

FC1H Flow Control

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



Flow-regulating, steel 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.

- 5,000 psi pressure rating (5/8" size and above rated to 3,000 psi).
- Carbon steel body, stainless steel trim, Buna-N O-ring.
- Port sizes from 1/8" to 2".
- 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 or oil.

FC1H	Physical Parameters
VALVE BODY	Carbon Steel
POPPET	Stainless Steel, Hard Seat
SEALING	Buna-N Standard
WORKING PSI (1/8"-1/2")	5,000 PSI (345 Bar)
WORKING PSI (others)	3,000 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)

Ordering Codes

FC1H **0500** **N**

Size Codes	
Code	Port Size
0125	1/8"
0250	1/4"
0375	3/8"
0500	1/2"
0625	5/8"
0750	3/4"
1000	1"
1250	1 1/4"
1500	1 1/2"
2000	2"

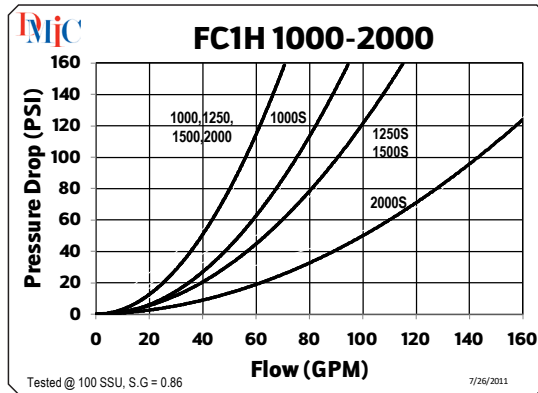
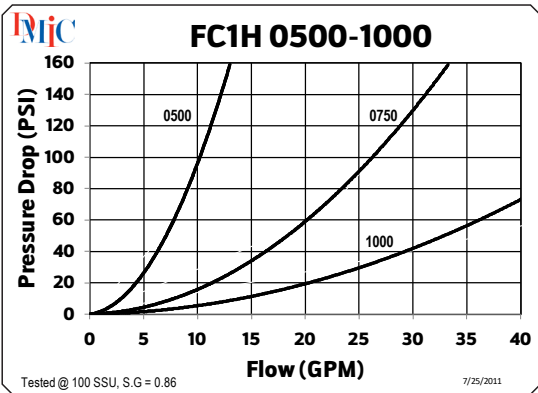
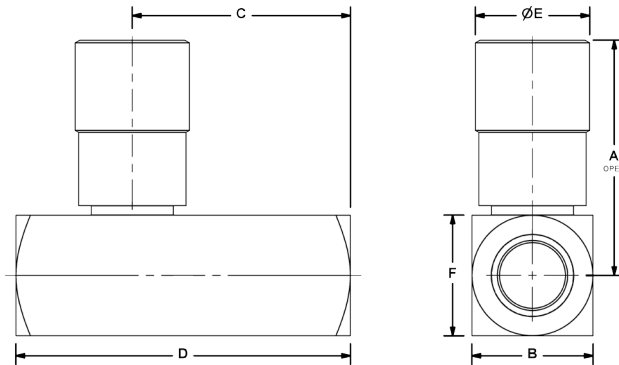
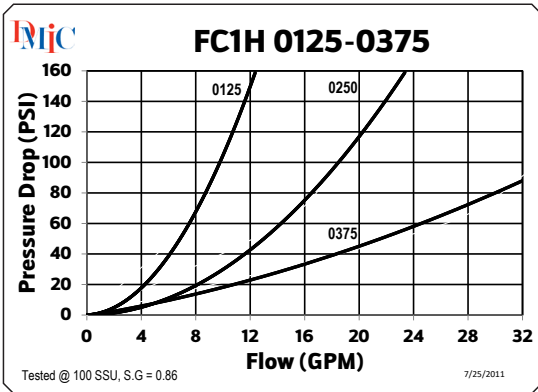
Port Thread	
N	NPT
S	SAE ORB
B	BSPP



FC1H Flow Control

FC1H	Nominal Size	Performance Data				Dimensions (inches)							
		Flow GPM ¹	Metered Direction		Free Flow		A	B	C	D	E	E	Lbs.
			Orifice Area	Effective C _v	Orifice Area	Effective C _v							
FC1H-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
FC1H-0125B													
FC1H-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
FC1H-0250B													
FC1H-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
FC1H-0375B													
FC1H-0375S													
FC1H-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
FC1H-0500B													
FC1H-0500S													
FC1H-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
FC1H-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
FC1H-0750B													
FC1H-0750S													
FC1H-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
FC1H-1000B			0.3070	7.000									
FC1H-1000S													
FC1H-1250N	1 1/4"	70 GPM	0.2300	5.250	0.855	19.52	5.12	2.25	3.88	5.63	1.88*	2.25	8.2
FC1H-1250B			0.3710	8.470									
FC1H-1250S													
FC1H-1500N	1 1/2"	100 GPM	0.2300	5.250	0.955	21.82	5.37	2.75	4.47	5.63	1.88*	2.75	10.2
FC1H-1500B			0.3710	8.470									
FC1H-1500S													
FC1H-2000N	2"	150 GPM	0.2300	5.250	1.046	23.90	5.75	3.50	5.31	6.50	1.88*	3.50	17.4
FC1H-2000B			0.6010	13.410									
FC1H-2000S													

(*) 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.

