# Check valve, pilot operated

**RE 21549/07.05** 1/4 Replaces: 05.02

#### Type Z2SRK

Size 10 Component series 1X Maximum operating pressure 210 bar Maximum flow 80 l/min



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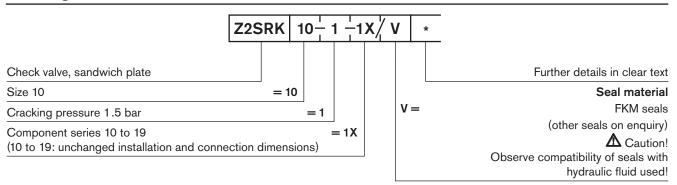
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#### **Features**

- Sandwich plate valve
- Position of ports to ISO 4401-05-04-0-94
- For the leak-free closure of two actuator ports

Information on available spare parts: www.boschrexroth.com/spc

#### Ordering code



### Function, section, circuit example, symbol ((1) = component side, (2) = plate side)

Isolator valve type Z2SRK is a pilot operated check valve of sandwich plate design.

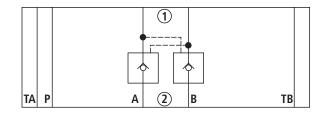
It is used for the leak-free closure of two actuator ports, even during longer periods of standstill.

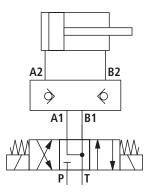
The oil can freely flow from A1 to A2 or B1 to B2, whereas in the opposite direction the flow is blocked.

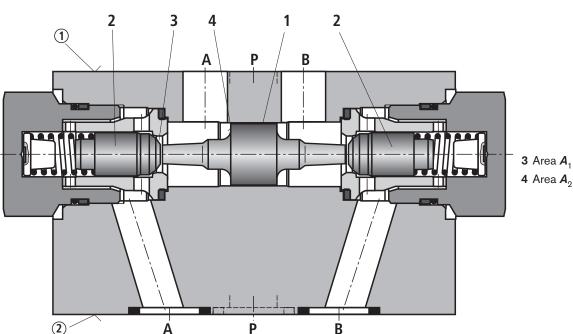
When fluid flows through the valve from A1 to A2 or B1 to B2,

spool (1) is pressurised and therefore shifted to the left or to the right, which causes poppet (2) to be pushed off its seat. Hydraulic fluid can now flow from B2 to B1 or from A2 to A1.

To allow safe closing of the valve poppets, the actuator ports of the directional valve must be unloaded to tank in the central position (see circuit example).







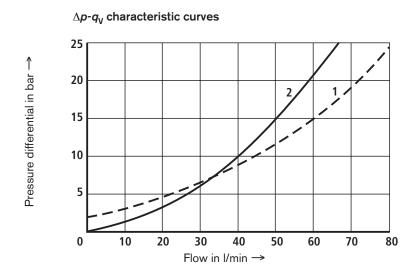
# Technical data (for applications outside these parameters, please consult us!)

General		
Weight	kg	approx. 3,2
Installation orientation		Optional
Ambient temperature range	°C	-20 to +80
Hydraulic		
Maximum operating pressure	bar	210
Cracking pressure in direction of free flow	bar	See characteristic curves below
Maximum flow	l/min	80
Direction of flow		See Symbol on page 2
Hydraulic fluid		Mineral oil (HL, HLP) to DIN 51524; fast bio-degradable hydraulic fluids to VDMA 24568 (see also RE 90221); HETG (rape seed oil); HEPG (polyglycols); HEES (synthetic esters); other hydraulic fluids on enquiry
Hydraulic fluid temperature range	°C	-20 to +80
Viscosity range	mm²/s	2.8 to 500
Max. permissible degree of contamination of the hydraulic fluid - cleanliness class to ISO 4406 (c)		Class 20/18/15 <sup>1)</sup>
Area ratio		$A_1/A_2 = 1/2.86$ (see sectional drawing on page 2)

<sup>1)</sup> The cleanliness class specified for components must be adhered to in hydraulic systems. Effective filtration prevents malfunction and, at the same time, prolongs the service life of components.

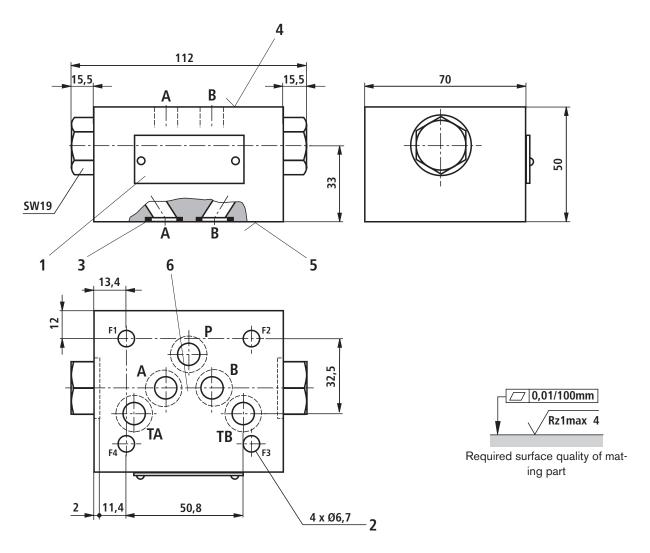
For the selection of filters, see data sheets RE 50070, RE 50076, RE 50081, RE 50086 and RE 50088.

# Characteristic curves (measured with HLP46, $\vartheta_{oil} = 40$ °C $\pm$ 5 °C)



- 1 Cracking pressure 1.5 bar
- 2 Across check valve insert (open)

#### Unit dimensions (nominal dimensions in mm)



- 1 Nameplate
- 2 Valve fixing bores
- 3 Identical seal rings for ports A, B, P, T
- 4 Component side
- 5 Plate side

Valve fixing screws (separate order)

4 socket head cap screws ISO 4762 - M6 - 10.9 (frictoon coefficient  $\,\mu_{total} = 0.14$ ); tightening torque  $M_T = 15.5$  Nm  $\pm$  10% (please adapt in the case of changed surfaces)

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