

# Lock valve

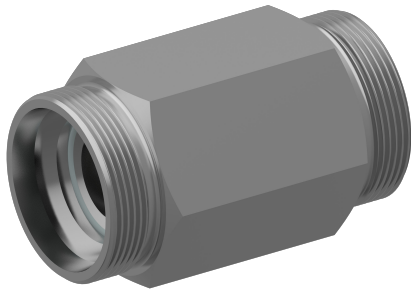
## Spring-loaded non-return valve

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$Q_{\max} = 400 \text{ l/min}$ ,  $p_{\max} = 250 \text{ bar}$

ball type,

Type series: RVL42L-42L-...



- Pipe line mounting valve
- Compact construction
- High pressure rating
- Very small pressure rise
- High opening pressures
- Usable as preload valve

### Description

The RV\_L series check valve is specially designed for line-mounting installations. It is characterized by high opening pressures and incredibly low pressure rise. This is reflected in the flat performance graph. The valve can be used as a pre-load valve. The spring-loaded spherical poppet-type check valve is very robust, provides excellent sealing, and is highly

resistant to contamination. The valve seat, poppet, and housing are hardened, and the sealing surfaces are precision-machined. In operation, hydraulic flow is blocked in the screw-in direction (port A to port B) and is allowed in the reverse direction. Additional nominal sizes are available on request.

### Symbol



## Technical data

General characteristics	Description, value, unit
Function group	Lock valve
Function	Spring-loaded non-return valve
Design	Pipe line mounting valve
Characteristic	ball type
Construction size	nominal size 40
Thread size	M52×2
Mounting attitude	unrestricted
Weight	1,16 kg
Surface protection addition	Screw connection Zn12 thick-film passivated (CrVI-free)

Hydraulic characteristics	Description, value, unit
Maximum operating pressure	250 bar
Maximum flow rate	400 l/min
Nominal flow rate	140 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	2,5 / 4 bar



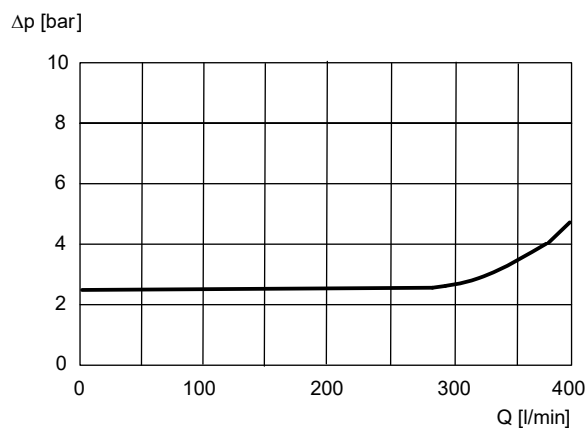
### NOTE!

For other values please contact Bucher Hydraulics.

## Performance graphs

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

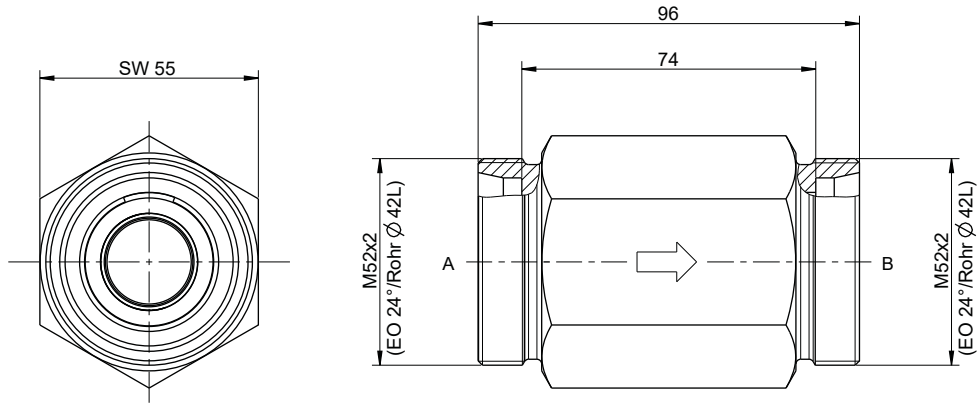
$\Delta p = f(Q)$  Pressure drop-flow rate characteristic



## Dimensions and sectional view

Beispiel für die Masseinheit:  
Example for the dimensional units:

96.0 = 96.0 mm millimeter



## Installation information



### NOTE!

When fitting the pipe line mounting valve, use the specified tightening torque. The value can be found in the chapter technical data.

## Application Notes



### NOTE!

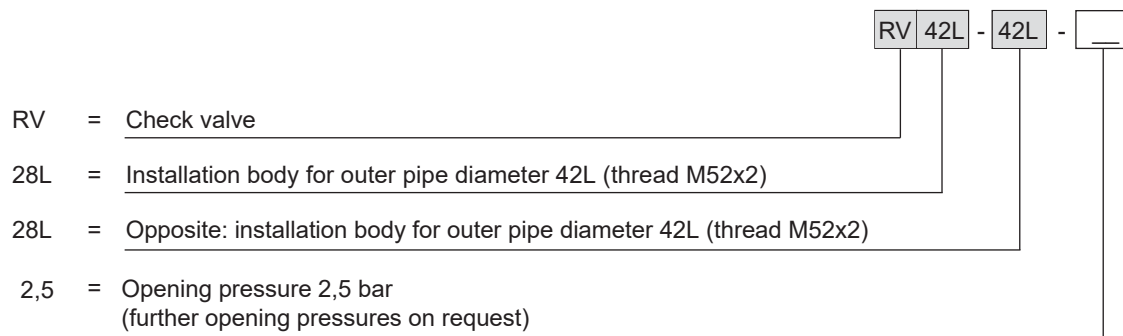
The maximum operating pressure must not be exceeded even when pressure peaks occur. In applications such as accumulator circuits, where sudden pressure can be applied to the valve in the free- flow direction, ensure that the specified flow ratings are not exceeded. Buyers bear the sole responsibility 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

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