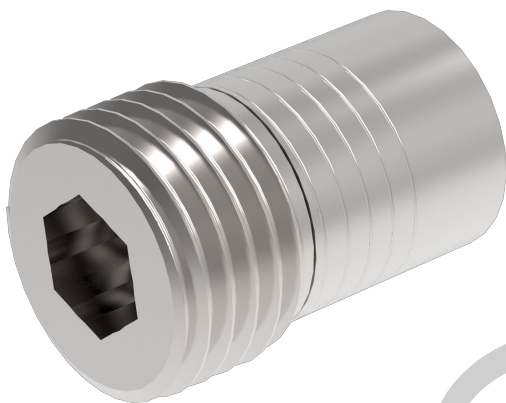


# Lock valve

## Spring-loaded non-return valve

$Q_{\max} = 80 \text{ l/min}$ ,  $p_{\max} = 250 \text{ bar}$   
plate type,  
Type series: RVG-G-10-...



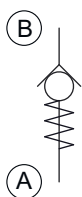
- Screw-in cartridge valve
- Particularly suitable for use as a make-up check valve
- Virtually leak-proof in closed condition
- High pressure rating

### Description

The RVG series plate-type check valve is virtually leak-free. Due to its fast response, it can be used as a make-up check valve. The spring-loaded poppet-type check valve in plate design is very robust, extremely leak-proof and insensitive to contamination. Valve seat, plate and body are hardened. The properties of

the sealing faces have been enhanced by precision mechanical processing. The valve has a cutting edge for metal-to-metal sealing. The valves prevent flow in the screw-in direction (A to B) 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
Product status	Phase-Out
Alternative product	<a href="#">RKVG-G-10-... (170-P-051104)</a>
Function group	Lock valve
Function	Spring-loaded non-return valve
Design	Screw-in cartridge valve
Characteristic	plate type
Construction size	nominal size 10
Thread size	G 1/2"
Mounting attitude	unrestricted
Weight	0.023 kg
Tightening torque steel	60 Nm

Hydraulic characteristics	Description, value, unit
Maximum operating pressure	250 bar
Maximum flow rate	80 l/min
Nominal flow rate	50 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 <sup>2</sup> /s (cSt)
Minimum fluid cleanliness (cleanliness class according to ISO 4406:1999)	class 20/18/15
Opening pressure	0.2...0.3 bar



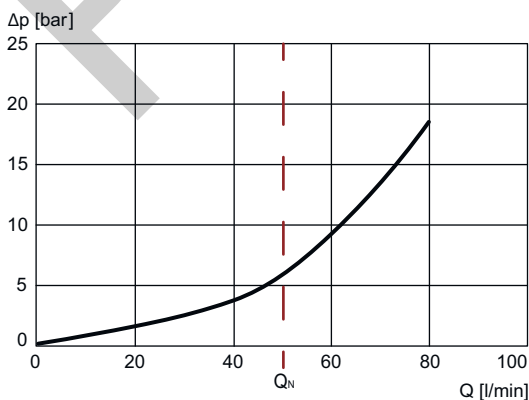
**NOTE!**

For other values please contact Bucher Hydraulics.

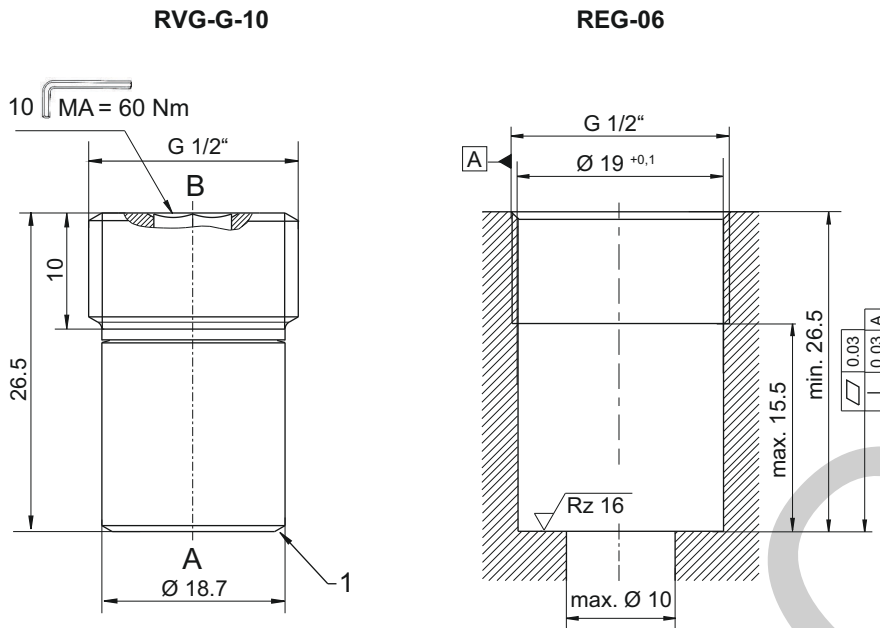
Performance graphs

measured with oil viscosity 33.0 mm<sup>2</sup>/s (cSt)

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



Dimensions and sectional view



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). 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. In dynamic accumulator circuits, internally damped valves of series RSVG should be used.



**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

Ex. RVG - G - 10 - 03

RVG = check valve, plate design, screw-in cartridge valve  
(no-flow direction opposite to screw-in direction)

G = whitworth pipe thread G1/2"

10 = nominal size 10, Q<sub>Nominal</sub> 50 l/min

03 = opening pressure 0.2 up to 0.3 bar (Item no.: 170209529)

Related data sheets

Reference	Description
<a href="#">170-P-059000</a>	Using nozzles or orifices before a Check Valve

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