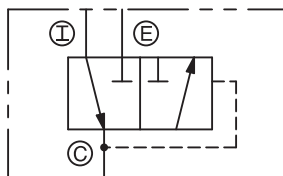


EV Quick Exhaust

Female-to-Female

IN-LINE

**DESCRIPTION**

Deltrol's quick exhaust valves provide fast dumping of exhaust air at the cylinder, eliminating the need for large selector valves ordinarily required to accommodate exhaust air moving back through the pneumatic system. Substantial front end savings and better operating efficiency result from the use of smaller air system components. In addition, smoother, faster cylinder operation and wider application of air-powered motions are obtained.

The quick exhaust valve has been designed with smooth, over-size internal passages which afford unrestricted flow and prevent clogging due to contaminated air lines. The diaphragm is also an exclusive Deltrol design, assuring instantaneous and complete venting of exhaust air from cylinders, air presses and other air operated equipment.

- **Instantaneous dumping of air allows use of smaller valves and piping**
- **Increases system efficiency and speeds**
- **Cost effective solution**

SPECIFICATIONS**Operating Pressure Range**

20 to 125 psi (1.4 to 8.6 bar)

Operating Temperature Range

Buna N (Standard):

0° to +250° F (-18° to +120° C)

Viton:

0° to +400° F (-18° to +204° C)

Flow Rating

Inlet Co-Efficient (Cv Factor) = .50 to 5.32

Exhaust Co-Efficient (Cv Factor) = 1.0 to 7.84

Threads

NPTF

Materials

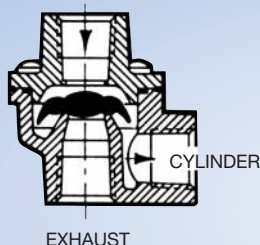
Body, Bonnet:

Die Cast Aluminum

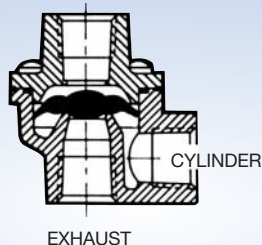
O-Ring: Buna-N, Viton

Diaphragm: Buna-N, Viton

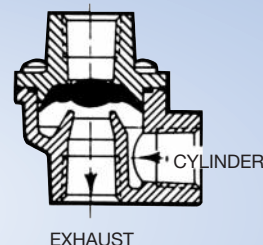
Screws: Zinc Plated Steel

EV20A2, EV25A2, EV30A2, EV35A2 PRINCIPLE OF OPERATION**Figure A**

When air is introduced into the inlet port, the diaphragm is forced into the exhaust seat. The outer lip of the diaphragm is deflected downward, away from the wall, allowing air to flow into the cylinder with a minimum of restriction. The diaphragm will remain on the exhaust seat as long as the inlet pressure is equal to or greater than the cylinder pressure.

**Figure B**

When the cylinder is fully charged and air is no longer flowing from the inlet to cylinder port, the outer lip of the diaphragm will assume its normal shape and will contact the outer wall. The diaphragm will remain on the exhaust seat.

**Figure C**

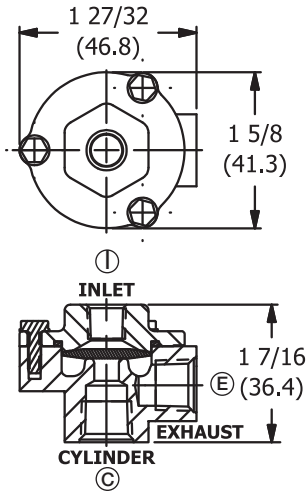
When pressure at the inlet port is vented to atmosphere (thru the control valve) the air in the cylinder, which is at a pressure level higher than atmosphere will force the diaphragm upwards to the inlet port. This will shut off the inlet port and allow air in the cylinder to flow directly to atmosphere.

(continued)
EV Quick Exhaust
 Female-to-Female

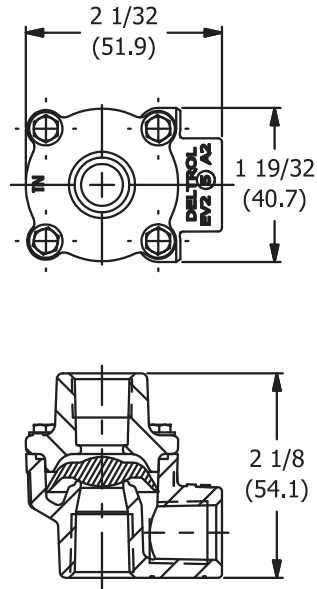
IN-LINE

INSTALLATION DIMENSIONS

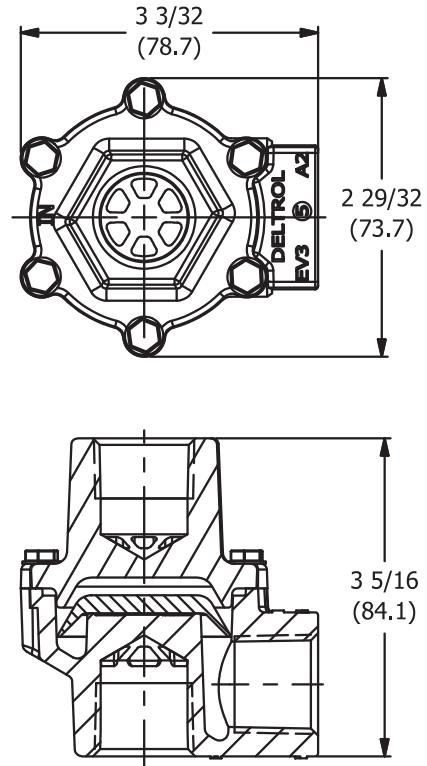
EV125-EV125-2



EV20-EV25



EV30-EV35



() Parentheses = Millimeters

HOW TO ORDER

Model Code	Seal	Inlet Port NPTF	Inlet Co-Efficient (Cv factor)	Cylinder Port NPTF	Exhaust Port NPTF	Exhaust Co-Efficient (Cv factor)	Min ΔP (Δbar) to Shift Diaphragm
EV125A	Buna N	1/8"	.50	1/4"	1/4"	1.0	5 (.3)
EV125A2		1/4"	.50	1/4"	1/4"	1.0	5 (.3)
EV20A2	Buna N	1/4"	1.57	1/4"	3/8"	2.33	8 (.6)
EV20A2V	Viton	1/4"	1.57	1/4"	3/8"	2.33	8 (.6)
EV25A2	Buna N	3/8"	2.50	3/8"	3/8"	2.98	8 (.6)
EV25A2V	Viton	3/8"	2.50	3/8"	3/8"	2.98	8 (.6)
EV30A2	Buna N	1/2"	3.48	1/2"	3/4"	5.45	3 (.2)
EV30A2V	Viton	1/2"	3.48	1/2"	3/4"	5.45	3 (.2)
EV35A2	Buna N	3/4"	5.32	3/4"	3/4"	7.84	3 (.2)
EV35A2V	Viton	3/4"	5.32	3/4"	3/4"	7.84	3 (.2)