

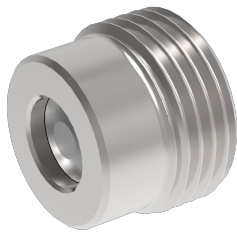
Lock valve

Spring-loaded non-return valve

$Q_{\max} = 50 \text{ l/min}$, $p_{\max} = 220 \text{ bar}$

ball type

Type series: RKVE-G-06-__-VD22



- Screw-in cartridge valve
- Unhardened cost optimized version
- Exceptionally high Q_{\max} with extremely low Δp
- No soft seal, thus not depending on temperature and pressure fluid
- Virtually leak-proof in closed condition

Description

The spherical poppet-type check valve of the RKVE-VD22 series is a cost-optimized alternative to the RKVE-VD for applications up to 220 bar. This series is characterized by very high pressure load capacity and extremely low Δp . Compared with the RKVE..., the permissible flow rate for the RKVE...-VD22 valve series has been increased by 50% for the same pressure differential. Valve seat, poppet and body are unhar-

dened. The valve has a cutting edge for metal-to-metal sealing. By eliminating the soft seal, the valve can be applied without regard to temperature and pressure fluid. The valves prevent flow in the screw-in direction (B to A) and open in the opposite direction. The valve is available in nominal sizes 04, 06, 08 and 10.

Symbol



Technical data

General characteristics	Description, value, unit
Function group	Lock valve
Function	Spring-loaded non-return valve
Design	Screw-in cartridge valve
Characteristic	ball type
Construction size	nominal size 06
Thread size	G 1/4"
Mounting attitude	unrestricted
Weight	0.007 kg
Tightening torque steel	20 Nm

Hydraulic characteristics	Description, value, unit
Maximum operating pressure	220 bar
Maximum flow rate	50 l/min
Nominal flow rate	25 l/min
Flow direction	see symbol
Hydraulic fluid	HL and HLP mineral oil according to DIN 51 524; other fluids on request!
Minimum fluid temperature	- 30 °C
Maximum fluid temperature	+ 120 °C
Viscosity range	10 ... 500 mm ² /s (cSt)
Minimum fluid cleanliness (cleanliness class according to ISO 4406:1999)	class 20/18/15
Opening pressure	0.2 / 0.5 / 1.0 bar



NOTE!

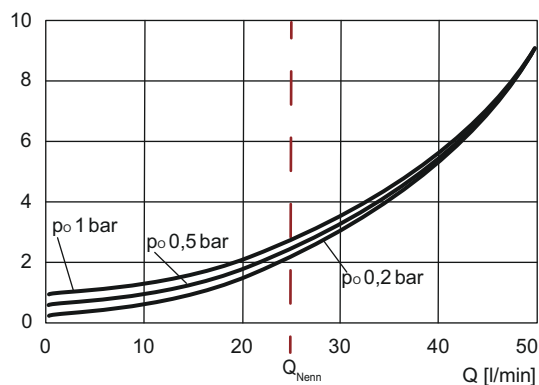
For other values please contact Bucher Hydraulics.

Performance graphs

measured with oil viscosity 33.0 mm²/s (cSt)

$\Delta p = f(Q)$ Pressure drop-flow rate characteristic

Δp [bar]



Ordering code

RKVE - G - 06 - 02 - VD22

- RKVE = check valve, screw-in type, spherical poppet
- G = whitworth pipe thread G1/4"
- 06 = nominal size 06, Q_{Nominal} 25 l/min
- 02 = opening pressure 0,2 bar (Item Number: 170648520)
- 05 = opening pressure 0,5 bar (Item Number: 170648521)
- 1 = opening pressure 1 bar (Item Number: 170648522)
- VD22 = unhardened and cost-optimized version for max. 220 bar

Related data sheets

Reference	Description
170-P-059000	Using nozzles or orifices before a Check Valve
170-P-051600	Mounting tool for check valves RKVE... and RV...
170-P-080011	Cavity REG-02-06

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