



# PILOT OPERATED DIRECTIONAL CONTROL VALVE DP10

ENGINEERING

1

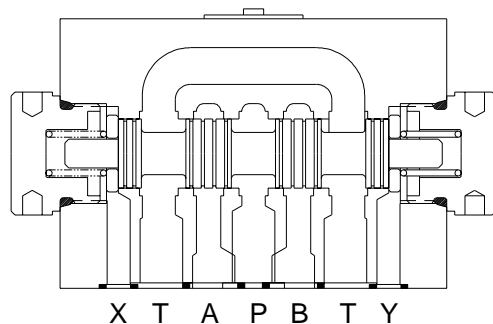
Ref. No. D32200  
Release 17/04/2002

## Description

Available as spring centered, spring offset. Valve mounting interface conforms to International and National standards.

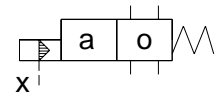


## Section

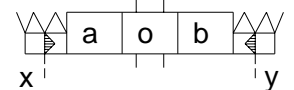


### Hydraulic Symbol

2 position spring offset

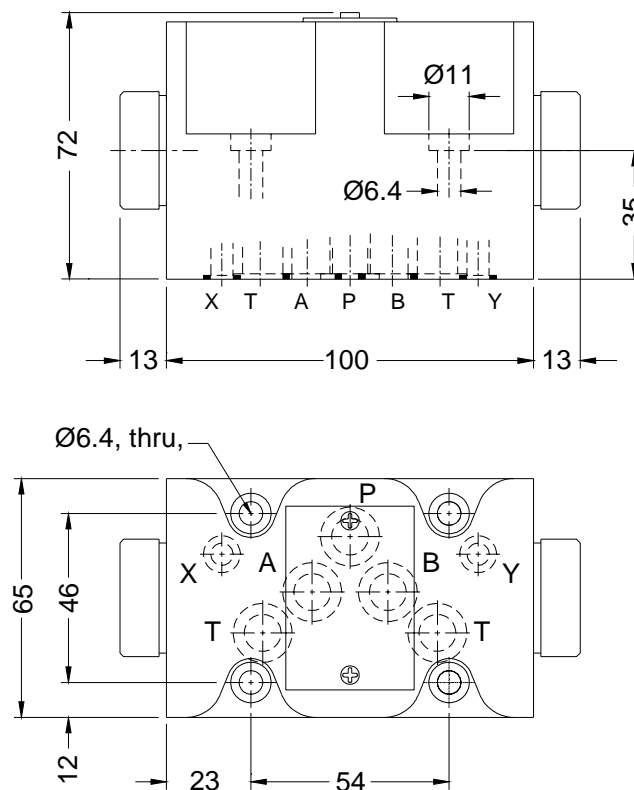


3 position spring centred

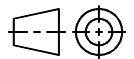


## Unit Dimensions

### Valve



Dimensions in mm.



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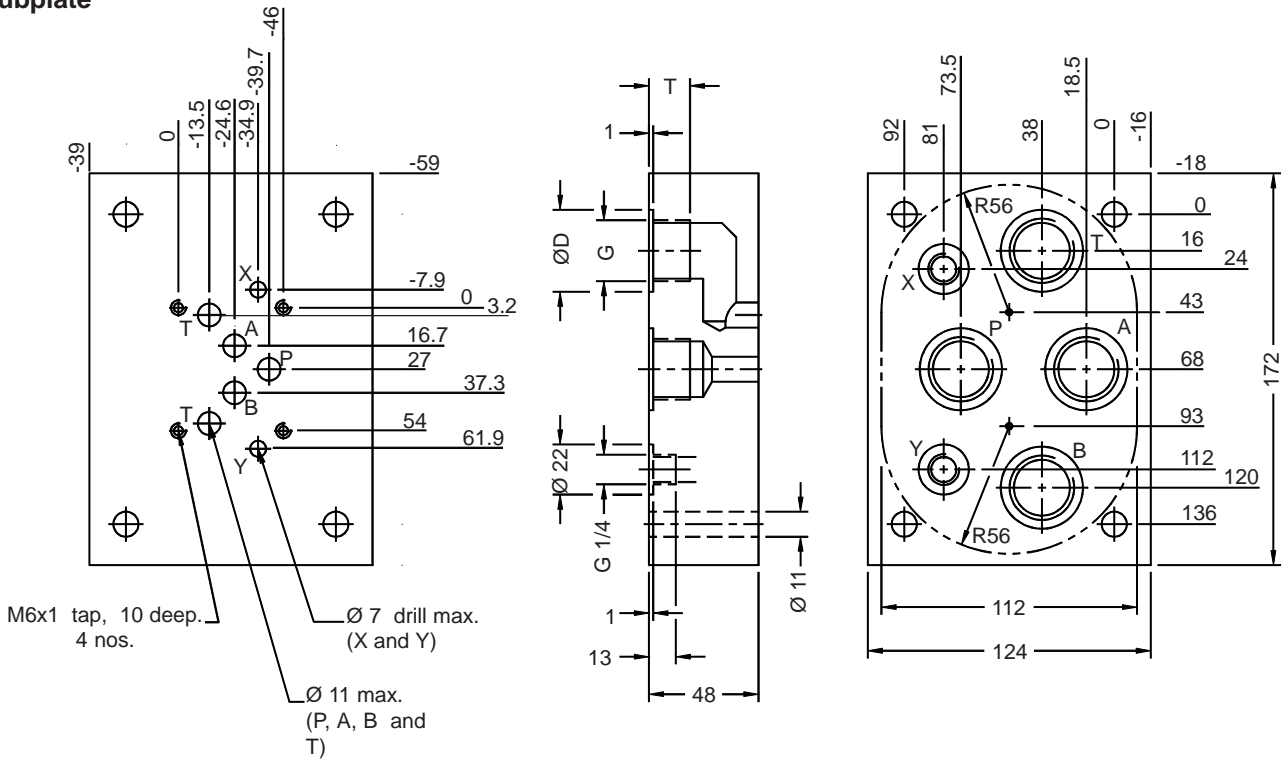
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**Subplate**



Subplate	G	ØD	T
1NSD05G06	G 3/4	36	17
1NSD05G08	G 1	44	19

Note :- Valve fixing screws M6x50L, 4 nos.  
Property class 10.9, Tightening torque 16 Nm.

**Unit Dimensions**

Construction .....	Spool type.
Mounting .....	Subplate mounting as per ISO 4401 - AC - 05 - 4 - A and IS 10187 - 10 mm diameter nominal port.
Mounting position .....	Optional.
Flow direction .....	As per spool type.
Operating pressure .....	For port P, A and B ..... 350 bar. For port T ..... 250 bar. For port X and Y ..... 150 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 .....	3.5 kg APPROX



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### Performance Curve

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

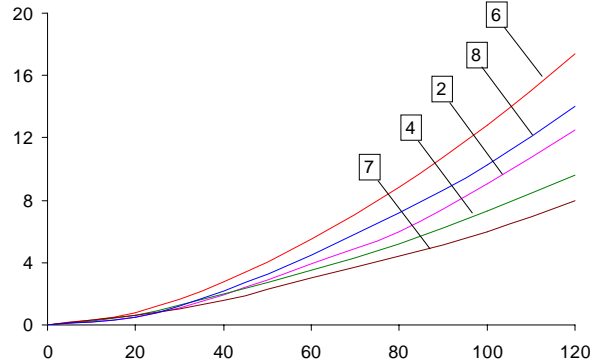
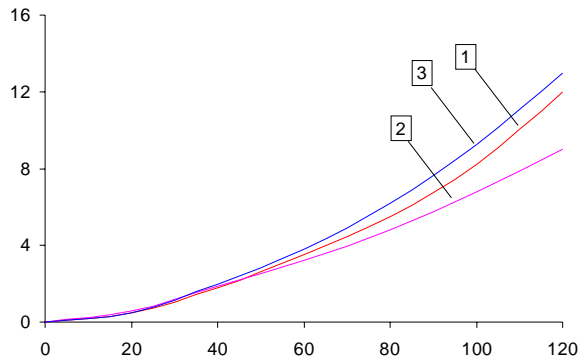


Table showing the relation between the spool type, direction of flow and curve in the above graph to be referred to.

Spool Type	P to A	P to B	A to T	B to T	P to T
A	5	5	-	-	-
B	5	5	-	-	-
C	3	3	5	5	-
D	3	3	4	4	-
E	3	3	4	4	-
H	1	1	2	2	-
J	3	3	4	4	-
L	3	3	4	4	-
P	1	1	7	8	6
F	1	1	8	7	6
G	-	-	-	-	-
M	1	1	5	5	-
U	3	3	4	4	-



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**Ordering Code**

4    DP    10    E    S    20

3 Service port  
4 Service port

Directional control valve  
pilot operated

Size 10

Spool type ( Refer chart )

Design code subject to  
change. Installation  
dimensions remain same.  
for design code 20 thru 29.

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

**Spool chart**

Type	Symbol	Crossover	Type	Symbol	Crossover
	a 0 A B P T			a 0 b A B P T	
A			L		
C			M		
D			P		
E			Q		
F			U		
G			V		
H					
J					

Note : Subplate to be ordered separately.



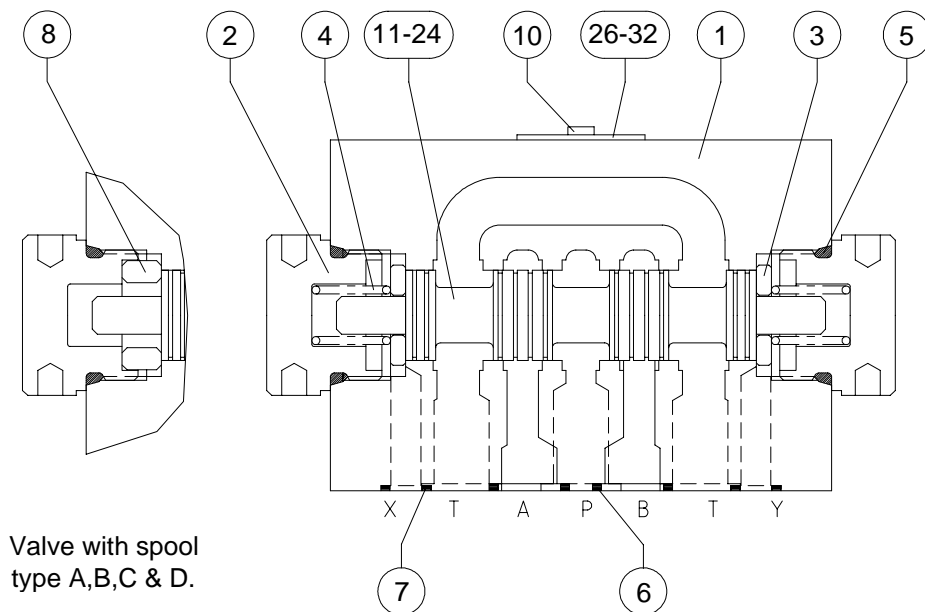
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**SERVICE**

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**Sectional view & Parts Detail**



Sl. No	Description / size	Part No.	Qty	Sl. No	Description / size	Part No.	Qty
1	Subplate Body		1	17	Spool H		1
2	End Plug		2	18	Spool J		1
3	Spring Pad		1	19	Spool L		1
* 4	Spring ( Code: 32306 )	32306	2	20	Spool M		1
* 5	O'ring ( Ø22 x 2.65 )	32106	2	21	Spool Q		1
* 6	O'ring ( Ø12 x 2 )	32113	5	22	Spool T		1
* 7	O'ring ( Ø12 x 2 )	32207	2	23	Spool U		1
8	Stopper		1	24	Spool V		1
9	Interface Cap		1	26	Label Common		1
10	CRPH Screw		2	27	Label Type C & D		1
11	Spool A & B		1	28	Label Type E		1
12	Spool C		1	29	Label Type F		1
13	Spool D		1	30	Label Type G		1
14	Spool E		1	31	Label Type H		1
15	Spool F & P		1	32	Label Type J		1
16	Spool G		1				

Note : \* Recommended seal kit. \* & □ Recommended spare kit.

While ordering the individual spares / seal kit / spare kit give part.no. and complete details of model code as punched on the pump body.



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