

Lock valve Spring-loaded non-return valve

 $Q_{max} = 400 \text{ l/min}, p_{max} = 350 \text{ bar}$

ball type

Type series: RVVE-G-40-...



- Screw-in cartridge valve
- Compact construction
- High pressure rating
- Very small pressure rise
- High opening pressures
- Usable as preload valve

Description

The RVVE series check valve is characterized by very high opening pressures and very small pressure rise. This is reflected in the flat performance graph. The valve can be used as a preload valve. The spring-loaded spherical poppet-type check valve is very robust, extremely leak-proof and insensitive to contamination. Valve seat, poppet and body are

hardened. The properties of the sealing faces have been enhanced by precision mechanical processing. 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, 10, 16, 25, 32 and 40.

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 40 |



| General characteristics | Description, value, unit |
|-------------------------|--------------------------|
| Thread size | G 1 1/2" |
| Mounting attitude | unrestricted |
| Weight | 0.044 kg |
| Tightening torque steel | 300 Nm |

| Hydraulic characteristics | Description, value, unit |
|---|--|
| Maximum operating pressure | 350 bar |
| Maximum flow rate | 400 l/min |
| Nominal flow rate | 360 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 mm ² /s (cSt) |
| Minimum fluid cleanliness (cleanlineless class according to ISO 4406:1999) | class 20/18/15 |
| Opening pressure | 4/6/8/10/12 bar |



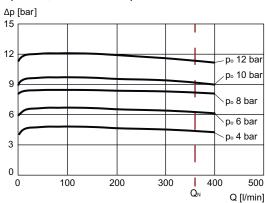
NOTE!

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



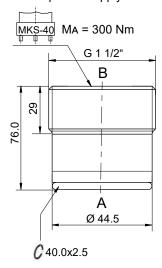
Reference: 170-P-051018-EN-03/06.2025



Dimensions and sectional view

RVVE-G-40

The dimensions specified apply to the mounted state.



For cavity REG-03

Installation information



NOTE!

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). Recommendation: before installing the valve, fit the O-ring in the cavity. 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.

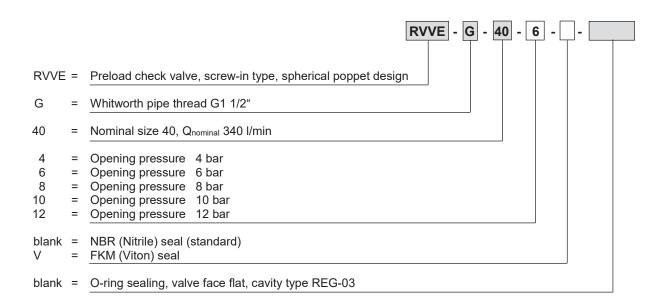


ATTENTION!

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



Ordering code



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-080027 | Cavity REG-03-40 |

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