

Features

- Controls cylinder extension and retraction
- Allows rapid cylinder return
- 3-Way Normally Closed
- Quick Exhaust & Needle Valve options
- Male pipe thread for direct mount to single acting spring return cylinders



Cylinder Control Valves

Pneumadyne’s new Solenoid Operated Cylinder Control Valves are ideal for applications requiring controlled movement of single-acting spring return cylinders. These precision machined valves were designed for use with [Pneumadyne’s 15 mm Solenoid Valves \(sold separately\)](#).

Materials

Brass/Electroless Nickel,
Aluminum/Anodize, Stainless Steel, Buna-N, Urethane

Performance Data

Temperature Range	Operating Pressure	Media
-20° to 160° F	0 to 125 psi	Air

Product	Max. Flow (scfm)		C _v	Fill Time sec/in3 0-90 psi	Exhaust Time sec/ in3 100-10 psi
	50 psi	125 psi			
CCV-F1-1	2.1	4.6	.045	.070	.120
CCV-F1-2	1.8	4.1	.045	.070	.012
CCV-F1-3	2.1	4.6	.045	.070	.012
CCV-F1-4	1.8	4.1	.045	.070	.120
CCV-44-4	1.8	4.1	.045	.070	.120

Cv per ANSI / (NFPA) T3.21.3

Operator: 15 mm 3WNC solenoid valve Ø1.6 mm orifice (sold separately)

Five configurations are available to accommodate cylinder extension and retraction requirements:

CCV-F1-1 features a 10-32 (F) input port and 1/8 NPT output port. Input pressure determines the rate of cylinder extension while the cylinder’s spring controls rod retraction.

CCV-F1-2 offers the combination of a Needle Valve and Quick Exhaust providing controlled cylinder movement in both directions. A built-in Needle Valve in the input port, 10-32 (F), controls cylinder extension while the 1/8 NPT Quick Exhaust in the output port allows rapid cylinder return.

CCV-F1-3 provides a 10-32 (F) input port and built-in Quick Exhaust with 1/8 NPT output port. Input pressure controls the cylinder extension and the Quick Exhaust allows rapid cylinder return.

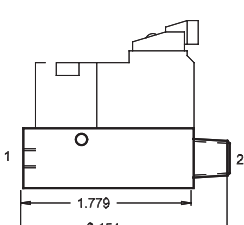
CCV-F1-4 features a built-in Needle Valve in the input port, 10-32 (F), for controlled cylinder extension. The cylinder’s spring controls rod retraction.

CCV-44-4 features 1/8 NPT (F) input and output ports. A built-in Needle Valve in the input port provides controlled cylinder extension while the cylinder’s spring controls rod retraction.

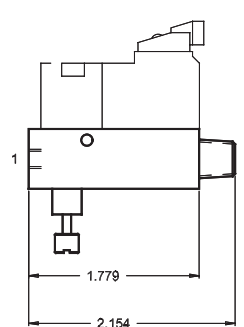
[Video Clip Available](#) [Top Cylinder s](#)

Cylinder Control Valve

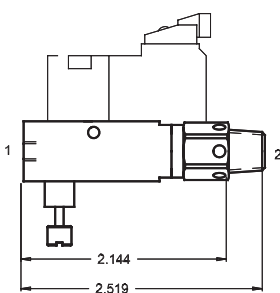
CCV-F1-1



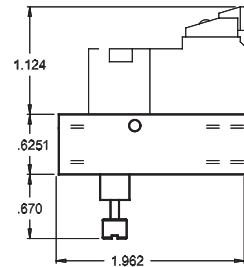
CCV-F1-4



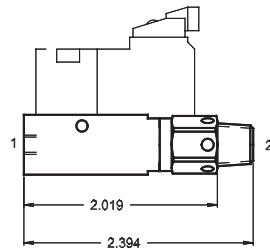
CCV-F1-2



CCV-44-4



CCV-F1-3



Function

Applying an electrical signal to the solenoid actuates the valve resulting in the controlled rod movement determined by the Cylinder Control Valve.

Product Information

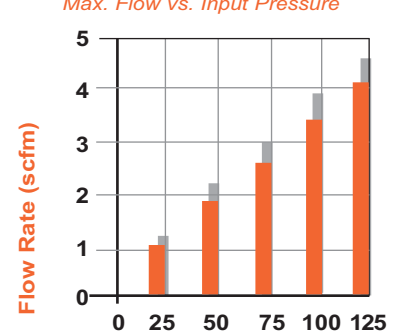
Part Number	Input	Output
CCV-F1-1	10-32 (F)	1/8 NPT
CCV-F1-2	10-32 (F) Needle Valve	1/8 NPT Quick Exhaust
CCV-F1-3	10-32 (F)	1/8 NPT Quick Exhaust
CCV-F1-4	10-32 (F) Needle Valve	1/8 NPT
CCV-44-4	1/8 NPT (F) Needle Valve	1/8 NPT (F)

Ordering Information

- To order standard product use part number listing.
- 15 mm Solenoid Valves sold separately.
- Contact factory for custom porting configurations.

Cylinder Control Valve

Max. Flow vs. Input Pressure

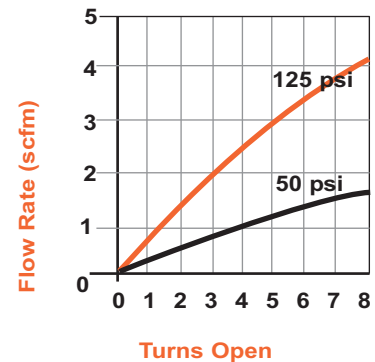


Input Pressure (psi)

CCV-F1-2
CCV-F1-4, CCV-44-4
CCV-F1-1 & CCV-F1-3

Cylinder Control Valve

Turns vs. Pressure for Needle Valves



Ideal for controlling single-acting spring return cylinders