

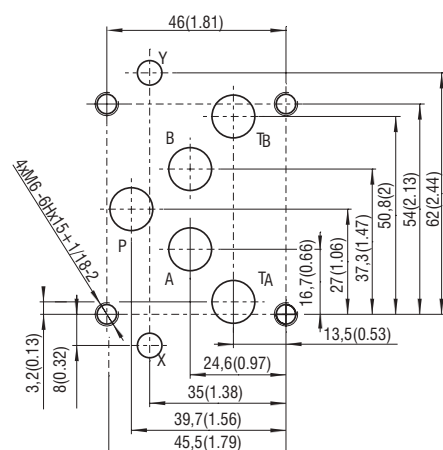
# Pilot to Open Operated Check Valve, Poppet Type, Modular

**VJR3-10/M**

Size 10 (D05) •  $Q_{max}$  140 l/min (37 GPM) •  $p_{max}$  350 bar (5100 PSI)

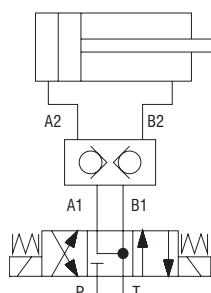


ISO 4401-05-04-0-05



Ports P, A, B, T - max.  $\varnothing$ 11.2 mm (0.44 in)

Typical circuit with pilot operated check valve



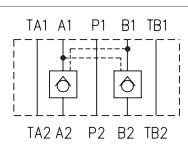
## Technical Features

- › Pilot to open operated check valve, poppet type with subplate mounting surface acc. to ISO 4401, DIN 24340 (CETOP 05) standards
- › Sandwich plate design for use in vertical stacking assemblies
- › Sharp-edged ground steel seats for dirt-tolerant performance
- › Leak-free closing and suitable for fast cycling with long life
- › High flow capacity
- › Valve is fitted with decompression stage facilitating steady opening without pressure peaks
- › In the standard version, the valve housing is phosphated and steel parts zinc coated for 240 h protection acc. to ISO 9227

## Functional Description

The valve allows flow to pass from port A(B)1 to A(B)2 while normally closing flow from A(B)2 to A(B)1 with load. When pressure is applied at pilot port. The flow passes from port 2 to 1. The valve has a 6:1 pilot ratio. The check valve is also spring closed to secure holding position in static conditions without the load. The valve is offered with optional bias spring ranges for back-pressure control.

Symbol

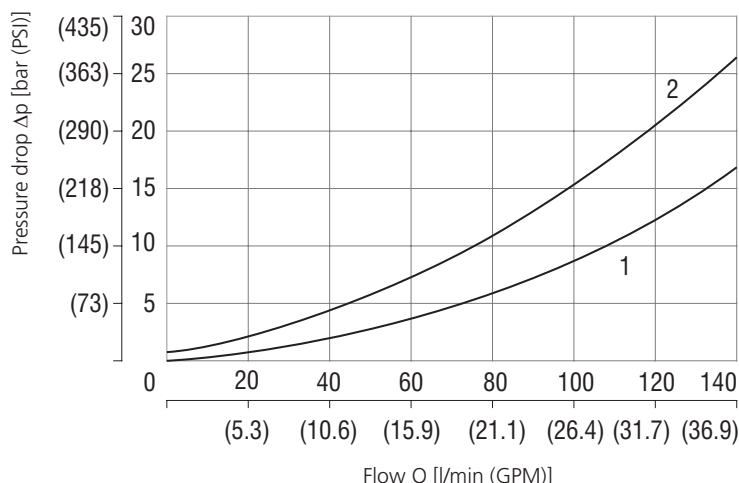


## Technical Data

| Valve size                    |             | 10 (D05)                          |
|-------------------------------|-------------|-----------------------------------|
| Max. flow                     | l/min (GPM) | 140 (37)                          |
| Max. operating pressure       | bar (PSI)   | 350 (5080)                        |
| Cracking pressure             | bar (PSI)   | 2 (29)                            |
| Fluid temperature range (NBR) | °C (°F)     | -30 .... +100 (-22 ... +212)      |
| Fluid temperature range (FPM) | °C (°F)     | -20 .... +120 (-4 ... +248)       |
| Pilot ratio                   |             | 6:1                               |
| Weight                        | kg (lbs)    | 2.2 (4.85)                        |
|                               | Datasheet   | Type                              |
| General information           | GI_0060     | products and operating conditions |
| Mounting interface            | SMT_0019    | Size 10                           |
| Spare parts                   | SP_8010     |                                   |

**Characteristics** measured at  $v = 32 \text{ mm}^2/\text{s}$  (156 SUS)

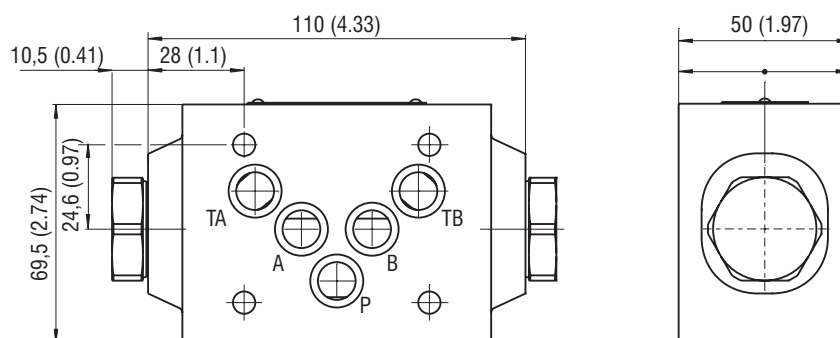
Pressure drop related to flow rate



|   | Flow direction |
|---|----------------|
| 1 | A1→A2 (B1→B2)  |
| 2 | A2→A1 (B2→B1)  |

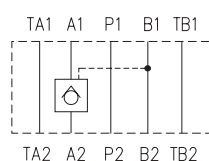
## Dimensions in millimeters (inches)

### Model "C,,

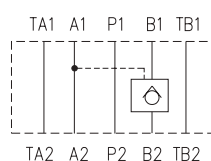


## Functional symbols

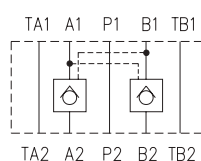
### VJR3-10/MA



### VJR3-10/MB



### VJR3-10/MC



① valve side

② subplate or manifold side

**Notes:** The orientation of the symbol on the name plate corresponds with the valve function.

## Ordering Code

VJR3-10 / M

Check valve, pilot to open, poppet type, modular

Valve size

Modular sandwich plate design

Functional symbols

Check valve in line A  
Check valve in line B  
Check valve in line A and B

Pilot ratio

6:1

A  
B  
C

6

No designation

A  
B

Surface treatment

body phosphated, steel parts  
zinc-coated (ZnCr-3), ISO 9227 (240 h)  
zinc-coated (ZnCr-3), ISO 9227 (240 h)  
zinc-coated (ZnNi), ISO 9227 (520 h)

No designation  
V

Seals

NBR  
FPM (Viton)

Cracking pressure

2.0 bar (29 PSI)

020