

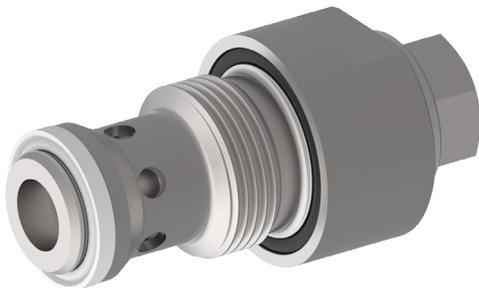
# Check valve

## Spring loaded check

$Q_{\max} = 120 \text{ l/min}$ ,  $p_{\max} = 350 \text{ bar}$

direct acting, poppet type

Type series: RVPA-10-...



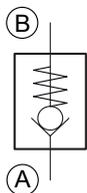
- Screw-in cartridge valve
- For cavity DC
- All external parts with zinc-nickel coating according to DIN EN ISO 19598
- Installation in threaded port body type DC-12
- High flow rates with low  $\Delta p$
- Seat tight shut-off
- Various opening pressures

### Description

The check valves, series RVP..., are size 10, screw-in valves with an M24x1,5 mounting thread. The poppet seat design ensures that the valves are leak-tight from B to A. Available are different types with a fixed opening pressure. All external parts of the screw-in valves are zinc-nickel plated, and are thus suitable for

use in the harshest operating environments. These valves are mainly used in mobile and industrial applications where leak-free shut-off in one direction is important. For self-assembly, please refer to the section related data sheets.

### Symbol



## Technical data

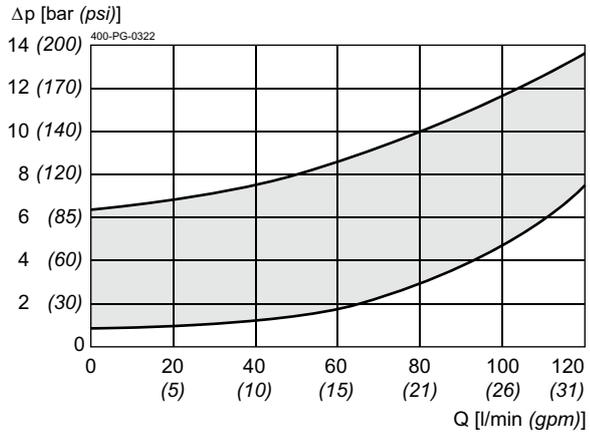
General Characteristics	Description, value, unit
Function group	Check valve
Function	Spring loaded check
Design	Screw-in cartridge valve
Controls	direct acting
Characteristic	poppet type
Construction size	nominal size 10
Thread size	M24×1,5
Mounting attitude	unrestricted
Weight	0.2 kg
Cavity acc. factory standard	For cavity DC
Tightening torque steel	65 Nm
Tightening torque aluminium	65 Nm
Tightening torque tolerance	± 10 %
Minimum ambient temperature	- 25 °C
Maximum ambient temperature	+ 80 °C
Surface protection	All external parts with zinc-nickel coating according to DIN EN ISO 19598
Available seal types	several seal types available, see ordering code
Seal kit order number	NBR: DS-044-N / FKM: DS-044-V

Hydraulic Characteristics	Description, value, unit
Maximum operating pressure	350 bar
Maximum flow rate	120 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	- 25 °C
Maximum fluid temperature	+ 80 °C
Viscosity range	10 ... 650 mm <sup>2</sup> /s (cSt)
Recommended viscosity range	15 ... 250 mm <sup>2</sup> /s (cSt)
Minimum fluid cleanliness (cleanliness class according to ISO 4406:1999)	class 20/18/15
Opening pressure	0.6 / 1.0 / 1.6 / 2.5 / 4.0 / 6.3 bar

## Performance graphs

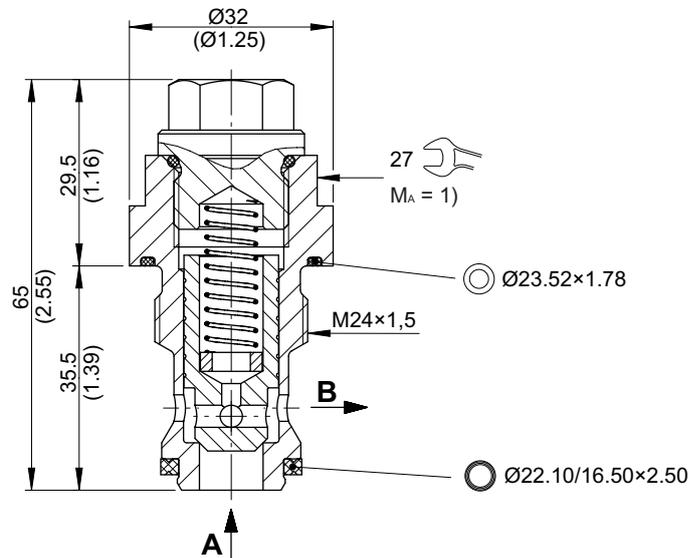
measured with oil viscosity 33.0 mm<sup>2</sup>/s (cSt)

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



## Dimensions and sectional view

**Beispiel für die Masseinheit:**  
**Example for the dimensional units:**  
0.79 = 0.79 mm millimeter  
(.031) = 0.031" inch



## Installation information



### NOTE!

1) When fitting the screw-in cartridge valve, use the specified tightening torque. The value can be found in the chapter "Technical data".



### NOTE!

The seals are not available individually. The seal kit order number can be found in the chapter "Technical data".



### ATTENTION!

Only qualified personnel with mechanical skills may carry out any maintenance work. Generally, the only work that should ever be undertaken is to check, and possibly replace, the seals. When changing seals, oil or grease the new seals thoroughly before fitting them.

## Ordering code

Ex. 

RV	P	A
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 - 

10
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06	_
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2
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- RV = check valve
- P = cartridge design
- A ... Q = standard model according to valid data sheet (*standard*)
- Z ... R = special model after consultation
- 10 = nominal size 10
- 06 = opening pressure 0.6 bar (*standard*)
- 10 = opening pressure 1.0 bar
- 16 = opening pressure 1.6 bar
- 25 = opening pressure 2.5 bar
- 40 = opening pressure 4.0 bar
- 63 = opening pressure 6.3 bar
- (blank) = NBR (nitril-butadien-rubber / BUNA) seals (*standard*)
- V = FKM (fluorocarbon rubber / VITON) seals  
(*special seals - please consult BUCHER*)
- 1 ... 9 = technical design no. (omit when ordering)

## Related data sheets

Reference	Description
400-P-040011	Form tools
400-P-060111	Cavity DC
400-P-740101	Threaded port body DC-12

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