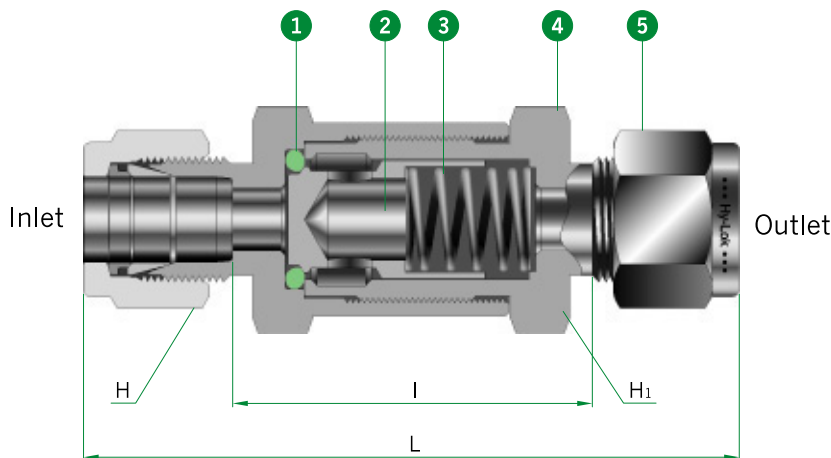


700 Series



- 1 O-Ring**
 - provides leak tight shut - off.
- 2 Back Stopped Poppet**
 - prevents the spring from being overstressed.
- 3 Variety of Springs**
 - are available for the cracking pressure in the range from 1/3 psig to 100psig.
- 4 Wide Range of Body Sizes**
 - allow Cv choices from 0.16 to 8.0
- 5 Variety of End Connections**
 - include Hy-Lok tube fittings, male/female NPT tapered threads, male/female ISO tapered threads.

Technical Data

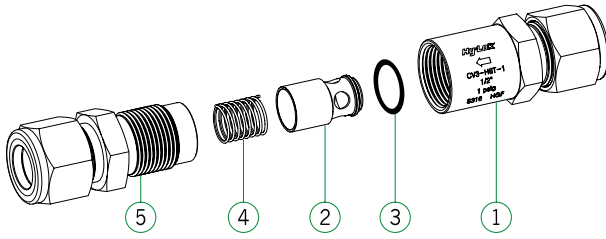
Series	CV1	CV2 CV3 CV4	CV5 CV6
Max. Working Pressure @ 70°F (21°C)	3000 psig (206barg)		2000 psig (137barg)
Operating Temperature Range	FKM : -10°F to 375°F (-23°C to 191°C) NBR : -10°F to 250°F (-23°C to 121°C)		
Nominal Cracking Pressure	1/3, 1, 3, 10, 25, 100 psig		1/3, 1, 3, 10, 25 psig

Table of Dimensions

Basic Part No.	Orifice	Cv	End Connections		Dimensions			
			Inlet	Outlet	L	I	H (Nut Hex)	H ₁ (Body Hex)
CV1	4.8	0.16	1/8" Hy - Lok	1/8" Hy - Lok	55,6	30,2	11,1	15,9
			1/8" Male NPT	1/8" Male NPT	44,4	-	-	
			1/8" Female NPT	1/8" Female NPT	46,6	-	-	
			1/4" Hy - Lok	1/4" Hy - Lok	60,0	29,5	14,3	
		0.47	6mm Hy - Lok	6mm Hy - Lok	-	29,4	14,0	19,1
			1/4" Male NPT	1/4" Hy - Lok	56,4	-	14,3	
			1/4" Male NPT	1/4" Male NPT	53,4	-	-	
			1/4" Female NPT	1/4" Female NPT	54,6	-	-	
CV2	7.1	1.48	3/8" Hy - Lok	3/8" Hy - Lok	74,8	41,3	17,5	22,2
			10mm Hy - Lok	10mm Hy - Lok		40,4	19,0	
			3/8" Male NPT	3/8" Male NPT	64,6	-	-	
CV3	10.0	1.70	3/8" Female NPT	3/8" Female NPT	63,8	-	-	22,2
			1/2" Hy - Lok	1/2" Hy - Lok	80,2	34,5	22,2	
			12mm Hy - Lok	12mm Hy - Lok	-	34,6	22,0	
			1/2" Male NPT	1/2" Male NPT	74,4	-	-	
CV4	13.5	2.60	1/2" Female NPT	1/2" Female NPT	84,7	-	-	28,6
			5/8" Hy - Lok	5/8" Hy - Lok	91,8	48,1	25,4	
CV5	16.0	5.20	3/4" Hy - Lok	3/4" Hy - Lok	110,7	61,9	28,6	31,8
			3/4" Male NPT	3/4" Male NPT	105,3	-	-	
			3/4" Female NPT	3/4" Female NPT	103,0	-	-	
CV6	18.0	8.00	1" Hy - Lok	1" Hy - Lok	121,2	58,7	38,1	34,9
			1" Male NPT	1" Male NPT	116,2	-	-	
			1" Female NPT	1" Female NPT	111,4	-	-	

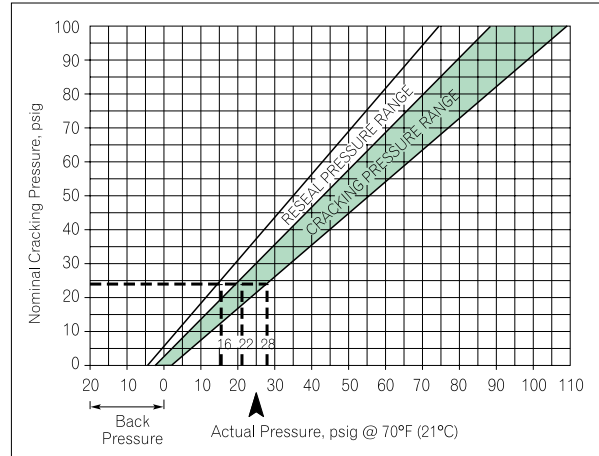
All dimensions in millimeters. Dimensions shown with Hy - Lok nuts in finger - tight position, where applicable.

Materials of Construction



No.	Component	Valve Body Materials	
		Material Grade / ASTM Specification	
1	Inlet Body	TP316 / A479 or A276	BRASS
2	Poppet	TP316 / A479 or A276	BRASS
3	O-Ring	FKM	
4	Spring	SS302	
5	Outlet Body	TP316 / A479 or A276	BRASS

Molybdenum dry film lubricant is used for outer body made of 316SS
Silicone based lubricant is used for poppet.



Cracking and Reseal Pressure

- From the graph, the actual cracking pressure of nominal 25psi is shown to range between 22psi to 28psi, and the reseal pressure 16psi to 22psi.

Back pressure may be required to reseal the valves with nominal cracking pressure of 5psi or lower.

- Cracking pressure : The upstream pressure at which the first indication of flow occurs.
- Reseal pressure : The upstream pressure at which there is no indication of flow.

Flow Rate at 70°F (20°C)

