

PC1H Pressure Comp

**Bidirectional Metered Flow with Check Valve ~ 1/4" to 1"
Carbon Steel body for working pressures to 3,000 PSI**



Flow-regulating needle valves with a built-in 5 psi check valve. Provides metered flow in one direction and free flow in the opposite direction. Flow rate is maintained within 5% in the event of upstream or downstream pressure fluctuations.

- 3,000 psi pressure rating.
- Carbon steel body, stainless steel trim, Buna-N O-ring.
- Port sizes from 1/4" 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 or oil.

PC1H	Physical Parameters
VALVE BODY	Carbon Steel
POPPET	Stainless Steel
SEALING	Buna-N Standard
WORKING PSI (1/8"-3/4")	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

PC1H	0500	N	
Size Codes		Port Thread	
Code	Port Size	N	NPT
0250	1/4"	S	SAE ORB
0375	3/8"	B	BSPP
0500	1/2"		
0625	5/8"		
0750	3/4"		
1000	1"		

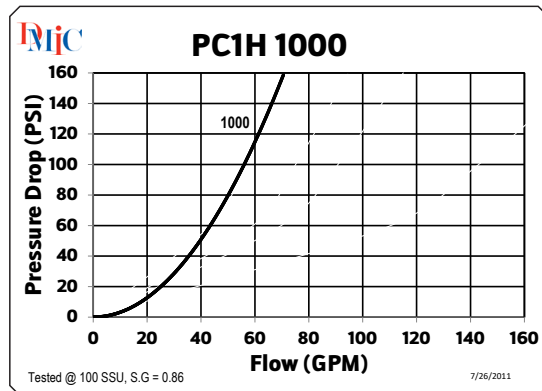
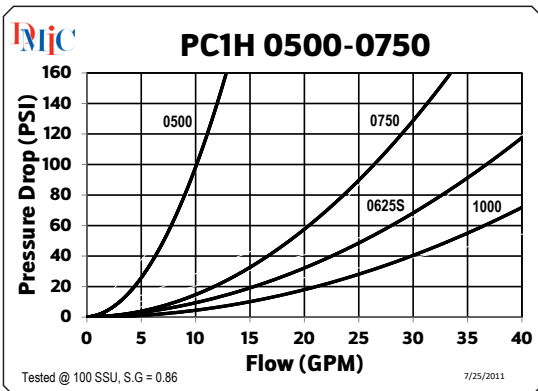
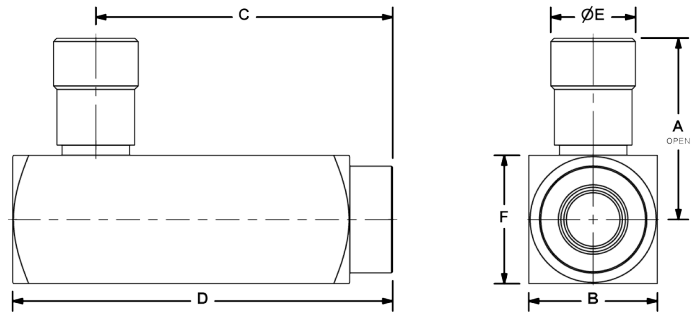
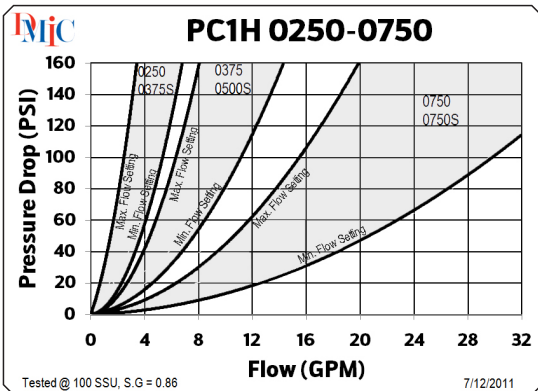
NOTES: (*) This model incorporates a reverse flow check. For 2-way compensation select model **PC2H**, page 18
 (*) For production qty. orders, non-adjustable versions factory preset to Buyer's flow setting are available
 (*) **PC1H** and **PC2H** valves require a minimum pressure differential between the inlet and outlet ports for correct operation. For sizes below 1/2", 107.5 PSI (7 Bar) is required; larger sizes require 159.5 PSI (11 Bar)



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PC1H	Nominal Size	Performance Data				Dimensions (inches)						
		Metered Direction Flow Range		Reverse Flow Characteristics		A	B	C	D	E	F	Lbs.
		Minimum Flow GPM	Maximum Flow GPM	Maximum Reverse Flow GPM	ΔP at Maximum Reverse Flow							
PC1H-0250N	1/4"	0.3 GPM	3 GPM	5 GPM	40 PSI	2.73	1.38	2.97	3.63	0.81	1.38	1.8
PC1H-0250B												
PC1H-0375N	3/8"	0.6 GPM	6 GPM	8 GPM	40 PSI	3.15	1.50	3.47	4.16	1.00	1.50	2.2
PC1H-0375B												
PC1H-0375S												
PC1H-0500N	1/2"	1.5 GPM	15 GPM	20 GPM	116 PSI	4.04	1.75	4.06	4.94	1.19	1.75	3.7
PC1H-0500B												
PC1H-0500S												
PC1H-0625S	5/8"	1.5 GPM	15 GPM	20 GPM	40 PSI	4.04	1.75	4.06	4.94	1.19	1.75	3.7
PC1H-0750N	3/4"	2.5 GPM	25 GPM	35 GPM	116 PSI	5.06	2.25	4.79	5.88	1.38	2.25	8.0
PC1H-0750B												
PC1H-0750S												
PC1H-1000N	1"	5.0 GPM	50 GPM	60 GPM	140 PSI	6.90	2.75	5.63	6.94	1.88*	2.75	14.6
PC1H-1000B												
PC1H-1000S												

(*) 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.

