ³ ./rev]	cm ³ /rev.			
[2.18]	36			
[3.15]	51.7	FLOW UP TO	75 LPM	[20 GPM]
[4.74]	77.7	PRESSURE UP TO	16.5 MPa	[2392 PSI]
[5.87]	96.2	TORQUE UP TO	533 Nm	[4847 lb.-in.]
[7.19]	117.9	SPEED UP TO	975 RPM	
[9.49]	155.5			
[11.59]	189.9			
[14.10]	231			
[23.28]	311.7			
[23.57]	386.2			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedure to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated shafts or housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

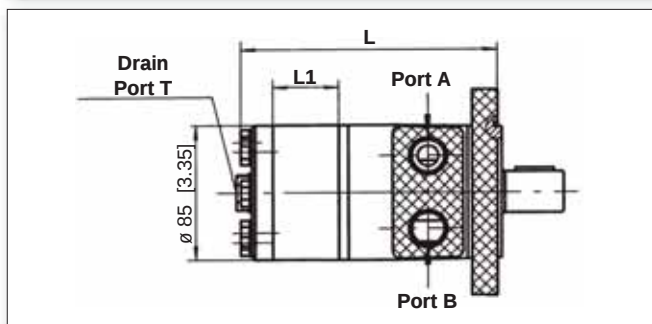
For individual motor performance chart consult equivalent YMP series data.

DISTRIBUTION TYPE		YMPH 36	YMPH 50	YMPH 80	YMPH 100	YMPH 125	YMPH 160	YMPH 200	YMPH 250	YMPH 315	YMPH 400		
GEOMETRIC DISPLAYCEMENT		[in ³ ./rev.]	[2.20]	[3.15]	[4.74]	[5.87]	[7.19]	[9.49]	[11.59]	[14.10]	[19.01]	[23.57]	
		cm ³ /rev.	36	51.7	77.7	96.2	117.9	155.5	189.9	231	311.7	386.2	
MAX. SPEED RPM		RATED	1050	850	650	520	390	310	260	200	156	130	
		CONT.	1078	879	740	589	475	370	296	237	189	149	
		INT.	1210	975	827	673	594	463	370	297	236	185	
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[486]	[716]	[1141]	[1424]	[1786]	[1804]	[2291]	[2874]	[3051]	[3847]	
		N*M	55	81	129	161	202	204	259	325	345	435	
	CONT.	[LB. IN.]	[486]	[716]	[1141]	[1424]	[1786]	[2167]	[2529]	[3184]	[3591]	[4847]	
		N*M	55	81	129	161	202	245	286	360	406	435	
	INT.	[LB. IN.]	[672]	[955]	[1512]	[1884]	[2370]	[3025]	[3449]	[4033]	[4466]	[4714]	
		N*M	76	108	171	213	268	342	390	456	505	533	
MAX. OUTPUT [HP] KW		RATED	[HP]	[8]	[9]	[12]	[12]	[11]	[9]	[9]	[7]	[8]	
			KW	6	7	8.6	8.6	8	6.5	6.9	6.6	5.5	5.8
		CONT.	[HP]	[8]	[9]	[12]	[12]	[12]	[12]	[11]	[11]	[10]	[10]
			KW	6	7	9.1	9	9.1	8.7	8.1	8.2	7.2	6.1
		INT.	[HP]	[10]	[12]	[16]	[16]	[16]	[16]	[15]	[14]	[12]	[10]
			KW	8	8.9	11.8	11.9	11.8	11.9	10.9	10.1	8.6	7.2
MAX. PRES- SURE DROP [PSI] MPa		RATED	[PSI]	[1812]	[1812]	[1812]	[1812]	[1450]	[1450]	[1450]	[1232]	[1232]	
			MPa	12.5	12.5	12.5	12.5	12.5	10	10	10	8.5	8.5
		CONT.	[PSI]	[1812]	[1812]	[1812]	[1812]	[1812]	[1812]	[1595]	[1595]	[1595]	[1450]
			MPa	12.5	12.5	12.5	12.5	12.5	12.5	11	11	11	10
		INT.	[PSI]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2030]	[1812]	[1522]
			MPa	16.5	16.5	16.5	16.5	16.5	16.5	16.5	14	12.5	10.5
		PEAK	[PSI]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2030]	[1812]	[1522]
			MPa	16.5	16.5	16.5	16.5	16.5	16.5	16.5	14	12.5	10.5
MAX. FLOW [GPM] L/MIN		RATED	[GPM]	[10.4]	[11.8]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]	
			L/MIN	40	45	55	55	55	55	55	55	55	55
		CONT.	[GPM]	[10.4]	[11.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]
			L/MIN	40	45	60	60	60	60	60	60	60	60
		INT.	[GPM]	[11.8]	[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
			L/MIN	45	50	75	75	75	75	75	75	75	75
WEIGHT [LB] KG		[LB]	[12]	[12]	[13]	[13]	[13]	[14]	[14]	[15]	[15]	[16]	
		KG	5.6	5.6	5.7	5.9	6	6.2	6.4	6.6	6.9	7.5	

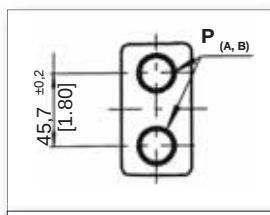
- * Rated speed and rated torque:
- * Continuous pressure:
- * Intermittent pressure:
- * Peak pressure:

Output value of speed and torque under rated flow and rated pressure.
 Max. value of operating motor continuously.
 Max. value of operating motor in 6 seconds per minute.
 Max. value of operating motor in 0.6 second per minute.

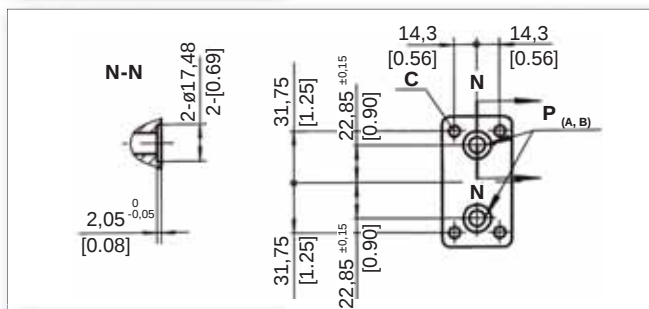
DIMENSIONS AND MOUNTING DATA



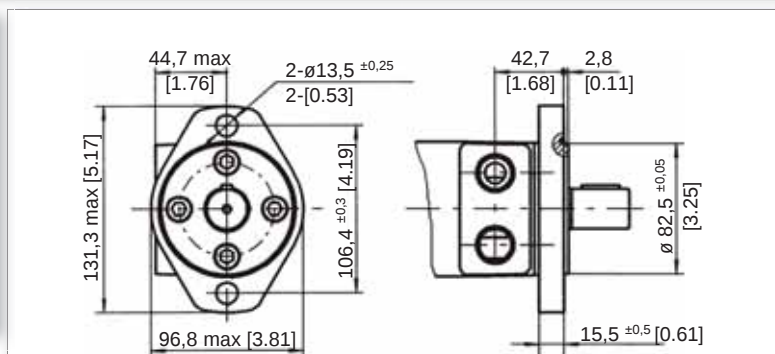
	[INCHES]		MILLIMETERS	
MODEL	L	L1	L	L1
YMPH 50	[5.39]	[.28]	141	7
YMPH 80	[5.53]	[0.41]	144.5	10.5
YMPH 100	[5.63]	[0.51]	147	13
YMPH 125	[5.75]	[0.63]	150	16
YMPH 160	[5.94]	[0.83]	155	21
YMPH 200	[6.18]	[1.02]	160	26
YMPH 250	[6.38]	[1.26]	166	32
YMPH 315	[6.77]	[1.65]	176	42
YMPH 400	[7.17]	[2.05]	186	52



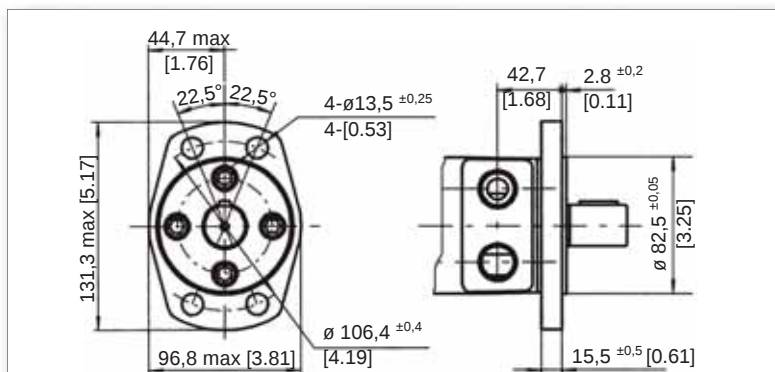
PORT G-S-P-T-R



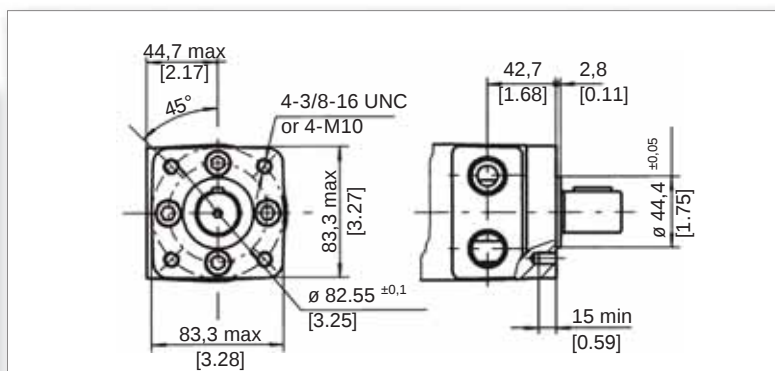
PORT B4 - B5



FLANGE H2 SAE-A 2 BOLT



FLANGE H6 MAGNETO



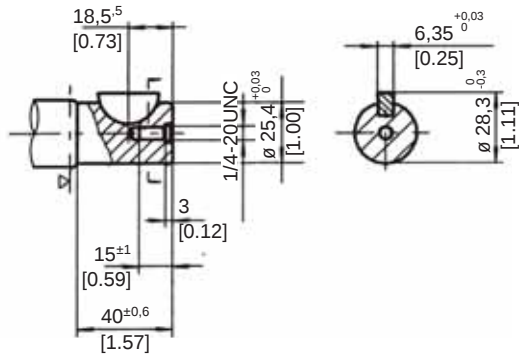
FLANGE H4/H5 4 BOLT

PORT & DRAIN PORT ORDERING CODES

ORDER CODE	G	DEPTH	S	DEPTH	P	DEPTH	T	DEPTH	R	DEPTH	B4	DEPTH	B5	DEPTH
PORTS - A and B	G 1/2	15 mm	7/8-14 O-RING	17 mm	1/2-14NPTF	15 mm	3/4 16 O-RING	15 mm	PT(RC) 1/2	15 mm	Ø10	-	Ø10	-
TANK PORT - T	G 1/4	12 mm	7/16-20UNF	12 mm	7/16-20UNF	12 mm	7/16-20UNF	12 mm	PT(RC) 1/4	9.7 mm	7/16 20UNF	12 mm	G 1/4	12 mm
BOLTS - C	-	-	-	-	-	-	-	-	-	-	4-5/16 18UNC	13 mm	4-M8	13 mm

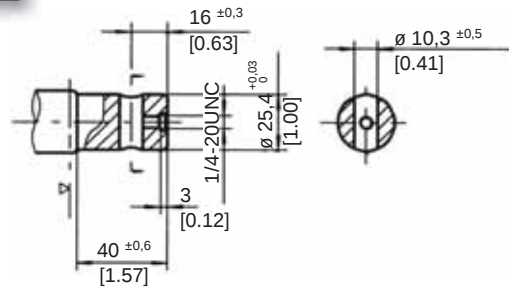
MOTOR SHAFT EXTENSIONS

K



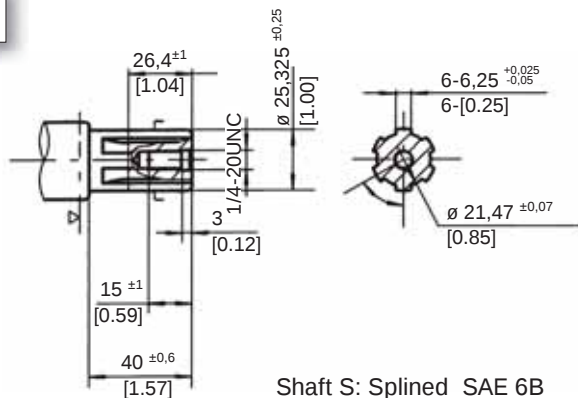
Shaft K: 1" Woodruff key
Woodruff Keyed 1" x .25"

H



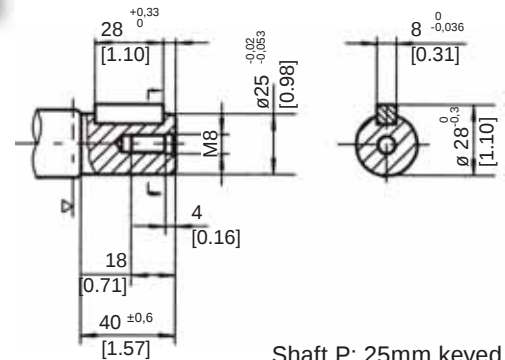
Shaft H: 1" Round Cross Hole
Cross hole .41"

S



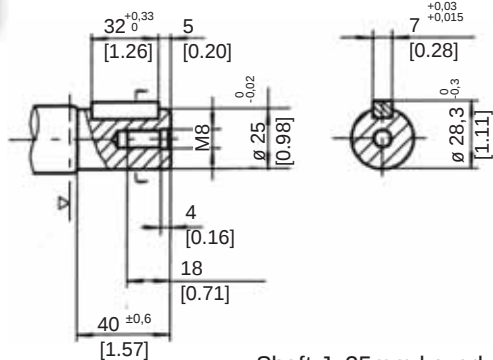
Shaft S: Splined SAE 6B

P



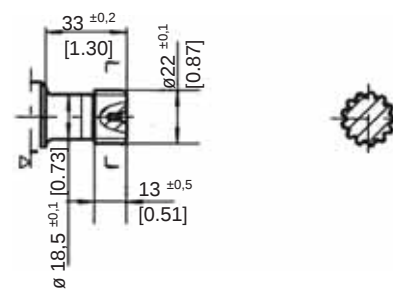
Shaft P: 25mm keyed
Parallel key 8 x 7 x 28

J



Shaft J: 25mm keyed
Parallel key 7 x 7 x 32

I

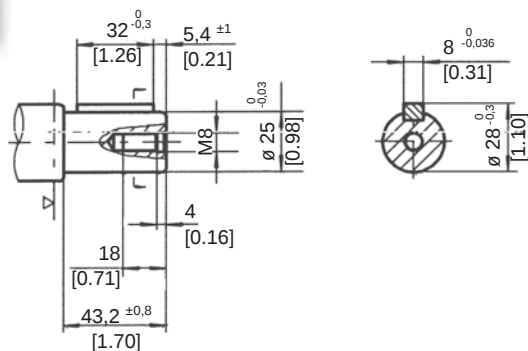


Shaft I: 7/8-13 Splined
13-DP16/32

▷ Motor Mounting Surface

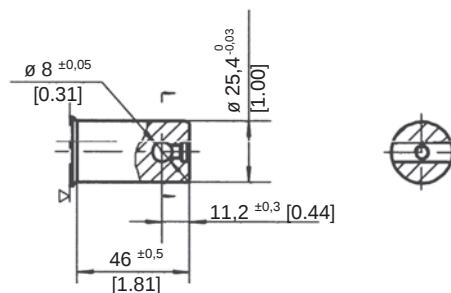
MOTOR SHAFT EXTENSIONS

A



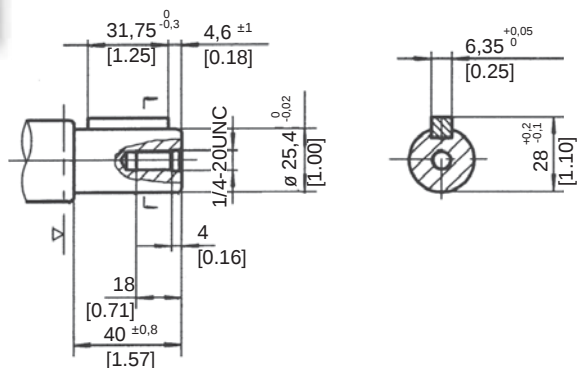
Shaft A: 25 mm Keyed
Parallel key 8x7x32

H1



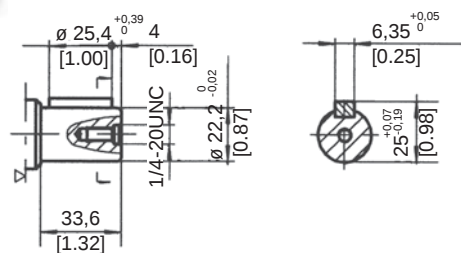
Shaft H1: 1" Round
Cross Hole .31

R



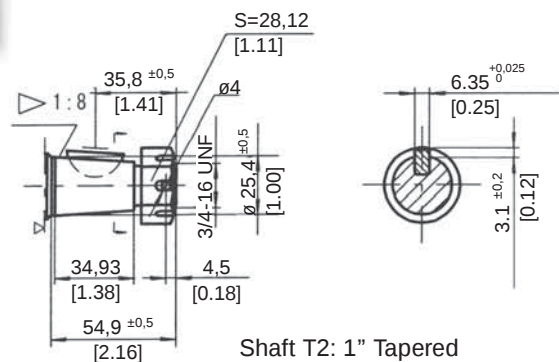
Shaft R: 1" Keyed
Parallel key .25 x .25 x 1.25

D



Shaft D: 7/8 Keyed
Parallel key .25 x .25 x 1.00

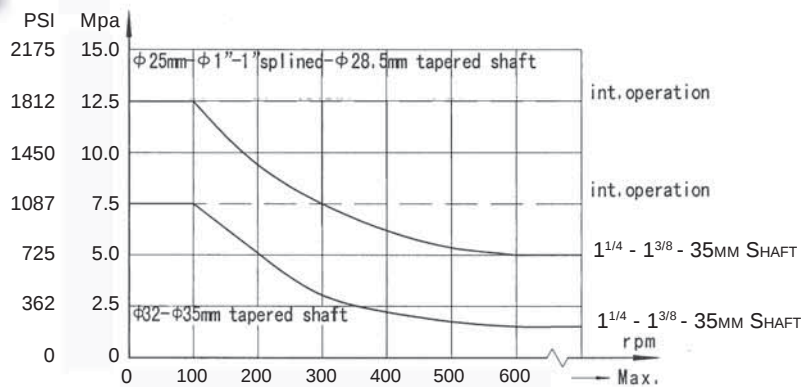
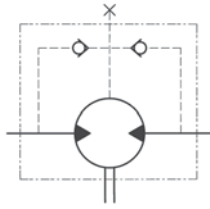
T2



Shaft T2: 1" Tapered
Woodruff key 1.00 x .25
Tightening torque: 200±10Nm

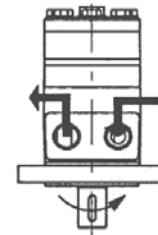
ADDITIONAL INFORMATION

PERMISSIBLE SHAFT SEAL PRESSURE



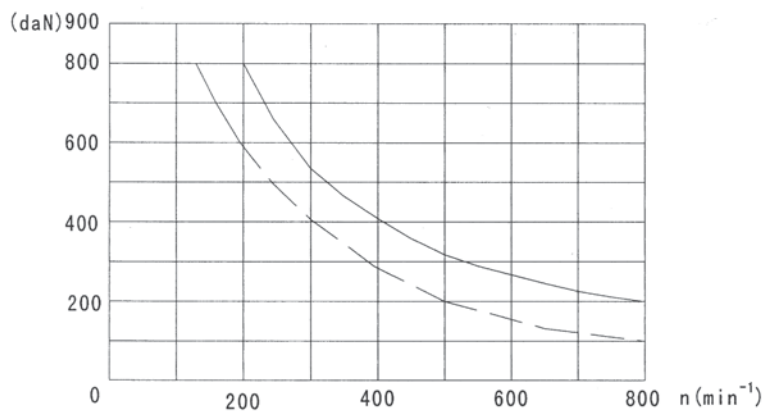
IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE. IN APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN DRAIN LINE.

SHAFT ROTATION DIRECTION

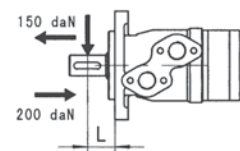


YMPH

LOAD CHART RATINGS



$$F_r = \frac{800, 2500}{n \cdot 95 + 1} \text{ daN}$$



F_r = Radial Force (daN)
 L = Distance (mm)
 n = Speed (rpm)

Rhomb-flange $L=30\text{mm}$
 Square-flange $L=24\text{mm}$

— shaft #25mm and #1" (#25.4mm)
 - - - shaft #32mm

ORDERING INFORMATION

1	2	3	4	5	6	7
YMPH						

1	2	3	4	5	6	7
DISP.	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS
36	H2 SAE - A 2 Bolt Pilot 3.25"x0.31"	K Shaft: 1" woodruff Key Wood ruff key 1"x.25	G G 1/2,G 1/4	NONE STANDARD	00 NO PAINT	NONE STANDARD
50	H6 4 Bolt Magneto Pilot 3.25"x0.31"	H Shaft:1" Round Cross Hole Cross Hole .41'	S 7/8-14 ORING , 7/16-20 UNF (G1/4)	R REVERSE	NONE BLUE	N HIGH RADIAL LOAD
80	H4 4 Bolt Flange Pilot 1.75"x0.11" 4 bolts: 3/8 - 16UNC	S Shaft: Splined SAE 6B	P 1/2-14NPTF, 7/16-20UNF (G1/4)		B BLACK	AX HIGH AXIAL LOAD
100	H5 4 Bolt Flange Pilot Ø44.4x2.8 4 x M10	P Shaft:25mm Keyed Parallel Key 8x7x28	T 3/4-16 O-RING, 7/16-20 UNF		S SILVER GRAY	0 NO CASE DRAIN
125		J Shaft: 25mm Keyed Parallel Key 7x7x32	R Port: PT(Rc)1/2" PT(Rc)1/4"			FR FREE RUNNING
160		I Shaft: 7/8-13 Splined	B4 10mm O-RING MANI-FOLD 4X5/16-18UNC, 7/16-20UNF (G1/4)			LL LOW LEAKAGE VALVE
200		A Shaft 25mm Keyed Parallel key 8x7x32	B5 10 MM O-RING MANI-FOLD 4XM8, 7/16-20 UNF (G1/4)			LSV LOW SPEED VALVE
250		H1 Shaft: 1" Round Cross Hole Cross Hole .31				CRS CORROSION RESISTANT SHAFT
315		R Shaft: 1" Keyed Parallel Key .25x.25x1.25				HPS HIGH PRESSURE SEAL
400		D Shaft: 7/8 Keyed Parallel Key .25x.25x1.00				HTS HIGH TEMP SEAL
		T2 Shaft: 1" Tapered Woodruff Key 1.00x.25				

Ordering Code:

All options have been determined with letters or numbers or combinations.All boxes must be filled with proper code.If specification is not in the table, please contact us with your specific requirements.

YMPW

The YMPW series motor uses the spool valve shaft distribution design for simplicity, efficiency and compactness. This design integrates the distribution and hydraulic bearing design with the motor shaft.

This design has identical displacement and performance of the YMP series with a few different options.

The inlet and outlet ports (A & B) are parallel with the mounting flange to meet certain application requirements. The SAE flange is available for these ports.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Spool Valve Distribution	YMPW	[in ³ ./rev]	[3.05~24.41]	[PSI]	[2400]	RPM	[HP]	[14]
		cm ³ /rev.	50 ~ 400	MPa	16.5	30~879	Kw	10

QUICK REFERENCE GUIDE

YMPW SERIES QUICK REFERENCE:

Displacements				
[in ³ ./rev]	cm ³ /rev.			
[3.15]	51.7	FLOW UP TO	75 LPM	[20 GPM]
[4.74]	77.7	PRESSURE UP TO	16.5 MPa	[2392 PSI]
[5.87]	96.2	TORQUE UP TO	533 Nm	[4847 lb.-in.]
[7.19]	117.9	SPEED UP TO	975 RPM	
[9.49]	155.5			
[11.59]	189.9			
[14.10]	231			
[19.01]	311.7			
[23.57]	386.2			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated shafts or housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

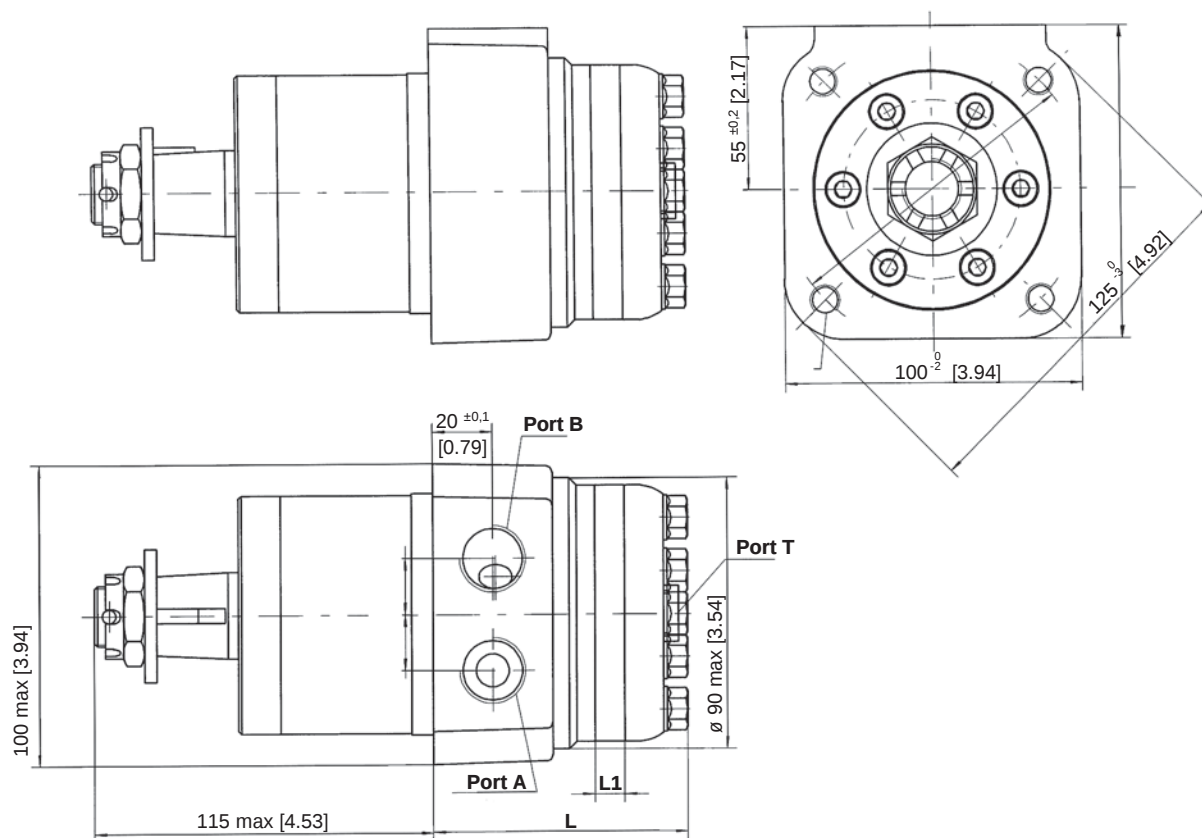
SPECIFICATION DATA

For individual motor performance chart consult equivalent YMP series data.

DISTRIBUTION TYPE		YMPW 50	YMPW 80	YMPW 100	YMPW 125	YMPW 160	YMPW 200	YMPW 250	YMPW 315	YMPW 400		
GEOMETRIC DISPLACEMENT		[in³./rev.]	[3.15]	[4.74]	[5.87]	[7 . 1 9]	[9.49]	[11.59]	[14.10]	[19.01]	[23.57]	
		cm³/rev.	51.7	77.7	96.2	117.9	155.5	189.9	231	311.7	386.2	
MAX. SPEED RPM		RATED	850	650	520	390	310	260	200	156	130	
		CONT.	879	740	589	475	370	296	237	189	149	
		INT.	975	827	673	594	463	370	297	236	185	
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[716]	[1141]	[1424]	[1786]	[1804]	[2291]	[2874]	[3051]	[3847]	
		N*M	81	129	161	202	204	259	325	345	435	
	CONT.	[LB. IN.]	[716]	[1141]	[1424]	[1786]	[2167]	[2529]	[3184]	[3591]	[4847]	
		N*M	81	129	161	202	245	286	360	406	435	
	INT.	[LB. IN.]	[955]	[1512]	[1884]	[2370]	[3025]	[3449]	[4033]	[4466]	[4714]	
		N*M	108	171	213	268	342	390	456	505	533	
MAX. OUTPUT [HP] KW		RATED	[HP]	[9]	[12]	[12]	[11]	[9]	[9]	[8]	[8]	
			KW	7	8.6	8.6	8	6.5	6.9	6.6	5.5	5.8
		CONT.	[HP]	[9]	[12]	[12]	[12]	[12]	[11]	[11]	[10]	[10]
			KW	7	9.1	9	9.1	8.7	8.1	8.2	7.2	6.1
		INT.	[HP]	[12]	[16]	[16]	[16]	[16]	[15]	[14]	[12]	[10]
			KW	8.9	11.8	11.9	11.8	11.9	10.9	10.1	8.6	7.2
MAX. PRES- SURE DROP [PSI] MP _A		RATED	[PSI]	[1812]	[1812]	[1812]	[1812]	[1450]	[1450]	[1450]	[1232]	[1232]
			MP_A	12.5	12.5	12.5	12.5	10	10	10	8.5	8.5
		CONT.	[PSI]	[1812]	[1812]	[1812]	[1812]	[1812]	[1595]	[1595]	[1595]	[1450]
			MP_A	12.5	12.5	12.5	12.5	12.5	11	11	11	10
		INT.	[PSI]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2030]	[1812]	[1522]
			MP_A	16.5	16.5	16.5	16.5	16.5	16.5	14	12.5	10.5
		PEAK	[PSI]	[2392]	[2392]	[2392]	[2392]	[2392]	[2392]	[2030]	[1812]	[1522]
			MP_A	16.5	16.5	16.5	16.5	16.5	16.5	14	12.5	10.5
MAX. FLOW [GPM] L/MIN		RATED	[GPM]	[11.8]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]	[14.5]	
			L/MIN	45	55	55	55	55	55	55	55	55
		CONT.	[GPM]	[11.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]
			L/MIN	45	60	60	60	60	60	60	60	60
		INT.	[GPM]	[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
			L/MIN	50	75	75	75	75	75	75	75	75
WEIGHT [LB] KG		[LB]	[12]	[13]	[13]	[13]	[14]	[14]	[15]	[15]	[16]	
		KG	5.6	5.7	5.9	6	75	75	75	6.9	75	

- * Rated speed and rated torque: Output value of speed and torque under rated flow and rated pressure.
- * Continuous pressure: Max. value of operating motor continuously.
- * Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- * Peak pressure: Max. value of operating motor in 0.6 second per minute.

DIMENSIONS AND MOUNTING DATA



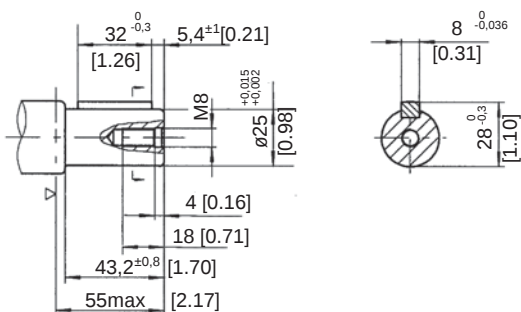
MODEL	[INCHES]		MILLIMETERS	
	L	L1	L	L1
YMPW 50	[3.19]	[.28]	81	7
YMPW 80	[3.33]	[0.41]	84.5	10.5
YMPW 100	[3.43]	[0.51]	87	13
YMPW 125	[3.54]	[0.63]	90	16
YMPW 160	[3.74]	[0.83]	95	21
YMPW 200	[3.94]	[1.02]	100	26
YMPW 250	[4.17]	[1.26]	106	32
YMPW 315	[4.57]	[1.65]	116	42
YMPW 400	[4.96]	[2.05]	126	52

PORT & DRAIN PORT ORDERING CODES

ORDER CODE	G	DEPTH	S	DEPTH
PORTS A and B	G 1/2	15 mm	7/8-14 O-RING	17 mm
TANK PORT - T	G 1/4	12 mm	7/16 20UNF	12 mm

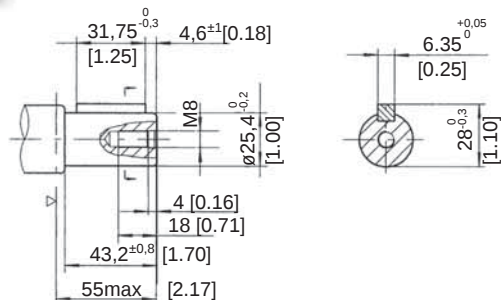
MOTOR SHAFT EXTENSIONS

A



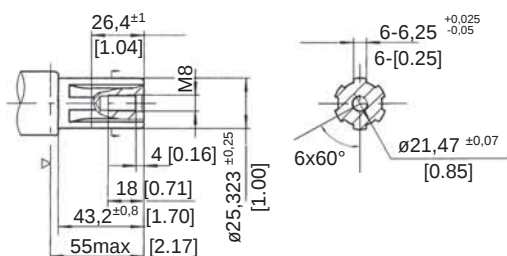
Shaft A: 25mm Keyed
Parallel Key 8x7x32

C



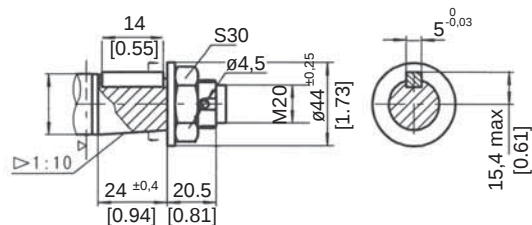
Shaft C: 1" Keyed
Parallel Key .25x.25x1.25

E



Shaft E: Splined SAE 6B

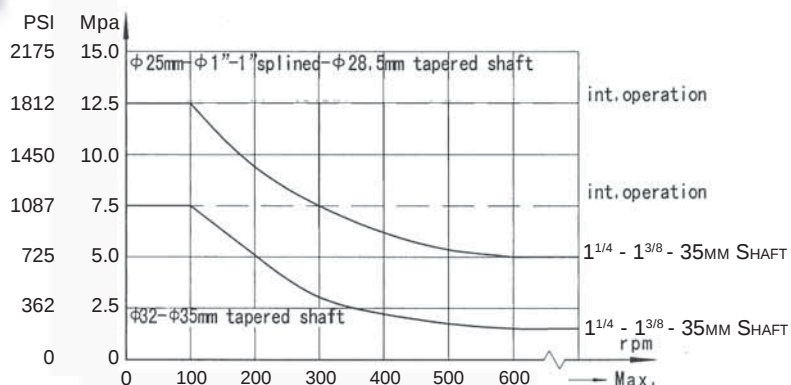
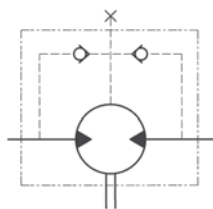
T



Shaft T: 1.125" Tapered
Parallel Key B5X5X14

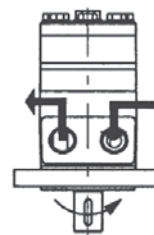
ADDITIONAL INFORMATION

PERMISSIBLE SHAFT SEAL PRESSURE



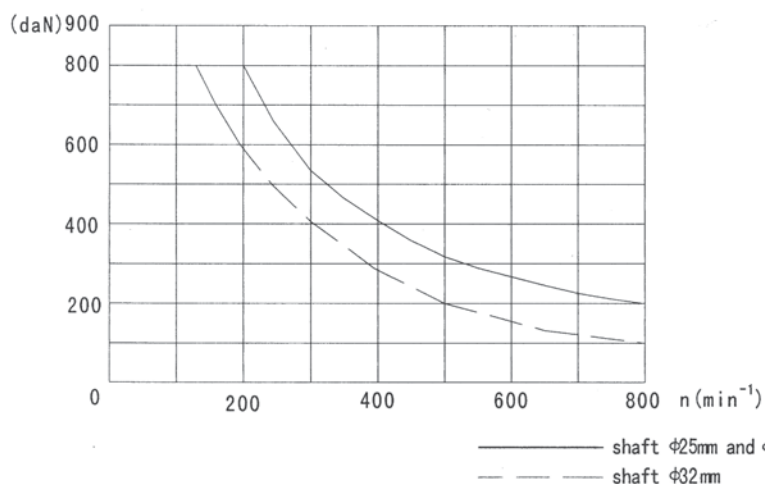
IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE.
IN APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN DRAIN LINE.

SHAFT ROTATION DIRECTION



YMPW

LOAD CHART RATINGS



$$F_r = \frac{800,2500}{n \cdot 95+1} \text{ daN}$$

F_r = Radial Force (daN)
 L = Distance (mm)
 n = Speed (rpm)
 Rhomb-flange $L=30\text{mm}$
 Square-flange $L=24\text{mm}$

ORDERING INFORMATION

1	2	3	4	5	6	7
YMPW						

1	2	3	4	5	6	7
DISP.	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS
50	OMIT Wheel Flange Pilot 80mmx7.5 4- m10 bolt holes	A	G	NONE	00	NONE
80		C	G 1/2, G 1/4	STANDARD	NO PAINT	STANDARD
100		E	S	R	NONE	N
125		T	7/8-14 ORING , 7/16-20 UNF (G1/4)	REVERSE	BLUE	AX
160					B	0
200						FR
250					S	LL
315						LSV
400						CRS
						HPS
						HTS

Ordering code:

All options have been determined with letters, numbers or combinations. All boxes must be filled with proper codes. If specification is not in the table, please contact us with your specific requirements.

YMR



The **YMR** series motor uses the **spool valve** shaft distribution design for simplicity, efficiency and compactness. This design integrates the distribution and hydraulic bearing design with the motor shaft.

This series uses the more advanced “**ROLLER**” gear type. It is manufactured with the most advanced technology and equipment to improve efficiency, smoothness, lower leakage and better overall performance.

These motors are very compact, economical, and powerful without the need of a reducer to deliver high torque.

The large number of shaft, flange, port and special options make this a very flexible motor useful for many applications.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Spool Valve Distribution	YMR	[in ³ ./rev]	[3.05 ~ 22.88]	[PSI]	[2900]	RPM	[HP]	[20]
		cm ³ /rev.	50 ~ 375	MPa	20	30 ~ 970	Kw	15

QUICK REFERENCE GUIDE

YMR SERIES QUICK REFERENCE:

Displacements				
[in ³ ./rev]	cm ³ /rev.			
[3.13]	51.3	FLOW UP TO	75 LPM	[20 GPM]
[4.92]	80.6	PRESSURE UP TO	20 MPa	[2900 PSI]
[6.15]	100.8	TORQUE UP TO	548 Nm	[4846 lb.-in.]
[7.62]	124.9	POWER UP TO	17 Kw	[23 HP]
[9.59]	157.2	SPEED UP TO	970 RPM	
[12.16]	199.2			
[15.38]	252			
[19.19]	314.5			
[22.58]	370			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated shafts or housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

DISTRIBUTION TYPE		YMR 50	YMR 80	YMR 100	YMR 125	YMR 160	YMR 200	YMR 250	YMR 315	YMR 375
GEOMETRIC DISPLACEMENT	[in ³ /rev.]	[3.13]	[4.92]	[6.15]	[7.62]	[9.59]	[12.16]	[15.38]	[19.19]	[22.58]
	cm ³ /rev.	51.3	80.6	100.8	124.9	157.2	199.2	252	314.5	370
MAX. SPEED RPM	RATED	755	750	600	475	375	300	240	190	160
	CONT.	970	940	750	600	470	375	300	240	200
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[884]	[1415]	[1769]	[2211]	[2830]	[2919]	[3113]	[3184]
		N*M	100	160	200	250	320	330	352	420
	CONT.	[LB. IN.]	[884]	[1680]	[2123]	[2582]	[3210]	[3166]	[3113]	[3184]
		N*M	100	190	240	292	363	358	352	360
	INT.	[LB. IN.]	[1114]	[1946]	[2476]	[3007]	[3803]	[3962]	[4157]	[4157]
		N*M	126	220	280	340	430	448	470	548
MAX. OUTPUT [HP] KW	RATED	[HP]	[10]	[17]	[17]	[16]	[17]	[14]	[12]	[9]
		KW	7.7	12.3	12.3	12.0	12.3	10	9	7
	CONT.	[HP]	[10]	[20]	[20]	[19]	[19]	[15]	[12]	[9]
		KW	7.7	15	15	14	14	11	9	8.6
	INT.	[HP]	[13]	[23]	[23]	[22]	[22]	[19]	[16]	[12]
		KW	9.7	17	17	16	16	14	12	9
MAX. PRES- SURE DROP [PSI] MPa	RATED	[PSI]	[2030]	[2030]	[2030]	[2030]	[2030]	[1740]	[1595]	[1232]
		MPa	14	14	14	14	14	12	11	8.5
	CONT.	[PSI]	[2030]	[2537]	[2537]	[2537]	[2392]	[1885]	[1595]	[1232]
		MPa	14	17.5	17.5	17.5	16.5	13	11	8.5
	INT.	[PSI]	[2537]	[2900]	[2900]	[2900]	[2900]	[2537]	[2030]	[1667]
		MPa	17.5	20	20	20	20	17.5	14	11.5
MAX. FLOW [GPM] L/MIN	CONT.	[GPM]	[10.6]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]
		L/MIN	40	60	60	60	60	60	60	60
	INT.	[GPM]	[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
		L/MIN	50	75	75	75	75	75	75	75
WEIGHT [LB] KG	[LB]	[15]	[15]	[15]	[16]	[17]	[18]	[19]	[20]	[20]
	KG	6.7	6.9	6.9	7.2	7.5	8	8.5	9	9.3

- * Rated speed and rated torque:
- * Continuous pressure:
- * Intermittent pressure:
- * Peak pressure:

Output value of speed and torque under rated flow and rated pressure.
 Max. value of operating motor continuously.
 Max. value of operating motor in 6 seconds per minute.
 Max. value of operating motor in 0.6 second per minute.

PERFORMANCE DATA

YMR 50 [3.13 in³/rev] 51.3 cm³/rev.

Max
cont.

Max
int.

		[725]	[1015]	[1305]	[1450]	[1740]	[2030]	[2320]	[2537]	[PSI] MPa
		5	7	9	10	12	14	16	17.5	
GPM	[1.3]	[310]	[398]	[539]	[593]	[681]	[778]			
	5	35	45	61	67	77	88			
		95	84	76	73	69	46			
	[2.6]	[318]	[407]	[548]	[610]	[708]	[840]	[955]	[1061]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	10	36	46	62	69	80	95	108	120	
		184	173	165	162	150	130	111	84	
	[3.9]	[310]	[433]	[557]	[646]	[778]	[884]	[964]	[1088]	
	15	35	49	63	73	88	100	109	123	
		283	277	269	261	250	230	211	185	
	[5.3]	[305]	[416]	[539]	[610]	[734]	[849]	[964]	[1114]	
	20	34.5	47	61	69	83	96	109	126	
		377	375	365	361	346	330	308	276	
	[6.6]	[301]	[398]	[539]	[610]	[716]	[849]	[964]	[1114]	
	25	34	45	61	69	81	96	109	126	
		476	468	460	453	438	423	395	361	
	[7.9]	[292]	[389]	[531]	[593]	[708]	[840]	[955]	[1114]	
	30	33	44	60	67	80	95	108	126	
		576	569	561	554	542	531	500	465	
	[9.2]	[274]	[371]	[522]	[584]	[708]	[822]	[946]	[1097]	
	35	31	42	59	66	80	93	107	124	
		669	665	657	654	638	623	598	561	
	[10.6]	[265]	[363]	[513]	[584]	[699]	[814]	[937]	[1079]	
	40	30	41	58	66	79	92	106	122	
		760	758	753	750	738	724	700	670	Max cont.
	[11.9]	[261]	[354]	[504]	[575]	[690]	[796]	[929]	[1070]	
	45	29.5	40	57	65	78	90	105	121	
		856	856	850	845	835	815	799	780	Max int.

YMR 80 [4.92 in³/rev] 80.6 cm³/rev.

Max
cont.

Max
int.

		[725]	[1015]	[1305]	[1450]	[1740]	[2030]	[2320]	[2537]	[PSI] MPa
		5	7	9	10	12	14	16	17.5	
GPM	[2.6]	[486]	[681]	[867]	[946]	[1150]	[1318]	[1503]	[1592]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	10	55 115	77 109	98 106	107 101	130 91	149 75	170 53	180 45	
Flow (L/min)	[5.3]	[442]	[722]	[929]	[1044]	[1167]	[1415]	[1574]	[1671]	
	20	50 239	81.6 235	105 227	118 224	132 209	160 196	178 172	189 160	
	[7.9]	[425]	[654]	[858]	[1008]	[1159]	[1327]	[1584]	[1680]	
	30	48 364	74 360	97 357	114 345	131 332	150 321	179 300	190 284	
	[10.6]	[398]	[628]	[840]	[929]	[1132]	[1318]	[1565]	[1663]	
	40	45 488	71 483	95 475	105 472	128 460	149 447	177 420	188 408	
Max cont.	[13.2]	[371]	[619]	[796]	[867]	[1106]	[1300]	[1512]	[1654]	
	50	42 619	70 615	90 607	98 598	125 593	147 568	171 547	187 535	
	[15.8]	[336]	[557]	[752]	[840]	[1044]	[1256]	[1495]	[1636]	
Max int.	60	38 740	63 725	85 721	95 715	118 707	142 688	169 667	185 657	
	[18.5]	[318]	[513]	[708]	[787]	[991]	[1229]	[1450]	[1583]	Max cont.
Max int.	70	36 860	58 853	80 839	89 837	112 823	139 811	164 790	179 776	
	[19.8]	[256]	[495]	[681]	[751]	[973]	[1176]	[1424]	[1565]	Max int.
	75	29 925	56 915	77 910	85 899	110 888	133 871	161 853	177 837	

YMR 100 [6.15 in³/rev] 100.8 cm³/rev

Max
cont.

Max
int.

		[725]	[1015]	[1305]	[1450]	[1740]	[2030]	[2320]	[2537]	[PSI] MPa
		5	7	9	10	12	14	16	17.5	
GPM	[2.6]	[619]	[884]	[1079]	[1220]	[1406]	[1610]	[1857]	[1963]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	10	70 99	100 95	122 87	138 84	159 74	182 63	210 52	222 44	
Flow (L/min)	[5.3]	[601]	[840]	[1088]	[1265]	[1459]	[1769]	[1955]	[2105]	
	20	68 199	95 194	123 188	143 182	165 175	200 162	221 150	238 138	
	[7.9]	[548]	[831]	[1070]	[1238]	[1450]	[1716]	[1946]	[2123]	
	30	62 299	94 294	121 288	140 284	164 278	194 263	220 249	240 236	
	[10.6]	[522]	[778]	[1052]	[1185]	[1424]	[1698]	[1928]	[2105]	
	40	59 400	88 398	119 387	134 385	161 380	192 366	218 350	238 336	
Max cont.	[13.2]	[486]	[734]	[1035]	[1106]	[1389]	[1636]	[1919]	[2078]	
	50	55 498	83 496	117 488	125 484	157 475	185 464	217 450	235 436	
Max int.	[15.8]	[425]	[699]	[973]	[1052]	[1344]	[1592]	[1893]	[2061]	
	60	48 599	79 595	110 587	119 585	152 579	180 569	214 552	233 538	
	[18.5]	[380]	[619]	[884]	[991]	[1256]	[1503]	[1778]	[2025]	
	70	43 699	70 693	100 687	112 683	142 679	170 668	201 648	229 636	
	[19.8]	[345]	[557]	[858]	[929]	[1238]	[1477]	[1742]	[2008]	
	75	39 748	63 741	97 737	105 735	140 720	167 713	197 697	227 686	
Max cont.		Max cont.								
Max int.		Max int.								

YMR 125 [7.62 in³/rev] 124.9 cm³/rev.

Max
cont.

Max
int.

		[725]	[1015]	[1305]	[1450]	[1740]	[2030]	[2320]	[2537]	[PSI] MPa
		5	7	9	10	12	14	16	17.5	
GPM L/ min	[2.6]	[796]	[1079]	[1415]	[1530]	[1813]	[2096]	[2282]	[2388]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	10	90 73	122 71	160 66	173 63	205 55	237 42	258 23	270 14	
Flow (L/min)	[5.3]	[752]	[1044]	[1046]	[1521]	[1840]	[2211]	[2459]	[2582]	
	20	85 154	118 152	159 150	172 145	208 138	250 123	278 109	292 91	
	[7.9]	[725]	[946]	[1397]	[1450]	[1822]	[2131]	[2450]	[2574]	
	30	82 237	107 236	158 233	164 226	206 219	241 207	277 192	291 170	
	[10.6]	[699]	[929]	[1327]	[1424]	[1804]	[2105]	[2432]	[2556]	
	40	79 315	105 313	150 309	161 307	204 302	238 297	275 272	289 254	
[13.2]	[663]	[849]	[1282]	[1415]	[1751]	[2087]	[2317]	[2494]		
50	75 398	96 397	145 395	160 391	198 381	236 368	262 353	282 337		
[15.8]	[548]	[840]	[1229]	[1397]	[1618]	[1963]	[2246]	[2467]		
60	62 475	95 473	139 471	158 470	183 463	222 450	254 427	279 416		
Max cont	[18.5]	[522]	[734]	[1106]	[1327]	[1574]	[1875]	[2211]	[2317]	Max cont.
	70	59 554	83 553	125 551	150 550	178 546	212 538	250 514	262 500	
Max int.	[19.8]	[495]	[708]	[1079]	[1282]	[1521]	[1813]	[2167]	[2308]	Max int.
	75	56 598	80 597	122 593	145 590	172 586	205 577	245 551	261 537	

PERFORMANCE DATA

YMR 160 [9.59 in³/rev] 157.2 cm³/rev.

		Max cont.				Max int.				[PSI] MPa	
		[725] 5	[1015] 7	[1305] 9	[1450] 10	[1740] 12	[2030] 14	[2320] 16	[2537] 17.5		
GPM L/min	10	[2.6] 115 58	[1017] 160 55	[1415] 203 52	[1946] 220 50	[2299] 260 44	[2653] 300 38	[3007] 340 34	[3202] 362 26		
	20	[5.3] 116 119	[1415] 160 115	[1813] 205 111	[2034] 230 108	[2344] 265 103	[2830] 320 95	[3140] 355 84	[3361] 380 76		
Flow (L/min)	30	[7.9] 105 184	[1397] 158 181	[1786] 202 177	[1955] 221 172	[2308] 261 165	[2697] 305 153	[3042] 344 134	[3343] 378 130	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	40	[10.6] 100 246	[1282] 145 244	[1733] 196 239	[1928] 218 237	[2273] 257 230	[2644] 299 218	[3007] 340 199	[3308] 374 184		
Max cont.	50	[13.2] 90 307	[1238] 140 305	[1680] 190 302	[1848] 209 300	[2211] 250 292	[2609] 295 280	[2972] 336 262	[3237] 366 244	Max cont.	
	60	[15.8] 84 370	[1203] 136 368	[1592] 180 364	[1760] 199 362	[2123] 240 355	[2529] 286 342	[2919] 330 334	[3184] 360 304		
Max int.	70	[18.5] 65 435	[1061] 120 434	[1450] 164 430	[1592] 180 427	[1972] 223 416	[2476] 280 405	[2830] 320 335	[3095] 350 366	Max int.	
	75	[19.8] 59 465	[1026] 116 462	[1397] 158 458	[1548] 175 456	[1946] 220 447	[2406] 272 433	[2777] 314 416	[3025] 342 395		

YMR 200 [9.59 in³/rev] 157.2 cm³/rev.

		[725] 5	[1015] 7	[1305] 9	[1508] 10.5	[1740] 12	[2030] 14	[2537] 17.5	[PSI] MPa					
GPM L/ min	[2.6] 10	[1309] 148 49	[1813] 205 47	[2255] 255 45	[2565] 290 43	[2892] 327 40	[3272] 370 30	[3909] 442 24	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)					
	[5.3] 20	[1238] 140 99	[1786] 202 97	[2211] 250 93	[2857] 323 90	[2919] 330 86	[3635] 411 78	[3962] 448 65						
[7.9] 30	[1150] 130 149	[1707] 193 146	[2131] 241 140	[2715] 307 136	[2874] 325 131	[3334] 377 122	[3936] 445 105							
[10.6] 40	[1105] 125 200	[1645] 186 197	[2052] 232 192	[2697] 305 188	[2768] 313 181	[3449] 390 170	[3856] 436 149							
[13.2] 50	[1061] 120 250	[1565] 177 247	[1990] 225 242	[2609] 295 238	[2697] 305 231	[3378] 382 218	[3776] 427 193							
[15.8] 60	[973] 110 300	[1468] 166 298	[1954] 221 291	[2521] 285 287	[2582] 292 282	[3290] 372 268	[3706] 419 236							
Max cont	[18.5] 70	[867] 98 350	[1327] 150 347	[1813] 205 342	[2158] 244 338	[2459] 278 331	[2927] 331 318	[3626] 410 282				Max cont.		
	[19.8] 75	[752] 85 375	[1247] 141 372	[1760] 199 366	[2078] 235 362	[2370] 268 357	[2857] 323 343	[3538] 400 310						
Max int.												Max int.		

YMR 250 [15.38 in³/rev] 252 cm³/rev.

		Max cont.				Max int.				[PSI] MPa	
		[435] 3	[725] 5	[1015] 7	[1160] 8	[1450] 10	[1595] 11	[2030] 14	[2537] 17.5		
GPM L/min	10	[2.6] 115 40	[1415] 180 38	[2220] 251 37	[2609] 295 35	[3095] 350 32	[3361] 380 30	[4157] 470 22	[4732] 535 16		
	20	[5.3] 110 79	[1574] 178 78	[2229] 252 75	[2600] 294 74	[3113] 352 70	[3405] 385 68	[4157] 470 57	[4847] 548 48		
Flow (L/min)	30	[7.9] 100 120	[1503] 170 119	[2193] 248 117	[2521] 285 116	[3078] 348 110	[3370] 381 107	[4148] 469 95	[4820] 545 79	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	40	[10.6] 91 158	[1406] 159 157	[2052] 232 156	[2370] 268 154	[2936] 332 151	[3237] 366 148	[4068] 460 130	[4687] 530 110		
Max cont.	50	[13.2] 81 200	[1309] 148 198	[1910] 216 196	[2229] 252 195	[2830] 320 163	[3113] 352 160	[4006] 453 152	[4608] 521 147	Max cont.	
	60	[15.8] 75 241	[1167] 132 240	[1778] 201 239	[2078] 235 237	[2697] 305 232	[3007] 340 228	[3829] 433 210	[4466] 505 180		
Max int.	70	[18.5] 50 280	[1035] 117 279	[1671] 189 277	[1946] 220 276	[2565] 290 271	[2830] 320 268	[3644] 412 250	[4378] 495 215	Max int.	
	75	[19.8] 42 300	[929] 105 299	[1592] 180 298	[1866] 211 297	[2485] 281 295	[2742] 310 289	[3582] 405 272	[4298] 486 239		

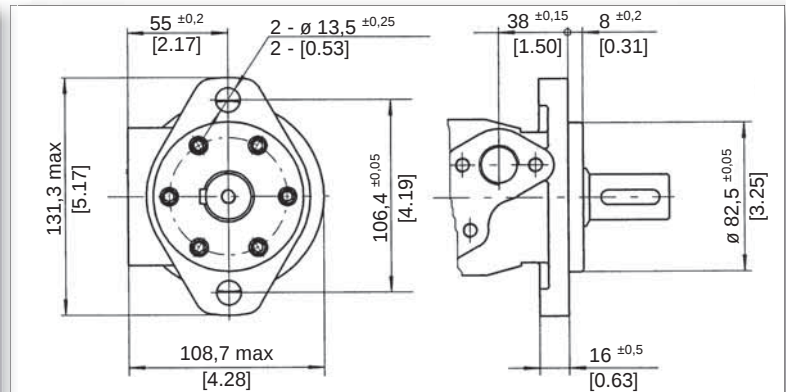
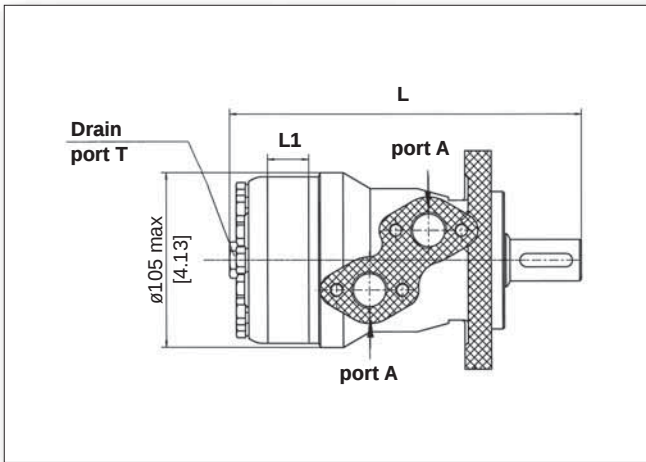
YMR 315 [19.19 in³/rev] 314.5 cm³/rev.

		[435] 3	[725] 5	[942] 6,5	[1160] 8	[1305] 9	[1885] 13	[1957] 13,5	[PSI] MPa					
GPM L/ min	[2.6] 10	[1194] 135 31	[1901] 215 29	[2467] 279 28	[3033] 343 27	[3387] 383 27	[4555] 515 24	[4864] 550 22	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)					
	[5.3] 20	[1176] 133 62	[1910] 216 61	[2556] 289 60	[3086] 349 58	[3361] 380 57	[4493] 508 52	[4882] 552 50						
[7.9] 30	[1105] 125 95	[1813] 205 92	[2432] 275 91	[3016] 341 90	[3316] 375 88	[4369] 494 81	[4802] 543 79							
[10.6] 40	[999] 113 123	[1724] 195 121	[2361] 267 120	[2963] 335 118	[3246] 367 117	[4289] 485 106	[4652] 526 104							
[13.2] 50	[814] 92 155	[1503] 170 154	[2237] 253 152	[2839] 321 149	[3113] 352 147	[4192] 474 137	[4519] 511 133							
[15.8] 60	[707] 80 190	[1415] 160 187	[2043] 231 193	[2697] 305 179	[2954] 334 176	[4050] 458 163	[4351] 492 157							
Max cont	[18.5] 70	[504] 57 222	[1203] 136 220	[1901] 215 217	[2520] 285 212	[2830] 320 208	[3927] 444 192	[4245] 480 185				Max cont.		
	[19.8] 75	[486] 55 235	[1097] 124 234	[1813] 205 231	[2379] 269 227	[2724] 308 225	[3776] 427 408	[4148] 469 201						
Max int.												Max int.		

PERFORMANCE DATA

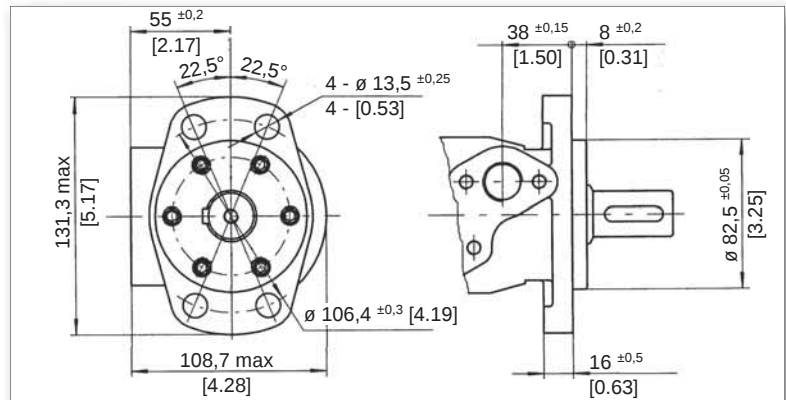
YMR 375 [22.58 in ³ /rev] 370 cm ³ /rev.								Max cont.	Max int.
								[1305] 9	[1885] 13
								[1957] 13.5	[PSI] MPa
GPM L/ min	[2.6] 10	[1415] 160 26	[2388] 270 25	[3007] 340 24	[3714] 420 22	[4157] 470 21	[4864] 550 19	[5395] 610 17	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	[5.3] 20	[1406] 159 53	[2299] 260 52	[3007] 340 51	[3626] 410 49	[4157] 470 47	[4776] 540 42	[5351] 605 37	
	[7.9] 30	[1327] 150 79	[1990] 225 78	[2918] 330 77	[3538] 400 75	[3980] 450 73	[4687] 530 67	[5306] 600 60	
	[10.6] 40	[1194] 135 106	[2123] 240 105	[2742] 310 104	[3317] 375 102	[3803] 430 99	[4599] 520 93	[5218] 590 85	
	[13.2] 50	[1061] 120 134	[2034] 230 132	[2609] 295 131	[3184] 360 129	[3714] 420 126	[4466] 505 120	[5041] 570 110	
	[15.8] 60	[867] 98 159	[1857] 210 158	[2432] 275 157	[3007] 340 155	[3449] 390 153	[4334] 490 147	[4864] 550 135	
	[18.5] 70	[663] 75 187	[1548] 175 186	[2211] 250 185	[2830] 320 183	[3272] 370 180	[4112] 465 175	[4687] 530 160	
	[19.8] 75	[575] 65 200	[1415] 160 199	[2034] 230 198	[2742] 310 195	[3184] 360 192	[3980] 450 187	[4555] 515 178	
	Max cont.								Max cont.
	Max int.								Max int.

DIMENSIONS AND MOUNTING DATA

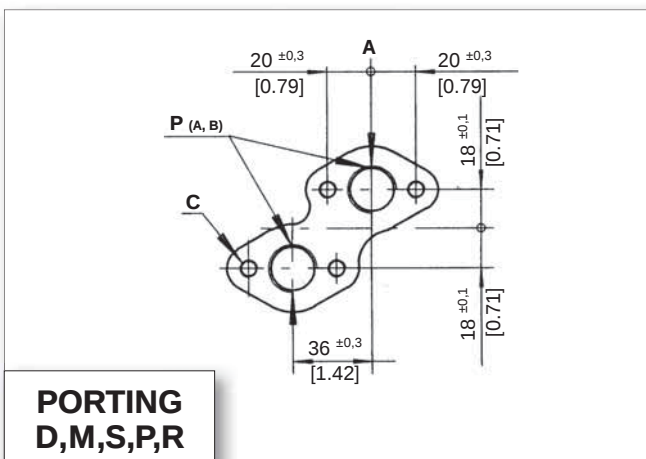


FLANGE 2 SAE-A 2 BOLT

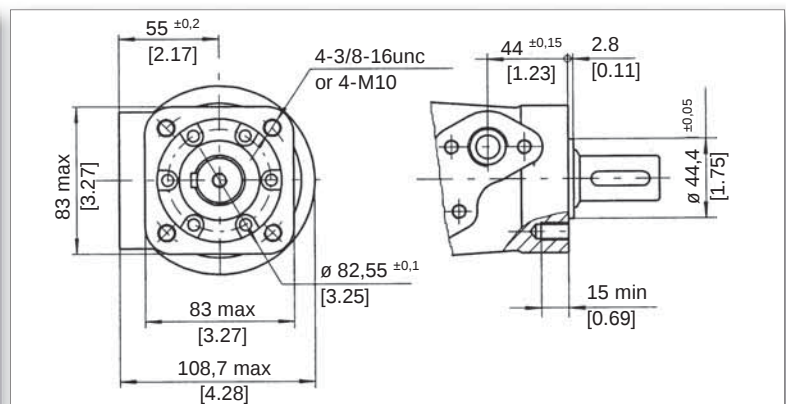
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MODEL	L	L1	L	L1
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YMR 80	[5.75]	[0.63]	146	16
YMR 100	[5.91]	[0.79]	150	20
YMR 125	[6.10]	[0.98]	155	25
YMR 160	[6.36]	[1.24]	161.5	31.5
YMR 200	[6.69]	[1.57]	170	40
YMR 250	[7.09]	[1.97]	180	50
YMR 315	[7.56]	[2.44]	192	62
YMR 375	[8.03]	[2.91]	204	74



FLANGE 4 MAGNETO



**PORTING
D,M,S,P,R**

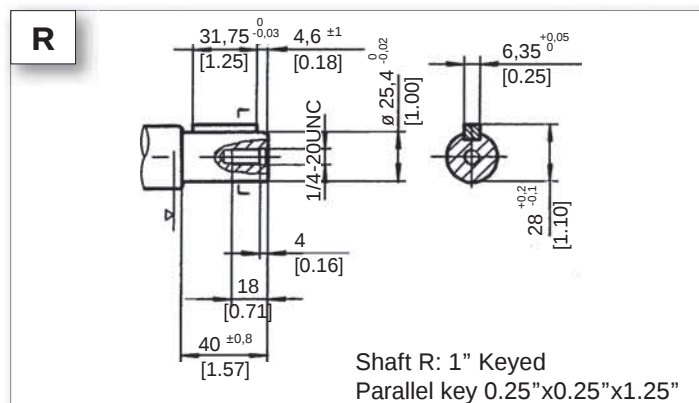
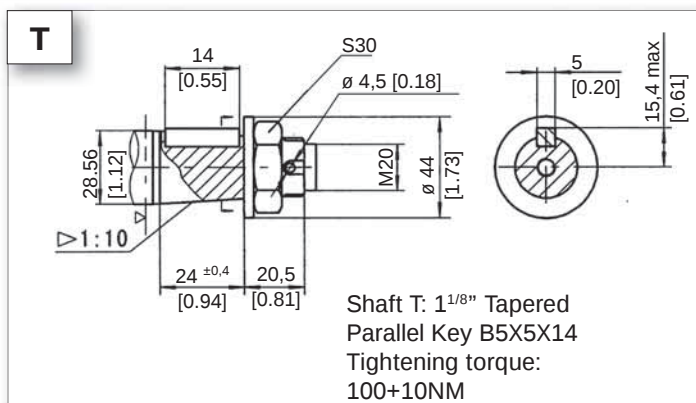
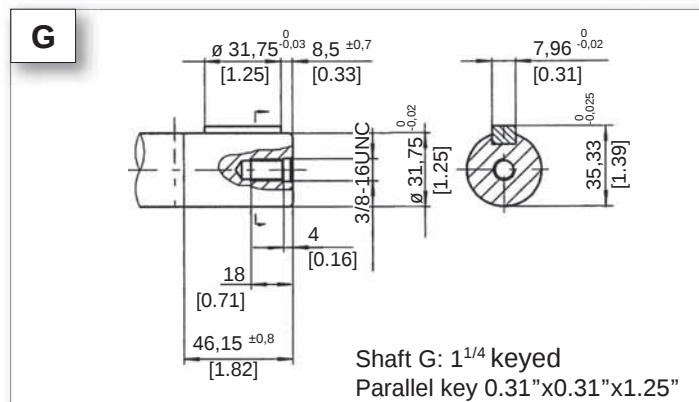
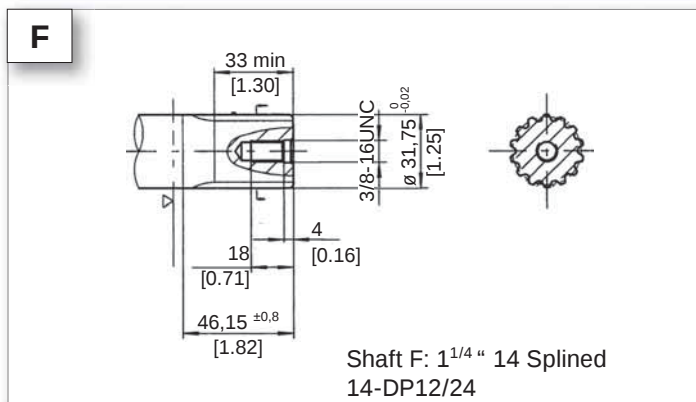
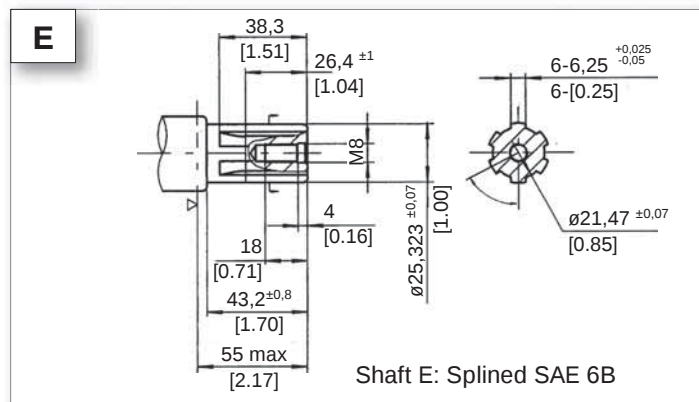
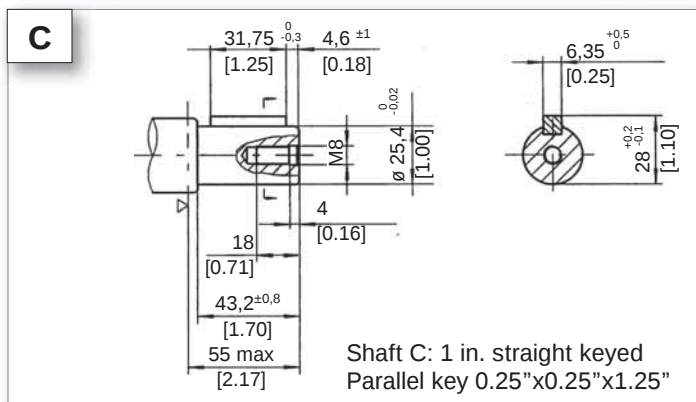
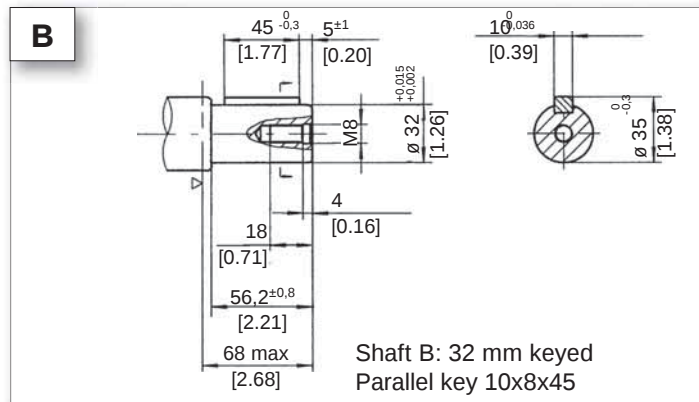
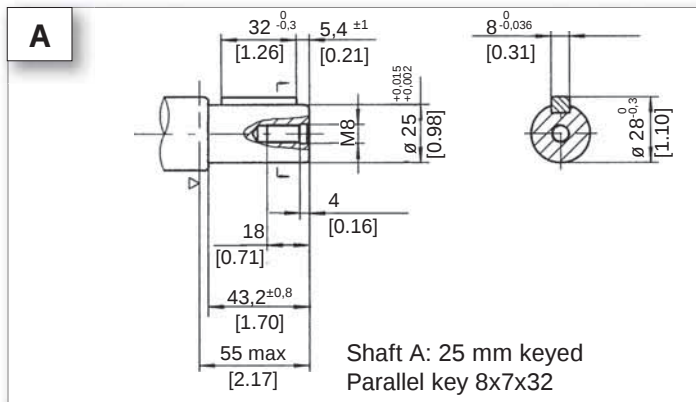


FLANGE H4/H5 4 BOLT

PORT & DRAIN PORT ORDERING CODES

ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	P	DEPTH	R	DEPTH
PORTS - A and B	G 1/2	15 mm	M22 X 1.5	15 mm	7/8-14 O-RING	17 mm	1/2-14NPTF	15 mm	PT(RC)1/2	15 mm
TANK PORT - T	G 1/4	12 mm	M14 X1.5	12 mm	7/16-20UNF	12 mm	7/16-20UNF	12 mm	PT(RC)1/4	9.7 mm
BOLTS - C	4-M8	13 mm	4-M8	13 mm	4-5/16-18UNC	13 mm	4-5/16-18UNC	13 mm	4-M8	13 mm

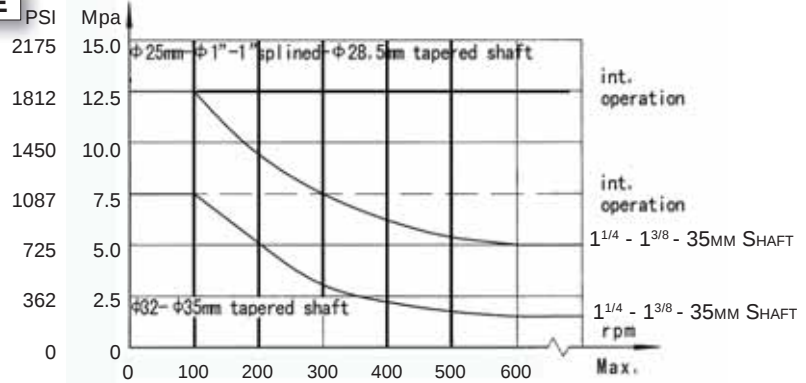
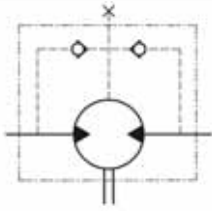
MOTOR SHAFT EXTENSIONS



▷ Motor Mounting Surface

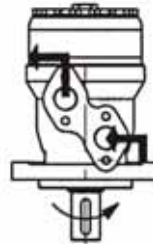
ADDITIONAL INFORMATION

PERMISSIBLE SHAFT SEAL PRESSURE



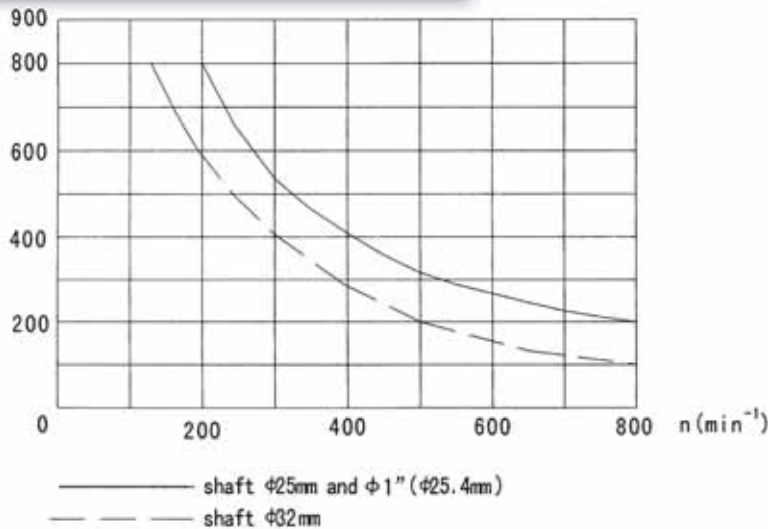
IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE. IN APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN DRAIN LINE.

SHAFT ROTATION DIRECTION

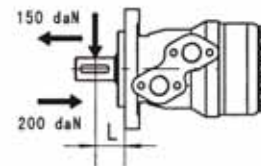


YMR

STATUS OF THE SHAFT'S RADIAL FORCE



$$F_r = \frac{800,2500}{n \cdot 95+1} \text{ daN}$$



F_r =Radial Force (daN)

L =Distance (mm)

n =Speed (rpm)

Rhomb-flange $L=30\text{mm}$

Square-flange $L=24\text{mm}$

ORDER INFORMATION

	1	2	3	4	5	6	7
YMR							

1	2		3		4		5		6		7	
DISP.	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT		SPECIAL OPTIONS	
50	2	SAE - A 2 Bolt Pilot .25"×0.31"	A	Shaft 25mm Keyed Parallel key 8×7×32	D	G1/2 Manifold Mount 4×M8, G1/4	NONE	STANDARD	00	NO PAINT	NONE	STANDARD
80	4	4 Bolt Magneto Pilot .25"×0.31"	B	Shaft 32mm Keyed Parallel key 10×8×45	M	M22×1.5 Manifold Mount 4×M8, M14×1.5	R	OPPOSITE	NONE	BLUE	N	BIG RADIAL FORCE
100	H4	4 Bolt Flange Pilot 1.75"×0.11" 4 bolts: 3/8 - 16UNC	C	Shaft 1" keyed Parallel key 25"×0.25"×1.25"	S	7/8-14 O-ring manifold 4x5/16-18UNC, 7/16-20UNF			B	BLACK	AX	BIG AXIAL FORCE
125	H5	4 Bolt Flange Pilot Ø44.4×2.8 4 x M10	E	Splined SAE 6B	P	1/2-14 NPTF Manifold 4x5/16-18UNC, 7/16-20UNF			S	SILVER GRAY	0	NO CASE DRAIN
160			R	Short shaft 1" Keyed Parallel key 25"×0.25"×1.25"	R	PT(Rc)1/2 Manifold 4xM8, PT(Rc)1/4					FR	FREE RUNNING
200			F	1 1/4" 14 Splined 14-DP12/24							LL	LOW LEAKAGE VALVE
250			FD	Long - 1 1/4" 14 Splined 14-DP12/24							LSV	LOW SPEED VALVE
315			G	1 1/4" keyed Parallel key 31"×0.31"×1.25"							CRS	CORROSION RESISTANT SHAFT
375			T	1 1/8" Tapered Parallel key B5X5X14							HPS	HIGH PRESSURE SEAL
											HTS	HIGH TEMP SEAL

Ordering Code:

All options have been determined with letters,numbers or combinations. All boxes must be filled with proper codes.If specification is not in the table,please contact us with your requirements.

YMRS



The **YMRS** series motor uses the **spool valve** shaft distribution design for simplicity, efficiency and compactness. This design integrates the distribution and hydraulic bearing design with the motor shaft.

This series uses the more advanced “**ROLLER**” gear type. It is manufactured with the most advanced technology and equipment to improve efficiency, smoothness, lower leakage and better overall performance.

This design has identical displacements and performance of the YMR series with a few different options.

These motors are very compact, economical, and powerful without the need of a reducer to deliver high torque.

The large number of shaft, flange, port and special options make this a very flexible motor useful for many applications.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Axial Distribution	YMRS	[in ³ ./rev]	[3.05 ~ 22.88]	[PSI]	[2900]	RPM	[HP]	[20]
		cm ³ /rev.	50 ~ 375	MPa	20	30 ~ 970	Kw	17

QUICK REFERENCE GUIDE

YMRS SERIES QUICK REFERENCE:

Displacements				
[in ³ /rev]	cm ³ /rev.			
[3.13]	51.3	FLOW UP TO	75 LPM	[20 GPM]
[4.92]	80.6	PRESSURE UP TO	20 MPa	[2900 PSI]
[6.15]	100.8	TORQUE UP TO	548 Nm	[4846 in.-lb.]
[7.62]	124.9	POWER UP TO	17 Kw	[23 HP]
[9.59]	157.2	SPEED UP TO	970 RPM	
[12.16]	199.2			
[15.38]	252			
[19.19]	314.5			
[22.58]	370			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated shafts or housings for corrosive environment and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

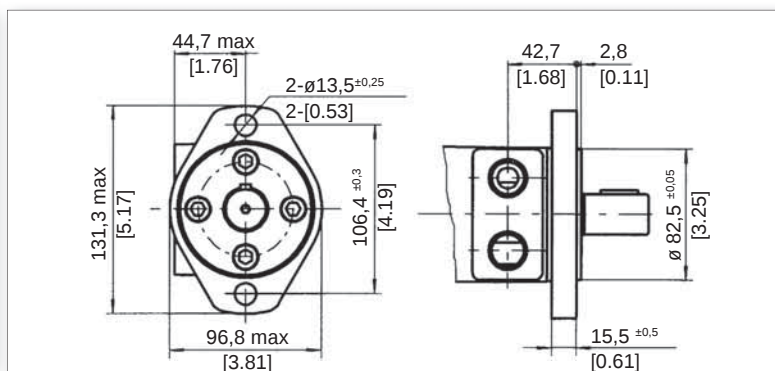
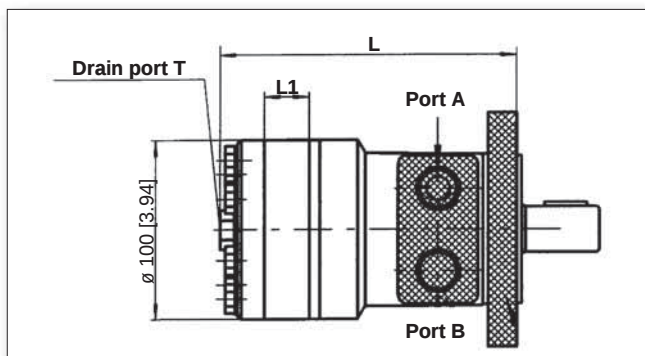
For individual motor performance chart consult equivalent YMR series data

DISTRIBUTION TYPE		YMRS 50	YMRS 80	YMRS 100	YMRS 125	YMRS 160	YMRS 200	YMRS 250	YMRS 315	YMRS 375
GEOMETRIC DISPLACEMENT	[in ³ /rev.]	[3.13]	[4.92]	[6.15]	[7.62]	[9.59]	[12.16]	[15.38]	[19.19]	[22.58]
	cm ³ /rev.	51.3	80.6	100.8	124.9	157.2	199.2	252	314.5	370
MAX. SPEED RPM	RATED	755	750	600	475	375	300	240	190	160
	CONT.	970	940	750	600	470	375	300	240	200
MAX. TORQUE [LB.IN.] N*M	RATED	[LB.IN.]	[884]	[1415]	[1769]	[2211]	[2830]	[2919]	[3113]	[3184]
		N*M	100	160	200	250	320	330	352	420
	CONT.	[LB.IN.]	[884]	[1680]	[2123]	[2582]	[3210]	[3166]	[3113]	[3184]
		N*M	100	190	240	292	363	358	352	360
	INT.	[LB.IN.]	[1114]	[1946]	[2476]	[3007]	[3803]	[3962]	[4157]	[4157]
		N*M	126	220	280	340	430	448	470	548
MAX. OUTPUT [HP] KW	RATED	[HP]	[10]	[17]	[17]	[16]	[17]	[14]	[12]	[9]
		KW	7.7	12.3	12.3	12.0	12.3	10	9	7
	CONT.	[HP]	[10]	[20]	[20]	[19]	[19]	[15]	[12]	[9]
		KW	7.7	15	15	14	14	11	9	8.6
	INT.	[HP]	[13]	[23]	[23]	[22]	[22]	[19]	[16]	[12]
		KW	9.7	17	17	16	16	14	12	9
MAX. PRES-SURE DROP [PSI] MPa	RATED	[PSI]	[2030]	[2030]	[2030]	[2030]	[2030]	[1740]	[1595]	[1232]
		MPa	14	14	14	14	14	12	11	8.5
	CONT.	[PSI]	[2030]	[2537]	[2537]	[2537]	[2392]	[1885]	[1595]	[1232]
		MPa	14	17.5	17.5	17.5	16.5	13	11	8.5
	INT.	[PSI]	[2538]	[2900]	[2900]	[2900]	[2900]	[2537]	[2030]	[1667]
		MPa	17.5	20	20	20	20	17.5	14	11.5
MAX. FLOW [GPM] L/MIN	CONT.	[GPM]	[10.6]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]
		L/MIN	40	60	60	60	60	60	60	60
	INT.	[GPM]	[13.2]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
		L/MIN	50	75	75	75	75	75	75	75
WEIGHT [LB] KG	[LB]	[15]	[15]	[15]	[16]	[17]	[18]	[19]	[20]	[20]
	KG	6.7	6.9	6.9	7.2	7.5	8	8.5	9	9.3

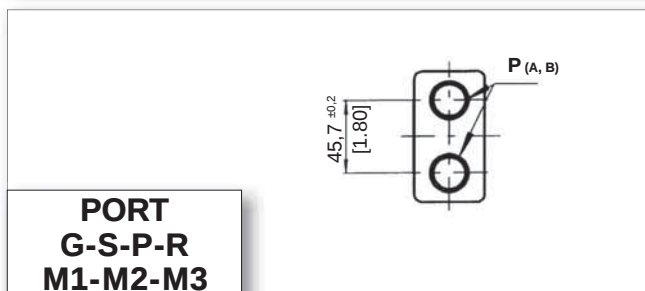
- * Rated speed and rated torque:
- * Continuous pressure:
- * Intermittent pressure:
- * Peak pressure:

Output value of speed and torque under rated flow and rated pressure.
 Max. value of operating motor continuously.
 Max. value of operating motor in 6 seconds per minute.
 Max. value of operating motor in 0.6 second per minute.

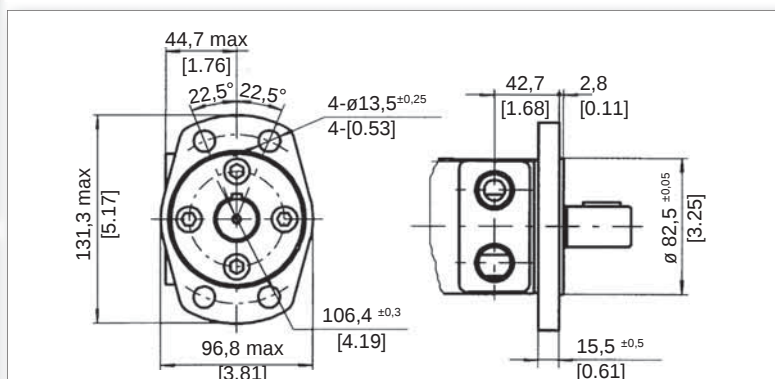
DIMENSIONS AND MOUNTING DATA



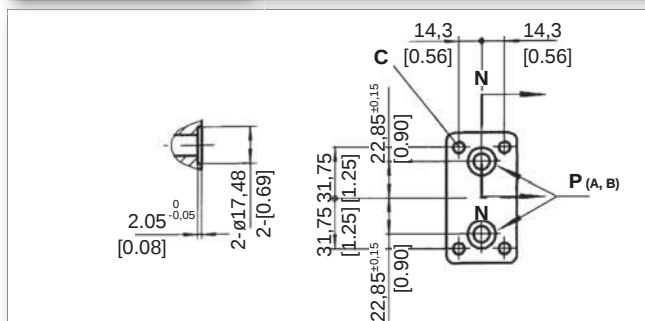
FLANGE H2



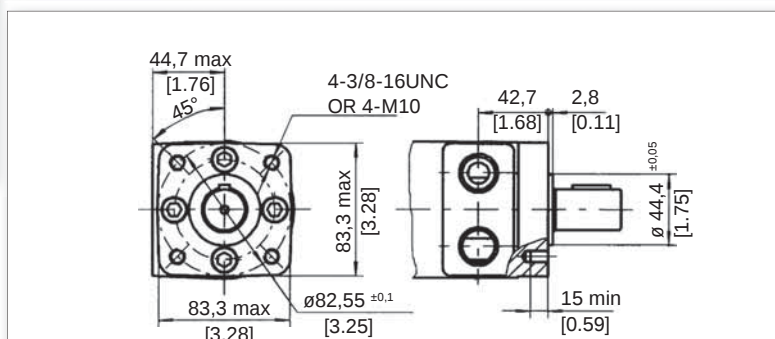
**PORT
G-S-P-R
M1-M2-M3**



FLANGE H6



**PORT
B4 -B5**



FLANGE H4/H5

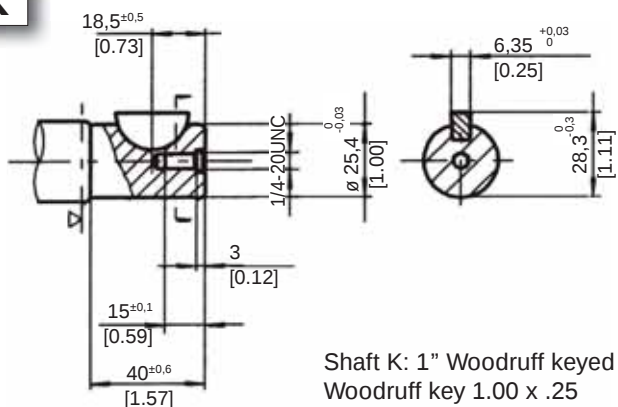
	[INCHES]		MILLIMETERS	
MODEL	L	L1	L	L1
YMRS 50	[5.67]	[0.39]	144	10
YMRS 80	[5.91]	[0.63]	150	16
YMRS 100	[6.06]	[0.79]	154	20
YMRS 125	[6.26]	[0.98]	159	25
YMRS 160	[6.12]	[1.24]	155.5	31.5
YMRS 200	[6.85]	[1.57]	174	40
YMRS 250	[7.24]	[1.97]	184	50
YMRS 315	[7.72]	[2.44]	196	62
YMRS 375	[8.19]	[2.91]	208	74

PORT & DRAIN PORT ORDERING CODES

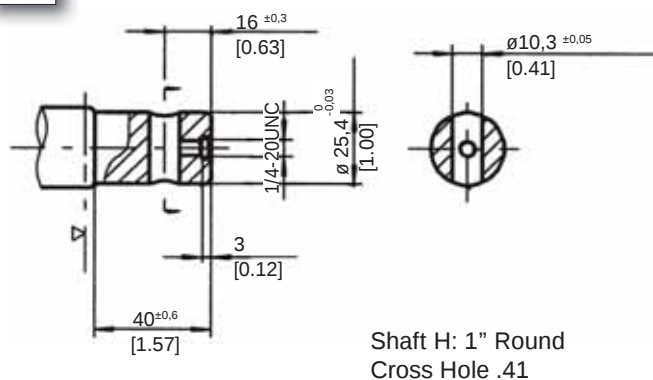
ORDER CODE	G	DEPTH	S	DEPTH	P	DEPTH	R	DEPTH	M1	DEPTH	M2	DEPTH	M3	DEPTH	B4	DEPTH	B5	DEPTH
PORTS A and B	G 1/2	15 mm	7/8-14 O-RING	17 mm	1/2 14NPTF	15 mm	PT(RC) 1/2	15 mm	M18 X 1.5	15 mm	M20 X 1.5	15 mm	M22 X 1.5	15 mm	Ø10	-	Ø10	-
TANK PORT T	G 1/4	12 mm	7/16 20UNF	12 mm	7/16 20UNF	12 mm	PT(RC) 1/4	9.7 mm	M10 X 1	12 mm	M10 X 1	12 mm	M10 X 1	12 mm	7/16 20UNF	12 mm	G1/4	12 mm
BOLTS - C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4-5/16 18UNC	13 mm	4-M8	13 mm

MOTOR SHAFT EXTENSIONS

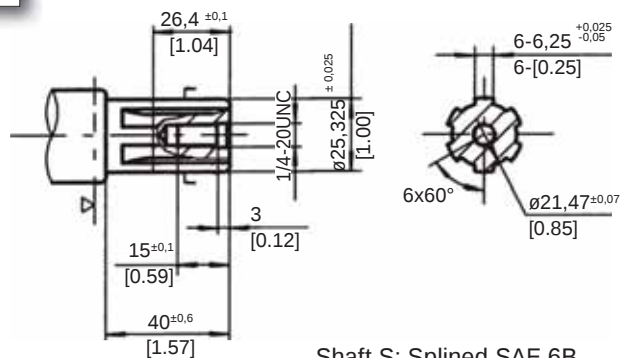
K



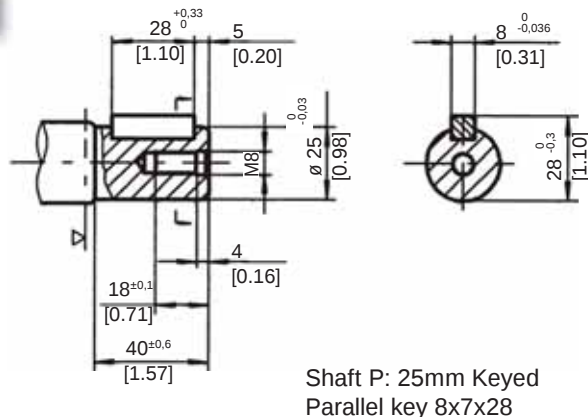
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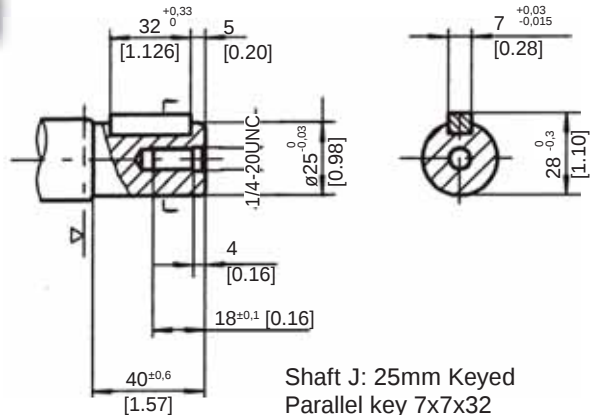
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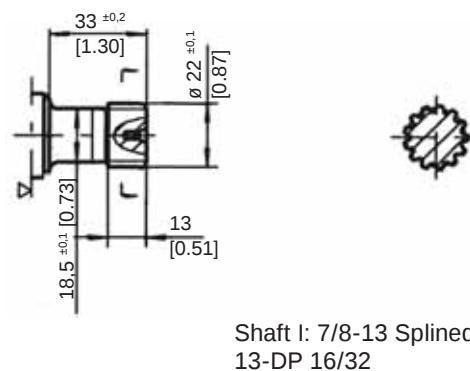
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J



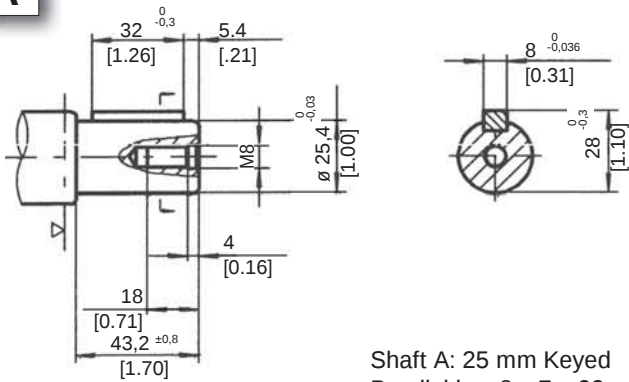
I



▷ Motor Mounting Surface

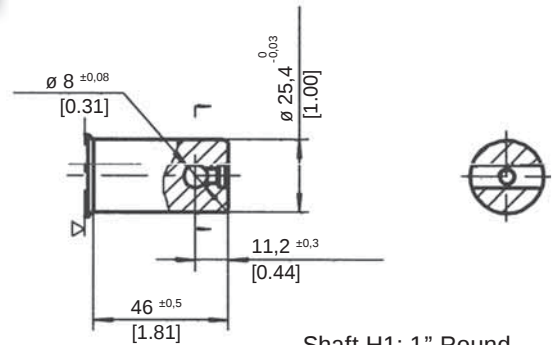
MOTOR SHAFT EXTENSIONS

A



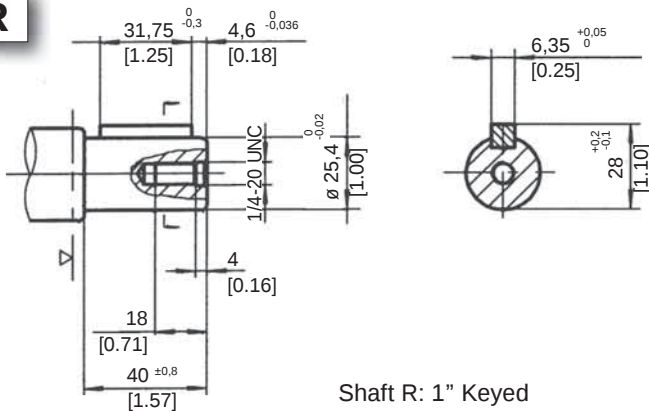
Shaft A: 25 mm Keyed
Parallel key 8 x 7 x 32

H1



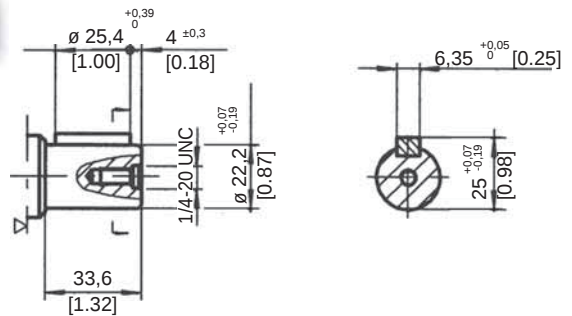
Shaft H1: 1" Round
Cross Hole .31

R



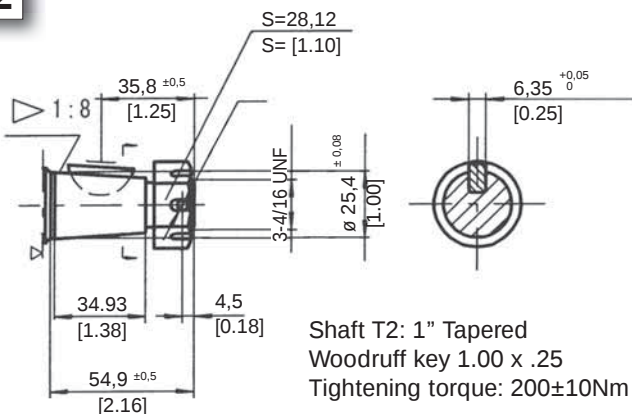
Shaft R: 1" Keyed
Parallel key .25 x .25 x 1.25

D



Shaft D: 7/8 Keyed
Parallel key .25 x .25 x 1.00

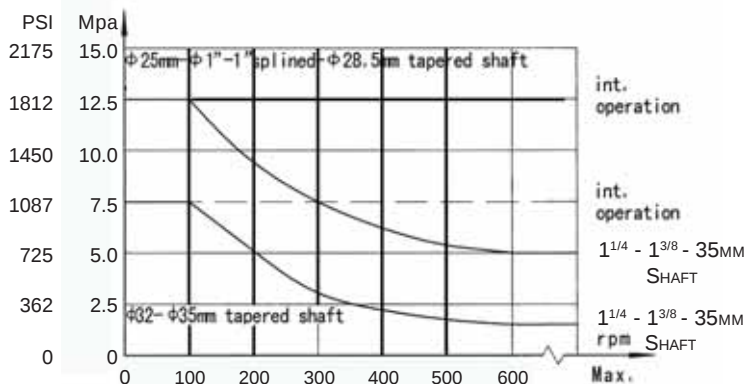
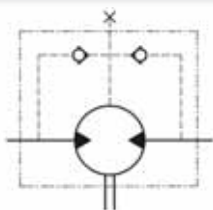
T2



Shaft T2: 1" Tapered
Woodruff key 1.00 x .25
Tightening torque: 200±10Nm

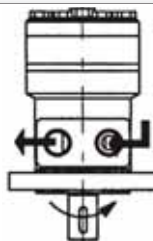
ADDITIONAL INFORMATION

PERMISSIBLE SHAFT SEAL PRESSURE



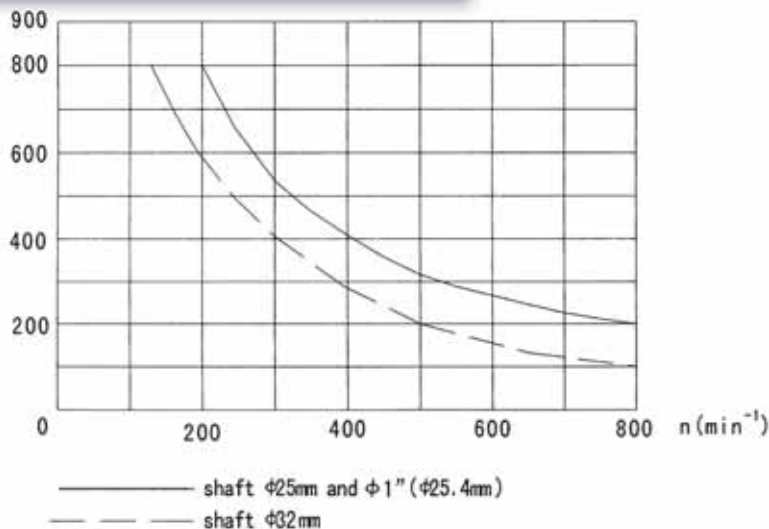
IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE. IN APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN DRAIN LINE.

SHAFT ROTATION DIRECTION

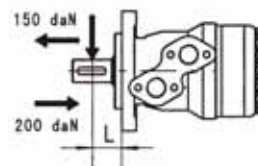


YMRS

STATUS OF THE SHAFT'S RADIAL FORCE



$$F_r = \frac{800,2500}{n \cdot 95+1} \text{ daN}$$



F_r =Radial Force (daN)
 L =Distance (mm)
 n =Speed (rpm)

Rhomb-flange $L=30\text{mm}$
Square-flange $L=24\text{mm}$

ORDER INFORMATION

1	2	3	4	5	6	7
YMRS						

1	2		3		4		5		6		7	
DISP.	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT		SPECIAL OPTIONS	
50	H2	SAE - A 2 Bolt Pilot .25"×0.31"	K	Shaft K: 1" Woodruff keyed • Woodruff key 1.00 x .25	G	G1/2, G1/4	NONE	STANDARD	00	NO PAINT	NONE	STANDARD
80	H6	4 Bolt Magneto Pilot .25"×0.31"	H	Shaft H: 1" Round Cross Hole .41	S	7/8-14 O-RING 7/16-20 UNF (G1/4)	R	OPPOSITE	NONE	BLUE	N	BIG RADIAL FORCE
100	H4	4 Bolt Flange Pilot .75"×0.11" 4 bolts: 3/8 - 16UNC	S	Shaft S: Splined SAE 6B	P	1/2NPTF, 7/16-20 UNF (G1/4)			B	BLACK	AX	BIG AXIAL FORCE
125	H5	4 Bolt Flange Pilot Ø44.4×2.8 4 x M10	P	Shaft P: 25mm Keyed Parallel key 8x7x28	R	PT(Rc)1/2 , PT(Rc)1/4			S	SILVER GRAY	0	NO CASE DRAIN
160			J	Shaft J: 25mm Keyed Parallel key 7x7x32	M1	M18 X 1.5, M10 X 1					FR	FREE RUNNING
200			I	Shaft I: 7/8 -13 Splined 13-DP16/32	M2	M20 X 1.5, M10 X 1					LL	LOW LEAKAGE VALVE
250			A	Shaft A: 25mm Keyed Parallel key 8x7x32	M3	M22 X 1.5, M10 X 1					LSV	LOW SPEED VALVE
315			H1	Shaft H1: 1" Round Cross Hole .31	B4	Ø10 O-ring manifold 4 x 5/16-18 7/16-20UNF (G 1/4)					CRS	CORROSION RESISTANT SHAFT
375			R	Shaft R: 1" Keyed Parallel Key .25x.25x1.25	B5	Ø10 O-ring manifold 4 x M8, 7/16-20UNF (G 1/4)					HPS	HIGH PRESSURE SEAL
			D	Shaft D: 7/8 Keyed Parallel key .25x.25x1.00							HTS	HIGH TEMP SEAL
			T2	Shaft T2: 1" Tapered Woodruff key 1.00x.25 Tightening torque: 200±10Nm								

Note: All options have been designated with a letter, number, or a combination. All boxes must be filled with the corresponding code. If your specification is not in the options list please contact us with your requirements.

YMH



The **YMH** series motor uses the **spool valve** shaft distribution design for simplicity, efficiency and compactness. This design integrates the distribution and hydraulic bearing design with the motor shaft.

This series uses the more advanced **“ROLLER”** gear type. It is manufactured with the most advanced technology and equipment to improve efficiency, smoothness, lower leakage and better overall performance.

These motors are very compact, economical, and powerful without the need of a reducer to deliver high torque.

The large number of shaft, flange, port and special options make this a very flexible motor useful for many applications.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Spool Valve Distribution	YMP	[in ³ ./rev]	[12.21~30.52]	[PSI]	[2900]	RPM	[HP]	[23]
		cm ³ /rev.	200 ~ 500	MPA	20	30~430	Kw	17

QUICK REFERENCE GUIDE

YMH SERIES QUICK REFERENCE:

Displacements				
[in ³ ./rev]	cm ³ /rev.			
[12.4]	203.2	FLOW UP TO	90 LPM	[23.78 GPM]
[15.61]	255.9	PRESSURE UP TO	20 MPa	[2900 PSI]
[19.29]	316.1	TORQUE UP TO	533 Nm	[4713lb.-in.]
[24.80]	406.0	POWER UP TO	17 Kw	[21.6 HP]
[29.85]	489.2	SPEED UP TO	439 RPM	

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated shafts or housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

DISTRIBUTION TYPE			YMH 200	YMH 250	YMH 315	YMH 400	YMH 500
GEOMETRIC DISPLACEMENT		[in³./rev.]	[12.40]	[15.62]	[19.29]	[24.80]	[29.86]
		cm³/rev.	203.2	255.9	316.1	406.4	489.2
MAX. SPEED RPM		RATED	263	209	169	131	109
		CONT.	366	290	236	183	155
		INT.	439	348	282	220	166
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[2636]	[3317]	[4015]	[4219]	[4059]
		N*M	298	375	454	477	459
	CONT.	[LB. IN.]	[4510]	[5492]	[6545]	[7641]	[7066]
		N*M	510	621	740	864	799
	INT.	[LB. IN.]	[5121]	[6208]	[7314]	[8738]	[8588]
		N*M	579	702	827	988	971
	PEAK	[LB. IN.]	[5757]	[6987]	[8225]	[9658]	[9658]
		N*M	651	790	930	1092	1092
MAX. OUTPUT [HP] KW	RATED	[HP]	[11]	[11]	[11]	[9]	[7]
		KW	8.2	8.2	8.2	6.6	5.2
	CONT.	[HP]	[15]	[12]	[13]	[10]	[9]
		KW	11.2	9.2	9.8	7.4	6.5
	INT.	[HP]	[23]	[20]	[17]	[17]	[15]
		KW	17	15	13	13	11
MAX. PRESSURE DROP [PSI] MP _A	RATED	[PSI]	[1813]	[1813]	[1813]	[1450]	[1160]
		MP_A	12.5	12.5	12.5	10	8
	CONT.	[PSI]	[2538]	[2538]	[2538]	[2248]	[1813]
		MP_A	17.5	17.5	17.5	15.5	12.5
	INT.	[PSI]	[2900]	[2900]	[2900]	[2755]	[2320]
		MP_A	20	20	20	19	16
	PEAK	[PSI]	[3263]	[3263]	[3263]	[3045]	[2610]
		MP_A	22.5	22.5	22.5	21	18
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[15.8]	[15.8]	[15.8]	[15.8]	[15.8]
		L/MIN	60	60	60	60	60
	CONT.	[GPM]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
		L/MIN	75	75	75	75	75
	INT.	[GPM]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]
		L/MIN	90	90	90	90	90
WEIGHT [LB] KG		[LB]	[23]	[24]	[25]	[27]	[29]
		KG	10.5	11	11.5	12.3	13

* Rated speed and rated torque:

* Continuous pressure:

* Intermittent pressure:

* Peak pressure:

Output value of speed and torque under rated flow and rated pressure.

Max. value of operating motor continuously.

Max. value of operating motor in 6 seconds per minute.

Max. value of operating motor in 0.6 second per minute.

PERFORMANCE DATA

YMH 200 [12.40 in³/rev] 203.2 cm³/rev.

		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[2900] 20	[PSI] MPa
GPM L/min	[1.3] 5	[867] 98 25	[1716] 194 25	[2512] 284 22				
	[2.6] 10	[893] 101 43	[1804] 204 41	[2662] 301 36	[3458] 391 29	[4263] 482 14		
Flow (L/min)	[5.3] 20	[876] 99 100	[1778] 201 97	[2689] 304 93	[3555] 402 85	[4502] 509 69	[5094] 576 56	TORQUE [LB-IN] TORQUE (N·M) SPEED (RPM)
	[7.9] 30	[858] 97 145	[1742] 197 143	[2653] 300 139	[3555] 402 130	[4510] 510 114	[5121] 579 101	
	[10.6] 40	[796] 90 200	[1680] 190 200	[2582] 292 200	[3529] 399 188	[4484] 507 168	[5112] 578 153	
	[13.2] 50	[725] 82 248	[1618] 183 246	[2512] 284 244	[3467] 392 235	[4422] 500 213	[5050] 571 199	
	[15.9] 60	[646] 73 292	[1539] 174 290	[2423] 274 287	[3396] 384 279	[4360] 493 260	[4979] 563 244	
	[18.5] 70	[557] 63 352	[1442] 163 350	[2335] 264 349	[3308] 374 338	[4254] 481 318	[4900] 554 301	
Max cont.	[19.8] 75	[522] 59 366	[1389] 157 365	[2291] 259 363	[3237] 366 355	[4201] 475 335	[4838] 547 319	
Max int.	[21.1] 80	[469] 53 381	[1327] 150 381	[2238] 253 380	[3166] 358 371	[4121] 466 352	[4758] 538 338	Max cont.
	[23.8] 90	[345] 39 443	[1238] 140 437	[2131] 241 434	[3078] 348 426	[4033] 456 407	[4652] 526 392	Max int.

YMH 250 [15.61 in³/rev] 255.9 cm³/rev.

		[507] 3.5	[1015] 7	[1305] 9	[1740] 12	[2102] 14.5	[2537] 17.5	[2900] 20	[PSI] MPa
GPM L/min	[1.3] 5	[1070] 121 19	[2176] 246 19	[2812] 318 18	[3520] 398 14				
	[2.6] 10	[1150] 130 34	[2282] 258 33	[2927] 331 31	[3759] 425 29	[4555] 515 23	[5262] 595 12		
Flow (L/min)	[5.3] 20	[1150] 130 78	[2282] 258 77	[2936] 332 76	[3821] 432 73	[4599] 520 65	[5492] 621 53	[6208] 702 42	TORQUE [LB-IN] TORQUE (N·M) SPEED (RPM)
	[7.9] 30	[1079] 122 115	[2220] 251 113	[2892] 327 111	[3794] 429 105	[4599] 520 96	[5492] 621 84	[6191] 700 75	
	[10.6] 40	[1017] 115 157	[2123] 240 157	[2857] 323 156	[3732] 422 150	[4537] 513 139	[5448] 616 127	[6173] 698 114	
	[13.2] 50	[929] 105 196	[2052] 232 195	[2777] 314 192	[3635] 411 185	[4466] 505 173	[5359] 606 159	[6076] 687 147	
	[15.9] 60	[831] 94 232	[1946] 220 230	[2671] 302 226	[3546] 401 218	[4387] 496 206	[5271] 596 192	[5979] 676 180	
	[18.5] 70	[720] 81.4 274	[1848] 209 274	[2547] 288 274	[3440] 389 266	[4281] 484 252	[5147] 582 238	[5890] 666 222	
Max cont.	[19.8] 75	[637] 72 290	[1795] 203 289	[2476] 280 287	[3370] 381 279	[4201] 475 266	[5076] 574 251	[5828] 659 236	
Max int.	[21.1] 80	[584] 66 303	[1716] 194 302	[2414] 273 298	[3281] 371 290	[4130] 467 279	[5006] 566 264	[5757] 651 249	Max cont.
	[23.8] 90	[433] 49 348	[1574] 178 347	[2264] 256 345	[3140] 355 337	[4006] 453 325	[4882] 552 309	[5607] 634 292	Max int.

YMH 315 [19.29 in³/rev] 316.1 cm³/rev.

		[507] 3.5	[1087] 7.5	[1450] 10	[1957] 13.5	[2247] 15.5	[2537] 17.5	[2900] 20	[PSI] MPa
GPM L/min	[1.3] 5	[1371] 155 16	[2874] 325 13						
	[2.6] 10	[1442] 163 27	[3025] 342 24	[4015] 454 18	[4917] 556 14				
Flow (L/min)	[5.3] 20	[1495] 169 63	[3087] 349 61	[4048] 469 55	[5147] 582 48	[5872] 664 40	[6483] 733 32	[7155] 809 19	TORQUE [LB-IN] TORQUE (N·M) SPEED (RPM)
	[7.9] 30	[1459] 165 93	[3042] 344 89	[4157] 470 82	[5130] 580 77	[5917] 669 67	[6545] 740 59	[7287] 824 46	
	[10.6] 40	[1362] 154 126	[2980] 337 126	[4112] 465 119	[5103] 577 111	[5864] 663 99	[6518] 737 88	[7314] 827 73	
	[13.2] 50	[1247] 141 159	[2874] 325 155	[4024] 455 148	[5023] 568 139	[5802] 656 126	[6438] 728 115	[7287] 824 98	
	[15.9] 60	[1070] 121 187	[2759] 312 186	[3891] 440 179	[4908] 555 169	[5687] 643 154	[6323] 715 143	[7181] 812 124	
	[18.5] 70	[911] 103 222	[2636] 298 222	[3759] 425 215	[4785] 541 205	[5581] 631 187	[6217] 703 176	[7075] 800 157	
Max cont.	[19.8] 75	[831] 94 236	[2538] 287 233	[3688] 417 224	[4678] 529 215	[5510] 623 196	[6155] 696 184	[7004] 792 166	
Max int.	[21.1] 80	[725] 82 246	[2450] 277 244	[3591] 406 236	[4581] 518 228	[5404] 611 210	[6085] 688 197	[6934] 784 174	Max cont.
	[23.8] 90	[548] 62 282	[2264] 256 280	[3414] 386 275	[4387] 496 266	[5245] 593 248	[5917] 669 234	[6783] 767 209	Max int.

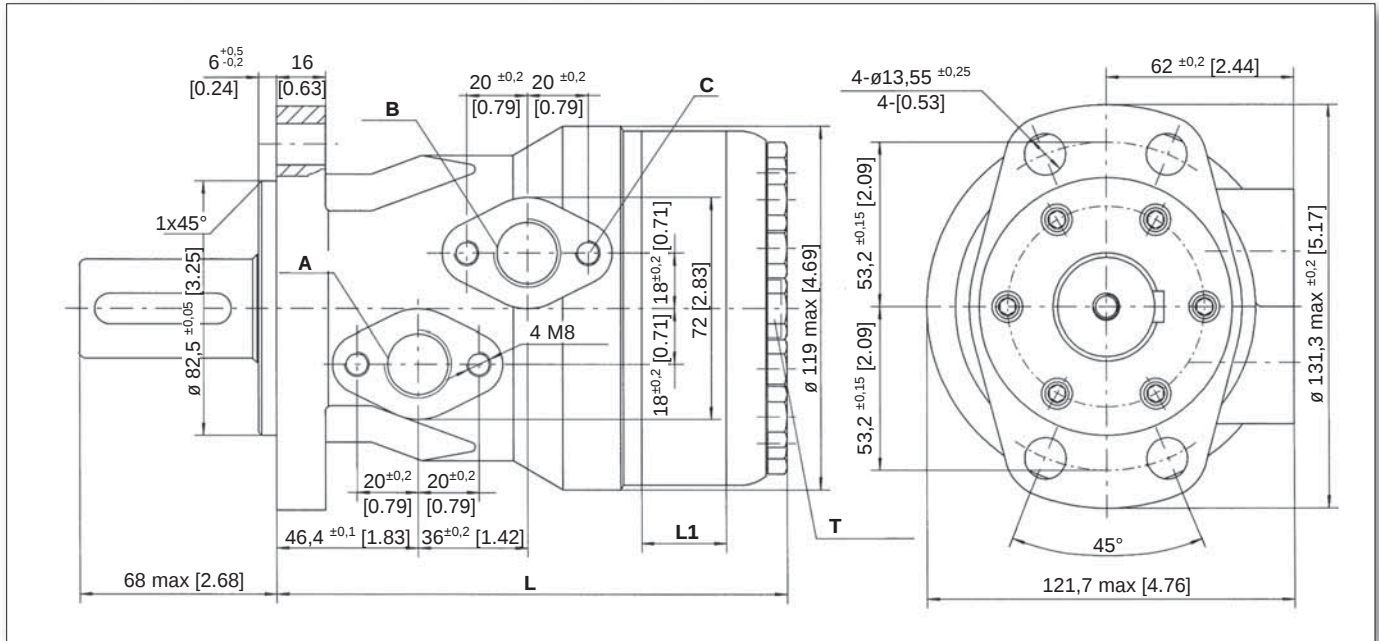
YMH 400 [24.80 in³/rev] 406.40 cm³/rev.

YMH 400 [24.80 in³/rev] 406.40 cm³/rev.					Max cont.	Max int.					
					[507] 3.5	[870] 6	[1522] 10.5	[1812] 12.5	[2247] 15.5	[2755] 19	[PSI] MPa
GPM	[1.3]	[1733] 196	[3078] 348	[4564] 516							TORQUE (LB-IN) TORQUE (N•M) SPEED (RPM)
	5	13	13	10							
Flow (L/min)	[2.6]	[1813] 205	[3210] 363	[4829] 546	[6209] 702	[7597] 859					
	10	22	21	21	17	11					
	[5.3]	[1848] 209	[3237] 366	[4802] 543	[6262] 708	[7730] 874	[8738] 988				
	20	50	49	46	41	36	31				
	[7.9]	[1778] 201	[3157] 357	[4793] 542	[6244] 706	[7641] 864	[8703] 984				
	30	73	72	70	63	56	51				
	[10.6]	[1725] 195	[3060] 346	[4705] 532	[6200] 701	[7588] 858	[8605] 973				
	40	99	98	96	86	77	71				
	[13.2]	[1530] 173	[2936] 332	[4581] 518	[6076] 687	[7500] 848	[8473] 958				
	50	123	122	118	107	97	90				
Max cont.	[15.9]	[1362] 154	[2821] 319	[4431] 501	[5908] 668	[7368] 833	[8349] 944				
	60	146	144	141	128	115	106				
	[18.5]	[1221] 138	[2697] 305	[4245] 480	[5740] 649	[7199] 814	[8181] 925				
	70	174	173	169	156	141	130				
	[19.8]	[1132] 128	[2600] 294	[4121] 466	[5634] 637	[7093] 802	[8057] 911				
	75	183	181	177	163	149	138				
	[21.1]	[999] 113	[2450] 277	[3989] 451	[5492] 621	[6951] 786	[7951] 899		Max cont.		
	80	192	191	188	174	158	144				
	Max int.	[23.8]	[796] 90	[2264] 256	[3829] 433	[5262] 595	[6783] 767	[7792] 881		Max int.	
		90	220	220	215	202	183	165			

PERFORMANCE DATA

YMH 500 [29.85 in ³ /rev] 489.2 cm ³ /rev.							Max cont.	Max int.	[PSI] MPa
							362 2.5	725 5	
							1232 8.5	1450 10	
							1812 12.5	2320 16	
GPM L/ min	[1.3]	[1459] 165	[2804] 317	[4564] 516					
	5	11	11	8					
	[2.6]	[1574] 178	[2963] 335	[4908] 555	[5917] 669	[6996] 791	[8570] 969		
	10	20	19	17	15	13	9		
	[5.3]	[1565] 177	[2927] 331	[4944] 559	[5952] 673	[7066] 799	[8738] 988		
	20	42	42	41	38	36	29		
Flow (L/min)	[7.9]	[1521] 172	[2830] 320	[4891] 553	[5864] 663	[7004] 792	[8694] 983		
	30	64	63	61	57	53	47		
	[10.6]	[1442] 163	[2733] 309	[4785] 541	[5784] 654	[6925] 783	[8588] 971		
	40	85	85	83	79	75	67		
	[13.2]	[1291] 146	[2618] 296	[4625] 523	[5616] 635	[6792] 768	[8437] 954		
	50	103	103	103	97	93	85		
	[15.9]	[1070] 121	[2432] 275	[4440] 502	[5430] 614	[6606] 747	[8260] 934		
	60	124	124	123	117	113	103		
	[18.5]	[858] 97	[2264] 256	[4263] 482	[5280] 597	[6447] 729	[8110] 917		
	70	148	148	148	140	134	122		
Max cont	[19.8]	[699] 79	[2123] 240	[4148] 469	[5147] 582	[6315] 714	[7977] 902		
	75	155	155	155	152	144	130		
	[21.1]	[531] 60	[1999] 226	[4006] 453	[5041] 570	[6200] 701	[7818] 884	Max cont.	
	80	166	166	166	159	153	139		
Max int.	[23.8]	[301] 34	[1778] 201	[3723] 421	[4864] 550	[5952] 673	[7685] 869	Max int.	
	90	166	165	164	157	156	155		

MOUNTING DATA



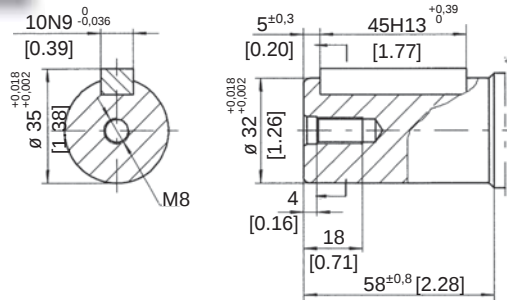
	[INCHES]		MILLIMETERS	
MODEL	L	L1	L	L1
YMH 200	[6.61]	[1.06]	168	27
YMH 250	[6.89]	[1.34]	175	34
YMH 315	[7.24]	[1.65]	184	42
YMH 400	[7.68]	[2.13]	195	54
YMH 500	[8.11]	[2.56]	206	65

PORT & DRAIN PORT ORDERING CODES

ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	P	DEPTH	R	DEPTH
PORTS - A and B	G 1/2	15 mm	M22 X 1.5	15 mm	7/8-14 O-RING	15 mm	1/2-14NPTF	15 mm	PT(RC)1/2	15 mm
TANK PORT - T	G 1/4	12 mm	M14 X 1.5	12 mm	7/16-20 UNF	12 mm	7/16-20 UNF	12 mm	PT(RC)1/4	1/4
BOLTS - C	4-M8	13 mm	4-M8	13 mm	4-M8	13 mm	4-M8	13 mm	4-M8	13 mm

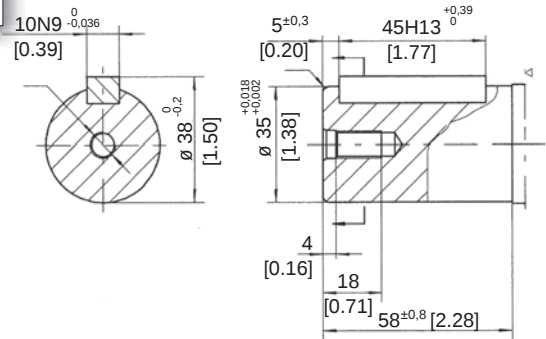
MOTOR SHAFT EXTENSIONS

B



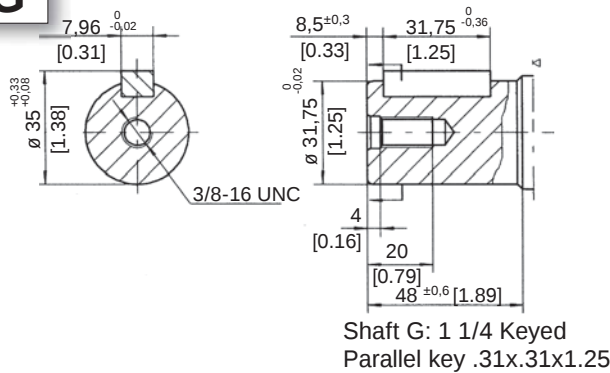
Shaft B: 32 mm keyed
Parallel key 10x8x45

M



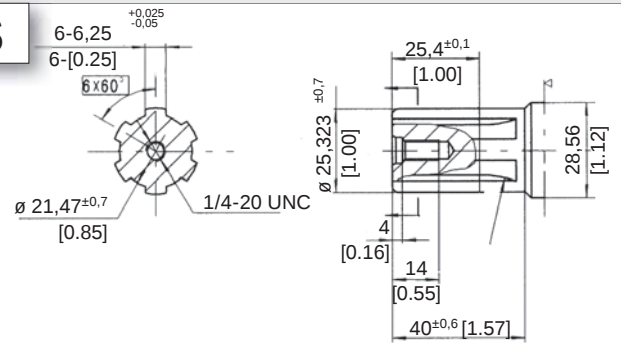
Shaft M: 35mm Keyed
Parallel key 10x8x45

G



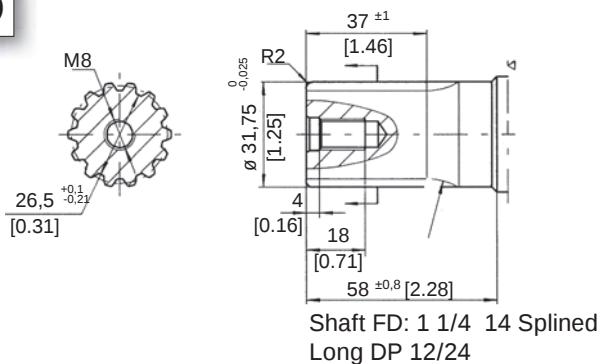
Shaft G: 1 1/4 Keyed
Parallel key .31x.31x1.25

S



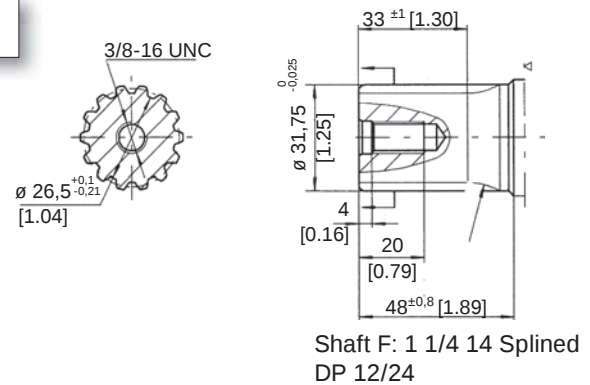
Shaft S: Splined SAE 6B

FD



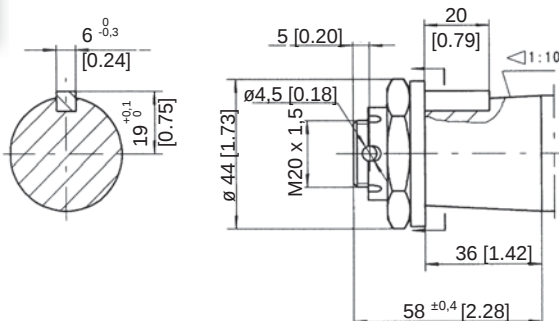
Shaft FD: 1 1/4 14 Splined
Long DP 12/24

F



Shaft F: 1 1/4 14 Splined
DP 12/24

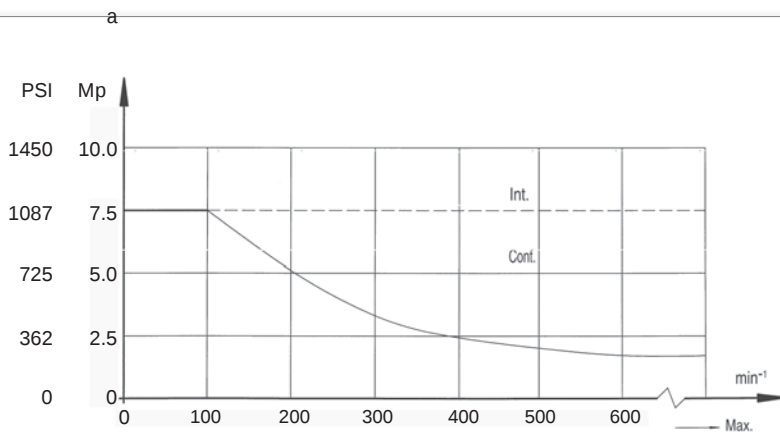
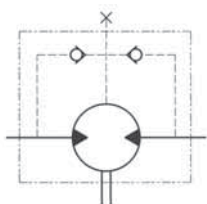
T1



Shaft T1: 35mm Tapered • Parallel key B6x6x20
Tightening torque: 200±10Nxm

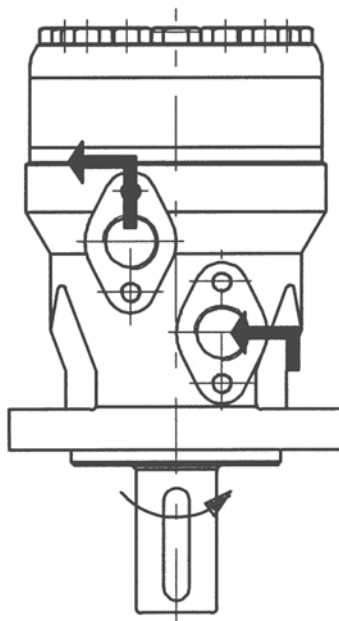
ADDITIONAL INFORMATION

PERMISSIBLE SHAFT SEAL PRESSURE



IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE. APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN THE DRAIN LINE.

SHAFT ROTATION DIRECTION



ORDERING INFORMATION

	1	2	3	4	5	6	7	8
YMH								

1	2	3	4	5	6	7
DISP.	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS
200	4 MAGNETO 3.25 PILOT	B Shaft: 32mm Keyed parallel key 10x8x45	D G1/2 Manifold mount 4 X M8 G1/4	NONE STANDARD	OO NO PAINT	NONE STANDARD
250		M Shaft: 35 Keyed parallel key 10x8x45	S 7/8-14 O-ring Manifold mount 4 X M8 7/16-20 UNF	R OPPOSITE	NONE BLUE	O NO CASE DRAIN
315		F Shaft: 11/4 14 splined 14-DP12/24	M M22 X 1.5 Manifold mount 4 x M8, M14 x 1.5		B BLACK	FR FREE RUNNING
400		FD Long Shaft: 11/4 14splined 14-DP12/24	P 1/2-14 NPTF Manifold 4xM8, 7/16-20UNF		S SILVER GRAY	LL LOW LEAKAGE VALVE
500		G Shaft: 11/4 Keyed parallel key .31x.31x11/4	R PT(Rc)1/2 Manifold mount 4 x M8 ,PT(Rc)1/4			CRS CORROSION RESISTANT SHAFT
		T1 35mm tapered parallel key B6x6x20				HPS HIGH PRESSURE SEAL
		S Shaft: Splined SAE 6B				HTS HIGH TEMP SEAL

Ordering Code:

All options have been determined with letters, numbers or combinations. All boxes must be filled with proper codes. If specification is not in the table, please contact us with your requirements.

YMSY



The **YMSY** series motors adapts an advanced **GEROLOR** gear set designed with disc distribution flow and high pressure.

This motor series uses the “**ROLOR**” gear type manufactured with most advanced technology and quality available to provide low pressure start up, smooth reliable operation and high efficiency.

The output shaft tapered roller bearings allow for high axial and radial forces.

Advanced design in disc distribution flow, which can automatically compensate in operating with high volume efficiency and long life.

The YMSY series has the same dimensions and mounting data as the YMS series. This series is rated **10-20%** higher for higher torque and higher pressure applications.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Disc Distribution	YMSY	[in ³ ./rev]	[4.88 ~ 22.88]	[PSI]	[3263]	RPM	[HP]	[32]
		cm ³ /rev.	80 ~ 415	MPA	22.5	30 ~ 800	Kw	24

QUICK REFERENCE GUIDE

Displacements				
[in ³ ./rev]	cm ³ /rev.			
[4.92]	80.6			
[6.15]	100.8			
[7.63]	125			
[9.40]	154	FLOW UP TO	90 LPM	[23.78 GPM]
[11.84]	194	PRESSURE UP TO	22.5 MPA	[3262 PSI]
[14.83]	243	TORQUE UP TO	1100 NM	[9728 LB. IN.]
[18.97]	311	SPEED UP TO	470 RPM	
[24.4]	394			
[28.98]	475			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedure to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated shafts or housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

DISTRIBUTION TYPE		YMSY 80	YMSY 100	YMSY 125	YMSY 160	YMSY 200	YMSY 250	YMSY 315	YMSY 400	YMSY 475	
GEOMETRIC DISPLACEMENT		[in³./rev.]	[4.92]	[6.15]	[7.63]	[9.40]	[11.84]	[14.83]	[18.97]	[24.04]	[28.98]
		cm³/rev.	80.6	100.8	125	154	194	243	311	394	475
MAX. SPEED RPM		RATED	675	540	432	337	270	216	171	135	110
		CONT.	800	748	600	470	375	300	240	185	155
		INT	988	900	720	560	450	360	280	225	185
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[1548]	[1946]	[2414]	[3936]	[4466]	[5483]	[6191]	[6766]	[6898]
		N*M	175	220	273	445	505	620	700	765	780
	CONT.	[LB. IN.]	[1990]	[2565]	[3228]	[4289]	[5183]	[6262]	[7783]	[7783]	[8048]
		N*M	225	290	365	485	586	708	880	880	910
	INT.	[LB. IN.]	[2211]	[2830]	[3538]	[4776]	[5704]	[7128]	[8490]	[8490]	[8490]
		N*M	250	320	400	540	645	806	960	960	960
MAX. OUTPUT [HP] KW	RATED	[HP]	[16]	[17]	[17]	[17]	[17]	[15]	[13]	[12]	
		KW	12	12.4	12.4	12.4	12.4	12.4	11.2	9.6	8.6
	CONT.	[HP]	[21]	[24]	[24]	[24]	[24]	[24]	[23]	[15]	[12]
		KW	16	18	18	18.1	18.1	18	17	11	9
	INT.	[HP]	[27]	[29]	[31]	[34]	[32]	[32]	[27]	[16]	[15]
		KW	20	22	23	25	24	23.8	20.2	12	11
MAX. PRES- SURE DROP [PSI] MP _A	RATED	[PSI]	[2320]	[2320]	[2320]	[2755]	[2755]	[2610]	[2320]	[2030]	[1740]
		MP _A	16	16	16	19	19	18	16	14	12
	CONT.	[PSI]	[2913]	[2913]	[2913]	[3045]	[3045]	[2900]	[2900]	[2320]	[2030]
		MP _A	20.5	20.5	20.5	21	21	20	20	16	14
	INT.	[PSI]	[3263]	[3263]	[3263]	[3263]	[3263]	[3263]	[3263]	[2538]	[2175]
		MP _A	22.5	22.5	22.5	22.5	22.5	22.5	22.5	17.5	15
PEAK	[PSI]	[4278]	[4278]	[4278]	[3263]	[3263]	[3263]	[3263]	[2900]	[2538]	
	MP _A	29.5	29.5	29.5	22.5	22.5	22.5	22.5	20	17.5	
MAX. FLOW [GPM] L/MIN	CONT.	[GPM]	[17.17]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
		L/MIN	65	75	75	75	75	75	75	75	75
	INT.	[GPM]	[21.14]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]
		L/MIN	80	90	90	90	90	90	90	90	90
MAX. INLET PRESSURE [PSI] MP _A	RATED	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MP _A	21	21	21	21	21	21	21	21	21
	CONT.	[PSI]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]
		MP _A	25	25	25	25	25	25	25	25	25
	INT.	[PSI]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]
		MP _A	30	30	30	30	30	30	30	30	30
WEIGHT [LB] KG		[LB]	[22]	[22.4]	[23]	[24]	[24]	[26]	[27]	[29]	[31]
		KG	9.8	10	10.3	10.7	11.1	11.6	12.3	13.2	14.3

- Rated speed and rated torque:
- Continuous pressure:
- Intermittent pressure:
- Peak pressure:

Output value of speed and torque under rated flow and rated pressure.
 Max. value of operating motor continuously.
 Max. value of operating motor in 6 seconds per minute.
 Max. value of operating motor in 0.6 second per minute.

PERFORMANCE DATA

YMSY 80 [4.92 in³/rev] 80.6 cm³/rev.

		[508]	[1015]	[1523]	[2030]	[2538]	[3045]	[3263]	[PSI] MPa
		3.5	7	10.5	14	17.5	20.5	22.5	
GPM	[3.9]	[310]	[708]	[1061]	[1397]	[1725]	[2016]	[2202]	
	15	35	80	120	158	195	228	249	
	[7.9]	[310]	[708]	[1061]	[1397]	[1725]	[2016]	[2202]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	30	35	80	120	158	195	232	260	
	[10.6]	[310]	[699]	[1057]	[1311]	[1707]	[2008]	[2211]	
	40	487	480	468	457	446	438	425	
	[13.2]	[265]	[681]	[1035]	[1353]	[1698]	[1981]	[2193]	
	50	30	77	117	153	192	224	248	
	[15.9]	[248]	[681]	[1035]	[1353]	[1698]	[1981]	[2149]	
	60	28	77	117	153	192	224	243	
Max cont.	[17.17]	[230]	[663]	[1026]	[1335]	[1663]	[1919]	[2087]	Max cont.
	65	26	75	116	151	188	217	236	
Max int.	[21.19]	[212]	[637]	[964]	[1256]	[1557]	[1823]	[2009]	Max int.
	80	24	72	109	142	176	206	227	
		981	968	955	925	893	870	832	

YMSY 100 [6.15 in³/rev] 100.8 cm³/rev.

		[508]	[1015]	[1523]	[2030]	[2538]	[3045]	[3263]	[PSI] MPa
		3.5	7	10.5	14	17.5	20.5	22.5	
GPM	[3.9]	[425]	[840]	[1327]	[1769]	[2211]	[2494]	[2742]	
	15	48	95	150	200	250	282	310	
	[7.9]	[398]	[831]	[1291]	[1751]	[2211]	[2565]	[2804]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	30	45	94	146	198	250	290	317	
	[10.6]	[380]	[787]	[1256]	[1733]	[2193]	[2517]	[2795]	
	40	43	89	142	196	248	288	316	
	[13.2]	[354]	[778]	[1194]	[1716]	[2184]	[2529]	[2786]	
	50	40	88	135	194	247	286	315	
	[15.9]	[327]	[778]	[1167]	[1636]	[2158]	[2563]	[2759]	
	60	37	88	132	185	244	283	312	
Max cont.	[19.8]	[310]	[708]	[1150]	[1592]	[2123]	[2467]	[2742]	Max cont.
	75	35	80	130	180	240	279	310	
Max int.	[23.8]	[245]	[663]	[1047]	[1503]	[2087]	[2397]	[2684]	Max int.
	90	30	75	124	170	236	271	303	
		850	840	810	787	770	750	747	

YMSY 125 [1.63 in³/rev] 125 cm³/rev.

		[508]	[1015]	[1523]	[2030]	[2538]	[3045]	[3263]	[PSI] MPa
		3.5	7	10.5	14	17.5	20.5	22.5	
GPM	[3.9]	[486]	[1061]	[1557]	[2167]	[2733]	[3051]	[3317]	
	15	55	120	176	245	309	345	375	
	[7.9]	[486]	[1061]	[1548]	[2241]	[2786]	[3219]	[3573]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	30	55	120	175	250	315	364	404	
	[10.6]	[469]	[1044]	[1574]	[2211]	[2786]	[3219]	[3564]	
	40	53	118	178	250	315	364	403	
	[13.2]	[442]	[1017]	[1557]	[2193]	[2784]	[3201]	[3511]	
	50	50	115	176	248	315	362	397	
	[15.9]	[398]	[999]	[1512]	[2131]	[2729]	[3166]	[3511]	
	60	45	113	171	241	308	358	397	
Max cont.	[19.8]	[398]	[913]	[1477]	[2123]	[2706]	[3113]	[3440]	Max cont.
	75	45	110	167	240	306	352	389	
Max int.	[23.8]	[354]	[929]	[1433]	[2096]	[2662]	[3033]	[3343]	Max int.
	90	40	105	162	237	301	343	378	
		710	696	680	661	646	628	610	

YMSY 160 [9.4 in³/rev] 154 cm³/rev.

		[508]	[1015]	[1523]	[2030]	[2538]	[3045]	[3263]	[PSI] MPa
		3.5	7	10.5	14	17.5	21	22.5	
GPM	[3.9]	[619]	[1256]	[1901]	[2636]	[3290]	[3847]	[4210]	
	15	70	142	215	298	372	435	476	
	[7.9]	[646]	[1335]	[1990]	[2759]	[3378]	[4033]	[4351]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	30	73	151	225	312	382	456	492	
	[10.6]	[663]	[1344]	[2016]	[2777]	[3387]	[4015]	[4316]	
	40	75	152	228	314	383	454	488	
	[13.2]	[619]	[1309]	[1990]	[2697]	[3290]	[3936]	[4245]	
	50	70	148	225	305	372	445	480	
	[15.9]	[601]	[1265]	[1928]	[2618]	[3272]	[3909]	[4245]	
	60	68	143	218	296	370	442	480	
Max cont.	[19.8]	[548]	[1238]	[1866]	[2574]	[3228]	[3883]	[4201]	Max cont.
	75	62	140	211	291	365	439	475	
Max int.	[23.8]	[522]	[1159]	[1786]	[2529]	[3157]	[3759]	[4068]	Max int.
	90	59	131	202	286	357	425	460	
		567	561	554	543	532	520	509	

PERFORMANCE DATA

YMSY 200 [11.8 in³/rev] 194 cm³/rev.

		[508]	[1015]	[1523]	[2030]	[2538]	[3045]	[3263]	[PSI] MPa
		3.5	7	10.5	14	17.5	21	22.5	
GPM	[3.9]	[769]	[1583]	[2414]	[3281]	[4166]	[4970]	[5395]	
	15	87	179	273	371	471	562	610	
	[7.9]	[805]	[1680]	[2547]	[3414]	[4325]	[5059]	[5466]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	30	91	190	288	386	489	572	618	
	[10.6]	[831]	[1707]	[2618]	[3485]	[4404]	[5165]	[5704]	
	40	94	193	296	394	498	584	645	
	[13.2]	[796]	[1689]	[2582]	[3440]	[4360]	[5130]	[5607]	
	50	90	191	292	389	493	580	634	
	[15.9]	[752]	[1636]	[2467]	[3378]	[4272]	[5085]	[5501]	
	60	85	185	279	382	483	575	622	
Max cont.	[19.8]	[690]	[1557]	[2397]	[3272]	[4174]	[4961]	[5395]	Max cont.
	75	78	176	271	370	472	561	610	
Max int.	[23.8]	[601]	[1442]	[2344]	[3193]	[4033]	[4820]	[5298]	Max int.
	90	68	163	265	361	456	545	599	

YMSY 250 [14.8 in³/rev] 243 cm³/rev.

		[508]	[1015]	[1523]	[2030]	[2537]	[2900]	[3262]	[PSI] MPa
		3.5	7	10.5	14	17.5	20	22.5	
GPM	[3.9]	[773]	[2043]	[3104]	[4086]	[5174]	[6023]	[6881]	
	15	110	231	351	462	585	681	778	
	[7.9]	[1026]	[2087]	[3175]	[4201]	[5280]	[6191]	[6987]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	30	116	236	359	475	597	700	790	
	[10.6]	[1044]	[2131]	[3210]	[4245]	[5298]	[6244]	[7040]	
	40	118	241	363	480	599	706	796	
	[13.2]	[982]	[2069]	[3113]	[4174]	[5227]	[6129]	[6969]	
	50	111	234	352	472	591	693	788	
	[15.9]	[937]	[1981]	[3051]	[4086]	[5147]	[6058]	[6828]	
	60	106	224	345	462	582	685	772	
Max cont.	[19.8]	[893]	[1893]	[3007]	[4015]	[5041]	[5925]	[6721]	Max cont.
	75	101	214	340	454	570	670	760	
Max int.	[23.8]	[822]	[1848]	[2963]	[3953]	[4944]	[5811]	[6624]	Max int.
	90	93	209	335	447	559	657	749	

YMSY 315 [18.9 in³/rev] 311 cm³/rev.

		[508]	[1015]	[1522]	[2030]	[2537]	[2900]	[3262]	[PSI] MPa
		3.5	7	10.5	14	17.5	20	22.5	
GPM	[3.9]	[1309]	[2689]	[4033]	[5421]	[6739]	[7774]	[8649]	
	15	148	304	456	613	762	879	978	
	[7.9]	[1371]	[2777]	[4112]	[5616]	[6881]	[7818]	[8738]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	30	155	314	465	635	778	884	988	
	[10.6]	[1415]	[2839]	[4236]	[5749]	[7040]	[8013]	[8817]	
	40	160	321	479	650	796	906	997	
	[13.2]	[1371]	[2777]	[4112]	[5642]	[6898]	[7836]	[8738]	
	50	155	314	465	638	780	886	988	
	[15.9]	[1535]	[2706]	[4006]	[5483]	[6766]	[7836]	[8632]	
	60	151	306	453	620	765	886	976	
Max cont.	[19.8]	[1291]	[2653]	[3936]	[5421]	[6677]	[7739]	[8543]	Max cont.
	75	146	300	445	613	755	875	966	
Max int.	[23.8]	[1194]	[2512]	[3856]	[5315]	[6545]	[7632]	[8419]	Max int.
	90	135	284	436	601	740	863	952	

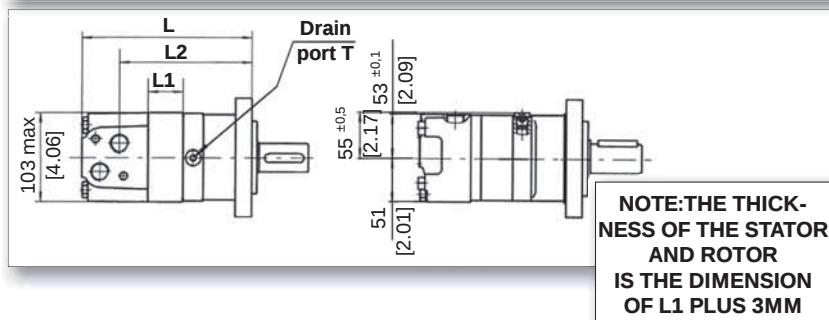
YMSY 400 [24.0 in³/rev] 394 cm³/rev.

		[508]	[1015]	[1523]	[2030]	[2320]	[2538]	[PSI] MPa
		3.5	7	10.5	14	16	17.5	
GPM	[3.9]	[1645]	[3352]	[5112]	[6889]	[7924]	[8720]	
	15	186	379	578	779	896	986	
	[7.9]	[1680]	[3431]	[5218]	[6996]	[8004]	[8764]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	30	190	388	590	791	905	991	
	[10.6]	[1725]	[3485]	[5271]	[7049]	[8066]	[8826]	
	40	195	394	596	797	912	998	
	[13.2]	[1689]	[3431]	[5191]	[6943]	[7995]	[8694]	
	50	191	388	587	785	904	983	
	[15.9]	[1645]	[3431]	[5191]	[6943]	[7995]	[8694]	
	60	186	388	587	785	904	983	
Max cont.	[19.8]	[1601]	[3290]	[5094]	[6810]	[7880]	[8605]	Max cont.
	75	181	372	576	770	891	973	
Max int.	[23.8]	[1557]	[3246]	[5050]	[6775]	[7809]	[8534]	Max int.
	90	176	367	571	766	883	965	

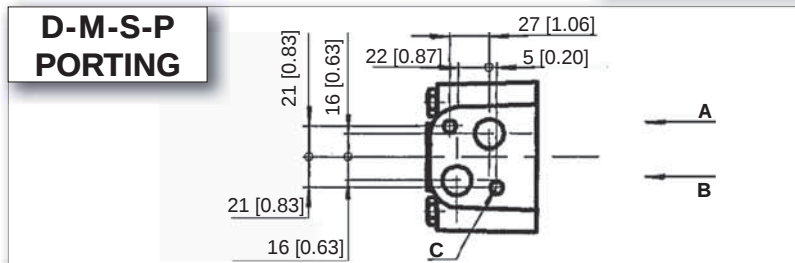
PERFORMANCE DATA

YMSY 475 [28.9 in ³ /rev] 475 cm ³ /rev.						Max cont.	Max int.
	[508]	[1015]	[1523]	[2030]	[2538]	[PSI]	
	3.5	7	10.5	14	17.5	MPa	
GPM	[3.9]	[1928]	[3883]	[5843]	[7889]	[8800]	
L/ min	15	218	439	661	892	995	
		30	29	28	27	25	
	[7.9]	[1972]	[3980]	[5979]	[8048]	[8862]	TORQUE [LB-IN]
	30	223	450	676	910	1002	TORQUE (N•M)
		61	60	58	56	53	SPEED (RPM)
Flow (L/min)	[10.6]	[2016]	[4077]	[6094]	[8198]	[8994]	
	40	228	461	689	927	1017	
		82	80	77	74	68	
	[13.2]	[1981]	[4033]	[6032]	[8136]	[8915]	
	50	224	456	682	920	1008	
		103	101	97	92	86	
	[15.9]	[1946]	[3989]	[5987]	[8075]	[8826]	
	60	220	451	677	913	998	
		123	121	118	112	105	
Max cont	[19.8]	[1875]	[3918]	[5872]	[7968]	[8667]	
	75	212	443	664	901	980	
		155	153	147	140	132	Max cont.
Max int.	[23.8]	[1733]	[3723]	[5687]	[7756]	[8481]	
	90	196	421	643	877	959	
		186	184	178	170	157	Max int.

MOUNTING DATA



	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
YMSY 80	[6.69]	[0.63]	[4.98]	170	16	126.5
YMSY 100	[6.85]	[0.79]	[5.14]	174	20	130.5
YMSY 125	[7.05]	[0.98]	[5.33]	179	25	135.5
YMSY 160	[7.15]	[1.09]	[5.43]	181.5	27.5	137.7
YMSY 200	[7.44]	[1.39]	[5.72]	189	35.1	145.2
YMSY 250	[7.92]	[1.85]	[6.19]	201	47	157.2
YMSY 315	[8.39]	[2.33]	[6.67]	213	59	169.2
YMSY 400	[25.4]	[2.72]	[7.07]	223	69	179.5
YMSY 475	[9.33]	[3.27]	[7.22]	237	83	183.5

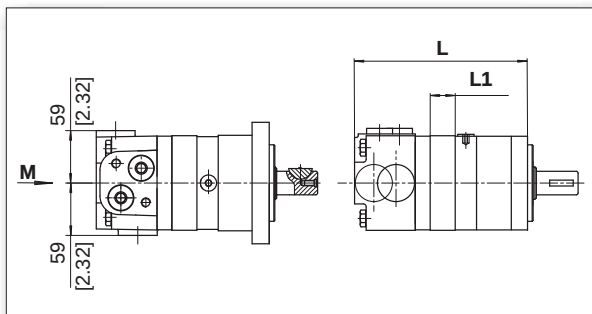


	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
YMSY 80 W	[5.22]	[0.63]	[3.50]	132.5	16	89
YMSY 100 W	[5.37]	[0.79]	[3.66]	136.5	20	93
YMSY 125 W	[5.57]	[0.98]	[3.86]	141.5	25	98
YMSY 160 W	[5.67]	[1.08]	[3.96]	143.9	27.5	100.5
YMSY 200 W	[5.96]	[1.38]	[4.25]	151.4	35.1	108
YMSY 250 W	[6.43]	[1.85]	[4.72]	163.4	47	120
YMSY 315 W	[6.91]	[2.32]	[5.20]	175.4	59	132
YMSY 400 W	[7.30]	[2.72]	[5.59]	185.5	69	142
YMSY 475 W	[7.85]	[3.27]	[6.14]	199.5	83	156

PORT & DRAIN PORT ORDERING CODES

ORDER CODE	D depth	M depth	S depth	P depth
PORTS - A AND B	G 1/2 18 mm	M 22 x 1.5 18 mm	7/8-14 O-ring 18 mm	1/2-14 NPT 15 mm
TANK PORT - T	G 1/4 12 mm	M 14 x 1.5 12 mm	7/16-20UNF 12 mm	7/16-20 UNF 12 mm
BOLTS-C	2-M10 13 mm	2-M10 13 mm	2-3/8-16 unc 13 mm	2-3/8-16 unc 13 mm

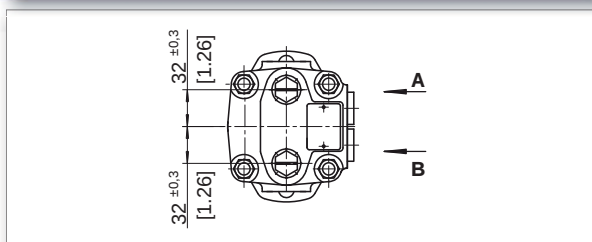
MOUNTING DATA



	[INCHES]		MILLIMETERS	
MODEL	L	L1	L	L1
YMSY 80	[6.93]	[0.63]	176	16
YMSY 100	[7.09]	[0.79]	180	20
YMSY 125	[7.28]	[0.98]	185	25
YMSY 160	[7.36]	[1.06]	187	27
YMSY 200	[7.64]	[1.34]	194	34
YMSY 250	[7.95]	[1.65]	202	42
YMSY 315	[8.43]	[2.13]	214	54
YMSY 400	[9.02]	[2.72]	229	69
YMSY 475	[9.57]	[3.27]	243	83

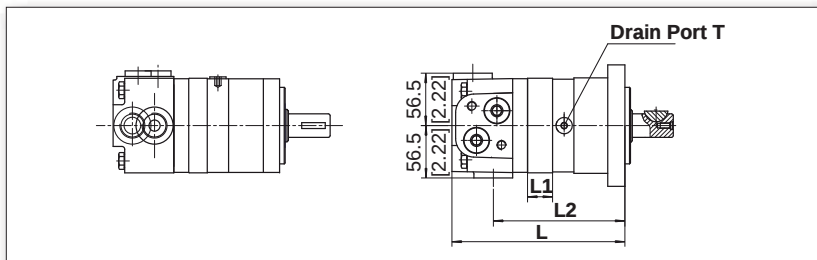
	[INCHES]		MILLIMETERS	
MODEL	L	L1	L	L1
YMSY 80 WE	[5.83]	[0.63]	148	16
YMSY 100 WE	[5.98]	[0.79]	152	20
YMSY 125 WE	[6.18]	[0.98]	157	25
YMSY 160 WE	[6.26]	[1.06]	159	27
YMSY 200 WE	[6.54]	[1.34]	166	34
YMSY 250 WE	[6.85]	[1.65]	174	42
YMSY 315 WE	[7.32]	[2.13]	186	54
YMSY 400 WE	[7.91]	[2.72]	201	69
YMSY 475 WE	[8.46]	[3.27]	215	83

PORTING END PORTS



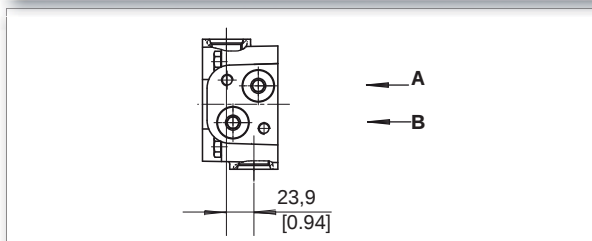
PORT & DRAIN PORT ORDERING CODES

ORDER CODE	EE-D depth	EE-M2 depth	EE-S2 depth
PORTS - A AND B	G 1/2 18 mm	M22x1.5 - 18 mm	7/8-14 O-ring 18 mm
TANK PORT - T	G 1/4 12 mm	M14x1.5 - 12 mm	7/16-20 UNF 12 mm



	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
YMSY 80	[6.93]	[0.63]	[5.12]	176	16	130
YMSY 100	[7.09]	[0.79]	[5.28]	180	20	134
YMSY 125	[7.28]	[0.98]	[5.47]	185	25	139
YMSY 160	[7.36]	[1.06]	[5.55]	187	27	141
YMSY 200	[7.64]	[1.34]	[5.83]	194	34	148
YMSY 250	[7.95]	[1.65]	[6.14]	202	42	156
YMSY 315	[8.43]	[2.13]	[6.61]	214	54	168
YMSY 400	[9.02]	[2.72]	[7.20]	229	69	183
YMSY 475	[9.57]	[3.27]	[7.76]	243	83	197

ED PORTING 180° PORTS

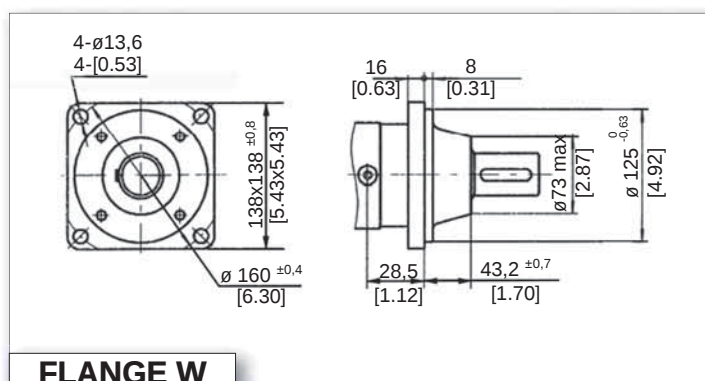
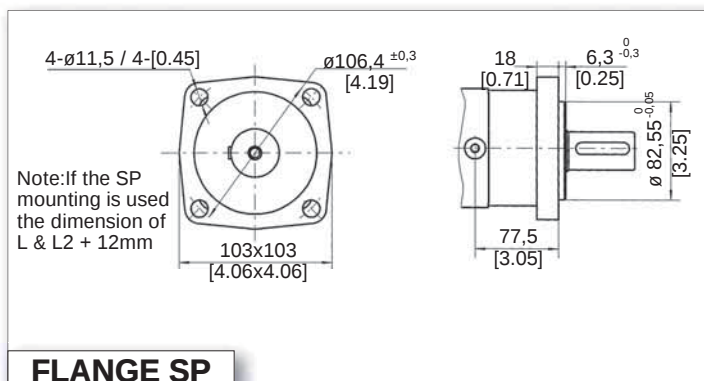
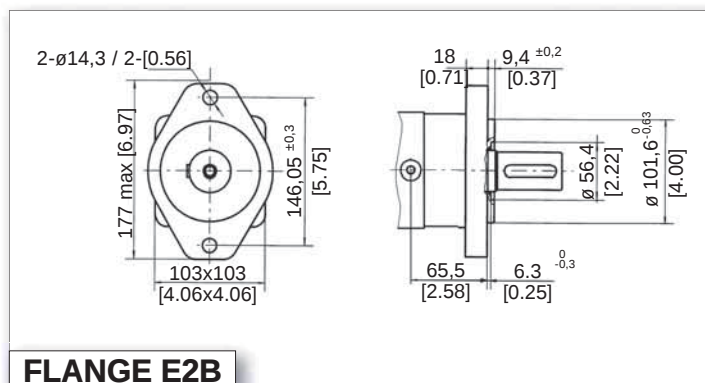
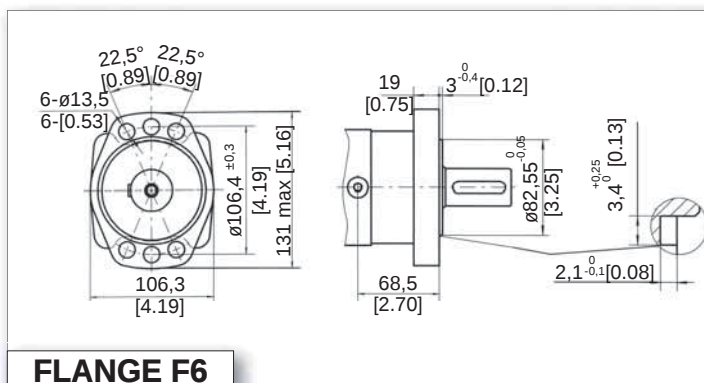
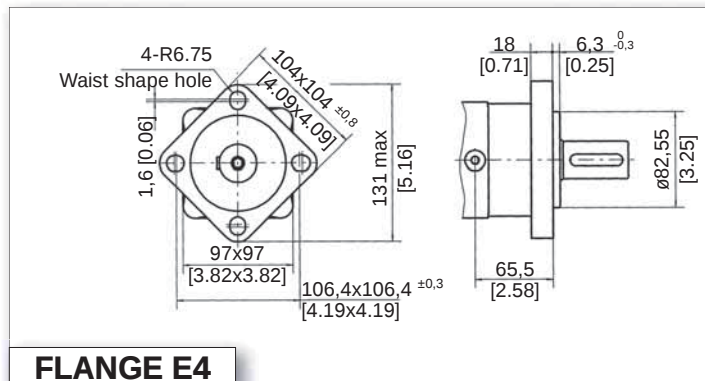
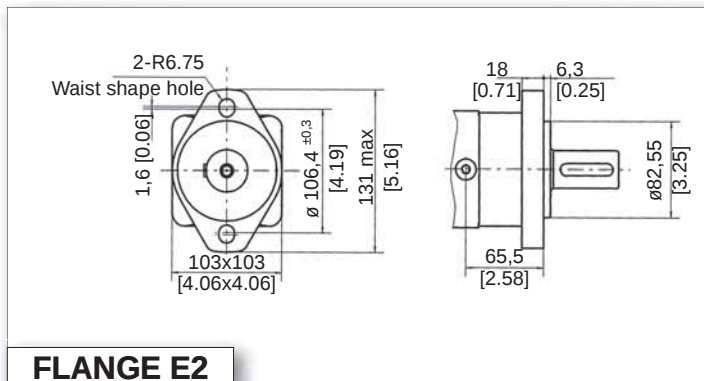


PORT & DRAIN PORT ORDERING CODES

ORDER CODE	ED depth
PORTS - A AND B	1-1/16-12 UN O-ring 18 mm
T	7/16-20 UNF 12 mm

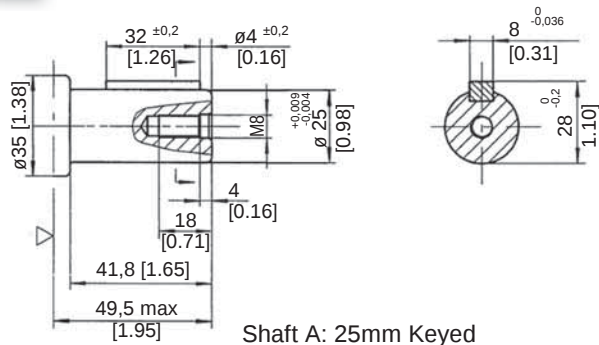
	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
YMSY 80	[5.83]	[0.63]	[4.02]	148	16	102
YMSY 100	[5.98]	[0.79]	[4.17]	152	20	106
YMSY 125	[6.18]	[0.98]	[4.37]	157	25	111
YMSY 160	[6.26]	[1.06]	[4.45]	159	27	113
YMSY 200	[6.54]	[1.34]	[4.69]	166	34	119
YMSY 250	[7.01]	[1.65]	[5.00]	178	42	127
YMSY 315	[7.48]	[2.13]	[5.47]	190	54	139
YMSY 400	[8.07]	[2.72]	[6.06]	205	69	154
YMSY 475	[8.62]	[3.27]	[6.61]	219	83	168

MOUNTING DATA



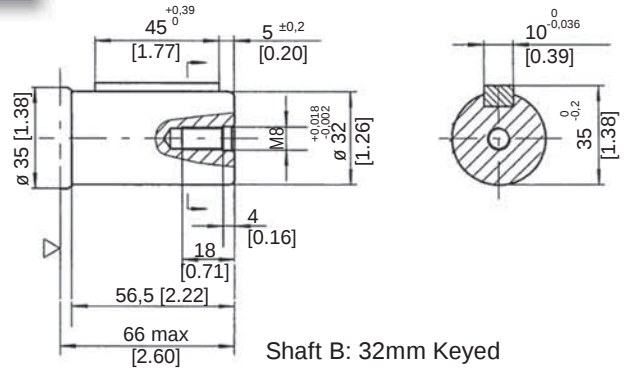
MOTOR SHAFT EXTENSIONS

A



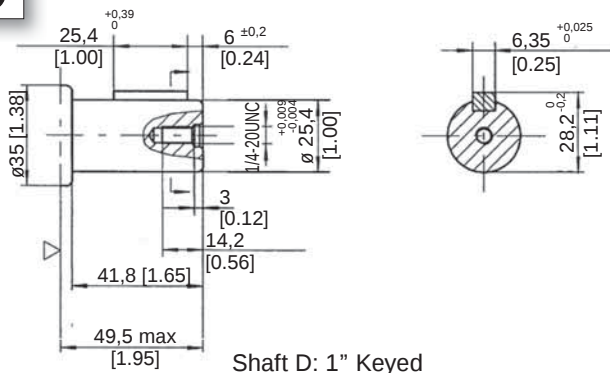
Shaft A: 25mm Keyed
Parallel key 8x7x32

B



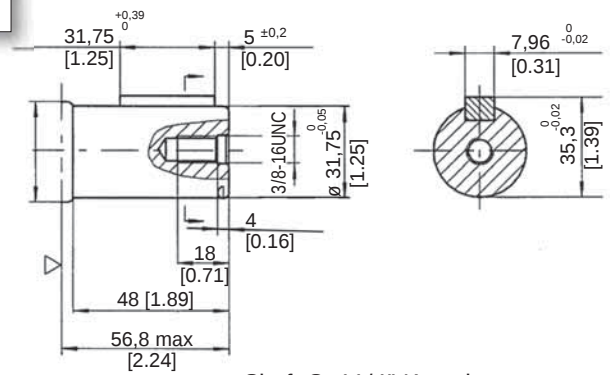
Shaft B: 32mm Keyed
Parallel key 10x8x45

D



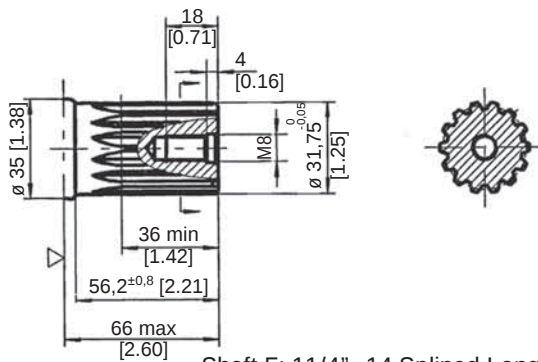
Shaft D: 1" Keyed
Parallel key .25x.25x1.0

G



Shaft G: 1 1/4" Keyed
Parallel key .31x.31x1.25

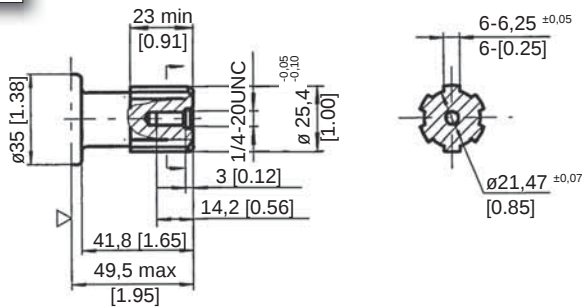
FD



Shaft F: 1 1/4" -14 Splined Long
14-DP12/24

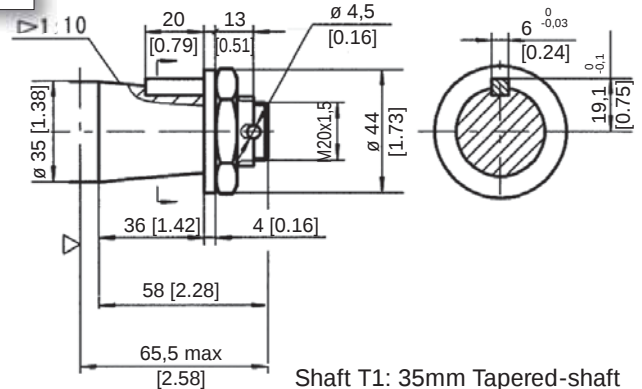
MOTOR SHAFT EXTENSIONS

S1



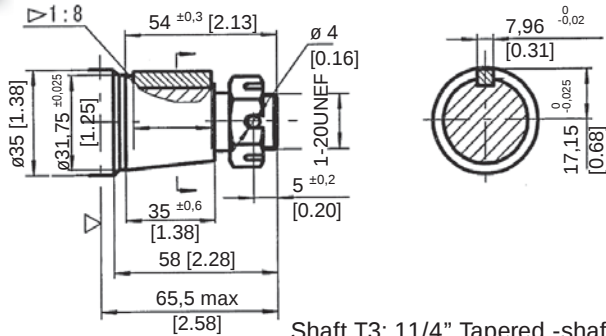
Shaft S1: Splined SAE 6B

T1



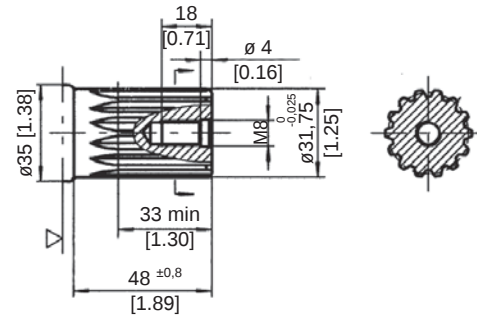
Shaft T1: 35mm Tapered-shaft
Parallel key B6x6x20

T3



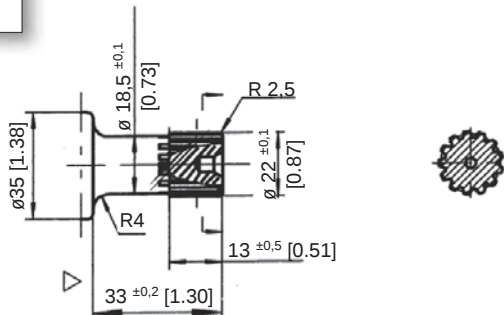
Shaft T3: 11/4" Tapered -shaft
Parallel key .31x.31x11/4
Tightening torque:200±10Nm

F



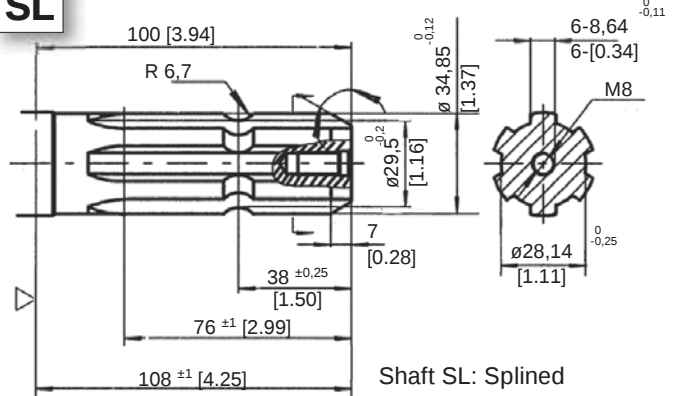
Shaft F : 11/4" 14 Splined Take out
14-DP12/24

I



Shaft I: 7/8" 13 Splined
13-DP16/32

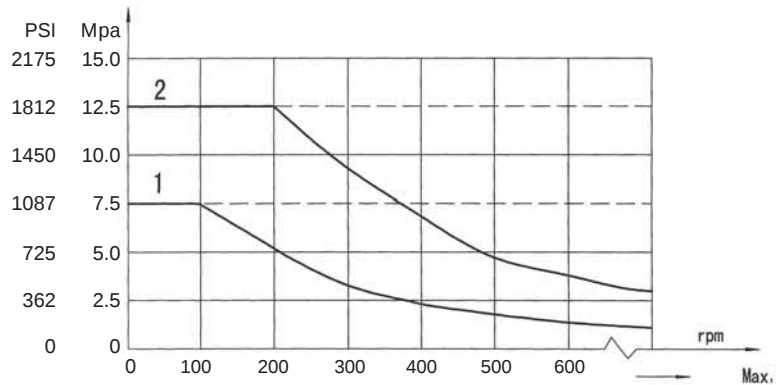
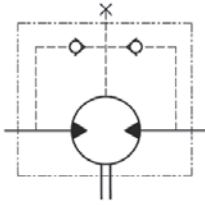
SL



Shaft SL: Splined
6-34.85x28.14x8.64

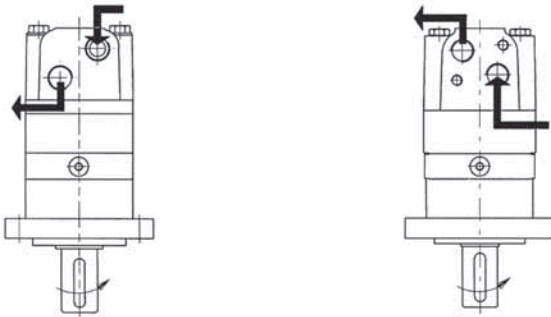
ADDITIONAL DATA

PERMISSIBLE SHAFT SEAL PRESSURE



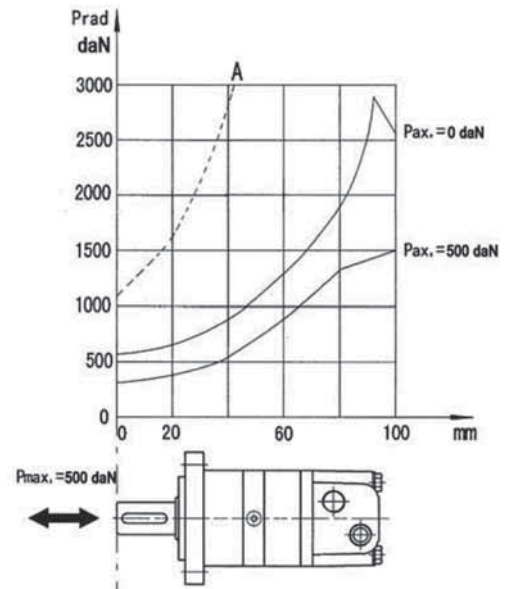
IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE. IN APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN DRAIN LINE.

DIRECTION OF SHAFT ROTATION



WHEN FACING SHAFT END OF MOTOR, SHAFT TO ROTATE: CLOCKWISE WHEN PORT "A" IS PRESSURIZED. COUNTER CLOCK WISE WHEN PORT "B" IS PRESSURIZED.

AXIAL AND RADIAL FORCES



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM

ORDERING INFORMATION

1	2	3	4	5	6	7
YMSY						

1	2		3		4		5		6		7	
DISP.	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT		SPECIAL OPTIONS	
80	E2	SAE 2-Bolt , pilot 3.25x.25	A	Shaft :25mm Keyed, parallel Key 8×7×32	D	G1/2 Manifold Mount 2-M10, G1/4	NONE	STAN- DARD	OO	NO PAINT	NONE	STANDARD
100	E4	4- Bolt flange, pilot 3.25x.25	B	Shaft: 32mm Keyed parallel Key 10×8×45	M	M22×1.5 Manifold Mount 2-M10, M14×1.5	R	OPPOSITE	NONE	BLUE	FR	FREE RUN- NING
125	F6	Magneto flange, pilot 3.25x.25	D	Shaft: 1" Keyed parallel Key .25x.25x1.0	S	7/8-14 O-ring manifold 2-3/8-16 UNC, 7/16-20UNF			B	BLACK	LL	LOW LEAKAGE
160	SP	4 Bolt-flange, pilot 3.25x.25	G	Shaft: 11/4" Keyed parallel Key .31x.31x1.25	P	1/2-14 NPTF Manifold 2-3/8-16 UNC, 7/16-20UNF			S	SILVER GRAY	LSV	LOW SPEED VALVE
200	W	4-Ø13.5 Wheel-flange, pilot Ø125×8	F	Shaft: 11/4-14,splined 14-DP12/24	EE M2	M22X1,5 M14X1,5					CRS	CORROSION RESISTANT SHAFT
250	E2B	SAE B 2-Bolt pilot 4.00x.37	FD	Long Shaft: 11/4-14 splined splined14-DP12/24	EE S2	7/8-14 UNF O-RING 7/16-20 UNF					HPS	HIGH PRESSURE SEAL
315			SL	Shaft Ø34.85 ,Splined 6-34.85×28.14×8.64	ED	1-1/16-12 UF O-RING, 7/16-20 UNF					HTS	HIGH TEMP SEAL
400			T1	35mm Tapered parallel key b6x6x20								
475			T3	shaft: 11/4 Tape- red parallel Key .31x.31x1.250								
			S1	Shaft :SAE-6 B splined								
			I	Shaft: 7/8-13 splined 13-DP16/32								

Ordering code:

All options have been determined with letters, numbers or combinations. All boxes must be filled with proper codes. If specification is not in the table , please contact us with your specific requirements.

YMSE



The **YMSE** series motors incorporate the advanced **GEROLOR** gear set which reduces internal friction to a minimum. A “DISC VALVE” distribution system which is internally balanced to reduce friction, leakage and permits better speed control producing higher efficiency, smoother rotation, higher speed and pressure.

The series has many sizes and options to make it very flexible for many applications. The output shaft is mounted on tapered roller bearings for high radial and axial load for very high duty applications

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Disc Distribution	YMSE	[in ³ ./rev]	[4.88 ~ 22.88]	[PSI]	[3263]	RPM	[HP]	[27]
		cm ³ /rev.	80 ~ 375	MPa	22.5	30 ~ 800	Kw	20

QUICK REFERENCE GUIDE

YMSE SERIES QUICK REFERENCE:

Displacements				
[in ³ ./rev]	cm ³ /rev.			
[4.92]	80.6	FLOW UP TO	90 LPM	[23.78 GPM]
[6.15]	100.8	PRESSURE UP TO	22.5 MPA	[3262 PSI]
[7.63]	125	TORQUE UP TO	751 NM	[3944 LB. IN.]
[9.59]	157.2	SPEED UP TO	446 RPM	
[12.2]	200			
[15.38]	252			
[19.19]	314.5			
[22.57]	370			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated shafts or housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

For individual motor performance charts consult equivalent YMS series data

DISTRIBUTION TYPE		YMSE 80	YMSE 100	YMSE 125	YMSE 160	YMSE 200	YMSE 250	YMSE 315	YMSE 375
GEOMETRIC DISPLACEMENT	[in ³ ./rev.]	[4.92]	[6.16]	[7.63]	[9.60]	[12.21]	[15.38]	[19.20]	[22.58]
	cm ³ /rev.	80.6	100.8	125	157.2	200	252	314.5	370
MAX. SPEED RPM	RATED	675	540	432	337	270	216	171	145
	CONT.	800	748	600	470	375	300	240	200
	INT	988	900	720	560	450	360	280	240
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[1548]	[1946]	[2414]	[2795]	[3007]	[3980]	[4953]
		N*M	175	220	273	316	340	450	536
	CONT.	[LB. IN.]	[1680]	[2123]	[2742]	[2795]	[3538]	[3980]	[4953]
		N*M	190	240	310	316	400	450	536
	INT.	[LB. IN.]	[2123]	[2653]	[3272]	[3803]	[4121]	[4776]	[5819]
		N*M	240	300	370	430	466	540	645
	PEAK	[LB. IN.]	[2299]	[2830]	[3538]	[4174]	[5749]	[6102]	[6545]
		N*M	260	320	400	472	650	690	751
MAX. OUTPUT [HP] KW	RATED	[HP]	[17]	[17]	[17]	[15]	[13]	[14]	[12]
		KW	12.4	12.4	12.4	11.2	9.6	10.2	8.6
	CONT.	[HP]	[21]	[25]	[26]	[21]	[21]	[19]	[16]
		KW	15.9	18.	19.5	15.6	15.7	14.1	11.8
	INT.	[HP]	[27]	[32]	[32]	[29]	[25]	[23]	[23]
		KW	20.1	23.5	23.2	21.2	18.3	17.0	17
MAX. PRES-SURE DROP [PSI] MPa	RATED	[PSI]	[2320]	[2320]	[2320]	[2175]	[1813]	[1813]	[1740]
		MPa	16	16	16	15	12.5	12.5	12
	CONT.	[PSI]	[2538]	[2538]	[2538]	[2175]	[2030]	[1813]	[1740]
		MPa	17.5	17.5	17.5	15	14	12.5	12
	INT.	[PSI]	[3045]	[3045]	[3045]	[3045]	[2320]	[2320]	[2030]
		MPa	21	21	21	21	16	16	14
	PEAK	[PSI]	[3263]	[3263]	[3263]	[3263]	[3263]	[2900]	[2683]
		MPa	22.5	22.5	22.5	22.5	22.5	20	18.5
MAX. FLOW [GPM] L/MIN	CONT.	[GPM]	[17.1]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
		L/MIN	65	75	75	75	75	75	75
	INT.	[GPM]	[21.1]	[23.7]	[23.7]	[23.]	[23.7]	[23.7]	[23.7]
		L/MIN	80	90	90	90	90	90	90
MAX. INLET PRESSURE [PSI] MPa	RATED	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21	21
	CONT.	[PSI]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]
		MPa	25	25	25	25	25	25	25
	INT.	[PSI]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]
		MPa	30	30	30	30	30	30	30
WEIGHT [LB] KG	[LB]	[22]	[22]	[23]	[24]	[24]	[26]	[27]	[28]
	KG	9.8	10	10.3	10.7	11.1	11.6	12.3	12.6

- Rated speed and rated torque: Output value of speed and torque under rated flow and rated pressure.
- Continuous pressure: Max. value of operating motor continuously.
- Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- Peak pressure: Max. value of operating motor in 0.6 second per minute.

PERFORMANCE DATA

YMSE 80

		[4.92 in ³ /rev] 80.6 cm ³ /rev.				Max cont.	Max int.	[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3045] 21		
GPM L/min	[3.9]	[310] 35	[707] 80	[1061] 120	[1397] 158	[1724] 195	[2078] 235		
	15	180	174	168	164	158	151		
Flow (L/min)	[7.9]	[310] 35	[707] 80	[1061] 120	[1397] 158	[1724] 195	[2122] 240	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	30	362	352	346	338	330	322		
	[10.6]	[310] 35	[699] 79	[1052] 119	[1371] 155	[1707] 193	[2070] 234		
	40	482	473	464	453	444	434		
	[13.2]	[265] 30	[681] 77	[1035] 117	[1353] 153	[1698] 192	[2052] 232		
	50	602	594	587	569	560	551		
Max cont.	[15.8]	[248] 28	[681] 77	[1035] 117	[1353] 153	[1698] 192	[2052] 232		
	60	724	713	707	683	673	664		
	[19.8]	[221] 25	[663] 75	[1008] 114	[1344] 152	[1680] 190	[2034] 230	Max cont.	
	75	840	832	817	796	786	777		
Max int.	[23.8]	[212] 24	[646] 73	[973] 110	[1327] 150	[1636] 185	[1990] 225	Max int.	
	90	900	893	872	853	843	834		

YMSE 100

		6.16 in ³ /rev] 100.8 cm ³ /rev.				Max cont.	Max int.	[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3045] 21		
GPM L/min	[3.9]	[425] 48	[840] 95	[1327] 150	[1769] 200	[2211] 250	[2556] 289		
	15	146	144	139	135	130	120		
Flow (L/min)	[7.9]	[398] 45	[831] 94	[1291] 146	[1751] 198	[2211] 250	[2609] 295	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	30	291	289	278	274	269	258		
	[10.6]	[380] 43	[787] 89	[1256] 142	[1733] 196	[2193] 248	[2591] 293		
	40	387	384	374	359	350	335		
	[13.2]	[354] 40	[778] 88	[1194] 135	[1716] 194	[2184] 247	[2582] 292		
	50	486	483	473	462	450	430		
Max cont.	[15.8]	[327] 37	[778] 88	[1167] 132	[1636] 185	[2158] 244	[2556] 289		
	60	588	584	574	562	550	538		
	[19.8]	[310] 35	[708] 80	[1150] 130	[1592] 180	[2123] 240	[2529] 286	Max cont.	
	75	740	735	720	705	696	676		
Max int.	[23.8]	[265] 30	[663] 75	[1097] 124	[1503] 170	[2087] 236	[2450] 277	Max int.	
	90	850	840	810	787	770	750		

YMSE 125

		[7.63 in ³ /rev] 125 cm ³ /rev.				Max cont.	Max int.	[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3045] 21		
GPM L/min	[3.9]	[486] 55	[1061] 120	[1557] 176	[2167] 245	[2733] 309	[3087] 349		
	15	112	110	103	96	93	90		
Flow (L/min)	[7.9]	[486] 55	[1061] 120	[1548] 175	[2211] 250	[2865] 324	[3317] 375	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	30	222	220	217	208	200	199		
	[10.6]	[486] 55	[1061] 120	[1548] 175	[2211] 250	[2865] 324	[3272] 370		
	40	302	298	292	284	276	268		
	[13.2]	[442] 50	[1017] 115	[1557] 176	[2193] 248	[2830] 320	[3272] 370		
	50	379	373	368	363	350	339		
Max cont.	[15.8]	[398] 45	[999] 113	[1512] 171	[2167] 245	[2865] 324	[3255] 368		
	60	456	448	443	439	425	406		
	[19.8]	[398] 45	[973] 110	[1477] 167	[2123] 240	[2777] 314	[3272] 370	Max cont.	
	75	570	563	555	546	533	515		
Max int.	[23.8]	[354] 40	[929] 105	[1433] 162	[2096] 237	[2733] 309	[3228] 365	Max int.	
	90	685	676	670	659	644	625		

YMS 160

		[9.60 in ³ /rev] 157.2 cm ³ /rev.				Max cont.	Max int.	[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3045] 21		
GPM L/min	[3.9]	[619] 70	[1238] 140	[1813] 205	[2697] 305	[3281] 371	[3803] 430		
	15	91	88	84	78	76	74		
Flow (L/min)	[7.9]	[663] 75	[1327] 150	[1893] 214	[2839] 321	[3361] 380	[3776] 427	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	30	185	182	176	168	164	162		
	[10.6]	[619] 70	[1327] 150	[1901] 215	[2830] 320	[3343] 378	[3759] 425		
	40	248	244	239	229	224	217		
	[13.2]	[575] 65	[1282] 145	[1901] 215	[2795] 316	[3343] 378	[3759] 425		
	50	312	308	304	294	288	280		
Max cont.	[15.8]	[575] 65	[1282] 145	[1893] 214	[2786] 315	[3317] 375	[3750] 424		
	60	375	371	365	357	346	336		
	[19.8]	[531] 60	[1221] 138	[1840] 208	[2751] 311	[3317] 375	[3714] 420	Max cont.	
	75	470	465	458	447	436	426		
Max int.	[23.8]	[495] 56	[1150] 130	[1769] 200	[2724] 308	[3272] 370	[3661] 414	Max int.	
	90	564	559	551	541	526	517		

PERFORMANCE DATA

YMSE 200

Y MSE 200 [12.21 in ³ /rev] 200 cm ³ /rev.				Max cont.	Max int.		[PSI] MP _A	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5		[3262] 22.5
GPM	[3.9]	[787]	[1680]	[2609]	[3538]	[4281]		[5377]
L/ min	15	89 73	190 71	295 68	400 64	484 60	608 52	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
Flow (L/min)	[7.9]	[769]	[1680]	[2600]	[3529]	[4289]	[5306]	
	30	87 148	190 146	294 143	399 140	485 135	600 127	
	[10.6]	[761]	[1663]	[2582]	[3511]	[4272]	[5253]	
	40	86 193	188 191	292 189	397 186	483 181	594 172	
	[13.2]	[708]	[1627]	[2565]	[3493]	[4245]	[5218]	
50	80 247	184 245	290 243	395 240	480 235	590 226		
Max cont	[15.8]	[654]	[1574]	[2530]	[3449]	[4201]	[5147]	
	60	74 298	178 295	286 293	390 290	475 284	582 273	
	[19.8]	[513]	[1415]	[2432]	[3317]	[4068]	[5041]	Max cont.
75	58 372	160 369	275 365	375 362	460 358	570 346		
Max int.	[23.8]	[433]	[1309]	[2299]	[3140]	[3936]	[4908]	Max int.
90	49 440	148 435	260 430	355 422	445 411	555 401		

YMSE 250

YMSE		250 [15.38 in³/rev] 252 cm³/rev.			Max cont.	Max int.		
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3262] 22.5	[PSI] MP _A
GPM	[3.9]	[1035]	[2034]	[3140]	[3980]	[4900]	[5766]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	L/ min	117 58	230 55	355 52	450 51	554 47	652 46	
Flow (L/min)	[7.9]	[1035]	[1990]	[3095]	[3944]	[4953]	[5811]	
	15	117 118	225 117	350 112	446 109	560 107	657 106	
	[10.6]	[1017]	[1990]	[3078]	[3909]	[4882]	[5749]	
	30	115 160	225 156	348 152	442 150	552 146	650 142	
	[13.2]	[973]	[1946]	[3051]	[3874]	[4829]	[5704]	
	40	110 202	220 200	345 198	438 196	546 195	645 192	
Max cont	[15.8]	[929]	[1946]	[3007]	[3847]	[4793]	[5678]	
	50	105 242	220 239	340 237	435 234	542 231	642 229	
	[19.8]	[840]	[1901]	[2989]	[3803]	[4749]	[5642]	
Max int.	75	95 300	215 296	338 293	430 286	537 282	638 278	Max cont.
	[23.8]	[796]	[1813]	[2936]	[3714]	[4687]	[5589]	
	90	90 360	205 354	332 348	420 340	530 332	632 326	Max int.

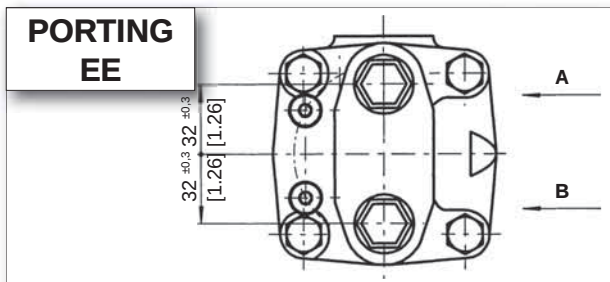
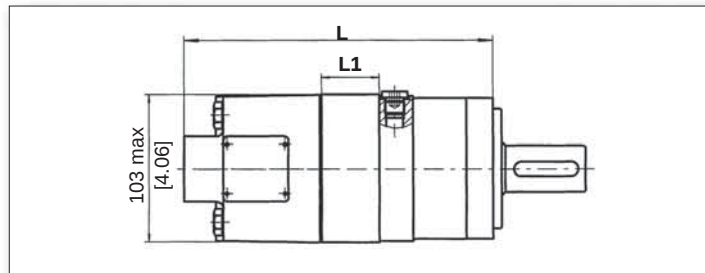
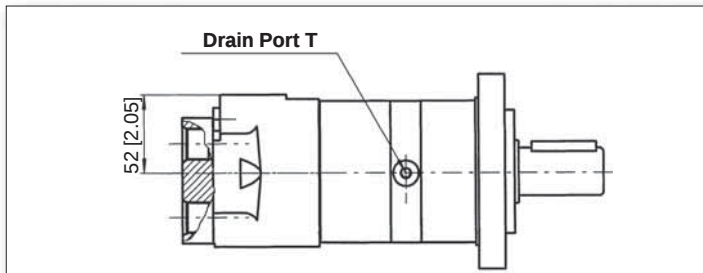
YMSE 315

Y MSE 315 [19.20 in³/rev] 314.5 cm³/rev.				Max cont.	Max int.		[PSI] MPa		
		[507] 3.5	[1015] 7	[1522] 10.5	[1740] 12	[2030] 14		[2682] 18.5	
GPM	[3.9]	[1415]	[2830]	[4112]	[4908]	[5749]		[6615]	
L/ min	15	160 48	320 47	465 45	555 43	650 40	748 38	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
Flow (L/min)	[7.9]	[1459]	[2848]	[4139]	[4953]	[5819]	[6651]		
	30	165 94	322 92	468 90	560 89	658 86	752 85		
	[10.6]	[1415]	[2742]	[4042]	[4829]	[5678]	[6553]		
	40	160 125	310 123	457 120	546 118	642 116	741 115		
	[13.2]	[1371]	[2697]	[3980]	[4758]	[5634]	[6509]		
Max cont	50	155 158	305 156	450 153	538 150	637 147	736 145	Max cont.	
	Max int.	[15.8]	[1344]	[2671]	[3909]	[4705]	[5589]		[6474]
		60	152 175	302 174	442 170	532 164	632 162		732 159
Max int.	[19.8]	[1282]	[2609]	[3856]	[4643]	[5554]	[6421]	Max int.	
	75	145 236	295 234	436 230	525 227	628 225	726 222		
Max int.	[23.8]	[1167]	[2476]	[3803]	[4599]	[5501]	[6394]	Max int.	
	90	132 285	280 282	430 280	520 276	622 273	723 270		

YMSE 375

YMSE 375				Max cont		Max int.		[PSI] MPa	
[22.58 in³/rev] 370 cm³/rev.									
				[507] 3.5	[1015] 7	[1305] 9	[1450] 10		[1740] 12
GPM	[3.9]	[1636] 185	[3202] 362	[4192] 474	[4528] 512	[5200] 588	[5837] 660	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	15	40	39	38	37	35	33		
Flow (L/min)	[7.9]	[1627] 184	[3219] 364	[4201] 475	[4546] 514	[5218] 590	[5846] 661		
	30	80	78	77	76	74	72		
	[10.6]	[1592] 180	[3202] 362	[4183] 473	[4537] 513	[5200] 588	[5828] 659		
	40	106	104	103	102	100	97		
	[13.2]	[1415] 160	[3184] 360	[4174] 472	[4519] 511	[5183] 586	[5819] 658		
Max cont	50	133	131	130	129	128	125		
	[15.8]	[1327] 150	[3175] 359	[4166] 471	[4510] 510	[5174] 585	[5811] 657		
	60	157	156	155	154	152	150		
Max int.	[19.8]	[1150] 130	[3122] 353	[4112] 465	[4457] 504	[5165] 584	[5757] 651	Max cont.	
	75	200	198	196	195	194	193	Max int.	

END PORT MOUNTING DATA



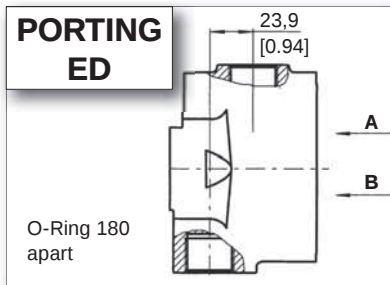
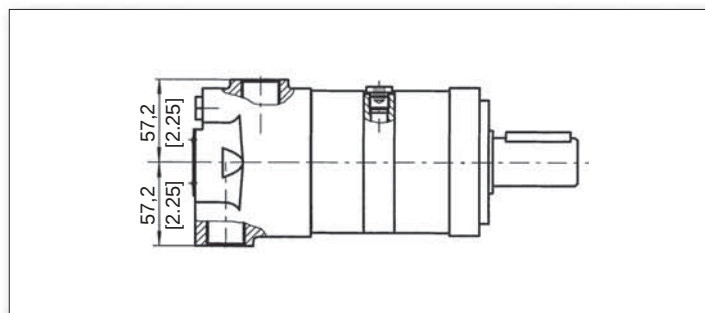
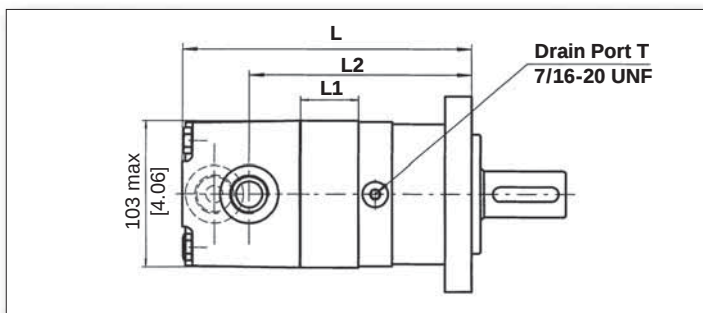
	[INCHES]		MM	
MODEL	L	L1	L	L1
YMSE 80	[6.97]	[0.51]	177	13
YMSE 100	[7.13]	[0.67]	181	17
YMSE 125	[7.32]	[0.87]	186	22
YMSE 160	[7.56]	[1.08]	192	27.5
YMSE 200	[7.91]	[.99]	201	35.1
YMSE 250	[8.31]	[1.85]	211	47
YMSE 315	[8.78]	[2.32]	223	59
YMSE 375	[9.25]	[2.80]	235	71

	[INCHES]		MM	
MODEL	L	L1	L	L1
YMSE 80 WE	[5.49]	[0.51]	139.4	13
YMSE 100 WE	[5.65]	[0.67]	143.4	17
YMSE 125 WE	[5.84]	[0.87]	148.4	22
YMSE 160 WE	[6.10]	[1.08]	154.9	27.5
YMSE 200 WE	[6.43]	[1.38]	163.4	35.1
YMSE 250 WE	[6.83]	[1.85]	173.4	47
YMSE 315 WE	[7.30]	[2.32]	185.4	59
YMSE 375 WE	[7.77]	[2.80]	197.4	71

ORDER CODE	EE-D	DEPTH	EE-M2	DEPTH	EE-S2	DEPTH
PORTS - A and B	G1/2	18 mm	M22x1,5	18 mm	7/8-14 O-ring	18 mm
TANK PORT - T	G1/4	12 mm	M14x1,5	12 mm	7/16-20unf	12 mm

NOTE: THE THICKNESS OF THE STATOR AND ROTOR IS THE DIMENSION OF L1 PLUS 3MM

180 PORT MOUNTING DATA

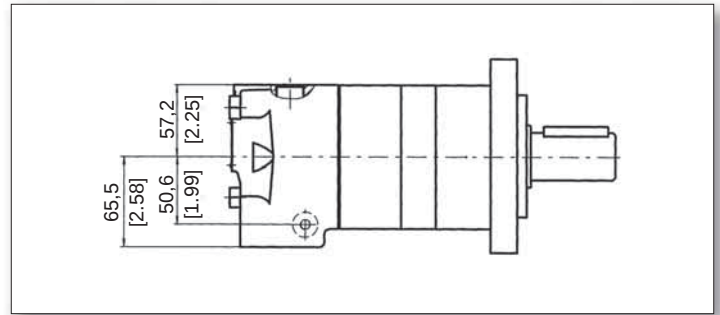
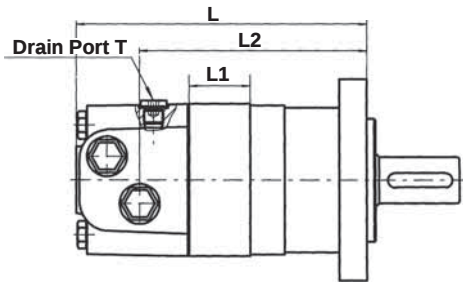


	[INCHES]			MM		
MODEL	L	L1	L2	L	L1	L2
YMSE 80	[6.81]	[.51]	[4.95]	173	13	125.7
YMSE 100	[6.97]	[.67]	[5.11]	177	17	129.7
YMSE 125	[7.17]	[.87]	[5.30]	182	22	134.7
YMSE 160	[7.38]	[1.08]	[5.52]	187.5	27.5	140.2
YMSE 200	[7.68]	[1.38]	[5.81]	195	35.1	147.7
YMSE 250	[8.15]	[1.85]	[6.29]	207	47	159.7
YMSE 315	[8.62]	[2.32]	[6.76]	219	59	171.7
YMSE 375	[9.09]	[2.80]	[7.23]	231	71	183.7

	[INCHES]			MM		
MODEL	L	L1	L2	L	L1	L2
YMSE 80 WE	[5.71]	[.51]	[3.84]	145	13	97.5
YMSE 100 WE	[5.87]	[.67]	[4.00]	149	17	101.5
YMSE 125 WE	[6.02]	[.87]	[4.19]	153	22	106.5
YMSE 160 WE	[6.24]	[1.08]	[4.41]	158.5	27.5	112
YMSE 200 WE	[6.54]	[1.38]	[4.70]	166	35.1	119.5
YMSE 250 WE	[7.05]	[1.85]	[5.18]	179	47	131.5
YMSE 315 WE	[7.52]	[2.32]	[5.65]	191	59	143.5
YMSE 375 WE	[7.99]	[2.80]	[6.12]	203	71	155.5

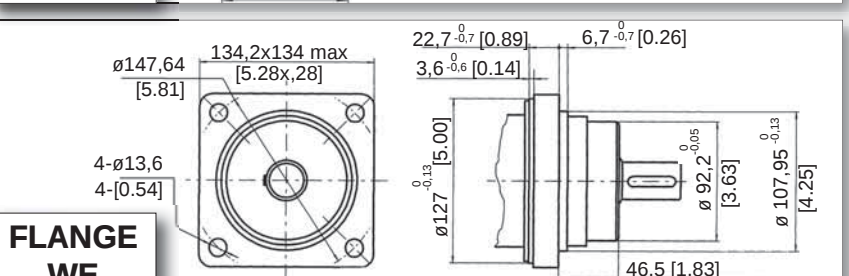
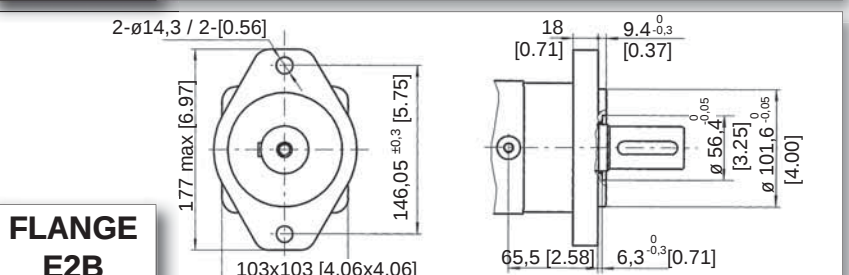
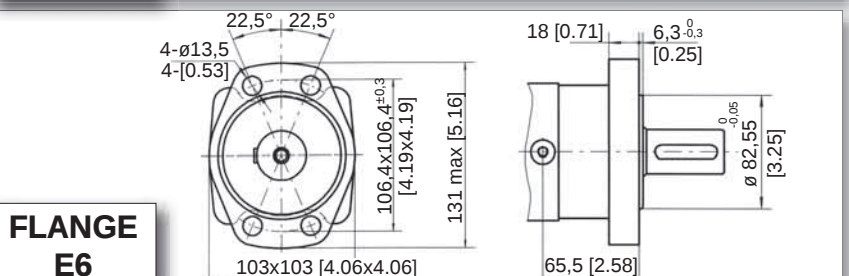
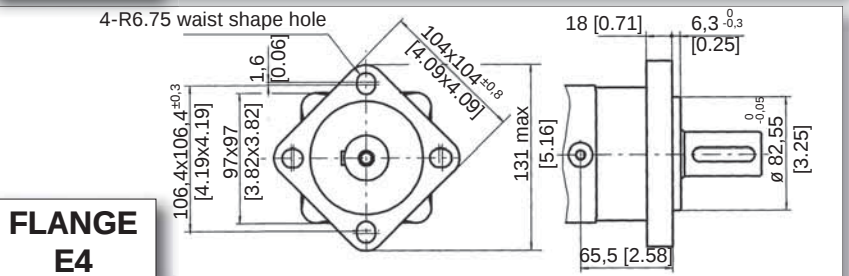
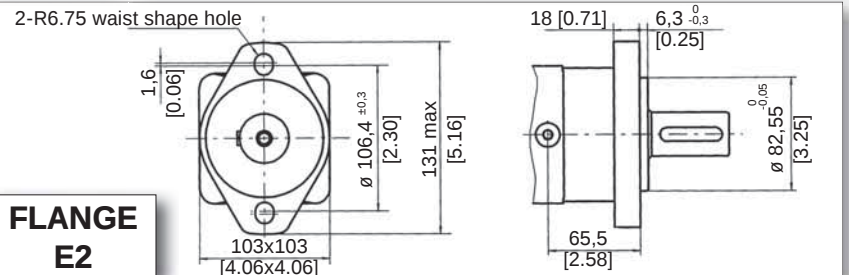
NOTE: THE THICKNESS OF THE STATOR AND ROTOR IS THE DIMENSION OF L1 PLUS 3MM

MOUNTING DATA

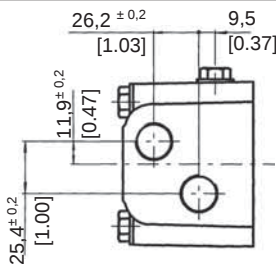


MODEL	[INCHES]			MM		
	L	L1	L2	L	L1	L2
YMSE 80	[6.74]	[.52]	[4.85]	171	13	123.2
YMSE 100	[6.89]	[.67]	[5.01]	175	17	127.2
YMSE 125	[7.09]	[.87]	[5.21]	180	22	132.2
YMSE 160	[7.27]	[1.09]	[5.43]	184.5	27.5	137.7
YMSE 200	[7.60]	[1.39]	[5.72]	193	35.1	145.2
YMSE 250	[8.07]	[1.85]	[6.19]	205	47	157.2
YMSE 315	[8.55]	[2.33]	[6.67]	217	59	169.2
YMSE 375	[9.02]	[2.80]	[7.14]	229	71	181.2

MODEL	[INCHES]			MM		
	L	L1	L2	L	L1	L2
YMSE 80 WE	[5.63]	[.51]	[3.74]	143	13	95
YMSE 100 WE	[5.79]	[.67]	[3.90]	147	17	99
YMSE 125 WE	[5.98]	[.87]	[4.09]	152	22	104
YMSE 160 WE	[6.20]	[1.08]	[4.31]	157.5	27.5	109.5
YMSE 200 WE	[6.50]	[1.38]	[4.61]	165	35.1	117
YMSE 250 WE	[6.97]	[1.85]	[5.08]	177	47	129
YMSE 315 WE	[7.44]	[2.32]	[5.55]	189	59	141
YMSE 375 WE	[7.91]	[2.80]	[6.02]	201	71	153



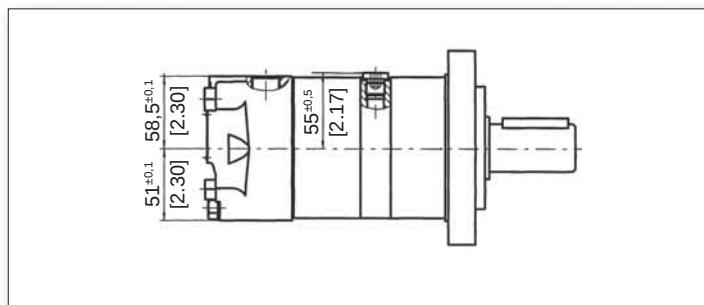
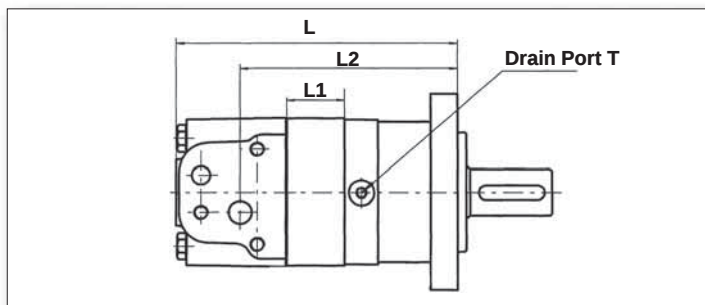
PORTING
DB, DU,
SU, SB,
M4



NOTE: THE THICKNESS OF THE STATOR AND ROTOR IS THE DIMENSION OF L1 PLUS 3MM

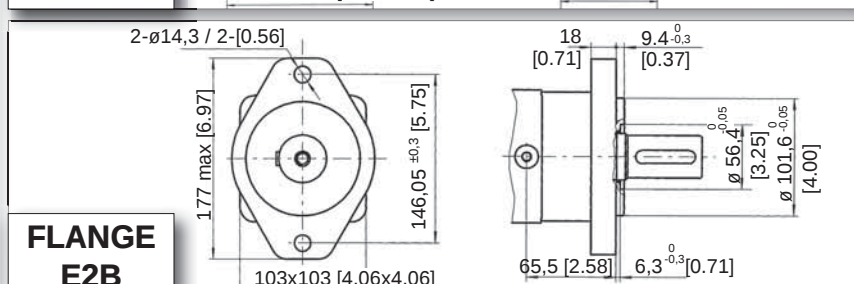
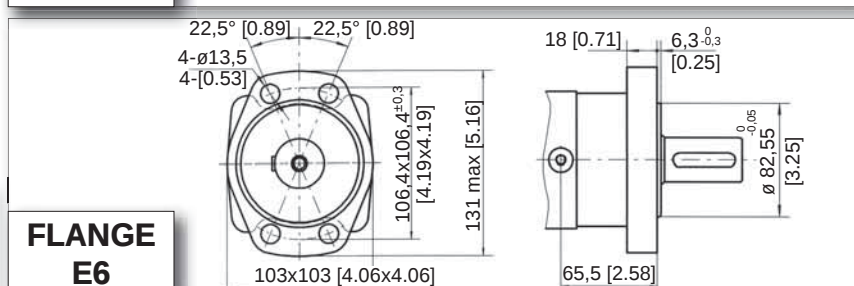
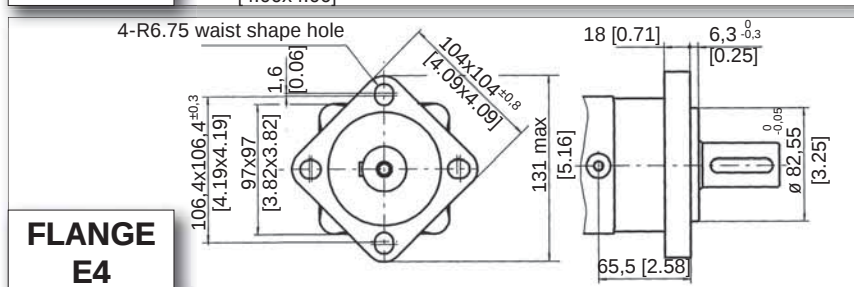
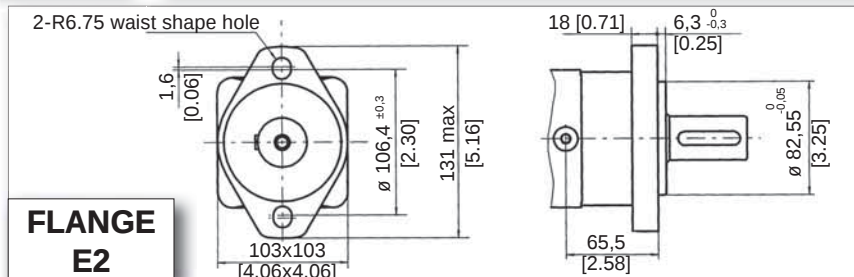
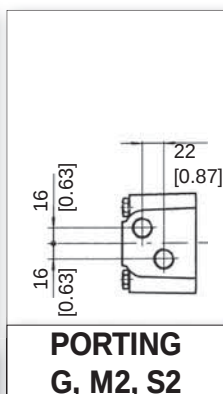
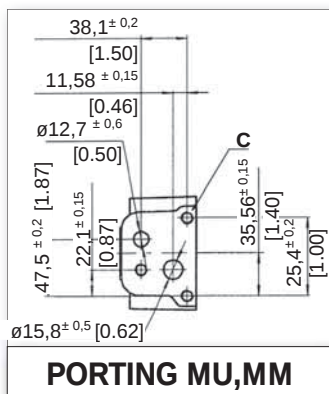
ORDER CODE	DB depth	DU depth	SU depth	SB depth	M4 depth
P(A, B)	G1/2 (18)	G1/2 (18)	7/8-14 O-ring (18)	7/8-14 O-ring (18)	M22 x 1,5 (18)
T	G1/4 (12)	7/16-20 UNF (12)	7/16-20 UNF (12)	G1/4 (12)	M14 x 1,5 (12)

MOUNTING DATA

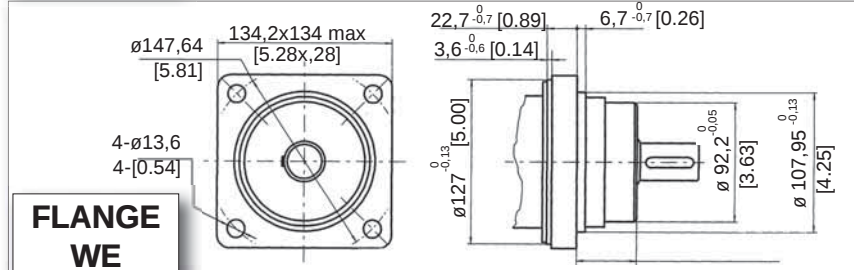


MODEL	[INCHES]			MM		
	L	L1	L2	L	L1	L2
YMSE 80	[6.57]	[.51]	[4.79]	167	13	121.7
YMSE 100	[6.73]	[.67]	[4.95]	171	17	125.7
YMSE 125	[6.93]	[.87]	[5.15]	176	22	130.7
YMSE 160	[7.15]	[1.08]	[5.36]	181.5	27.5	136.2
YMSE 200	[7.44]	[.99]	[5.66]	189	25.1	143.7
YMSE 250	[7.91]	[1.85]	[6.13]	201	47	155.7
YMSE 315	[8.39]	[2.32]	[6.60]	213	59	167.7
YMSE 375	[8.86]	[2.80]	[7.07]	225	71	179.7

MODEL	[INCHES]			MM		
	L	L1	L2	L	L1	L2
YMSE 80 WE	[5.47]	[.51]	[3.68]	139	13	93.5
YMSE 100 WE	[5.63]	[.67]	[3.84]	143	17	97.5
YMSE 125 WE	[5.83]	[.87]	[4.04]	148	22	102.5
YMSE 160 WE	[6.04]	[1.08]	[4.25]	153.5	27.5	108
YMSE 200 WE	[6.34]	[1.38]	[4.55]	161	35.1	115.5
YMSE 250 WE	[6.81]	[1.85]	[5.02]	173	47	127.5
YMSE 315 WE	[7.28]	[2.32]	[5.49]	185	59	139.5
YMSE 375 WE	[7.76]	[2.80]	[5.96]	197	71	151.5

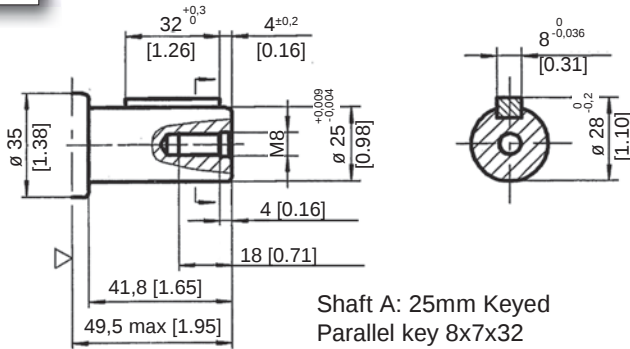


ORDER CODE	MU	MM	G depth	M2 depth	S2 depth
P(A, B)	Ø12.7 Ø 15.8	Ø12.7 Ø 15.8	G 1/2 (18)	M22 x 1.5 (18)	7/8-14 O-ring
T	7/16-20 UNF (12)	G 1/4 (12)	G 1/4 (12)	M14 x 1.5 (12)	7/16-20 UNF
C	3x3/8-16 UNC	3 x M10	-	-	-

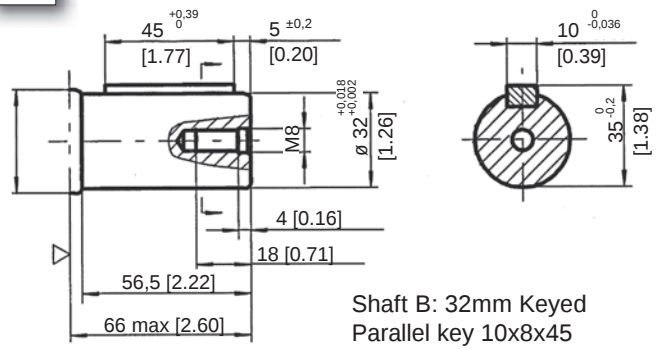


MOTOR SHAFT EXTENSIONS

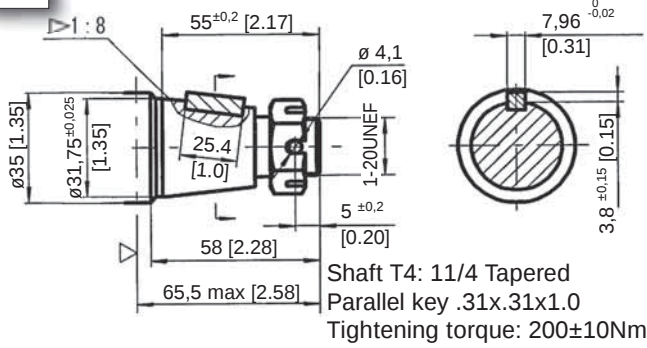
A



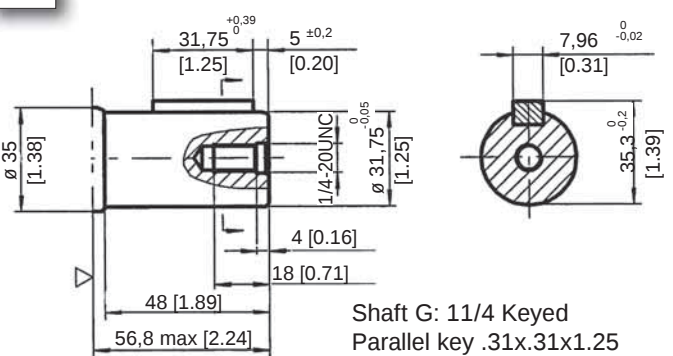
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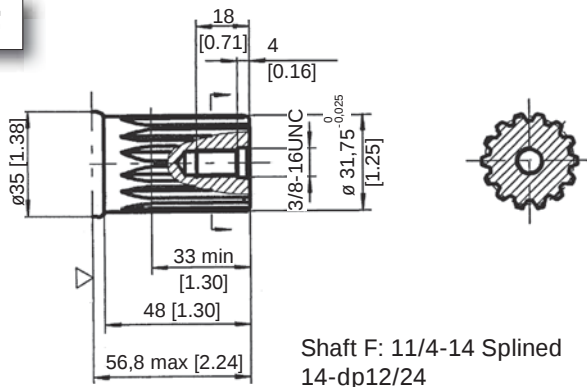
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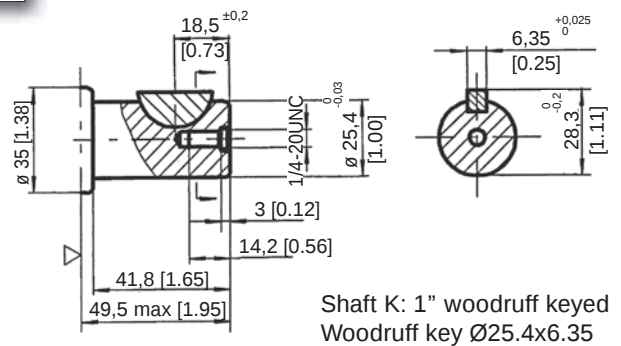
G



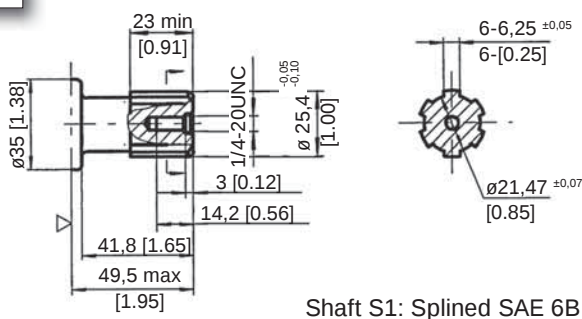
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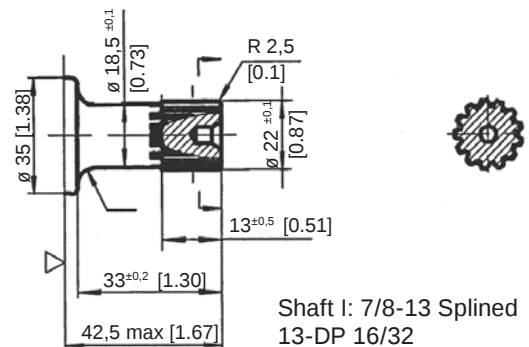
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S1

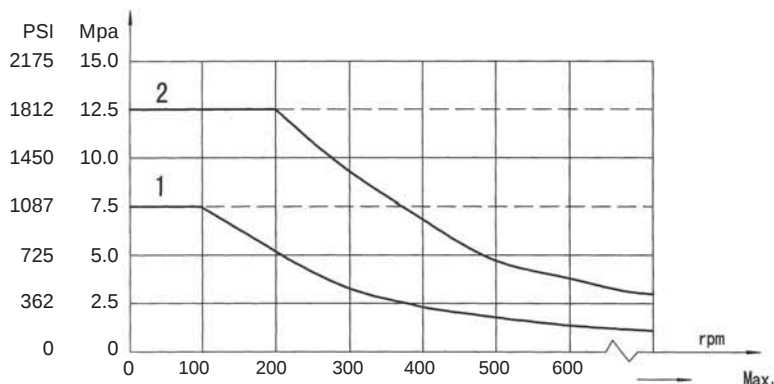
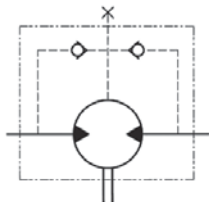


I



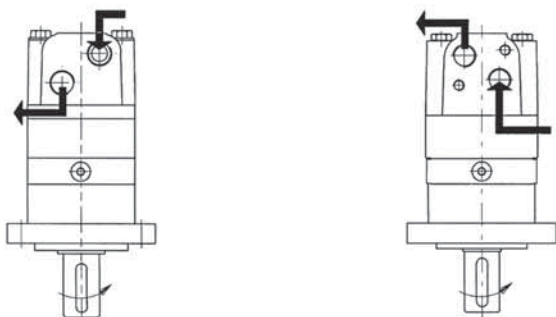
ADDITIONAL DATA

PERMISSIBLE SHAFT SEAL PRESSURE



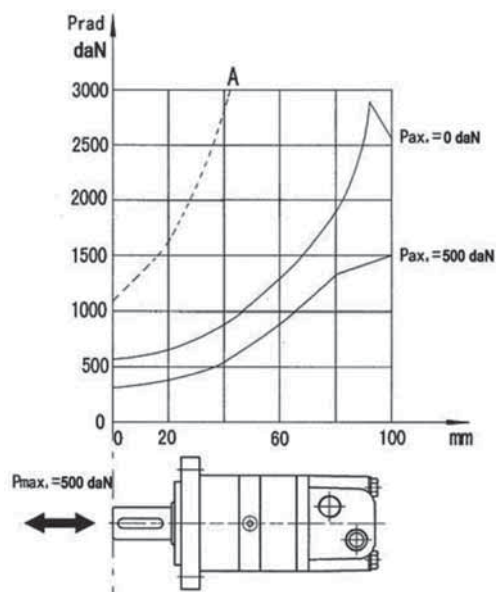
IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE. IN APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN DRAIN LINE.

DIRECTION OF SHAFT ROTATION



WHEN FACING SHAFT END OF MOTOR, SHAFT TO ROTATE:
CLOCKWISE WHEN PORT "A" IS PRESSURIZED. COUNTER CLOCK
WISE WHEN PORT "B" IS PRESSURIZED.

AXIAL AND RADIAL FORCES



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curves apply to a B10 bearing life of 3000 hours at 200 RPM

ORDERING INFORMATION

1	2	3	4	5	6	7
YMSE						

1	2		3		4		5		6		7	
DISP.	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT		SPECIAL OPTIONS	
80	E2	SAE 2-Bolt pilot 3.25X.25	A	Shaft: 25mm Keyed parallel Key 8×7×32	MU	1/2",5/8"Crosshole Manifold 3×3/8-16UNC, 7/16-20UNF	NONE	STAN-DARD	00	NO PAINT	NONE	STANDARD
100	E4	4-Bolt flange pilot 3.25x.25	B	Shaft: 32mm Keyed parallel Key 10×8×45	MM	1/2",5/8"Crosshole Manifold 3×M10, G1/4	R	OPPOSI-TE	NONE	BLUE	FR	FREE RUNNING
125	E6	Magneto-flange, pilot 3.25x.25	K	Shaft: 1"Woodruff Key key 1.0x.25	EE-D	G1/2,G1/4			B	BLACK	LL	LOW LEAKAGE
160	E2B	SAE 2-BOLT pilot4.00x .37	G	Shaft: 11/4 Ke-yed parallel Key .31x.31x1.25	EE-M2	M22X1.5, M14X1.5			S	SILVER GRAY	LSV	LOW SPEED VALVE
200	WE	4-Ø13.5 Wheel-flange, pilot Ø125×8	F	Shaft: 11/4-14 Spli-ned 14-DP12/24	EE-S2	7/8-14UNF O-RING 7/16-20 UNF					CRS	CORROSION RESISTANT SHAFT
250			T4	Shaft:11/4 Tapered parallel key .31x.31x1.0	ED	1-1/16-12UNF O-RING,7/16-20 UNF					HPS	HIGH PRESSU-RE SEAL
315			S1	Shaft: SAE 6B Splined	DB	G1/2,G1/4					HTS	HIGH TEMP SEAL
375			I	Shaft: 7/8-13 Splined 13-DP16/32	DU	G1/2,7/16-20UNF						
					SB	7/8-14UNF O-RING,G1/4						
					SU	7/8-14UNF O-RING 7/16-20UNF						
					M4	M22X1.5,M14X1.5						
					G	G1/2,G1/4						
					M2	M22X1.5,M14X1.5						
					S2	7/8-14UNF O-RING, 7/16-20UNF						

Ordering Code:

All options have been determined with letters, numbers or combinations. All boxes must be filled with proper codes. If specification is not in the table, please contact us with your requirements.

YMSS

The **YMSS** series motor incorporates the advanced **GEROLOR** gear set which reduces internal friction to a minimum. A “**DISC VALVE**” distribution system which is internally balanced to reduce friction, leakage and permits better speed control producing higher efficiency, smoother rotation, higher speed and pressure.

This series has many sizes and options to make it very flexible for many applications.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Disc Distribution	YMSS	[in ³ ./rev]	[4.88 ~ 22.88]	[PSI]	[3263]	RPM	[HP]	[27]
		cm ³ /rev.	80 ~ 375	MPa	22.5	30 ~ 800	Kw	20

QUICK REFERENCE GUIDE

YMSS SERIES QUICK REFERENCE:

Displacements				
[in ³ /rev]	cm ³ /rev.			
[4.92]	80.6	FLOW UP TO	90 LPM	[23.78 GPM]
[6.15]	100.8	PRESSURE UP TO	22.5 MPA	[3262 PSI]
[7.63]	125	TORQUE UP TO	751 NM	[3944 LB. IN.]
[9.59]	157.2	SPEED UP TO	446 RPM	
[12.2]	200			
[15.38]	252			
[19.19]	314.5			
[22.57]	370			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

For individual motor performance chart consult equivalent YMS series data.

DISTRIBUTION TYPE			YMSS 80	YMSS 100	YMSS 125	YMSS 160	YMSS 200	YMSS 250	YMSS 315	YMSS 375
GEOMETRIC DISPLACEMENT	[in ³ ./rev.]		[4.92]	[6.16]	[7.63]	[9.60]	[12.21]	[15.38]	[19.20]	[22.58]
	cm ³ /rev.		80.6	100.8	125	157.2	200	252	314.5	370
MAX. SPEED RPM	RATED		675	540	432	337	270	216	171	145
	CONT.		800	748	600	470	375	300	240	200
	INT.		988	900	720	560	450	360	280	240
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[1548]	[1946]	[2414]	[2795]	[3007]	[3980]	[4953]	[4740]
		N*M	175	220	273	316	340	450	560	536
	CONT.	[LB. IN.]	[1680]	[2123]	[2742]	[2795]	[3538]	[3980]	[4953]	[4740]
		N*M	190	240	310	316	400	450	560	536
	INT.	[LB. IN.]	[2123]	[2653]	[3272]	[3803]	[4121]	[4776]	[5819]	[5704]
		N*M	240	300	370	430	466	540	658	645
	PEAK	[LB. IN.]	[2299]	[2830]	[3538]	[4174]	[5749]	[6102]	[6545]	[6642]
		N*M	260	320	400	472	650	690	740	751
MAX. OUTPUT [HP] KW	RATED	[HP]	[16,7]	[16,7]	[16,7]	[15]	[13]	[14]	[14]	[12]
		KW	12.4	12.4	12.4	11.2	9.6	10.2	10	8.6
	CONT.	[HP]	[21]	[25]	[26]	[21]	[21]	[19]	[19]	[16]
		KW	15.9	18.8	19.5	15.6	15.7	14.1	14.1	11.8
	INT.	[HP]	[27]	[31]	[31]	[29]	[25]	[23]	[25]	[23]
		KW	20.1	23.5	23.2	21.2	18.3	17.0	18.9	17
MAX. PRESSURE DROP [PSI] MPa	RATED	[PSI]	[2320]	[2320]	[2320]	[2175]	[1813]	[1813]	[1740]	[1450]
		MPa	16	16	16	15	12.5	12.5	12	10
	CONT.	[PSI]	[2538]	[2538]	[2538]	[2175]	[2030]	[1813]	[1740]	[1450]
		MPa	17.5	17.5	17.5	15	14	12.5	12	10
	INT.	[PSI]	[3045]	[3045]	[3045]	[3045]	[2320]	[2320]	[2030]	[1740]
		MPa	21	21	21	21	16	16	14	12
	PEAK	[PSI]	[3263]	[3263]	[3263]	[3263]	[3263]	[2900]	[2683]	[2030]
		MPa	22.5	22.5	22.5	22.5	22.5	20	18.5	14
MAX. FLOW [GPM] L/MIN	CONT.	[GPM]	[17.1]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
		L/MIN	65	75	75	75	75	75	75	75
	INT.	[GPM]	[21.1]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]	[23.7]
		L/MIN	80	90	90	90	90	90	90	90
MAX. INLET PRESSURE [PSI] MPa	RATED	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21	21	21
	CONT.	[PSI]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]
		MPa	25	25	25	25	25	25	25	25
	INT.	[PSI]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]
		MPa	30	30	30	30	30	30	30	30
WEIGHT [LB] KG	[LB]		[22]	[22]	[23]	[24]	[24]	[26]	[27]	[28]
	KG		9.8	10	10.3	10.7	11.1	11.6	12.3	12.6

PERFORMANCE DATA

YMSS 80

		[4.92 in ³ /rev] 80.6 cm ³ /rev.				Max cont.	Max int.	[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3045] 21		
GPM L/min	[3.9]	[310] 35	[707] 80	[1061] 120	[1397] 158	[1724] 195	[2078] 235		
	15	180	174	168	164	158	151		
Flow (L/min)	[7.9]	[310] 35	[707] 80	[1061] 120	[1397] 158	[1724] 195	[2122] 240	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	30	362	352	346	338	330	322		
	[10.6]	[310] 35	[699] 79	[1052] 119	[1371] 155	[1707] 193	[2070] 234		
	40	482	473	464	453	444	434		
	[13.2]	[265] 30	[681] 77	[1035] 117	[1353] 153	[1698] 192	[2052] 232		
	50	602	594	587	569	560	551		
Max cont.	[15.8]	[248] 28	[681] 77	[1035] 117	[1353] 153	[1698] 192	[2052] 232		
	60	724	713	707	683	673	664		
	[19.8]	[221] 25	[663] 75	[1008] 114	[1344] 152	[1680] 190	[2034] 230	Max cont.	
	75	840	832	817	796	786	777		
Max int.	[23.8]	[212] 24	[646] 73	[973] 110	[1327] 150	[1636] 185	[1990] 225	Max int.	
	90	900	893	872	853	843	834		

YMSS 100

		[6.16 in ³ /rev] 100.8 cm ³ /rev.				Max cont.	Max int.	[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3045] 21		
GPM L/min	[3.9]	[425] 48	[840] 95	[1327] 150	[1769] 200	[2211] 250	[2556] 289		
	15	146	144	139	135	130	120		
Flow (L/min)	[7.9]	[398] 45	[831] 94	[1291] 146	[1751] 198	[2211] 250	[2609] 295	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	30	291	289	278	274	269	258		
	[10.6]	[380] 43	[787] 89	[1256] 142	[1733] 196	[2193] 248	[2591] 293		
	40	387	384	374	359	350	335		
	[13.2]	[354] 40	[778] 88	[1194] 135	[1716] 194	[2184] 247	[2582] 292		
	50	486	483	473	462	450	430		
Max cont.	[15.8]	[327] 37	[778] 88	[1167] 132	[1636] 185	[2158] 244	[2556] 289		
	60	588	584	574	562	550	538		
	[19.8]	[310] 35	[708] 80	[1150] 130	[1592] 180	[2123] 240	[2529] 286	Max cont.	
	75	740	735	720	705	696	676		
Max int.	[23.8]	[265] 30	[663] 75	[1097] 124	[1503] 170	[2087] 236	[2450] 277	Max int.	
	90	850	840	810	787	770	750		

YMSS 125

		[7.63 in ³ /rev] 125 cm ³ /rev.				Max cont.	Max int.	[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3045] 21		
GPM L/min	[3.9]	[486] 55	[1061] 120	[1557] 176	[2167] 245	[2733] 309	[3087] 349		
	15	112	110	103	96	93	90		
Flow (L/min)	[7.9]	[486] 55	[1061] 120	[1548] 175	[2211] 250	[2865] 324	[3317] 375	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	30	222	220	217	208	200	199		
	[10.6]	[486] 55	[1061] 120	[1548] 175	[2211] 250	[2865] 324	[3272] 370		
	40	302	298	292	284	276	268		
	[13.2]	[442] 50	[1017] 115	[1557] 176	[2193] 248	[2830] 320	[3272] 370		
	50	379	373	368	363	350	339		
Max cont.	[15.8]	[398] 45	[999] 113	[1512] 171	[2167] 245	[2865] 324	[3255] 368		
	60	456	448	443	439	425	406		
	[19.8]	[398] 45	[973] 110	[1477] 167	[2123] 240	[2777] 314	[3272] 370	Max cont.	
	75	570	563	555	546	533	515		
Max int.	[23.8]	[354] 40	[929] 105	[1433] 162	[2096] 237	[2733] 309	[3228] 365	Max int.	
	90	685	676	670	659	644	625		

YMSS 160

		[9.60 in ³ /rev] 157.2 cm ³ /rev.				Max cont.	Max int.	[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3045] 21		
GPM L/min	[3.9]	[619] 70	[1238] 140	[1813] 205	[2697] 305	[3281] 371	[3803] 430		
	15	91	88	84	78	76	74		
Flow (L/min)	[7.9]	[663] 75	[1327] 150	[1893] 214	[2839] 321	[3361] 380	[3776] 427	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	30	185	182	176	168	164	162		
	[10.6]	[619] 70	[1327] 150	[1901] 215	[2830] 320	[3343] 378	[3759] 425		
	40	248	244	239	229	224	217		
	[13.2]	[575] 65	[1282] 145	[1901] 215	[2795] 316	[3343] 378	[3759] 425		
	50	312	308	304	294	288	280		
Max cont.	[15.8]	[575] 65	[1282] 145	[1893] 214	[2786] 315	[3317] 375	[3750] 424		
	60	375	371	365	357	346	336		
	[19.8]	[531] 60	[1221] 138	[1840] 208	[2751] 311	[3317] 375	[3714] 420	Max cont.	
	75	470	465	458	447	436	426		
Max int.	[23.8]	[495] 56	[1150] 130	[1769] 200	[2724] 308	[3272] 370	[3661] 414	Max int.	
	90	564	559	551	541	526	517		

PERFORMANCE DATA

YMSS 200

		[12.21 in³/rev]	200 cm³/rev.		cont.		int.		[PSI] MP _A
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3262] 22.5		
GPM	[3.9]	[787]	[1680]	[2609]	[3538]	[4281]	[5377]		
L/ min	15	89 73	190 71	295 68	400 64	484 60	608 52	TORQUE (LB-IN) TORQUE (N•M) SPEED (RPM)	
	[7.9]	[769]	[1680]	[2600]	[3529]	[4289]	[5306]		
Flow (L/min)	30	87 148	190 146	294 143	399 140	485 135	600 127		
	[10.6]	[761]	[1663]	[2582]	[3511]	[4272]	[5253]		
	40	86 193	188 191	292 189	397 186	483 181	594 172		
	[13.2]	[708]	[1627]	[2565]	[3493]	[4245]	[5218]		
	50	80 247	184 245	290 243	395 240	480 235	590 226		
	[15.8]	[654]	[1574]	[2530]	[3449]	[4201]	[5147]		
	60	74 298	178 295	286 293	390 290	475 284	582 273		
	[19.8]	[513]	[1415]	[2432]	[3317]	[4068]	[5041]		
Max cont	75	58 372	160 369	275 365	375 362	460 358	570 346	Max cont.	
	[23.8]	[433]	[1309]	[2299]	[3140]	[3936]	[4908]		
Max int.	90	49 440	148 435	260 430	355 422	445 411	555 401	Max int.	

YMSS 250

		[15.38 in ³ /rev]	252 cm ³ /rev.	cont.		int.		[PSI] MP _A	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3262] 22.5		
GPM L/min	[3.9] 15	[1035] 117 58	[2034] 230 55	[3140] 355 52	[3980] 450 51	[4900] 554 47	[5766] 652 46		
	[7.9] 30	[1035] 117 118	[1990] 225 117	[3095] 350 112	[3944] 446 109	[4953] 560 107	[5811] 657 106		
Flow (L/min)	[10.6] 40	[1017] 115 160	[1990] 225 156	[3078] 348 152	[3909] 442 150	[4882] 552 146	[5749] 650 142		
	[13.2] 50	[973] 110 202	[1946] 220 200	[3051] 345 198	[3874] 438 196	[4829] 546 195	[5704] 645 192		
	[15.8] 60	[929] 105 242	[1946] 220 239	[3007] 340 237	[3847] 435 234	[4793] 542 231	[5678] 642 229		
	[19.8] 75	[840] 95 300	[1901] 215 296	[2989] 338 293	[3803] 430 286	[4749] 537 282	[5642] 638 278		Max cont.
Max int.	[23.8] 90	[796] 90 360	[1813] 205 354	[2936] 332 348	[3714] 420 340	[4687] 530 332	[5589] 632 326	Max int.	

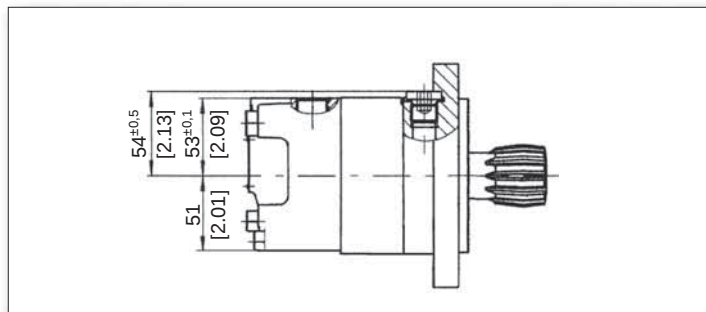
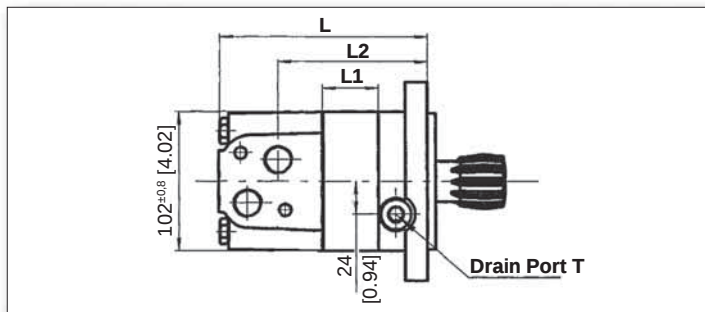
YMSs 315

		[19.20 in³/rev]	314.5 cm³/rev.	cont.		int.		[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[1740] 12	[2030] 14	[2682] 18.5		
GPM	[3.9]	[1415]	[2830]	[4112]	[4908]	[5749]	[6615]		
	15	160 48	320 47	465 45	555 43	650 40	748 38		
L/ min	[7.9]	[1459]	[2848]	[4139]	[4953]	[5819]	[6651]	TORQUE (LB-IN) TORQUE (N•M) SPEED (RPM)	
	30	165 94	322 92	468 90	560 89	658 86	752 85		
Flow (L/min)	[10.6]	[1415]	[2742]	[4042]	[4829]	[5678]	[6553]		
	40	160 125	310 123	457 120	546 118	642 116	741 115		
	[13.2]	[1371]	[2697]	[3980]	[4758]	[5634]	[6509]		
	50	155 158	305 156	450 153	538 150	637 147	736 145		
	[15.8]	[1344]	[2671]	[3909]	[4705]	[5589]	[6474]		
	60	152 175	302 174	442 170	532 164	632 162	732 159		
Max cont.	[19.8]	[1282]	[2609]	[3856]	[4643]	[5554]	[6421]	Max cont.	
	75	145 236	295 234	436 230	525 227	628 225	726 222		
Max int.	[23.8]	[1167]	[2476]	[3803]	[4599]	[5501]	[6394]	Max int.	
	90	132 285	280 282	430 280	520 276	622 273	723 270		

YMSS 37

		[22.58 in³/rev]	370 cm³/rev.	cont		int.		[PSI] MPa
		[507] 3.5	[1015] 7	[1305] 9	[1450] 10	[1740] 12	[2030] 14	
GPM	[3.9]	[1636]	[3202]	[4192]	[4528]	[5200]	[5837]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	15	185 40	362 39	474 38	512 37	588 35	660 33	
Flow (L/min)	[7.9]	[1627]	[3219]	[4201]	[4546]	[5218]	[5846]	
	30	184 80	364 78	475 77	514 76	590 74	661 72	
	[10.6]	[1592]	[3202]	[4183]	[4537]	[5200]	[5828]	
	40	180 106	362 104	473 103	513 102	588 100	659 97	
	[13.2]	[1415]	[3184]	[4174]	[4519]	[5183]	[5819]	
	50	160 133	360 131	472 130	511 129	586 128	658 125	
Max cont	[15.8]	[1327]	[3175]	[4166]	[4510]	[5174]	5811]	
	60	150 157	359 156	471 155	510 154	585 152	657 150	
	[19.8]	[1150]	[3122]	[4112]	[4457]	[5165]	[5757]	
Max int.	75	130 200	353 198	465 196	504 195	584 194	651 193	Max cont.
	[23.8]	[929]	[3095]	[4086]	[4422]	[5130]	[5722]	Max int.
	90	105 238	350 235	462 234	500 232	580 230	647 227	

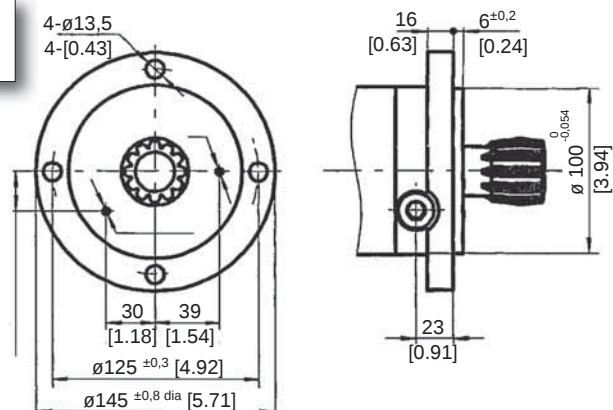
MOUNTING DATA



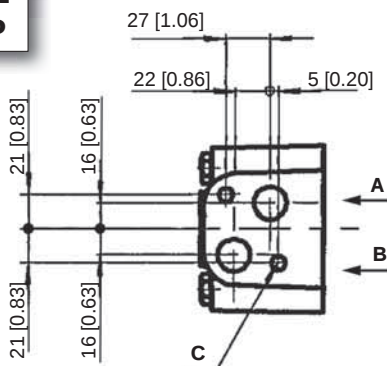
MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
YMSS 80	[5.12]	[0.52]	[3.39]	130	13	86
YMSS 100	[5.28]	[0.67]	[3.55]	134	17	90
YMSS 125	[5.48]	[0.87]	[3.74]	139	22	95
YMSS 160	[5.69]	[12.90]	[3.96]	144.5	27.5	100.5
YMSS 200	[5.99]	[1.39]	[4.26]	152	35.1	108
YMSS 250	[6.46]	[1.85]	[4.73]	164	47	120
YMSS 315	[6.93]	[2.33]	[5.20]	176	59	132
YMSS 375	[7.41]	[2.80]	[5.67]	188	71	144

NOTE: THE THICKNESS OF THE STATOR AND ROTOR IS THE DIMENSION OF L1 PLUS 3MM

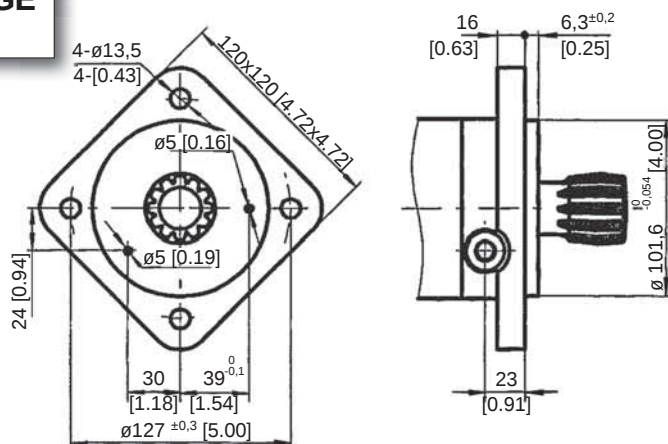
FLANGE D



FLANGE D,M,S,P



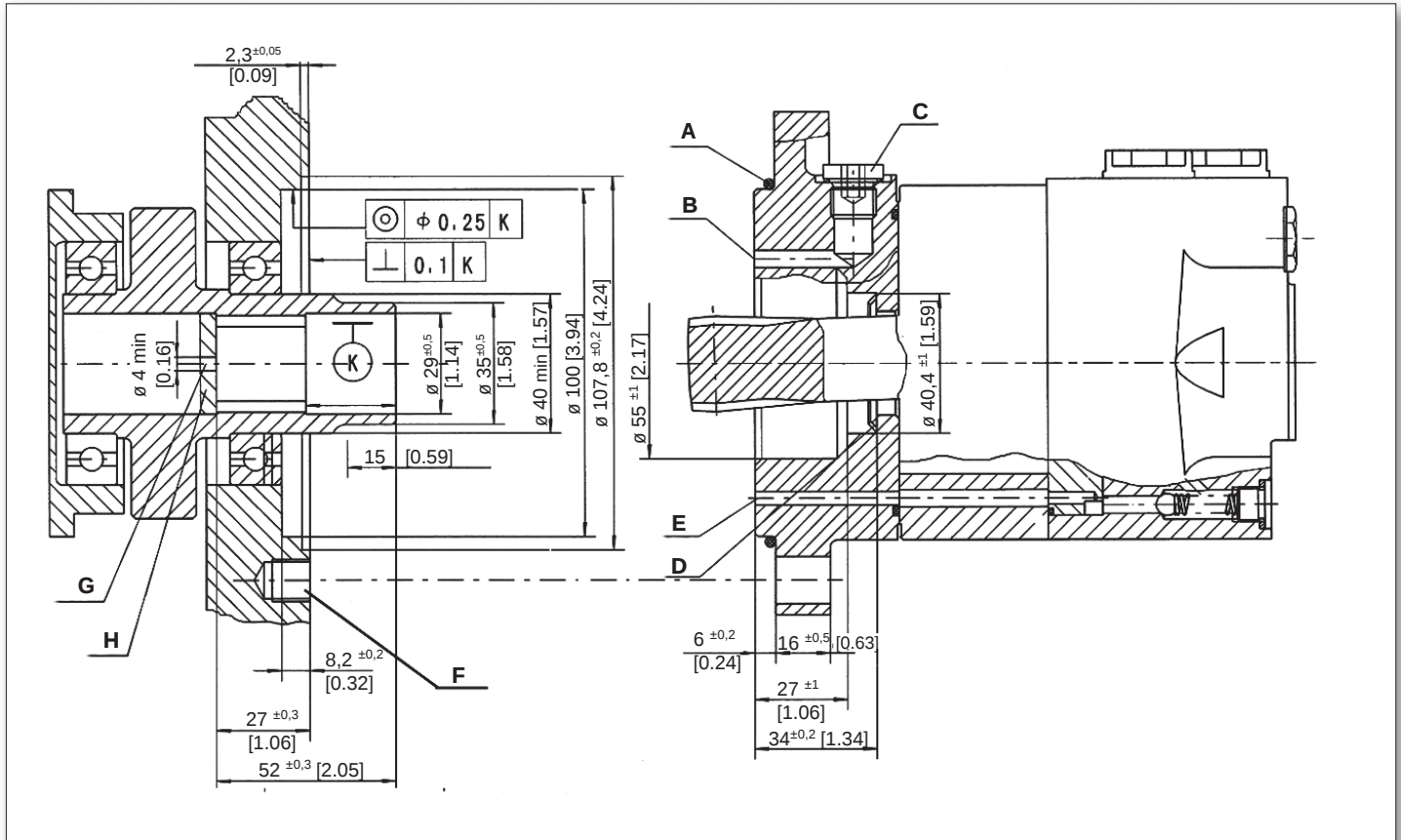
FLANGE E



PORT & DRAIN PORT ORDERING CODES

ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	P	DEPTH
PORTS - A and B	G 1/2	18 mm	M22 X 1.5	18 mm	7/8-14 O-RING	18 mm	1/2-14NPTF	15 mm
TANK PORT - T	G 1/4	12 mm	M14 X 1.5	12 mm	7/16-20UNF	12 mm	7/16-20UNF	12 mm
BOLTS - C	2-M10	13 mm	2-M10	13 mm	2-3/8-16UNC	13 mm	2-3/8-16UNC	13 mm

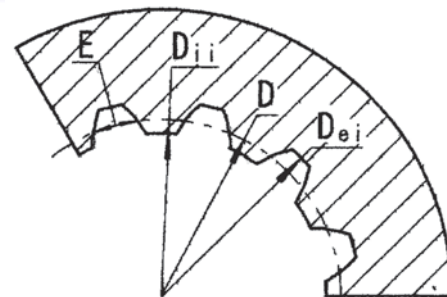
MOUNTING DATA



- A: O-ring:100x3
 B: External drain channel
 C: Drain connection G 1/4;12 mm deep
 D: Conical seal ring
 E: Internal drain channel
 F: M10;min. 15mm deep
 G: Oil circulation hole
 H: Hardened stop plate

INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

FILLET ROOT SIDE FIT		mm
NUMBER OF TEETH	Z	12
DIAMETRAL PITCH	DP	12/24
PRESSURE ANGLE	α_D	30°
PITCH DIA.	D	Ø25.4
MAJOR DIA.	D_{ei}	Ø28 ⁰ _{-0.1}
MINOR DIA.	D_{ii}	Ø23 ^{+0.033} ₀
SPACE WIDTH CIRCULAR	E	4.308 ±0.02



Hardening Specification: HRC 62±2
 Effective case depth 0.7±0.2

ORDERING INFORMATION

	1	2	3	4	5	6	7
YMSS							

1	2	3	4	5	6	7
DISP.	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS
80	D 4-Ø13.5 Circle-flange Ø125, pilot Ø100×6	None Short shaft DP12/24	D G1/2 Manifold Mount 2-M10, G1/4	NONE STANDARD	00 NO PAINT	NONE STANDARD
100	E 4-Ø13.5 Square-flange Ø127, pilot Ø101.6×6.3		M M22×1.5 Manifold Mount 2-M10, M14×1.5	R OPPOSITE	NONE BLUE	LL LOW LEAKAGE
125			S 7/8-14 O-ring manifold 2-3/8- 16 UNC, 7/16-20UNF		B BLACK	FR FREE RUNNING
160			P 1/2-14 NPTF Manifold 2-3/8-16 UNC, 7/16-20UNF		S SILVER GRAY	LSV LOW SPEED VALVE
200						
250						
315						
375						

Ordering Code:

All options have been determined with letters, numbers or combinations. All boxes must be filled with proper codes. If specification is not in the table, please contact us with your requirements.

YMSJ

The **YMSJ** series motors incorporates the advanced **GEROLOR** gear set with reduces internal friction to a minimum. A “DISC VALVE” distribution system which is internally balanced to reduce friction, leakage and permits better speed control producing higher efficiency, smoother rotation, higher speed and pressure.

The series has many sizes and options to make it very flexible for many applications

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Disc Distribution	YMSJ	[in ³ ./rev]	[4.88 ~ 22.88]	[PSI]	[3263]	RPM	[HP]	[27]
		cm ³ /rev.	80 ~ 375	MPa	22.5	30 ~ 800	Kw	20

QUICK REFERENCE GUIDE

YMSJ SERIES QUICK REFERENCE:

Displacements				
[in ³ ./rev]	cm ³ /rev.			
[4.92]	80.6	FLOW UP TO	90 LPM	[23.78 GPM]
[6.15]	100.8	PRESSURE UP TO	22.5 MPA	[3262 PSI]
[7.63]	125	TORQUE UP TO	1100 NM	[3944 LB. IN.]
[9.59]	157.2	SPEED UP TO	470 RPM	
[12.2]	200			
[15.38]	252			
[19.19]	314.5			
[22.57]	370			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

For individual motor performance chart consult equivalent YMS series data

DISTRIBUTION TYPE		YMSJ 80	YMSJ 100	YMSJ 125	YMSJ 160	YMSJ 200	YMSJ 250	YMSJ 315	YMSJ 375
GEOMETRIC DISPLACEMENT	[in ³ ./rev.]	[4.92]	[6.16]	[7.63]	[9.60]	[12.21]	[15.38]	[19.20]	[22.58]
	cm³/rev.	80.6	100.8	125	157.2	200	252	314.5	370
MAX. SPEED RPM	RATED	675	540	432	337	270	216	171	145
	CONT.	800	748	600	470	375	300	240	200
	INT	988	900	720	560	450	360	280	240
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[1548]	[1946]	[2414]	[2795]	[3007]	[3980]	[4740]
		N*M	175	220	273	316	340	450	536
	CONT.	[LB. IN.]	[1680]	[2123]	[2742]	[2795]	[3538]	[3980]	[4740]
		N*M	190	240	310	316	400	450	536
	INT.	[LB. IN.]	[2123]	[2653]	[3272]	[3803]	[4121]	[4776]	[5704]
		N*M	240	300	370	430	466	540	645
	PEAK	[LB. IN.]	[2299]	[2830]	[3538]	[4174]	[5749]	[6102]	[6642]
		N*M	260	320	400	472	650	690	751
MAX. OUTPUT [HP] KW	RATED	[HP]	[16.7]	[16.7]	[16.7]	[15]	[13]	[14]	[12]
		KW	12.4	12.4	12.4	11.2	9.6	10.2	8.6
	CONT.	[HP]	[21]	[25]	[26]	[21]	[21]	[19]	[16]
		KW	15.9	18.	19.5	15.6	15.7	14.1	11.8
	INT.	[HP]	[27]	[31]	[32]	[29]	[25]	[23]	[23]
		KW	20.1	23.5	23.2	21.2	18.3	17.0	17
MAX. PRES- SURE DROP [PSI] MPa	RATED	[PSI]	[2320]	[2320]	[2320]	[2175]	[1813]	[1813]	[1740]
		MPa	16	16	16	15	12.5	12.5	12
	CONT.	[PSI]	[2538]	[2538]	[2538]	[2175]	[2030]	[1813]	[1740]
		MPa	17.5	17.5	17.5	15	14	12.5	12
	INT.	[PSI]	[3045]	[3045]	[3045]	[3045]	[2320]	[2320]	[2030]
		MPa	21	21	21	21	16	16	14
	PEAK	[PSI]	[3263]	[3263]	[3263]	[3263]	[3263]	[2900]	[2683]
		MPa	22.5	22.5	22.5	22.5	22.5	20	18.5
MAX. FLOW [GPM] L/MIN	CONT.	[GPM]	[17.1]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]	[19.8]
		L/MIN	65	75	75	75	75	75	75
	INT.	[GPM]	[21.1]	[23.7]	[23.7]	[23.]	[23.7]	[23.7]	[23.7]
		L/MIN	80	90	90	90	90	90	90
MAX. INLET PRESSURE [PSI] MPa	RATED	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21	21
	CONT.	[PSI]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]
		MPa	25	25	25	25	25	25	25
	INT.	[PSI]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]
		MPa	30	30	30	30	30	30	30
WEIGHT [LB] KG	[LB]	[22]	[22]	[23]	[24]	[24]	[26]	[27]	[28]
	KG	9.8	10	10.3	10.7	11.1	11.6	12.3	12.6

- Rated speed and rated torque:
- Continuous pressure:
- Intermittent pressure:
- Peak pressure:

Output value of speed and torque under rated flow and rated pressure.
 Max. value of operating motor continuously.
 Max. value of operating motor in 6 seconds per minute.
 Max. value of operating motor in 0.6 second per minute.

PERFORMANCE DATA

YMSJ 80

		[4.92 in ³ /rev] 80.6 cm ³ /rev.				Max cont.	Max int.	[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3045] 21		
GPM L/min	[3.9]	[310] 35	[707] 80	[1061] 120	[1397] 158	[1724] 195	[2078] 235		
	15	180	174	168	164	158	151		
Flow (L/min)	[7.9]	[310] 35	[707] 80	[1061] 120	[1397] 158	[1724] 195	[2122] 240	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	30	362	352	346	338	330	322		
	[10.6]	[310] 35	[699] 79	[1052] 119	[1371] 155	[1707] 193	[2070] 234		
	40	482	473	464	453	444	434		
	[13.2]	[265] 30	[681] 77	[1035] 117	[1353] 153	[1698] 192	[2052] 232		
	50	602	594	587	569	560	551		
Max cont.	[15.8]	[248] 28	[681] 77	[1035] 117	[1353] 153	[1698] 192	[2052] 232		
	60	724	713	707	683	673	664		
	[19.8]	[221] 25	[663] 75	[1008] 114	[1344] 152	[1680] 190	[2034] 230	Max cont.	
	75	840	832	817	796	786	777		
Max int.	[23.8]	[212] 24	[646] 73	[973] 110	[1327] 150	[1636] 185	[1990] 225	Max int.	
	90	900	893	872	853	843	834		

YMSJ 100

		[6.16 in ³ /rev] 100.8 cm ³ /rev.				Max cont.	Max int.	[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3045] 21		
GPM L/min	[3.9]	[425] 48	[840] 95	[1327] 150	[1769] 200	[2211] 250	[2556] 289		
	15	146	144	139	135	130	120		
Flow (L/min)	[7.9]	[398] 45	[831] 94	[1291] 146	[1751] 198	[2211] 250	[2609] 295	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	30	291	289	278	274	269	258		
	[10.6]	[380] 43	[787] 89	[1256] 142	[1733] 196	[2193] 248	[2591] 293		
	40	387	384	374	359	350	335		
	[13.2]	[354] 40	[778] 88	[1194] 135	[1716] 194	[2184] 247	[2582] 292		
	50	486	483	473	462	450	430		
Max cont.	[15.8]	[327] 37	[778] 88	[1167] 132	[1636] 185	[2158] 244	[2556] 289		
	60	588	584	574	562	550	538		
	[19.8]	[310] 35	[708] 80	[1150] 130	[1592] 180	[2123] 240	[2529] 286	Max cont.	
	75	740	735	720	705	696	676		
Max int.	[23.8]	[265] 30	[663] 75	[1097] 124	[1503] 170	[2087] 236	[2450] 277	Max int.	
	90	850	840	810	787	770	750		

YMSJ 125

		[7.63 in ³ /rev] 125 cm ³ /rev.				Max cont.	Max int.	[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3045] 21		
GPM L/min	[3.9]	[486] 55	[1061] 120	[1557] 176	[2167] 245	[2733] 309	[3087] 349		
	15	112	110	103	96	93	90		
Flow (L/min)	[7.9]	[486] 55	[1061] 120	[1548] 175	[2211] 250	[2865] 324	[3317] 375	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	30	222	220	217	208	200	199		
	[10.6]	[486] 55	[1061] 120	[1548] 175	[2211] 250	[2865] 324	[3272] 370		
	40	302	298	292	284	276	268		
	[13.2]	[442] 50	[1017] 115	[1557] 176	[2193] 248	[2830] 320	[3272] 370		
	50	379	373	368	363	350	339		
Max cont.	[15.8]	[398] 45	[999] 113	[1512] 171	[2167] 245	[2865] 324	[3255] 368		
	60	456	448	443	439	425	406		
	[19.8]	[398] 45	[973] 110	[1477] 167	[2123] 240	[2777] 314	[3272] 370	Max cont.	
	75	570	563	555	546	533	515		
Max int.	[23.8]	[354] 40	[929] 105	[1433] 162	[2096] 237	[2733] 309	[3228] 365	Max int.	
	90	685	676	670	659	644	625		

YMSJ 160

		[9.60 in ³ /rev] 157.2 cm ³ /rev.				Max cont.	Max int.	[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3045] 21		
GPM L/min	[3.9]	[619] 70	[1238] 140	[1813] 205	[2697] 305	[3281] 371	[3803] 430		
	15	91	88	84	78	76	74		
Flow (L/min)	[7.9]	[663] 75	[1327] 150	[1893] 214	[2839] 321	[3361] 380	[3776] 427	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)	
	30	185	182	176	168	164	162		
	[10.6]	[619] 70	[1327] 150	[1901] 215	[2830] 320	[3343] 378	[3759] 425		
	40	248	244	239	229	224	217		
	[13.2]	[575] 65	[1282] 145	[1901] 215	[2795] 316	[3343] 378	[3759] 425		
	50	312	308	304	294	288	280		
Max cont.	[15.8]	[575] 65	[1282] 145	[1893] 214	[2786] 315	[3317] 375	[3750] 424		
	60	375	371	365	357	346	336		
	[19.8]	[531] 60	[1221] 138	[1840] 208	[2751] 311	[3317] 375	[3714] 420	Max cont.	
	75	470	465	458	447	436	426		
Max int.	[23.8]	[495] 56	[1150] 130	[1769] 200	[2724] 308	[3272] 370	[3661] 414	Max int.	
	90	564	559	551	541	526	517		

PERFORMANCE DATA

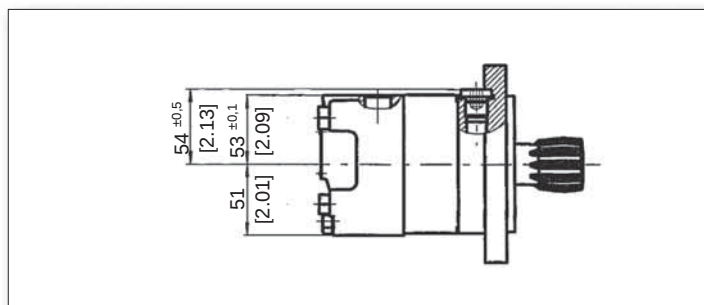
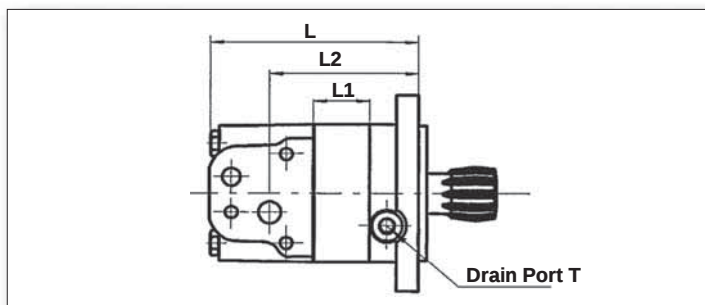
YMSJ 200		[12.21 in ³ /rev] 200 cm ³ /rev.			Max cont.	Max int.	[PSI] MP _A	
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5		[3262] 22.5
GPM	[3.9]	[787]	[1680]	[2609]	[3538]	[4281]		[5377]
L/ min	15	89 73	190 71	295 68	400 64	484 60	608 52	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
Flow (L/min)	[7.9]	[769]	[1680]	[2600]	[3529]	[4289]	[5306]	
	30	87 148	190 146	294 143	399 140	485 135	600 127	
	[10.6]	[761]	[1663]	[2582]	[3511]	[4272]	[5253]	
	40	86 193	188 191	292 189	397 186	483 181	594 172	
	[13.2]	[708]	[1627]	[2565]	[3493]	[4245]	[5218]	
50	80 247	184 245	290 243	395 240	480 235	590 226		
Max cont.	[15.8]	[654]	[1574]	[2530]	[3449]	[4201]	[5147]	
	60	74 298	178 295	286 293	390 290	475 284	582 273	
	[19.8]	[513]	[1415]	[2432]	[3317]	[4068]	[5041]	
Max int.	75	58 372	160 369	275 365	375 362	460 358	570 346	Max cont.
	[23.8]	[433]	[1309]	[2299]	[3140]	[3936]	[4908]	
90	49 440	148 435	260 430	355 422	445 411	555 401	Max int.	

YMSJ 250				Max cont.		Max int.		[PSI] MPa
[15.38 in ³ /rev]		252 cm ³ /rev.						
		[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2537] 17.5	[3262] 22.5	
GPM	[3.9]	[1035]	[2034]	[3140]	[3980]	[4900]	[5766]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	15	117 58	230 55	355 52	450 51	554 47	652 46	
Flow (L/min)	[7.9]	[1035]	[1990]	[3095]	[3944]	[4953]	[5811]	
	30	117 118	225 117	350 112	446 109	560 107	657 106	
	[10.6]	[1017]	[1990]	[3078]	[3909]	[4882]	5749]	
	40	115 160	225 156	348 152	442 150	552 146	650 142	
	[13.2]	[973]	[1946]	[3051]	[3874]	[4829]	[5704]	
	50	110 202	220 200	345 198	438 196	546 195	645 192	
Max cont.	[15.8]	[929]	[1946]	[3007]	[3847]	[4793]	[5678]	
	60	105 242	220 239	340 237	435 234	542 231	642 229	
	[19.8]	[840]	[1901]	[2989]	[3803]	[4749]	[5642]	
Max int.	75	95 300	215 296	338 293	430 286	537 282	638 278	Max cont.
	[23.8]	[796]	[1813]	[2936]	[3714]	[4687]	[5589]	Max int.
	90	90 360	205 354	332 348	420 430	530 332	632 326	

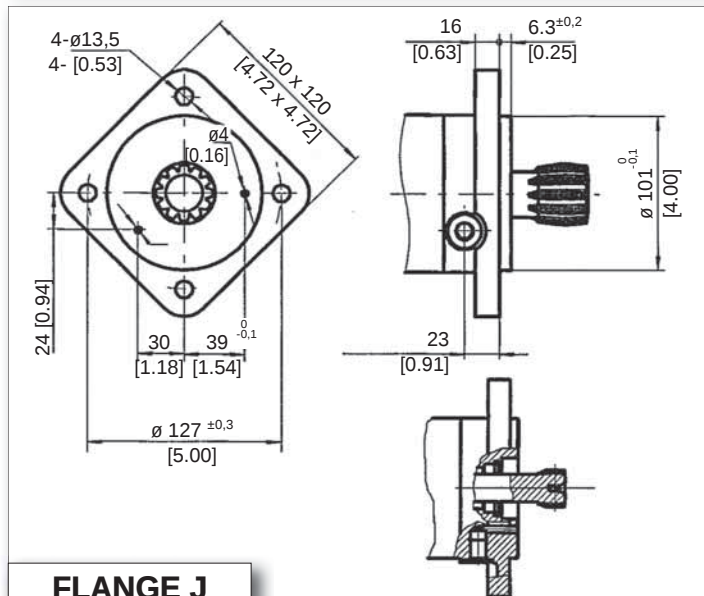
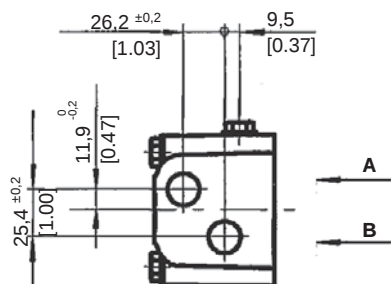
YMSJ 315 [19.20 in³/rev] 314.5 cm³/rev.				Max cont.	Max int.		[PSI] MPa	
		[507] 3.5	[1015] 7	[1522] 10.5	[1740] 12	[2030] 14		[2682] 18.5
GPM	[3.9]	[1415]	[2830]	[4112]	[4908]	[5749]		[6615]
L/ min	15	160 48	320 47	465 45	555 43	650 40	748 38	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	[7.9]	[1459]	[2848]	[4139]	[4953]	[5819]	[6651]	
Flow (L/min)	30	165 94	322 92	468 90	560 89	658 86	752 85	
	[10.6]	[1415]	[2742]	[4042]	[4829]	[5678]	[6553]	
	40	160 125	310 123	457 120	546 118	642 116	741 115	
	[13.2]	[1371]	[2697]	[3980]	[4758]	[5634]	[6509]	
	50	155 158	305 156	450 153	538 150	637 147	736 145	
Max cont.	[15.8]	[1344]	[2671]	[3909]	[4705]	[5589]	[6474]	
	60	152 175	302 174	442 170	532 164	632 162	732 159	
	[19.8]	[1282]	[2609]	[3856]	[4643]	[5554]	[6421]	
Max int.	75	145 236	295 234	436 230	525 227	628 225	726 222	Max cont.
	[23.8]	[1167]	[2476]	[3803]	[4599]	[5501]	[6394]	Max int.
	90	132 285	280 282	430 280	520 276	622 273	723 270	

YMSJ 37				Max cont		Max int.		[PSI] MPa
[22.58 in ³ /rev]		370 cm ³ /rev.						
		[507]	[1015]	[1305]	[1450]	[1740]	[2030]	
		3.5	7	9	10	12	14	
GPM	[3.9]	[1636]	[3202]	[4192]	[4528]	[5200]	[5837]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	15	185	362	474	512	588	660	
Flow (L/min)	[7.9]	[1627]	[3219]	[4201]	[4546]	[5218]	[5846]	
	30	184	364	475	514	590	661	
	[10.6]	[1592]	[3202]	[4183]	[4537]	[5200]	[5828]	
	40	180	362	473	513	588	659	
	[13.2]	[1415]	[3184]	[4174]	[4519]	[5183]	[5819]	
	50	160	360	472	511	586	658	
Max cont	[15.8]	[1327]	[3175]	[4166]	[4510]	[5174]	[5811]	
	60	150	359	471	510	585	657	
	[19.8]	[1150]	[3122]	[4112]	[4457]	[5165]	[5757]	
Max int.	75	130	353	465	504	584	651	Max cont.
	[23.8]	[929]	[3095]	[4086]	[4422]	[5130]	[5722]	Max int.
90	105	350	462	500	580	647		
		40	39	38	37	35	33	
		80	78	77	76	74	72	
		106	104	103	102	100	97	
		133	131	130	129	128	125	
		157	156	155	154	152	150	
		200	198	196	195	194	193	
		238	235	234	232	230	227	

MOUNTING DATA

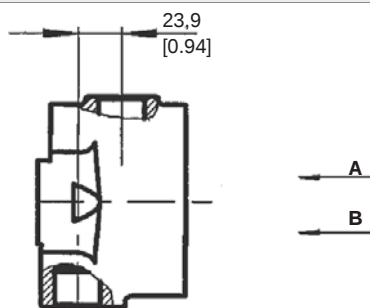


PORTING DB, DU, SU, SB, M4

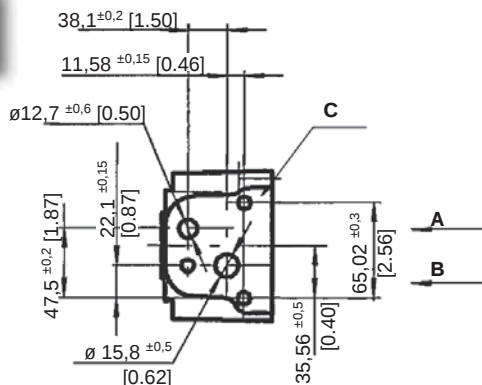


PORTING ED

O-ring Ports
180 Apart



PORTING MU, MM



FLANGE J

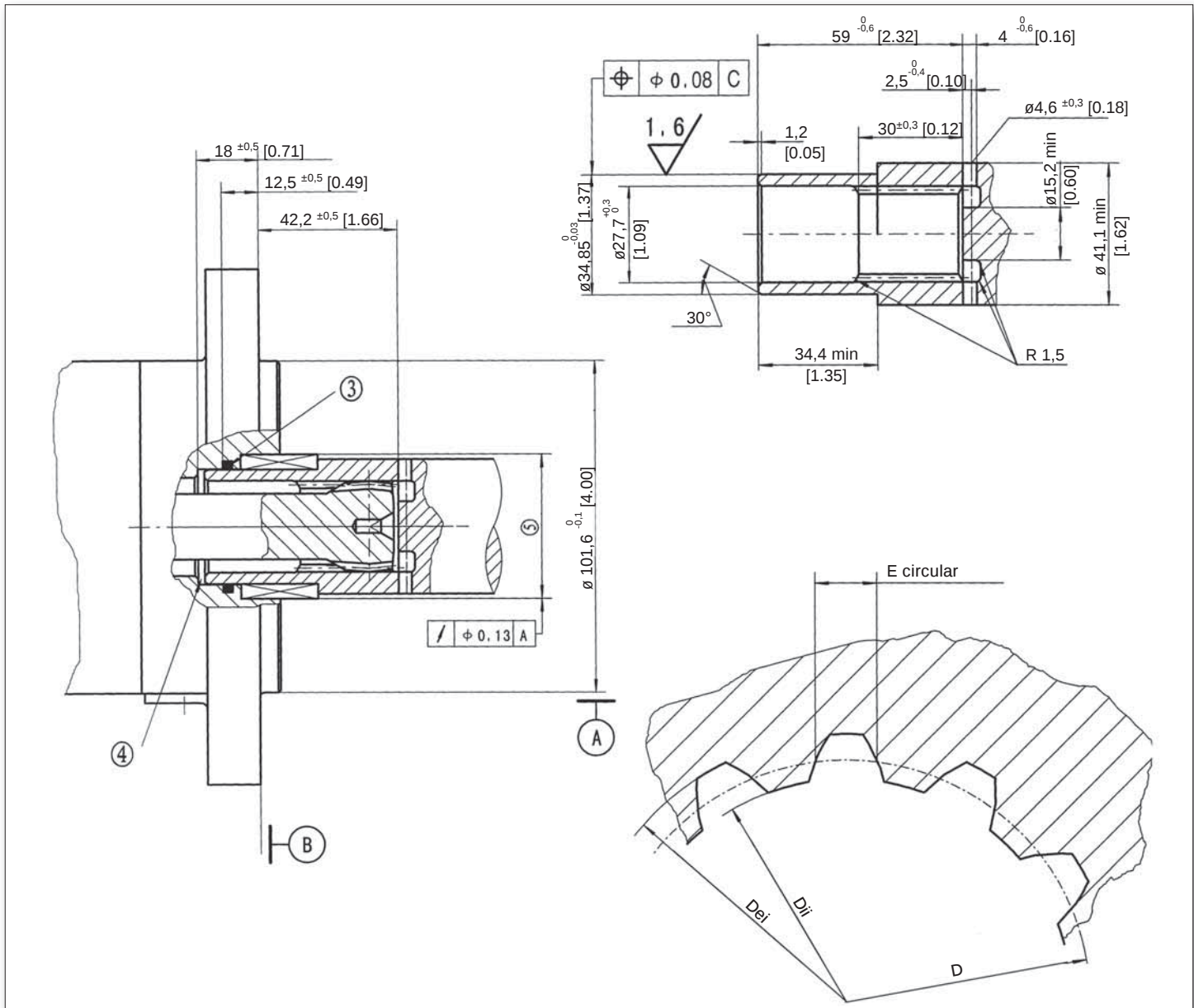
	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
YMSJ 80	[5.28]	[0.52]	[3.39]	134	13	86
YMSJ 100	[5.44]	[0.67]	[3.55]	138	17	90
YMSJ 125	[5.63]	[0.87]	[3.74]	143	22	95
YMSJ 160	[5.85]	[12.90]	[3.96]	148.5	27.5	100.5
YMSJ 200	[6.15]	[1.39]	[4.26]	156	35.1	108
YMSJ 250	[6.62]	[1.85]	[4.73]	168	47	120
YMSJ 315	[7.09]	[2.33]	[5.20]	180	59	132
YMSJ 375	[7.56]	[2.80]	[5.67]	192	71	144

- Note: 1) If the porting MU, MM, S2 is used, the dimension of L2 should be reduced by 1,5 mm and L should be reduced by 4 mm
 2) If the port ED is used, the dimensions of the L2 should be plus 2,5 mm and L should be plus 2 mm
 3) The thickness of the stator and rotor is the dimension of L1 + 3mm.

PORT & DRAIN PORT ORDERING CODES

ORDER CODE	DB	DEPTH	DU	DEPTH	SU	DEPTH	SB	DEPTH	M4	DEPTH	MU	MM	DEPTH	ED	DEPTH
PORTS - A and B	G12	18 mm	G1/2	18 mm	7/8-14 O-ring	18 mm	7/8-14 O-ring	18 mm	M22x1,5	18 mm	12.7 15.8	12.7 15.8		1-1/16-12un	18 mm
TANK PORT - T	G1/4	12 mm	7/16-20UNF	12 mm	7/16-20unf	12 mm	G 1/4	12 mm	M14x1.5	12 mm	7/16-20UNF	G 1/4	12 mm	7/16-20unf	12 mm
BOLTS - C											3x3/8-16UNF	3xM10			

DIMENSION AND MOUNTING DATA



INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

FILLET ROOT SIDE FIT		mm
NUMBER OF TEETH	Z	12
DIAMETRAL PITCH	DP	12/24
PRESSURE ANGLE	α_D	30°
PITCH DIA.	D	Ø 25.4
MAJOR DIA.	Dei	Ø 27.6 ^{+0.14} / ₀
MINOR DIA.	Dii	Ø 23.1 ^{+0.12} / ₀
SPACE WIDTH CIRCULAR	E	4.282 ±0.036
DIMENSION BETWEEN TWO PINS (Ø4)	Me	19.02-19.19

- Internal spline in mating part to be as follows: Material to be ASTM A304, 8620H. Carborize to a hardness of 58-62 HRC with case depth (to 50HRC) of 0.75-1 [0.030-.040] (dimensions apply after heat treat).
- Mating part to have critical dimensions as shown. Oil holes must be provided and open for proper oil circulation.
- Some means of maintaining clearance between shaft and mounting flange must be provided
- Seal to be furnished with motor for proper oil circulation thru splines
- Counterbore designed to adapt to a standard sleeve bearing 35.040 [1.3784-1.3795] ID by 44.040-44.070 [1.7339-1.7350] O.D. (Oilite Bronze sleeve bearing AAM3544-22)

ORDERING INFORMATION

1	2	3	4	5	6	7
YMSJ						

1	2		3		4		5		6		7					
DISP.	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT		SPECIAL OPTIONS					
80	J	Square Flange ø 127, Pilot ø 101,6x6,3	None	Short Shaft 12-DP-12/24	MU	1/2",5/8" Crosshole Manifold 3x3/8-16 UNC, 7/16-20 UNF	NONE	STAN- DARD	OO	NO PAINT	NONE	STANDARD				
100					MM	1/2",5/8" Crosshole Mani- fold 3xM10, G1/4			R	OPPOSITE			NONE	BLUE	LL	LOW LEA- KAGE
125					EE-D	G1/2, G1/4							B	BLACK	FR	FREE RUN- NING
160					EE-M2	M22X1,5 - M14X1,5							S	SILVER GRAY	LS	LOW SPEED VALVE
200					EE-S2	7/8-14 UNF O-RING, 7/16-20 UNF										
250					ED	11/16-12 UNF O-RING, 7/16-20 UNF										
315					DB	G1/2, G1/4										
375					DU	G1/2, 7/16-20 UNF										
					SB	7/8-14 UNF O-RING, G1/4										
					SU	7/8-14 UNF O-RING 7/16-20 UNF										
					M4	M22X1.5, M14X1.5										
					G	G1/2, G1/4										
					M2	M22X1.5, M14X1.5										
	S2	7/8-14 UNF O-RING 7/16-20 UNF														

ORDERING CODE

All options have been determined with letter or numbers or combination. All boxes must be filled with proper code. If specification is not in the table, please contact us with your specific requirement

YMT



The **YMT** series motor incorporates the advanced **GEROLOR** gear set which reduces internal friction to a minimum. A **DISC VALVE** distribution system which is internally balanced to reduce friction, leakage and permits better speed control producing higher efficiency, smoother rotation, higher speeds and pressure.

This series has many sizes and options to make it very flexible for many applications. The output shaft is mounted on tapered roller bearings for high radial and axial loads for very high duty applications.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Disc Distribution	YMT	[in ³ ./rev]	[9.77~48.82]	[PSI]	[3480]	RPM	[HP]	[47]
		cm ³ /rev.	160 ~ 800	MPa	24	30~705	Kw	35

QUICK REFERENCE GUIDE

YMT SERIES QUICK REFERENCE:

Displacements				
[in. ³ /rev]	cm ³ /rev.			
[9.83]	161.1	FLOW UP TO	125 LPM	[33 GPM]
[12.29]	201.4	PRESSURE UP TO	30 MPa	[4350 PSI]
[14.19]	232.5	TORQUE UP TO	1643 Nm	[14530 lbin.]
[15.36]	251.8	SPEED UP TO	770 RPM	
[19.91]	326.3			
[25.07]	410.9			
[31.95]	523.6			
[38.38]	629.1			
[48.92]	801.8			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated shafts or housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

DISTRIBUTION TYPE		YMT 160	YMT 200	YMT 250	YMT 315	YMT 400	YMT 500	YMT 630	YMT 800
GEOMETRIC DISPLACEMENT	[in ³ ./rev.]	[9.83]	[12.29]	[15.37]	[19.92]	[25.08]	[31.96]	[38.39]	[48.93]
	cm ³ /rev.	161.1	201.4	251.8	326.3	410.9	523.6	629.1	801.8
MAX. SPEED RPM	RATED	470	475	381	294	228	183	150	121
	CONT.	614	615	495	380	302	237	196	154
	INT.	770	743	592	458	364	284	233	185
MAX. TORQUE [IN. LB.] N*M	RATED	[IN.LB]	[3352]	[4166]	[5147]	[6704]	[7924]	[9401]	[10,224]
		N*M	379	471	582	758	896	1063	1207
	CONT.	[IN. LB.]	[4166]	[5209]	[6430]	[8508]	[9684]	[11,011]	[11,656]
		N*M	471	589	727	962	1095	1245	1318
	INT.	[IN. LB.]	[507]	[6350]	[7853]	[10,206]	[11,223]	[12,461]	[13,248]
		N*M	57.3	718	888	1154	1269	1409	1498
	PEAK	[IN.LB]	[5917]	[7411]	[9162]	[11,907]	[12,826]	[14,538]	[14,317]
		N*M	669	838	1036	1346.3	1450.3	1643.8	1618.8
MAX. OUTPUT [HP] KW	RATED	[HP]	[25.0]	[31.4]	[31.1]	[31.2]	[28.7]	[27.3]	[24.4]
		KW	18.7	23.4	23.2	23.3	21.4	20.4	18.2
	CONT.	[HP]	[37.1]	[46.8]	[46.2]	[46.8]	[41.8]	[38.6]	[33.9]
		KW	27.7	34.9	34.5	34.9	31.2	28.8	25.3
	INT.	[HP]	[42.9]	[53.6]	[53.6]	[53.6]	[46.9]	[46.9]	[36.8]
		KW	32	40	40	40	35	35	27.5
MAX. PRES- SURE DROP [PSI] MPa	RATED	[PSI]	[2320]	[2320]	[2320]	[2320]	[2175]	[2030]	[1740]
		MPa	16	16	16	16	15	14	12
	CONT.	[PSI]	[2900]	[2900]	[2900]	[2900]	[2610]	[2320]	[2030]
		MPa	20	20	20	20	18	16	14
	INT.	[PSI]	[3480]	[3480]	[3480]	[3480]	[3045]	[2610]	[2320]
		MPa	24	24	24	24	21	18	16
	PEAK	[PSI]	[4060]	[4060]	[4060]	[4060]	[3480]	[3045]	[2755]
		MPa	28	28	28	28	24	21	19
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[21.1]	[26.4]	[26.4]	[26.4]	[26.4]	[26.4]	[26.]
		L/MIN	80	100	100	100	100	100	100
	CONT.	[GPM]	[26.4]	[33]	[33]	[33]	[33]	[33]	[33]
		L/MIN	100	125	125	125	125	125	125
	INT.	[GPM]	[33]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]
		L/MIN	125	150	150	150	150	150	150
MAX. INLET PRESSURE [PSI] MPa	RATED	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21	21
	CONT.	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21	21
	INT.	[PSI]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]
		MPa	25	25	25	25	25	25	25
	PEAK	[PSI]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]
		MPa	30	30	30	30	30	30	30
WEIGHT [LB] KG	[LB]	[43]	[44]	[45]	[46]	[48]	[52]	[53]	[55]
	KG	19.5	20	20.5	21	22	23	24	25

- Continuous pressure: Max. value of operating motor continuously.
- Rated speed and rated torque: Output value of speed and torque under rated flow and rated pressure.
- Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- Peak pressure: Max. value of operating motor in 0.6 second per minute.

PERFORMANCE DATA

YMT 160 [9.83 in³./rev.] 161.1 cm³/rev.

		[580] 4	[1160] 8	[1450] 10	[1740] 12	[2320] 16	Max cont. [2900] 20	Max int. [3480] 24	[PSI] MPa
GPM	[2.7]	[778]	[1557]	[2016]	[2432]	[3193]	[3953]	[4732]	
	10	88	176	228	275	361	447	535	
L / min	[5.3]	[787]	[1601]	[2070]	[2450]	[3290]	[4059]	[4926]	TORQUE [LB-IN]
	20	89	181	234	277	372	459	557	TORQUE (N•M)
Flow (L/min)	[10.6]	[805]	[1592]	[2079]	[2450]	[3370]	[4166]	[5068]	SPEED (RPM)
	40	91	180	235	277	381	471	573	
	[15.9]	[725]	[1574]	[2078]	[2449.79]	[3370]	[4157]	[5059]	
	60	82	178	235	277	381	470	572	
	[21.1]	[689.84]	[1530.02]	[2025.28]	[2440.95]	[3351.88]	[4121.31]	[5014.55]	
	80	78	173	229	276	379	466	567	
Max cont.	[26.4]	[619]	[1415]	[1928]	[2379]	[3272]	[4024]	[4935]	
	100	70	160	218	269	370	455	558	Max cont.
Max int.	[33.0]	[513]	[1309]	[1866]	[2308]	[3175]	[3962]	[4882]	
	125	58	148	211	261	359	448	552	Max int.

YMT 200 [12.29 in³./rev.] 201.4 cm³/rev.

		[580] 4	[1160] 8	[1450] 10	[1740] 12	[2320] 16	Max cont. [2900] 20	Max int. [3480] 24	[PSI] MPa
GPM	[2.7]	[1097]	[2061]	[2556]	[3007]	[4015]	[4953]	[5917]	
	10	124	233	289	340	454	560	669	
L / min	[5.3]	[1106]	[2114]	[2635.52]	[3069]	[4139]	[5094]	[6155]	TORQUE [LB-IN]
	20	125	239	298	347	468	576	696	TORQUE (N•M)
Flow (L/min)	[10.6]	[1061]	[2131]	[2618]	[3113]	[4201]	[5210]	[6332]	SPEED (RPM)
	40	120	241	296	352	475	589	716	
	[15.9]	[1026]	[2096]	[2609]	[3113]	[4227]	[5209]	[6350]	
	60	116	237	295	352	478	589	718	
	[21.1]	[955]	[2043]	[2556]	[3095]	[4192]	[5183]	[6332]	
	80	108	231	289	350	474	586	716	
Max cont.	[26.4]	[876]	[2008]	[2529]	[3042]	[4166]	[5130]	[6297]	
	100	99	227	286	344	471	580	712	Max cont.
Max int.	[33.0]	[743]	[1840]	[2441]	[2945]	[4059]	[5006]	[6164]	
	125	84	208	276	333	459	566	697	Max int.
	[39.6]	[619]	[1716]	[2299]	[2865]	[3953]	[4900]	[6032]	
	150	70	194	260	324	447	554	682	Max int.

YMT 250 [15.37 in³./rev.] 251.8 cm³/rev.

		[580] 4	[1160] 8	[1450] 10	[1740] 12	[2320] 16	Max cont. [2900] 20	Max int. [3480] 24	[PSI] MPa
GPM	[2.7]	[1220]	[2529]	[3140]	[3706]	[4944]	[6094]	[7287]	
	10	138	286	355	419	559	689	824	
L / min	[5.3]	[1265]	[2618]	[3219]	[3821]	[5130]	[6262]	[7544]	TORQUE [LB-IN]
	20	143	296	364	432	580	708	853	TORQUE (N•M)
Flow (L/min)	[10.6]	[1229]	[2662]	[3290]	[3891]	[5244]	[6394]	[7818]	SPEED (RPM)
	40	139	301	372	440	593	723	884	
	[15.9]	[1167]	[2600]	[3290]	[3900]	[5236]	[6430]	[7853]	
	60	132	294	372	441	592	727	888	
	[21.1]	[1132]	[2503]	[3219]	[3829]	[5191]	[6377]	[7845]	
	80	128	283	364	433	587	721	887	
Max cont.	[26.4]	[1114]	[2494]	[3140]	[3776]	[5147]	[6332]	[7774]	
	100	126	282	355	427	582	716	879	Max cont.
Max int.	[33.0]	[1026]	[2299]	[3007]	[3661]	[5023]	[6217]	[7641]	
	125	116	260	340	414	568	703	864	Max int.
	[39.6]	[778]	[2140]	[2830]	[3511]	[4882]	[6067]	[7491]	
	150	88	242	320	397	552	686	847	

YMT 315 [19.92 in³./rev.] 326.3 cm³/rev.

		[580] 4	[1160] 8	[1450] 10	[1740] 12	[2320] 16	Max cont. [2900] 20	Max int. [3480] 24	[PSI] MPa
GPM	[2.7]	[1627]	[3210]	[4006]	[4820]	[6491]	[7880]	[9392]	
	10	184	363	453	545	734	891	1062	
L / min	[5.3]	[1672]	[3361]	[4174]	[4970]	[6695]	[8110]	[9808]	TORQUE [LB-IN]
	20	189	380	472	562	757	917	1109	TORQUE (N•M)
Flow (L/min)	[10.6]	[1689]	[3370]	[4280]	[5041]	[6845]	[8437]	[10,162]	SPEED (RPM)
	40	191	381	484	570	774	954	1149	
	[15.9]	[1672]	[3325]	[4360]	[5068]	[6828]	[8508]	[10,206]	
	60	189	376	493	573	772	962	1154	
	[21.1]	[1583]	[3263]	[4236]	[4997]	[6951]	[8437]	[10,197]	
	80	179	369	479	565	786	954	1153	
Max cont.	[26.4]	[1495]	[3157]	[4130]	[4970]	[6704]	[8331]	[10,109]	
	100	169	357	467	562	758	942	1143	Max cont.
Max int.	[33.0]	[1300]	[2972]	[3953]	[4811]	[6589]	[8136]	[9967]	
	125	147	336	447	544	745	920	1127	Max int.
	[39.6]	[1052]	[2812]	[3821]	[4652]	[6306]	[7907]	[9702]	
	150	119	318	432	526	713	894	1097	

PERFORMANCE DATA

YMT 400 [25.08 in³./rev.] 410,9 cm³/rev.

		[435] 3	[870] 6	[1305] 9	[1740] 12	[2175] 15	Max cont. [2610] 18	Max int. [3045] 21	[PSI] MPa
GPM	[2.7]	[1557]	[3246]	[4953]	[6323]	[7827]	[9286]	[10,692]	
L/min	10	176	367	560	715	885	1050	1209	
		24	23	22	21	20	19	18	
	[5.3]	[1583]	[3272]	[4997]	[6421]	[7951]	[9472]	[10,931]	TORQUE [LB-IN]
		179	370	565	726	899	1071	1236	TORQUE (N•M)
	20	49	48	47	44	42	40	38	SPEED (RPM)
	[10.6]	[1557]	[3272]	[5015]	[6483]	[8128]	[9649]	[11,170]	
		176	370	567	733	919	1091	1263	
	40	96	95	93	90	87	83	79	
Flow (L/min)	[15.9]	[1539]	[3193]	[4979]	[6447]	[8136]	[9684]	[11,223]	
		174	361	563	729	920	1095	1269	
	60	145	143	139	135	131	127	121	
	[21.1]	[1468]	[3122]	[4891]	[6359]	[8066]	[9587]	[11,170]	
		166	353	553	719	912	1084	1263	
	80	193	191	188	184	180	176	170	
	[26.4]	[1327]	[2998]	[4758]	[6262]	[7924]	[9437]	[11,073]	
		150	339	538	708	896	1067	1252	
	100	242	240	238	234	228	224	218	
Max cont.	[33.0]	[1194]	[2733]	[4634]	[6085]	[7721]	[9242]	[10,799]	Max cont.
		135	309	524	688	873	1045	1221	
	125	302	300	298	294	289	285	178	
Max int.	[39.6]	[1114]	[2582]	[4493]	[5890]	[7535]	[9021]	[10,586]	Max int.
		126	292	508	666	852	1020	1197	
	150	364	362	358	354	350	346	339	

YMT 500 [31.96 in³./rev.] 523,6 cm³/rev.

		[435] 3	[870] 6	[1305] 9	[1740] 12	[2030] 14	Max cont. [2320] 16	Max int. [2610] 18	[PSI] MPa
GPM	[2.7]	[1963]	[3989]	[6120]	[7889]	[9286]	[10,551]	[11,851]	
L/min	10	222	451	692	892	1050	1193	1340	
		18	18	18	17	16	15	13	
	[5.3]	[2043]	[4104]	[6313]	[8119]	[9463]	[10,790]	[12,178]	TORQUE [LB-IN]
		231	464	714	918	1070	1220	1377	TORQUE (N•M)
	20	37	36	35	34	33	32	30	SPEED (RPM)
	[10.6]	[2034]	[4121]	[6430]	[8322]	[9675]	[11,002]	[12,576]	
		230	466	727	941	1094	1244	1422	
	40	75	74	73	72	70	68	64	
Flow (L/min)	[15.9]	[1990]	[4042]	[6315]	[8322]	[9622]	[11,011]	[12,461]	
		225	457	714	941	1088	1245	1409	
	60	113	112	111	109	107	105	101	
	[21.1]	[1884]	[3812]	[6155]	[8198]	[9516]	[11,002]	[12,390]	
		213	431	696	927	1076	1244	1401	
	80	151	150	149	147	145	143	138	
	[26.4]	[1716]	[3714]	[6014]	[7968]	[9401]	[10,825]	[12,231]	
		194	420	680	901	1063	1224	1383	
	100	189	188	187	185	183	181	177	
Max cont.	[33.0]	[1610]	[3520]	[5669]	[7756]	[9056]	[10,604]	[11,957]	Max cont.
		182	398	641	877	1024	1199	1352	
	125	237	236	235	233	231	229	225	
Max int.	[39.6]	[1300]	[3263]	[5466]	[7544]	[8879]	[10,321]	[11,718]	Max int.
		147	369	618	853	1004	1167	1325	
	150	284	283	282	280	278	276	272	

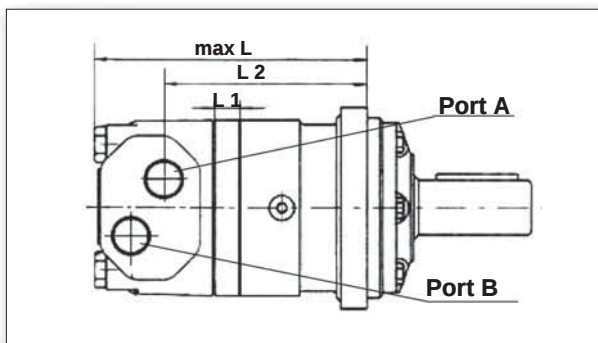
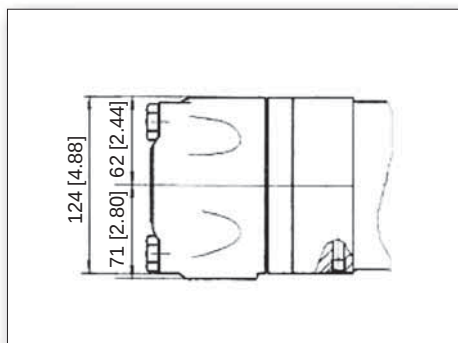
YMT 630 [38.39 in³./rev.] 629,1 cm³/rev.

		[435] 3	[870] 6	[1305] 9	[1522] 10.5	[1740] 12	Max cont. [2030] 14	Max int. [2320] 16	[PSI] MPa
GPM	[2.7]	[2061]	[4599]	[7031]	[7977]	[9498]	[10,560]	[12,054]	
L/min	10	233	520	795	902	1074	1194	1363	
		14	14	13	13	13	11	11	
	[5.3]	[2096]	[4900]	[7402]	[8428]	[9879]	[10,958]	[12,444]	TORQUE [LB-IN]
		237	554	837	953	1117	1239	1407	TORQUE (N•M)
	20	28	27	27	26	26	24	22	SPEED (RPM)
	[10.6]	[2114]	[4891]	[7606]	[8729]	[10,356]	[11,568]	[13,116]	
		239	553	860	987	1171	1308	1483	
	40	62	62	61	60	59	56	54	
Flow (L/min)	[15.9]	[1972]	[4811]	[7632]	[8649]	[10,365]	[11,656]	[13,248]	
		223	544	863	978	1172	1318	1498	
	60	94	94	92	91	90	86	82	
	[21.1]	[1946]	[4749]	[7553]	[8534]	[10,365]	[11,621]	[13,239]	
		220	537	854	965	1172	1314	1497	
	80	123	122	121	119	118	114	110	
	[26.4]	[1840]	[4617]	[7358]	[8358]	[10,224]	[11,524]	[13,160]	
		208	522	832	945	1156	1303	1488	
	100	156	155	153	152	150	147	142	
Max cont.	[33.0]	[1778]	[4413]	[7164]	[8234]	[10,056]	[11,426]	[13,018]	Max cont.
		201	499	810	931	1137	1292	1472	
	125	196	196	194	192	191	187	183	
Max int.	[39.6]	[1539]	[4351]	[6943]	[8145]	[9914]	[11,294]	[12,859]	Max int.
		174	492	785	921	1121	1277	1454	
	150	233	232	231	230	227	223	217	

YMT 800 [48.93 in³./rev.] 801,8 cm³/rev.

		[435] 3	[870] 6	[1305] 9	[1522] 10.5	[1812] 12.5	Max cont. [1885] 13	Max int.	[PSI] MPa
GPM	[2.7]	[3060]	[5987]	[8871]	[10,250]	[12,072]	[12,293]		
L/min	10	346	677	1003	1159	1365	1390		
		12	12	11	11	11	10		
	[5.3]	[3148]	[6120]	[9145]	[10,462]	[12,417]	[12,895]		TORQUE [LB-IN]
		356	692	1034	1183	1404	1458		TORQUE (N•M)
	20	24	24	24	23	22	18		SPEED (RPM)
	[10.6]	[3228]	[6217]	[9428]	[10,931]	[12,903]	[13,408]		
		365	703	1066	1236	1459	1516		
	40	50	50	49	48	46	40		
Flow (L/min)	[15.9]	[3131]	[6217]	[9375]	[10,940]	[12,948]	[13,443]		
		354	703	1060	1237	1464	1520		
	60	74	73	71	71	68	63		
	[21.1]	[2936]	[6067]	[9286]	[10,843]	[12,948]	[13,390]		
		332	686	1050	1226	1464	1514		
	80	99	98	98	96	93	86		
	[26.4]	[2697]	[5784]	[9065]	[10,675]	[12,780]	[13,319]		
		305	654	1025	1207	1445	1506		
	100	125	123	123	121	118	110		
Max cont.	[33.0]	[2476]	[5501]	[8747]	[10,445]	[12,576]	[13,151]		Max cont.
		280	622	989	1181	1422	1487		
	125	154	153	153	150	149	140		
Max int.	[39.6]	[2184]	[5218]	[8428]	[10,224]	[12,435]	[13,054]		Max int.
		247	590	953	1156	1406	1476		
	150	185	184	183	181	179	172		

MOUNTING DATA

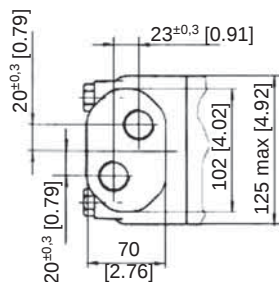


	[INCHES]		MILLIMETERS	
MODEL	L1	L2	L1	L2
YMTW160	[0.67]	[3.03]	17	77
YMTW200	[0.83]	[3.19]	21	81
YMTW250	[1.07]	[3.42]	27	87
YMTW315	[0.79]	[3.58]	20	91
YMTW400	[1.07]	[3.86]	27	98
YMTW500	[1.38]	[4.17]	35	106
YMTW630	[1.85]	[4.64]	47	118
YMTW800	[2.29]	[5.08]	58	129

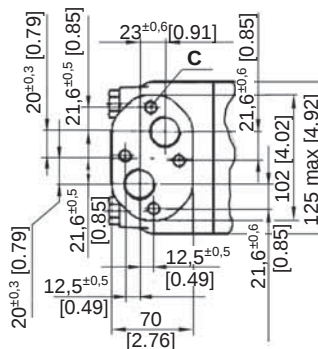
	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
YMT160	[7.60]	[0.67]	[5.61]	193	17	142.5
YMT200	[7.76]	[0.83]	[5.77]	197	21	146.5
YMT250	[8.00]	[1.07]	[6.01]	203	27	152.5
YMT315	[8.19]	[0.79]	[6.17]	208	20	156.5
YMT400	[8.47]	[1.07]	[6.44]	215	27	163.5
YMT500	[8.78]	[1.38]	[6.76]	223	35	171.5
YMT630	[9.26]	[1.85]	[7.23]	235	47	183.5
YMT800	[9.69]	[2.29]	[7.66]	246	58	194.5

Note: 1) The thickness of the stator and rotor for displacements from 160-250 is the dimension of L1 + 3mm
2) The thickness of the stator and rotor for displacements from 315-800 is the dimension of L1 + 7mm.

PORTS S1,S,G,M3



PORTS D,M

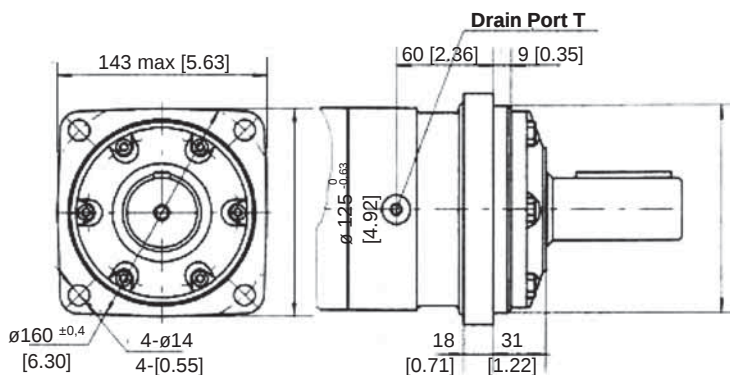


PORT & DRAIN PORT ORDERING CODES

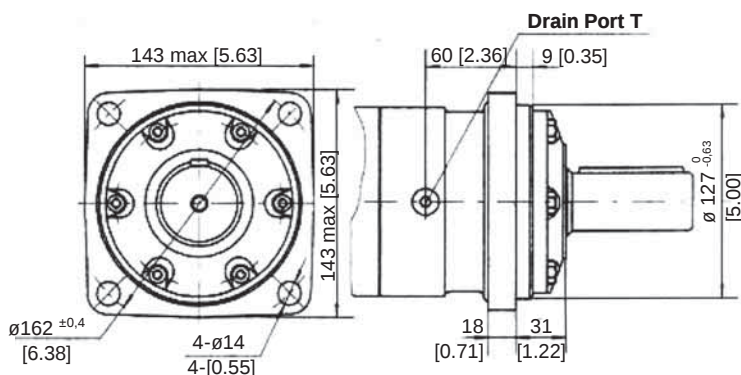
ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	G	DEPTH	M3	DEPTH	S1	DEPTH
PORTS - A and B	G 3/4	18 mm	M27 X 2	18 mm	1-1/16-12 UN	18 mm	G 3/4	18 mm	M27 X 2	18 mm	1-1/16-12 UN	18 MM
TANK PORT - T	G 1/4	12 mm	M14 X1.5	12 mm	9/16-18UNF	12 mm	G 1/4	12 mm	M14X1.5	12MM	7/16-20UNF	12MM
BOLTS - C	4-M10	10 mm	4-M10	10 mm								

MOUNTING DATA

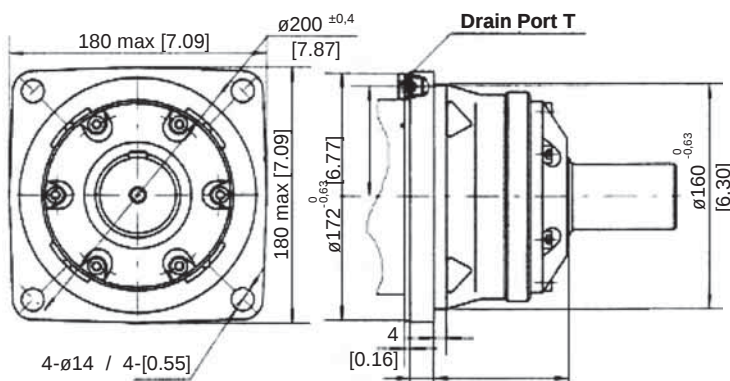
FLANGE 4



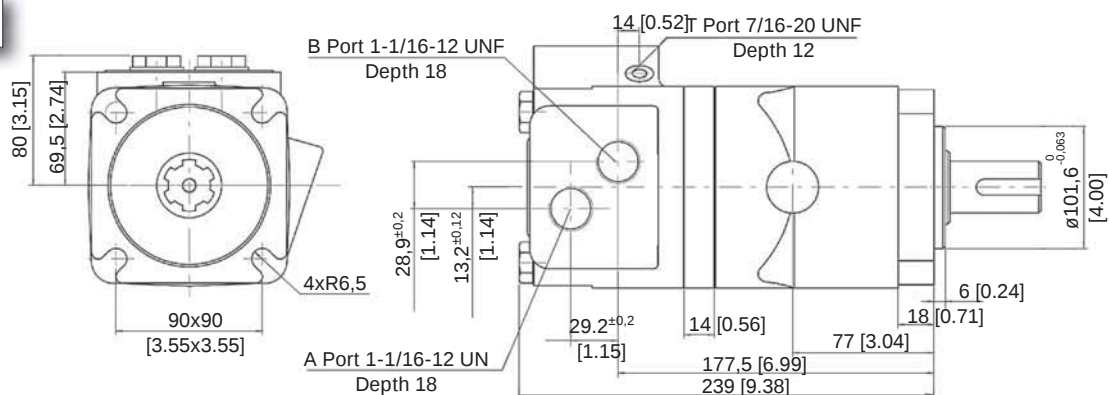
FLANGE K6



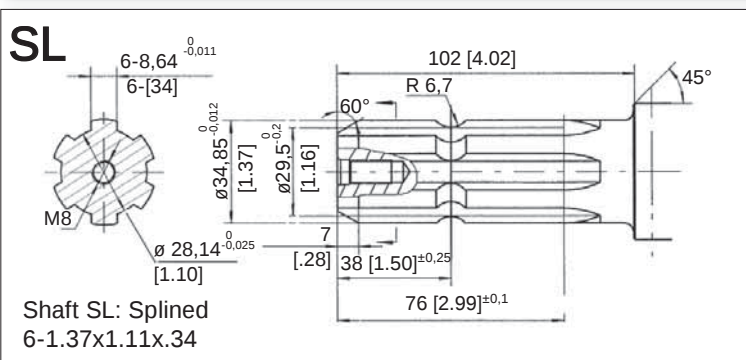
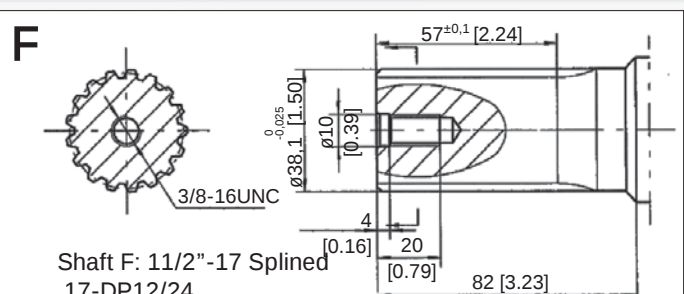
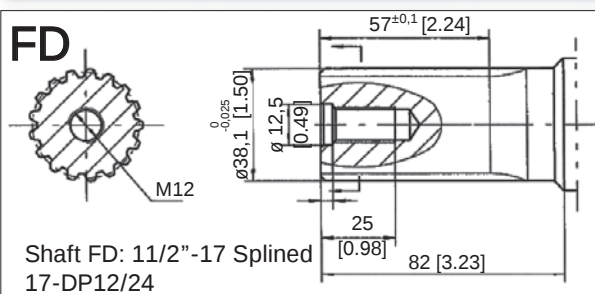
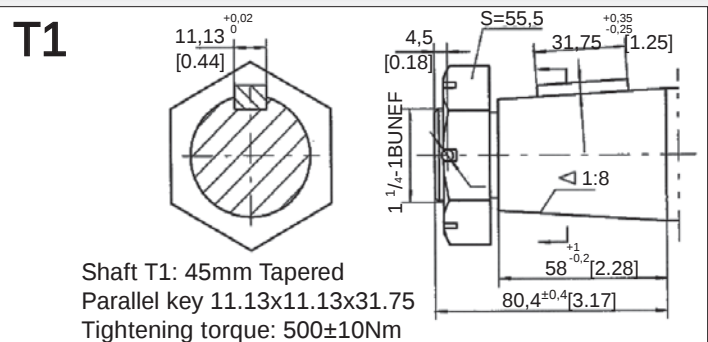
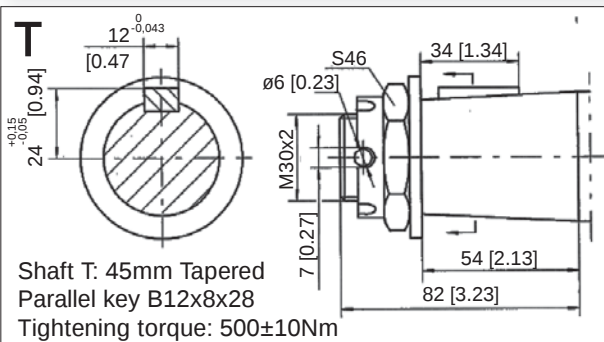
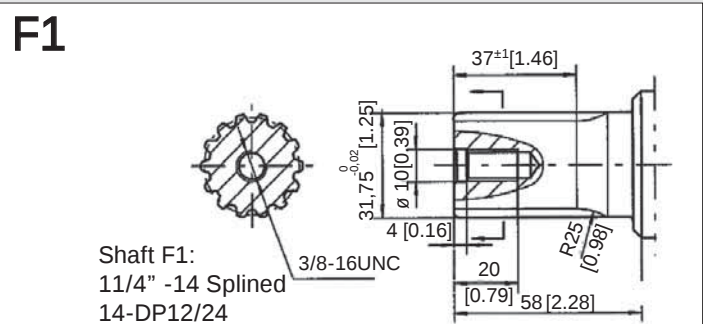
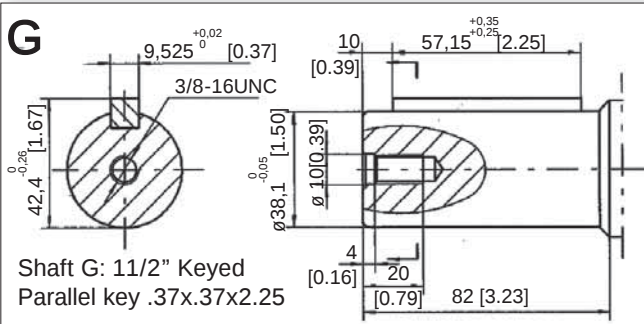
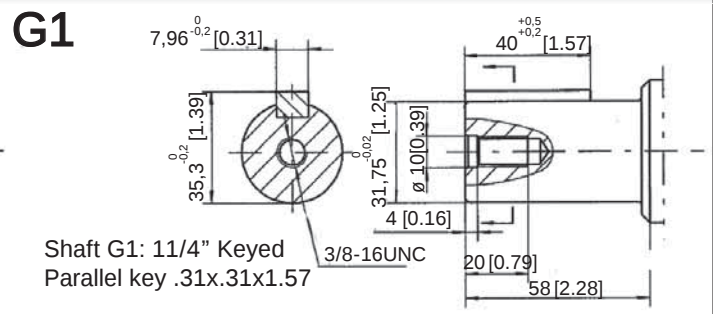
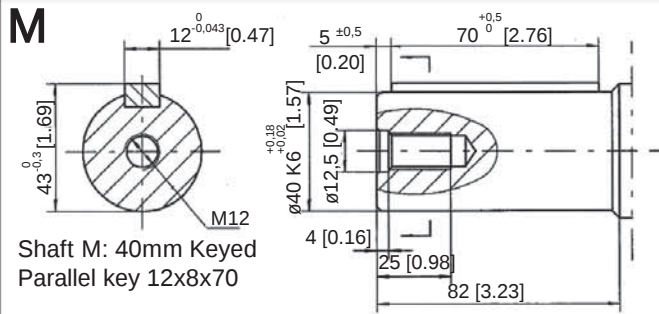
FLANGE W



FLANGE B2E

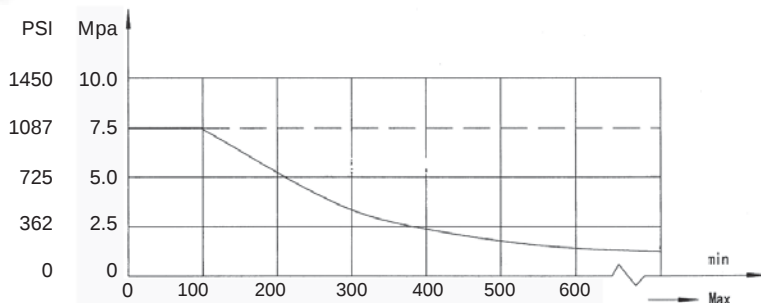
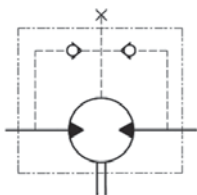


MOTOR SHAFT EXTENSIONS



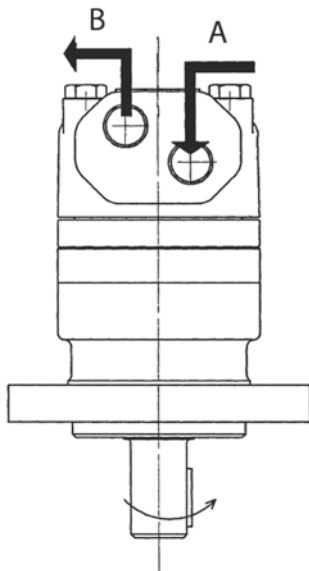
ADDITIONAL DATA

PERMISSIBLE SHAFT SEAL PRESSURE



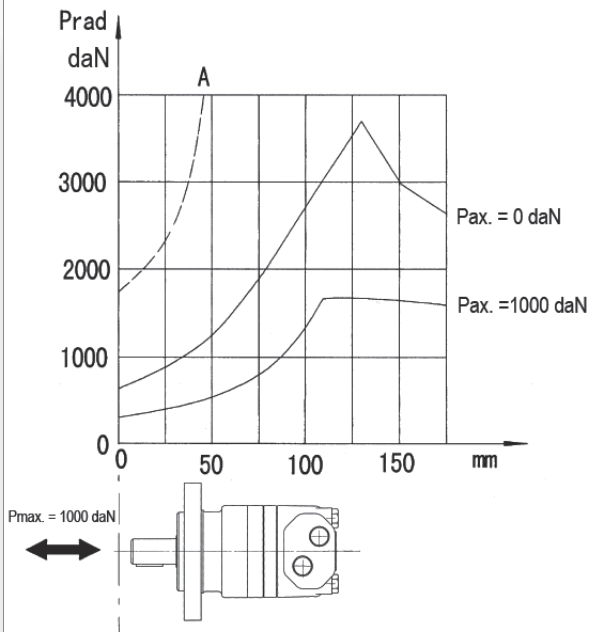
IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE.
IN APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN DRAIN LINE.

DIRECTION OF SHAFT ROTATION



WHEN FACING SHAFT END OF MOTOR, SHAFT TO ROTATE:
CLOCKWISE WHEN PORT "A" IS PRESSURIZED.
COUNTER CLOCK WISE WHEN PORT "B" IS PRESSURIZED.

AXIAL AND RADIAL FORCES



The output shaft is mounted on tapered roller bearings that permit high radial and axial loads. Curve "A" shows Max radial shaft load. Any shaft load exceeding the values quoted in the curve could determine premature failure of the shaft bearings or other parts. The other curves show a B10 life of 3000 hours and 200 RPM.

ORDERING INFORMATION

	1	2	3	4	5	6	7	8
YMT								

1	2	3	4	5	6	7
DISP.	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS
160	4 4-Ø14 Square-flange Ø160, pilot Ø125×9	M Shaft: 40mm Keyed Key 12×8×70	D G3/4 Manifold Mount 4-M10, G1/4	NONE STANDARD	00 NO PAINT	NONE STANDARD
200	K6 4-Ø14.5 Square-flange Ø162, pilot Ø127×9	G Shaft: 11/2" Keyed parallel Key .38x.38x2.25	M M27×2 Manifold Mount 4-M10, M14×1.5	R OPPOSITE	NONE BLUE	FR FREE RUN- NING
250	W 4-Ø18 Wheel-flange Ø200, pilot Ø160×7	F Shaft: 11/2"-17, Splined 17-DP12/24	S 1 1/16-12un, 9/16-18unf		B BLACK	LL LOW LEAKAGE VALVE
315	B2E 4-6.5 Square Flange 4" pilot	T Shaft: 45mm Tapered parallel key B12×28×8	S1 1-1/16-12UN, 7/16- 20UNF		S SILVER GRAY	LSV LOW SPEED VALVE
400		T1 Shaft: 45mm Tapered key 11.13×11.13×31.75	G G3/4 - G1/4			CRS CORROSION RESISTANT SHAFT
500		SL Shaft: Ø34.85, splined 6-34.85×28.14×8.64	M3 M27×2 - M14×1.5			HPS HIGH PRESSU- RE SEAL
630		G1 Shaft: 11/4 Keyed parallel key 7.96×7.96×40				HTS HIGH TEMP SEAL
800		F1 Shaft: 11/4"-14 Splined 14-DP12/24				
		FD Shaft: 11/2"-17 Splined 17-DP12/24				

Ordering code:

All options have been determined with letters, numbers or combinations. All boxes must be filled with proper codes. If specification is not in the table, please contact us with your specific requirements.

YMTE



The **YMTE** series motor incorporates the advanced **GEROLOR** gear set which reduces internal friction to a minimum. A **DISC VALVE** distribution system which is internally balanced to reduce friction, leakage and permit better speed control. Producing efficiency, smoother rotation, higher speed and pressure.

This series has many sizes and options to make it very flexible for many applications. The output shaft is mounted on tapered roller bearings for high radial and axial loads for very high duty applications.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output power	
Disc Distribution	YMTE	[in ³ ./rev]	[9.77~48.82]	[PSI]	[3480]	RPM	[HP]	[47]
		cm ³ /rev.	160 ~ 800	MPa	24	30~705	Kw	35

QUICK REFERENCE GUIDE

YMTE SERIES QUICK REFERENCE:

Displacements				
[in ³ ./rev]	cm ³ /rev.			
[14.19]	232.5	FLOW UP TO	125 LPM	[33 GPM]
[15.36]	251.8	PRESSURE UP TO	30 MPA	[4350 PSI]
[19.91]	326.3	TORQUE UP TO	1643 NM	[14530 LBIN.]
[25.07]	410.9	SPEED UP TO	770 RPM	
[31.95]	523.6			
[38.38]	629.1			
[48.91]	801.8			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated shafts or housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

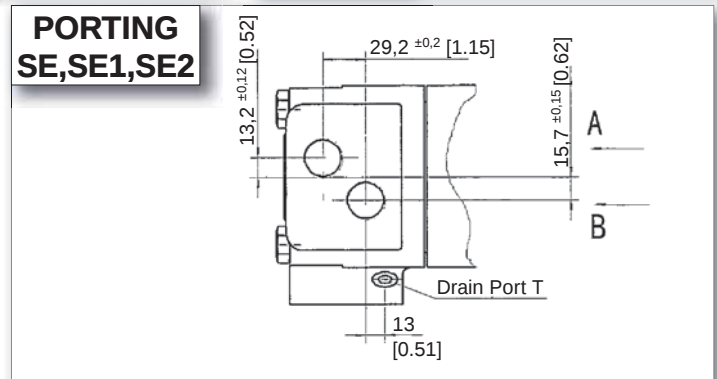
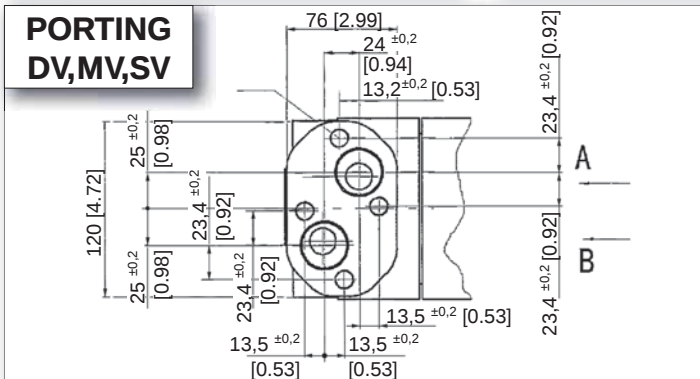
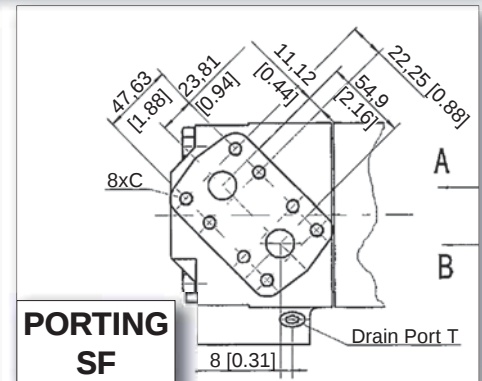
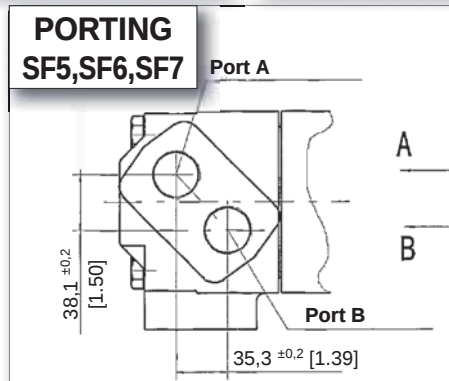
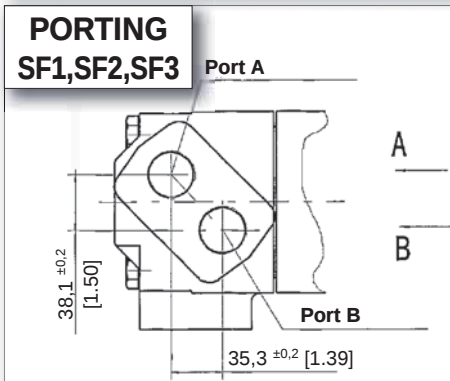
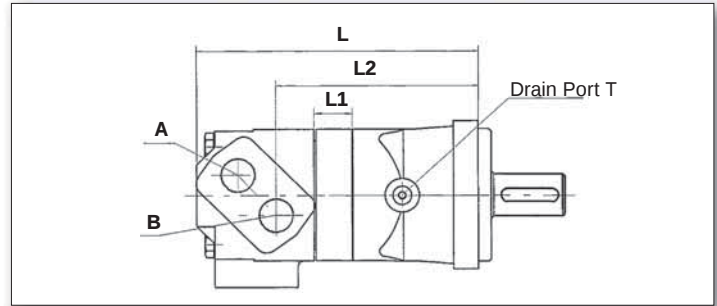
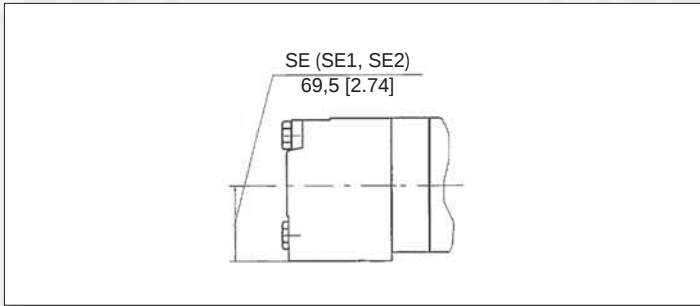
- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

- For individual motor performance charts consult equivalent YMT series data

DISTRIBUTION TYPE		YMTE 230	YMTE 250	YMTE 315	YMTE 400	YMTE 500	YMTE 630	YMTE 800
GEOMETRIC DISPLACEMENT	[in ³ ./rev.]	[14.19]	[15.37]	[19.92]	[25.08]	[31.96]	[38.39]	[48.93]
	cm ³ /rev.	232.5	251.8	326.3	410.9	523.6	629.1	801.8
MAX. SPEED RPM	RATED	412	381	294	228	183	150	121
	CONT.	536	495	380	302	237	196	154
	INT.	643	592	458	364	284	233	185
MAX. TORQUE [IN. LB.] N*M	RATED	[IN.LB]	[4687]	[5147]	[6704]	[7924]	[9401]	[10,675]
		N*M	530	582	758	896	1063	1207
	CONT.	[IN. LB.]	[5925]	[6430]	[8508]	[9684]	[11,011]	[12,948]
		N*M	670	727	962	1095	1245	1464
	INT.	[IN. LB.]	[7261]	[7853]	[10,206]	[11,223]	[12,461]	[13,443]
		N*M	821	888	1154	1269	1409	1520
	PEAK	[IN.LB]	[8473]	[9162]	[11,907]	[12,826]	[14,538]	[1725]
		N*M	958	1036	1346.3	1450.3	1643.8	1665
MAX. OUTPUT [HP] KW	RATED	[HP]	[31.1]	[31.1]	[31.2]	[28.7]	[27.3]	[24.5]
		KW	23.2	23.2	23.3	21.4	20.4	15.3
	CONT.	[HP]	[46.5]	[46.2]	[46.8]	[41.8]	[38.6]	[29.8]
		KW	34.7	34.5	34.9	31.2	28.8	22.2
	INT.	[HP]	[53.6]	[53.6]	[53.6]	[46.9]	[46.9]	[35.9]
		KW	40	40	40	35	35	26.8
MAX. PRES- SURE DROP [PSI] MPa	RATED	[PSI]	[2320]	[2320]	[2320]	[2175]	[2030]	[1523]
		MPa	16	16	16	15	14	10.5
	CONT.	[PSI]	[2900]	[2900]	[2900]	[2610]	[2320]	[1813]
		MPa	20	20	20	18	16	12.5
	INT.	[PSI]	[3480]	[3480]	[3480]	[3045]	[2610]	[1885]
		MPa	24	24	24	21	18	13
	PEAK	[PSI]	[4060]	[4060]	[4060]	[3480]	[3045]	[2755]
		MPa	28	28	28	24	21	16
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[26.4]	[26.4]	[26.4]	[26.4]	[26.4]	[26.]
		L/MIN	100	100	100	100	100	100
	CONT.	[GPM]	[33]	[33]	[33]	[33]	[33]	[33]
		L/MIN	125	125	125	125	125	125
	INT.	[GPM]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]
		L/MIN	150	150	150	150	150	150
MAX. INLET PRESSURE [PSI] MPa	RATED	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21
	CONT.	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21
	INT.	[PSI]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]
		MPa	25	25	25	25	25	25
	PEAK	[PSI]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]
		MPa	30	30	30	30	30	30
WEIGHT [LB] KG	[LB]	[45]	[45]	[46]	[48]	[52]	[53]	[55]
	KG	20.4	20.5	21	22	23	24	25

PORTING DATA

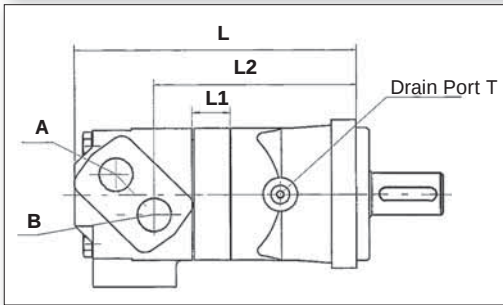


	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
YMTE 230	[9.39]	[0.48]	[6.48]	238.5	12	164.5
YMTE 250	[9.47]	[0.56]	[6.56]	240.5	14	166.5
YMTE 315	[9.71]	[0.79]	[6.80]	246.5	20	172.5
YMTE 400	[9.98]	[1.07]	[7.07]	253.5	27	179.5
YMTE 500	[10.30]	[1.38]	[7.39]	261.5	35	187.5
YMTE 630	[10.77]	[1.85]	[7.86]	273.5	47	199.5
YMTE 800	[11.20]	[2.29]	[8.29]	284.5	58	210.5

- Note:
- 1) The dimensional data for ports SF, SF1 and SF2 are as the chart indicates
 - 2) The dimensional data for ports DV, MV and SV are as followed: L dimension-16mm and L2 dimension + 6.5mm.
 - 3) The dimensional data for ports SE, SE1, SE2 and WE are as followed: L dimension -70mm and L2 dimension -52mm
 - 4) The thickness of the stator and rotor for displacements from 315-800 is the dimension of L1 + 7mm.

ORDER CODE	SF1 SF6	DEPTH	SF2 SF7	DEPTH	SF	DEPTH	DV	DEPTH	MV	DEPTH	SV SF3/SF5	DEPTH	SE	DEPTH	SE1	DEPTH	SE2	DEPTH
PORTS - A and B	M33X2	18 mm	G1	18 mm	3/4"	18 mm	G1	18 mm	M33X2	18 mm	1-5/16-12UN	18 mm	1-1/16-12UN	18 mm	1-1/16-12UN	18 mm	G3/1	18 mm
TANK PORT - T	M14X1.5	12 mm	G 1/4	12 mm	7/16-20UNF	12 mm	G 1/4	12 mm	M14X1.5	12 mm	7/16-20UNF	12 mm	9/16 UNF	12 mm	7/16-20UNF	12 mm	G 1/4	12 mm
BOLTS - C	-	-	-	-	8X3/8-16UNC	-	4XM12	-	4XM12	-	-	-	-	-	-	-	-	-

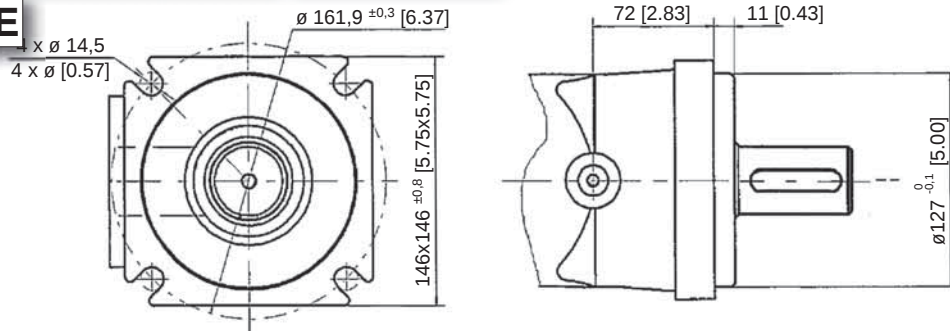
MOUNTING FLANGE DATA



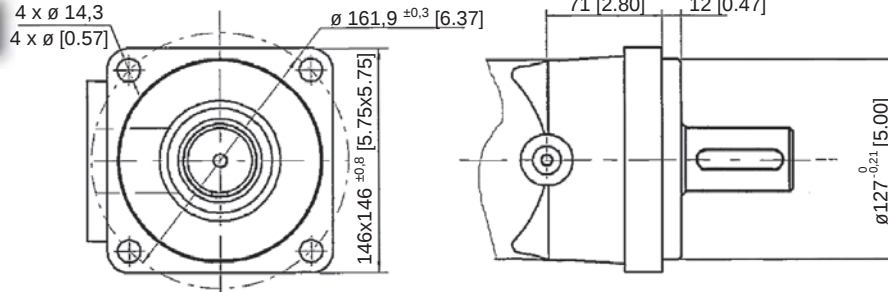
NOTE:
THE THICKNESS
OF THE STATOR
AND ROTOR FOR
DISPLACEMENTS
315-800 IS THE
DIMENSION OF
L1 + 7 MM

MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
YMTE 230	[9.39]	[0.48]	[6.48]	238.5	12	164.5
YMTE 250	[9.47]	[0.56]	[6.56]	240.5	14	166.5
YMTE 315	[9.71]	[0.79]	[6.80]	246.5	20	172.5
YMTE 400	[9.98]	[1.07]	[7.07]	253.5	27	179.
YMTE 500	[10.30]	[1.38]	[7.39]	261.5	35	187.5
YMTE 630	[10.77]	[1.85]	[7.86]	273.5	47	199.5
YMTE 800	[11.20]	[2.29]	[8.29]	284.5	58	210.5

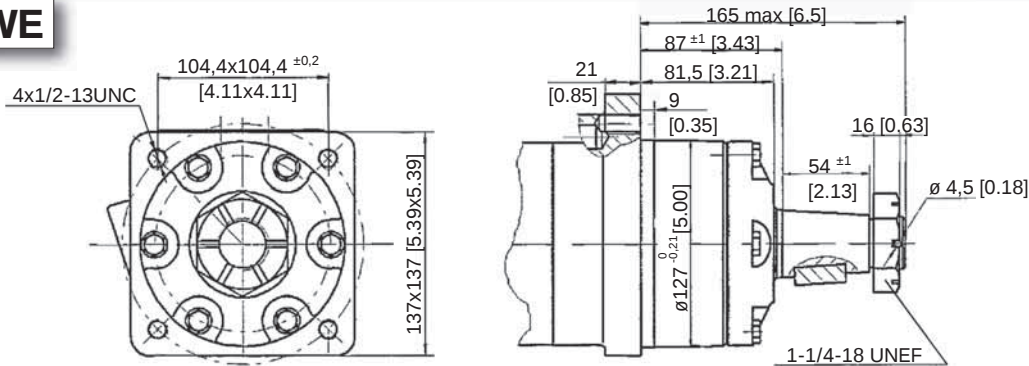
FLANGE B2E



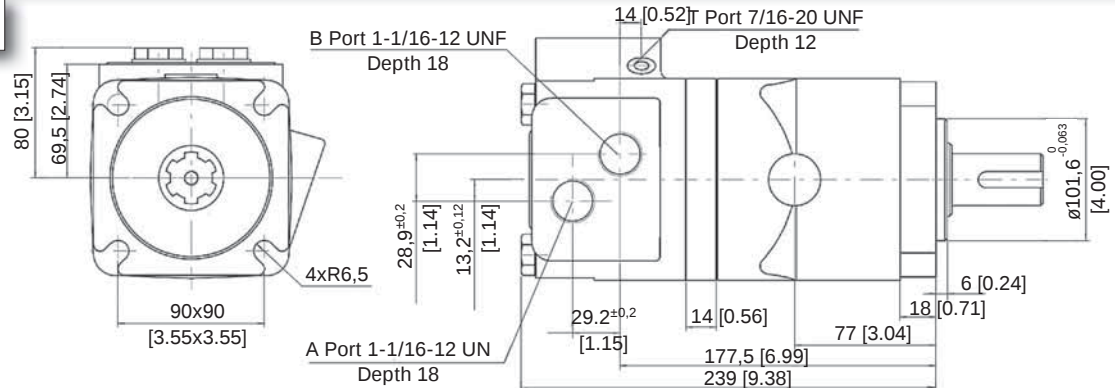
FLANGE CC



FLANGE WE

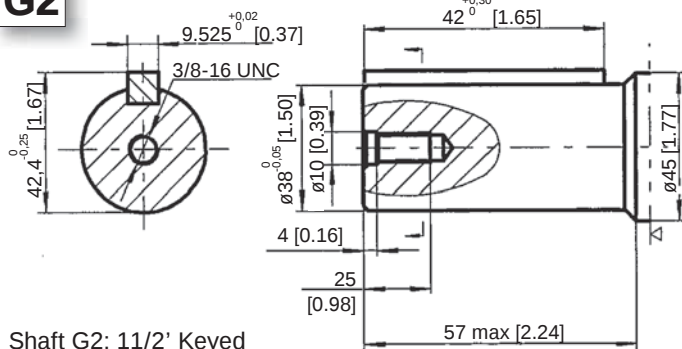


FLANGE B2E



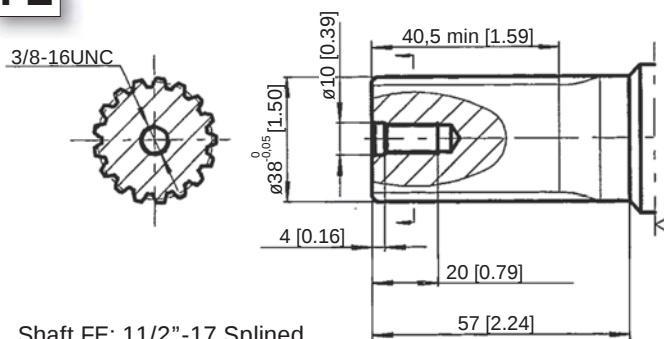
MOTOR SHAFT EXTENSIONS

G2



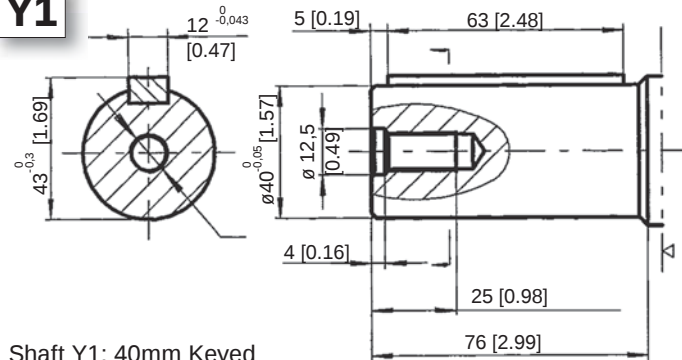
Shaft G2: 11/2' Keyed
Parallel Key .37x.37x1.65

FE



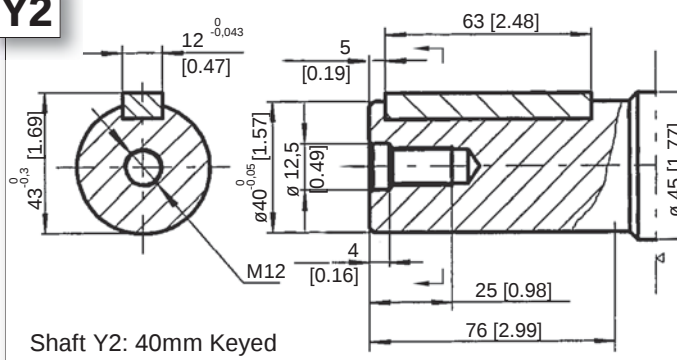
Shaft FE: 11/2'-17 Splined
17-dp12/24

Y1



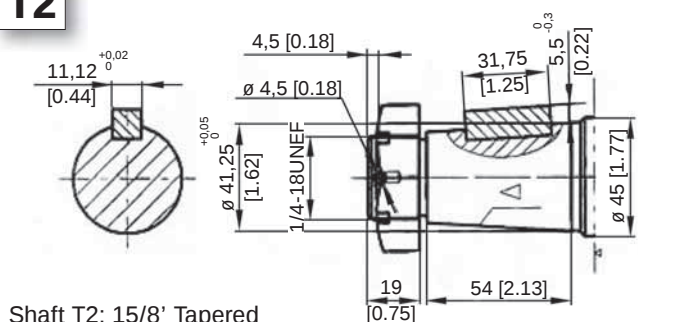
Shaft Y1: 40mm Keyed
Parallel Key 12x8x63

Y2



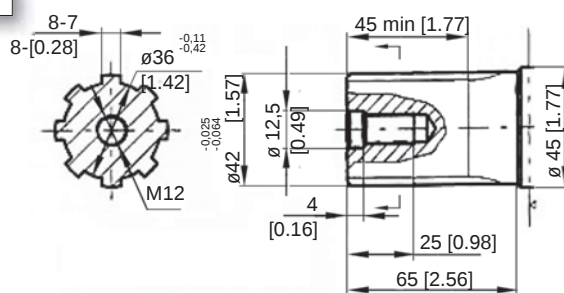
Shaft Y2: 40mm Keyed
Parallel Key 12x8x63

T2



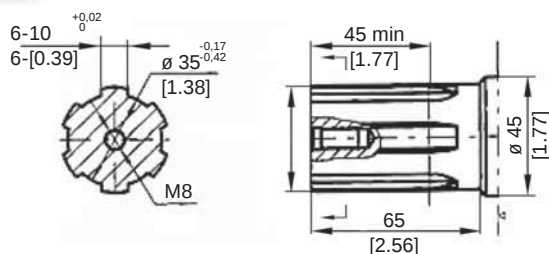
Shaft T2: 15/8' Tapered
Parallel Key .44x.44x1.25
Tightening torque: 500±10Nm

H



Shaft H: 42mm Splined
Splines 8-42x36x7

P

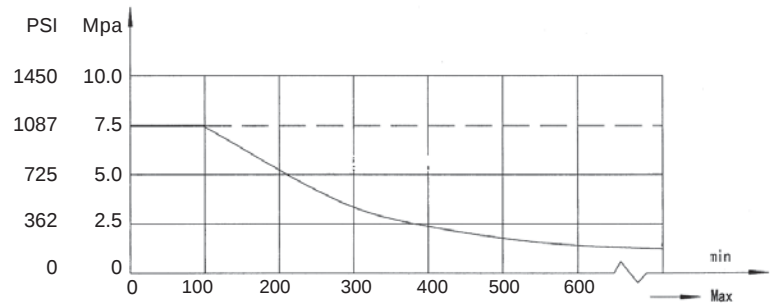
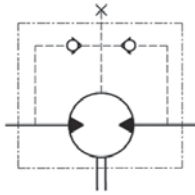


Shaft P: 40mm Splined
Splines 6-40x35x10



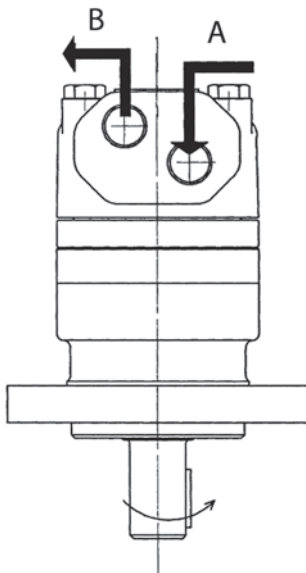
ADDITIONAL DATA

PERMISSIBLE SHAFT SEAL PRESSURE



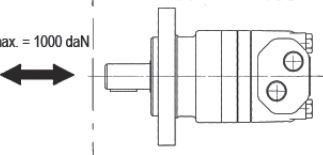
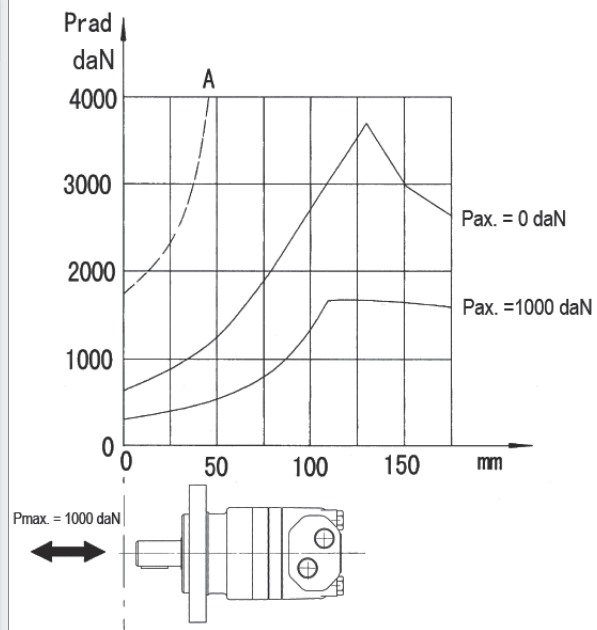
IN APPLICATIONS WITHOUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE.
IN APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN DRAIN LINE.

DIRECTION OF SHAFT ROTATION



WHEN FACING SHAFT END OF MOTOR, SHAFT TO ROTATE:
CLOCKWISE WHEN PORT "A" IS PRESSURIZED. COUNTER CLOCK-
WISE WHEN PORT "B" IS PRESSURIZED.

AXIAL AND RADIAL FORCE



The output shaft is mounted on tapered roller bearings that permit high radial and axial loads. Curve "A" shows MAX radial shaft loads. Any shaft load exceeding the values quoted in the curve could determine premature failure of the shaft, bearings or other parts. The other curves show a B10 life of 3000 Hours and 200 RPM.

ORDERING INFORMATION

1	2	3	4	5	6	7
YMTE						

1	2		3		4		5		6		7	
DISP.	FLANGE		OUTPUT SHAFT		PORT AND DRAIN PORT		ROTATION DIRECTION		PAINT		SPECIAL OPTIONS	
230	CC	4-Ø14.3 Square-flange Ø161.9 pilot Ø127X12	G2	11/2" KEYED PARALLEL KEY .37X.37X1.65	SF	3/4' MANIFOLD MOUNT, 8-3/8-16UNC 7/16-20UNF	NONE	STANDARD	00	NO PAINT	NONE	STANDARD
250	KV	4-Ø14.5 Square flange Ø161.9 Ø127×9	FE	11/2"-17 SPLINED 17-DP 12/24	SF1	M33 X 2, M14 X 1.5	R	OPPOSITE	NONE	BLUE	FR	FREE RUNNING
315	WE	4-Ø18 Wheel-flange Ø 147, pilot Ø 127×9	Y1	40MM KEYED PARALLEL KEY 12X8X63	SF2	G1,G1/4			B	BLACK	LL	LOW LEAKAGE
400	B2E	4-6.5 Square Flange 101.6 [4.00] Pilot	Y2	40MM KEYED PARALLEL KEY 12X8X63	SE	1-1/16-12UNF ORING 9/16-18 UNF			S	SILVER GRAY	LSV	LOW SPEED VALVE
500			T2	15/8" TAPERED PARALLELKEY .44X.44X1.25	SE1	1-1/16-12UNF ORING 7/16-20UNF			CRS		CORROSION RISISTANT SHAFT	
630			H	42MM SPLINED 8-42X36X7	SE2	G3/4, G1/4			HPS		HIGH PRESSURE SEAL	
800			P	40MM SPLINED 6-40X35X10	DV	G1,MANIFOLD MOUNT 4-M12, G1/4			HTS		HIGH TEMP SEAL	
					MV	M33X2, MANIFOLD MOUNT, 4-M12,M14X1.5						
			SV	1-5/16-12UNF ORING 7/16-20UNF								
				SF3	1-5/16-12UNF 7/16-20UNF							
				SF5	G1. G1/4							
				SF6	M33x2, M14x1.5							
				SF7	1 5/16 - 12 UNF 7/16 - 20 UNF							

Ordering code:

All options have been determined with letters, numbers or combinations. All boxes must be filled with proper codes. If specification is not in the table , please contact us with your specific requirements.

YMTS



The **YMTS** series motor incorporates the advanced **GEROLOR** gear set which reduces internal friction to a minimum and a **DISC VALVE** distribution system which is internally balanced to reduce friction, leakage and permit better speed control producing higher efficiency, smoother rotation, higher speed and pressure.

This series has many sizes and options to make it very flexible for many application.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output power	
DISC Distribution	YMTS	[in ³ ./rev]	[9.77~48.82]	[PSI]	[3480]	RPM	[HP]	[47]
		cm ³ /rev.	160 ~ 800	MPa	24	30~705	Kw	35

QUICK REFERENCE GUIDE

YMTS SERIES QUICK REFERENCE:

DISPLACEMENTS				
[IN ³ /REV]	CM ³ /REV.			
[9.83]	161.1	FLOW UP TO	125 LPM	[33.03 GPM]
[12.29]	201.4	PRESSURE UP TO	30 MPA	[4350 PSI]
[14.19]	232.5	TORQUE UP TO	1643 NM	[14530 LBIN.]
[15.36]	251.8	SPEED UP TO	770 RPM	
[19.91]	326.3			
[25.07]	410.9			
[31.95]	523.6			
[38.38]	629.1			
[48.92]	801.8			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedure to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

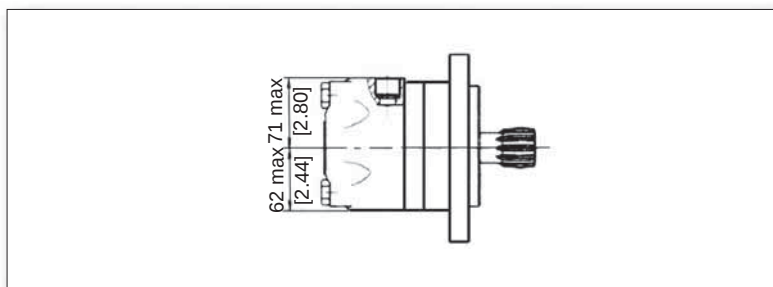
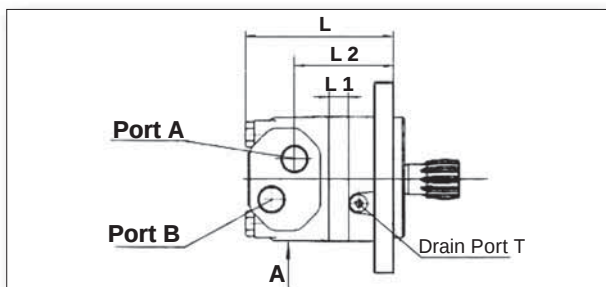
- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

- For individual motor performance charts consult equivalent YMT series data

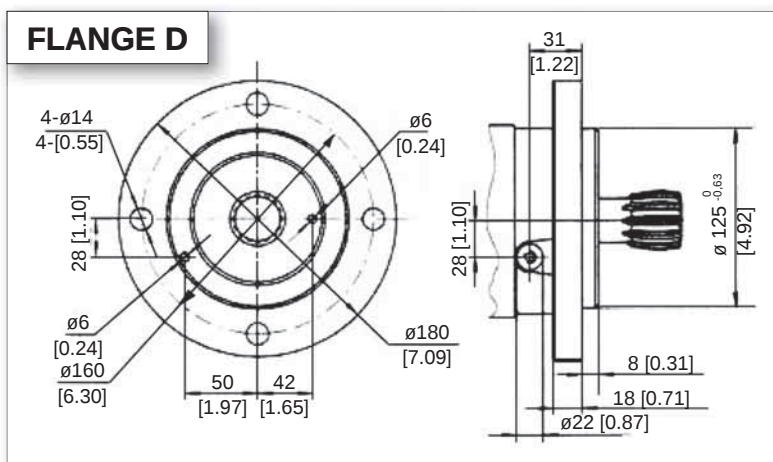
DISTRIBUTION TYPE		YMTS 160	YMTS 200	YMTS 230	YMTS 250	YMTS 315	YMTS 400	YMTS 500	YMTS 630	YMTS 800
GEOMETRIC DISPLACEMENT	[in ³ ./rev.]	[9.83]	[12.29]	[14.19]	[15.37]	[19.92]	[25.08]	[31.96]	[38.39]	[48.93]
	cm ³ /rev.	161.1	201.4	232.5	251.8	326.3	410.9	523.6	629.1	801.8
MAX. SPEED RPM	RATED	470	475	412	381	294	228	183	150	121
	CONT.	614	615	536	495	380	302	237	196	154
	INT.	770	743	643	592	458	364	284	233	185
MAX. TORQUE [IN. LB.] N*M	RATED	[IN.LB]	[3352]	[4166]	[4687]	[5147]	[6704]	[7924]	[9401]	[10,675]
		N*M	379	471	530	582	758	896	1063	1207
	CONT.	[IN. LB.]	[4166]	[5209]	[5925]	[6430]	[8508]	[9684]	[11,011]	[12,948]
		N*M	471	589	670	727	962	1095	1245	1464
	INT.	[IN. LB.]	[507]	[6350]	[7261]	[7853]	[10,206]	[11,223]	[12,461]	[13,443]
		N*M	57.3	718	821	888	1154	1269	1409	1520
MAX. OUTPUT [HP] KW	RATED	[HP]	[25.0]	[31.4]	[31.1]	[31.1]	[31.2]	[28.7]	[27.3]	[20.5]
		KW	18.7	23.4	23.2	23.2	23.3	21.4	20.4	15.3
	CONT.	[HP]	[37.1]	[46.8]	[46.5]	[46.2]	[46.8]	[41.8]	[38.6]	[29.8]
		KW	27.7	34.9	34.7	34.5	34.9	31.2	28.8	22.2
	INT.	[HP]	[42.9]	[53.6]	[53.6]	[53.6]	[53.6]	[46.9]	[46.9]	[35.9]
		KW	32	40	40	40	40	35	35	27.5
MAX. PRES- SURE DROP [PSI] MPa	RATED	[PSI]	[2320]	[2320]	[2320]	[2320]	[2320]	[2175]	[2030]	[1523]
		MPa	16	16	16	16	16	15	14	10.5
	CONT.	[PSI]	[2900]	[2900]	[2900]	[2900]	[2900]	[2610]	[2320]	[1813]
		MPa	20	20	20	20	20	18	16	12.5
	INT.	[PSI]	[3480]	[3480]	[3480]	[3480]	[3480]	[3045]	[2610]	[1885]
		MPa	24	24	24	24	24	21	18	13
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[21.1]	[26.4]	[26.4]	[26.4]	[26.4]	[26.4]	[26.4]	[26.]
		L/MIN	80	100	100	100	100	100	100	100
	CONT.	[GPM]	[26.4]	[33]	[33]	[33]	[33]	[33]	[33]	[33]
		L/MIN	100	125	125	125	125	125	125	125
	INT.	[GPM]	[33]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]
		L/MIN	125	150	150	150	150	150	150	150
MAX. INLET PRESSURE [PSI] MPa	RATED	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21	21	21
	CONT.	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21	21	21
	INT.	[PSI]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]
		MPa	25	25	25	25	25	25	25	25
WEIGHT [LB] KG		[LB]	[43]	[44]	[45]	[45]	[46]	[48]	[52]	[55]
		KG	19.5	20	20.4	20.5	21	22	23	25

DIMENSION AND MOUNTING DATA

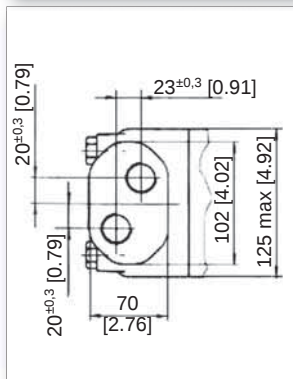


	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
YMTS 160	[5.83]	[0.67]	[3.80]	148	17	96.5
YMTS 200	[5.98]	[0.83]	[3.96]	152	21	100.5
YMTS 250	[6.22]	[1.06]	[4.23]	158	27	107.5
YMTS 315	[6.42]	[0.79]	[4.53]	163	20	115
YMTS 400	6.69]	[1.06]	[4.80]	170	27	122
YMTS 500	[7.01]	[1.38]	[5.12]	178	35	130
YMTS 630	[7.48]	[1.85]	[5.59]	190	47	142
YMTS 800	[7.91]	[2.28]	[6.02]	201	58	153

Note: 1)The thickness of the stator and rotor for displacements from 160-250 is the dimension of $L1 + 3\text{mm}$
2)The thickness of the stator and rotor for displacements from 315-800 is the dimension of $L1 + 7\text{mm}$.

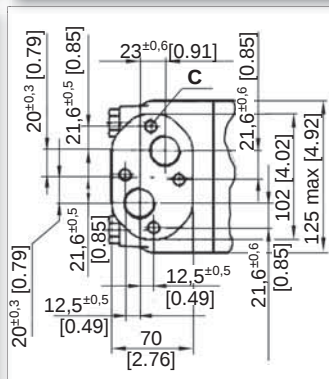


PORTS
S1,S,G2,M3

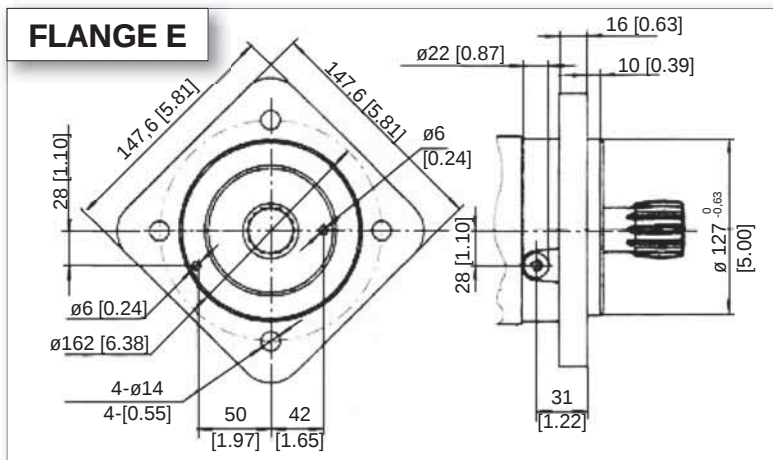


PORTS

D,M



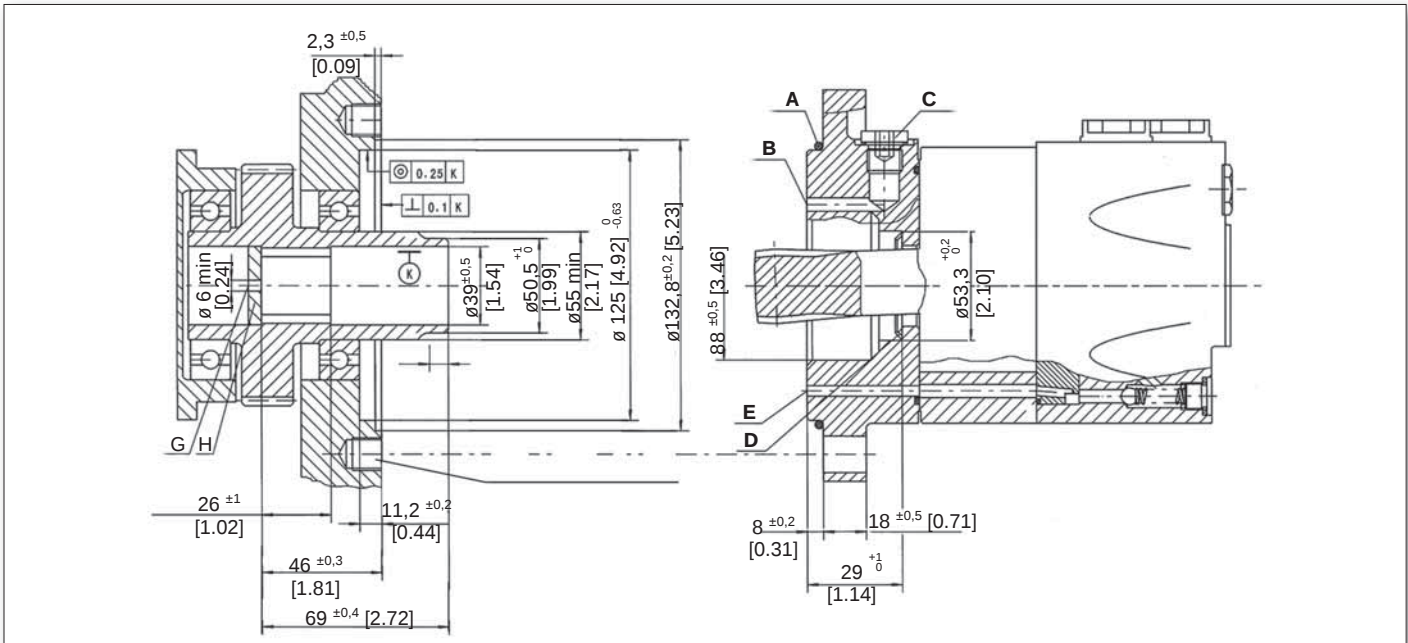
FLANGE E



PORT & DRAIN PORT ORDERING CODES

ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	G	DEPTH	M3	DEPTH	S1	DEPTH
PORTS - A and B	G 3/4	18 mm	M27 X 2	18 mm	1-1/16-12 UN	18 mm	G 3/4	18 mm	M27 X 2	18 mm	1-1/16-12 UN	18 MM
TANK PORT - T	G 1/4	12 mm	M14 X1.5	12 mm	9/16-18UNF	12 mm	G 1/4	12 mm	M14X1.5	12 mm	7/16-20UNF	12MM
BOLTS - C	4-M10	10 mm	4-M10	10 mm								

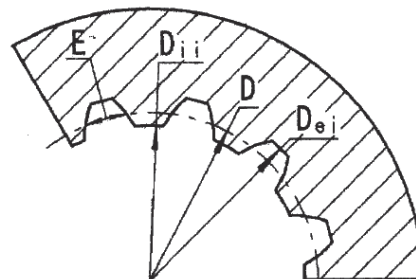
MOUNTING DATA



- A: O-ring:125x3
 B: External drain channel
 C: Drain connection G 1/4;12 mm deep
 D: Conical seal ring
 E: Internal drain channel
 F: M12;min. 18mm deep
 G: Oil circulation hole
 H: Hardened stop plate

INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

FILLET ROOT SIDE FIT		mm
NUMBER OF TEETH	Z	16
DIAMETRAL PITCH	DP	12/24
PRESSURE ANGLE	α_D	30°
PITCH DIA.	D	Ø33.8656
MAJOR DIA.	D _{Ei}	Ø38.4
MINOR DIA.	D _{ii}	Ø32.15
SPACE WIDTH CIRCULAR	E	4.516 ±0.037



Hardening Specification: HRC 62±2
 Effective case depth 0.7±0.2

ORDERING INFORMATION

	1	2	3	4	5	6	7
YMTS							

1	2	3	4	5	6	7
DISP.	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS
160	D 4-Ø14Circle-flange Ø160, pilot Ø125×8 E 4-Ø14.5Square-flange Ø162, pilot Ø127×10	NONE Short shaft DP12/24	D G3/4Manifold Mount 4-M10, G1/4	NONE STANDARD	00 NO PAINT	NONE STANDARD
200			M M27×2 Manifold Mount 4-M10, M14×1.5		NONE BLUE	FR FREE RUNNING
250			S 17/16-12 O-RING, 9/16-18UNF	R REVERSE	B BLACK	LL LOW LEAKAGE
315			S1 1-1/16-12 O-RING, 7/16-20UNF		S SILVER GRAY	LSV LOW SPEED VALVE
400			G G3/4 - G1/4			
500			M3 M27X2, M14X1.5			
630						
800						

Ordering code:

All options have been determined with letters, numbers or combinations. All boxes must be filled with proper codes. If specification is not in the table , please contact us with your specific requirements.

YMTJ

The **YMTJ** series motor incorporates the advanced **GEROLOR** gear set which reduces internal friction to a minimum. A **DISC VALVE** distribution system which is internally balanced to reduce friction, leakage and permits better speed control producing higher efficiency, smoother rotation, higher speed and pressure.

This series has many sizes and options to make it very flexible for many applications.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Disc Distribution	YMTJ	[in ³ ./rev]	[14.03 ~48.82]	[PSI]	[3480]	RPM	[HP]	[47]
		cm ³ /rev.	230 ~ 800	MPa	24	30~705	Kw	35

QUICK REFERENCE GUIDE

YMTJ SERIES QUICK REFERENCE:

Displacements				
[in ³ ./rev]	cm ³ /rev.			
[14.19]	232.5	FLOW UP TO	125 LPM	[33 GPM]
[15.36]	251.8	PRESSURE UP TO	30 MPA	[4350 PSI]
[19.91]	326.3	TORQUE UP TO	1643 NM	[14530 LBIN.]
[25.07]	410.9	SPEED UP TO	770 RPM	
[31.95]	523.6			
[38.38]	629.1			
[48.84]	801.8			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

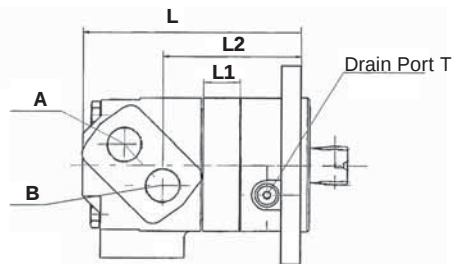
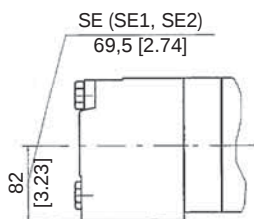
- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * For longer life we suggest the motor at start, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

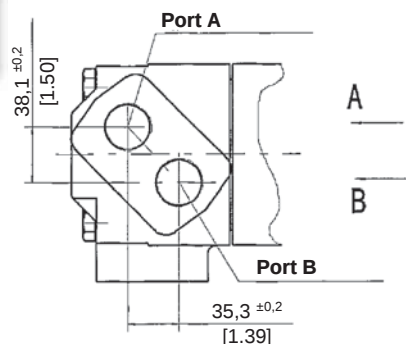
- For individual motor performance charts consult equivalent YMT series data

DISTRIBUTION TYPE			YMTJ 160	YMTJ 200	YMTJ 230	YMTJ 250	YMTJ 315	YMTJ 400	YMTJ 500	YMTJ 630	YMTJ 800
GEOMETRIC DISPLACEMENT		[in³./rev.]	[9.83]	[12.29]	[14.19]	[15.37]	[19.92]	[25.08]	[31.96]	[38.39]	[48.93]
		cm³/rev.	161.1	201.4	232.5	251.8	326.3	410.9	523.6	629.1	801.8
MAX. SPEED RPM		RATED	470	475	412	381	294	228	183	150	121
		CONT.	614	615	536	495	380	302	237	196	154
		INT	770	743	643	592	458	364	284	233	185
MAX. TORQUE [IN. LB.] N*M	RATED	[IN.LB]	[3352]	[4166]	[4687]	[5147]	[6704]	[7924]	[9401]	[10,224]	[10,675]
		N*M	379	471	530	582	758	896	1063	1156	1207
	CONT.	[IN. LB.]	[4166]	[5209]	[5925]	[6430]	[8508]	[9684]	[11,011]	[11,656]	[12,948]
		N*M	471	589	670	727	962	1095	1245	1318	1464
	INT.	[IN. LB.]	[507]	[6350]	[7261]	[7853]	[10,206]	[11,223]	[12,461]	[13,248]	[13,443]
		N*M	57.3	718	821	888	1154	1269	1409	1498	1520
PEAK	[IN.LB]	[5917]	[7411]	[8473]	[9162]	[11,907]	[12,826]	[14,538]	[14,317]	[1725]	
	N*M	669	838	958	1036	1346.3	1450.3	1643.8	1618.8	1665	
MAX. OUTPUT [HP] KW	RATED	[HP]	[25.0]	[31.4]	[31.1]	[31.1]	[31.2]	[28.7]	[27.3]	[24.4]	[20.5]
		KW	18.7	23.4	23.2	23.2	23.3	21.4	20.4	18.2	15.3
	CONT.	[HP]	[37.1]	[46.8]	[46.5]	[46.2]	[46.8]	[41.8]	[38.6]	[33.9]	[29.8]
		KW	27.7	34.9	34.7	34.5	34.9	31.2	28.8	25.3	22.2
	INT.	[HP]	[42.9]	[53.6]	[53.6]	[53.6]	[53.6]	[46.9]	[46.9]	[36.8]	[35.9]
		KW	32	40	40	40	40	35	35	27.5	26.8
MAX. PRES- SURE DROP [PSI] MPa	RATED	[PSI]	[2320]	[2320]	[2320]	[2320]	[2320]	[2175]	[2030]	[1740]	[1523]
		MPa	16	16	16	16	16	15	14	12	10.5
	CONT.	[PSI]	[2900]	[2900]	[2900]	[2900]	[2900]	[2610]	[2320]	[2030]	[1813]
		MPa	20	20	20	20	20	18	16	14	12.5
	INT.	[PSI]	[3480]	[3480]	[3480]	[3480]	[3480]	[3045]	[2610]	[2320]	[1885]
		MPa	24	24	24	24	24	21	18	16	13
PEAK	[PSI]	[4060]	[4060]	[4060]	[4060]	[4060]	[3480]	[3045]	[2755]	[2320]	
	MPa	28	28	28	28	28	24	21	19	16	
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[21.1]	[26.4]	[26.4]	[26.4]	[26.4]	[26.4]	[26.4]	[26.4]	[26.]
		L/MIN	80	100	100	100	100	100	100	100	100
	CONT.	[GPM]	[26.4]	[33]	[33]	[33]	[33]	[33]	[33]	[33]	[33]
		L/MIN	100	125	125	125	125	125	125	125	125
	INT.	[GPM]	[33]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]
MAX. INLET PRESSURE [PSI] MPa	RATED	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21	21	21	21
	CONT.	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21	21	21	21
	INT.	[PSI]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]
		MPa	25	25	25	25	25	25	25	25	25
PEAK	[PSI]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	[4350]	
	MPa	30	30	30	30	30	30	30	30	30	
WEIGHT [LB] KG		[LB]	[43]	[44]	[45]	[45]	[46]	[48]	[52]	[53]	[55]
		KG	19.5	20	20.4	20.5	21	22	23	24	25

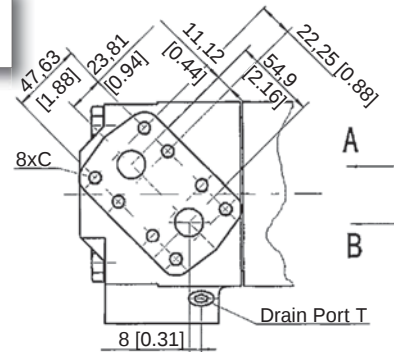
PORTING DATA



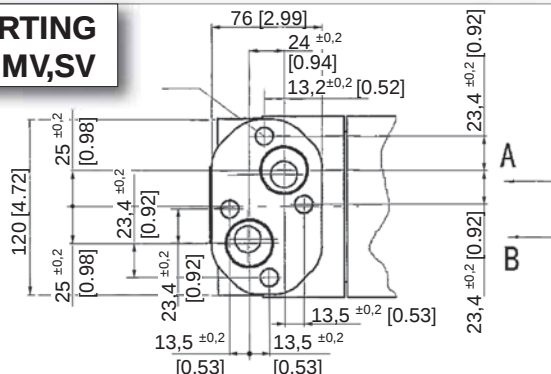
PORTING SF1,SF2,SF3



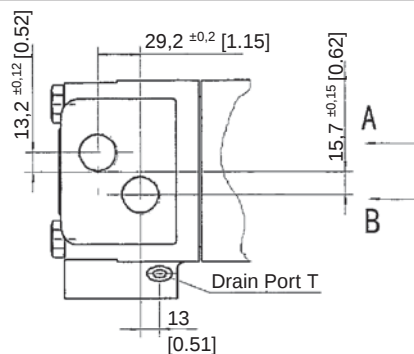
PORTING SF



PORTING DV,MV,SV



PORTING SE,SE1,SE2



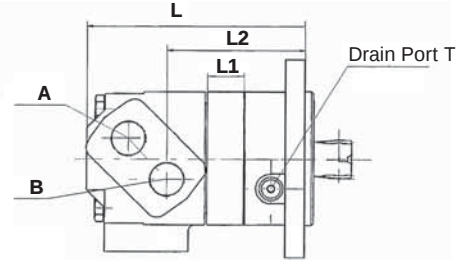
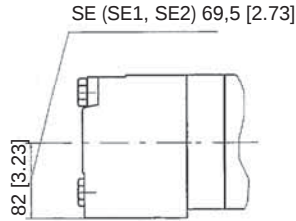
MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
YMTJ 230	[6.93]	[0.48]	[41.15]	176	12	104.5
YMTJ 250	[7.01]	[0.56]	[4.20]	178	14	106.5
YMTJ 315	[7.25]	[0.79]	[4.43]	184	20	112.5
YMTJ 400	[7.52]	[1.07]	[4.71]	191	27	119.5
YMTJ 500	[7.84]	[1.38]	[5.02]	199	35	127.5
YMTJ 630	[8.31]	[1.85]	[5.50]	211	47	139.5
YMTJ 800	[8.74]	[2.29]	[5.93]	222	58	150.5

- Note: 1) The dimensional data for ports SF,SF1 and SF2 are as the chart indicates
 2) The dimensional data for ports DV,MV and SV are as followed: L dimension-16mm and L2 dimension + 6.5mm.
 3) The dimensional data for ports SE,SE1,SE2 and WE are as followed: L dimension -70mm and L2 dimension -59 mm
 4) The thickness of the stator and rotor for displacements from 315-800 is the dimension of L1 + 7mm.

PORT & DRAIN PORT ORDERING CODES

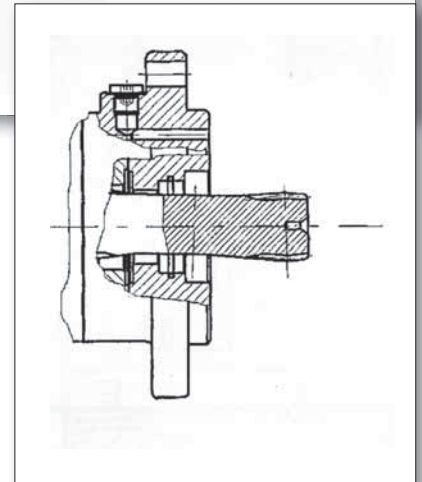
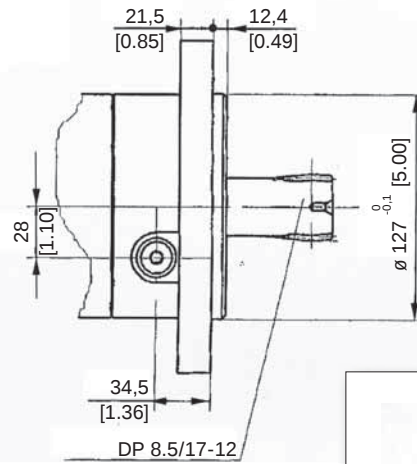
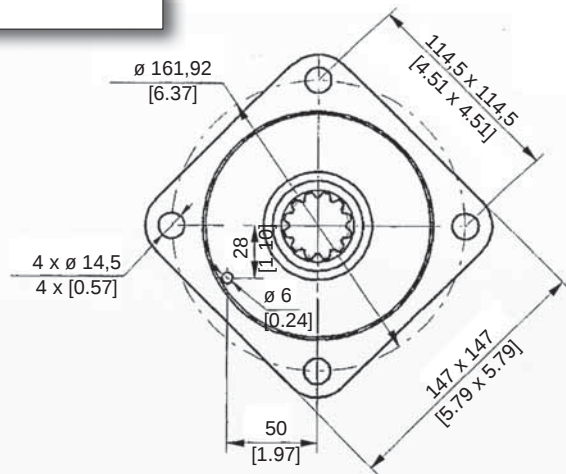
ORDER CODE	SF1	DEPTH	SF2	DEPTH	SF	DEPTH	DV	DEPTH	MV	DEPTH	SV/SF3	DEPTH	SE	DEPTH	SE1	DEPTH	SE2	DEPTH
PORTS - A and B	M33X2	18 mm	G1	18 mm	3/4"	18 mm	G1	18 mm	M33X2	18 mm	1-5/16-12UN	18 mm	1-16-12UN	18 mm	1-1/16-12UN	18 mm	G3/4	18 mm
TANK PORT - T	M14X1.5	12 mm	G1/4	12 mm	7/16-20UNF	12 mm	G 1/4	12 mm	M14X1.5	12 mm	7/16-20UNF	12 mm	9/16-18UNF	12 mm	7/16-20UNF	12 mm	G1/4	12 mm
BOLTS - C					8X3/8-16UNC	-	4XM12	-	4XM12	-	-	-						

MOUNTING FLANGE DATA



NOTE: THE THICKNESS OF THE STATOR AND ROTOR FOR DISPLACEMENTS 230-800 IS THE DIMENSION OF L1 + 7MM

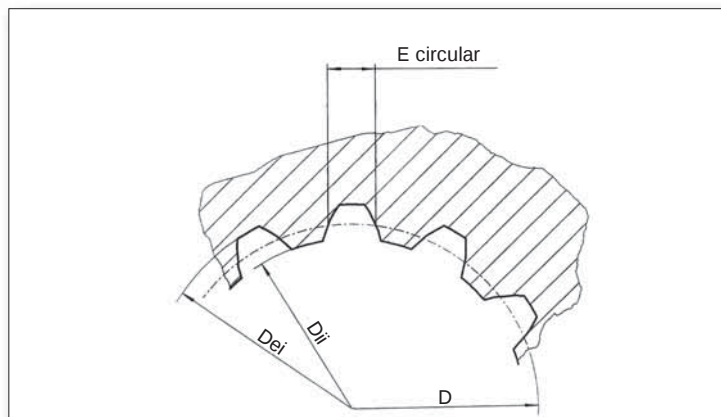
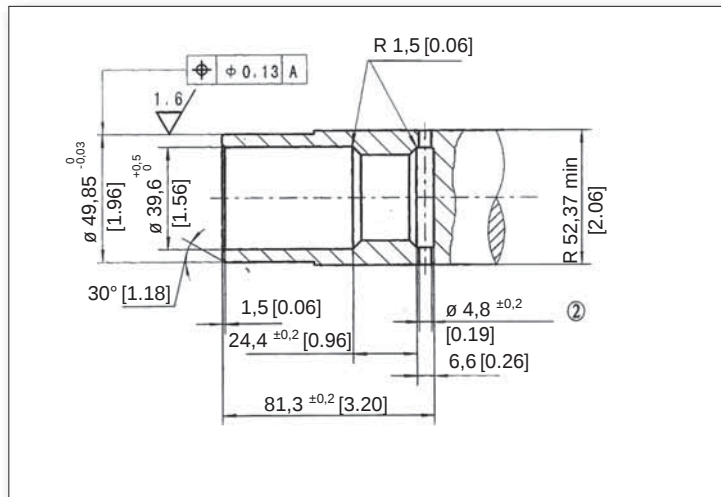
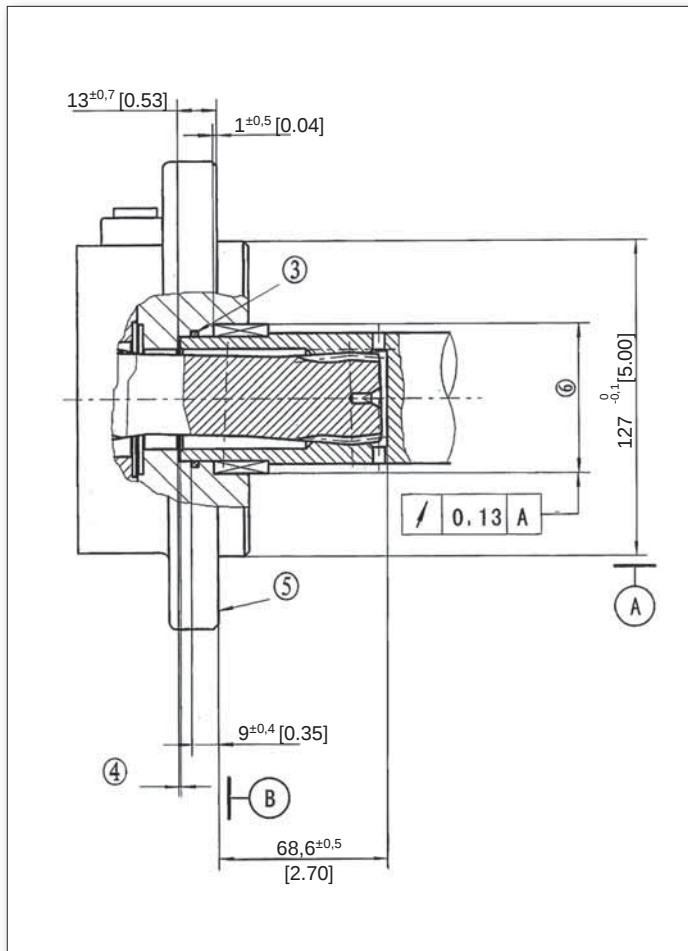
FLANGE J



MODEL	[INCHES]			MILLIMETERS		
	L	L1	L2	L	L1	L2
YMTJ 230	[6.93]	[0.48]	[41.15]	176	12	104.5
YMTJ 250	[7.01]	[0.56]	[4.20]	178	14	106.5
YMTJ 315	[7.25]	[0.79]	[4.43]	184	20	112.5
YMTJ 400	[7.52]	[1.07]	[4.71]	191	27	119.5
YMTJ 500	[7.84]	[1.38]	[5.02]	199	35	127.5
YMTJ 630	[8.31]	[1.85]	[5.50]	211	47	139.5
YMTJ 800	[8.74]	[2.29]	[5.93]	222	58	150.5



MOUNTING DATA



INTERNAL SPLINE DATA FOR THE ATTACHED COMPONENT

FILLET ROOT SIDE FIT		mm
NUMBER OF TEETH	Z	12
DIAMETRAL PITCH	DP	8.5/17
PRESSURE ANGLE	D	30°
PITCH DIA.	D	ø 35.858823
MAJOR DIA.	Dei	ø 38.97 ^{+0.20}
MINOR DIA.	Dii	ø 33.3 ^{+0.18}
SPACE WIDTH CIRCULAR	E	5.866 ^{±0.032}
DIMENSION BETWEEN TWO PINS (Ø4)	Me	26.929-27.084

1. Internal spline in mating part to be as follows: Material to be ASTM A304, 8620H. Carborize to a hardness of 60-64 HRC with case depth (to 50HRC) of 0.75-1 [0.030-.040] (dimensions apply after heat treat).
2. Mating part to have critical dimensions as shown. Oil holes must be provided and open for proper oil circulation.
3. Some means of maintaining clearance between shaft and mounting flange must be provided
4. Seal to be furnished with motor for proper oil circulation thru splines
5. Similar to SAE "C" Four Bolt Flange
6. Counterbore designed to adapt to a standard sleeve bearing 50.010-50.038 [1.9689-1.9700] ID by 60.51-60.079 [2.3642-2.3653] O.D. (Oilite Bronze sleeve bearing)

ORDERING INFORMATION

	1	2	3	4	5	6	7	8
YMTJ								

1	2	3	4	5	6	7
DISP.	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS
230	J Squareflange, 161.9mm pilot127mmx12.4	NONE Short shaft12-DP8.5/17	SF 3/4",Manifold Mount,8-3/8UNC 7/16-20UNF	NONE STANDARD	00 NO PAINT	NONE STANDARD
250			SF1 M33X2,M14X1.5	R REVERSE	NONE BLUE	FR FREE RUNNING
315			SF2 G1,G1/4		B BLACK	LL LOW LEAKAGE
400			SE 1-1/16-12 UN O-RING, 9/16-18UNF		S SILVER GRAY	LSV LOW SPEED VALVE
500			SE1 1-1/16-12UNC O-RING 7/16-20 UNF			
630			SE2 G3/4,G1/4			
800			DV G1,Manifold Mount, 4-M12 G1/4			
			MV M33X2, Manifold Mount 4-M12,M14X1.5			
			SV 1-5/16-12UNC O-RING 7/16-20UNF			
			SF3 1-5/16-12 ORING 7/16-20 UNF			

Ordering Code:

All options have been determined with letters, numbers or combinations.All boxes must be filled with proper codes.If specification is not in the table, please contact us with your requirements.



The **YMV** series motors adapts an advanced **GEROLOR** gear set designed with disc distribution flow and high pressure.

This motor series uses the **"ROLOR"** gear type manufactured with most advanced technology and quality available to provide low pressure start up, smooth reliable operation and high efficiency.

The output shaft tapered roller bearings allow for high axial and radial forces.

Advanced design in disc distribution flow, which can automatically compensate in operating with high volume efficiency and long life.

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Disc Distribution	YMV	[in ³ ./rev]	[19.23~6040]	[PSI]	[4060]	RPM	[HP]	[27]
		cm ³ /rev.	315 ~ 990	MPa	28	10 ~ 446	Kw	58

QUICK REFERENCE GUIDE

YMV SERIES QUICK REFERENCE:

Displacements				
[in ³ ./rev]	cm ³ /rev.			
[20.32]	333	FLOW UP TO	225 LPM	[59 GPM]
[25.56]	419	PRESSURE UP TO	28 MPa	[4060 PSI]
[31.60]	518	TORQUE UP TO	2470 Nm	[21,84 lb.in.]
[40.63]	666	SPEED UP TO	446 RPM	
[48.87]	801			
[60.40]	990			

Shaft Seals: Standard high pressure shaft seals permit applications in series or without drain line when required

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and life of the motors and other components.

Special Motors: These motors have special options like nickel plated shafts or housings for corrosive environment and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

DISTRIBUTION TYPE			YMV 315	YMV 400	YMV 500	YMV 630	YMV 800	YMV 1000
GEOMETRIC DISPLACEMENT		[in./rev.]	[20.32]	[25.57]	[31.61]	[40.63]	[48.88]	[60.40]
		cm³/rev.	333	419	518	666	801	990
MAX. SPEED RPM		RATED	335	270	215	170	140	105
		CONT.	446	354	386	223	185	145
		INT	649	526	425	331	275	220
MAX. TORQUE [LB. IN.] N*M	RATED	[LB. IN.]	[6456]	[9021]	[10701]	[12576]	[14061]	[17821]
		N*M	730	1020	1210	1422	1590	2015
	CONT.	[LB. IN.]	[8181]	[10790]	[12824]	[14504]	[16008]	[17821]
		N*M	925	1220	1450	1640	1810	2015
	INT.	[LB. IN.]	[9728]	[12727]	[15742]	[17688]	[18661]	[20164]
		N*M	1100	1439	1780	2000	2110	2280
	PEAK	[LB. IN.]	[11931]	[15035]	[18758]	[20677]	[21845]	[21226]
		N*M	1349	1700	2121	2338	2470	2400
MAX. OUTPUT [HP] KW	RATED	[HP]	[34]	[39]	[37]	[34]	[31]	[28]
		KW	25.6	28.8	27.2	25.3	23.3	21.2
	CONT.	[HP]	[58]	[61]	[78]	[52]	[47]	[38]
		KW	43	45.2	58.6	38.3	35.1	28.6
	INT.	[HP]	[70]	[70]	[70]	[62]	[54]	[54]
		KW	52	52	52	46	40	40
MAX. PRESSURE DROP [PSI] MPa	RATED	[PSI]	[2320]	[2320]	[2320]	[2320]	[2030]	[2030]
		MPa	16	16	16	16	14	14
	CONT.	[PSI]	[2900]	[2900]	[2900]	[2610]	[2320]	[2030]
		MPa	20	20	20	18	16	14
	INT.	[PSI]	[3480]	[3480]	[3480]	[3045]	[2610]	[2329]
		MPa	24	24	24	21	18	16
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[29.0]	[29.0]	[29.0]	[29.0]	[29.0]	[29.0]
		L/MIN	110	110	110	110	110	110
	CONT.	[GPM]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]	[39.6]
		L/MIN	150	150	150	150	150	150
	INT.	[GPM]	[59.4]	[59.4]	[59.4]	[59.4]	[59.4]	[59.4]
		L/MIN	225	225	225	225	225	225
MAX. INLET PRESSURE [PSI] MPa	RATED	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21
	CONT.	[PSI]	[3045]	[3045]	[3045]	[3045]	[3045]	[3045]
		MPa	21	21	21	21	21	21
	INT.	[PSI]	[3625]	[3625]	[3625]	[3625]	[3625]	[3625]
		MPa	25	25	25	25	25	25
WEIGHT [LB] KG		[LB]	[70]	[72]	[74]	[77]	[80]	[84.6]
		KG	31.8	32.6	33.5	34.9	36.5	38.6

- Rated speed and rated torque:
- Continuous pressure:
- Intermittent pressure:
- Peak pressure:

Output value of speed and torque under rated flow and rated pressure.
 Max. value of operating motor continuously.
 Max. value of operating motor in 6 seconds per minute.
 Max. value of operating motor in 0.6 second per minute.

PERFORMANCE DATA

YMV 315 [20.32 in³/rev] 333 cm³/rev.

Max
cont.

Max
int.

	[1015]	[1450]	[2030]	[2320]	[2610]	[2900]	[3045]	[3480]	[PSI]
	7	10	14	16	18	20	21	24	MPa
GPM	[7.9]	[2697]	[3847]	[5351]	[6350]	[6987]	[7889]	[8331]	[9375]
L/min	30	305	435	605	718	790	892	942	1060
		89	85	79	71	70	68	62	55
	[15.9]	[2680]	[3936]	[5528]	[6509]	[7323]	[8181]	[8561]	[9702]
	60	303	445	625	736	828	925	968	1097
		183	179	174	168	163	160	154	148
Flow (L/min)	[23.8]	[2653]	[3891]	[5528]	[6456]	[7305]	[8154]	[8508]	[9569]
	90	300	440	625	730	826	922	962	1082
		275	272	266	258	254	248	242	235
	[27.7]	[2609]	[3847]	[5483]	[6421]	[7270]	[8110]	[8473]	[9534]
	105	295	435	620	726	822	917	958	1078
		325	320	312	306	300	292	290	285
	[31.7]	[2565]	[3812]	[5395]	[6368]	[7252]	[8066]	[8419]	[9463]
	120	290	431	610	720	820	912	952	1070
		371	366	359	350	345	337	332	325
Max cont	[39.6]	[2459]	[3635]	[5324]	[6332]	[7093]	[7995]	[8331]	[9348]
	150	278	411	602	716	802	904	942	1057
		464	459	454	445	435	428	422	412
									Max cont.
Max int.	[50.2]	[2299]	[3467]	[5200]	[6279]	[7031]	[7889]	[8225]	
	190	260	392	588	710	795	892	930	
		595	588	582	575	568	562	555	Max int.

YMV 400 [25.56 in³/rev] 419 cm³/rev.

Max
cont.

Max
int.

	[1015]	[1450]	[2030]	[2320]	[2610]	[2900]	[3045]	[3480]	[PSI]
	7	10	14	16	18	20	21	24	MPa
GPM	[7.9]	[3467]	[5236]	[7181]	[8800]	[9286]	[10,436]	[10,569]	[12,249]
L/min	30	392	592	812	995	1050	1180	1195	1385
		71	70	68	63	60	56	52	47
	[15.9]	[3555]	[5430]	[7270]	[9021]	[9463]	[10,790]	[10,922]	[12,603]
	60	402	614	822	1020	1070	1220	1235	1425
		146	142	138	132	127	124	120	118
Flow (L/min)	[23.8]	[3502]	[5359]	[7208]	[8977]	[9419]	[10,701]	[10,834]	
	90	396	606	815	1015	1065	1210	1225	
		240	238	232	228	222	217	212	
	[27.7]	[3449]	[5306]	[7119]	[8932]	[9392]	[10,657]	[10,790]	
	105	390	600	805	1010	1062	1205	1220	
		270	266	261	258	254	250	248	
	[31.7]	[3396]	[5253]	[7058]	[8888]	[9330]	[10,613]	[10,701]	
	120	384	594	798	1005	1055	1200	1210	
		294	290	286	284	280	276	272	
Max cont	[39.6]	[3317]	[5147]	[7005]	[8862]	[9198]			
	150	375	582	792	1002	1040			
		370	365	360	358	355			Max cont.
Max int.	[50.2]	[3184]	[5076]	[6960]	[8729]	[9065]			
	190	360	574	787	987	1025			
		485	480	475	472	470			Max int.

YMV 500 [31.60 in³/rev] 518 cm³/rev.

Max
cont.

Max
int.

	[1015]	[1450]	[2030]	[2320]	[2610]	[2900]	[3045]	[3480]	[PSI]
	7	10	14	16	18	20	21	24	MPa
GPM	[7.9]	[3909]	[5970]	[8826]	[10,436]	[11,143]	[12,470]	[13,133]	[15,557]
L/min	30	442	675	998	1180	1260	1410	1485	1759
		57	55	53	52	50	48	44	40
	[15.9]	[4024]	[6058]	[9065]	[10,701]	[11,188]	[12,780]	[13,354]	[15,742]
	60	455	685	1025	1210	1265	1445	1510	1780
		117	115	111	106	101	97	95	90
Flow (L/min)	[23.8]	[3980]	[5996]	[9021]	[10,657]	[11,143]	[12,824]	[13,443]	[15,795]
	90	450	678	1020	1205	1260	1450	1520	1786
		186	184	183	180	178	173	170	166
	[27.7]	[3936]	[5943]	[8950]	[10,613]	[11,099]	[12,788]	[13,381]	
	105	445	672	1012	1200	1255	1446	1513	
		205	202	198	194	192	187	186	
	[31.7]	[3891]	[5908]	[8888]	[10,560]	[11,055]	[12,373]	[13,354]	
	120	440	668	1005	1194	1250	1399	1510	
		240	238	235	232	230	226	225	
Max cont	[39.6]	[3847]	[5864]	[8844]	[10,489]	[11,020]			
	150	435	663	1000	1186	1246			
		294	290	286	282	278			Max cont.
Max int.	[50.2]	[3785]	[5819]	[8782]					
	190	428	658	993					
		373	368	362					Max int.

YMV 630 [40.63 in³/rev] 666 cm³/rev.

Max
cont.

Max
int.

	[1015]	[1450]	[2030]	[2320]	[2610]	[2900]	[3045]	[3480]	[PSI]
	7	10	14	16	18	20	21	24	MPa
GPM	[7.9]	[5395]	[7783]	[11,320]	[12,417]	[14,292]	[15,742]	[16,300]	[17,564]
L/min	30	610	880	1280	1404	1616	1780	1843	1986
		43	41	38	36	34	31	30	29
	[15.9]	[5439]	[7853]	[11,816]	[12,488]	[14,398]	[15,919]		
	60	615	888	1336	1412	1628	1800		
		90	87	84	82	81	77		
Flow (L/min)	[23.8]	[5377]	[7765]	[11,771]	[12,576]	[14,504]	[16,008]		
	90	608	878	1331	1422	1640	1810		
		140	138	136	134	132	128		
	[27.7]	[5306]	[7712]	[11,727]	[12,514]	[14,433]	[15,831]		
	105	600	872	1326	1415	1632	1790		
		164	162	158	155	153	149		
	[31.7]	[5262]	[7650]	[11,586]	[12,426]	[14,372]	[15,742]		
	120	595	865	1310	1405	1625	1780		
		186	183	180	177	174	171		
Max cont	[39.6]	[5218]	[7562]	[11,515]	[12,364]				
	150	590	855	1302	1398				
		235	232	228	224				Max cont.
Max int.	[50.2]	[5183]	[7482]						
	190	586	846						
		298	292						Max int.

PERFORMANCE DATA

YMV 800 [48.87 in³/rev] 801 cm³/rev.

Max
cont.

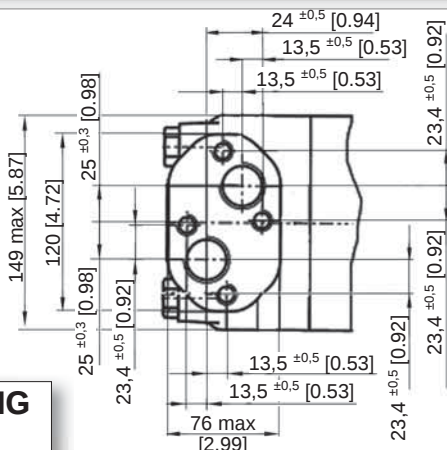
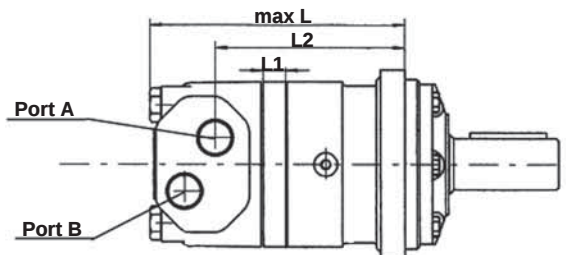
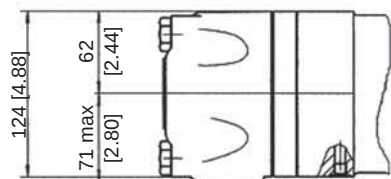
		[1015] 7	[1450] 10	[2030] 14	[2320] 16	[PSI] MPa
GPM	[7.9]	[6987]	[10,056]	[13,991]	[15,831]	
	30	790	1137	1582	1790	
L/min	[15.9]	802	1142	1590	1810	
	60	68	66	62	60	
Flow (L/min)	[23.8]	[7031]	[10,038]	[13,974]	[15,919]	
	90	795	1135	1580	1800	
	[27.7]	[6960]	[9994]	[13,938]	[15,848]	
	105	787	1130	1576	1792	
	[31.7]	[6916]	[9941]	[13,699]	[15,565]	
	120	782	1124	1549	1760	
Max cont	[39.6]	[6863]	[9781]	[13,522]		Max cont.
	150	776	1106	1529	176	
Max int.	[50.2]	[6792]	[9728]			Max int.
	190	768	1100			

YMV 1000 [60.40 in³/rev] 990 cm³/rev.

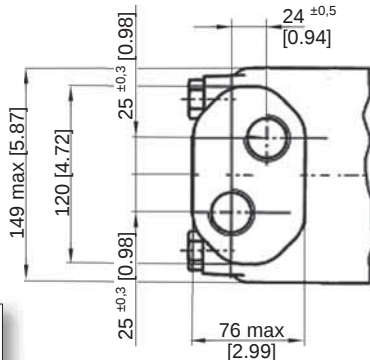
Max
cont.

		[1015] 7	[1450] 10	[2030] 14	[2320] 16	[PSI] MPa
GPM	[7.9]	[8649]	[12410]	[12511]	[20075]	
	30	978	1410	1980	2270	
L/min	[15.9]	992	1422	2015	2280	
	60	58	56	55	51	
Flow (L/min)	[23.8]	[8129]	[12603]	[17715]	[20129]	
	90	987	1425	2003	2276	
	[27.7]	[8694]	[12541]	[17635]	[19837]	
	105	983	1418	1994	2243	
	[31.7]	[8623]	[12461]	[17582]	[19669]	
	120	975	1409	1988	2224	
Max cont	[39.6]	[8499]	[12099]	[16830]		Max cont.
	150	961	1368	1903	123	
Max int.	[50.2]	[8340]	[11833]			Max int.
	190	943	1338			

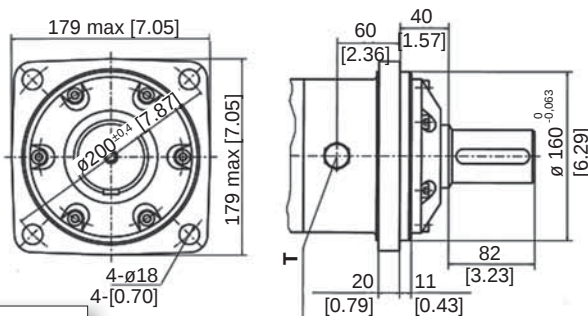
YMV MOUNTING DATA



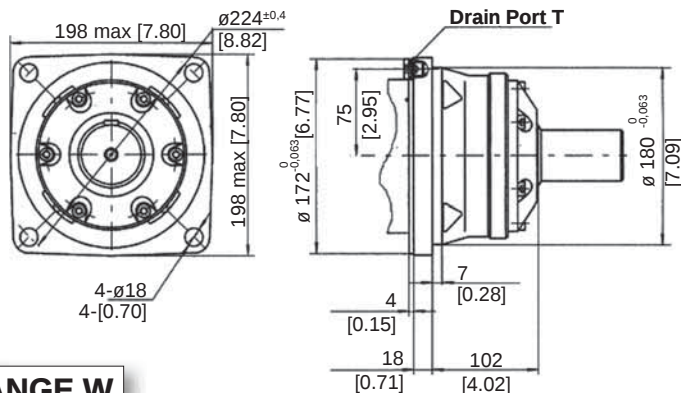
**PORTING
D, M**



**PORTING
S, G, M5**



FLANGE 4



FLANGE W

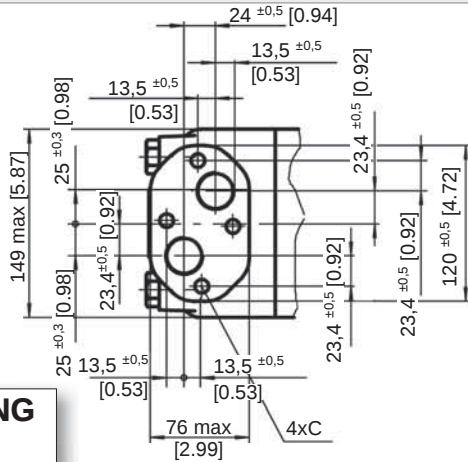
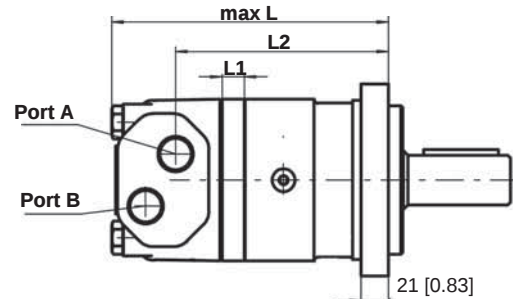
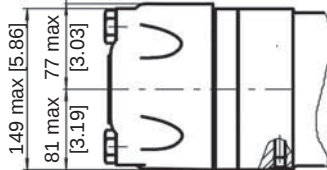
	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
YMV315	[8.55]	[0.79]	[6.36]	217	20	161.5
YMV400	[8.82]	[1.06]	[6.63]	224	27	168.5
YMV500	[9.13]	[1.38]	[6.95]	232	35	176.5
YMV630	[9.61]	[1.85]	[7.42]	244	47	188.5
YMV800	[10.04]	[2.28]	[7.85]	255	58	199.5

	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
YMW315	[5.85]	[0.79]	[3.68]	148.5	20	93.5
YMV400	[6.12]	[1.06]	[3.96]	155.5	27	100.5
YMV500	[6.44]	[1.38]	[4.27]	163.5	35	108.5
YMV630	[6.91]	[1.85]	[4.74]	175.5	47	120.5
YMV800	[7.34]	[2.28]	[5.18]	186.5	58	131.5

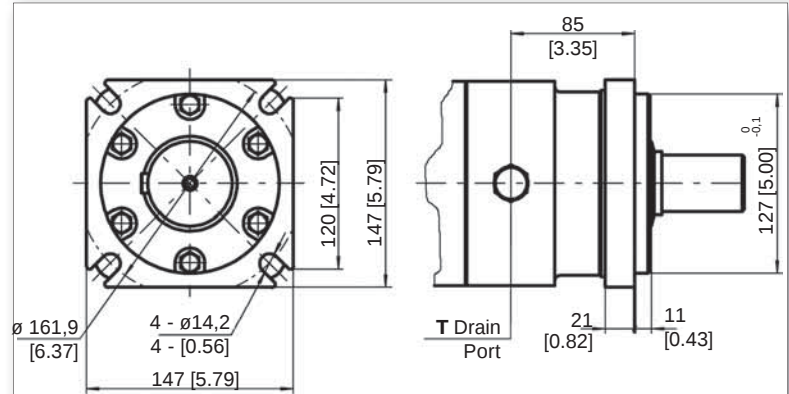
PORT & DRAIN PORT ORDERING CODES

ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	G	DEPTH	M5	DEPTH
PORTS - A and B	G 1	18 mm	M33 X 2	18 mm	1-5/16-12UN	18 mm	G 1	18 mm	M33 X 2	18 mm
TANK PORT - T	G 1/4	12 mm	M14 X1.5	12 mm	9/16-18UNF	12 mm	G 1/4	12 mm	M14X1.5	12 mm
BOLTS - C	4-M12	10 mm	4-M12	10 mm	-	-	-	-	-	-

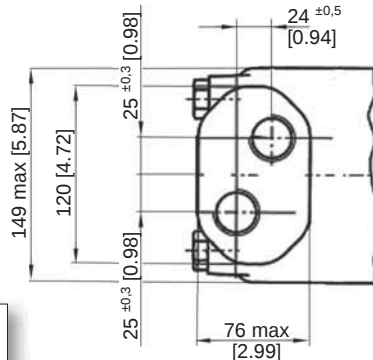
YMVE MOUNTING DATA



**PORTING
D, M**



FLANGE K6



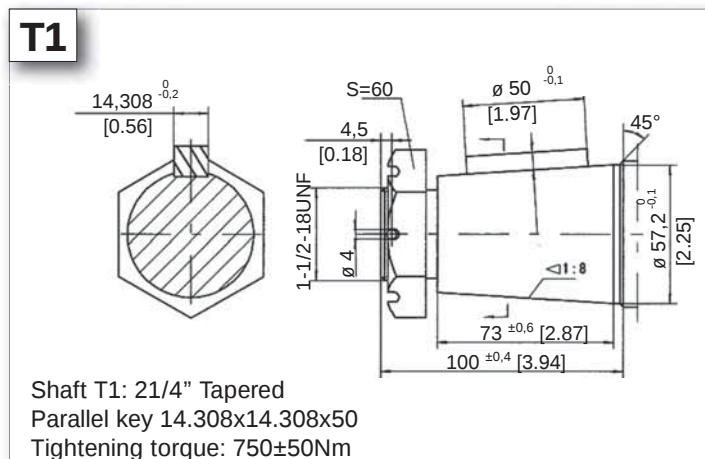
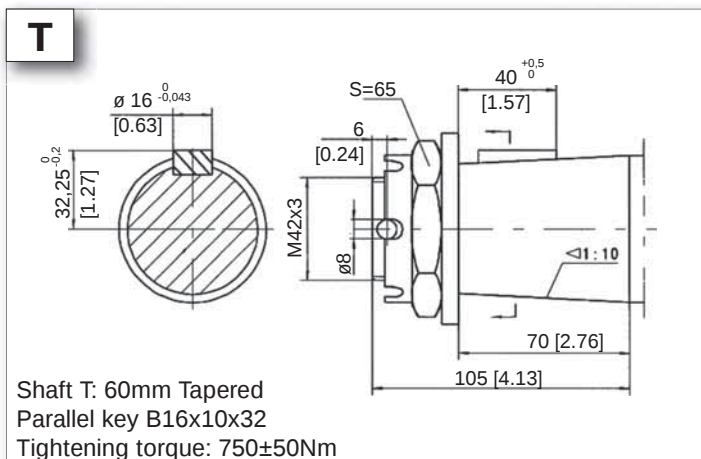
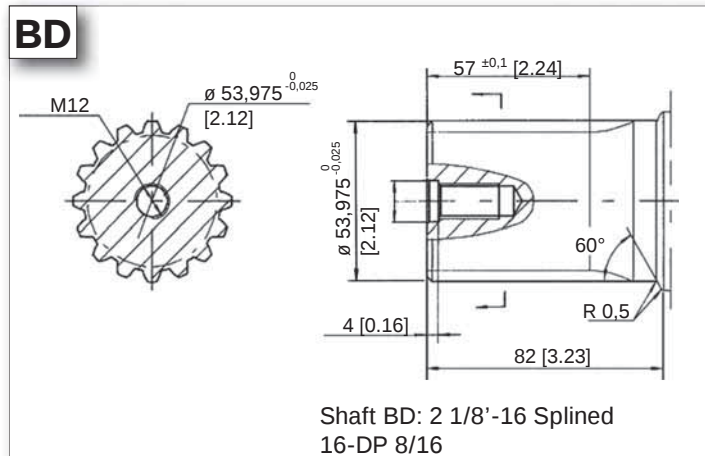
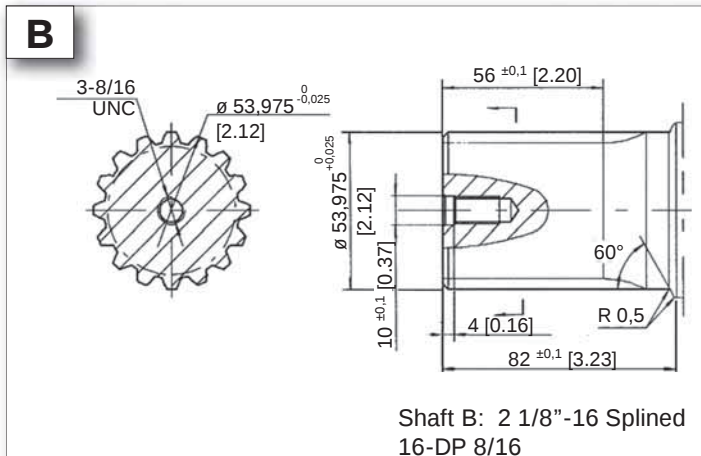
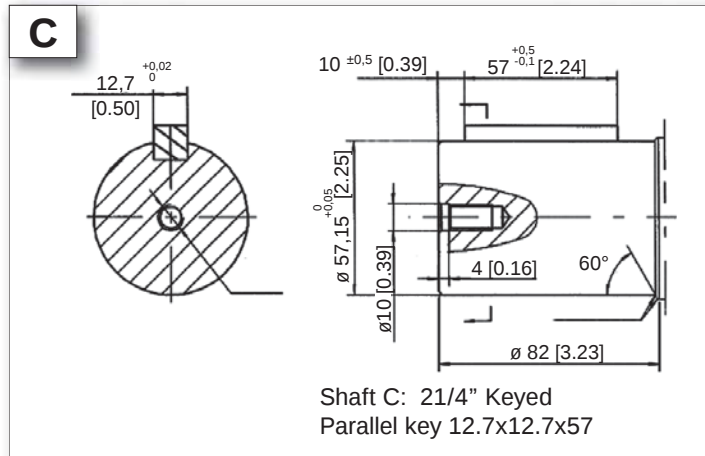
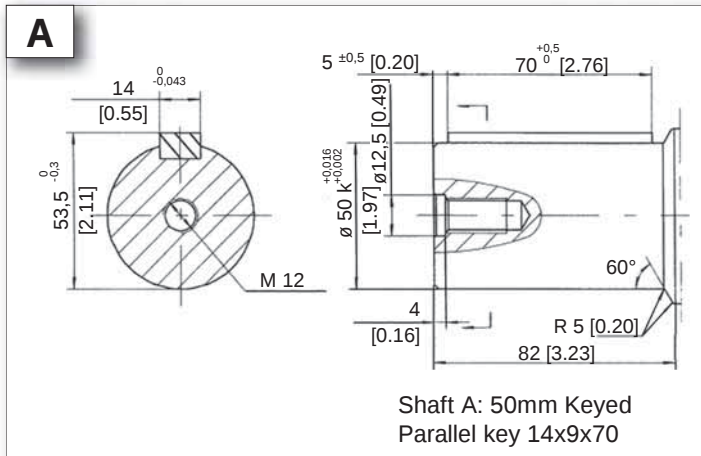
**PORTING
S, G, M5**

	[INCHES]			MILLIMETERS		
MODEL	L	L1	L2	L	L1	L2
YMVE315	[9.69]	[0.79]	[7.44]	246	20	189
YMVE400	[9.96]	[1.06]	[7.72]	253	27	196
YMVE500	[10.28]	[1.38]	[8.03]	261	35	204
YMVE630	[10.75]	[1.85]	[8.50]	273	47	216
YMVE800	[11.18]	[2.28]	[8.94]	284	58	227

PORT & DRAIN PORT ORDERING CODES

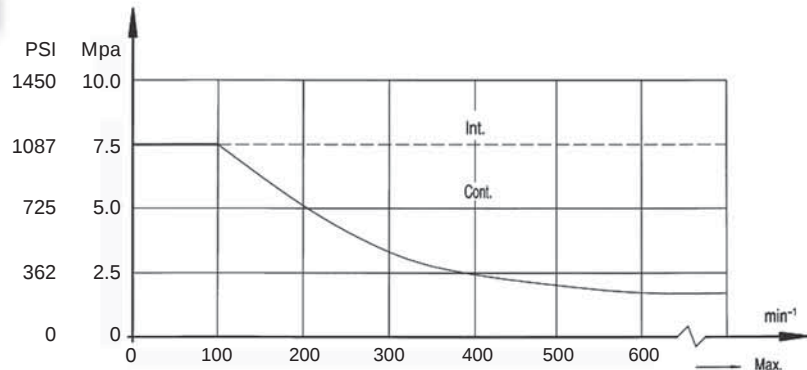
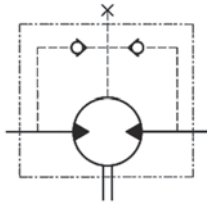
ORDER CODE	D	DEPTH	M	DEPTH	S	DEPTH	G	DEPTH	M5	DEPTH
PORTS - A and B	G 1	18 mm	M33 X 2	18 mm	1-5/16-12UN	18 mm	G 1	18 mm	M33 X 2	18 mm
TANK PORT - T	G 1/4	12 mm	M14 X1.5	12 mm	9/16-18UNF	12 mm	G 1/4	12 mm	M14X1.5	12 mm
BOLTS - C	4-M12	10 mm	4-M12	10 mm	-	-	-	-	-	-

MOTOR SHAFT EXTENSIONS



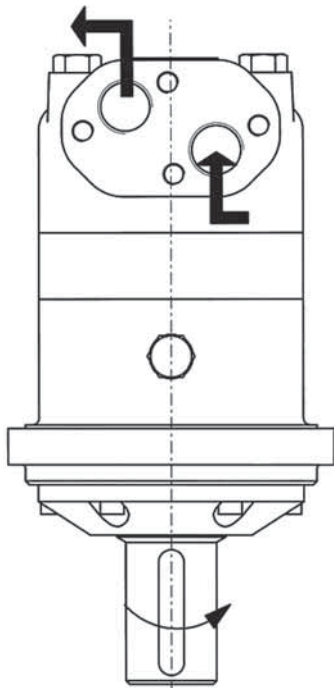
ADDITIONAL DATA

PERMISSIBLE SHAFT SEAL PRESSURE



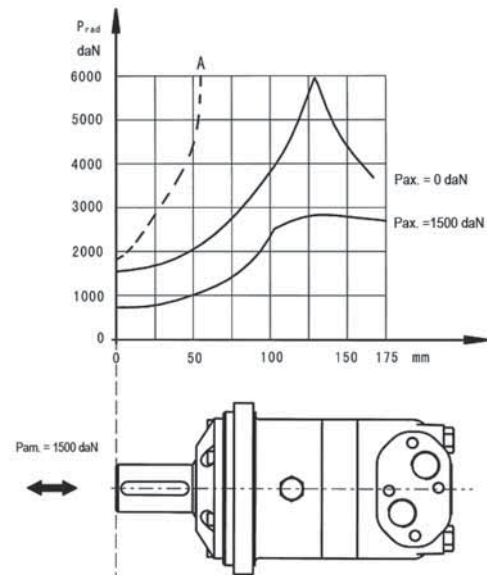
IN APPLICATIONS WITH OUT A DRAIN LINE, THE PRESSURE EXERTED ON THE SHAFT SEAL WILL EXCEED THE PRESSURE IN THE RETURN LINE. IN APPLICATIONS USING A DRAIN LINE, THE PRESSURE ON THE OUTPUT SHAFT SEAL CAN EQUAL THE PRESSURE IN DRAIN LINE.

DIRECTION OF SHAFT ROTATION



YMV

AXIAL AND RADIAL FORCES



The output shaft runs in tapered bearings that permit high axial and radial forces, Curve "A" shows max radial shaft load, Any shaft loads exceeding the values quoted in the curve will involve a risk of breakage, The two other curve supply to a B10 bearing life of 3000 hours at 200 RPM.

ORDERING INFORMATION

	1	2	3	4	5	6	7
YMV							

1	2	3	4	5	6	7
DISP.	FLANGE	OUTPUT SHAFT	PORT AND DRAIN PORT	ROTATION DIRECTION	PAINT	SPECIAL OPTIONS
315	4 4-Ø14.5 Square-flange, pilot Ø160×11	A Shaft:50mm Keyed , parallel key 14×9×70	D G1 Manifold 4×M12, G1/4	NONE STANDARD	OO NO PAINT	NONE STANDARD
400	W 4-Ø18 Wheel-flange Ø224, pilot Ø180×10	BD Shaft: 2 1/8" Splined 16-DP8/16	M M33×2 Manifold 4×M12, M14×1.5	R OPPOSITE	NONE BLUE	FR FREE RUNNING
500	K6 4-Ø14.2 Square flange Pilot ø 161.9	B Shaft: 2 1/8" Splined 16-DP8/16	S 1-5/16-12UN, 9/16-18UNF		B BLACK	LL LOW LEAKAGE
630		C Shaft: 2 1/4" Keyed parallel key 12.7×12.7×57	G G1,G1/4		S SILVER GRAY	LSV LOW SPEED VALVE
800		T 60mm Tape-red parallel key B16×10×32	M5 M33×2, M14×1.5			CRS CORROSIVE RESISTANT SHAFT
		T1 2 1/4" Tapered parallel key 14.308×14.308×50				HPS HIGH PRESSURE SEAL
						HTS HIGH TEMP SEAL

Ordering Code:

All options have been determined with letters,numbers or combinations.All boxes must be filled with proper codes.If specification is not in the table,please contact us with your requirements.

YME2



The **YME2** series motors incorporate the advanced **GEROLOR** gear set which reduces internal friction to a minimum and a “**COMMUTATOR VALVE**” distributions system which is internally balanced to reduce friction,leakage and permit better speed control.Producing higher efficiency, smoother rotation, higher speed and pressure.

This series also has many sizes and options to make it very flexible for many applications,The output shaft is supported by needle bearings for high radial and axial load for heavy duty applications,

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output power	
commutator Distribution	YME2	[in. ³ /rev]	[4.08-22.57]	[PSI]	[2900]	RPM	[HP]	[23.99]
		cm ³ /rev.	66.8-370	MPa	20	842	Kw	17.9

YME2 SERIES QUICK REFERENCE GUIDE

Displacements				
[in. ³ /rev]	cm ³ /rev.			
[4.08]	66.8	FLOW UP TO	75 LPM	[19.82 GPM]
[4.97]	81.3	PRESSURE UP TO	20 MPa	[2900 PSI]
[6.20]	101.6	TORQUE UP TO	613 Nm	[5421 lb.-in.]
[7.75]	127	POWER UP TO	17,9 Kw	[24 HP]
[9.60]	157.2	SPEED UP TO	842 RPM	
[11.82]	193.6			
[13.80]	226			
[15.69]	257			
[17.57]	287.8			
[19.20]	314.5			
[22.58]	370			

Shaft Seals: High pressure shaft seals permit the parallel or series application without the need of a drain line.

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and longer life for the motors and other components.

Special Motors: These motors have a variety of special options like nickel plated shafts or housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

DISTRIBUTION TYPE		YME2 65	YME2 80	YME2 100	YME2 125	YME2 160	YME2 200	YME2 230	YME2 250	YME2 295	YME2 315	YME2 375	
GEOMETRIC DISPLACEMENT	[in³./rev.]	[4.08]	[4.97]	[6.20]	[7.75]	[9.60]	[11.82]	[13.80]	[15.69]	[17.57]	[19.20]	[22.58]	
	cm³/rev.	66.8	81.3	101.6	127	157.2	193.6	226	257	287.8	314.5	370	
MAX. SPEED RPM	RATED	490	410	330	265	210	175	195	170	155	135	120	
	CONT.	667	543	439	350	283	229	247	216	196	178	152	
	INT	842	689	553	441	355	289	328	287	254	235	199	
MAX. TORQUE [IN. LB.] N*M	RATED	[IN. LB.]	[973]	[1203]	[1459]	[1893]	[2317]	[2759]	[2812]	[2910]	[3078]	[3219]	[3290]
		N*M	110	136	165	214	262	312	318	329	348	364	372
	CONT.	[IN. LB.]	[1114]	[1389]	[1689]	[2167]	[2715]	[3378]	[3343]	[3370]	[3476]	[3962]	[3883]
		N*M	126	157	191	245	307	382	378	381	393	448	439
	INT.	[IN. LB.]	[1557]	[1901]	[2370]	[2963]	[3732]	[4599]	[4670]	[4802]	[4838]	[5191]	[5421]
		N*M	176	215	268	335	422	520	528	543	547	587	613
MAX. OUTPUT [HP] KW	RATED	[HP]	[7.4]	[8.2]	[7.9]	[8.3]	[8.2]	[7.8]	[8.6]	[8.0]	[7.8]	[7.0]	[6.7]
		KW	5.5	6.1	5.9	6.22	6.1	5.8	6.4	6	5.8	5.2	5
	CONT.	[HP]	[11.1]	[11.8]	[10.6]	[11.9]	[11.9]	[12.0]	[13.3]	[12.5]	[11.7]	[10.7]	[10.2]
		KW	8.3	8.8	7.9	8.9	8.9	9	9.9	9.3	8.7	8	7.6
	INT.	[HP]	[18.6]	[19.3]	[18.1]	[18.9]	[20.9]	[21.0]	[24.0]	[22.1]	[20.9]	[19.2]	[18.8]
		KW	13.9	14.4	13.5	14.1	15.6	15.7	17.9	16.5	15.6	14.3	14
MAX. PRESSU- RE DROP [PSI] MPa	RATED	[PSI]	[1813]	[1813]	[1813]	[1813]	[1813]	[1813]	[1595]	[1450]	[1305]	[1305]	[1160]
		MPa	12.5	12.5	12.5	12.5	12.5	12.5	11	10	9	9	8
	CONT.	[PSI]	[2030]	[2030]	[2030]	[2030]	[2030]	[2030]	[1740]	[1595]	[1450]	[1450]	[1305]
		MPa	14	14	14	14	14	14	12	11	10	10	9
	INT.	[PSI]	[2755]	[2755]	[2755]	[2755]	[2755]	[2755]	[2393]	[2248]	[2103]	[1958]	[1813]
		MPa	19	19	19	19	19	19	16.5	15.5	14.5	13.5	12.5
	PEAK	[PSI]	[2900]	[2900]	[2900]	[2900]	[2900]	[2900]	[2610]	[2610]	[2465]	[2320]	[2320]
		MPa	20	20	20	20	20	20	18	18	17	16	16
MAX. FLOW [GPM] L/MIN	RATED	[GPM]	[8.9]	[8.9]	[8.9]	[8.9]	[8.9]	[8.9]	[11.8]	[11.8]	[11.8]	[11.8]	[11.8]
		L/MIN	34	34	34	34	34	34	45	45	45	45	45
	CONT.	[GPM]	[11.8]	[11.8]	[11.8]	[11.8]	[11.8]	[11.8]	[15.0]	[15.0]	[15.0]	[15.0]	[15.0]
		L/MIN	45	45	45	45	45	45	57	57	57	57	57
	INT.	[GPM]	[15.1]	[15.1]	[15.1]	[15.1]	[15.1]	[15.1]	[19.82]	[19.82]	[19.82]	[19.82]	[19.82]
		L/MIN	57	57	57	57	57	57	75	75	75	75	75

- Rated speed and rated torque: Output value of speed and torque under rated flow and rated pressure.
- Continuous pressure: Max. value of operating motor continuously.
- Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- Peak pressure: Max. value of operating motor in 0.6 second per minute.

PERFORMANCE DATA

YME2 65

[4.08 in³/rev]

66.8 cm³/rev.

Max
cont.

Max
int.

	[507]	[1015]	[1522]	[2030]	[2755]	[PSI]
	3.5	7	10.5	14	19	MPa

GPM	[0.5]	[230]	[477]	[734]		
L/min	2	26	54	83		
		22	16	4		
	[1.3]	[239]	[495]	[769]	[1.043]	
	5	27	56	87	118	
		69	62	53	42	
	[2.6]	[256]	[531]	[805]	[1.088]	[1.512]
	10	29	60	91	123	171
		145	141	132	122	95
	[4.0]	[265]	[548]	[831]	[1.114]	[1.556]
	15	30	62	94	126	176
		221	216	207	196	149
	[5.3]	[248]	[513]	[805]	[1.079]	[1.538]
	20	28	58	91	122	174
		295	290	279	261	232
	[6.6]	[212]	[486]	[796]	[1.070]	[1.521]
	25	24	55	90	121	172
		368	365	352	341	312
	[9.0]	[194]	[477]	[787]	[1.052]	[1.512]
	34	22	54	89	119	171
		501	493	478	457	423
	[11.9]	[177]	[460]	[752]	[1.017]	[1.486]
	45	20	52	85	115	168
		667	660	642	621	587
	[15.1]	[133]	[407]	[707]	[990]	[1.441]
	57	15	46	80	112	163
		842	835	814	789	735

Max
cont.

Max
int.

YME2 100

[6.20 in³/rev]

101.6 cm³/rev.

Max
cont.

Max
int.

	[507]	[1015]	[1522]	[2030]	[2755]	[PSI]
	3.5	7	10.5	14	19	MPa

GPM	[0.5]	[354]	[725]	[1.114]		
L/min	2	40	82	126		
		15	11	4		
	[1.3]	[363]	[734]	[1.327]	[1.822]	
	5	41	83	150	206	
		44	36	28	12	
	[2.6]	[371]	[805]	[1.220]	[1.565]	[2.034]
	10	42	91	138	177	230
		97	95	94	81	54
	[4.0]	[371]	[805]	[1.220]	[1.636]	[2.273]
	15	42	91	138	185	257
		147	144	137	124	93
	[5.3]	[336]	[778]	[1.203]	[1.592]	[2.158]
	20	38	88	136	180	244
		195	192	182	169	138
	[6.6]	[345]	[787]	[1.256]	[1.689]	[2.370]
	25	39	89	142	191	268
		244	241	230	221	194
	[9.0]	[274]	[699]	[1.158]	[1.583]	[2.211]
	34	31	79	131	179	250
		331	328	323	308	273
	[11.9]	[186]	[619]	[1.052]	[1.486]	[2.131]
	45	21	70	119	168	241
		439	436	433	419	383
	[15.1]	[88]	[531]	[964]	[1.397]	[2.052]
	57	10	60	109	158	232
		553	545	534	527	491

Max
cont.

Max
int.

YME2 80

[4.96 in³/rev]

81.3 cm³/rev.

Max
cont.

Max
int.

	[507]	[1015]	[1522]	[2030]	[2755]	[PSI]
	3.5	7	10.5	14	19	MPa

GPM	[0.5]	[292]	[619]	[937]		
L/min	2	33	70	106		
		18	14	4		
	[1.3]	[309]	[637]	[982]	[1.327]	
	5	35	72	111	150	
		55	51	44	25	
	[2.6]	[318]	[663]	[1.008]	[1.371]	[1.901]
	10	36	75	114	155	215
		121	118	113	107	88
	[4.0]	[327]	[681]	[1.026]	[1.388]	[1.901]
	15	37	77	116	157	215
		181	178	171	162	148
	[5.3]	[309]	[654]	[990]	[1.335]	[1.822]
	20	35	74	112	151	206
		242	238	231	223	205
	[6.6]	[309]	[628]	[955]	[1.309]	[1.786]
	25	35	71	108	148	202
		303	298	289	275	261
	[9.0]	[274]	[610]	[929]	[1.282]	[1.751]
	34	31	69	105	145	198
		411	407	396	382	373
	[11.9]	[203]	[548]	[884]	[1.229]	[1.06]
	45	23	62	100	139	12
		543	537	521	513	501
	[15.1]	[159]	[486]	[867]	[1.185]	[1.645]
	57	18	55	98	134	186
		689	681	665	649	618

Max
cont.

Max
int.

YME2 125

[7.75 in³/rev]

127 cm³/rev.

Max
cont.

Max
int.

	[507]	[1015]	[1522]	[2030]	[2755]	[PSI]
	3.5	7	10.5	14	19	MPa

GPM	[0.5]	[460]	[1.327]	[1.397]		
L/min	2	52	150	158		
		12	9	3		
	[1.3]	[486]	[990]	[1.503]	[1.954]	[2.565]
	5	55	112	170	221	290
		35	31	22	15	10
	[2.6]	[504]	[1.035]	[1.592]	[2.140]	[2.962]
	10	57	117	180	242	335
		78	75	69	63	46
	[4.0]	[495]	[1.044]	[1.592]	[2.167]	[2.927]
	15	56	118	180	245	331
		116	113	109	99	76
	[5.3]	[486]	[1.035]	[1.574]	[2.140]	[2.927]
	20	55	117	178	242	331
		155	153	147	136	110
	[6.6]	[460]	[982]	[1.565]	[2.105]	[2.874]
	25	52	111	177	238	325
		593	188	182	172	151
	[9.0]	[380]	[929]	[1.495]	[2.043]	[2.883]
	34	43	105	169	231	326
		264	262	254	244	220
	[11.9]	[336]	[840]	[1.406]	[1.937]	[2.777]
	45	38	95	159	219	314
		350	348	346	331	301
	[15.1]	[186]	[1.556]	[1.247]	[2.476]	[2.671]
	57	21	176	141	280	302
		441	439	431	417	384

Max
cont.

Max
int.

PERFORMANCE DATA

YME2 160

[9.59 in³/rev] 157.2 cm³/rev.

Max
cont.

Max
int.

[PSI]
MPa

GPM L/ min	[0.5] 2	[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2755] 19	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
		64 10	132 8	199 2			
[1.3] 5	[2.6] 10	[601] 68 28	[1.220] 138 26	[1.839] 208 19	[2.485] 281 10		
		[628] 71 62	[1.300] 147 60	[1.954] 221 56	[2.680] 303 53	[3.706] 419 38	
[4.0] 15	[5.3] 20	[637] 72 93	[1.309] 148 91	[1.990] 225 87	[2.715] 307 79	[3.767] 426 61	
		[628] 71 126	[1.309] 148 123	[1.972] 223 118	[2.697] 305 110	[3.732] 422 95	
[6.6] 25	[9.0] 34	[548] 62 157	[1.238] 140 155	[1.928] 218 152	[2.618] 296 141	[3.670] 415 129	
		[495] 56 214	[1.185] 134 211	[1.866] 211 206	[2.538] 287 197	[3.608] 408 181	
Max cont	Max int.	[416] 47 283	[1.123] 127 281	[1.813] 205 275	[2.485] 281 266	[3.458] 391 241	Max cont.
		[318] 36 355	[858] 97 352	[1.610] 182 346	[2.299] 260 336	[3.272] 370 311	Max int.

YME2 200

[11.81 in³/rev] 193.6 cm³/rev.

Max
cont.

Max
int.

[PSI]
MPa

GPM L/ min	[0.5] 2	[507] 3.5	[1015] 7	[1522] 10.5	[2030] 14	[2755] 19	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
		80 9	163 7	245 3			
[1.3] 5	[2.6] 10	[778] 88 23	[1.574] 178 21	[2.352] 266 18	[3.113] 352 12		
		[787] 89 49	[1.601] 181 48	[2.432] 275 43	[3.343] 378 39	[4.572] 517 27	
[4.0] 15	[5.3] 20	[805] 91 76	[1.663] 188 73	[2.476] 280 68	[3.378] 382 63	[4.599] 520 44	
		[787] 89 101	[1.610] 182 98	[2.432] 275 95	[3.308] 374 86	[4.572] 517 69	
[6.6] 25	[9.0] 34	[690] 78 127	[1.503] 170 125	[2.397] 271 121	[3.325] 376 113	[4.581] 518 101	
		[566] 64 173	[1.397] 158 171	[2.370] 268 165	[3.210] 363 156	[4.440] 502 143	
Max cont	Max int.	[451] 51 229	[1.388] 157 227	[2.229] 252 221	[3.104] 351 212	[4.369] 494 196	Max cont.
		[318] 36 289	[1.220] 138 286	[2.043] 231 279	[2.918] 330 271	[4.148] 469 256	Max int.

YME2 230

[13.79 in³/rev] 226 cm³/rev.

Max
cont.

Max
int.

[PSI]
MPa

GPM L/ min	[0.5] 2	[507] 3.5	[1015] 7	[1522] 10.5	[1740] 12	[2392] 16.5	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
		97 7	191 4	280 2			
[1.3] 5	[2.6] 10	[893] 101 18	[1.760] 199 14	[2.662] 301 8	[3.078] 348 4		
		[911] 103 43	[1.893] 214 42	[2.874] 325 40	[3.343] 378 36	[4.661] 527 29	
[4.0] 15	[5.3] 20	[920] 104 65	[1.901] 215 63	[2.892] 327 59	[3.316] 375 52	[4.670] 528 47	
		[893] 101 86	[1.857] 210 84	[2.839] 321 81	[3.281] 371 75	[4.634] 524 66	
[6.6] 25	[9.0] 34	[840] 95 108	[1.778] 201 106	[2.795] 316 102	[3.219] 364 94	[4.519] 511 87	
		[725] 82 147	[1.663] 188 145	[2.724] 308 141	[3.166] 358 135	[4.431] 501 128	
[11.9] 45	Max cont	[486] 55 197	[1.397] 158 195	[2.441] 276 191	[2.910] 329 186	[4.289] 485 176	
		[168] 19 247	[1.150] 130 244	[2.264] 256 240	[2.662] 301 230	[3.989] 451 221	Max cont.
Max int.	75	[575] 65 328	[1.618] 183 323	[2.211] 250 311	[3.546] 401 303		Max int.

YME2 250

[15.68 in³/rev] 257 cm³/rev.

Max
cont.

Max
int.

[PSI]
MPa

GPM L/ min	[0.5] 2	[507] 3.5	[1015] 7	[1522] 10.5	[1595] 11	[2247] 15.5	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
		112 6	207 3	309 1			
[1.3] 5	[2.6] 10	[1.017] 115 18	[1.928] 218 14	[2.830] 320 8	[3.078] 348 4		
		[999] 113 39	[2.078] 235 38	[3.166] 358 35	[3.352] 379 31	[4.802] 543 23	
[4.0] 15	[5.3] 20	[999] 113 58	[2.069] 234 56	[3.157] 357 53	[3.369] 381 45	[4.793] 542 3	
		[982] 111 77	[2.061] 233 75	[3.148] 356 72	[3.325] 376 65	[4.785] 541 48	
[6.6] 25	[9.0] 34	[964] 109 97	[2.016] 228 95	[3.131] 354 89	[3.281] 371 81	[4.705] 532 69	
		[805] 91 131	[1.884] 213 128	[3.060] 346 123	[3.219] 364 116	[4.608] 521 103	
[11.9] 45	Max cont	[787] 89 174	[1.866] 211 172	[3.051] 345 165	[3.193] 361 157	[4.581] 518 135	
		[646] 73 216	[1.839] 208 213	[2.998] 339 205	[3.025] 342 197	[4.307] 487 184	Max cont.
Max int.	75	[654] 74 287	[1.751] 198 284	[2.662] 301 278	[3.900] 441 267		Max int.

PERFORMANCE DATA

YME2 295

[17.56 in³/rev] 287.8 cm³/rev.

Max
cont.

Max
int.

		[507] 3.5	[1015] 7	[1595] 11	[2102] 14.5	[PSI] MPa
GPM L/ min	[1.3]	[1.070]	[2.149]	[3.254]	[4.502]	TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	5	121 15	243 14	368 10	509 5	
	[2.6]	[1.105]	[2.237]	[3.369]	[4.678]	
	10	125 33	253 31	381 27	529 20	
	[4.0]	[1.141]	[2.308]	[3.476]	[4.838]	
	15	129 51	261 50	393 47	547 41	
Flow (L/min)	[5.3]	[1.123]	[2.291]	[3.449]	[4.820]	
	20	127 68	259 67	390 63	545 55	
	[6.6]	[1.114]	[2.255]	[3.414]	[4.767]	
	25	126 86	255 84	386 80	539 69	
	[9.0]	[1.088]	[2.193]	[3.361]	[4.696]	
	34	123 116	248 114	380 110	531 98	
	[11.9]	[1.017]	[2.069]	[3.255]	[4.616]	
	45	115 154	234 153	368 148	522 136	
	[15.1]	[955]	[2.007]	[3.175]	[4.546]	
Max cont.	57	108 196	227 194	359 187	514 176	Max cont.
Max int.	[19.8]		[1.866]	[3.086]	[4.475]	Max int.
	75		211 254	349 246	506 231	

YME2 315

[19.19 in³/rev] 314.5 cm³/rev.

Max
cont.

Max
int.

		[507] 3.5	[1015] 7	[1595] 11	[1957] 13.5	[PSI] MPa
GPM L/ min	[1.3]	[1.203]	[2.485]	[3.776]		TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	5	136 11	281 8	427 3		
	[2.6]	[1.230]	[2.583]	[3.874]	[5.076]	
	10	139 30	287 29	438 26	574 20	
	[4.0]	[1.247]	[2.609]	[3.962]	[5.191]	
	15	141 47	295 46	448 43	587 40	
Flow (L/min)	[5.3]	[1.220]	[2.538]	[3.909]	[5.191]	
	20	138 62	287 61	442 58	587 53	
	[6.6]	[1.158]	[2.476]	[3.812]	[5.014]	
	25	131 78	280 75	431 71	567 66	
	[9.0]	[1.035]	[2.379]	[3.741]	[4.926]	
	34	117 106	269 104	423 98	557 91	
	[11.9]	[1.088]	[2.237]	[3.511]	[4.731]	
	45	114 141	253 138	397 132	535 125	
	[15.1]	[760]	[1.937]	[3.387]	[4.466]	
Max cont.	57	86 178	219 173	383 168	505 162	Max cont.
Max int.	[19.8]		[955]	[2.538]	[3.679]	Max int.
	75		108 235	287 231	416 219	

YME2 375

[22.57 in³/rev] 370 cm³/rev.

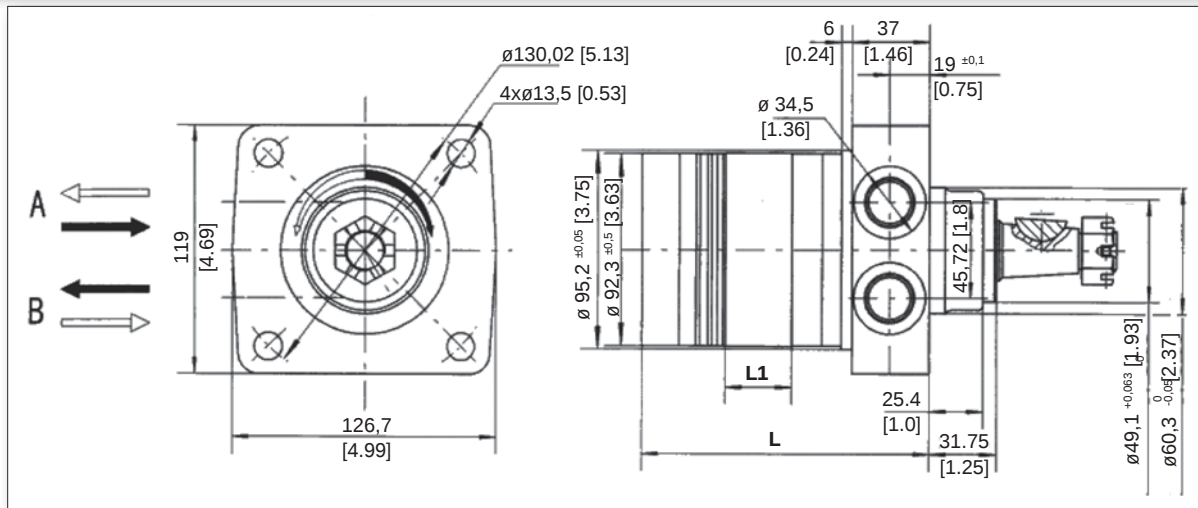
Max
cont.

Max
int.

		[507] 3.5	[1015] 7	[1305] 9	[1812] 12.5	[PSI] MPa
GPM L/ min	[1.3]	[1.335]	[2.786]	[3.644]		TORQUE [LB-IN] TORQUE (N•M) SPEED (RPM)
	5	151 10	315 7	412 3		
	[2.6]	[1.371]	[2.865]	[3.776]	[5.359]	
	10	155 25	324 24	427 21	606 18	
	[4.0]	[1.433]	[2.927]	[3.882]	[5.421]	
	15	162 40	331 39	439 37	613 32	
Flow (L/min)	[5.3]	[1.397]	[2.883]	[3.838]	[5.324]	
	20	158 53	326 52	434 49	602 45	
	[6.6]	[1.335]	[2.795]	[3.750]	[5.209]	
	25	151 67	316 65	424 62	589 58	
	[9.0]	[1.247]	[2.733]	[3.688]	[5.129]	
	34	141 91	309 89	417 85	580 80	
	[11.9]	[1.220]	[2.653]	[3.608]	[5.059]	
	45	138 121	300 119	408 115	572 107	
	[15.1]	[1.044]	[2.485]	[3.476]	[4.864]	
Max cont.	57	118 152	281 150	393 144	550 136	Max cont.
Max int.	[19.8]		[2.282]	[3.263]	[4.581]	Max int.
	75		258 199	369 191	518 183	

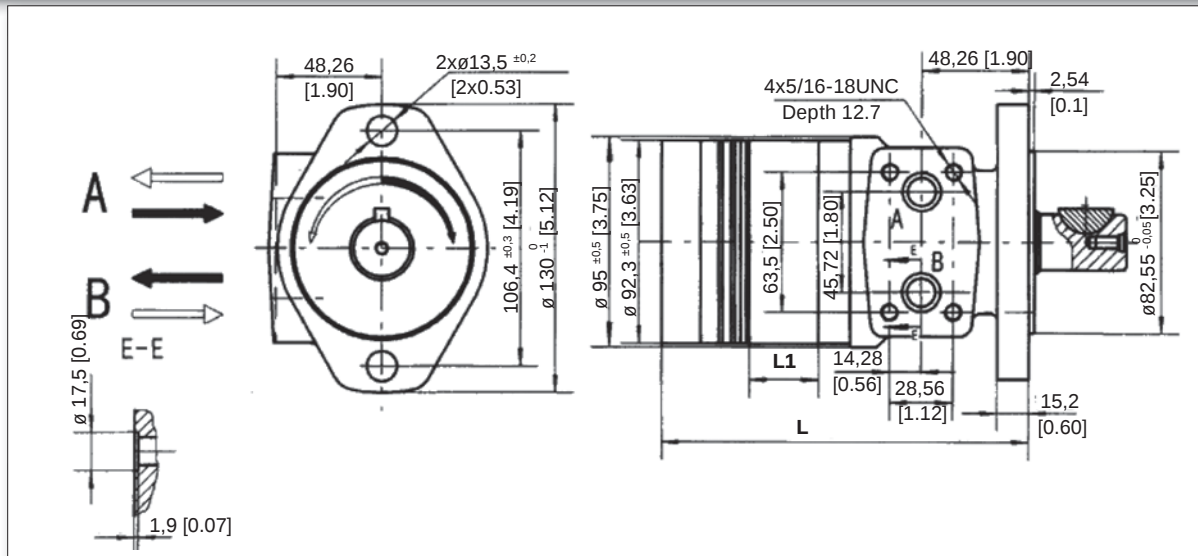
DIMENSION AND MOUNTING DATA

Code: Wheel Mount WS: 7/8-14 O-RING - WD: G1/2 - WM: M22X1.5



DISPLACEMENT CM ³ /REV	65	80	100	125	160	200	230	250	295	315	375
L1 (inches)	[0.51]	[0.63]	[0.79]	[0.98]	[1.20]	[1.50]	[1.73]	[1.97]	[2.20]	[2.44]	[2.91]
L1 (mm)	13	16	20	25	30.5	38.1	44	50	56	62	74
L (inches)	[4.69]	[4.80]	[4.96]	[5.16]	[5.37]	[5.67]	[5.91]	[6.14]	[6.38]	[6.61]	[7.09]
L (mm)	119	122	126	131	136.5	144	150	156	162	168	180
WEIGHT (lb)	[16]	[16]	[17]	[18]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
WEIGHT (kg)	7.4	7.5	7.8	8	8.3	8.7	9.2	9.6	10	10.3	10.8

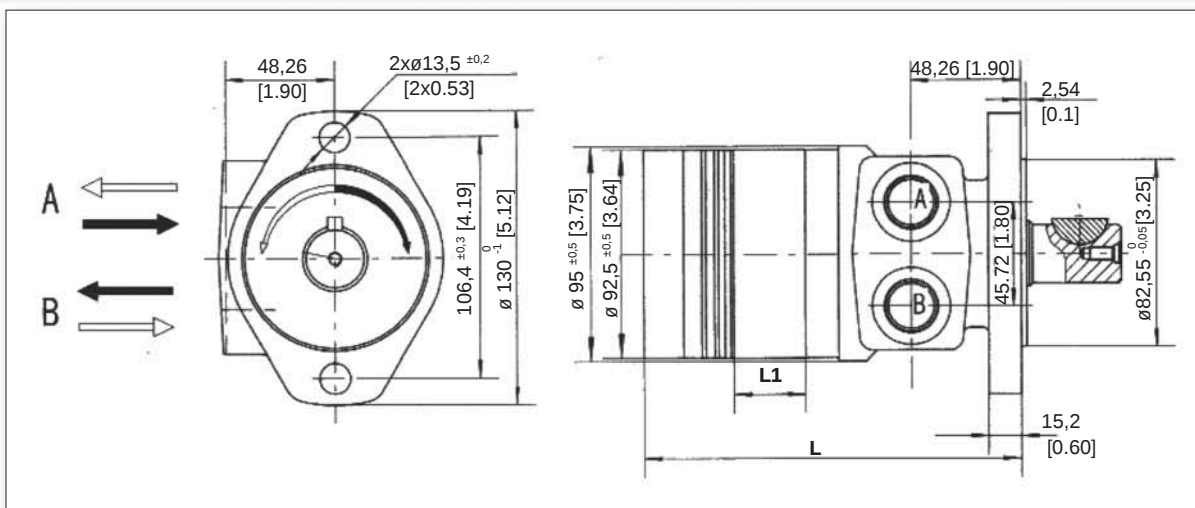
Code: HM Manifold • A. B Port 1/2"



DISPLACEMENT CM ³ /REV	65	80	100	125	160	200	230	250	295	315	375
L1 (inches)	[0.51]	[0.63]	[0.79]	[0.98]	[1.20]	[1.50]	[1.73]	[1.97]	[2.20]	[2.44]	[2.91]
L1 (mm)	13	16	20	25	30.5	38.1	44	50	56	62	74
L (inches)	[5.87]	[5.98]	[6.14]	[6.34]	[6.56]	[6.85]	[7.09]	[7.32]	[7.56]	[7.80]	[8.27]
L (mm)	149	152	156	161	166.5	174	180	186	192	198	210
WEIGHT (lb)	[14]	[14]	[15]	[15]	[16]	[17]	[18]	[19]	[20]	[20]	[21]
WEIGHT (kg)	6.4	6.5	6.8	7	7.3	7.7	8.2	8.6	9	9.3	9.8

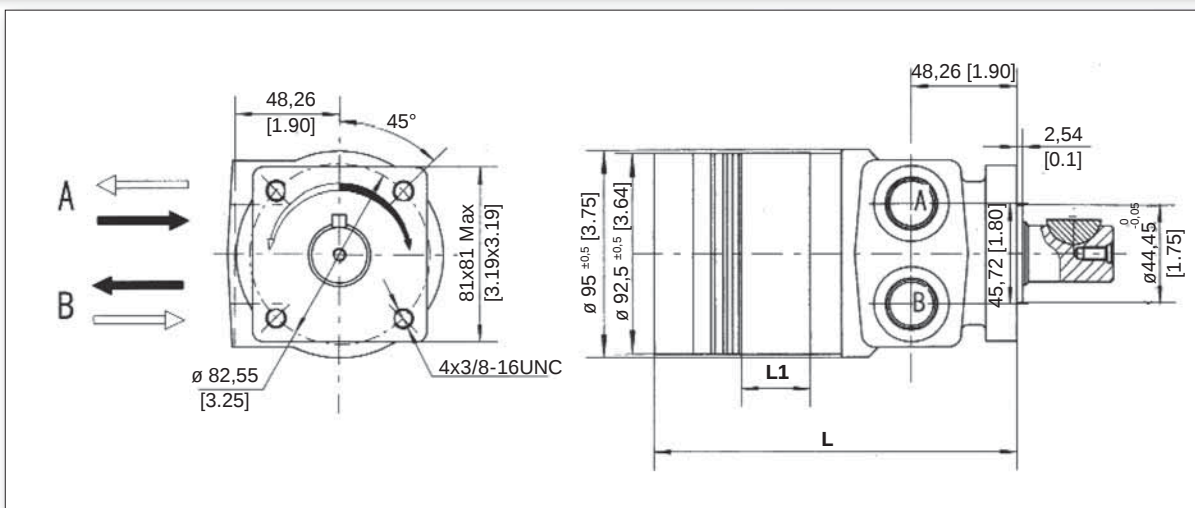
DIMENSION AND MOUNTING DATA

Code: Port A. B • HS 7/8-14 UNF • HP 1/2-14NPTF • HD G1/2 • HG M22x1,5



DISPLACEMENT CM ³ /REV	65	80	100	125	160	200	230	250	295	315	375
L1 (inches)	[0.51]	[0.63]	[0.79]	[0.98]	[1.20]	[1.50]	[1.73]	[1.97]	[2.20]	[2.44]	[2.91]
L1 (mm)	13	16	20	25	30.5	38.1	44	50	56	62	74
L (inches)	[5.87]	[5.98]	[6.14]	[6.34]	[6.56]	[6.85]	[7.09]	[7.32]	[7.56]	[7.80]	[8.27]
L (mm)	149	152	156	161	166.5	174	180	186	192	198	210
WEIGHT (lb)	[14]	[14]	[15]	[15]	[16]	[17]	[18]	[19]	[20]	[20]	[21]
WEIGHT (kg)	6.4	6.5	6.8	7	7.3	7.7	8.2	8.6	9	9.3	9.8

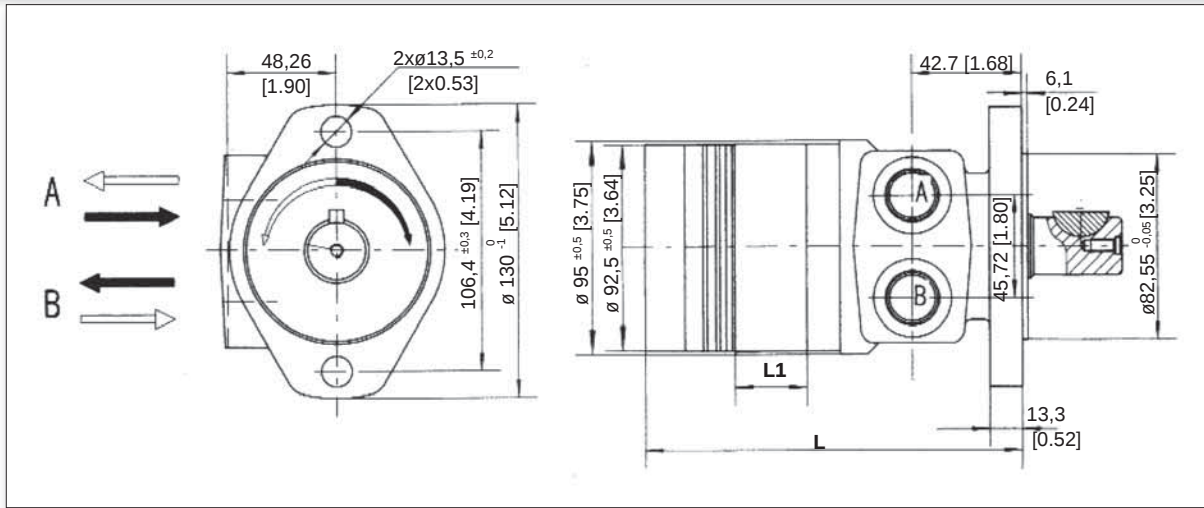
Code: Port A. B • H4S 7/8-14 UNF • H4P 1/2-14NPTF • H4D G1/2 • H4G M22x1,5



DISPLACEMENT CM ³ /REV	65	80	100	125	160	200	230	250	295	315	375
L1 (inches)	[0.51]	[0.63]	[0.79]	[0.98]	[1.20]	[1.50]	[1.73]	[1.97]	[2.20]	[2.44]	[2.91]
L1 (mm)	13	16	20	25	30.5	38.1	44	50	56	62	74
L (inches)	[5.87]	[5.98]	[6.14]	[6.34]	[6.56]	[6.85]	[7.09]	[7.32]	[7.56]	[7.80]	[8.27]
L (mm)	149	152	156	161	166.5	174	180	186	192	198	210
WEIGHT (lb)	[14]	[14]	[15]	[15]	[16]	[17]	[18]	[19]	[20]	[20]	[21]
WEIGHT (kg)	6.4	6.5	6.8	7	7.3	7.7	8.2	8.6	9	9.3	9.8

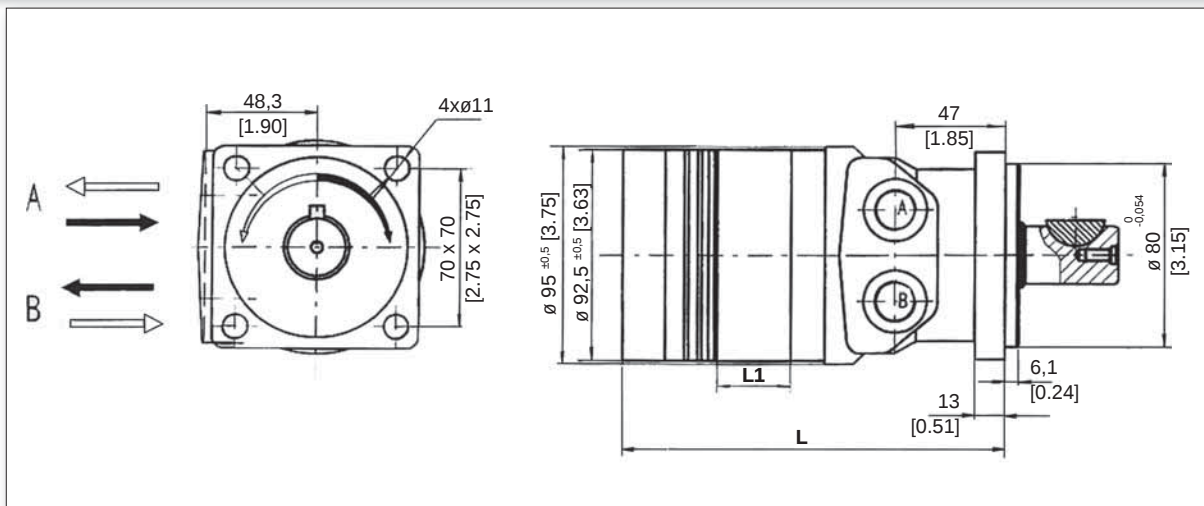
DIMENSION AND MOUNTING DATA

Code: Port A. B • HS1 7/8-14 UNF • HP1 1/2-14NPTF • HD1 G1/2 • HG1 M22x1,5



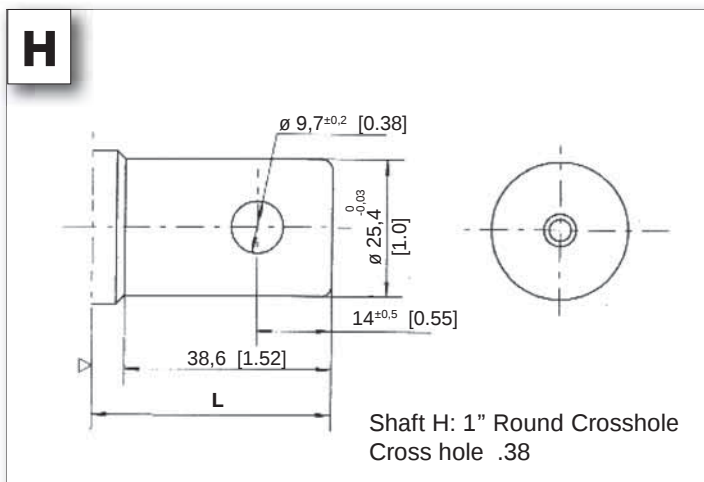
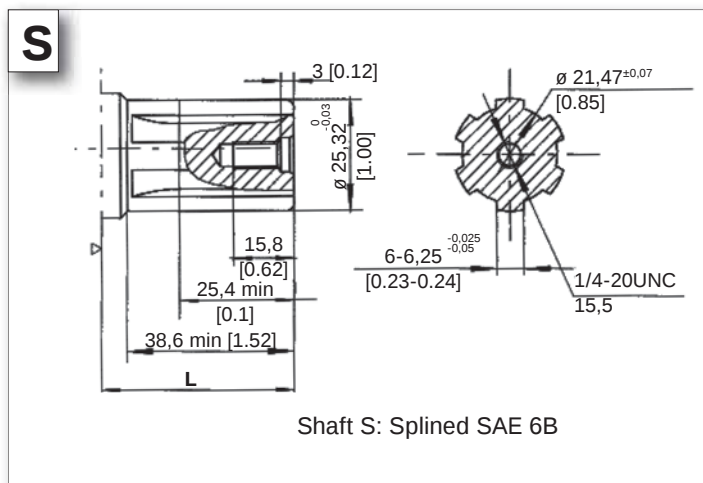
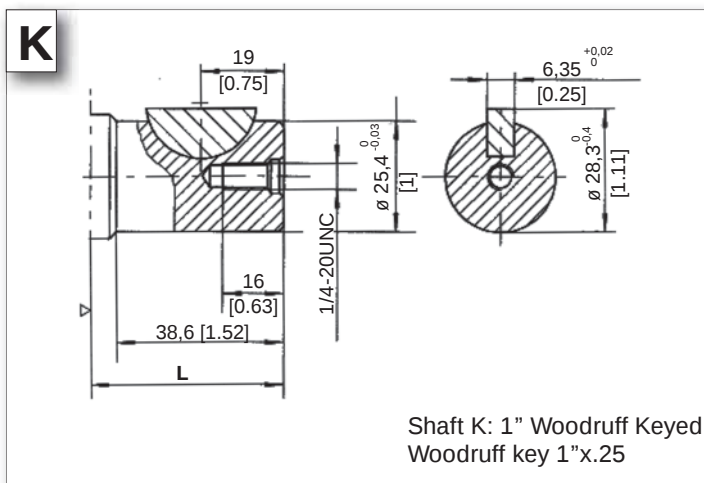
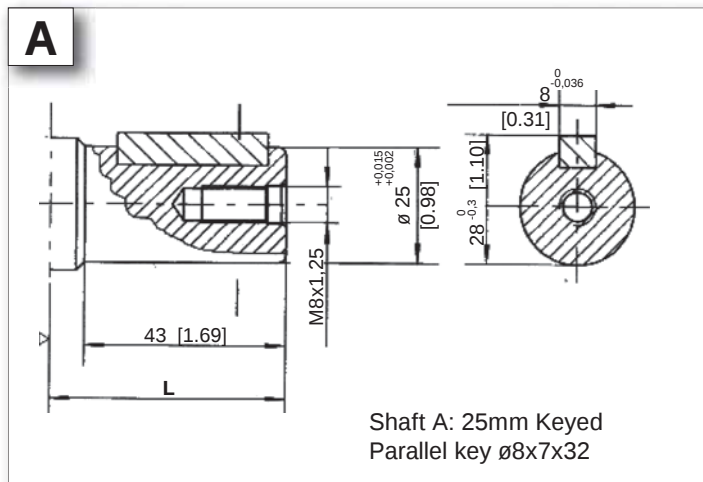
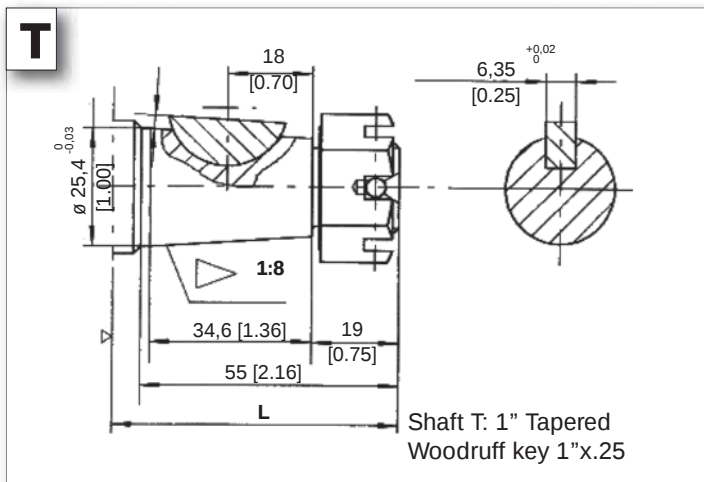
DISPLACEMENT CM ³ /REV	65	80	100	125	160	200	230	250	295	315	375
L1 (inches)	[0.51]	[0.63]	[0.79]	[0.98]	[1.20]	[1.50]	[1.73]	[1.97]	[2.20]	[2.44]	[2.91]
L1 (mm)	13	16	20	25	30.5	38.1	44	50	56	62	74
L (inches)	[5.75]	[5.87]	[6.02]	[6.22]	[6.44]	[6.73]	[6.97]	[7.20]	[7.44]	[7.67]	[8.15]
L (mm)	146	149	153	158	163.5	171	177	183	189	195	207
WEIGHT (lb)	[14]	[14]	[15]	[15]	[16]	[17]	[18]	[19]	[20]	[20]	[21]
WEIGHT (kg)	6.4	6.5	6.8	7	7.3	7.7	8.2	8.6	9	9.3	9.8

Code: B • A, B Port M18x1,5



DISPLACEMENT CM ³ /REV	65	80	100	125	160	200	230	250	295	315	375
L1 (inches)	[0.51]	[0.63]	[0.79]	[0.98]	[1.20]	[1.50]	[1.73]	[1.97]	[2.20]	[2.44]	[2.91]
L1 (mm)	13	16	20	25	30.5	38.1	44	50	56	62	74
L (inches)	[5.75]	[5.87]	[6.02]	[6.22]	[6.44]	[6.73]	[6.97]	[7.20]	[7.44]	[7.67]	[8.15]
L (mm)	146	149	153	158	163.5	171	177	183	189	195	207
WEIGHT (lb)	[14]	[14]	[15]	[15]	[16]	[17]	[18]	[19]	[20]	[20]	[21]
WEIGHT (kg)	6.4	6.5	6.8	7	7.3	7.7	8.2	8.6	9	9.3	9.8

SHAFT EXTENSION

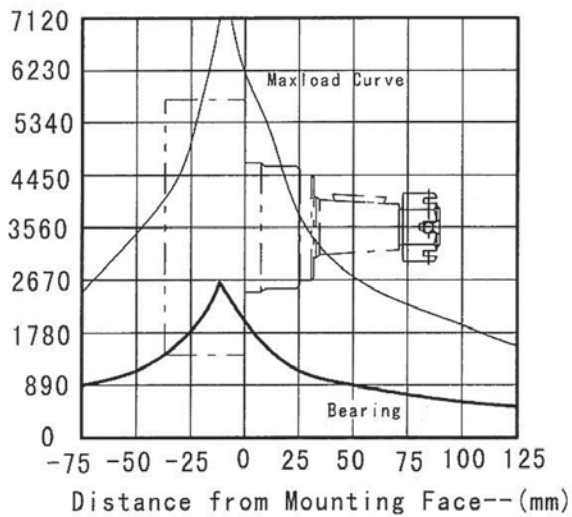


DIMENSION L

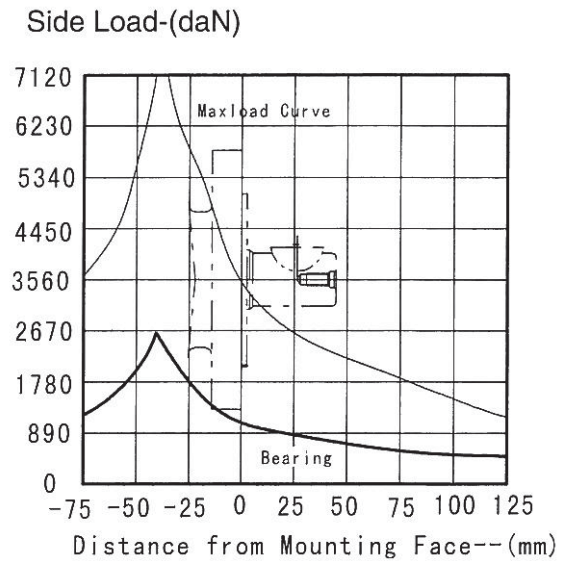
SHAFT MOUNTING	T	A	K	S	H
WS	90.2 [3.55]	78.2 [3.08]	73.9 [2.91]	73.9 [2.91]	73.9 [2.91]
HS/HP					
H4S/H4P	62.3 [2.45]	50.4 [1.98]	44.7 [1.76]	44.7 [1.76]	44.7 [1.76]
HM					

PERMISSIBLE SHAFT LOADS

YME2 FOR WHEEL MOUNTING



YME2 FOR OTHER MOUNTING



The bearing curve represents allowable bearing loads for an L10 bearing life at 3×10^6 revolutions.
The maximum load curve is defined by bearing static load capacity, this curve should not be exceeded at any time including shock loads.

ORDERING INFORMATION

	1	2	3	4	5	6	7
YME2							

1	2		3		4		5		6	
DISP.	FLANGE		OUTPUT SHAFT		ROTATION DIRECTION		PAINT		UNUSUALLY FUNCTION	
65	WS	4-Ø13.5 Wheel-flange, pilot Ø60.3x7 Port 7/8-14 O-ring	T	SHAFT: 1" TAPERED WOODRUFF KEY 1X.25	NONE	STANDARD	00	NO PAINT	NONE	STANDARD
80	WD	4-Ø13.5 Wheel-flange, pilot Ø60.3x7 Port G 1/2	A	SHAFT: 25MM KEYED PARALLEL KEY 8X7X32	R	REVERSE	NONE	BLUE	FR	FREE RUNNING
100	VM	4-Ø13.5 Wheel-flange, pilot Ø60.3x7 Port M22x1.5	K	SHAFT: 1" WOODRUFF KEYED WOODRUFF KEY 1"X.25			B	BLACK	LL	LOW LEAKAGE
125	HM	2-Ø13.5 Rhomb-flange, pilot Ø82.5x2.54 Port 1/2 Manifold mount 4x5/8-18	S	SHAFT: 1"SAE 6B SPLINED			S	SILVER GRAY	LSV	LOW SPEED VALVE
160	HS	2-Ø13.5 Rhomb-flange, pilot Ø82.5x2.54 Port 7/8-14 O-ring	H	SHAFT: 1" ROUND CROSSHOLE CROSSHOLE .38					CRS	CORROSION RESISTANT SHAFT
200	HP	2-Ø13.5 Rhomb-flange, pilot Ø82.5x2.54 Port 1/2-14 NPFT Pipe							HPS	HIGH PRESSURE SEAL
230	HD	2-Ø13.5 Rhomb-flange, pilot Ø82.5x2.54 Port G1/2							HTS	HIGH TEMP SEAL
250	HG	2-Ø13.5 Rhomb-flange, pilot Ø82.5x2.54 Port M22x1.5								
295	H4S	4-3/8-16 Square-flange, pilot Ø44.4x2.54= Port 7/8-14 O-ring								
315	H4P	4-3/8-16 Square-flange, pilot Ø44.4x2.54= Port 1/2-14 NPFT Pipe								
375	H4D	4-3/8-16 Square-flange, pilot Ø44.4x2.54= Port G1/2								
	H4G	4-3/8-16 Square-flange, pilot Ø44.4x2.54= Port M22x1.5								

YMJ

The **YMJ** series motors incorporate the advanced **GEROLOR** gear set which reduces internal friction to a minimum and a “**COMMUTATOR VALVE**” distributions system which is internally balanced to reduce friction,leakage and permit better speed control. Producing higher efficiency, smoother rotation,higher speed and pressure.

This series also has many sizes and options to make it very flexible for many applications,The output shaft is supported by needle bearings for high radial and axial load for heavy duty applications,

SPECIFICATIONS

Distribution Type	Model	Displacement		Max. Operating Pressure		Speed Range	Max. Output Power	
Commutator Distribution	YMJ	[in. ³ /rev]	[4.08-22.57]	[PSI]	[2900]	RPM	[HP]	[23.99]
		cm ³ /rev.	66.8-370	MPa	20	842	Kw	17.9

YMJ SERIES QUICK REFERENCE GUIDE

Displacements				
[in. ³ /rev]	cm ³ /rev.			
[4.08]	66.8	FLOW UP TO	75 LPM	[19.82 GPM]
[4.97]	81.3	PRESSURE UP TO	20 MPa	[2900 PSI]
[6.20]	101.6	TORQUE UP TO	613 Nm	[5421 lb.-in.]
[7.75]	127	POWER UP TO	17,9 Kw	[24 HP]
[9.60]	157.2	SPEED UP TO	842 RPM	
[11.82]	193.6			
[13.80]	226			
[15.69]	257			
[17.57]	287.8			
[19.20]	314.5			
[22.58]	370			

Shaft Seals: High pressure shaft seals permit the parallel or series application without the need of a drain line.

Low Speed Valving: These motors are manufactured following strict procedures to reduce tolerances between all components to permit lower speed, higher efficiency and smoother rotation at very low speeds. These motors are not for high speed or low pressure applications.

Free Wheeling: These motors are created for applications where free wheeling is required or could be beneficial to the best results of the application and longer life for the motors and other components.

Special Motors: These motors have a variety of special options like nickel plated shafts or housings for corrosive environments and applications.

APPLICATION GUIDELINES:

For optimum results the following working conditions are recommended:

- * Oil temperature should be between 20° - 60° C [68° - 180° F]
- * Oil filter of 10 - 20 micron
- * Oil viscosity 42 - 74 mm² at 40° C
- * Different shafts are used when there is a radial load or not. Check data pages
- * For longer life we suggest the motor at start up, run for a shorter period of time (one hour) at no more than 30% of rated speed and pressure.

SPECIFICATION DATA

For individual motor performance chart consult equivalent YME2 series data.

DISTRIBUTION TYPE		YMJ 65	YMJ 80	YMJ 100	YMJ 125	YMJ 160	YMJ 200	YMJ 230	YMJ 250	YMJ 295	YMJ 315	YMJ 375			
GEOMETRIC DISPLACEMENT		[in³./rev.]	[4.08]	[4.97]	[6.20]	[7.75]	[9.60]	[11.82]	[13.80]	[15.69]	[17.57]	[19.20]	[22.58]		
		cm³/rev.	66.8	81.3	101.6	127	157.2	193.6	226	257	287.8	314.5	370		
MAX. SPEED RPM		RATED	490	410	330	265	210	175	195	170	155	135	120		
		CONT.	667	543	439	350	283	229	247	216	196	178	152		
		INT	842	689	553	441	355	289	328	287	254	235	199		
MAX. TORQUE [IN. LB.] N*M	RATED	[IN. LB.]	[973]	[1203]	[1459]	[1893]	[2317]	[2759]	[2812]	[2910]	[3078]	[3219]	[3290]		
		N*M	110	136	165	214	262	312	318	329	348	364	372		
	CONT.	[IN. LB.]	[1114]	[1389]	[1689]	[2167]	[2715]	[3378]	[3343]	[3370]	[3476]	[3962]	[3883]		
		N*M	126	157	191	245	307	382	378	381	393	448	439		
	INT.	[IN. LB.]	[1557]	[1901]	[2370]	[2963]	[3732]	[4599]	[4670]	[4802]	[4838]	[5191]	[5421]		
		N*M	176	215	268	335	422	520	528	543	547	587	613		
MAX. OUTPUT [HP] KW		RATED	[HP]	[7.4]	[8.2]	[7.9]	[8.3]	[8.2]	[7.8]	[8.6]	[8.0]	[7.8]	[7.0]	[6.7]	
			KW	5.5	6.1	5.9	6.22	6.1	5.8	6.4	6	5.8	5.2	5	
		CONT.	[HP]	[11.1]	[11.8]	[10.6]	[11.9]	[11.9]	[12.0]	[13.3]	[12.5]	[11.7]	[10.7]	[10.2]	
			KW	8.3	8.8	7.9	8.9	8.9	9	9.9	9.3	8.7	8	7.6	
		INT.	[HP]	[18.6]	[19.3]	[18.1]	[18.9]	[20.9]	[21.0]	[24.0]	[22.1]	[20.9]	[19.2]	[18.8]	
			KW	13.9	14.4	13.5	14.1	15.6	15.7	17.9	16.5	15.6	14.3	14	
MAX. PRESSURE DROP [PSI] MPa		RATED	[PSI]	[1813]	[1813]	[1813]	[1813]	[1813]	[1813]	[1595]	[1450]	[1305]	[1305]	[1160]	
			MPa	12.5	12.5	12.5	12.5	12.5	12.5	11	10	9	9	8	
		CONT.	[PSI]	[2030]	[2030]	[2030]	[2030]	[2030]	[2030]	[2030]	[1740]	[1595]	[1450]	[1450]	[1305]
			MPa	14	14	14	14	14	14	14	12	11	10	10	9
		INT.	[PSI]	[2755]	[2755]	[2755]	[2755]	[2755]	[2755]	[2755]	[2393]	[2248]	[2103]	[1958]	[1813]
			MPa	19	19	19	19	19	19	19	16.5	15.5	14.5	13.5	12.5
		PEAK	[PSI]	[2900]	[2900]	[2900]	[2900]	[2900]	[2900]	[2900]	[2610]	[2610]	[2465]	[2320]	[2320]
			MPa	20	20	20	20	20	20	20	18	18	17	16	16
MAX. FLOW [GPM] L/MIN		RATED	[GPM]	[8.9]	[8.9]	[8.9]	[8.9]	[8.9]	[8.9]	[11.8]	[11.8]	[11.8]	[11.8]	[11.8]	
			L/MIN	34	34	34	34	34	34	34	45	45	45	45	45
		CONT.	[GPM]	[11.8]	[11.8]	[11.8]	[11.8]	[11.8]	[11.8]	[11.8]	[15.0]	[15.0]	[15.0]	[15.0]	[15.0]
			L/MIN	45	45	45	45	45	45	45	57	57	57	57	57
		INT.	[GPM]	[15.1]	[15.1]	[15.1]	[15.1]	[15.1]	[15.1]	[15.1]	[19.82]	[19.82]	[19.82]	[19.82]	[19.82]
			L/MIN	57	57	57	57	57	57	57	75	75	75	75	75

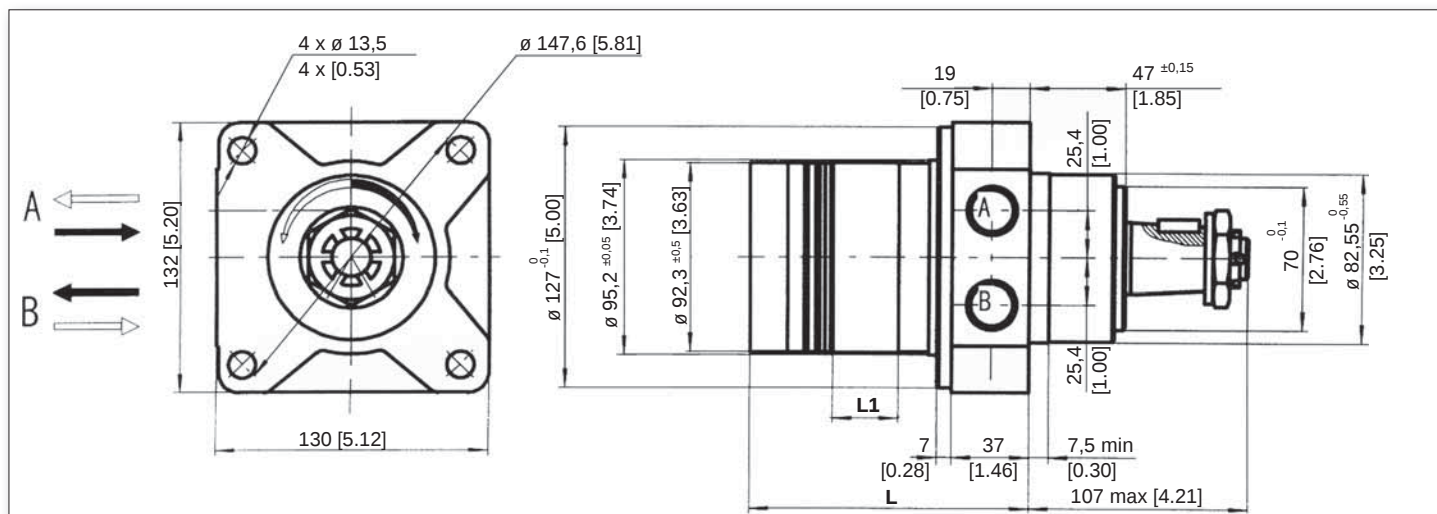
- Rated speed and rated torque: Output value of speed and torque under rated flow and rated pressure.
- Continuous pressure: Max. value of operating motor continuously.
- Intermittent pressure: Max. value of operating motor in 6 seconds per minute.
- Peak pressure: Max. value of operating motor in 0.6 second per minute.

DIMENSION AND MOUNTING DATA

Code: WS Ports A & B 7/8-14 O-ring

Code: WD Ports A & B G1/2

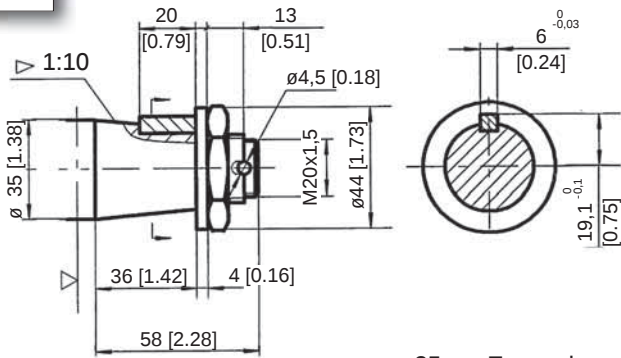
Code: WM Ports A & B M22X1.5



DISPLACEMENT CM ³ /REV	65	80	100	125	160	200	230	250	295	315	375
L1 (inches)	[0.51]	[0.63]	[0.79]	[0.98]	[1.20]	[1.50]	[1.73]	[1.97]	[2.20]	[2.44]	[2.91]
L1 (mm)	13	16	20	25	30.5	38.1	44	50	56	62	74
L (inches)	[4.53]	[4.65]	[4.80]	[5.00]	[5.22]	[5.51]	[5.75]	[5.98]	[6.22]	[6.46]	[6.85]
L (mm)	115	118	122	127	132.5	140	146	152	158	164	174
WEIGHT (lb)	[19.8]	[20.0]	[22.8]	[23.3]	[23.9]	[24.8]	[25.9]	[26.8]	[27.72]	[28.3]	[29.4]
WEIGHT (KG)	9	9.1	10.4	10.6	10.9	11.3	11.8	12.2	12.6	12.9	13.4

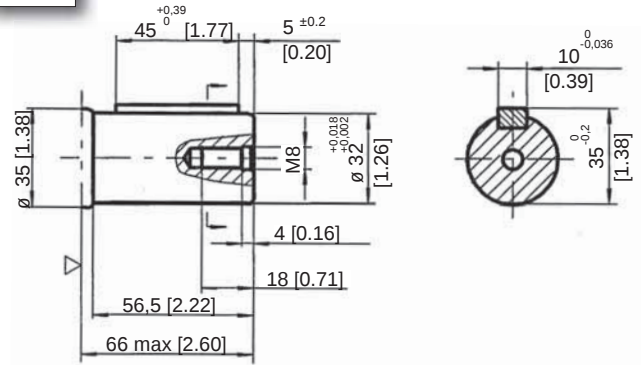
SHAFT EXTENSION

T1



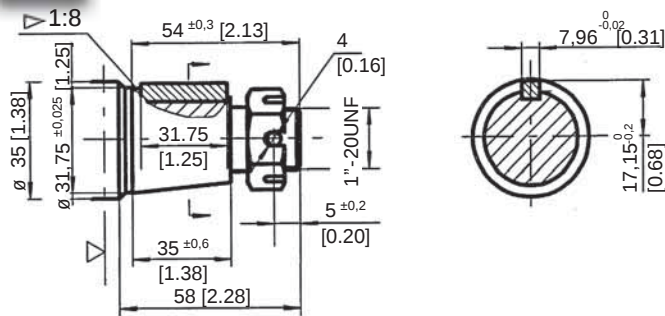
Shaft T1: 35mm Tapered
Parallel Key b6x6x20
Tightening torque: 200±10Nm

B



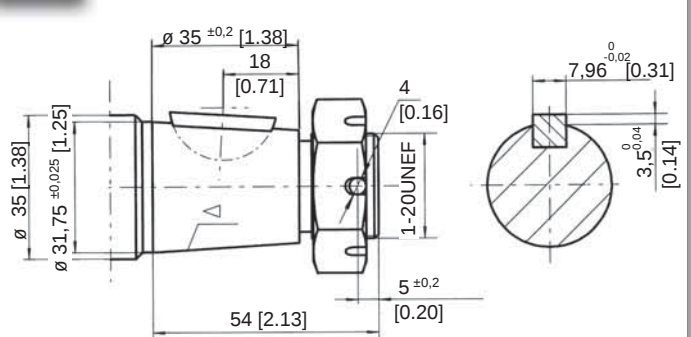
Shaft B: 32mm Keyed
Parallel key $\varnothing 10 \times 8 \times 45$

T3



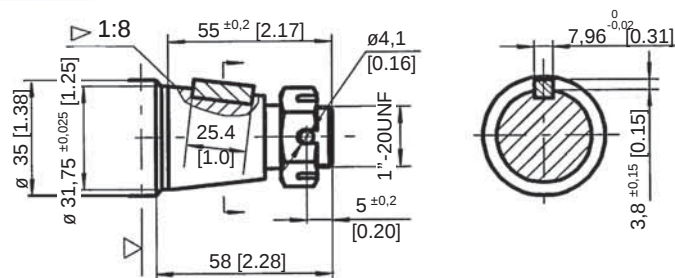
Shaft T3: 1.25" Tapered
Parallel Key .31x.31x1.25
Tightening torque: 200±10Nm

T2



Shaft T2: 1.25" Tapered
Woodruff Key 1.0x.31

T4



Shaft T4: 1.25" Tapered
Parallel Key .31x.31x1.25
Tightening torque: 200±10N

ORDERING INFORMATION

	1	2	3	4	5	6
YMJ						

1	2		3		4		5		6	
DISP.	FLANGE		OUTPUT SHAFT		ROTATION DIRECTION		PAINT		SPECIAL OPTIONS	
65	WS	Wheel Flange: Pilot 3.25x.28 Ports 7/8-14 o-ring 4-13.5 Bolt Holes	T1	SHAFT: 35MM Tapered Parallel Key B6X6X20	NONE	STAN- DARD	00	NO PAINT	NONE	STANDARD
80	WD	Wheel Flange: Pilot 3.25x.28 Ports G1/2 4-13.5 Bolt Holes	T2	SHAFT: 1.25 Tapered Woodruff Key 1.0x.31	R	REVERSE	NONE	BLUE	FR	FREE RUNNING
100	WM	Wheel Flange: Pilot 3.25x.28 Ports M22x1.5	T3	SHAFT: 1.25 Tapered Parallel Key .31x.31x1.25			B	BLACK	LL	LOW LEAKAGE
125			T4	SHAFT: 1.25 Tapered Parallel Key .31x.31x1.0			S	SILVER GRAY	LSV	LOW SPEED VALVE
160			B	SHAFT: 32mm Keyed Parallel Key 10x8x45					CRS	CORROSION RESISTANT
200									HPS	HIGH PRESSURE SEAL
230									HTS	HIGH TEMP SEAL
250										
295										
315										
375										

Ordering Code:

All options have been determined with letters or numbers or combinations. All boxes must be filled with proper code. If specification is not in the table, please contact us with your specific requirements.

YZDQ2



YZDQ2 SERIES HYDRAULIC BRAKE

ZDQ2 series brake is a wet disc hydraulic brake. The hydraulic disk brake uses spring pressure to apply the brake, and hydraulic pressure to release.

CHARACTERISTIC FEATURES:

- ZDQ2 series incorporates an advance friction disc and spring design: For long life, low noise, high reliability
- 4 tapped drain ports, which makes this unit adaptable to many different positions and applications.
- Flange mountable to **YMP, YMR, YMS** series hydraulic motor

YZDQ2 SERIES HYDRAULIC BRAKE

YZDQ2 series hydraulic brakes is shipped without oil and is lubricated during normal operation. Normal operation is to have the brake pressurized in the released position with the vehicle hydraulic system running. Any function which reduced the hydraulic system pressure below the release pressure of the brake will allow the springs to apply the brake.

YZDQ2 series hydraulic brakes are designed for use in heavy duty applications on vehicles in the construction, material handling, agricultural, mining, sanitation and timber industries. They are also used in a wide variety of winch and hydro-static drive system applications.

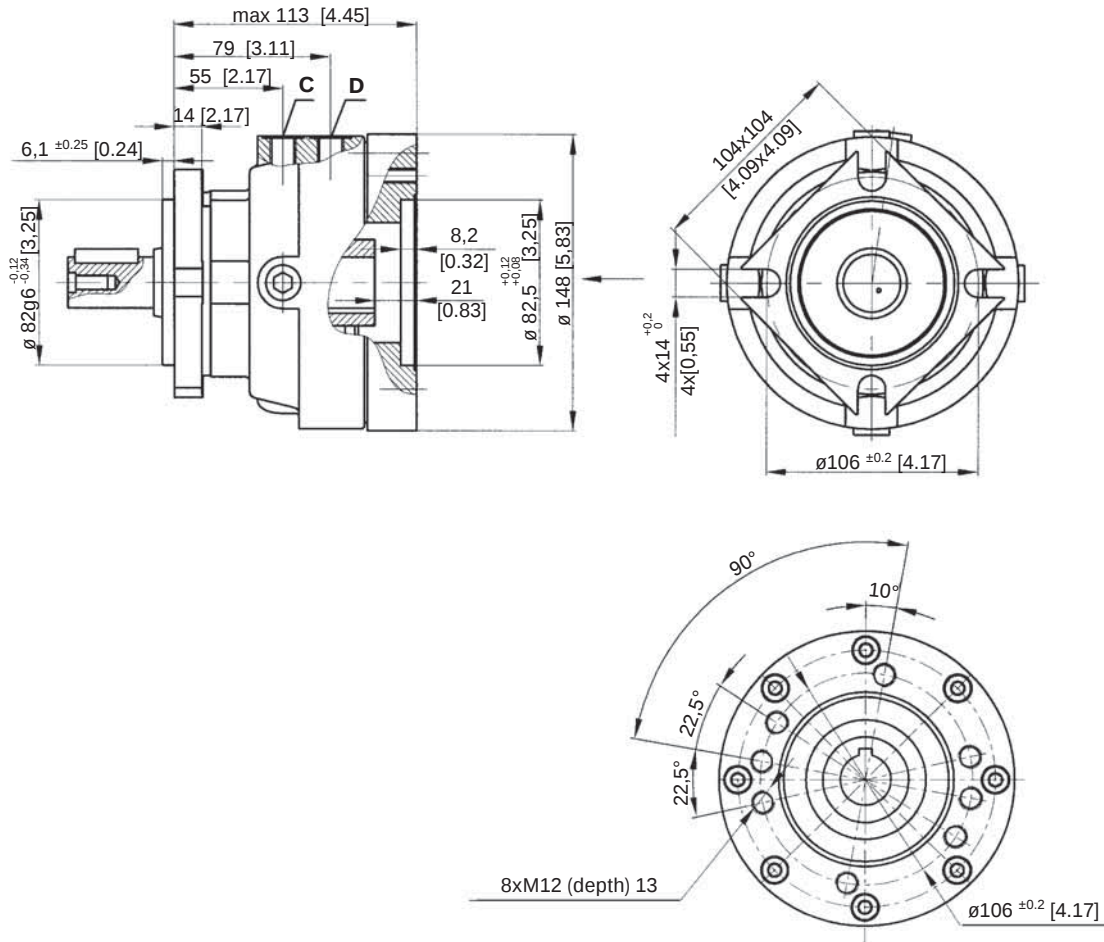
YZDQ2 SERIES HYDRAULIC BRAKE

For optimum results the following working conditions are recommended:

1. Assembly: for YZDQ2, that the brake be cycled before normal operation to insure proper lubrication.
2. Fluid type: mineral based-HM (GB/T763.2-87) (ISO6743/4) of HLP (DIN51524)
3. Oil Temperature range between 20 - 60°C [68-180°F]
4. Viscosity range: 42 ~ 74 mm²/s at 40°C
5. Filtration: nominal filtration of 25 micron, ISO code 20/16
6. Maintenance: change oil after the first 50 ~ 100h; then after every 500 ~ 1000h

MOUNTING DATA

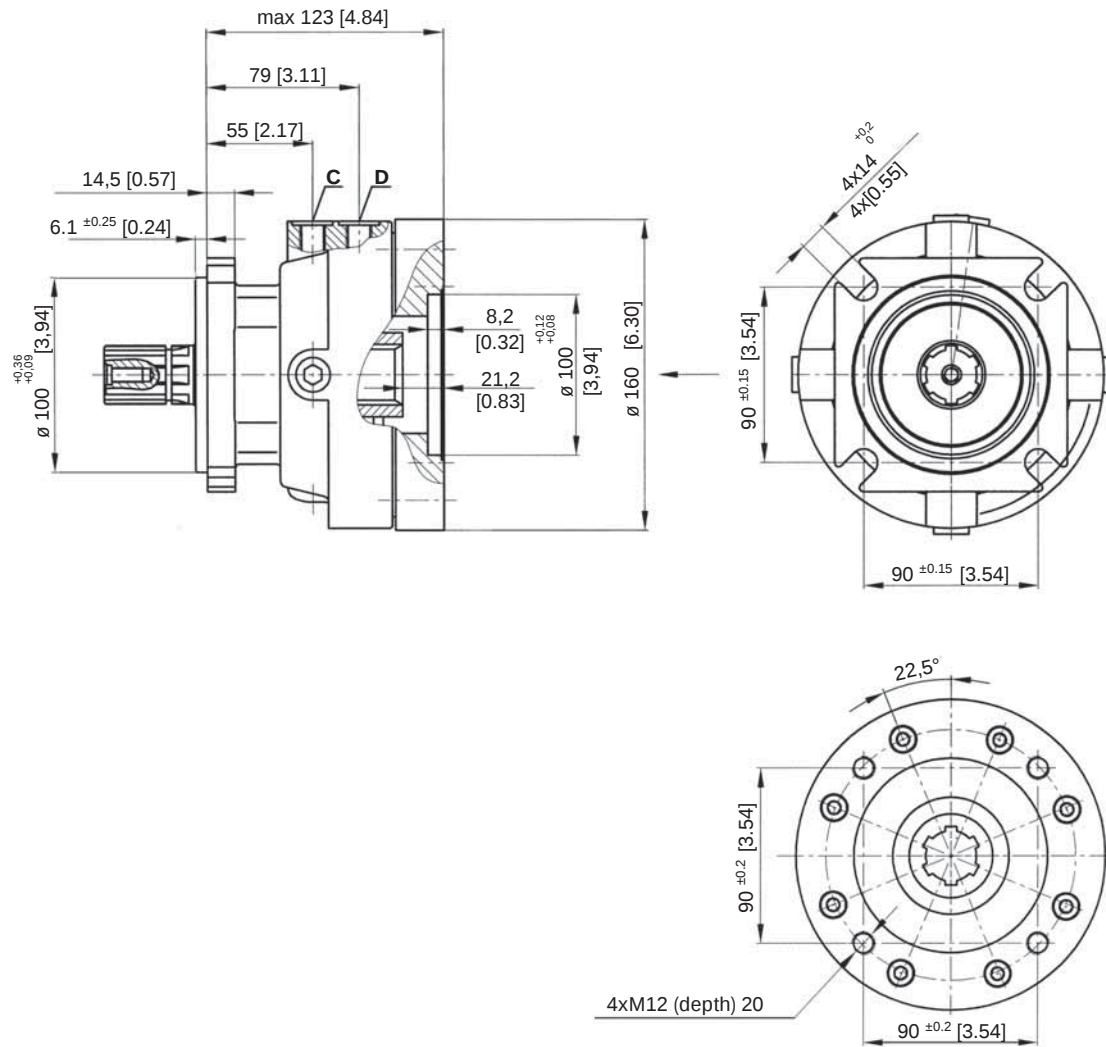
YZDQ2-1



- C Drainage tap G 1/4, 9 mm depth
D Brake release port G 1/4, 9 mm depth

MOUNTING DATA

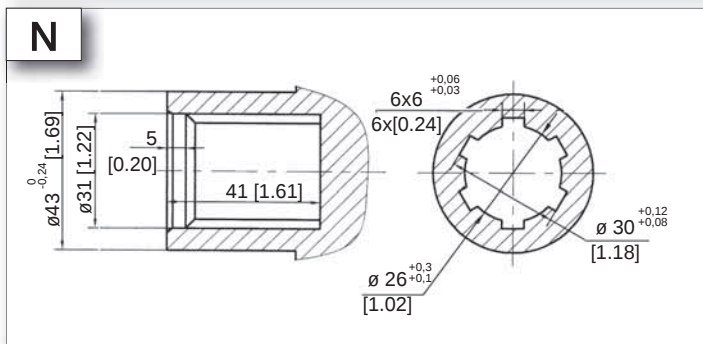
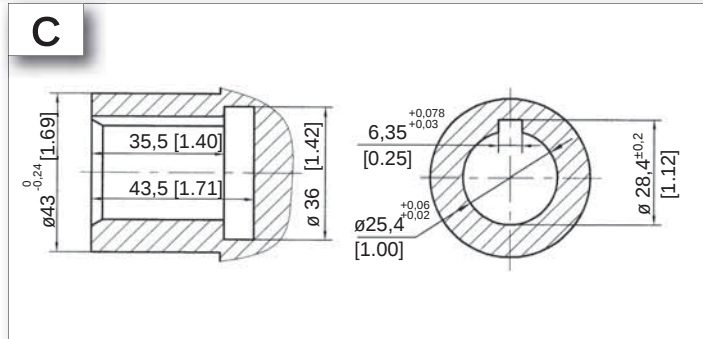
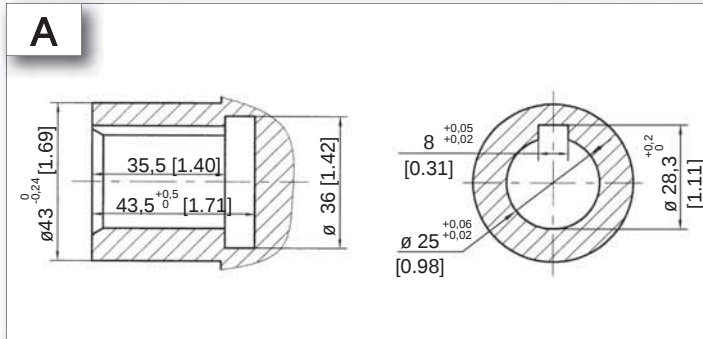
YZDQ2-2



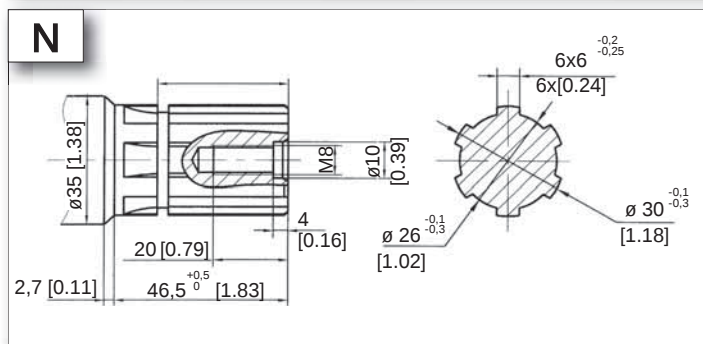
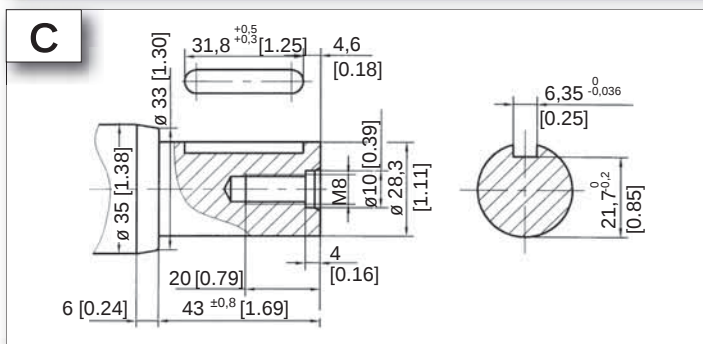
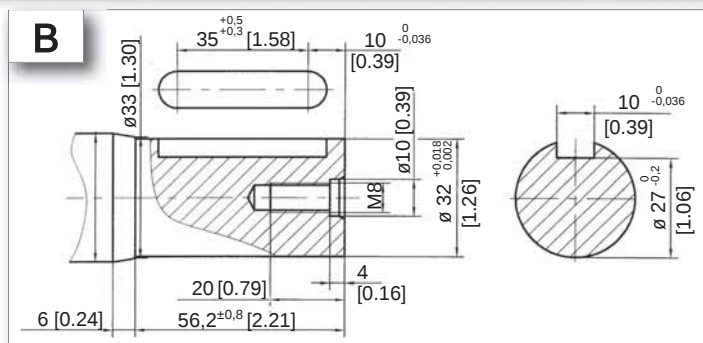
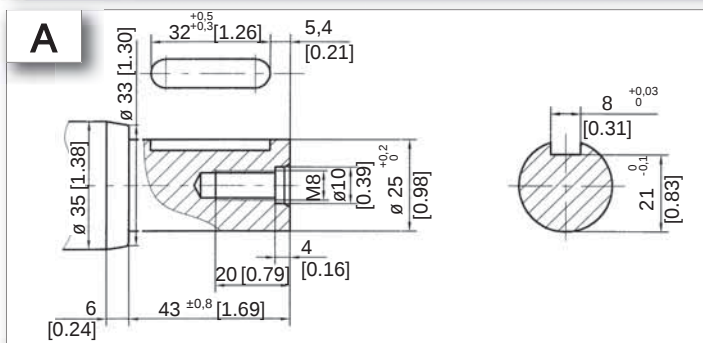
- C Drainage tap G 1/4, 9 mm depth
D Brake release port G 1/4, 9 mm depth

INPUT AND OUTPUT SHAFT DATA

INPUT SHAFTS

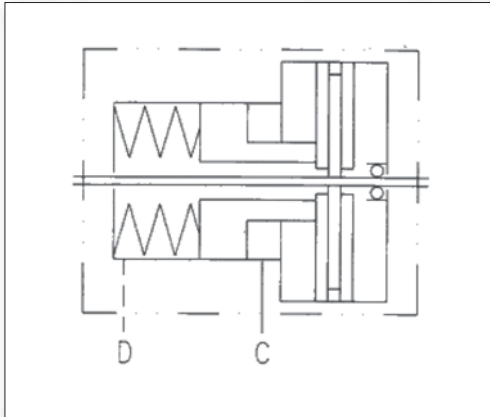


OUTPUT SHAFTS



SPECIFICATIONS

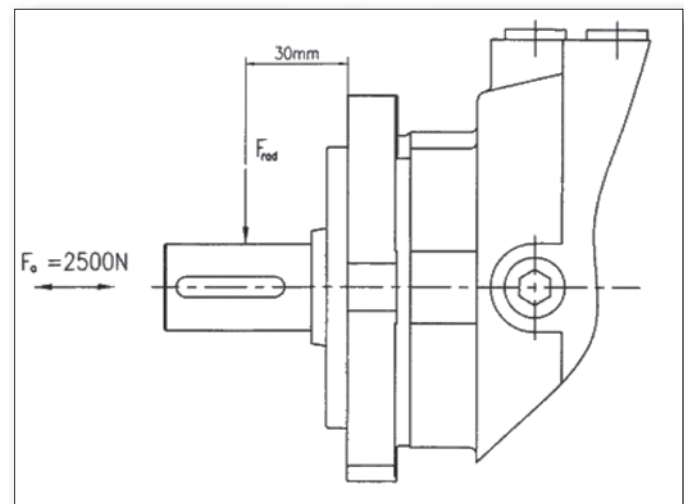
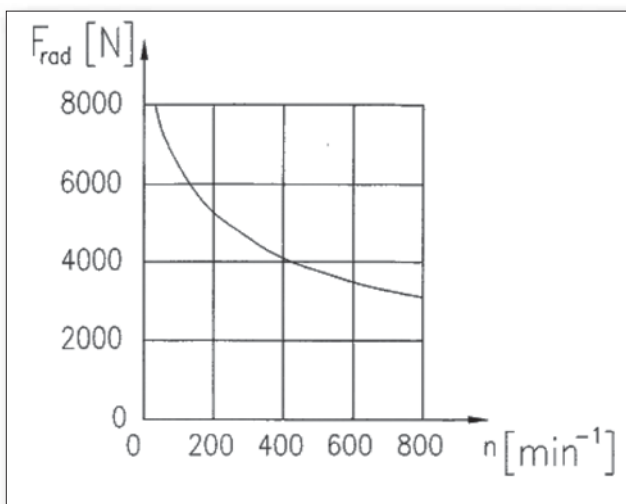
SCHEMATIC



SPECIFICATION		YZDQ2-1		YZDQ2-2
Min static torque*	Nm [lb-in]	200-230 [1768-2034]	410 ~ 450 [3626-3979]	410 ~ 450 [3626-3979]
Min Opening Pressure	Mpa [PSI]	1.7 ~ 2.3 [246-333]		
Max Opening Pressure	Mpa [PSI]	30 [4350]		
Min oil quantity for brake releasing	cm ³ [in ³]	7 ~ 8 [.43-.49]		
Oil Volume	cm ³ [in ³]	50 ~ 120 [3-7.3]		
Max pressure in drain space	Mpa PSI	0.05 [7.2]		
Weight	Kg [Lbs]	9 [19.80]		9.5 [20.9]

* Static torque is obtained at working pressure - 0 Mpa

LOAD CURVES



ORDERING INFORMATION

1	2	3	4	5	6
YZDQ2					

1	2		3		4		5		6	
CODE.	TORQUE		INPUT SHAFT		OUTPUT SHAFT		PAINT		SPECIAL OPTIONS	
1	210	Torque: 200-230Nm 1768-2034 lb/in	A	25MM Keyed Parallel Key 8x7x32	A	25mm Keyed Parallel Key 8x7x32	oo	No Paint	Omit	Standard
	430	Torque:410-450Nm 3626-3980 lb/in	C	1" Keyed Parallel Key .25x.25x1.25	B	32mm Keyed Parallel Key 10x8x45	N	Blue		
					C	1" Keyed Parallel Key .25x.25x1.26	B	Black		
2	430	Torque:410-450Nm 3626-3980 lb/in	N	Splined 6-30x26x6	N	Splined 6-30x26x6	S	Silver		

Ordering code:

All options have been determined with letters, numbers or combinations. All boxes must be filled with proper codes. If specification is not in the table , please contact us with your specific requirements.

LSHT HYDRAULIC MOTOR DATA SHEET

Date: _____

Company _____

Contact _____ Phone _____

Machine _____ Model _____

Existing Motor Mfg _____

Code _____

Model # _____

Quantity _____

Type: GEROTOR _____ GEROLLER _____

Valve Design: SPOOL _____ DISC _____

Displacement _____ Cu in/rev

Max oil flow _____ GPM

Max working pressure _____ PSI

Nominal oil flow _____ GPM Porting _____

Nominal working pressure _____ PSI Shaft _____

Speed _____ RPM cont Mnt Flange _____

RPM int

RPM peak

Is a drain line available? ☐ Yes ☐ No

Type of flow circulation ☐ Closed Loop ☐ Open Loop

Free-wheeling required ☐ Yes ☐ No

Max torque _____ lb/in

Max fluid temp _____ F

Additional application info. _____

Duty Cycle	% of Time	Torque lb/in	% of Time	Speed Rpm	% of Time
1					
2					
3					
4					

For Internal use: _____ Date: _____

Selection _____

Reviewed by _____

Approved by _____



LIMITED ONE YEAR WARRANTY FOR HYDRAULIC MOTORS

If the hydraulic motor (product) fails to function within one (1) year after the date of its original shipment, or invoice date whichever come first, due to a defect in the materials or workmanship, Young Powertech Inc. (YPT) will remedy the defect without charge to the consumer purchaser. The foregoing limited warranty does not cover failure to function caused by damage to the product while in your possession, improper installation, unreasonable use or abuse of the product, failure to provide or use of improper maintenance, failure to follow written installation and instructions, or any use other than for personal, family or household purposes. THE REMEDIES PROVIDED IN THE ABOVE EXPRESS LIMITED WARRANTY ARE THE SOLE AND EXCLUSIVE REMEDIES AVAILABLE TO YOU. NO OTHER EXPRESS WARRANTIES ARE MADE. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE LIMITED IN DURATION AS SET FORTH ABOVE. IN NO EVENT SHALL YPT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. The consumer-purchaser must maintain proof of purchase and shipment date of the product to prove the date of purchase and shipment in the unlikely event of a warranty claim. In order to obtain a return authorization number you must contact Young Powertech Inc. at 610-558-0760 prior to shipping. The customer will be required to ship only the defective parts, freight pre-paid to :

Young Powertech Inc
3060 Plaza Dr.
Unit 107
Garnet Valley, PA 19061

Young Powertech Inc, will repair or replace any part found defective and return the unit prepaid by ground shipment to the customer.

In the event that the unit is not found to have a defect the customer will be charged an inspection fee and the unit will be returned freight collect to the customer.



Young Powertech Inc
3060 Plaza Drive # 107
Garnet Valley PA 19060
Tel: (610) 558-0760
Fax: (610) 558-0762
e-mail: info@yptius.com

YPT-001-2010-REV1