1.13

# Check valve pilot operated

# Type Z2S 22...L5X

Size 22 Up to 315bar Up to 450 L/min



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#### **Features**

- Porting pattern confirms 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

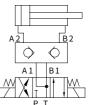
# **Function and configuration**

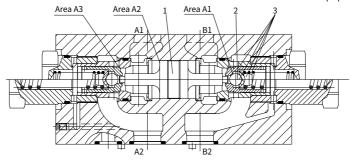
Hydraulic pilot operated check valves type Z2S22 are sandwich plate design. They are used for the leakage-free closure of one or two service ports, even for long periods of time. Free flow occurs from A1 to A2 or B1 to B2. Flow in the opposite direction is blocked.

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 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 .

#### Circuit example

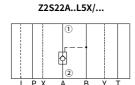


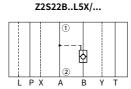


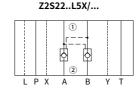
#### Z2S22..L5X/...check valve, hydraulic pilot operated

1 Spool 2 Ball poppet valve 3 Check valve

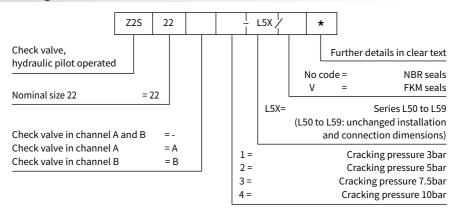
# **Symbols** (① =valve side, ② = sub-plate side)







# **Ordering code**

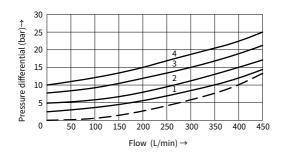


#### **Technical data**

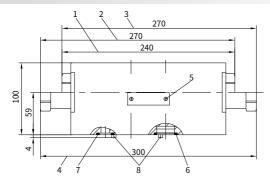
Fluid		Mineral oil suitable for NBR and FKM seal
		Phosphate ester for FKM seal
Degree of contamination		Maximum permissible degree of fluid contamination:
		Class 9. NAS 1638 or 20/18/15, ISO4406
Fluid temperature rang	°C	-30 to +80 (NBR seal)
		-20 to +80 (FKM seal)
Viscosity range	mm²/s	2.8 to 500
Operating pressure	bar	315
Max.flow-rate	L/min	450
Flow direction		See symbol
Crack pressure(free flow direction)	bar	3, 5, 7.5, 10
Area ratio		A1/A2=1/13.6, A3/A2=1/2.8
Weight	kg	12.8

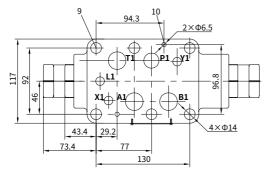
#### **Characteristic curves**

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

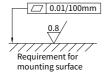


- $A \longrightarrow A1$ ;  $B \longrightarrow B1$ --A1  $\longrightarrow A$ ;  $B1 \longrightarrow B$
- 1 Cracking pressure 3bar
- 2 Cracking pressure 5bar
- 3 Cracking pressure 7.5bar
- 4 Cracking pressure 10bar





- 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 O-rings 27×3 for ports A, B, P, T
- 7 O-rings 19×3 for ports X, Y, L
- 8 Locating pin
- 9 Fixing holes
- 10 Locating holes



# It must be ordered separately if connection plate is needed. Type:

G153/01(G1), G153/02(M33×2) G154/01(G11/4), G154/02(M42×2) G156/01(G11/2), G156/02(M48×2)

#### Valve fixing screws:

Internal hexagon screw 4-M6 GB/T 70.1-2000 Tightening torque M<sub>A</sub>=130Nm must be ordered separately

