

Check Valve

Model: S



- ◆ Size 6 to 30
- ◆ Maximum working pressure 450 bar
- ◆ Maximum working flow 450 L/min

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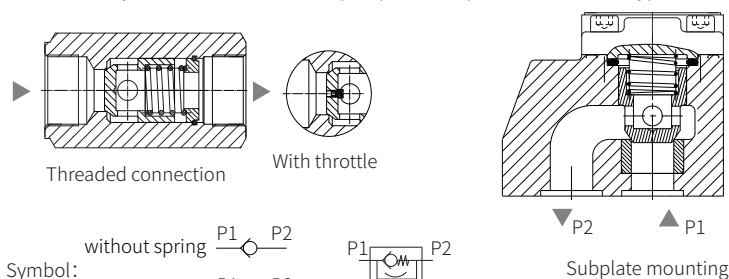
Features

- Leakage-free blocking in one direction
- Various cracking pressure
- Threaded connection
- Subplate mounting

Function description, sectional drawing

The S type check valve is used to allow the oil to flow freely in one direction but without allowing reverse flow. It is a conical valve structure with small pressure loss, various cracking pressure and two connections.

The valve is mainly used at the outlet of the pump for back pressure valve and bypass valve.



Modes and specifications

S			more information in text	
check valve	=S			
A	P	size		sealing material
6	-	= 6	No code=	NBR seals
8	-	= 8	V=	FKM seals
10	10	= 10		(consult for other seals)
15	-	= 15		
20	20	= 20	connection threaded	no code= G thread
25	-	= 25	2=	Metric thread
30	30	= 30		
subplate mounting	=P			throttle ²⁾
threaded connection	=A			
cracking pressure:	P	A		
without spring	=0	=00	no code=	without throttle
cracking pressure 0.2bar	=1	=01	B00=	M4 thread without installation
cracking pressure 0.5bar	=1	=05	B10=	throttle $\phi 1.0\text{mm}$
cracking pressure 1.5bar	=2	=15	B12=	throttle $\phi 1.2\text{mm}$
cracking pressure 3bar	=3	=30	B15=	throttle $\phi 1.5\text{mm}$
cracking pressure 5bar	=5	=50		
cracking pressure 8bar ¹⁾	=8	=80		
0 series (only for P type)	=0		corrosion resistance (according to EN ISO9227)	
(0 to 9 series: installation and connection size unchanged)			J3=	improve corrosion resistance, 240h salt spray test
1 series (only for A type)	=1X		J5=	improve corrosion resistance, 720h salt spray test
(10 to 19 series: installation and connection size unchanged)				
			Maximum working pressure	
			420=	42MPa (size 25, 30)
			450=	45MPa (size 6~20)

Note: ¹⁾ Only for size 25,30

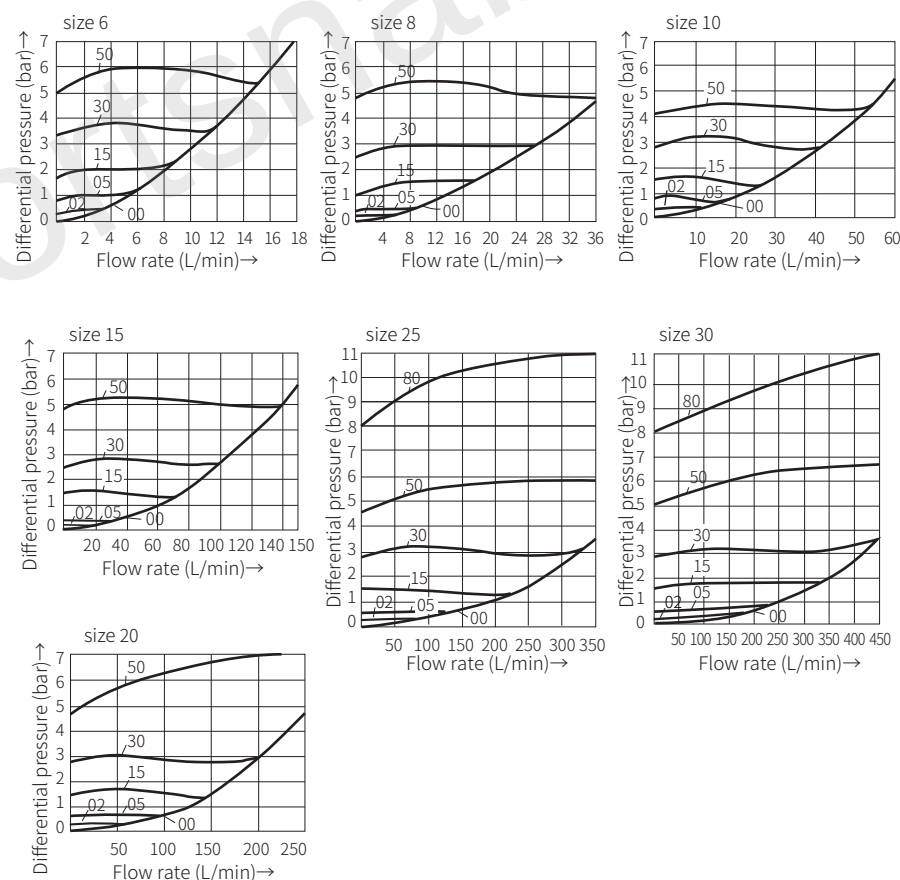
²⁾ Only for threaded connection

Technical parameters

Fluid	Mineral hydraulic oil or phosphate hydraulic oil	
Temperature range	(°C)	-30 to +80
Viscosity range	(mm ² / s)	2.8 to 500
Working pressure	(bar)	to 420(size 25, 30) ; to 450 (size 6~20) , to 315 (subplate mounting)
Cracking pressure	(bar)	See characteristic curve
Maximum flow	(L/min)	

Characteristic curve

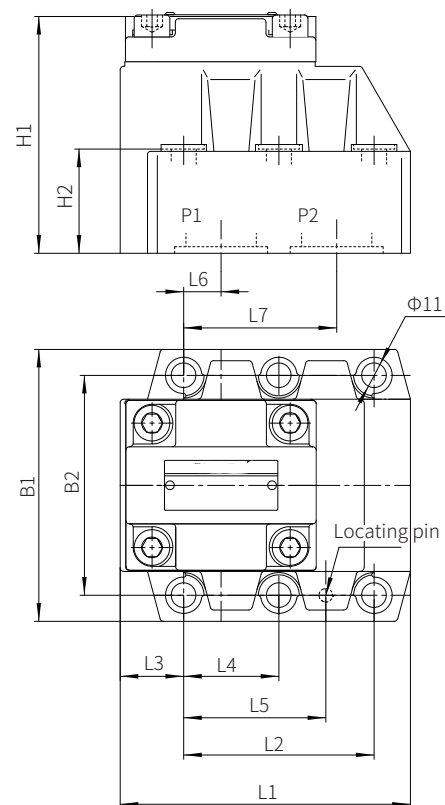
(Measured when using HLP46, $\vartheta_{\text{oil}} = 40^\circ\text{C} \pm 5^\circ\text{C}$)



Component size

Size unit: mm

Subplate mounting valve S...P...0J



Subplate model:

size 10: G460/01 G460/02
G461/01 G461/02
size 20: G412/01 G412/02
G413/01 G413/02
size 30: G414/01 G414/02
G415/01 G415/02

Valve fixing screw:

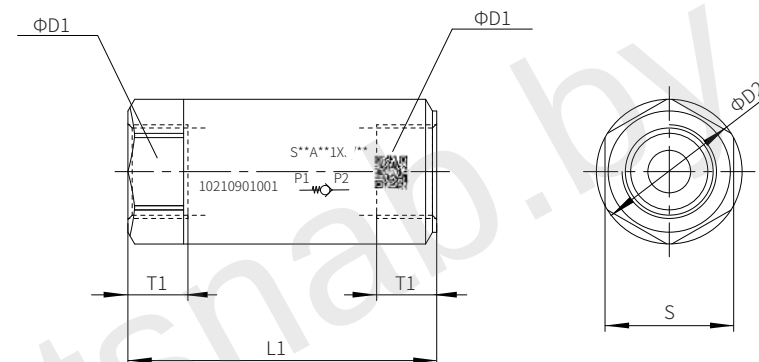
size 10: 4-M10×40-10.9 GB/T70.1-2000
Tightening torque $M_A=60\text{Nm}$
size 20: 4-M10×50-10.9 GB/T70.1-2000
Tightening torque $M_A=60\text{Nm}$
size 30: 4-M10×70-10.9 GB/T70.1-2000
Tightening torque $M_A=60\text{Nm}$

Size	B1	B2	L1	L2	L3	L4	L5	L6	L7	H1	H2	O-ring for ports P1, P2
10	85	66.7	78	42.9	17.8	-	31.8	7.1	35.7	64	21	17.12×2.62
20	102	79.4	101	60.3	23	-	44.5	11.1	49.2	91	31.5	28.17×3.53
30	120	96.8	128	84.2	28	42.1	62.7	16.7	67.5	104.5	46	34.52×3.53

Component size

Size unit: mm

Threaded connection valve S...A... /



Size	6	8	10	15	20	25	30
D1	G	G1/4"	G3/8"	G1/2"	G3/4"	G1"	G1-1/4"
	M	M14×1.5	M18×1.5	M22×1.5	M27×2	M33×2	M42×2
D2	22.5	28	34	42	52	68	74.5
L1	58	58	72	85	98	120	132
T1	12	12	14	16	18	20	22
S	19	24	30	36	46	60	65
Weight (Kg)	0.1	0.2	0.3	0.5	1	2	2.5