

Flangeable elements with single or double acting Cross Piloted Check Valves

EDCM/EDCMF-VR

RE 18301-46

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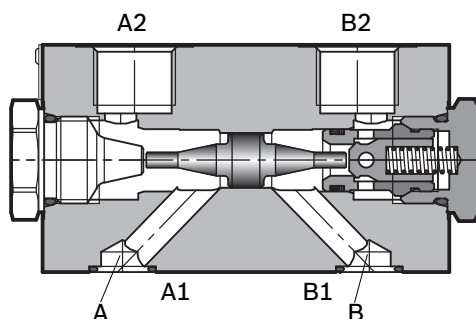
Description

These secondary flangeable elements can be interfaced and bolted on top of the A and B ports of the ED elements of the directional valve assembly.

They incorporate two cross piloted check valve which allow free flow toward the A and B outlet ports, and lock in a leak free mode the flow returning from the actuator, until sufficient pilot pressure is built up in the opposite line and the check valve is opened.

Depending on the version selected (AB, or OA, or OB), the PO check valve is in both A and B ports, or in A port only, or in B port only (see hydraulic symbols).

The pilot ratio is 3:1, consequently, the pilot pressure needs to be at least 1/3, or 33% of the load induced pressure in the actuator before Check Valve opens, and oil can return to tank. The body of these elements is made of Yellow Zinc Plated (Cr+3) Cast Iron (CI). Hydraulic Ports A2 and B2 are size G3/8 or G1/2 or 3/4-16 UNF 2-B (SAE8).



Technical data

General		
Weight (AB, OA, OB version)	kg (lbs)	2.0 (4.4)
Ambient Temperature	°C (°F)	-20....+50 (-4....+122) (NBR seals)
Hydraulic		
Maximum pressure	bar (psi)	310 (4500)
Maximum flow	l/min (gpm)	70 (18.5)
Hydraulic fluid	Mineral oil based hydraulic fluids HL (DIN 51524 part 1).	
General properties: it must have physical lubricating and chemical properties suitable for use in hydraulic systems such as, for example:	Mineral oil based hydraulic fluids HLP (DIN 51524 part 2). For use of environmentally acceptable fluids (vegetable or polyglycol base) please consult us.	
Fluid Temperature	°C (°F)	-20....+80 (-4....+176) (NBR)
Permissible degree of fluid contamination	ISO 4572: $\beta_{x \geq 75} X = 10 \dots 12$ ISO 4406: class 19/17/14 NAS 1638: class 8	
Viscosity range	mm ² /s	5....420

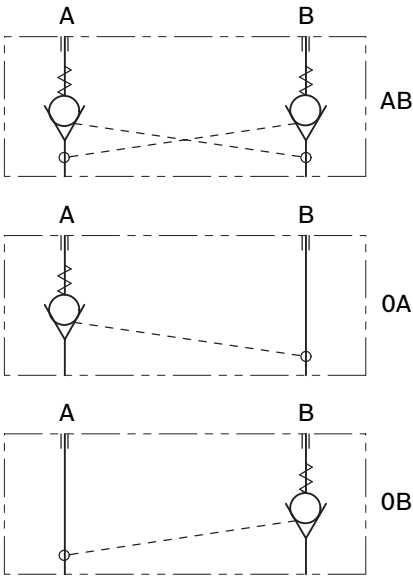
Note

For applications with different specifications consult us.

Ordering details

01	02	03	04	05	06	07
L	85	41			00	0
Family						
01	Directional Valve					L
Model						
02	Flangeable element for EDC valves					85
Type						
03	Cross Piloted Check Valves					41
Configuration						
04	Check Valves for both A and B ports					00AB
	Check Valve for port A only					000A
	Check Valve for port B only					000B
Cracking Pressure						
05	0.5 bar (7.3 psi)					01
	5 bar (72,5 psi)					05 ¹⁾
Ports						
06	G 3/8 DIN 3852					0
	G 1/2 DIN 3852					2
	3/4" - 16 UNF - SAE8					3
	Machined for interfacing to modular elements					M
Additional fixtures						
07	Standard					0

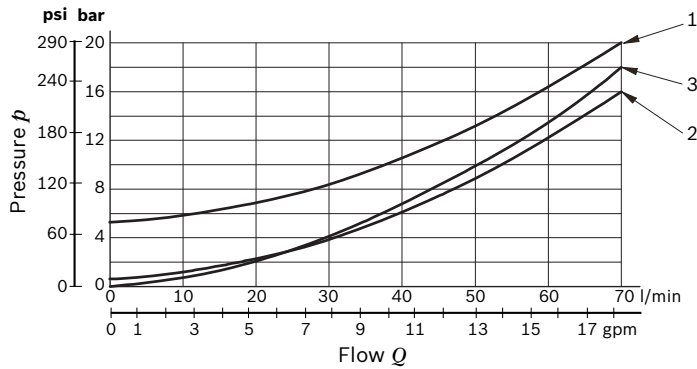
Symbols



1) Recommended version for EDC-P (RE18301-09)

Characteristic curves

Pressure relieving



Cracking pressure	Curve no.
5 bar (72,5 psi) free flow either A1 > A2 or B1 > B2	1
0.5 bar (7.3 psi) free flow either A1 > A2 or B1 > B2	2
Returning flow, fully piloted, either A2 > A1 or B2 > B1	3

Measured with hydraulic fluid ISO-VG32 at 45° ±5 °C
(113° ±9 °F); ambient temperature 20 °C (68 °F).

Technical drawing of a mechanical part, showing four views (1, 2, 3, 4) and dimensions in millimeters (mm) and inches (in).

View 1 (Top View): Shows the top of the part. Dimensions include overall width 119 (4.69), overall height 58 (2.28), and a central rectangular feature with width 104 (4.09) and height 7 (0.28). There are four holes with diameters $\varnothing 8$ (0.35) and $\varnothing 5.2$ (0.20), each with a quantity of 4. A small feature is labeled 1).

View 2 (Front View): Shows the front of the part. Dimensions include overall width 58 (2.28), overall height 27 (1.06), and a central circular feature with diameter $\varnothing 25$ (0.98). A small feature is labeled 2).

View 3 (Side View): Shows the side of the part. Dimensions include overall width 28.5 (1.12), overall height 45 (1.77), and a central circular feature with diameter $\varnothing 30$ (1.18). A small feature is labeled 3).

View 4 (Bottom View): Shows the bottom of the part. Dimensions include overall width 119 (4.69), overall height 33 (1.30), and a central rectangular feature with width 104 (4.09) and height 7 (0.28). There are four holes with diameters $\varnothing 8$ (0.35) and $\varnothing 5.2$ (0.20), each with a quantity of 4. A small feature is labeled 4).

Material and Thread Specifications: The part is made of SAE8 - 3/4-16"UNF. The thread is specified as $\varnothing 20.6$ (0.81) and $\varnothing 30$ (1.18).

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|---|--|
| <p>1 Four through holes Ø 5.2 mm (0.205 inch) for screw and tightening torques see data sheet RE 18301-90.</p> <p>2 A and B ports for the actuator.</p> | <p>3 Identification label.</p> <p>4 Machined for interfacing to modular elements (=M ports version).</p> |
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Subject to change.