

MANNESMANN REXROTH	Check valve, hydraulically pilot operated, Type Z2S 4, Series 1X			RE 21 540/12.95
	Size 4	up to 315 bar	up to 20 L/min	Replaces: 07.92

Characteristics:

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



K 4942-7
Type Z2S 4--1X/...

Function description, section

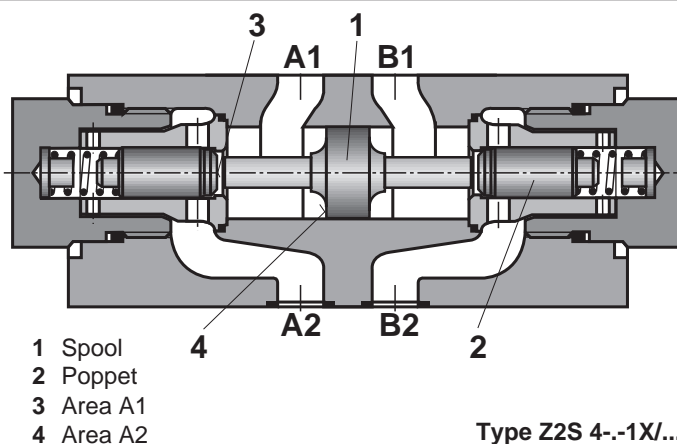
The Z2S isolating valve is a hydraulically pilot operated check valve in sandwich plate design.

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, in the opposite direction the flow is blocked.

If there is a flow through the valve in directions A1 to A2 or B1 to B2 the spool (1) is activated and moved to the right or the left. Thus it pushes the poppet (2) off the seat. Now 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 centre position (see circuit example).



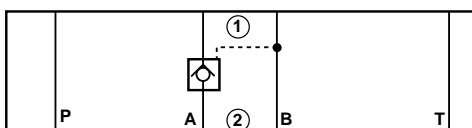
Type Z2S 4--1X/...

Ordering Code

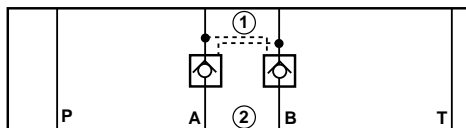
Valve types which result from the grey-shaded areas are available at short notice!	Z2S 4	-1X/	*	Further details in clear text
Leakage-free closure in channels A and B = -				no code = NBR-seals
Leakage-free closure in channel A = A				V = FPM-seals
Leakage-free closure in channel B = B				(other seals on request)
Opening pressure 1,5 bar = 1				Warning!
Opening pressure 3 bar = 2				Observe sealing suitability of pressure fluid used!
Opening pressure 7 bar = 3				
Opening pressure 10 bar = 4				
			1X =	Series 10 to 19
				(10 to 19: unchanged installation and connection dimensions)

Symbols (1) = valve side, (2) = plate side)

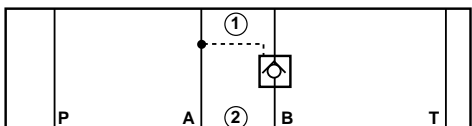
Z2S 4 A.-1X/..



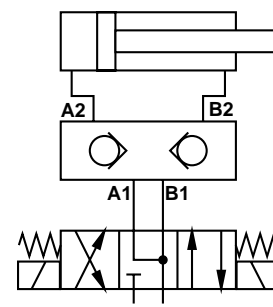
Z2S 4 --1X/..



Z2S 4 B.-1X/..



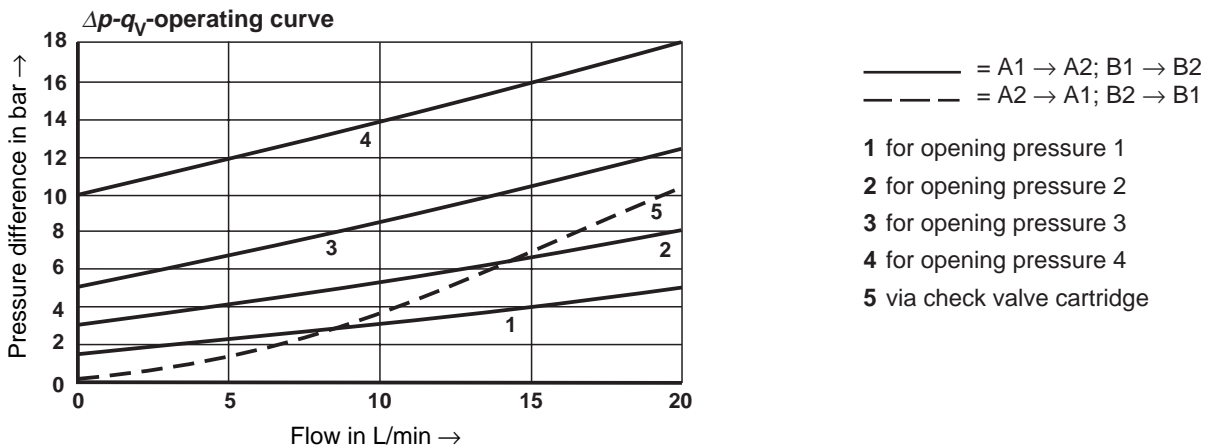
Circuit example



Technical data (For application outside these parameters please consult us!)

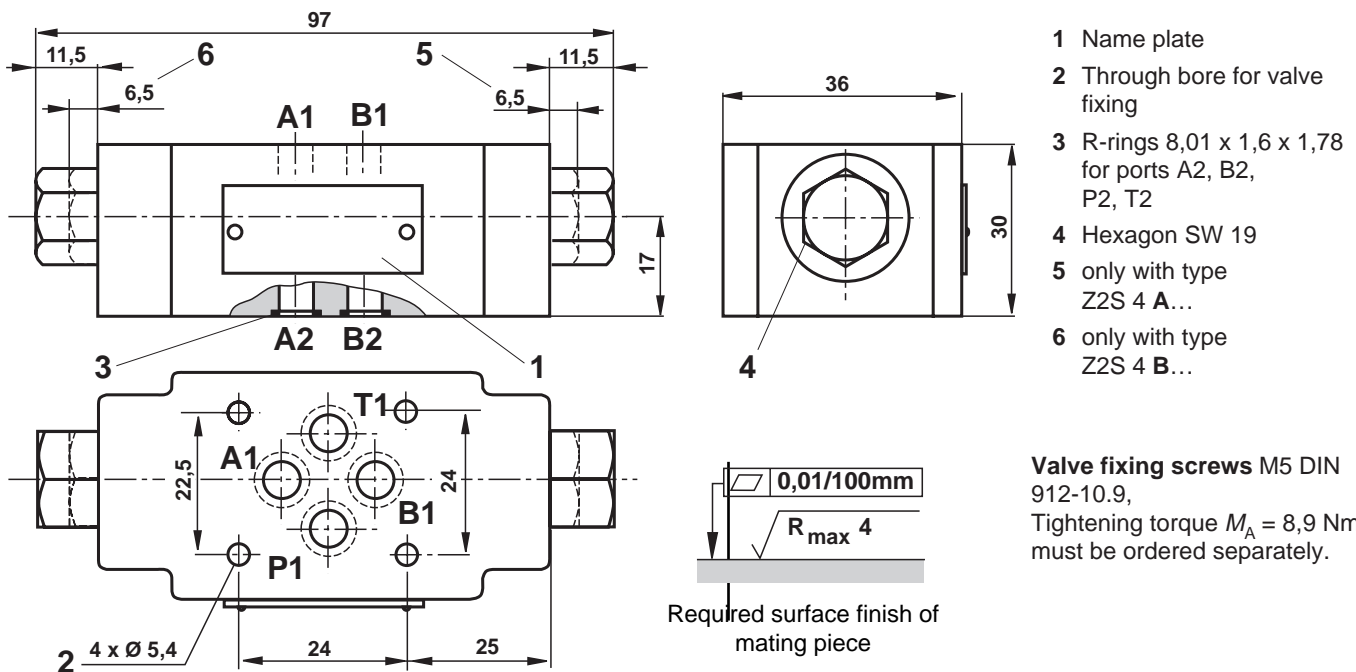
Pressure fluid 1) suitable for NBR- and FPM-seals 2) suitable only for FPM-seals	Mineral oil (HL, HLP) to DIN 51 524 ¹⁾ ; Fast bio-degradable pressure fluids to VDMA 24 568 (also see RE 90 221); HETG (rape seed oil) ¹⁾ ; HEPG (polyglycols) ²⁾ ; HEES (synthetic ester) ²⁾ ; other pressure fluids on request
Fluid cleanliness	Maximum permissible degree of contamination of pressure fluid to NAS 1638 Class 9 We therefore recommend a filter with a minimum retention rate of $\beta_{10} \geq 75$
Pressure fluid temperature range	°C -30 to +80 with NBR-seals -20 to +80 with FPM-seals
Viscosity range	mm ² /s 2,8 to 500
Operating pressure, max.	bar up to 315
Flow, max.	L/min up to 20
Direction of flow	see symbol
Opening pressure in free direction	see operating curves
Area ratio	A1/A2 = 1/3
Weight	kg ca. 0,5

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



Unit dimensions

(Dimensions in mm)



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