Lock valve
Spring-loaded non-return valve

Q_{max} = 120 l/min, p_{max} = 220 bar
ball type, soft sealing,
Type series: RKVE-G-10-__-WD22

- Screw-in cartridge valve
- Almost leakage-free sealing in the closed position.
- Compact cavity design
- Exceptionally high Qmax with extremely low Δp
- Noise reduction during the switching operation

Description

The soft-sealing ball check valve of the RKVE-WD22 series is designed for very low pressure losses and high operational reliability. Reliable sealing is achieved even at low differential pressures. The soft-sealing design ensures almost leak-free sealing, while external sealing of the valve is achieved by a metallic sealing edge. The hydraulic flow is blocked 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

General characteristics	Description, value, unit
Characteristic	ball type, soft sealing
Construction size	nominal size 10
Thread size	G 1/2”
Mounting attitude	unrestricted
Weight	0.025 kg
Tightening torque steel	50 Nm

Hydraulic characteristics	Description, value, unit
Maximum operating pressure	220 bar
Maximum flow rate	120 l/min
Nominal flow rate	80 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	+ 80 °C
Viscosity range	10 ... 500 mm²/s (cSt)
Minimum fluid cleanliness (cleanlineless class according to ISO 4406:1999)	class 17/15/12
Opening pressure	0.2 bar
Rate of pressure rise	max. 5000 bar/s

NOTE!
The permissible service life is 100,000 operating hours or 500,000 switching cycles, whichever limit is reached first. Application-specific limits can be determined upon request.

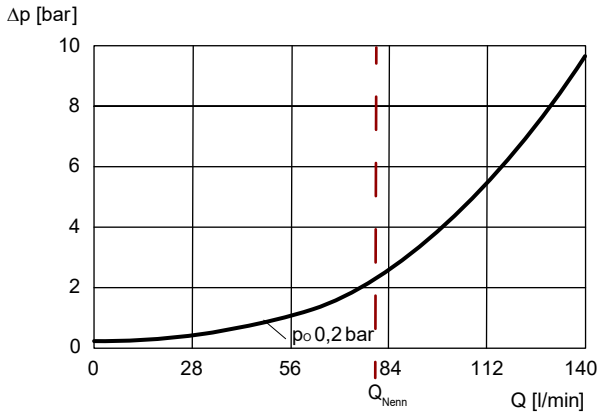
NOTE!
For other values please contact Bucher Hydraulics.

NOTE!
Further opening pressures on request.

Performance graphs

measured with oil viscosity 33.0 mm²/s (cSt)

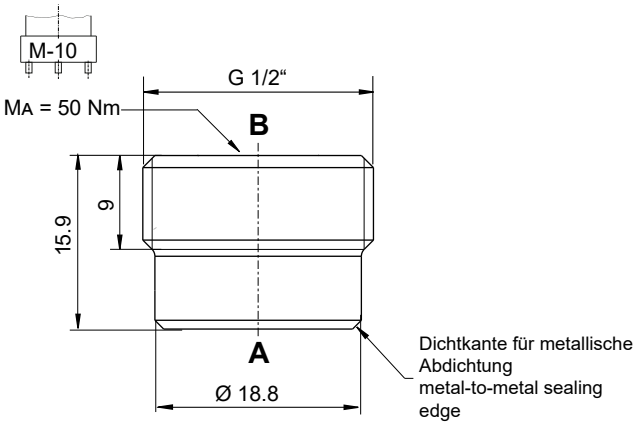
Δp = f (Q) Pressure drop-flow rate characteristic



Dimensions and sectional view

Beispiel für die Masseinheit:
Example for the dimensional units:
15.9 = 15.9 mm millimeter

Die angegebenen Maße gelten für den eingebauten Zustand.
The specified dimensions refer to the assembled condition.



Für Bohrungsform REG-02 / for bore type REG-02

Installation information

IMPORTANT!
When fitting the screw-in cartridge valve, use the specified tightening torque. The value can be found in the chapter "Technical data".
Orifices or nozzles are to be placed after the check valve. If this is not possible, a right-angled bore must be designated between the check valve and the nozzle. (see data sheet 170-P-059000).
Suitable fitting tools are available at Bucher Hydraulics (see data sheet 170-P-051600).

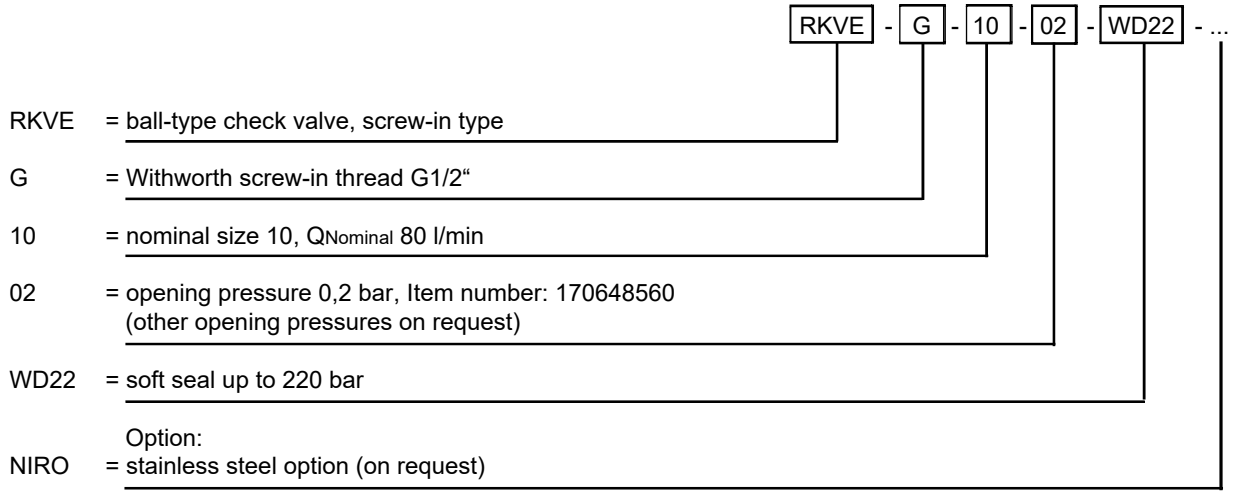
ATTENTION!
When fitting the valve, make sure that it is firmly seated on the sealing surface and that it is not deformed by the use of excessive force.

Application Notes

NOTE!
The maximum operating pressure must not be exceeded even when pressure peaks occur. In applications such as accumulator circuits, where sudden pressure can be applied to the valve in the free- flow direction, ensure that the specified flow ratings are not exceeded. Buyers bear the sole responsibility for ensuring that the valve is suitable for their applications and must be substantiated by trials or testing, if necessary.

ATTENTION!
The valves are only suitable for pressure relief in the opening direction to a limited extent. (if necessary, please consult Bucher Hydraulics).

Ordering code



Available in pipe-mounting body

Related data sheets

Reference	Description
170-P-051600	Mounting tool for check valves RKVE... and RV...
170-P-059000	Using nozzles or orifices before a Check Valve
170-P-080013	Cavity REG-02-10

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