

# FC1H FLOW CONTROLS

**Unidirectional flow with Built-In Check Valve ~ 1/8" to 2"  
Carbon Steel body for working pressures to 5,000 PSI**



DMIC's updated **FC1H** is now U.S. made in Buyer's choice of domestic port thread. Dual taper needle design provides fine metering at low flows and rapid response at higher flows. The first three turns provide fine response, while the final three turns provide quick response.

- DMIC's **ChromaFlow** color-coded design facilitates initial calibration, system documentation, and restoration of correct settings if required
- Designed for **5,000 PSI maximum operating pressure**
- **Integral 5 PSI poppet check valve** provides free return flow
- **Optional security knob** (append suffix 'LHS') permanently fixes valve flow setting for tamper resistance
- For OEM production quantities, optional **"fine" needle profile** available

FC1H	Nominal Size	Port Thread	Performance Data				Dimensions (inches)										
			Flow GPM <sup>1</sup>	Metered Direction		Free Flow		A	B	C	D	E	Lbs.				
				Orifice Area (sq.in., mm <sup>2</sup> )	Effective C <sub>v</sub>	Orifice Area (sq.in., mm <sup>2</sup> )	Effective C <sub>v</sub>										
FC1H-0125N	1/8"	1/8" NPTF	3 GPM	0.0102	0.230	0.023	0.53	1.54	0.63	1.28	2.00	0.75	0.3				
FC1H-0125B		1/8" BSPP	11 l/m	6,6		14,8											
FC1H-0250N	1/4"	1/4" NPTF	5 GPM	0.0194	0.433	0.068	1.56	1.79	0.81	1.66	2.63	0.81	0.5				
FC1H-0250B		1/4" BSPP	19 l/m	12,5		43,9											
FC1H-0375N	3/8"	3/8" NPTF	8 GPM	0.0344	0.787	0.099	2.27	2.18	1.00	1.75	2.75	1.00	0.7				
FC1H-0375B		3/8" BSPP						30 l/m	22,2	63,9	1.88	1.00	1.92	3.12	0.81	0.6	
FC1H-0375S		#6 SAE															
FC1H-0375IU		16mm ISO6149															
FC1H-0500N	1/2"	1/2" NPTF	15 GPM	0.0427	0.976	0.224	5.11	2.70	1.25	2.23	3.44	1.19	1.5				
FC1H-0500B		1/2" BSPP						57 l/m	27,6	144,5	2.24	1.12	2.12	3.50	1.00	1.0	
FC1H-0500S		#8 SAE															
FC1H-0500IU		18mm ISO6149															
FC1H-0625S	5/8"	#10 SAE	15 GPM	0.0427	0.976	0.224	5.11	2.70	1.25	2.56	4.00	1.19	1.8				
FC1H-0625IU		22mm ISO6149	95 l/m	27,6		144,5											
FC1H-0750N	3/4"	3/4" NPTF	25 GPM	0.1080	2.470	0.348	7.95	3.38	1.50	2.58	3.88	1.38	2.6				
FC1H-0750B		3/4" BSPP						95 l/m	69,7	224,5	3.38	1.50	3.01	4.62	1.38	2.6	
FC1H-0750S		#12 SAE															
FC1H-0750IU		27mm ISO6149															
FC1H-1000N	1"	1" NPTF	40 GPM	0.2300	5.250	0.453	10.35	4.87	1.75	3.22	5.00	1.88*	5.1				
FC1H-1000B		1" BSPP		151 l/m				148,4	292,3	5.15	2.25	3.50	5.62	1.88*	5.1		
FC1H-1000S		#16 SAE						0.3070	7.000								
FC1H-1000IU		33mm ISO6149						198,1									
FC1H-1250N	1 1/4"	1 1/4" NPTF	70 GPM	0.2300	5.250	0.855	19.52	5.12	2.25	3.88	5.63	1.88*	8.1				
FC1H-1250B		1 1/4" BSPP		265 l/m				148,4	551,6	5.52	2.75	4.25	6.50	1.88	8.1		
FC1H-1250S		#20 SAE						0.3710	8.470								
FC1H-1500N	1 1/2"	1 1/2" NPTF	100 GPM	0.2300	5.250	0.955	21.82	5.37	2.75	4.47	5.63	1.88*	10.2				
FC1H-1500B		1 1/2" BSPP		380 l/m				148,4	616,1	5.65	3.00	5.00	7.25	1.88*	10.2		
FC1H-1500S		#24 SAE						0.3710	8.470								
FC1H-2000N	2"	2" NPTF	150 GPM	0.2300	5.250	1.046	23.90	5.75	3.50	5.31	6.50	1.88*	17.4				
FC1H-2000B		2" BSPP		568 l/m				148,4	674,8	6.44	4.00	6.13	9.00	1.88*	17.4		
FC1H-2000S		#32 SAE						0.6010	13.410								

NOTES: (1) Typical flows quoted in U.S. GPM, using 100 SUS Petroleum Based Fluid at 100°

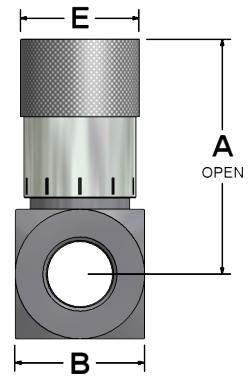
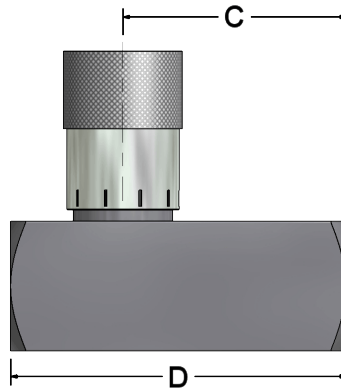
(\* ) Means HEX



# FC1H FLOW CONTROLS

FC1H	Physical Parameters
VALVE BODY	Carbon Steel
POPPET	Stainless Steel, Hard Seat
SEALING	Buna-N Standard
WORKING PSI (1/8"-1/2")	5000 PSI (345 Bar)
WORKING PSI (others)	3000 PSI (207 Bar)
SAFETY FACTOR	Minimum 3:1
RETURN FLOW CHECK	Present
CHECK VALVE SETTING	5 PSI (0,35 Bar)
TEMP RANGE	-40°F/250°F (-40°C/121°C)

For complete ordering information and option availability please see page 20.



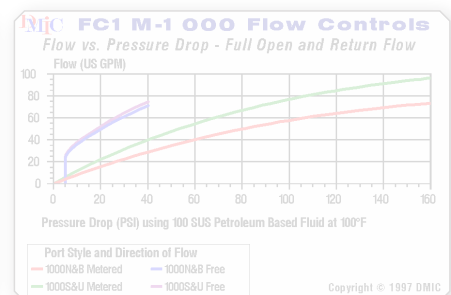
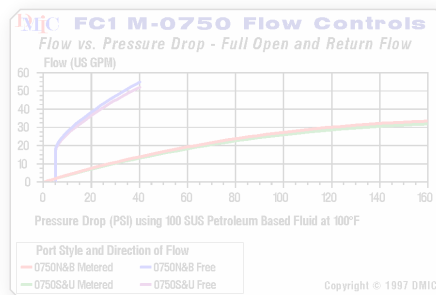
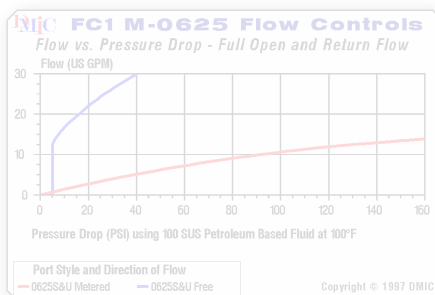
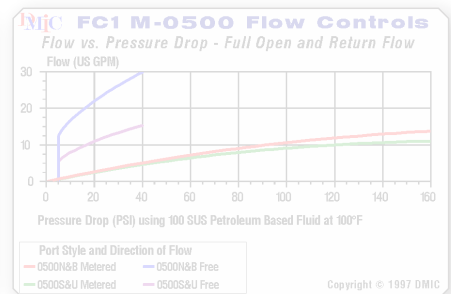
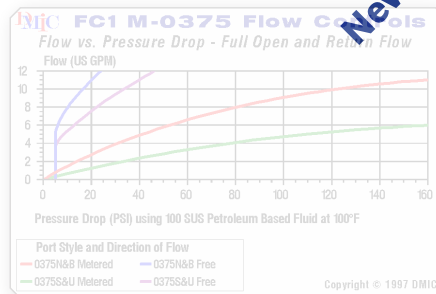
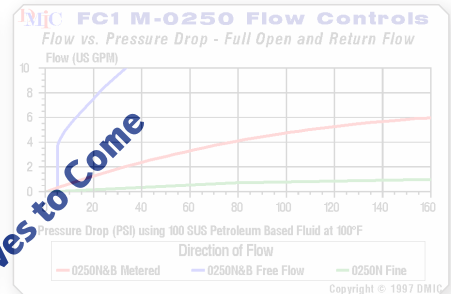
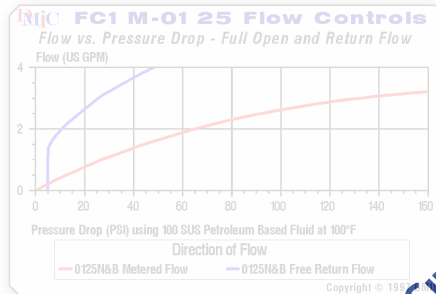
**FC1 H - 1500 U /LHS**

Model	
M	Brass, to 2000 PSI
H	Steel, to 5000 PSI

Nominal Size	
Expressed in 1/1000" units	
Example: 0375=3/8", 1 1/2=1500	

Inlet Port Thread	
Standard US/Canada	
N	NPT
S	SAE ORB
Metric Standard	
B	BSPP
Optional Threads (Call DMIC)	
B	BSPP
T	BSPT
IU	ISO6149

Easy Order Options	
/LHS	Security (Permanent) Locking Knob
/LH	Finger Screw Locking Knob
/FN	Fine Metering Needle Option



**This valve series is factory sealed and disassembly will destroy the valve and void the warranty. Due to our policy of continual product improvement, the specifications in this catalog may change without notice. When designing by spec, please request a certified print.**

