

Right Angle Flow Control Valves

General Information

Parker offers a wide range of flow controls to meet a large variety of applications. Parker flow controls are designed for mounting directly onto the cylinder ports to provide precise control of piston rod speed. Due to their compactness they are particularly suitable for applications where space is at a premium.

General Principle

The piston rod moves as a result of the pressure differential on either side of the piston. The speed of the rod is normally determined by the exhaust air flow from the cylinder, although certain applications require control from the inlet. The control of the air flow is via an adjustable flow control valve installed on the exhaust port.

Operation

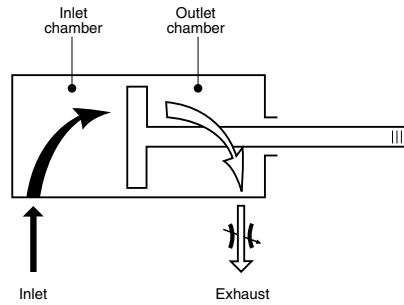
The mounting of two flow controls on a cylinder permits speed control of the cylinder rod in both directions. Air passes freely through the flow control valve A, with the check valve in the open position. The exhaust is controlled by the flow control valve B, where the check valve in the closed position forces the air to go through the adjustable needle valve. The function of A and B are reversed when inlet air is applied to port B.

Advantages

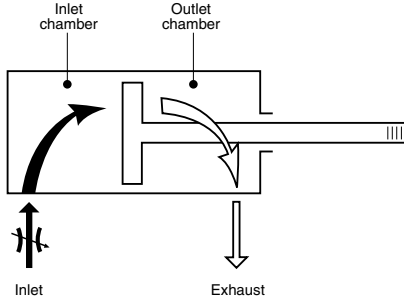
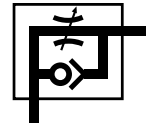
- Direct mounting
- Compact
- Positional
- Optimum flow control
- Swivel outlet for use where access is restricted

Valve Specifications

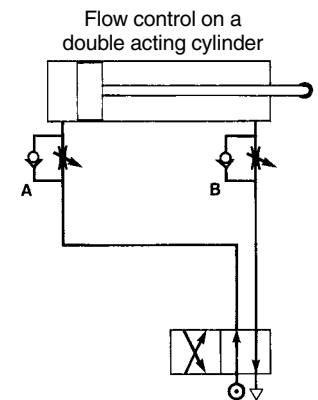
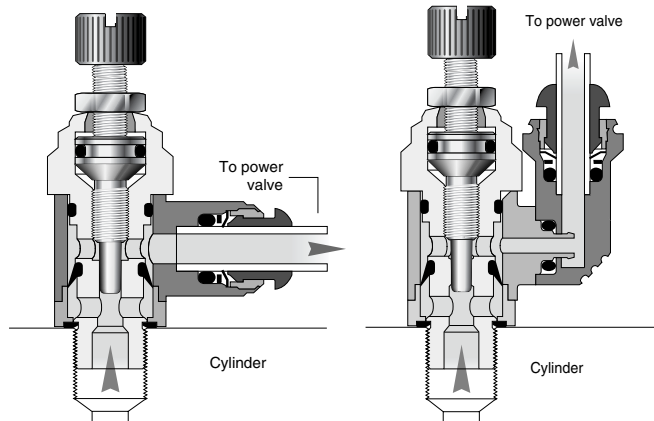
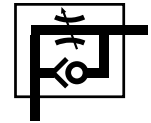
Maximum working pressure: 145 PSI
 Operating Temperature: - 10° to 200° F
 Body Material: Brass black epoxy coated
 Bolt Material: Brass



Flow regulation on the exhaust port

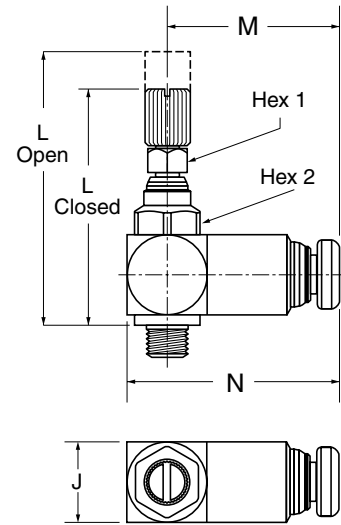


Flow regulation on the inlet port



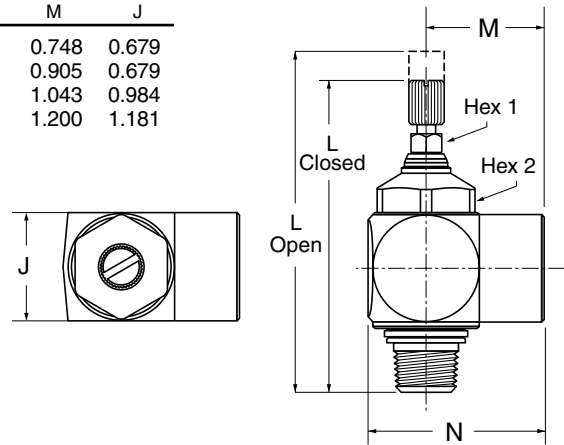
Push-in Connection Exhaust Flow Control FC701

PART NO.	TUBE SIZE	THREAD SIZE	HEX 1	HEX 2	L OPEN	L CLOSED	N	M	J
FC701-2-0	1/8	10-32	1/16	5/16	1.363	1.167	1.040	0.870	0.393
FC701-5/32-4	5/32	1/4	5/16	5/8	2.566	2.318	1.377	1.008	0.679
FC701-4-2	1/4	1/8	5/16	5/8	2.181	2.000	1.361	0.992	0.679
FC701-4-4	1/4	1/4	5/16	5/8	2.566	2.318	1.381	1.011	0.679
FC701-4-6	1/4	3/8	5/16	13/16	3.157	2.696	1.582	1.090	0.984
FC701-6-4	3/8	1/4	5/16	5/8	2.566	2.318	1.507	1.138	0.679
FC701-6-6	3/8	3/8	5/16	13/16	3.157	2.696	1.677	1.177	0.984
FC701-6-8	3/8	1/2	9/16	1	3.858	3.287	1.866	1.276	1.181



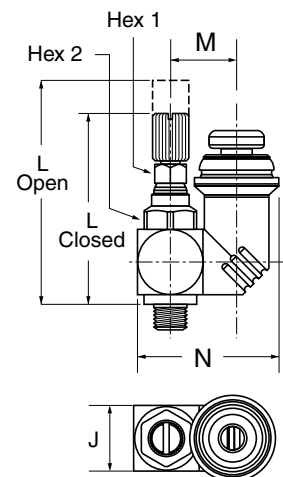
Threaded Connection Exhaust Flow Control FC702

PART NO.	MALE PIPE	FEMALE PIPE	HEX 1	HEX 2	L OPEN	L CLOSED	N	M	J
FC702-2	1/8	1/8	5/16	5/8	2.181	2.000	1.117	0.748	0.679
FC702-4	1/4	1/4	5/16	5/8	2.566	2.318	1.274	0.905	0.679
FC702-6	3/8	3/8	5/16	13/16	3.157	2.696	1.535	1.043	0.984
FC702-8	1/2	1/2	9/16	1	3.858	3.287	1.791	1.200	1.181



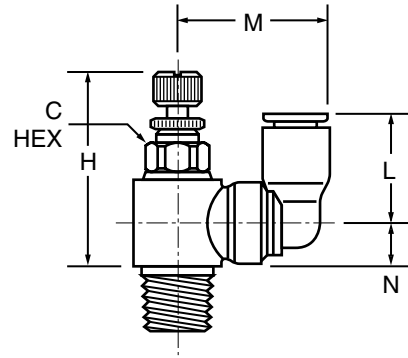
Swivel Exhaust Flow Control FCS701

PART NO.	TUBE SIZE	THREAD SIZE	HEX 1	HEX 2	L OPEN	L CLOSED	N	M	J
FCS701-2-2	1/8	1/8	5/16	5/8	2.181	2.000	1.240	0.620	0.679
FCS701-5/32-2	5/32	1/8	5/16	5/8	2.181	2.000	1.239	0.618	0.679
FCS701-5/32-4	5/32	1/4	5/16	5/8	2.566	2.318	1.240	0.620	0.679
FCS701-4-2	1/4	1/8	5/16	5/8	2.181	2.000	1.318	0.657	0.679
FCS701-4-4	1/4	1/4	5/16	5/8	2.566	2.318	1.318	0.657	0.679
FCS701-6-6	3/8	3/8	5/16	13/16	3.157	2.696	1.740	0.834	0.984
FCS701-6-8	3/8	1/2	9/16	1	3.858	3.287	1.619	0.992	1.181



Miniature Swivel Exhaust Flow Control FCS703

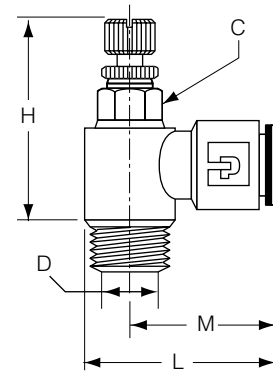
PART NO.	TUBE SIZE	THREAD SIZE	C HEX (MM)	H CLOSED	H OPEN	L	M	N
FCS703-5/32-0	5/32	10-32	6	.96	1.08	.55	.73	.26
FCS703-5/32-2	5/32	1/8	8	1.08	1.20	.55	.73	.33



Miniature Exhaust Flow Control FCM701

Composite Body

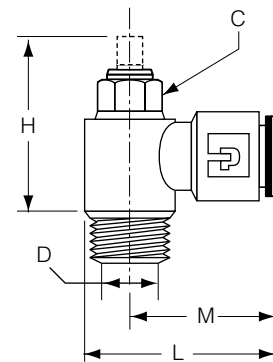
PART NO.	TUBE SIZE	THREAD SIZE	C HEX (MM)	H CLOSED	H OPEN	L	M	FLOW DIA. D
FCM701-5/32-0	5/32	10-32	6	.925	1.023	.846	.669	.080
FCM701-5/32-2	5/32	1/8	7	1.000	1.083	.935	.708	.100
FCM701-4-0	1/4	10-32	6	.925	1.023	.885	.708	.080
FCM701-4-2	1/4	1/8	7	1.000	1.083	.957	.730	.100
FCM701-4-4	1/4	1/4	8	1.083	1.180	1.013	.748	.160



Knobless Miniature Exhaust Flow Control FCM703

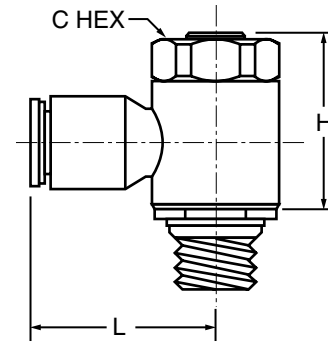
Composite Body

PART NO.	TUBE SIZE	THREAD SIZE	C HEX (MM)	H CLOSED	H OPEN	L	M	FLOW DIA. D
FCM703-5/32-0	5/32	10-32	6	.650	.787	.846	.669	.080
FCM703-5/32-2	5/32	1/8	6	.708	.860	.935	.708	.100
FCM703-4-0	1/4	10-32	6	.650	.790	.825	.650	.080
FCM703-4-2	1/4	1/8	7	.708	.860	.956	.730	.100
FCM703-4-4	1/4	1/4	8	.826	.964	1.013	.748	.160



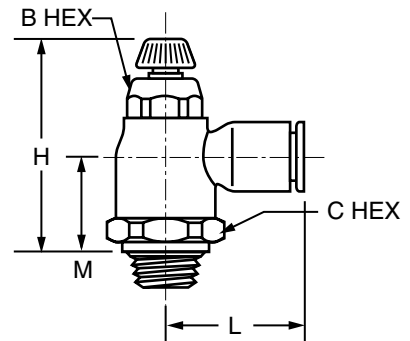
Knobless Compact Exhaust Flow Control FCC701

PART NO.	TUBE SIZE	THREAD SIZE	C HEX (MM)	H	L
FCC701-2-2	1/8	1/8	13	.79	.75
FCC701-5/32-2	5/32	1/8	13	.79	.75
FCC701-4-2	1/4	1/8	13	.79	.85
FCC701-4-4	1/4	1/4	17	1.04	.89
FCC701-5-2	5/16	1/8	13	.79	1.02
FCC701-5-4	5/16	1/4	17	1.04	1.06
FCC701-6-4	3/8	1/4	17	1.04	1.14
FCC701-6-6	3/8	3/8	20	1.14	1.36



Compact Exhaust Flow Control FCC703

PART NO.	TUBE SIZE	THREAD SIZE	B HEX	C HEX	H CLOSED	H OPEN	L	M
FCC703-5/32-2	5/32	1/8	.39	.63	1.44	1.67	.85	.59
FCC703-4-2	1/4	1/8	.39	.63	1.44	1.67	.85	.59
FCC703-6-4	3/8	1/4	.67	.91	1.71	2.03	1.22	.71



Push-to-Connect Exhaust Metal Flow Control FC705

PART NO.	TUBE SIZE	THREAD SIZE	B HEX	C HEX	H CLOSED	H OPEN	L	M
FC705-5/32-2	5/32	1/8	.39	.75	1.79	2.01	.85	.87
FC705-4-2	1/4	1/8	.39	.75	1.79	2.01	.85	.87
FC705-4-4	1/4	1/4	.39	.75	1.79	2.01	.97	.87
FC705-6-4	3/8	1/4	.55	.75	1.91	2.11	1.14	.91
FC705-6-6	3/8	3/8	.67	.99	2.15	2.40	1.40	.91

