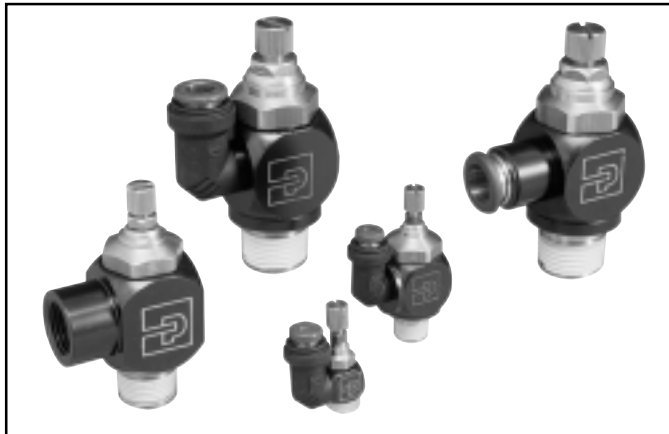




Pneumatic Division
Richland, Michigan 49083

VAL-SIF-125
FC Series Right Angle
Flow Control Valves

ISSUED: July, 2001



Right Angle Flow Control Valves
FC701, FC702, FCS701 Series

Application

The Right Angle Flow Control is an ideal solution to cylinder speed control where space is at a premium. Costly fittings, connections and piping expenses can be eliminated because the valve can rotate 360°, the piping alignment can be in any direction. It then locks into place.

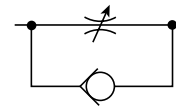
Operation

Install by threading male end directly into cylinder port. The free-flow and metered-flow direction is automatically predetermined. Free-flow direction is into cylinder and metered-flow is out of the cylinder. Flow is adjusted with an Allen wrench and locked with nut.

FC701 Series is available with Prestolok fittings on inlet port to accommodate 1/8 – 1/2 tube sizes. This allows for quick connection and eliminates need for separate tube fitting.

FC702 Series is available with a threaded inlet connection.

FCS701 Series is available with a swivel outlet, for use where access is restricted.



Specifications

Body:
Brass Black Epoxy Coated

Seals:
Buna N

Bolt Material:
Brass

Temperature Range:
-10°F to 200°F (-23°C to 93°C)

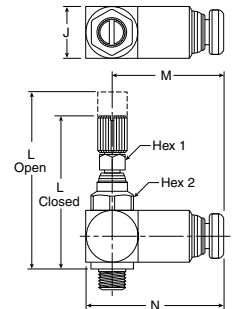
Plunger:
Brass and Acetal

Pressure Range:
145 PSIG (10 bar, 1000 kPa) max.

Dimensions

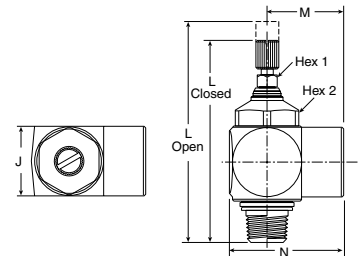
Flow Control with Push-in Connect FC701

Part No.	Tube Size	Thread Size	Hex 1	Hex 2	L Open	L Closed	N	M	J	Adjusted Flow (SCFM)	Free Flow (SCFM)
FC701-2-0	1/8	10-32	1/16	5/16	1.363	1.167	1.040	0.870	0.393	7.06	6.76
FC701-2-2	1/8	1/8	5/16	5/8	2.181	2.000	1.330	0.961	0.679	13.40	11.65
FC701-5/32-0	5/32	10-32	1/16	5/16	1.363	1.167	1.067	0.870	0.393	9.12	6.60
FC701-5/32-2	5/32	1/8	5/16	5/8	2.181	2.000	1.370	1.000	0.679	16.41	15.60
FC701-5/32-4	5/32	1/4	5/16	5/8	2.566	2.318	1.377	1.008	0.679	10.99	3.94
FC701-4-2	1/4	1/8	5/16	5/8	2.181	2.000	1.361	0.992	0.679	17.74	14.69
FC701-4-4	1/4	1/4	5/16	5/8	2.566	2.318	1.381	1.011	0.679	40.03	34.77
FC701-4-6	1/4	3/8	5/16	13/16	3.157	2.696	1.582	1.090	0.984	40.90	34.28
FC701-6-4	3/8	1/4	5/16	5/8	2.566	2.318	1.507	1.138	0.679	42.05	37.39
FC701-6-6	3/8	3/8	5/16	13/16	3.157	2.696	1.677	1.177	0.984	76.33	32.33
FC701-6-8	3/8	1/2	9/16	1	3.858	3.287	1.866	1.276	1.181	99.10	117.21
FC701-8-8	1/2	1/2	9/16	1	3.858	3.287	2.024	1.433	1.181	140.85	125.24



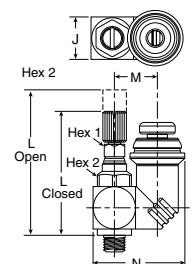
Flow Control with Threaded Connection FC702

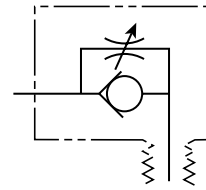
Part No.	Tube Size	Thread Size	Hex 1	Hex 2	L Open	L Closed	N	M	J	Adjusted Flow (SCFM)	Free Flow (SCFM)
FC702-2	1/8	1/8	5/16	5/8	2.181	2.000	1.117	0.748	0.679	18.75	15.85
FC702-4	1/4	1/4	5/16	5/8	2.566	2.318	1.274	0.905	0.679	42.65	34.69
FC702-6	3/8	3/8	5/16	13/16	3.157	2.696	1.535	1.043	0.984	59.66	39.91
FC702-8	1/2	1/2	9/16	1	3.858	3.287	1.791	1.200	1.181	124.90	123.76



Flow Control with Swivel Outlet FCS701

Part No.	Tube Size	Thread Size	Hex 1	Hex 2	L Open	L Closed	N	M	J	Adjusted Flow (SCFM)	Free Flow (SCFM)
FCS701-2-2	1/8	1/8	5/16	5/8	2.181	2.000	1.240	0.620	0.679	5.12	7.15
FCS701-5/32-0	5/32	10-32	1/16	5/16	1.363	1.167	0.854	0.401	0.393	5.56	5.34
FCS701-5/32-2	5/32	1/8	5/16	5/8	2.181	2.000	1.239	0.618	0.679	9.34	9.03
FCS701-5/32-4	5/32	1/4	5/16	5/8	2.566	2.318	1.240	0.620	0.679	11.17	10.18
FCS701-4-2	1/4	1/8	5/16	5/8	2.181	2.000	1.318	0.657	0.679	17.39	14.25
FCS701-4-4	1/4	1/4	5/16	5/8	2.566	2.318	1.318	0.657	0.679	26.35	27.74
FCS701-5-4	5/16	1/4	5/16	5/8	2.566	2.318	1.392	0.696	0.679	39.16	34.61
FCS701-6-4	3/8	1/4	5/16	5/8	2.566	2.319	1.535	0.755	0.679	39.08	38.02
FCS701-6-6	3/8	3/8	5/16	13/16	3.157	2.696	1.740	0.834	0.984	59.97	41.47
FCS701-6-8	3/8	1/2	9/16	1	3.858	3.287	1.619	0.992	1.181	92.50	81.47





**Miniature Right Angle Flow Control
FCM701 and FCM703 Series**

Application and Operation

Miniature right angle flow controls provide meter out control of exhaust air from an air cylinder while providing full flow in the reverse direction. The 10-32 male thread can be used to mount directly to cylinder ports. The inlet ports are available in 5-32 or 1/4" instant tube fittings. The adjustment screw is captive and discourages tampering.

This compact flow control saves space and reduces the number of fittings involved in making the connection. Plumbing can be oriented 360° about the cylinder port.

Specifications

Body:
Polyamide

Mounting Threads:
Brass

Temperature Range*:
0°F to 140°F (-18°C to 60°C)

Pressure Range:
145 PSIG (10 bar, 1000 kPa) max.

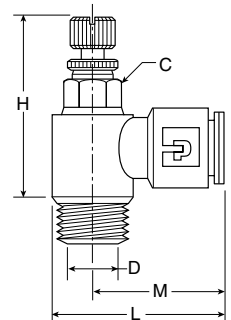
* Ambient temperatures below freezing require moisture-free air. Ambient temperatures below freezing and above 180° require lubricants especially selected for suitability at these temperatures. Pneumatic valves should be used with filtered and lubricated air.

Dimensions

Miniature Exhaust Flow Control FCM701

Composite Body

Part No.	Tube Size	Thread Size	C Hex (mm)	H Closed	H Open	L	M	Flow Dia. D	Adjusted Flow (SCFM)	Free Flow (SCFM)
FCM701-5/32-0	5/32	10-32	6	.925	1.023	.846	.669	.080	5.23	2.90
FCM701-5/32-2	5/32	1/8	7	1.000	1.083	.935	.708	.100	8.41	6.32
FCM701-4-0	1/4	10-32	6	.925	1.023	.885	.708	.080	9.94	3.86
FCM701-4-2	1/4	1/8	7	1.000	1.083	.957	.730	.100	10.56	5.08
FCM701-4-4	1/4	1/4	8	1.083	1.180	1.013	.748	.160	18.79	10.79



Knobless Miniature Exhaust Flow Control FCM703

Composite Body

Part No.	Tube Size	Thread Size	C Hex (mm)	H Closed	H Open	L	M	Flow Dia. D	Adjusted Flow (SCFM)	Free Flow (SCFM)
FCM703-5/32-0	5/32	10-32	6	.650	.787	.846	.669	.080	7.43	4.76
FCM703-4-2	1/4	1/8	7	.708	.860	.956	.730	.100	12.08	5.86
FCM703-4-4	1/4	1/4	8	.826	.964	1.013	.748	.160	19.55	10.89

