

1.14

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

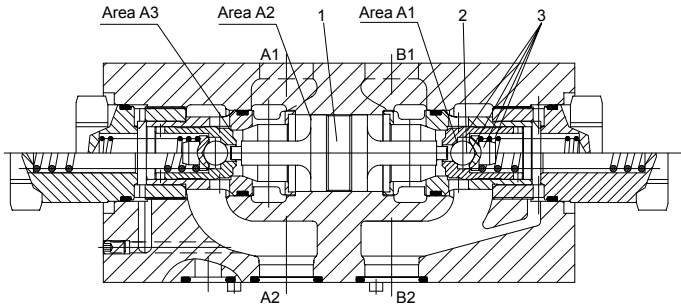
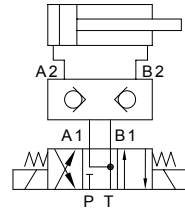
Function and configuration

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

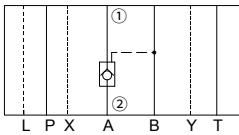


Z2S22..L5X/...check valve, hydraulic pilot operated

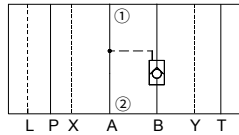
1 Spool 2 Ball poppet valve 3 Check valve

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

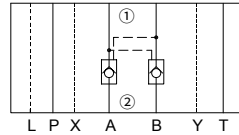
Z2S22A..L5X/...



Z2S22B..L5X/...



Z2S22..L5X/...



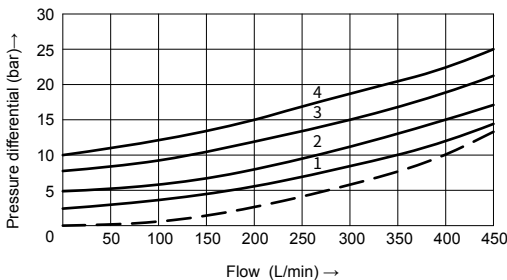
Ordering code

Z2S	22				L5X	/		*
Check valve, hydraulic pilot operated		Further details in clear text						
Nominal size 22 = 22		No code = NBR seals V = FKM seals						
Check valve in channel A and B = -		L5X= Series L50 to L59						
Check valve in channel A = A		(L50 to L59: unchanged installation and connection dimensions)						
Check valve in channel B = B		1 = Cracking pressure 3bar 2 = Cracking pressure 5bar 3 = Cracking pressure 7.5bar 4 = Cracking pressure 10bar						

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	mm ² /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 $\vartheta_{oil}=40^{\circ}\text{C} \pm 5^{\circ}\text{C}$, using HLP46)

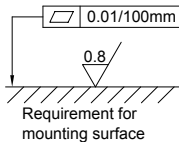
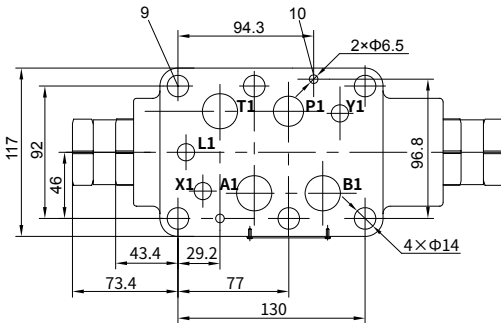
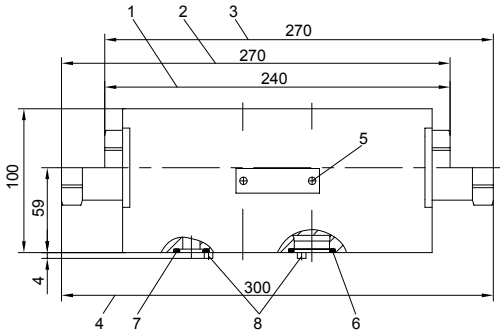


— A → A1; B → B1
 - - A1 → A; B1 → B

- 1 Cracking pressure 3bar
- 2 Cracking pressure 5bar
- 3 Cracking pressure 7.5bar
- 4 Cracking pressure 10bar

Unit dimensions

(Dimensions in mm)



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 $M_A=130\text{Nm}$
must be ordered separately

- 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

