

# Flangeable elements with single or double acting Cross Piloted Check Valves

EDM-VR

**RE 18301-40**

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Replaces: 07.2012



## Description

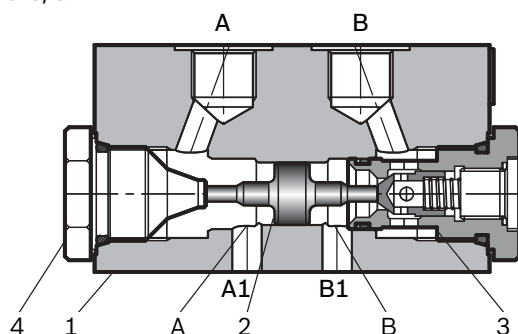
The secondary flangeable elements EDM-VR-\_\_ can be interfaced and bolted on top of the A and B ports of the ED elements of the Directional Valve Assembly.

They incorporate two Cross Piloted Check Valves 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 4:1, consequently, the pilot pressure needs to be at least 1/4, or 25% of the load induced pressure in the actuator before the Check Valve opens, and oil can return to tank.

The body of the EDM-VR- elements is made of Black Anodized Aluminium (AL). Hydraulic Ports A2 and B2 are size G 3/8.



## Technical data

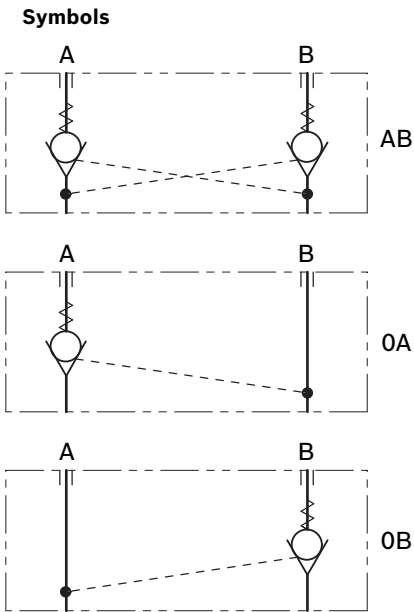
General		
Weight	kg (lbs)	0.8 (1.76)
EDM-VR AB and A/B		
Ambient Temperature	°C (°F)	-20....+50 (-4....+122) (NBR seals)
Hydraulic		
Maximum pressure	bar (psi)	250 (3625)
Maximum flow	l/min (gpm)	50 (13.2)
Hydraulic fluid	Mineral oil based hydraulic fluids HL (DIN 51524 part 1).	
General properties: 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: $\beta_{x \geq 75} X = 12 \dots 15$ ISO 4406: class 20/18/15 NAS 1638: class 9	
Viscosity range	mm <sup>2</sup> /s	5....420

## Note

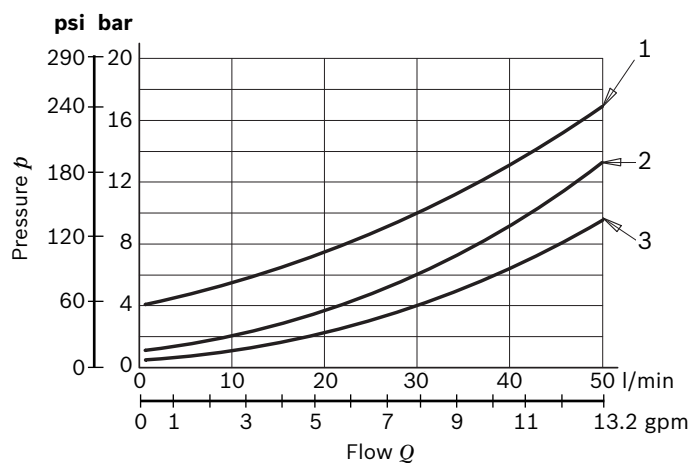
For applications with different specifications consult us

Ordering details

01	02	03	04	05	06
L	88	40			000
Family					
01	Directional Valve elements ED				L
Model					
02	Flangeable element secondary valves				88
Type					
03	Cross Piloted Check Valves				40
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
	4 bar (58 psi)				04
Ports					
06	G 3/8 DIN 3852				0



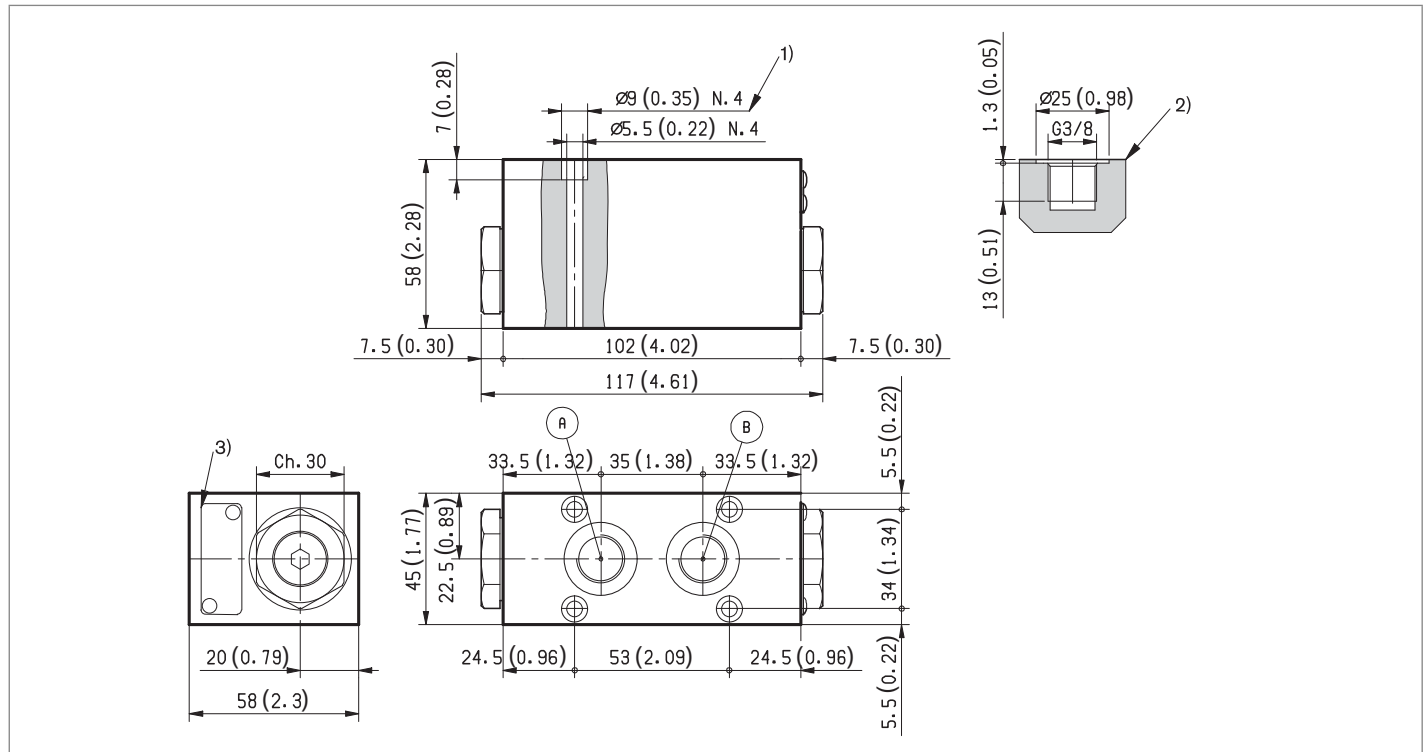
## Characteristic curves



Cracking pressure	Curve no.
4 bar (58 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  $45^\circ \pm 5^\circ \text{C}$   
 $(113^\circ \pm 9^\circ \text{F})$ ; ambient temperature  $20^\circ \text{C}$  ( $68^\circ \text{F}$ ).

## External dimensions and fittings



- 1 Four through holes  $\varnothing 5.5$  mm (0.217 inch) for screws and tightening torques see data sheet RE 18301-90.
- 2 A and B ports for the actuator.
- 3 Identification label.

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Subject to change.