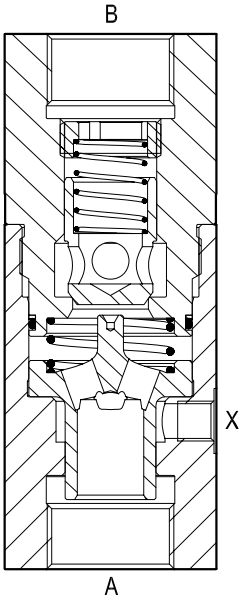
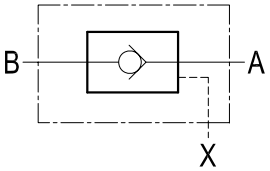
RE 18316-50/10.09

Pilot operated check valves

Single poppet type

OV Series





Description

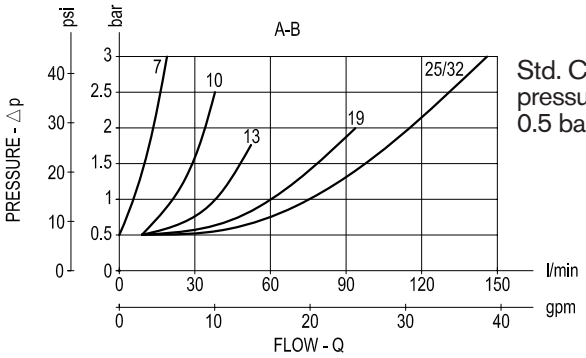
Flow is always allowed to pass from A to B when pressure at A rises above the spring bias pressure and the poppet is pushed from the seat. The valve is normally closed (checked) from B to A; when sufficient pilot pressure is present at Pil port (X), the annular pilot area pushes the poppet from its seat 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

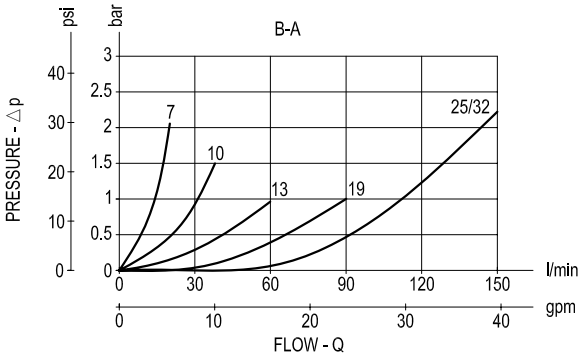
Code	Pressure **P** max bar (psi)	Flow **Q** max l/min (gpm)	Weight kg (lbs)	Pilot ratio
OV 7	350 (5000)	15 (4)	0.75 (1.65)	14 : 1
OV 10	350 (5000)	35 (9)	1.04 (2.29)	5 : 1
OV 13	350 (5000)	50 (13)	1.42 (3.13)	5 : 1
OV 19	250 (3600)	100 (26)	2.3 (5.1)	3.2 : 1
OV 25	250 (3600)	150 (40)	4.3 (9.5)	3.2 :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

Steel body, zinc plated

Performance



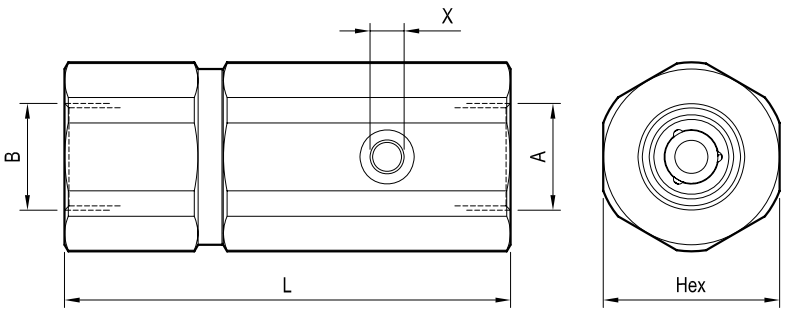
Std. Cracking pressure
0.5 bar (7.25 psi)



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		/	

= Cracking pressure (only bar value see below)

series 7	= **7**
series 10	= **10**
series 13	= **13**
series 19	= **19**
series 25	= **25**
series 32	= **32**

Cracking pressure free flow bar (psi)	OV 7	OV 10	OV 13	OV 19	OV 25
	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)

Type	Material number
OV 7	R932500363
OV 7/4	R932006931
OV 10	R932500364
OV 10/4	R932006932
OV 10/5	R932006933
OV 13	R932500366
OV 13/4	R932006934
OV 13/5	R932006935
OV 19	R932500367
OV 19/4	R932500368

Type	Material number
OV 19/8	R932006936
OV 19/15	R932006937
OV 25	R932500369
OV 25/4	R932006938
OV 25/8	R932006939
OV 25/10	R932006940
OV 32	R932500370

Type	Material number

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