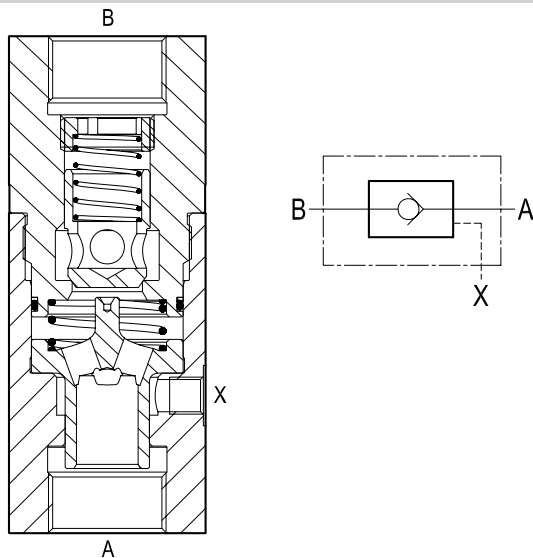


Pilot operated check valves Single poppet type

OV Series



Description

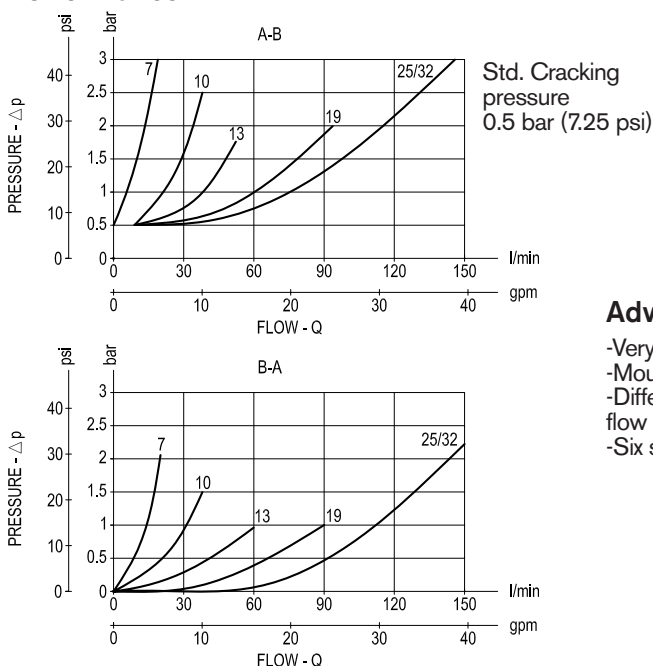
Flow is always allowed to pass from A to B when pressure at A rises above the spring bias pressure and the poppet is pushed from the seat. The valve is normally closed (checked) from B to A; when sufficient pilot pressure is present at Pil port (X), the annular pilot area pushes the poppet from its seat and flow is allowed from B to A. Precision machining and hardening process allow virtually leak-free performance in the checked condition. The valve is available in different sizes and versions for different flow ranges, as specified by the tables of the Technical data, Performance diagrams and Dimensions.

Technical data

Code	Pressure P max bar (psi)	Flow Q max l/min (gpm)	Weight kg (lbs)	Pilot ratio
OV 7	350 (5000)	15 (4)	0.75 (1.65)	14 : 1
OV 10	350 (5000)	35 (9)	1.04 (2.29)	5 : 1
OV 13	350 (5000)	50 (13)	1.42 (3.13)	5 : 1
OV 19	250 (3600)	100 (26)	2.3 (5.1)	3.2 : 1
OV 25	250 (3600)	150 (40)	4.3 (9.5)	3.2 : 1
OV 32	250 (3600)	150 (40)	4.5 (9.9)	3.2 : 1

Steel body, zinc plated

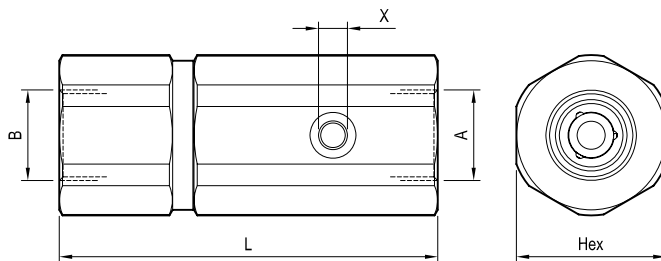
Performance



Advantages

- Very compact design and inline mounting for space saving.
- Mounting position is unrestricted.
- Different values of cracking pressure are available for A-B flow (see the relevant table).
- Six sizes provide great adaptability to the system.

Dimensions



Ports size / Dimensions

Code	Ports size		Hex mm (inches)	L mm (inches)
	A-B	X		
OV 7	G 1/4	G 1/4	36 (1.42)	98 (3.86)
OV 10	G 3/8	G 1/4	41 (1.61)	106 (4.17)
OV 13	G 1/2	G 1/4	46 (1.81)	119 (4.69)
OV 19	G 3/4	G 1/4	55 (2.17)	139 (5.47)
OV 25	G 1	G 1/4	70 (2.76)	169 (6.65)
OV 32	G 1-1/4	G 1/4	70 (2.76)	177 (6.97)

Applications

Ideal to lock cylinders in a leak free mode in order lock or clamp loads. They are non-modulating ON-OFF valves suitable for holding applications, but unsuitable to control the motion of overrunning loads which would cause a loss of pilot pressure. They should not be used for paired cylinders and, when fitted to the cylinder annular chamber, the valve pilot ratio should be significantly higher than the cylinder ratio. In case of doubt, please consult us.

Ordering code

OV		/	
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series 7	= 7
series 10	= 10
series 13	= 13
series 19	= 19
series 25	= 25
series 32	= 32

= Cracking pressure (only bar value see below)

	OV 7	OV 10	OV 13	OV 19	OV 25
Cracking pressure free flow bar (psi)	4 (58)	4 (58)	4 (58)	4 (58)	4 (58)
		5 (72.5)	5 (72.5)	8 (116)	8 (116)
				15 (217.5)	10 (145)

Do not specify for the standard pressure 0.5 bar (7.25 psi)

Note: The OV32 cracking pressure is 0.5 bar (7.25 psi)

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Note: The OV32 cracking pressure is 0.5 bar (7.25 psi)

Type	Material number	Type	Material number	Type	Material number
OV 7	R932500363	OV 19/8	R932006936		
OV 7/4	R932006931	OV 19/15	R932006937		
OV 10	R932500364	OV 25	R932500369		
OV 10/4	R932006932	OV 25/4	R932006938		
OV 10/5	R932006933	OV 25/8	R932006939		
OV 13	R932500366	OV 25/10	R932006940		
OV 13/4	R932006934	OV 32	R932500370		
OV 13/5	R932006935				
OV 19	R932500367				
OV 19/4	R932500368				

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 Subject to change.