



1.1

Check valve

Type S

Sizes 6 to 40
Up to 315 bar
Up to 600 L/min



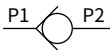
Contents

Function and configuration	02
Ordering code	02
Technical data	03
Characteristic curves	03
Unit dimensions of threaded connection	04
Unit dimensions of sub-plate mounting	05

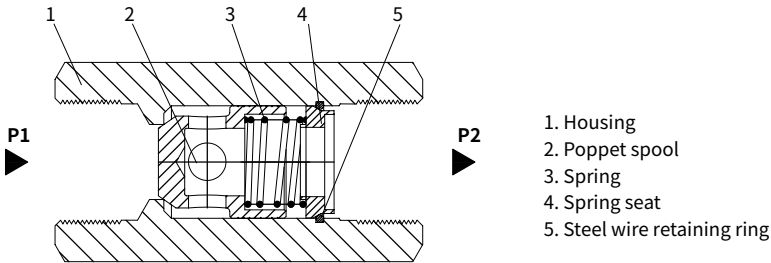
Features

- Poppet valve seat
- Threaded connection and sub-plate mounting
- Various cracking pressures, optional

Symbol



Function and configuration



Check valve type S is used to allow fluid flowing in one direction and leakage-free closure in the opposite direction. When fluid flow via port P1, fluid pushes poppet (2) to move overcoming the spring(3), and connects chamber P1 and P2. When fluid flows from P2 to P1, poppet (2) moves left and the check valve closes.

For check valves without a spring, the fixed position should ensure that the poppet will remain at the closed position.

Ordering code

S

/

*

Check valve

Nominal sizes	Threaded connection	Sub-plate mounting
6	=6	
8	=8	
10	=10	=10
15	=15	
20	=20	=20
25	=25	
30	=30	=30
40	=40	

For threaded connection = A
For sub-plate mounting = P

Further details in clear text

Only for sub-plate mounting

No code = NBR seals
V = FKM seals

Only for threaded connection

No code= G thread
2= Metric thread

·0 = Threaded connection revision index

-L2X = Sub-plate mounting series L20 to L29
(L20 to L29: unchanged installation and connection dimensions)

0 = Without spring (Not for size 40)

1 = Crack pressure 0.5 bar

2 = Crack pressure 1.5bar

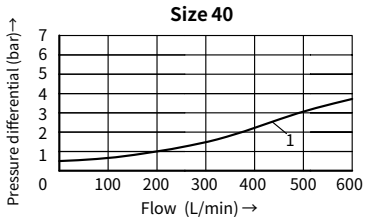
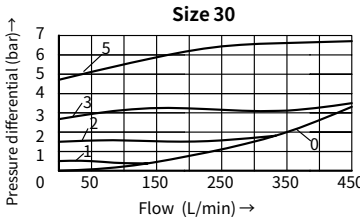
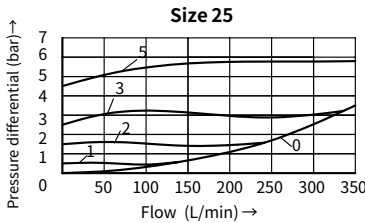
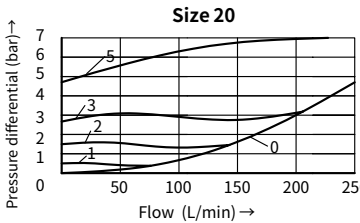
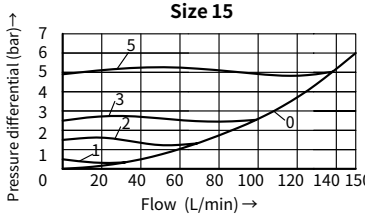
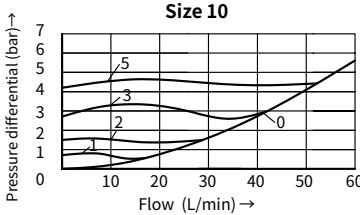
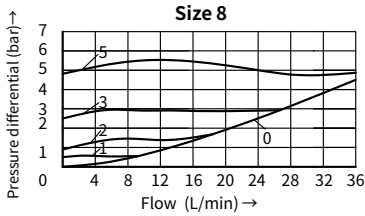
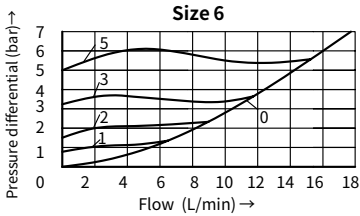
3 = Crack pressure 3bar

5 = Crack pressure 5bar

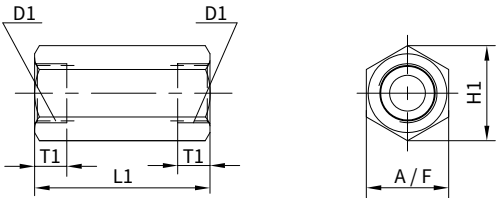
Technical data

Size		6	8	10	15	20	25	30	40
Max. flow-rate	L/min	15	30	40	120	200	300	400	600
Max. operating pressure	bar	315							
Crack pressure	bar	0.5; 1.5; 3; 5							
Fluid		Mineral oil ; Phosphate ester							
Fluid temperature range	°C	-30 to +80							
Viscosity range	mm²/s	2.8 to 500							
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)

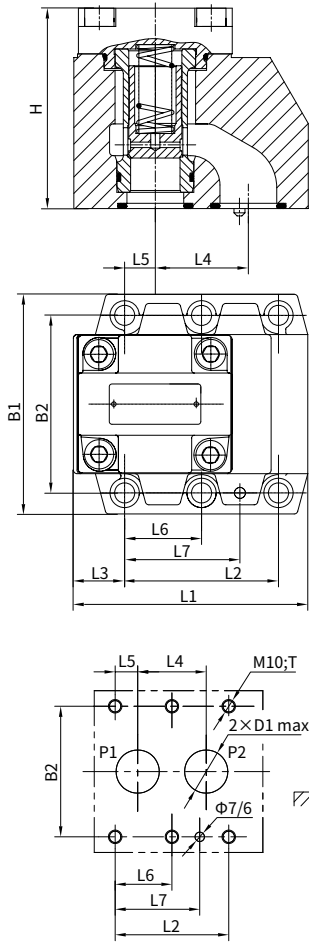


Unit dimensions of threaded connection



Size		6	8	10	15	20	25	30	40
D1	G thread	G 1/4	G 3/8	G 1/2	G 3/4	G 1	G1 1/4	G1 1/2	G 2
	Metric thread	M14×1.5	M18×1.5	M22×1.5	M27×2	M33×2	M42×2	M48×2	M60×2
H1		22	28	34.5	41.5	53	69	75	92
L1		58	58	72	85	98	120	132	165
T1		12	12	14	16	18	20	22	28
A/F		19	24	30	36	46	60	65	80
Weight(kg)		0.1	0.2	0.3	0.5	1	2	2.5	4.4

Unit dimensions of sub-plate mounting



It must be ordered separately,
if connection plate is needed.

Type:

Size 10:

G460/01A (G3/8) G460/02(M18×1.5)
G461/01A (G1/2) G461/02(M22×1.5)

Size 20:

G412/01(G3/4) G412/02(M27×2)
G413/01(G1) G413/02(M33×2)

Size 30:

G414/01(G1 1/4) G414/02(M42×2)
G415/01(G1 1/2) G415/02(M48×2)

Valve fixing screws:

Size 10: 4-M10×40 GB/T 70.1-10.9
Size 20: 4-M10×50 GB/T 70.1-10.9
Size 30: 6-M10×60 GB/T 70.1-10.9

Size	B1	B2	L1	L2	L3	L4	L5	L6	L7	H	D1	T	O-ring	Weight(Kg)
10	85	66.7	78	42.9	18	28.6	7.2	-	31.8	71	Φ13	23	17.12×2.62	2
20	102	79.4	101	60.3	23	38.1	11.1	-	44.5	108	Φ22	24	28.17×3.53	4.3
30	120	96.8	128	84.2	28	50.8	16.7	42.1	62.7	110	Φ30	25	34.52×3.53	7.7