

1.12

# Check valve pilot operated

# Type Z2S 10...L3X

Size 10 Up to 315bar Up to 120 L/min



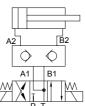
| Contents                   |    | Features   |
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| Function and configuration | 02 | - Porting pattern to DIN 24 340                    |
| Symbols                    | 02 | - Leakage-free closure for one or two              |
| Ordering code              | 03 | ports  |
| Technical data             | 03 | - Sandwich plate valve, for use in                 |
| Characteristic curves      | 03 | vertical stacking assemblies                       |
| Unit dimensions            | 04 | <ul> <li>4 cracking pressures, optional</li> </ul> |

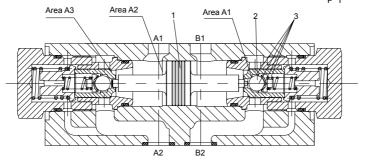
#### **Function and configuration**

Hydraulic pilot operated check valves type Z2S10 are sandwich plate design. They are used for the leakage-free closure of one or two ports, even for long periods of time. Fluid flows freely from A1 to A2 or B1 to B2. Flow in the opposite direction is blocked. 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 the reliable closure of the two check valves in the neutral position, the service ports A1 and B1 must be connected to tank.

#### Circuit example





Z2S10..L3X/...check valve, hydraulic pilot operated

1 Spool

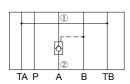
2 Ball poppet valve

3 Check valve

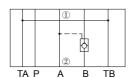
# **Symbols**

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

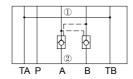
Z2S10A..L3X/...



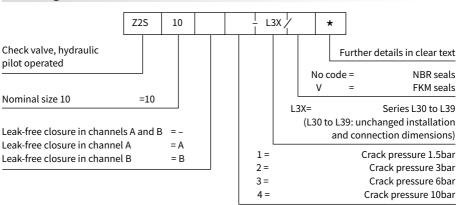
Z2S10B..L3X/...



Z2S10..L3X/...



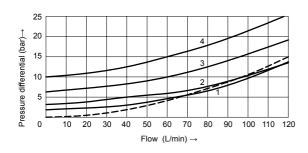
# **Ordering code**



#### **Technical data**

| Fluid                               |       | Mineral oil suitable for NBR and FKM seal          |  |
|-------------------------------------|-------|--|--|
|                                     |       | Phosphate ester for FKM seal                       |  |
| Daniel of annianting                |       | Maximum permissible degree of fluid contamination: |  |
| Degree of contamination             |       | Class 9. NAS 1638 or 20/18/15, ISO4406             |  |
| Fluid temperature range             | °C    | -30 to +80 (NBR seal)                              |  |
|                                     |       | -20 to +80 (FKM seal)                              |  |
| Viscosity range                     | mm²/s | 2.8 to 500   |  |
| Operating pressure                  | bar   | 315  |  |
| Max.flow-rate                       | L/min | 120  |  |
| Flow direction                      |       | See symbol   |  |
| Crack pressure(free flow direction) | bar   | 1.5, 3, 6, 10                                      |  |
| Area ratio                          |       | A1/A2=1/13.4 A3/A2=1/2.68                          |  |
| Area ratio                          |       | (Please refer to page"02/04"for section drawing)   |  |
| Weight                              | kg    | 3  |  |

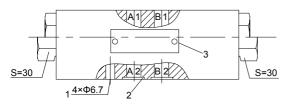
#### **Characteristic curves** (Measured at $\vartheta_{oil}$ =40°C $\pm$ 5°C, using HLP46)

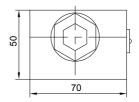


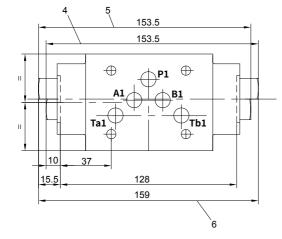
- A —A1; B —B1 -- A1 <del>--</del> A; B1 <del>--</del> B
- 1 Crack pressure 1.5bar 2 Crack pressure 3bar
- 3 Crack pressure 6bar
- 4 Crack pressure 10bar

### **Unit dimensions**

(Dimensions in mm)



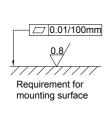




- 1 4 through holes for valve mounting screws
- 2 O-rings 12×2 for ports A, B, P, T
- 3 Name plate
- 4 Check valve in port B
- 5 Check valve in port A
- 6 Check valve in both port A and B

#### Valve mounting screws:

Internal hexagon screw Size 10: 4-M6 GB/T 70.1-2000 Tightening torque M<sub>A</sub>=15.5 Nm must be ordered separately



It must be ordered separately, if connection is needed.

**Type:** G66/01(G3/8),  $G66/02(M18 \times 1.5)$  $G67/01(G1/2), G67/02(M22 \times 1.5)$ G534/01(G3/4), G534/02(M27×2)

