



1.6

Check valve

Type Z1S...30

Sizes 6 to 22
Up to 315bar
Up to 400 L/min



Contents

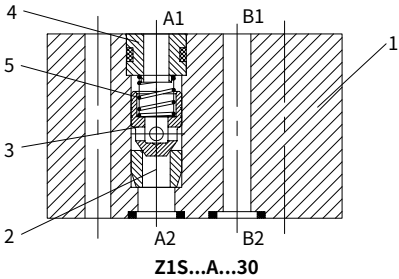
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Features

- Sandwich plate valve
for use in vertical sandwich installation
- 8 different checking functions, optional
(detail refer to the Ordering code)

Function and symbols

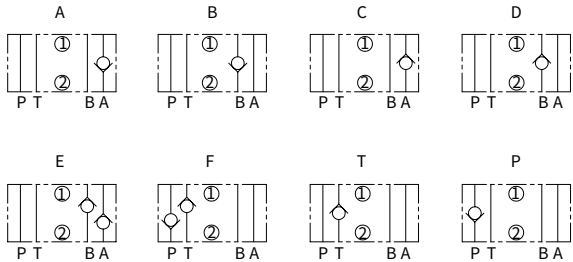
The Z1S ...valve is a direct operated check valve in sandwich plate design. It mainly consist of the housing (1) and check valve cartridge (2). It is used for the leak-free closure in one direction and allows free flow in the opposite direction. The stroke of the poppet (3) is limited by the spring seat (4). The integrated spring (5) holds the poppet (3) in the closed position.



Ordering code

Z1S				-	30	/		*
Sandwich plate check valve							Further details in clear text	
Nominal size 6	= 6						No code =	NBR seals
Nominal size 10	= 10						V =	FKM seals
Nominal size 16	= 16							
Nominal size 22	= 22							
Closed in port A (A1 to A2)	=A						30=	30 series
Closed in port B (B1 to B2)	=B							
Closed in port A (A2 to A1)	=C							
Closed in port B (B2 to B1)	=D							
Closed in ports A and B (A2 to A1) and (B2 to B1)	=E						1 =	Crack pressure 0.5bar
Closed in ports P and T (P1 to P2) and (T2 to T1)	=F						2 =	Crack pressure 3bar
Closed in port P (P1 to P2)	=P						3 =	Crack pressure 5bar
Closed in port T (T2 to T1)	=T							

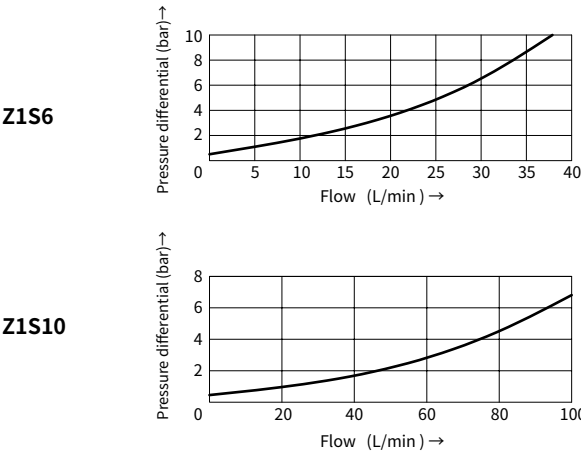
Symbols (① =valve side, ② = sub-plate side)



Technical data

Nominal size		6	10	16	22
Weight	kg	0.8	2.3	8.5	13
Max. flow -rate	L/min	42	100	200	400
Max. operating pressure	bar	To 315			
Crack pressure	bar	0.5, 3, 5			
Viscosity range	mm ² /s	-2.8 to 500			
Fluid temperature range	°C	-20 to +70			
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			

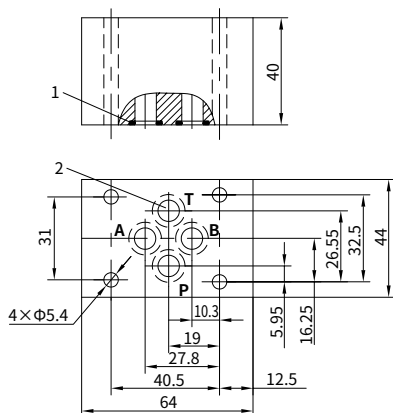
Characteristic curves (Measured at $\vartheta_{oil}=40^{\circ}\text{C} \pm 5^{\circ}\text{C}$, using HLP46)



Unit dimensions (Sizes 6 and 10)

(Dimensions in mm)

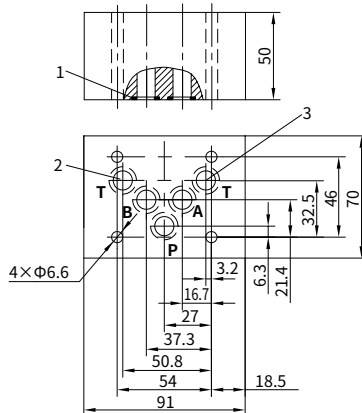
Z1S6



1 O-ring 9.25 x 1.78

2 Check valve of Z1S6T and Z1S6F are integrated at the line.

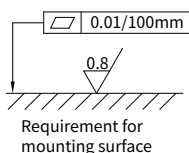
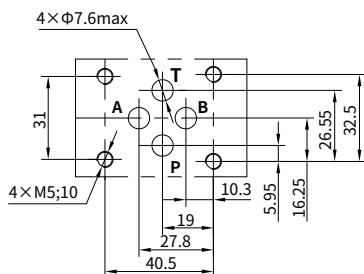
Z1S10



1 O-ring 10.82 x 1.78

2 Port T of Z1S10T and Z1S10F is blocked.

3 Check valves of Z1S10T and Z1S10F are integrated at the line.



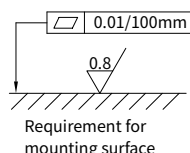
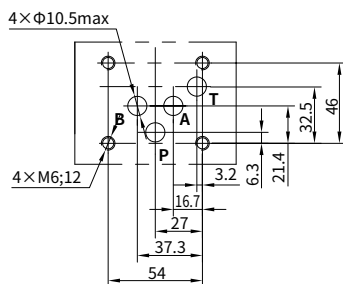
It must be ordered separately if connection plate is needed.

Type:

G341/01(G1/4), G341/02 (M14×1.5)

G342/01(G3/8), G342/02 (M18×1.5)

G502/01(G1/2), G502/02 (M22×1.5)



It must be ordered separately if connection plate is needed.

Type:

G66/01(G3/8), G66/02 (M18×1.5)

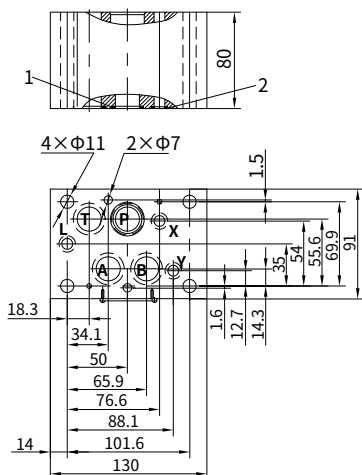
G67/01(G1/2), G67/02 (M22×1.5)

G534/01(G3/4), G534/02 (M27×2)

Unit dimensions (Sizes 16 and 22)

(Dimensions in mm)

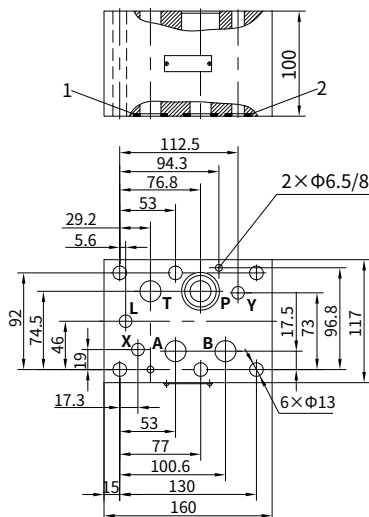
Z1S16



1 O-rings 22×2.5 (Ports A, B, P, T)

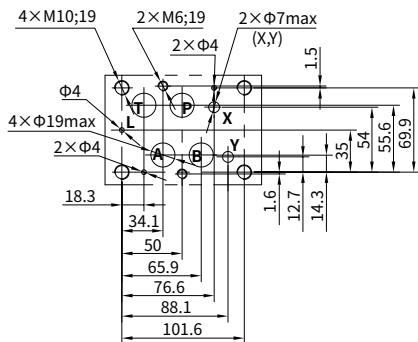
2 O-rings 10×2 (Ports X, Y, L)

Z1S22



1 O-rings 27×3 (Ports A, B, P, T)

2 O-rings 19×3 (Ports X, Y, L)



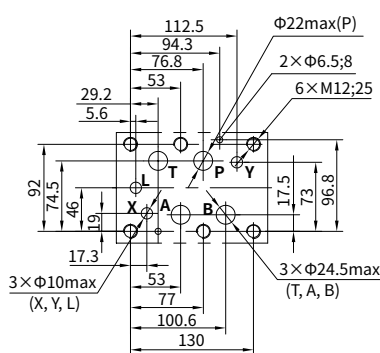
0.01/100mm

0.8

Requirement for
mounting surfaceIt must be ordered separately
if connection plate is needed.

Type: G172/01(G3/4), G172/02(M27×2)

G174/01(G1), G172/02 (M33×2)



0.01/100mm

0.8

Requirement for
mounting surfaceIt 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)