

FC1M Flow Control

Unidirectional flow with Built-In Check Valve ~ 1/8" to 1"
Brass barstock body for working pressures to 2,000 PSI



Flow-regulating, brass body flow control valves with a built-in 5 psi check valve. Provides regulated flow in one direction and free flow in the opposite direction.

- 2,000 psi pressure rating (1" size rated to 500 psi).
- Brass body and trim, Buna-N O-ring.
- Port sizes from 1/8" to 1".
- Choice of threaded connection types.
- Dual taper needle for coarse adjustments at high flow and fine adjustments at low flow (optional fine needle profile available).
- Chromaflow feature provides color bands for visual setup validation.
- Set screw to secure knob for tamper prevention.
- Suitable for use with air, oil, or water.

Ordering Codes

FC1M	Brass Flow Controls Physical Parameters
VALVE BODY	Brass Barstock
NEEDLE	416 Stainless Steel
POPPET	Brass, Soft Seat
SEALING (1/8"-1/2")	Soft Seat, Buna-N
SEALING (3/4"-1")	Hard Seat
WORKING PSI (1/8"-3/4")	2,000 PSI (138 Bar)
WORKING PSI (1")	500 PSI (34,5 Bar)
SAFETY FACTOR	Minimum 3:1
RETURN FLOW CHECK	Present
CHECK VALVE SETTING	5 PSI (0,35 Bar)
TEMP RANGE	-5°F/195°F (-20°C/90°C)

FC1M	0500	N
Size Codes		Port Thread
Code	Port Size	
0125*	1/8"	N NPT
0250	1/4"	S SAE ORB
0375	3/8"	B BSPP
0500	1/2"	
0625	5/8"	
0750	3/4"	
1000	1"	

* = NPT only

Using DMIC Flow Characteristic Curves

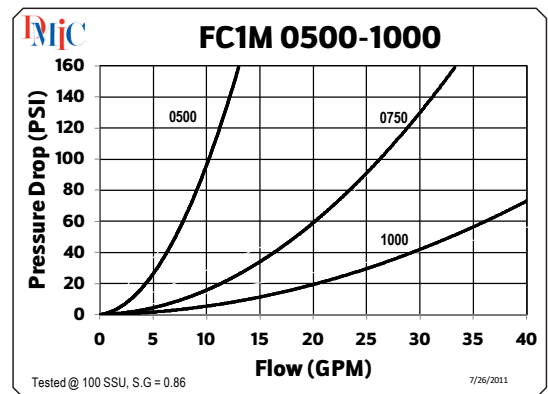
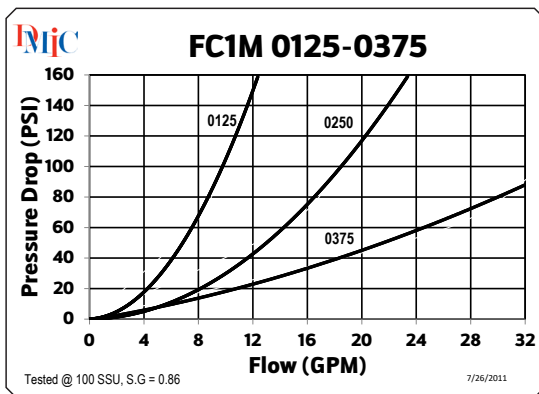
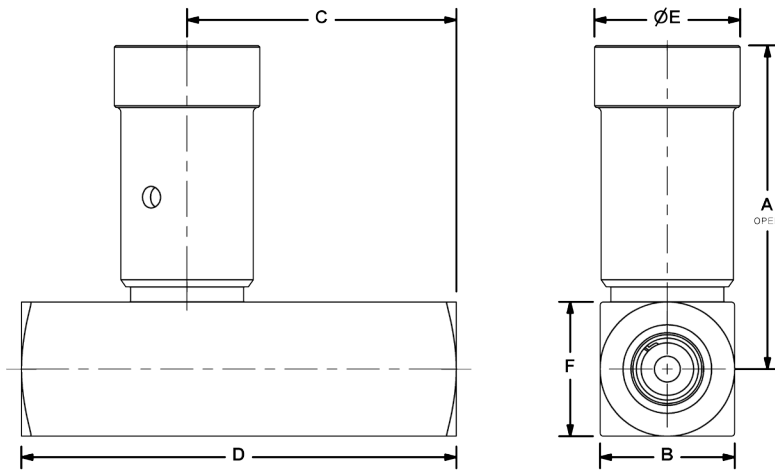
DMIC's Flow Curves (see opposite page) provide an indication of valve performance in your application, based on actual flow tests of the subject valves under controlled laboratory conditions (which may differ from your application's temperature and fluid viscosity). Due to the individually optimized design of DMIC Flow Controls, you may observe variations in flow capacity between port thread styles.



FC1M Flow Control

FC1M	Nominal Size	Performance Data					Dimensions (inches)						
		Flow GPM ¹	Metered Direction		Free Flow		A	B	C	D	E	F	Lbs.
			Orifice Area	Effective C _v	Orifice Area	Effective C _v							
FC1M-0125N	1/8"	3 GPM	0.0102	0.230	0.023	0.53	1.54	0.63	1.28	2.00	0.75	0.63	0.3
FC1M-0250N	1/4"	5 GPM	0.0194	0.433	0.068	1.56	1.79	0.81	1.66	2.63	0.81	0.81	0.5
FC1M-0250B													
FC1M-0375N	3/8"	8 GPM	0.0344	0.787	0.099	2.27	2.18	1.00	1.75	2.75	1.00	1.00	0.7
FC1M-0375B													
FC1M-0500N	1/2"	15 GPM	0.0427	0.976	0.224	5.11	2.70	1.25	2.23	3.44	1.19	1.25	1.5
FC1M-0500B							2.24	1.12	2.12	3.50	1.00	1.12	1.01
FC1M-0500S							2.70	1.25	2.56	4.00	1.19	1.25	1.8
FC1M-0625S	5/8"	15 GPM	0.0427	0.976	0.224	5.11	2.70	1.25	2.56	4.00	1.19	1.25	1.8
FC1M-0750N	3/4"	25 GPM	0.1080	2.470	0.348	7.95	3.38	1.50	2.58	3.88	1.38	1.50	2.6
FC1M-0750B							3.38	1.50	3.01	4.62	1.38	1.50	2.6
FC1M-0750S							4.87	1.75	3.22	5.00	1.88*	1.75	5.1
FC1M-1000N	1"	40 GPM	0.2300	5.250	0.453	10.35	4.87	1.75	3.22	5.00	1.88*	1.75	5.1
FC1M-1000B			0.3070	7.000									
FC1M-1000S			5.15	2.25	3.50	5.62	1.88*	2.25	5.1				

(*) Depicts HEX size
 Note: [1] Typical flow rates in US GPM for 100 SSU petroleum based fluid



Note: [2] Flow characteristics shown are nominal values only. Actual results may differ depending on fluid viscosity, temperature, and port connection.

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.

