



SOLENOID PILOT OPERATED DIRECTIONAL CONTROL VALVE 4DEP20

ENGINEERING

1

Ref. No. P04162
Release 06/2005

Description

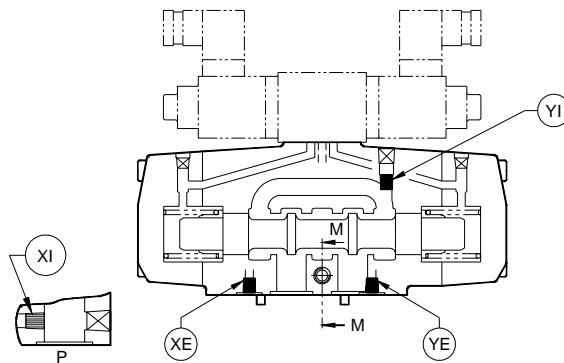
Completely encapsulated mechanism for protection against dirt.

Available as spring centred, spring offset

Valve mounting interface conforms to International and National standards.

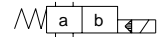


Section

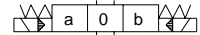


Hydraulic Symbol

2 position spring offset



3 position spring centered



For pilot pressure

External : Open XE

Close XI

Internal : Open XI

Close XE

For pilot drain

External : Open YE

Close YI

Internal : Open YI

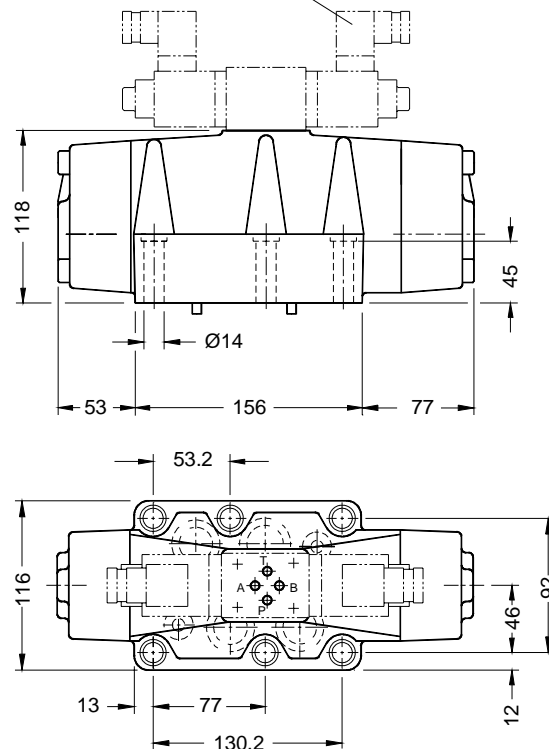
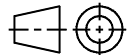
Close YE

Unit Dimensions

Valve

Provision

Dimensions in mm.



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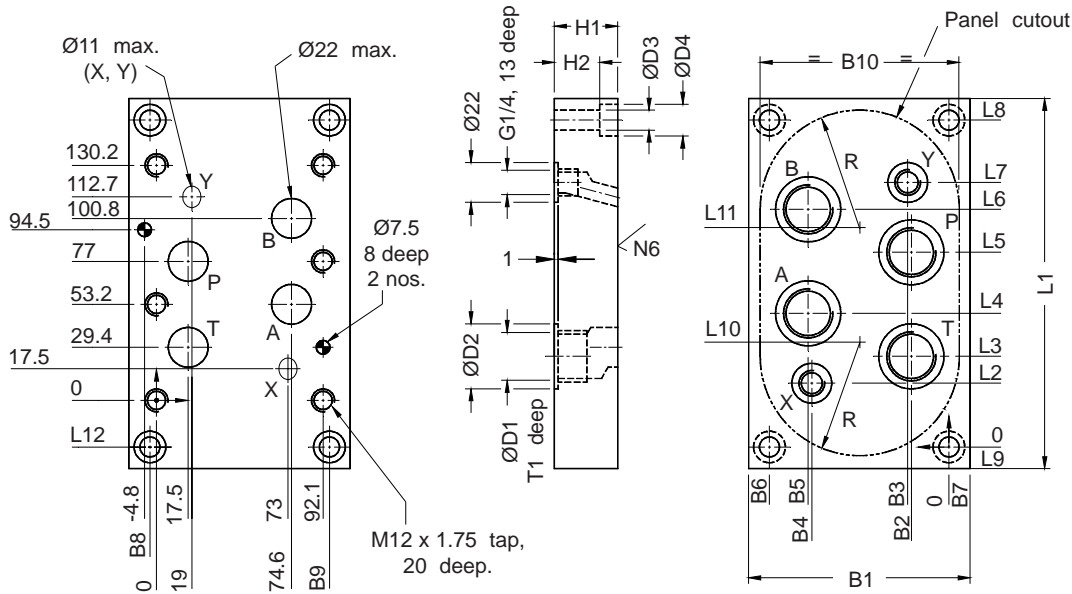
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Subplate



Subplate type	ØD1	ØD2	T1	ØD3	ØD4	H1	H2	B1	B2	B3	B4	B5	B6	B7	B8	B9
1SD07G0	G 3/4	36	18	11	17.5	35	25	116	17.	19	73	74.5	92.	-1	0	92.
1SD07G0	G 1	44	18	11	17.5	35	25	116	17.	19	73	74.5	92.	-1	0	92.
1SD07G1	G1 1/4	54	21	14	--	78	43	170	32	36	106	110	142	-1	-2	117

Subplate type	B10	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	R	Mass kg.
1SD07G0	110	205	35.	50.	74	107.8	131.6	146.5	18	-1	50.	131.6	-25.8	55	6
1SD07G0	110	205	35.	50.	74	107.8	131.6	146.5	18	-1	50.	131.6	-25.8	55	6
1SD07G1	160	250	16.	60.	84	137.8	161.6	205	22	-1	103	119	-46	11	19

Note : Valve fixing screws M12 X 1.75, 65 long. 6 nos. Property class 12.9 Tightening torque 105 Nm.

Technical Specifications

Construction	Spool type
Mounting	Subplate mounting as per ISO 4401 - AE - 08 - 4 - A and IS - 10187 - 20 mm. diameter nominal port.
Mounting position	Optional
Flow direction	As per spool type.
Operating pressure	For port P, A, B and X 350 bar For port T (for external drain) 250 bar (for Internal drain) 160 bar For port Y 160 bar
Minimum pilot pressure	5 bar
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 16/13 or better.
Maximum flow handling capacity	Refer performance curves.
Mass	17.5 Kg. APPROX



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Performance Curve

Oil used : ISO VG 68, Viscosity : 68 cSt @ 40 °C, Temp test : 50 °C.

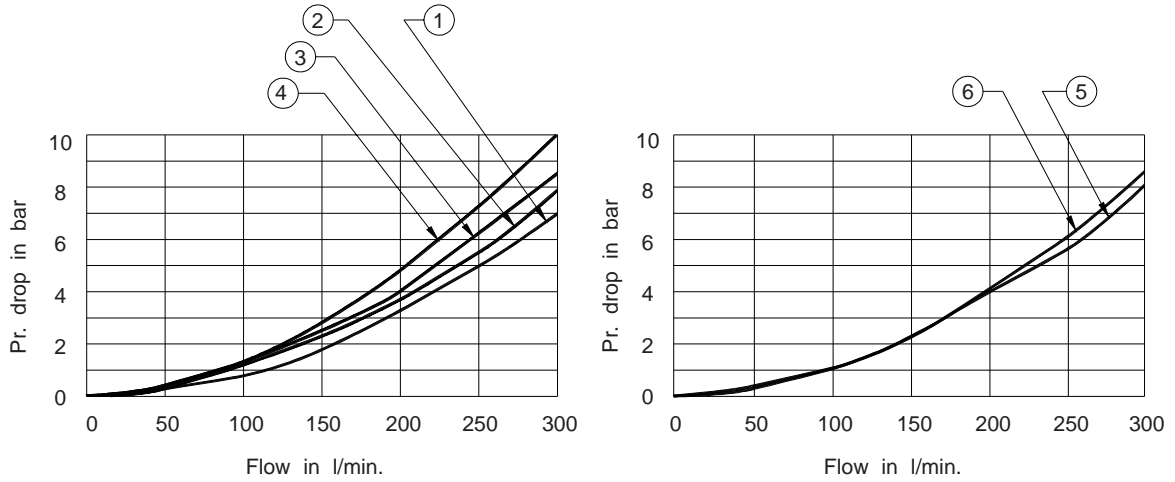


Table showing the relation between the spool type, direction of flow and curve in the above graph to be referred to.

Direction of flow	P to T	P to A	P to B	A to T	B to T
Spool type	Curve No.				
E	--	2	2	2	2
F	--	1	1	1	2
G	3	6	6	5	4
H	--	--	--	1	1
J	--	2	2	1	1
L	--	2	2	1	2
P	--	1	1	2	1



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Ordering Code

4 DEP 20 E X S 10

4 Service port

Directional control valve
Electrically controlled
pilot operated

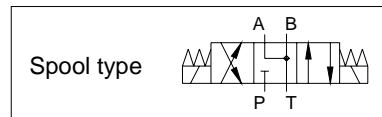
Size 20

Spool type (Refer chart)

Design code subject to
change. Installation
dimensions remain same.
for design code 10 thru 19.

S
Spring centred
for 3 position valves
Spring offset
for 2 position valves

External pilot supply, External pilot drain.	XY
Internal pilot supply, External pilot drain.	Y
Internal pilot supply, Internal pilot drain.	Omit for Std.
External pilot supply, Internal pilot drain.	X



Note : Subplate and Solenoid (refer spool type) to be ordered separately.

Spool Chart

Type	Symbol	Crossover	Type	Symbol	Crossover
C			T		
D			M		
E			P		
F			Q		
G			U		
H			V		
J					
L					

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Subject to revision.