

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 Bases

When used in conjunction with Pneumadyne's 15 mm Solenoid Valves, these precision machined bases are an ideal choice for applications requiring controlled movement of single-acting spring return cylinders. Configurations featuring a quick exhaust and/or needle valve are available to easily control cylinder extension and retraction speeds. 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.

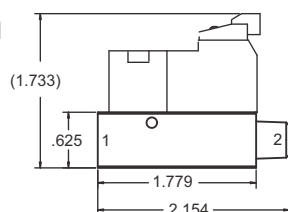
CCV-F1-3 provides a 10-32 (F) input port and built-in Quick Exhaust with 1/8 NPT output port. Input pressure controls the cylinder extension and the Quick Exhaust allows rapid cylinder return.

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.

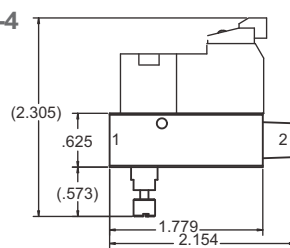
CCV-44-4 features 1/8 NPT (F) input and output ports. A built-in Needle Valve in the input port provides controlled cylinder extension while the cylinder's spring controls rod retraction.

Cylinder Control Valve

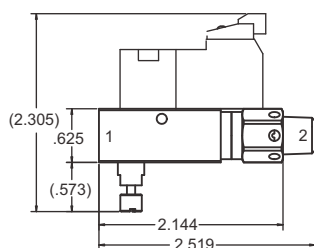
CCV-F1-1



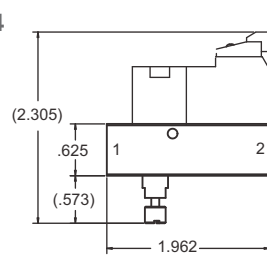
CCV-F1-4



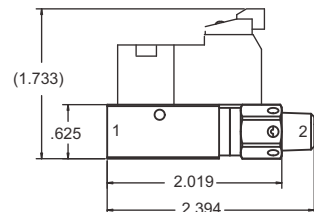
CCV-F1-2



CCV-44-4

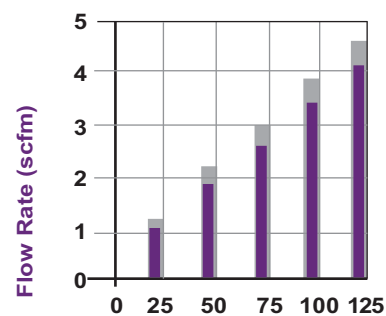


CCV-F1-3



Cylinder Control Valve

Max. Flow vs. Input Pressure

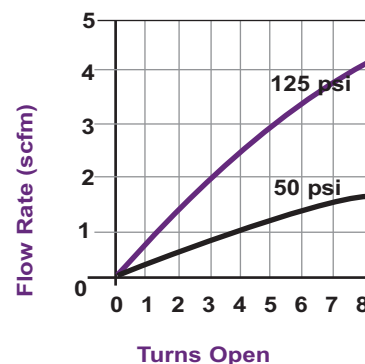


Input Pressure (psi)

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

Cylinder Control Valve

Turns vs. Pressure for Needle Valves



Function

Applying an electrical signal to the solenoid results in the controlled rod movement determined by the Cylinder Control Base.

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 refer to Product Information listing.
- 15 mm Solenoid Valves sold separately.
- Contact factory for custom porting configurations.

Ideal for controlling the movement of single-acting spring return cylinders