

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" |

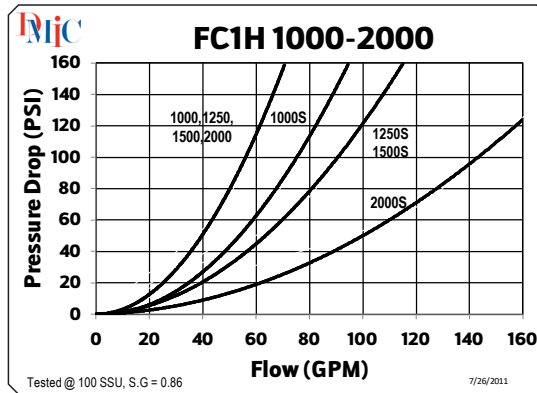
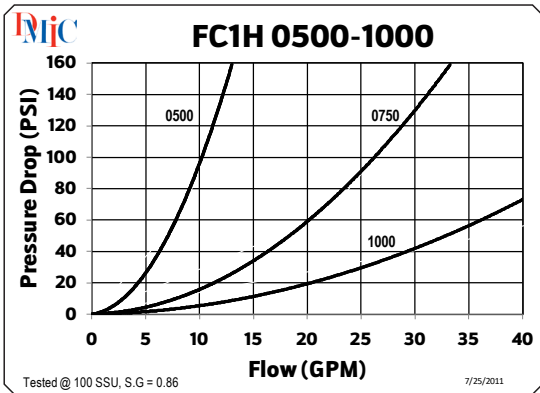
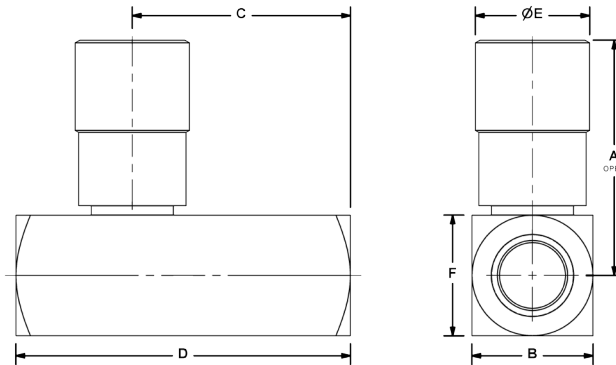
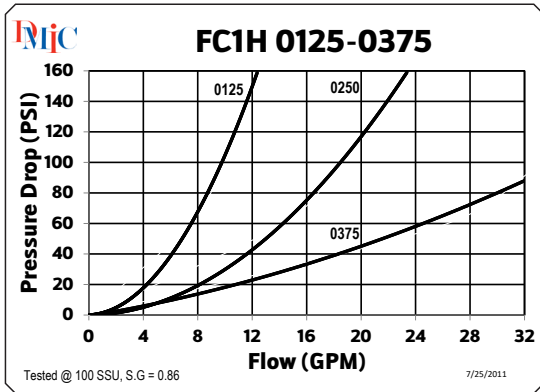
| Port Thread | |
|-------------|---------|
| N | NPT |
| S | SAE ORB |
| B | BSPP |



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.

