



PILOT OPERATED CHECK VALVE CI

ENGINEERING

1

Ref. No. P04904

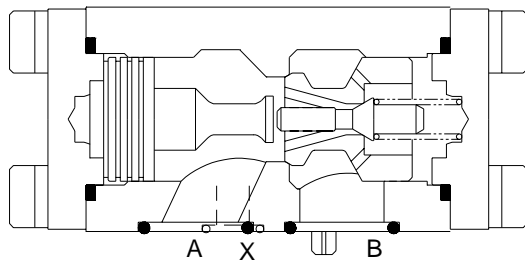
Release 02/2004

Description

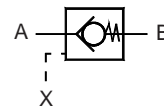
Seat type valve, internal drain construction.
Six sizes in threaded port body.
Three sizes in subplate mounting construction.
Subplate mounting interface conforms to ISO 5781 (draft.)



Section



Hydraulic Symbol



Unit Dimensions

Dimensions in mm.

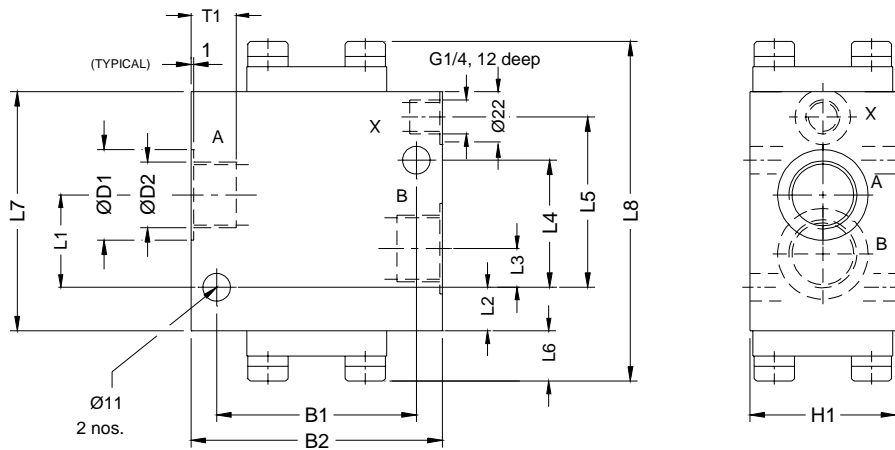


Table 1

Size	Mass Kg.	B1	B2	ØD1	ØD2	H1	L1	L2	L3	L4	L5	L6	L7	L8	T1
10	2.4	66.5	85	30	G 1/2	47	27.5	18.5	10.5	33.5	49	18	80	116	15
20	4	74	95	44	G1	57	38	20	10.5	44	63	18	95	135	18
30	8.4	97	120	60	G1 1/2	80	54.5	15.5	20.5	73.5	89.5	29	115	173	22

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Subplate mounting valves

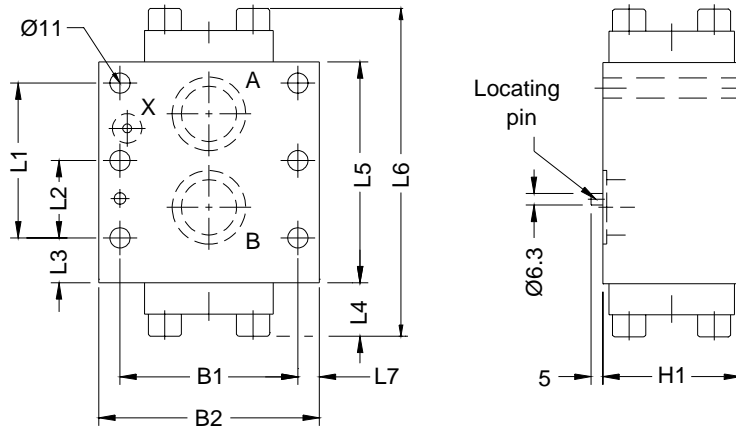


Table 2

Size	Mass Kg.	B1	B2	H1	L1	L2	L3	L4	L5	L6
10	2.5	66.7	85	47	42.9	--	18.5	18	80	116
20	4.1	79.4	100	57	60.3	--	17.5	20	95	135
30	8.5	96.8	120	80	84.1	42.1	15.5	29	115	173



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Subplates

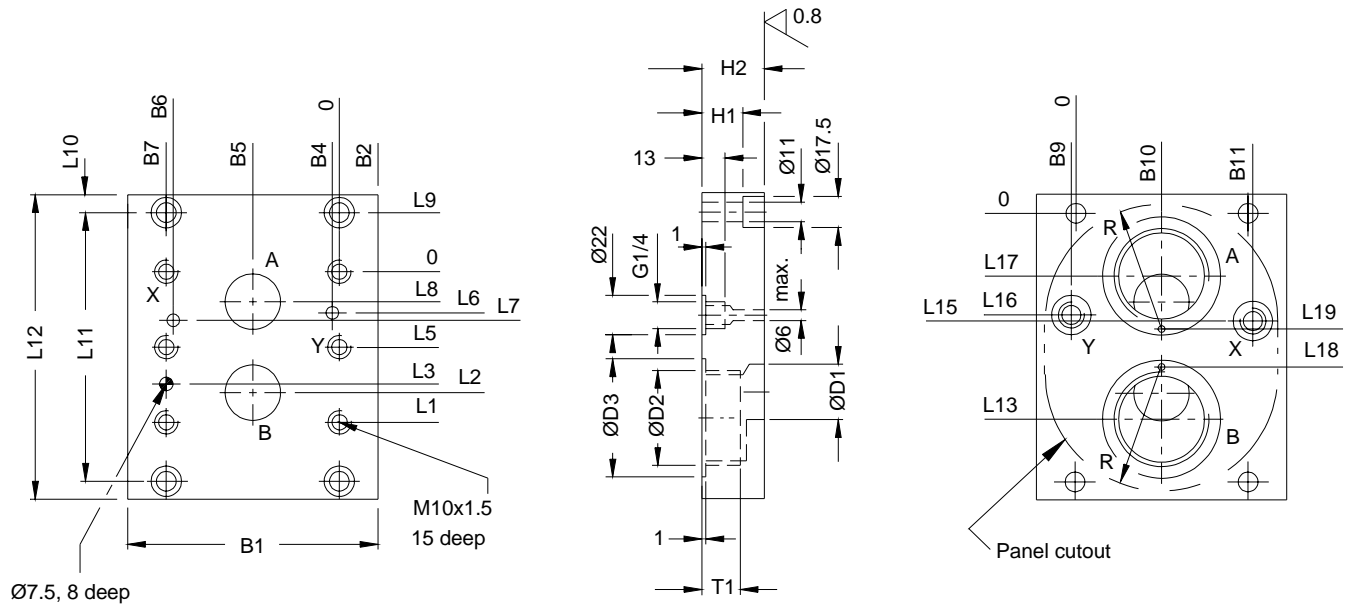


Table 3

Size NG	Model	Mass Kg.	B1	B2	B5	B6	B7	B10	B11	D1	D2	D3	H2
10	SP06G03	2.4	86	9.7	33.3	58.7	66.7	33.5	58.7	13	G3/8	25	29
	SP06G04	2.4	86	9.7	33.3	58.7	66.7	33.5	58.7	13	G1/2	30	29
20	SP08G08	5.2	112	16.3	39.7	73	79.4	39.7	75	22	G1	44	45
30	SP09G12	8.5	140	21.6	48.4	92.9	96.8	48.4	98.5	31	G1 1/2	60	47
Size NG	Model	H1	L1	L2	L3	L5	L7	L8	L9	L10	L11	L12	L13
10	SP06G03	15	42.9	35.7	31.8	--	21.4	7.1	31.9	10	107	127	73
	SP06G04												75
20	SP08G08	25	60.3	49.2	44.5	--	20.8	11.1	22	16	104	136	82
30	SP09G12	35	84.1	67.5	62.7	42.1	24.6	16.7	33	10	150	170	115
Size NG	Model	L15	L17	L18	L19	R	T1	Valve fixing screws (S.H.C.S.)		Tightening Torque			
10	SP06G03	53.3	33	68	39	40	12	M10 x 60 L - 4 Nos.	70 Nm				
	SP06G04		31				14						
20	SP08G08	42.6	22	57	47	52	18	M10 x 70 L - 4 Nos.					
30	SP09G12	60	35	90	60	65	22	M10 x 90 L - 6 Nos.					



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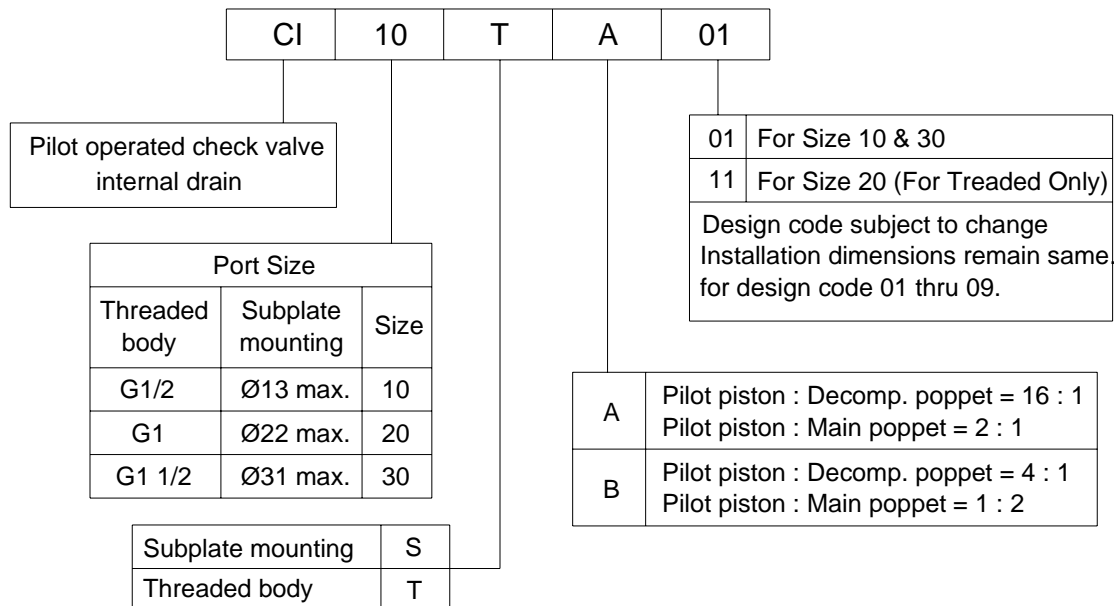
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Technical Specifications

Construction	Seat type valve, with decompression poppet.
Mounting style	Threaded port or subplate mounting.
Interface for subplate mounting	As per ISO 5781 -- AG-06-2-A ISO 5781 -- AH-08-2-A ISO 5781 -- AJ-10-2-A
Mounting position	Optional.
Flow direction	Free flow from A to B. Pilot flow from B to A.
Cracking pressure	1 bar
Operating pressure	315 bar for Ports A, B and X.
Area ratios (A)	Pilot piston : Decomp. poppet = 16 : 1 Pilot piston : Main poppet = 2 : 1
..... (B)	Pilot piston : Decomp. poppet = 4 : 1 Pilot piston : Main poppet = 1 : 2
Hydraulic medium	Mineral oil.
Viscosity range	10 cSt to 380 cSt.
Fluid temperature range	-20 °C to +70 °C.
Fluid cleanliness requirement	As per ISO code 16/13 or better.
Max. flow handling capacity	Size l / min 10 80 20 160 30 350
Mass	Refer Table 1.

Ordering Code





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Description

Design code 21 valves have smaller diameter pilot pistons, hence they require higher pilot pressure for reverse free flow.

All other features are identical to valves of design code 10 thru 19.

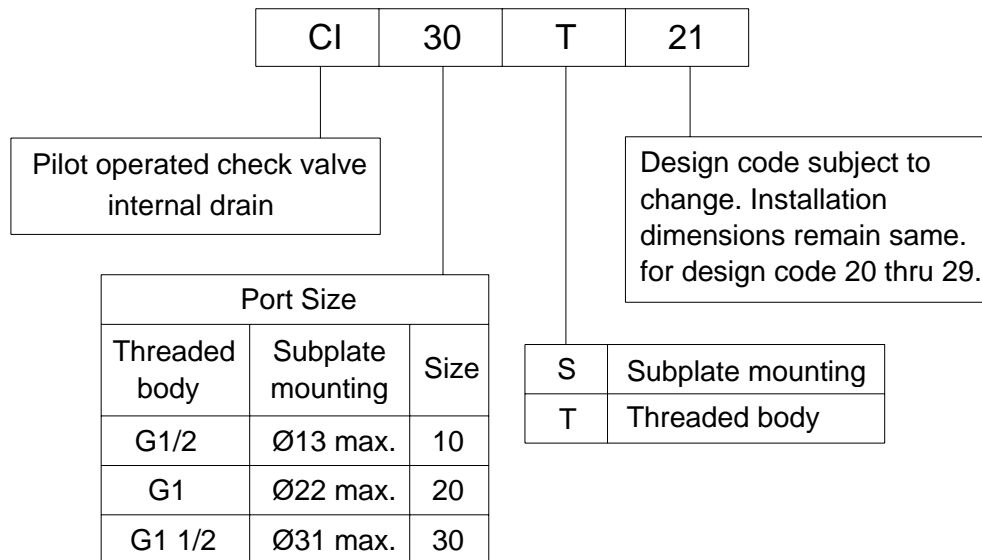
Technical specification

Area ratio :

$$\frac{\text{Pilot piston}}{\text{Decompression poppet}} = \frac{4}{1}$$

$$\frac{\text{Pilot piston}}{\text{Main poppet}} = \frac{1}{2}$$

Ordering code



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Subject to revision.