Check Valve, Ball-type

VJO1-10/S  
Size 10 / M20x1.5  •  \( Q_{\text{max}} \) 80 l/min (21 GPM)  •  \( p_{\text{max}} \) 350 bar (5100 PSI)

**Technical Features**

- Hardened precision parts
- Sharp-edged steel seats for dirt-tolerant performance
- Leak-free closing, suitable for fast cycling with long life
- Compact design for limited installation space availability
- High flow capacity
- In the standard version, the valve is without surface coating

**Functional Description**

A hydraulic check valve in the form of a screw-in cartridge-style for use as a blocking or load-holding device. The cartridge has a ball check which is closed by spring until sufficient pressure is applied at port 1 to open flow to port 2.

**Technical Data**

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### Pressure drop related to flow rate

**Pressure drop \( \Delta p \) [bar (PSI)] vs. Flow \( Q \) [l/min (GPM)]**

- \( \Delta p = 2 \) bar (29 PSI) at \( Q = 10 \) l/min (0.95 GPM)
- \( \Delta p = 58 \) bar (843 PSI) at \( Q = 80 \) l/min (21.1 GPM)

**Valve size** 10 / M20x1.5

- **Max. flow** \( Q_{\text{max}} \) 80 l/min (21 GPM)
- **Max. operating pressure** 350 bar (5076 PSI)
- **Cracking pressure** 0.5 bar (7.25 PSI)
- **Fluid temperature range (NBR)** -30 °C (0°F) to +100 °C (+22°F to +212°F)
- **Fluid temperature range (FPM)** -20 °C (-4°F) to +120 °C (+4°F to +248°F)
- **Mass** 0.017 kg (0.038 lbs)

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

- **Datasheet**
  - **Type**
    - General information: GI_0060
    - Products and operating conditions: GI_0060
    - Spare parts: SP_8010

Subject to change · VJO1-10/S_5307_1en_02/2016
Check Valve, ball-type

Valve size

Screw-in

Thread
M20x1.5

Ordering Code

VJO1-10 / S

Seals
No designation
NBR
FPM (Viton)

Cracking pressure
0.5 bar (7.30 PSI)

Dimensions in millimeters (inches)

Cavity in millimeters (inches)

25 ± 2 Nm
(18.4 ± 1.5 ft-lbf)

20

8x3.5 (0.14)

M20x1.5

12.6 (0.5)

16.5 (0.65)

12 (0.47)

9 (0.35)

3max

1x45°