

RE 21 548/02.03

Replaces: 05.02

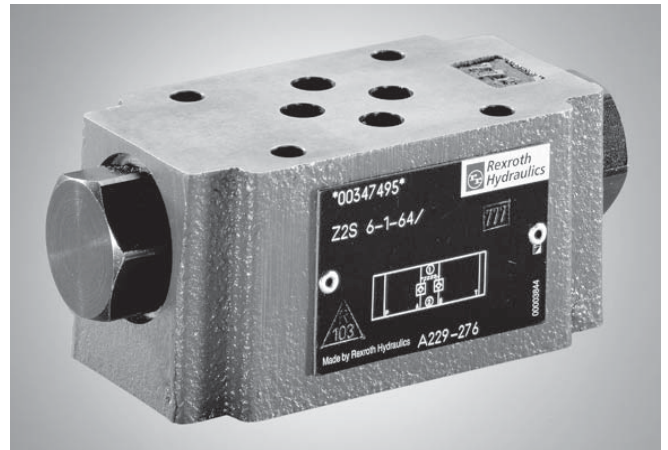
**Check valve,
hydraulically pilot operated
Type Z2S**

Nominal size 6

Series 6X

Maximum operating pressure 315 bar

Maximum flow 60 L/min

HAD 6988/02
Type Z2S 6-.-6X/...**Overview of contents**

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Features

- Sandwich plate valve
- Porting pattern to DIN 24 340 form A, **without** locating pin hole (standard)
- Porting pattern to ISO 4401 and CETOP–RP 121 H, **with** locating pin hole, (ordering code.../60 at the end of the valve type code)
- For leak-free closure of one or two actuator ports, optional
- For use in sandwich stacking systems
- 3 different opening pressures, optional

Ordering details

Z2S 6		6X/		*
Leak-free closure in ports A and B	= -			Further details in clear text
Leak-free closure in port A	= A			No code = Without locating pin hole
Leak-free closure in port B	= B			/60 ¹⁾ = With locating pin hole
Opening pressure 1.5 bar	= 1			No code = NBR seals
Opening pressure 3 bar	= 2			V = FKM seals
Opening pressure 7 bar	= 3			(other seals on request)
Series 60 to 69 (60 to 69: unchanged installation and connection dimensions)	= 6X			⚠ Attention! The compatibility of the seals and pressure fluid has to be taken into account!

¹⁾ Locating pin 3 x 8 DIN EN ISO 8752, Material No. **R900005694**
(separate order)



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Function, section

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

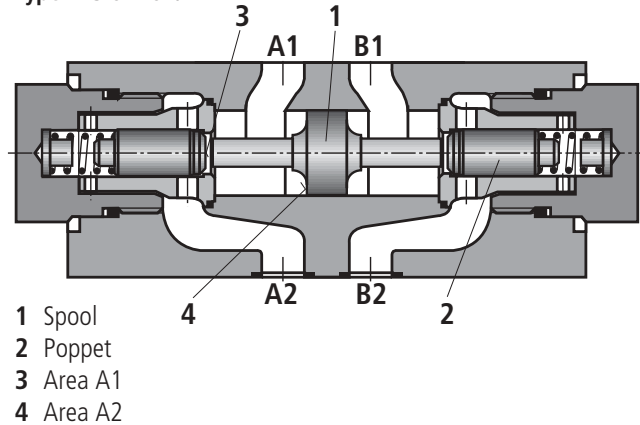
It is used for the leak-free closure of one or two actuator ports even during long standstill periods.

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

When oil flows through the valve from A1 to A2 or B1 to B2 pressure is applied to the spool (1), which is then moved to the right or left and the poppet (2) is thereby lifted off its seat. Now the pressure fluid can flow from B2 to B1 or from A2 to A1.

In order to ensure that the poppet seats (2) correctly the actuator ports of the directional valve, in the neutral position, should be connected to tank (see circuit example).

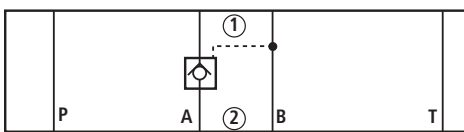
Type Z2S 6 --6X/...



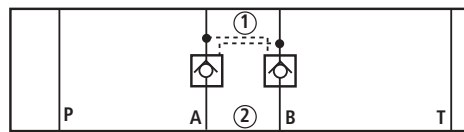
- 1 Spool
- 2 Poppet
- 3 Area A1
- 4 Area A2

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

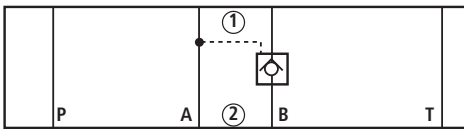
Z2S 6 A.- 6X/..



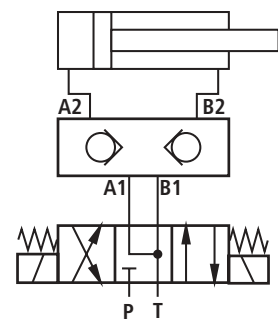
Z2S 6 -- 6X/..



Z2S 6 B.- 6X/..



Circuit example



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

General

Installation		Optional
Ambient temperature range	°C	-30 to +80 for NBR seals -20 to +80 for FKM seals
Weight	kg	Approx. 0.8

Hydraulic

Pressure fluid		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
Cleanliness class to ISO code		Maximum permissible degree of contamination of the pressure fluid is to ISO 4406 (C) class 20/18/15 ³⁾
Pressure fluid temperature range	°C	-30 to +80 for NBR seals -20 to +80 for FKM seals
Viscosity range	mm ² /s	2.8 to 500
Max. operating pressure	bar	Up to 315
Max. flow	L/min	Up to 60
Flow direction		See symbol
Opening pressure in the free-flow direction		See characteristic curves
Area ratio		A1/A2 = 1/3

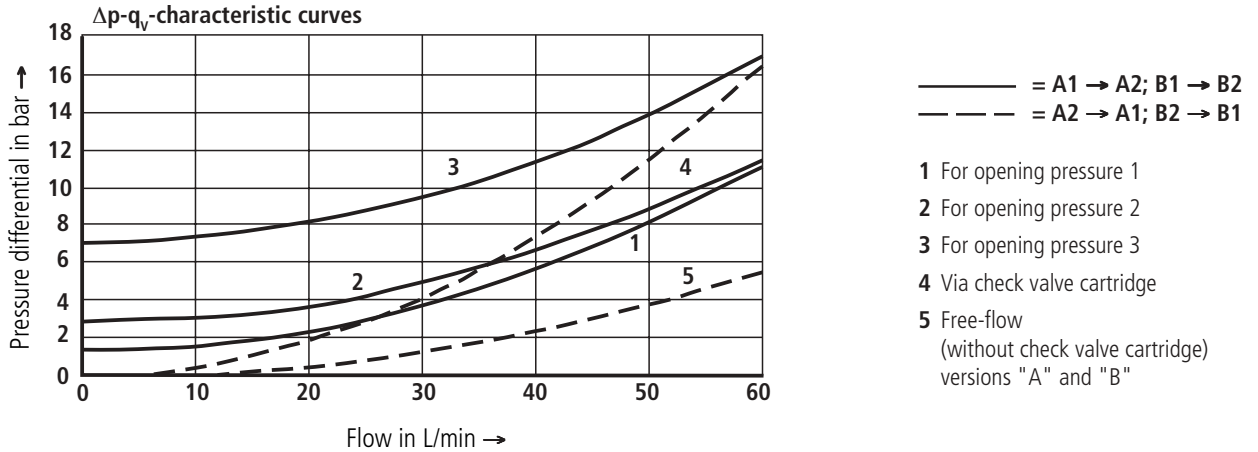
¹⁾ Suitable for NBR and FKM seals

²⁾ **Only** suitable for FKM seals

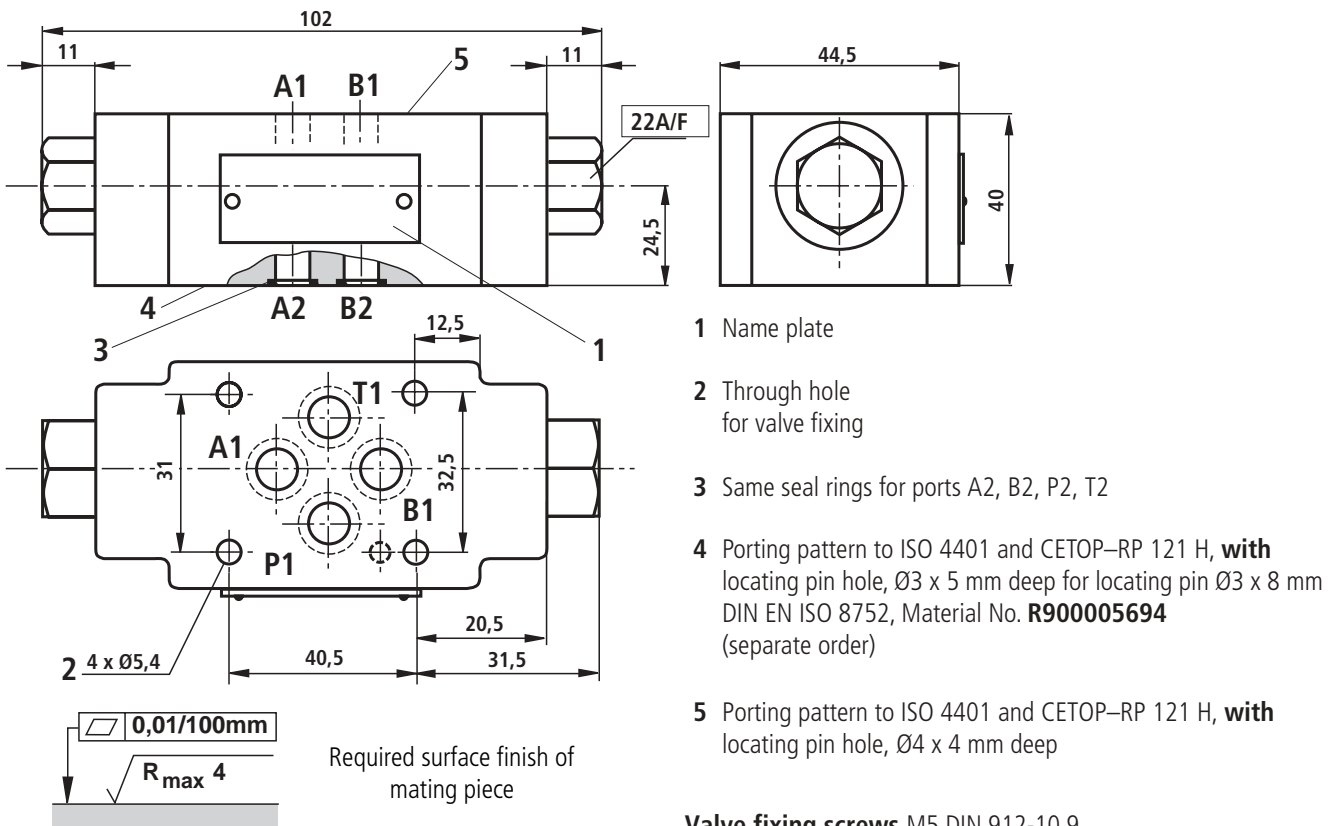
³⁾ The cleanliness class stated for the components must be adhered to in hydraulic systems. Effective filtration prevents faults

from occurring and at the same time increases the component service life. For the selection of filters see catalogue sheets RE 50 070, RE 50 076 and RE 50 081.

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



Unit dimensions (dimensions in mm)



Preferred types (readily available)

Type	Material No.
Z2S 6 -1-6X/	R900347495
Z2S 6 -1-6X/V	R900347504
Z2S 6 -2-6X/	R900347496
Z2S 6 -2-6X/V	R900347505
Z2S 6 -3-6X/	R900347497

Type	Material No.
Z2S 6A1-6X/	R900347498
Z2S 6A2-6X/	R900347499
Z2S 6B1-6X/	R900347501
Z2S 6B2-6X/	R900347502

Preferred types and standard components are highlighted in the RPS (Standard Price list).

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