



PILOT OPERATED DIRECTIONAL CONTROL VALVE DP10

ENGINEERING

1

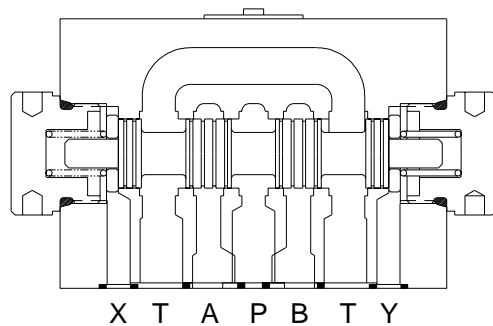
Ref. No. D32200
Release 17/04/2002

Description

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

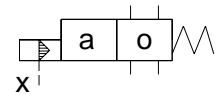


Section

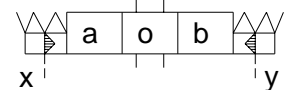


Hydraulic Symbol

2 position spring offset

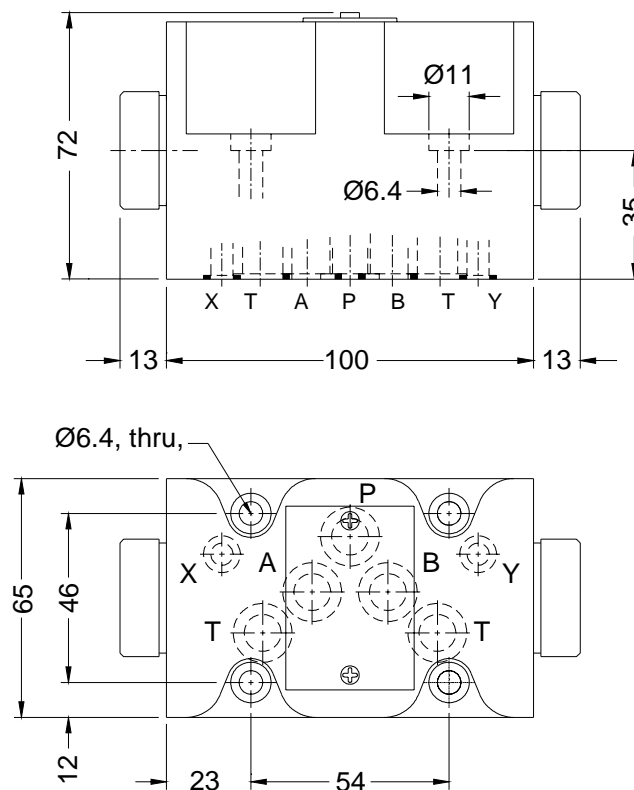


3 position spring centred

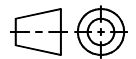


Unit Dimensions

Valve



Dimensions in mm.



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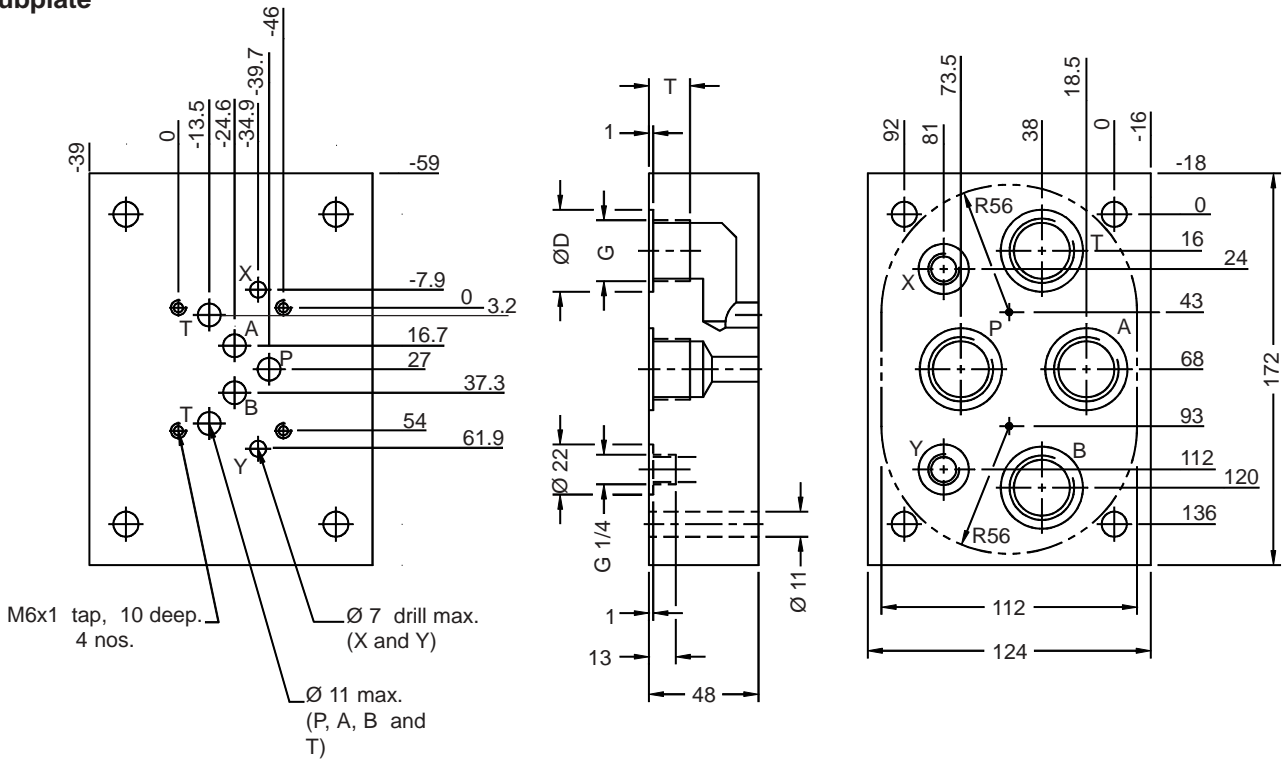
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2

Ref. No. D32200

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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3

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Performance Curve

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

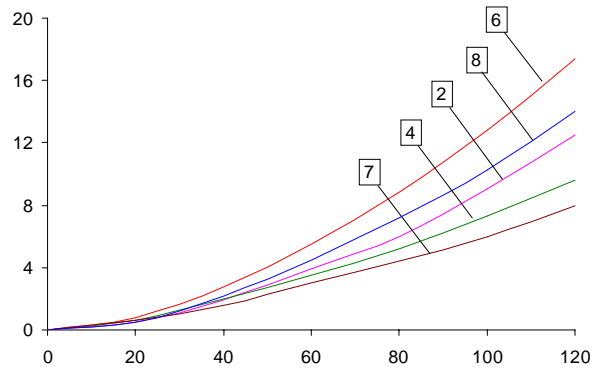
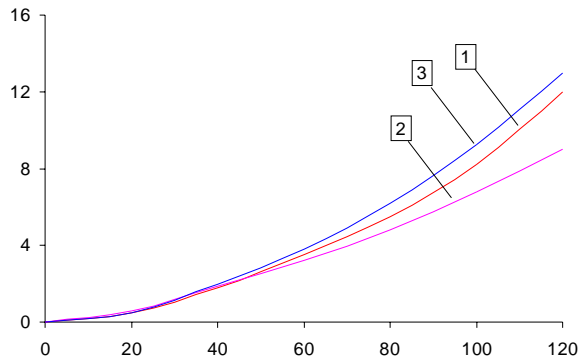


Table showing the relation between the spool type, direction of flow and curve in the above graph to be referred to.

| 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 | - |



**PILOT OPERATED
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ENGINEERING

4

Ref. No. D32200

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.



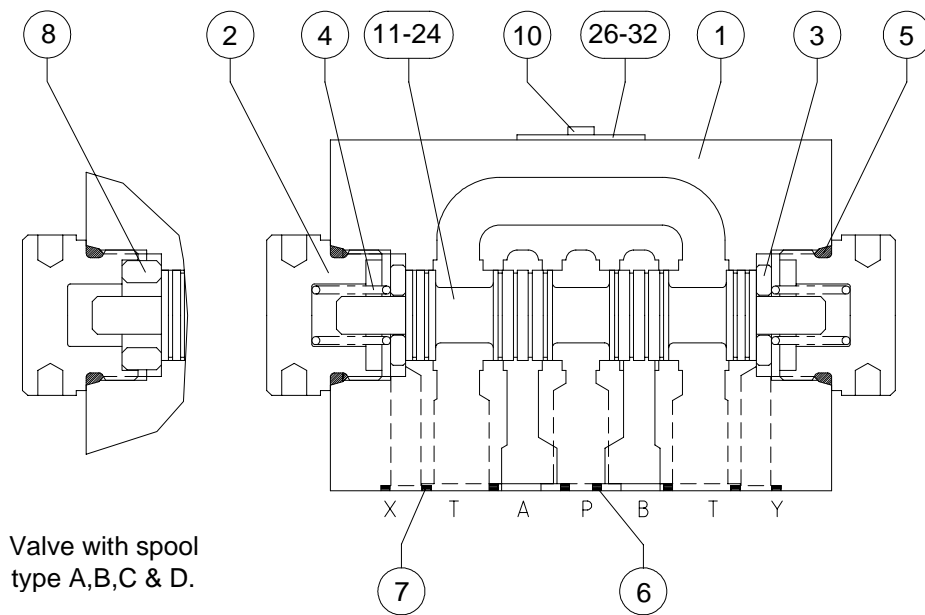
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SERVICE

5

Ref. No. D32200

Sectional view & Parts Detail



Valve with spool type A,B,C & D.

| 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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SERVICE

6

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