### MANNESMANN REXROTH

# Check valve, hydraulically pilot operated, Type Z2S 6, Series 6X

Size 6 up to 315 bar up to 60 L/min

RE 21 548/12.95

Replaces: 04.92

#### **Characteristics:**

- Sandwich plate valve
- Mounting pattern to DIN 24 340 Form A, ISO 4401 and CETOP-RP 121 H
- For leakage-free closure of one or two actuator ports, optional
- For use in sandwich stacking systems
- 3 different opening pressures, optional



к 3856/5 Type Z2S 6 -.-6X/...

### Function description, section

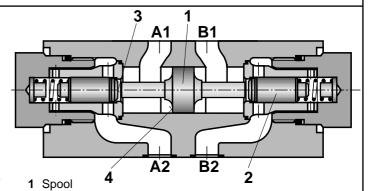
The isolating valve Z2S is a pilot operated check valve in sandwich plate design.

It is used for the leakage-free closure of one or two actuator ports even during long standstill periods.

There is free flow in direction A1 to A2 or B1 to B2 and in the opposite direction the flow is blocked.

If there is flow in the valve from A1 to A2 or B1 to B2 the spool (1) is effected. Thus the spool (1) is moved to the right or the left and pushes the poppet (2) off its seat. Now the pressure fluid may flow from B2 to B1 or from A2 to A1.

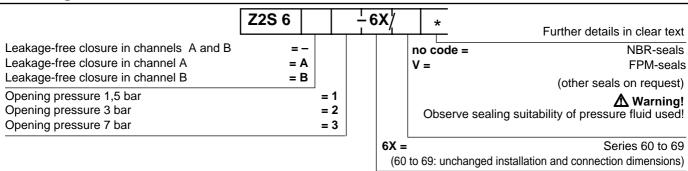
In order to enable the safe closure of the poppets (2) the actuator ports of the directional valve must be connected to tank when in the centre position (see circuit example).

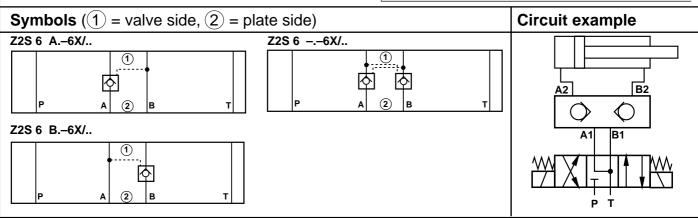


- 2 Poppet
- 3 Area A1
- 4 Area A2

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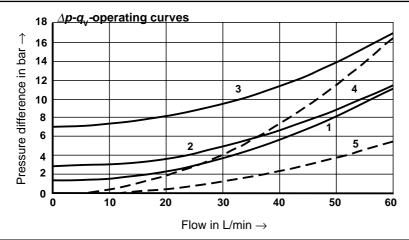
## **Ordering code**





Technical data (For application outside these parameters please consult us!)	
Pressure fluid	Mineral oil (HL, HLP) to DIN 51 524 1);
1) suitable for NBR- <b>and</b> FPM-seals 2) suitable <b>only</b> for FPM-seals	Fast bio-degradable pressure fluids to VDMA 24 568 (also see RE 90 221); HETG (rape seed oil) 1); HEPG (polyglycols) 2); HEES (synthetic ester) 2); other pressure fluids on request
Fluid cleanliness	Maximum permissible degree of contamination of pressure fluid NAS 1638 Class 9. We therefore reommend a filter with a minimum retention rate of $\mathcal{B}_{10} \ge 75$
Pressure fluid temperature range °C	-30 to +80 with NBR-seals
	-20 to +80 with FPM-seals
Viscosity range mm <sup>2</sup> /s	2,8 to 500
Operating pressure, max. bar	up to 315
Flow, max. L/min	up to 60
Direction of flow	see symbol
Opening pressure in free direction	see operating curves
Area ratio	A1/A2 = 1/3
Weight kg	ca. 0,8

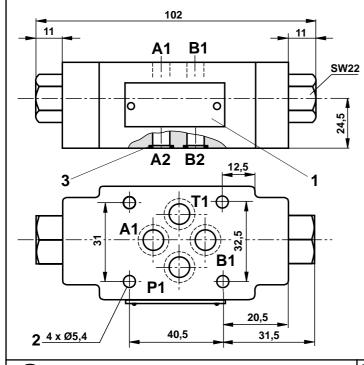
# **Operating curves** (measured at $v = 41 \text{ mm}^2/\text{s}$ and t = 50 °C)



- 1 to opening pressure 1
- 2 to opening pressure 2
- 3 to opening pressure 3
- 4 via check valve cartridge
- **5** free flow (without check valve cartridge) Types "A" and "B"

#### **Unit dimensions**

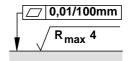
# (Dimensions in mm)



- 44,5
- 1 Name plate
- 2 Through bore for valve fixing
- **3** R-rings 9,81 x 1,5 x 1,78 for ports A2, B2, P2, T2

Valve fixing screws M5 DIN 912-10.9,

Tightening torque  $M_A = 8.9$  Nm, must be ordered separately.



Required surface finish of mating piece

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