

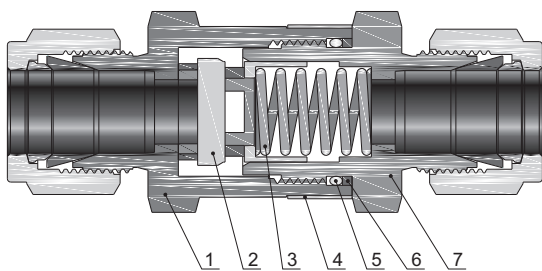
Excess Flow Valves

EV1 Series



Features

- ❖ Working pressure up to: 6000 psig (413 bar)
- ❖ Working temperature: -10°F to 400°F (-23°C to 204°C)
- ❖ Compact design for convenient installation
- ❖ Variety of end connections
- ❖ Stainless steel construction
- ❖ All metal seat design



	Component	Material Grade
1	Inlet body	316 S.S. / ASTM A479
2	Poppet	316 S.S. / ASTM A479
3	Spring	304 S.S. / ASTM A313
4	Identification ring	6061 / ASTM B211
5	O-ring	FKM
6	Backup ring	PTFE / ASTD D1710
7	Outlet body	316 S.S. / ASTM A479

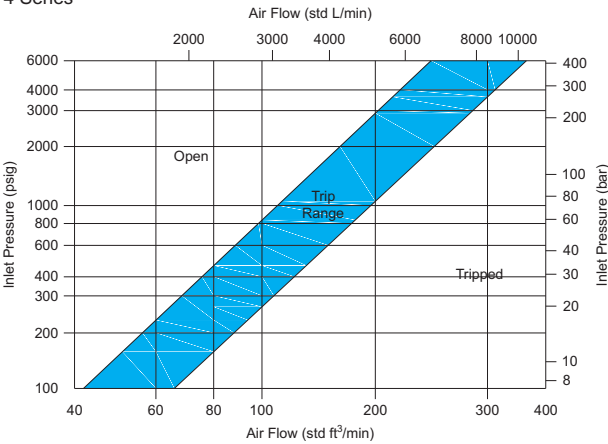
Operation

- ❖ Stop uncontrolled release of system media if downstream line ruptures. When the system is functioning normally, the working element remains in the open position. If the excess flow occurs downstream, the working element quickly moves to the tripped position to stop bleeding. When system pressure reaches balance through the bleed vent, the spring resets the working element to the open position automatically. The flow which goes through the bleed vent should be lower than one percent of the flow rate in the trip range.

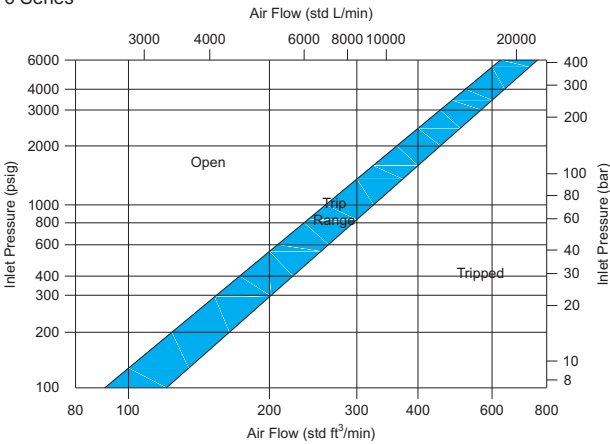
Flow Data at 70°F (20°C)

Air Flow

4 Series

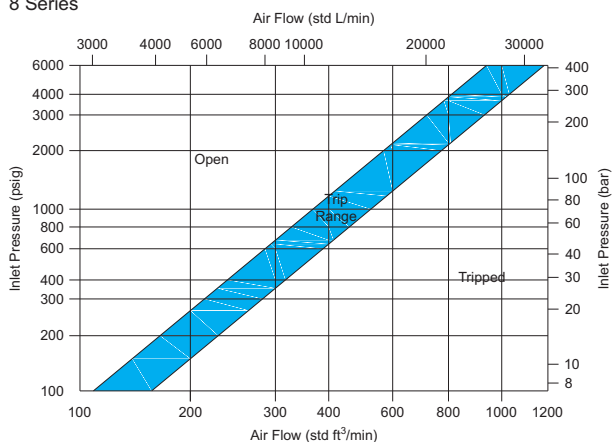


6 Series



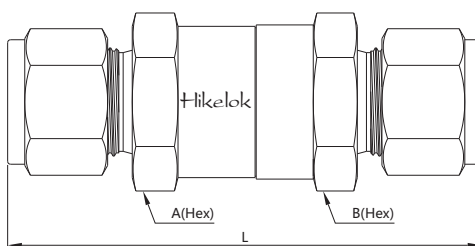
Water Flow

8 Series



Series	Cv	Trip Range gal/min (L/min)
-4	0.5	3.9 to 5.8 (14.7 to 21.9)
-6	1.1	8.2 to 10.0 (31.0 to 37.8)
-8	1.1	11.2 to 14.9 (42.3 to 56.3)

Dimensions



Basic Ordering Number	Connection Type and Size	Dimension, in.(mm)		
		L	A	B
EV1-F4	1/4" Hikelok tube fittings	2.43(61.7)	11/16(17.46)	11/16(17.46)
EV1-F6	3/8" Hikelok tube fittings	3.05(77.5)	1 1/16(26.99)	1 1/16(26.99)
EV1-F8	1/2" Hikelok tube fittings	3.27(83.1)	1 1/16(26.99)	1 1/16(26.99)
EV1-M6	6 mm Hikelok tube fittings	2.43(61.7)	11/16(17.46)	11/16(17.46)
EV1-M8	8 mm Hikelok tube fittings	3.00(76.4)	1 1/16(26.99)	1 1/16(26.99)
EV1-M10	10 mm Hikelok tube fittings	3.09(78.7)	1 1/16(26.99)	1 1/16(26.99)
EV1-M12	12 mm Hikelok tube fittings	3.27(83.3)	1 1/16(26.99)	1 1/16(26.99)
EV1-FNPT2	1/8" Female NPT	1.87(47.5)	11/16(17.46)	11/16(17.46)
EV1-FNPT4	1/4" Female NPT	2.12(53.8)	11/16(17.46)	11/16(17.46)
EV1-FNPT6	3/8" Female NPT	2.55(64.8)	1 1/16(26.99)	1 1/16(26.99)
EV1-FNPT8	1/2" Female NPT	3.03(77.0)	1 1/16(26.99)	1 1/16(26.99)
EV1-NPT2	1/8" Male NPT	1.79(45.5)	11/16(17.46)	11/16(17.46)
EV1-NPT4	1/4" Male NPT	2.17(55.1)	11/16(17.46)	11/16(17.46)
EV1-NPT6	3/8" Male NPT	2.36(59.9)	1 1/16(26.99)	1 1/16(26.99)
EV1-NPT8	1/2" Male NPT	2.73(69.3)	1 1/16(26.99)	1 1/16(26.99)

Temperature range of different O-ring sealing materials

O-ring Material	Temperature Ranges °F (°C)
Fluorocarbon FKM	-10 to 400 (-23 to 204)
Buna N	-40 to 250 (-40 to 121)
Ethylene propylene	-50 to 300 (-45 to 148)
Neoprene	-40 to 250 (-40 to 121)
Kalrez	-10 to 527 (-23 to 275)

How to Order

EV1— F4 — M6 — V — 316

Series	Inlet Type	Inlet Size	Outlet Type	Outlet Size	Seal Material	Body Material
EV1	FNPT Female NPT	4 1/4 in.	Same as inlet type and inlet size		V Fluorocarbon FKM	316 316 S.S.
	NPT Male NPT	6 3/8 in. or 6 mm			B Buna N	316L 316L S.S.
	FBT Female BSPT	8 1/2 in. or 8 mm	If outlet and inlet are the same, eliminate the outlet designator		E Ethylene propylene	304 304 S.S.
	MBT Male BSPT	10 10 mm			N Neoprene	304L 304L S.S.
	FMS Female Metric	12 3/4 in. or 12 mm			Z Kalrez	
	MS Male Metric (for BG)					
	FBP Female BSPP					
	MBP Male BSPP (for BG)					
	F Fractional Tube Fitting					
	M Metric Tube Fitting					