

Check Valve, Poppet-type, Pilot to Open, Modular

VJR1-04/M

Size 04 (D02) • Q_{max} 20 l/min (5 GPM) • p_{max} 320 bar (4600 PSI)



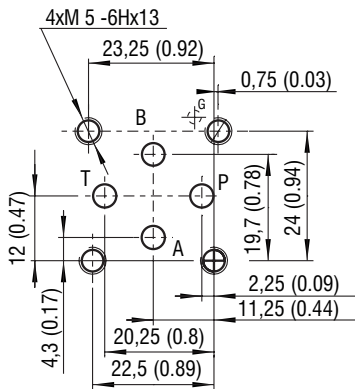
Technical Features

- › Pilot to open check valve, poppet-type with subplate mounting interface acc. to ISO 4401, DIN 24340 (CETOP 02)
- › Sandwich plate design for use in vertical stacking assemblies
- › Sharp-edged steel seats for dirt-tolerant performance
- › Leak-free closing, suitable for fast cycling with long life
- › High flow capacity
- › In the standard version, the valve housing is phosphated and steel parts are zinc-coated for 240 h protection acc. to ISO 9227

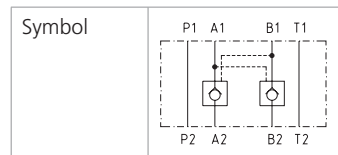
ISO 4401-02-01-0-05

Functional Description

The valve allows flow to pass from port A(B)1 to A(B)2 while normally under load inhibiting flow from A(B)2 to A(B)1. When pressure is applied at the pilot port, the valve is opened and flow passes from port 2 to 1. The valve has a 3:1 pilot ratio, meaning that at least one third of the load pressure must be applied to open the valve. The check valve is spring closed to secure the holding position in static conditions and without load.



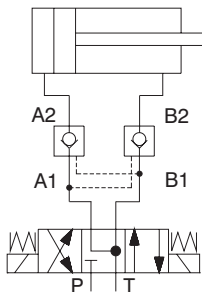
Ports P, A, B, T
max \varnothing 4.5 mm (0.18 in)



Technical Data

Valve size		04 (D02)
Max. flow	l/min (GPM)	20 (5.3)
Max. operating pressure	bar (PSI)	320 (4640)
Cracking pressure	bar (PSI)	1 (14.5)
Fluid temperature range (NBR)	°C (°F)	-30 +100 (-22 ... +212)
Fluid temperature range (FPM)	°C (°F)	-20 +120 (-4 ... +248)
Pilot ratio		3 : 1
Mass	kg (lbs)	0.7 (1.54)

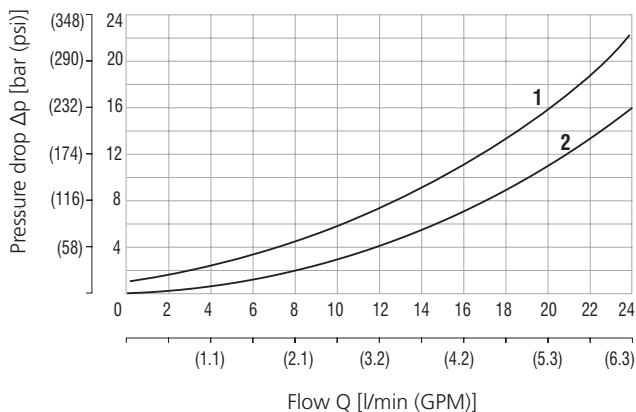
Typical circuit with pilot operated check valve



	Datasheet	Type
General information	GI_0060	Products and operating conditions
Mounting interface / tolerances	SMT_0019	Size 04
Spare parts	SP_8010	

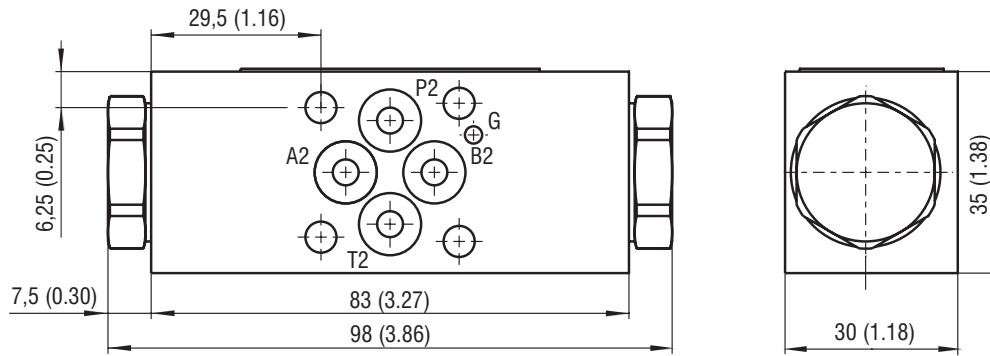
Characteristics measured at $v = 32 \text{ mm}^2/\text{s}$ (156 SUS)

Pressure drop related to flow rate



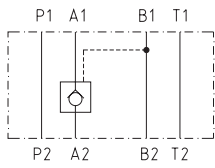
	Flow direction
1	A1 → A2 (B1 → B2)
2	A2 → A1 (B2 → B1)

Dimensions in millimeters (inches)

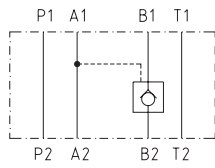


Functional symbols

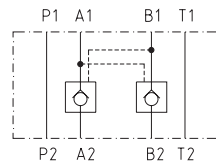
VJR1-04/MA



VJR1-04/MB



VJR1-04/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

VJR1-04 / 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

A
B
C

Pilot ratio
3 : 1

3

Surface treatment

No designation body phosphated, steel parts
 A zinc-coated (ZnCr-3), ISO9227 (240 h)
 B zinc-coated (ZnNi), ISO 9227 (520 h)

No designation
V

Seals
NBR
FPM (Viton)

Cracking pressure
1 bar (14.5 PSI)

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