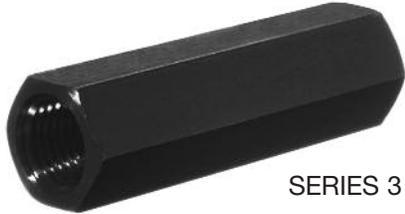
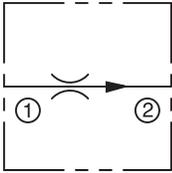


PC3, PC4, PCM Flow Regulator
Female-to-Female

IN-LINE



SERIES 3

DESCRIPTION

Pneu-Trol pressure compensated constant flow valves are exceptionally accurate in maintaining constant flow with pressures up to 3,000 psi (207 bar). These non-adjustable units provide exact factory-set output flow, regardless of inlet pressure, up to rated limits.

Series 3 is a miniature 1/4" valve for small flow rates. Series 4 is our standard fixed flow valve with flow capacity up to 30.0 gpm (113.6 lpm). Both Series 3 & 4 provide for "restricted" reverse flow as limited by the internal orifice.

The compensating action of these valves results from a fixed diameter orifice at the inlet end and a series of variable orifices at the outlet end. Flow through the variable orifices is controlled by a spring and piston. These elements work together to regulate hydraulic flow within the determined rates. Flows are controlled within ±15% up to 1.5 gpm (5.7 lpm) and ±10% at higher flow up to 30.0 gpm (113.6 lpm). Regulation is virtually unaffected by temperature changes from 60° F (16° C) to 180° F (82° C). At a temperature differential [ΔT] of 70° F (21° C) flow variation would be approximately ±2% max; while at temperature differential [ΔT] of 120° F (49° C) the flow variation would be approximately ±4% max.

Series 3 units are made from high-strength steel. Series 4 units are made from aluminum for the 1/4" & 3/8" sizes and high-strength steel for 1/2" & 3/4" sizes. The standard porting of these valves is NPTF with optional SAE threads available on selected models.

- For hydraulic applications only
- Maintains accurate constant flow at pressures up to 3,000 psi (207 bar)
- Fixed (Factory-Set) flow units

FLOW RATING

SERIES 3

Size	Controlled Flow Range gpm (lpm)	Min. Oper. Press. ΔP (Δbar)
1/4"	0.1 to 2.0 (0.4 to 7.6)	100 (6.9)
SAE 6		

SERIES 4

Size	Controlled Flow Range gpm (lpm)	Min. Oper. Press. ΔP (Δbar)
1/4"	0.5 to 5.0 (1.9 to 18.9)	100 - 300 (6.9 - 20.7)
SAE 4		
3/8"	1.0 to 10.0 (3.8 to 37.9)	100 - 200 (6.9 - 13.8)
SAE 6		
1/2"	1.5 to 15.0 (5.7 to 56.8)	100 (6.9)
SAE 8		
3/4"	2.0 to 30.0 (7.6 to 113.6)	100 (6.9)
SAE 12		

SPECIFICATIONS

Maximum Operating Pressure (Non-Shock Service)

Carbon Steel: 3,000 psi (207 bar)
Aluminum: 3,000 psi (207 bar)

Minimum Operating Pressure
(See Flow Rating Chart)

Operating Temperature Range
-15° to +400° F (-26° to +204° C)

Threads
NPTF, SAE

Materials (PC3)

Body, Sleeve: Steel
Spring: Music Wire
Piston: Steel
O-Ring: Viton
Washer: Steel
Retaining Ring: Steel

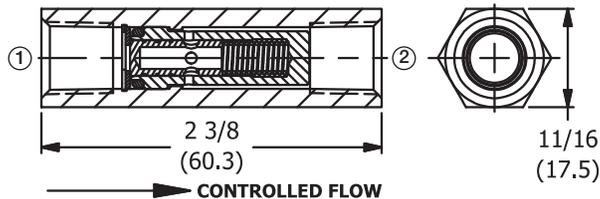
Materials (PC4)

Body, Adapter:
Aluminum 2011-T3 (PC4-21, PC-4-31)
Steel (PC4-41, PC4-61)
Housing: Steel
Spring: Music Wire
Piston: Steel
O-Rings: Viton
Back-Up Washer: Teflon

INSTALLATION DIMENSIONS

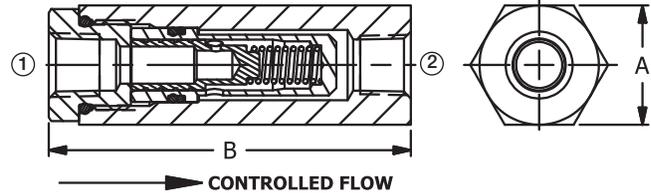
Series 3

Miniature Fixed - with Restricted Reverse Flow



Series 4

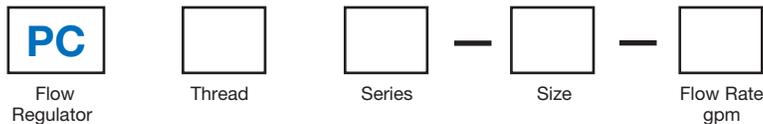
Standard Fixed - with Restricted Reverse Flow



Size	A HEX	B
1/4"-SAE 4	1 (25.4)	3 (76.2)
3/8"-SAE 6	1-3/8 (34.9)	3-7/8 (98.4)
1/2"-SAE 8	1-1/2 (38.1)	4-1/4 (108.0)
3/4"	1-5/8 (41.3)	4-19/32 (116.7)
SAE 12	1-5/8 (41.3)	4-7/8 (123.8)

() Parentheses = Millimeters

HOW TO ORDER



Code	Thread
Omit	NPT
M4	SAE 4
M6	SAE 6
M8	SAE 8
M12	SAE 12

Code	Series
3	Miniature
4	Standard

Code	Size		Series 3 only
	NPT	SAE	
2	1/4"	SAE 6	
21	1/4"	SAE 4	
31	3/8"	SAE 6	
41	1/2"	SAE 8	
61	3/4"	SAE 12	

AVAILABLE MODEL CODES

Size	NPT Thread	Flow Range gpm (lpm)
1/4"	PC3-2-gpm	0.1 to 2.0 (0.4 to 7.6)
	PC4-21-gpm	0.5 to 5.0 (1.9 to 18.9)
3/8"	PC4-31-gpm	1.0 to 10.0 (3.8 to 37.9)
1/2"	PC4-41-gpm	1.5 to 15.0 (5.7 to 56.8)
3/4"	PC4-61-gpm	2.0 to 30.0 (7.6 to 113.6)

Size	SAE Thread	Flow Range gpm (lpm)
SAE 4	PCM44-21-gpm	0.5 to 5.0 (1.9 to 18.9)
SAE 6	PCM63-2-gpm	0.1 to 2.0 (0.4 to 7.6)
	PCM64-31-gpm	1.0 to 10.0 (3.8 to 37.9)
SAE 8	PCM84-41-gpm	1.5 to 15.0 (5.7 to 56.8)
SAE 12	PCM124-61-gpm	2.0 to 30.0 (7.6 to 113.6)

AVAILABLE FLOW RATES BY SIZE

PC3 Only 1/4"		PC4 1/4"		PC4 3/8"		PC4 1/2"		PC4 3/4"	
gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm
0.10	0.38	0.50	1.90	1.00	3.79	1.50	5.68	2.00	7.57
0.15	0.57	0.75	2.84	1.20	4.55	3.00	11.36	2.50	9.47
0.20	0.76	0.90	3.41	1.50	5.68	3.50	13.25	3.00	11.36
0.30	1.14	1.00	3.79	2.00	7.57	3.75	14.20	3.50	13.25
0.40	1.52	1.25	4.74	2.25	8.52	4.00	15.14	4.00	15.14
0.05	1.90	1.30	4.92	2.50	9.47	4.50	17.04	4.50	17.04
0.60	2.28	1.50	5.68	3.00	11.36	5.00	18.93	5.00	18.93
0.75	2.84	1.75	6.63	3.25	12.30	5.50	20.82	6.00	22.71
1.00	3.79	2.00	7.57	3.50	13.25	6.00	22.71	7.00	26.50
1.25	4.74	2.50	9.47	4.00	15.14	7.00	26.50	8.00	30.28
1.50	5.68	2.80	10.60	5.00	18.93	7.50	28.39	9.00	34.07
1.75	6.63	3.00	11.36	6.00	22.71	8.50	32.18	10.00	37.86
2.00	7.57	3.50	13.25	6.25	23.66	9.00	34.07	12.00	45.42
		4.00	15.14	7.00	26.50	10.00	37.86	14.00	52.99
		5.00	18.93	8.00	30.28	11.00	41.64	16.00	60.56
				9.00	34.07	12.00	45.42	18.00	68.13
				10.00	37.86	13.00	49.21	20.00	75.70
						14.00	52.99	22.00	83.27
						15.00	56.78	24.00	90.84
								26.00	98.41
								28.00	105.98
								30.00	113.55

Note: PC3s & PC4s are NOT stocked as complete or finished units.
 All "Fixed" units are drilled to suit each customer's order "after" receipt.