

1.12

# Check valve pilot operated

Type Z2S 10...L3X

Size 10 Up to 315bar Up to 120 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

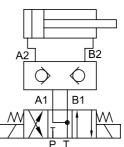
## **Function and configuration**

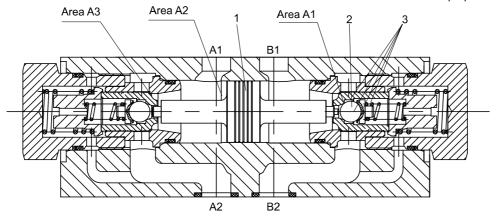
Hydraulic pilot operated check valves type Z2S10 are sandwich plate design. They are used for the leakage-free closure of one or two ports, even for long periods of time. Fluid flows freely from A1 to A2 or B1 to B2. Flow in the opposite direction is blocked.

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





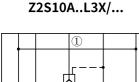
Z2S10..L3X/...check valve, hydraulic pilot operated

1 Spool

2 Ball poppet valve

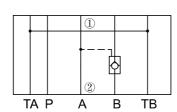
3 Check valve

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

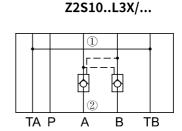


TA P

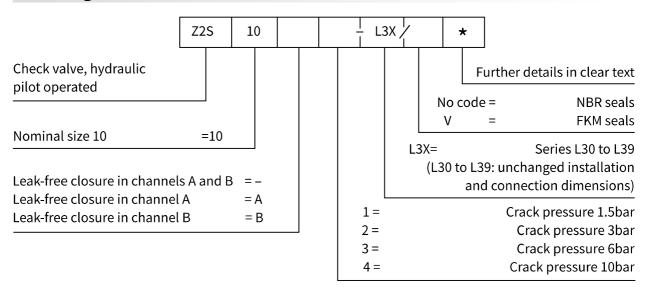




Z2S10B..L3X/...



## **Ordering code**

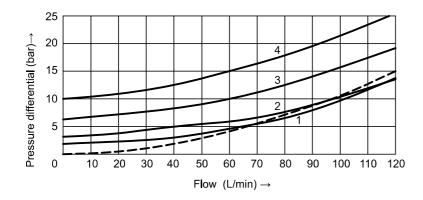


## **Technical data**

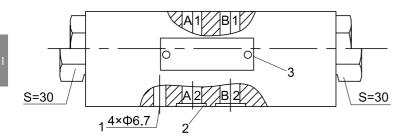
Fluid		Mineral oil suitable for NBR and FKM seal
		Phosphate ester for FKM seal
Degree of contamination		Maximum permissible degree of fluid contamination:
		Class 9. NAS 1638 or 20/18/15, ISO4406
Fluid temperature range	°C	-30 to +80 (NBR seal)
		-20 to +80 (FKM seal)
Viscosity range	mm²/s	2.8 to 500
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

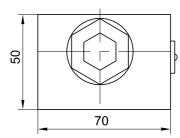
# **Characteristic curves**

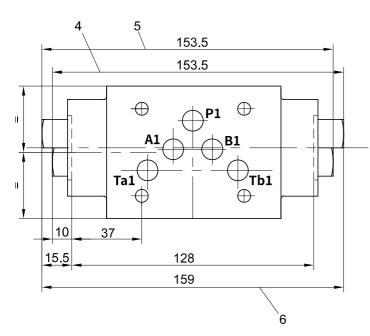
(Measured at  $\vartheta_{oil}$ =40°C  $\pm$ 5°C, using HLP46)



- A <del>– −</del>A1; B <del>– −</del>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



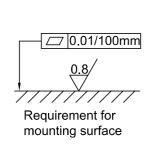




- 1 4 through holes for valve mounting screws
- 2 O-rings 12×2 for ports A, B, P, T
- 3 Name plate
- 4 Check valve in port B
- 5 Check valve in port A
- 6 Check valve in both port A and B

#### 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)

