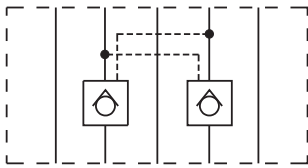


KRACHT



Pilot operated check valve  
VJR2-10/M

# Pilot operated check valve VJR2-10/M



- Pilot operated check valves for use in sticking assemblies
- 3 models
  - double valve with check valves in lines A and B

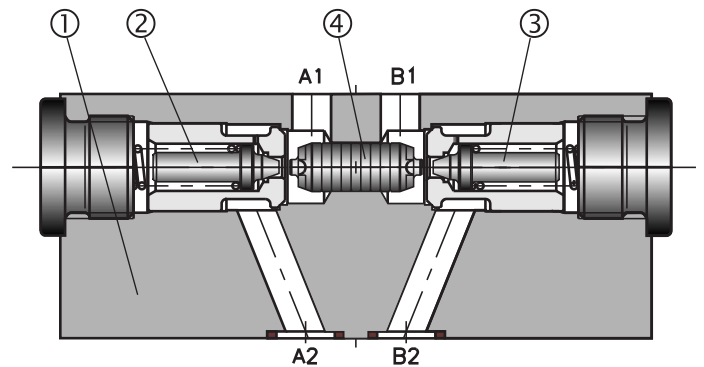
- single valve with check valves in line A
- single valve with check valves in line B

- Installation dimensions to ISO 4401-05-04-0-94 and DIN 24 340-A10

## Konstruktionsbeschreibung

A pilot operated check valve closes tightly the hydraulic circuit between the valve and the actuator. The valve basically consists of the housing (1), one or two check valves (2), (3) and the pilot piston (4). The main poppets of the check valves are provided with pilot poppets (5) which enable opening the check valve under pressure. When fluid flows from A1 to A2 it opens the check valve (2) and at the same time shifts the Pilot piston (4) which opens by means of the pilot poppet (5) the check valve (3). When the pressure in channels A1 and B1 drops, the springs push the poppets onto the seats and the circuit

between the check valve and the actuator is closed under pressure. To ensure that the check valves close tightly, a directional valve with functional symbol Y is to be used, which connects in its middle position the ports A1 and B1 with tank T (see typical circuit diagram). The basic surface treatment of the valve housing (1) is phosphate coated, whereas the other parts are zinc coated.



## Ordering Code

**EXAMPLE** **VJR2 - 10 / M** . . .

Pilot operated check valve	Norminal size	Modular design	Sealing no design. V	Standard (NBR) Viton (FPM)
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**Functional symbols**

**A**  
valve in line A

TA1 A1 P1 B1 TB1  
TA2 A2 P2 B2 TB2

**B**  
valve in line B

TA1 A1 P1 B1 TB1  
TA2 A2 P2 B2 TB2

**C**  
valves in lin A and B

TA1 A1 P1 B1 TB1  
TA2 A2 P2 B2 TB2

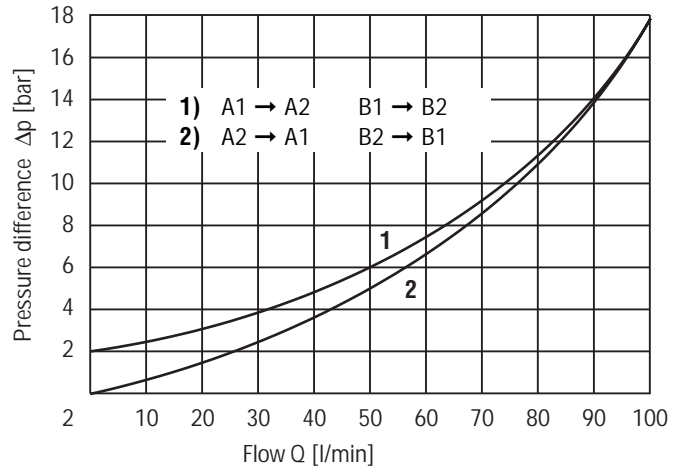
① valve-side    ② subplate-side

**Typical circuit**

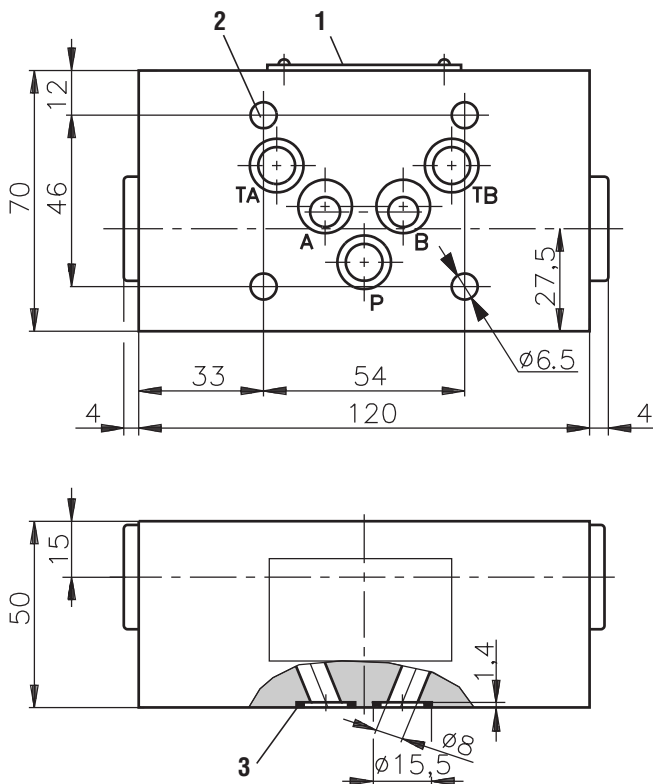
## Technical Data

Norminal size:	10 mm
Maximum flow rate:	100 l/min / 26.42 US gpm
Max. operating pressure:	320 bar / 4641 psi
Cracking pressure:	2 bar / 29 psi
Hydraulik fluid:	Hydraulik fluid of power classes HM, HV to CETOP PR 91 H in viscosity classes ISO VG 32, 46 and 68.
Fluid temperature range for standard sealing (NBR)	-30... +80 ° C / -22... +176° F
Viscosity range	10... 400 mm <sup>2</sup> /s <sup>-1</sup>
Maximum degree of fluid contamination:	Class 18/15 according to ISO 4406. Therefore we recommend a filter with a retention rate $\beta_{10} \geq 75$ .
Area ratio (pilot piston/ check valve seat):	5,6 : 1
Wight:	3 kg / 6.61 lb

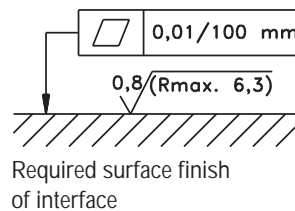
## $\Delta p$ -Q Characteristic Measured at $v = 35 \text{ mm}^2/\text{s}$ and $t = 40 \text{ }^\circ\text{C}$



## Valve Dimensions in mm (in brackets)



- 1 Name plate
- 2 4 through mounting holes
- 3 Sealing rings (5 pcs) supplied in each valve  
Standard (NBR) Square ring 12,42 x 1,68  
Viton (FPM) Square ring 12,42 x 1,78



## Caution!

The packing foil is recyclable. The protecting plate can be returned to the manufacturer. Tightening torque of the screws is 11.13 lb.ft (15 Nm). The technical information regarding the product presented in this catalogue is for descriptive purpose only. It should not be construed in any case as a guaranteed representation of the product properties in the sense of the law.

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