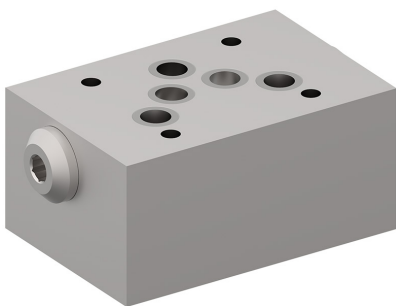


# Lock valve Pilot operated check valve

$Q_{max} = 120 \text{ l/min}$ ,  $p_{max} = 350 \text{ bar}$   
poppet type, hydraulic operation  
Type series: SRE-\_-10-...



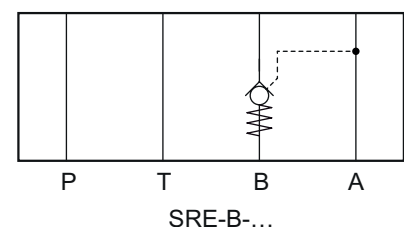
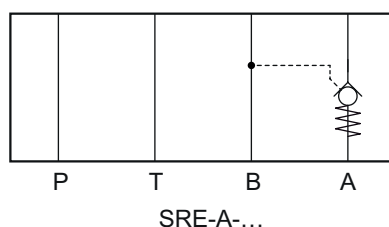
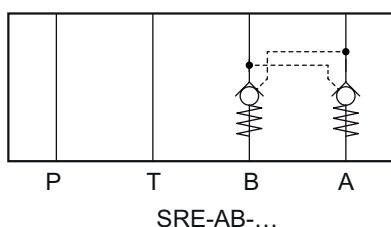
- Stack valve
- Interface to ISO 4401-05-04
- External parts of screw-in valves with zinc-nickel plating according to DIN EN ISO 19598
- Stack-mounting body with temporary corrosion protection
- Stackable valve elements
- High degree of flexibility due to the possibility of different combinations

## Description

The pilot operated check valves, series SRE..., are size 10, stack-mounting valves with interface to ISO 4401-05-04. The check function is cancelled by applying pilot pressure from the opposite side. The two-stage design with pre-opening prevents switching shocks when the

pressure volume is released. There are different versions available. These valves are mainly used in mobile and industrial applications, and provide high flexibility for stackable system solutions. For installation, please refer to the section related data sheets.

## Symbol



Technical data

General Characteristics	Description, value, unit
Function group	Lock valve
Function	Pilot operated check valve
Design	Stack valve
Controls	hydraulical operation
Characteristic	poppet type
Construction size	nominal size 10
Mounting attitude	unrestricted
Weight	3.10 kg
Interface according to	ISO 4401-05-04
Minimum ambient temperature	- 30 °C
Maximum ambient temperature	+ 80 °C
Surface protection	External parts of screw-in valves with zinc-nickel plating according to DIN EN ISO 19598
Surface protection	Stack-mounting body with temporary corrosion protection
Sealing material	see ordering code
Seal kit order number	NBR: DS-033-N / FKM: DS-033-V

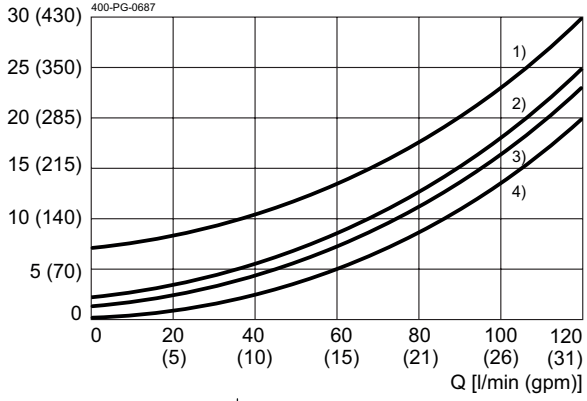
Hydraulic Characteristics	Description, value, unit
Maximum operating pressure	350 bar
Maximum flow rate	120 l/min
Flow direction	see symbol
Hydraulic fluid	HL and HLP mineral oil according to DIN 51 524; other fluids on request!
Minimum fluid temperature	- 30 °C
Maximum fluid temperature	+ 80 °C
Viscosity range	10 ... 650 mm <sup>2</sup> /s (cSt)
Recommended viscosity range	15 ... 250 mm <sup>2</sup> /s (cSt)
Geometric Differential Area Ratio	1:6
Opening pressure	1.5 / 2.5 / 7.0 bar





Performance graphs

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

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

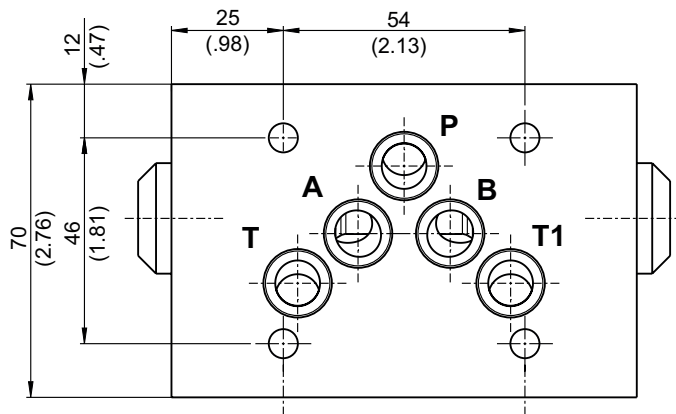
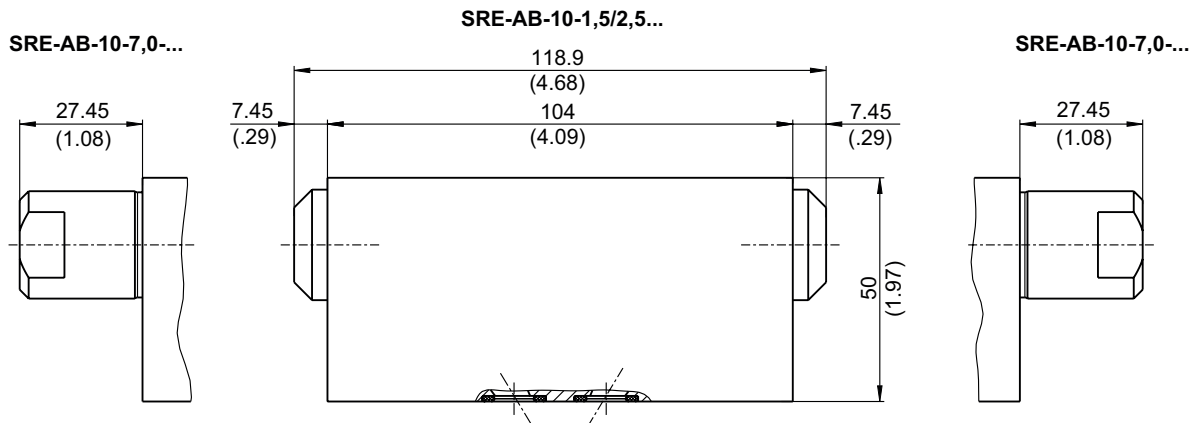
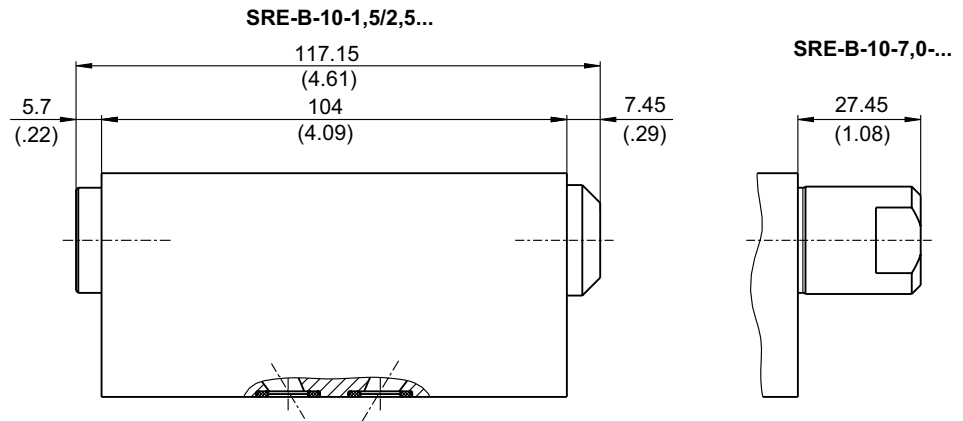
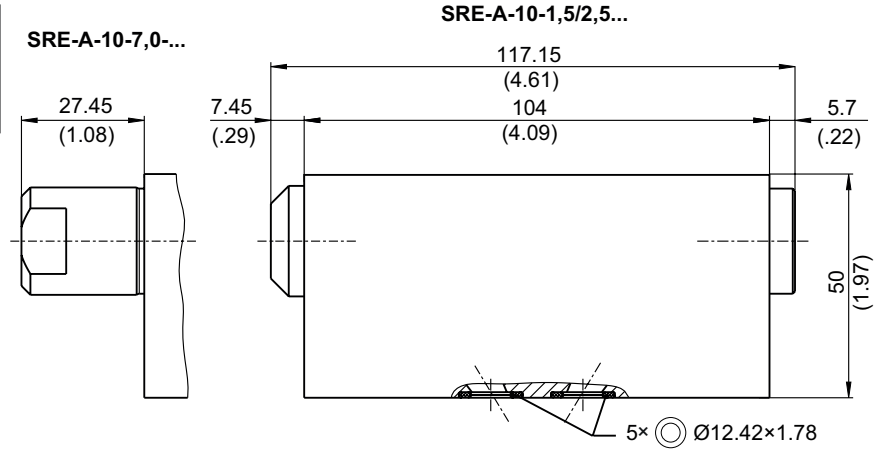
$\Delta p = [\text{bar (psi)}]$



- 1) Version 7,0 bar  Freier Durchfluss über Rückschlagventil/free flow direction
- 2) Version 2,5 bar  Freier Durchfluss über Rückschlagventil/free flow direction
- 3) Version 1,5 bar  Freier Durchfluss über Rückschlagventil/free flow direction
- 4)  Entsperrter Durchfluss gegen Rückschlagventil/pilot open reverse flow direction

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



### 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. **S** **RE** - **AB** - **10** - **1,5** - **\_** - **N** **A** **1**

- S = stack valve
- RE = pilot operated check valve
- A = check function in A
- B = check function in B
- AB = check function in A and B
- 10 = nominal size 10
- 1,5 = opening pressure 1.5 bar (standard)
- 2,5 = opening pressure 2.5 bar (on request)
- 7,0 = opening pressure 7.0 bar (on request)
- (blank) = temporary corrosion protection (standard)
- BZN = coating ZnNi (on request)
- N = NBR (nitril-butadien-rubber / BUNA) seals (standard)
- V = FKM (fluorocarbon rubber / VITON) seals  
(special seals - please contact BUCHER)
- A...Q = standard model - see relevant data sheets
- Z...R = special features - please consult BUCHER
- 1...9 = design stage (omit when ordering new units)

## Related data sheets

Reference	Description
400-P-050101	Interface ISO 05 (Size 10) according to ISO 4401-05-04

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