

'FC 1 M' Flow Controls

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



DMIC's updated 'FC1M' is now U.S. made in Buyer's choice of domestic port thread, for stock delivery in most cases. Dual taper needle design provides fine metering at low flows and rapid response at higher flows. Color calibrated design simplifies adjustment.

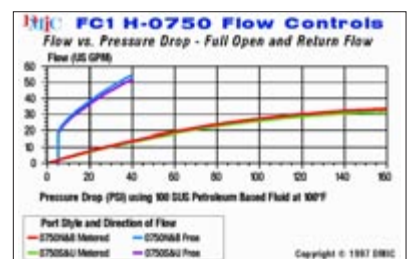
- ✓ DMIC's 'ChromaFlow' color-coded design facilitates initial calibration, system documentation, and restoration of correct settings if required
- ✓ Brass body rated to **2,000 PSI maximum** (1" size rated for 500 PSI)
- ✓ **Integral 5 PSI poppet check valve** provides free return flow
- ✓ **Optional security knob** (append suffix '/LHS') permanently fixes valve flow setting for tamper resistance and "goof-proofing"
- ✓ For OEM production quantities, **optional "fine" needle profile** available

Flow Control Part No.	Nominal Size	Port Thread	PERFORMANCE DATA				DIMENSIONS (inches, mm)						
			Flow GPM ¹	Metered Direction		Free Flow		A	B	C	D	E	Lbs. kg
				Orifice Area (sq.in., mm ²)	Effective C _v	Orifice Area (sq.in., mm ²)	Effective C _v						
FC1M-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
FC1M-0125B		1/8" BSPP	11 l/m	6.6		14.8		39.1	15.9	32.5	50.8	19.1	0.1
FC1M-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
FC1M-0250B		1/4" BSPP	19 l/m	12.5		43.9		45.5	20.6	42.2	66.7	20.6	0.2
FC1M-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
FC1M-0375B		3/8" BSPP						55.4	25.4	44.5	69.9	25.4	0.3
FC1M-0375S		#6 SAE						1.85	1.00	1.92	3.13	0.81	0.6
FC1M-0375IU		16mm ISO6149						47.0	25.4	48.8	79.4	20.6	0.2
FC1M-0500N	1/2"	1/2" NPTF	15 GPM	0.0427	0.976	0.224	5.11	2.70	1.25	2.24	3.44	1.19	1.5
FC1M-0500B		1/2" BSPP						68.6	31.8	56.9	87.3	30.2	0.7
FC1M-0500S		#8 SAE						2.24	1.13	2.12	3.50	1.00	1.0
FC1M-0500IU		18mm ISO6149						56.8	28.6	53.8	88.9	25.4	0.5
FC1M-0625S	5/8"	#10 SAE	15 GPM	0.0427	0.976	0.224	5.11	2.68	1.25	2.56	4.00	1.19	1.8
FC1M-0625IU		22mm ISO6149	95 l/m	27.6		144.5		68.1	31.8	65.0	101.6	30.2	0.8
FC1M-0750N	3/4"	3/4" NPTF	25 GPM	0.1080	2.470	0.348	7.95	3.38	1.50	2.57	3.88	1.38	2.6
FC1M-0750B		3/4" BSPP						85.9	38.1	65.3	98.4	35.1	1.2
FC1M-0750S		#12 SAE						3.38	1.50	3.01	4.63	1.38	2.6
FC1M-0750IU		27mm ISO6149						85.9	38.1	76.5	117.5	35.1	1.2
FC1M-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
FC1M-1000B		1" BSPP						123.7	44.5	81.8	127.0	47.8	2.3
FC1M-1000S		#16 SAE						5.14	2.25	3.50	5.63	1.88	5.1
FC1M-1000IU		33mm ISO6149						130.6	57.2	88.9	142.9	47.8	2.3

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

DMIC Using DMIC Flow Characteristic Curves

DMIC's Flow Curves 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' Dimensions & Flow Curves

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

'FC1M' Brass Flow Controls Physical Parameters

VALVE BODY:	Brass Barstock
POPPET:	Brass, Soft Seat
SEALING (1/8-1/2"):	Soft Seat, Buna-N
(3/4-1"):	Hard Seat
WORKING PSI (1/8-3/4"):	2,000 PSI (140 Bar)
(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)

Ordering Codes for 'FC1M' Precision Flow Controls

FC1 M - 0500 N /LHS

MODEL:

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

NOMINAL SIZE:

Expressed in 1/1000ths inch.
Example: 0375 = 3/8", 1 1/2 = 1500

INLET PORT THREAD:

Standard US/Canada:

N: NPTF
S: SAE ORB

Metric Standard:

B: BSPP

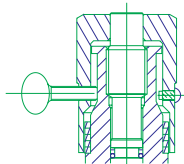
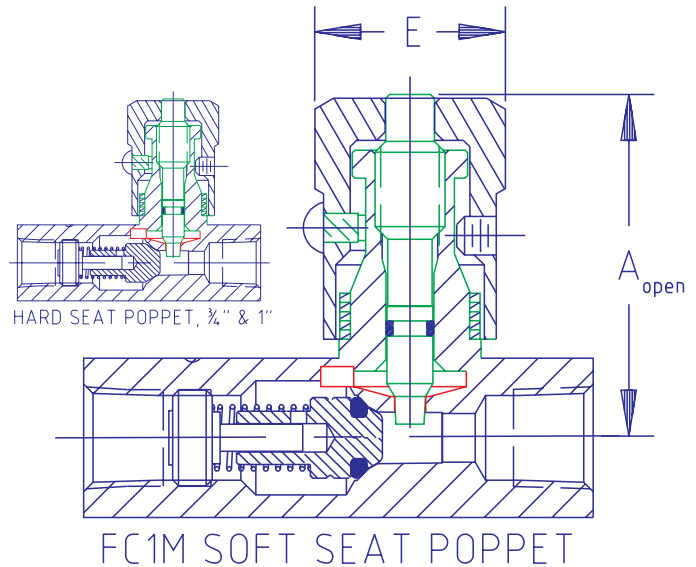
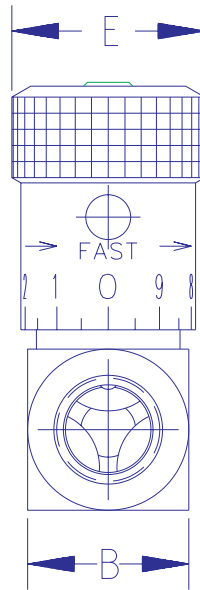
Optional Threads (Call DMIC):

B: BSPP
T: BSPT
IU: ISO6149

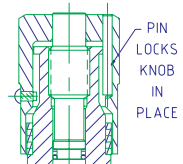
EASY ORDER OPTIONS:

/LHS Security (Permanent) Locking Knob
/LH Finger Screw Locking Knob
/FN Fine Metering Needle Option
(1/4", 3/8", 1/2" sizes only)

For complete ordering information and option availability please see page 16.



FINGER SCREW OPTION
Specify option "/LH"



TAMPERPROOF OPTION
Specify option "/LHS"

