



# Z2S16...type Modular Hydraulic Operated Check Valve



## Z2S16...5XJ...type

Size 16  
Max. Working Pressure: 315 bar  
Max. Flow: 300 L/min

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### Features

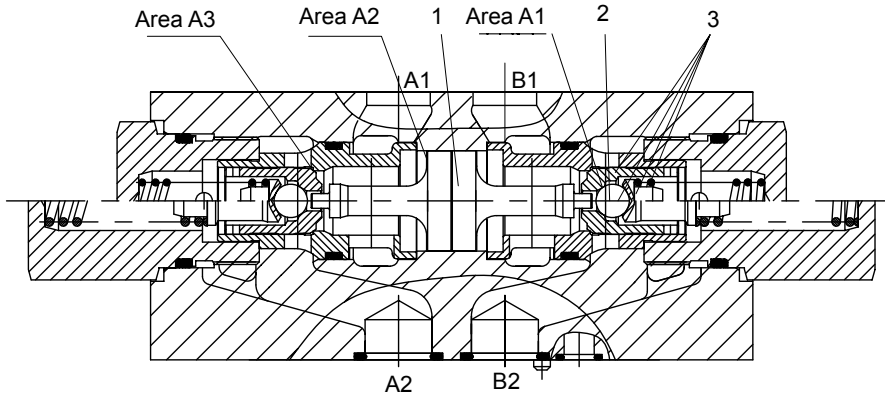
- Porting pattern to DIN 24 340
- Leakage-free closure for one or two ports
- Sandwich plate valve,  
for use in vertical stacking assemblies
- 4 cracking pressures, optional

## Function and configuration

Z2S16 type valve is a releasable check valve in sandwich plate design. It is used for the leakage-free closure of one or two service ports, also in case of long periods of time. Free flow occurs from A1 to A2 or B1 to B2. Flow in the opposite direction is blocked.

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When fluid flows from A1 to A2, the spool (1) is pressurised and is pushed to the right, thereby opening the ball poppet valve (2) which then opens the check valve (3). In order to make reliable closure of the two check valves in the neutral position, the service ports A1 and B1 of the directional valve must be connected to returning line .

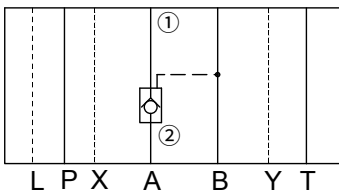


**Z2S16..5XJ/...modular hydraulic check valve**

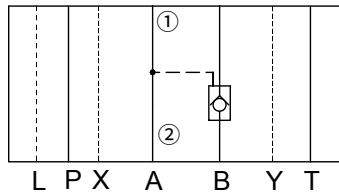
1 Spool      2 Ball poppet valve      3 Check valve

## Symbols ( ① =valve side, ② = sub-plate side)

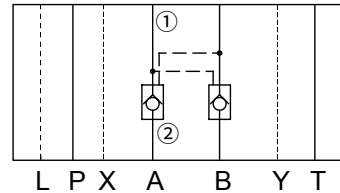
**Z2S16A..5XJ/...**



**Z2S16B..5XJ/...**



**Z2S16..5XJ/...**



# Specification

|     |    |  |     |   |
|-----|----|--|-----|---|
| Z2S | 16 |  | 5XJ | * |
|-----|----|--|-----|---|

Modular Hydraulic check valve

Size 16 =16

Leak-free closure in channels A and B = -  
 Leak-free closure in channel A = A  
 Leak-free closure in channel B = B

Further details in clear text

No code = NBR seals  
 V = FKM seals

5XJ= Series 50J to 59J  
 (50J to 59J: unchanged installation and connection dimensions)

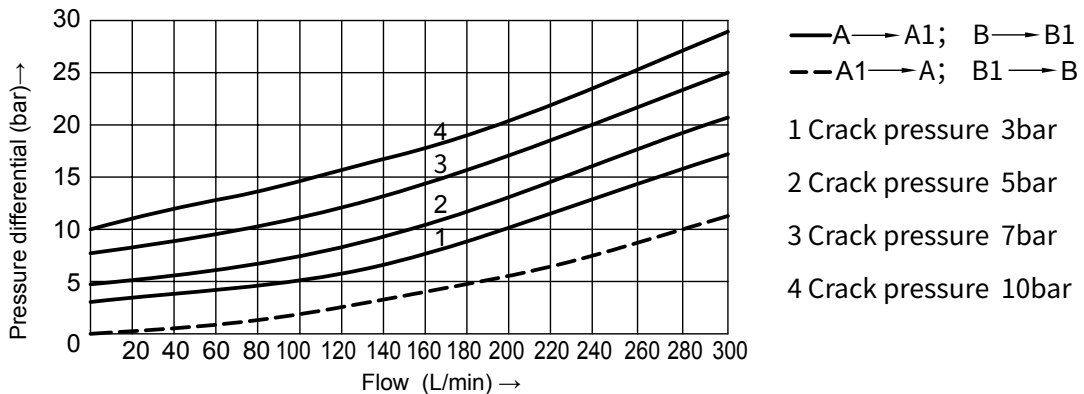
1 = Crack pressure 3bar  
 2 = Crack pressure 5bar  
 3 = Crack pressure 7.5bar  
 4 = Crack pressure 10bar

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## Technical data

|                                     |                    |  |
|-------------------------------------|--------------------|--|
| Fluid                               |                    | Mineral oil suitable for NBR and FKM seal<br>Phosphate ester for FKM seal                    |
| Degree of contamination             |                    | Maximum permissible degree of fluid contamination:<br>Class 9. NAS 1638 or 20/18/15, ISO4406 |
| Fluid temperature range             | °C                 | -30 to +80 (NBR seal)<br>-20 to +80 (FKM seal)   |
| Viscosity range                     | mm <sup>2</sup> /s | 2.8 to 500   |
| Operating pressure                  | bar                | 315  |
| Max.flow-rate                       | L/min              | 300  |
| Flow direction                      |                    | See symbols  |
| Crack pressure(free flow direction) | bar                | 3, 5, 7.5, 10  |
| Area ratio                          |                    | A1/A2=1/11.8 A3/A2=1/2.8<br>(Please refer to page"02/04"for section drawing )                |
| Weight                              | kg                 | 6.8  |

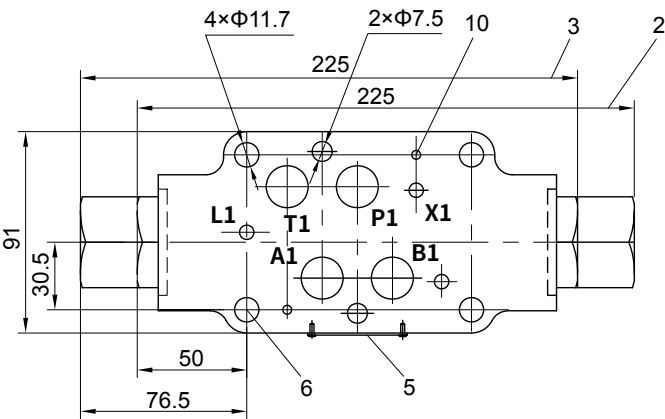
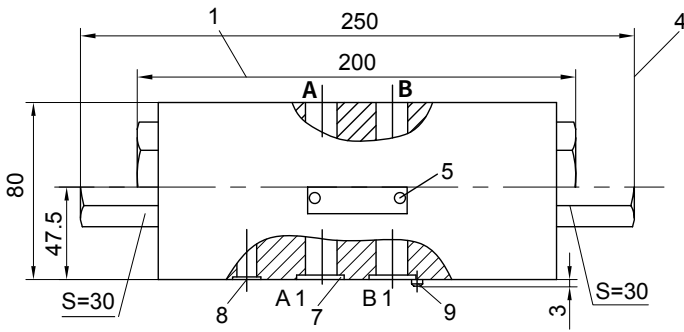
## Characteristic curves ( Measured at t=40°C ±5°C , using HLP46)



# Unit dimensions

(Dimensions in mm)

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- 1 Valve with version 1 or 2 cracking pressure, check valve in port A and/or port B
- 2 Valve with version 3 or 4 cracking pressure, check valve in port B.
- 3 Valve with version 3 or 4 cracking pressure, check valve in port A.
- 4 Valve with version 3 or 4 cracking pressure, check valve in port A and B
- 5 Name plate
- 6 Mounting holes
- 7 O-rings  
22×2.5 for ports A, B, P, T
- 8 O-rings  
10×2 for ports X, Y, L
- 9 Locating pin
- 10 Locating holes

