

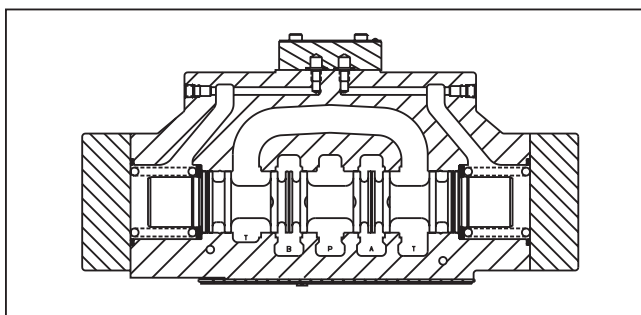
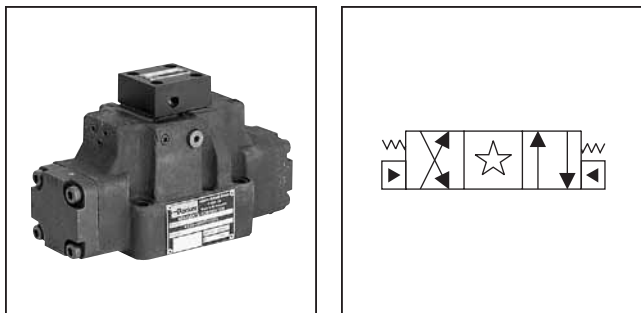
General Description

A

Series D4P directional control valves are 5-chamber pilot operated valves. They are available in 2 or 3-position styles. These manifold mounted valves conform to NFPA's D07, CETOP 7 and NG16.

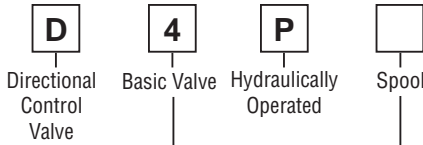
Features

- Low pressure drop design.
- Hardened spools for long life.

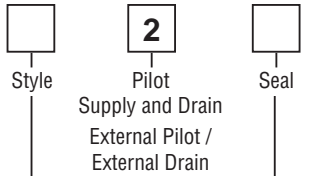


Specifications

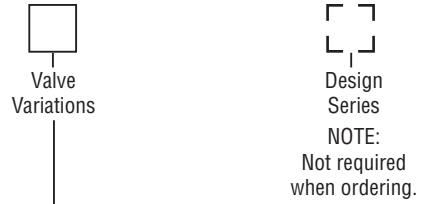
General	
Design	Directional spool valve
Actuation	Hydraulic
Size	NG16
Mounting interface	DIN 24340 A16, ISO 4401, NFPA D07, CETOP RP 121-H
Mounting Position	Unrestricted, preferably horizontal
Ambient Temperature	[°C] -25...+50 (-13°F...+122°F)
MTTF _D value	150 years
Hydraulic	
Maximum Operating Pressure	External Drain: P, A B, T 350 Bar (5075 PSI); X, Y 350 Bar (5075 PSI)
Fluid	Hydraulic oil in accordance with DIN 51524 / 51525
Fluid Temperature	[°C] -25 ... +70 (-13°F...+158°F)
Viscosity Permitted	[cSt] / [mm ² /s] 2.8...400 (13...1850 SSU)
Recommended	[cSt] / [mm ² /s] 30...80 (139...371 SSU)
Filtration	ISO 4406 (1999); 18/16/13 (meet NAS 1638: 7)
Maximum Flow	300 LPM (79.4 GPM)
Leakage at 350 Bar (per flow path)	[ml/min] up to 200 (0.05 GPM) (depending on spool)
Pilot Supply Pressure	Minimum 5 Bar (73 PSI)
Maximum	350 Bar (5075 PSI)
Static / Dynamic	
Step Response	The response times depend on the pilot oil pressure and on the speed of the increase/ decrease of the pilot pressure.



NFPA D07,
 CETOP 7
 DIN NG16



Code	Description
N	Nitrile
V	Fluorocarbon



Code	Description	Code	Description
Omit	Standard Valve	9	Stroke Adjust A End
7	Pilot Choke, Meter-Out	60	Pilot Choke, Meter-In
8	Stroke adjust B End	89	Stroke Adjust A and B Ends

3 Position Spools	
Code	Spool Type
	a 0 b
1	
2	
3	
4	
5	
6	
7	
9	
11	
14	
15	
16	
21	
22	
54	
81	
82	

2 Position Spools	
Code	Spool Type
	a b
20	
26	
30	

3 Position Spools		
Code	All 3 Position Spools	
C		3 positions. Spring offset in position "0". Operated in position "a" or "b".
	Standard	Spool Type 9
E		2 positions. Spring offset in position "0". Operated in position "a".
		Operated in position "b".
F		2 positions. Spring offset in position "b". Operated in position "0".
		Spring offset in position "a".
K		2 positions. Operated in position "b". Spring offset in position "0".
		Operated in position "a".
M		2 positions. Spring offset in position "a". Operated in position "0".
		Spring offset in position "b".
R		2 positions, detent. No center in offset position. Operated in position "0" or "b".
		No center in offset position.
S		2 positions, detent. No center in offset position. Operated in position "0" or "a".
		No center in offset position.

2 Position Spools		
Code	Spool Position	
B		Spring offset in position "b". Operated in position "a".
D		Detent, operated in position "a" or "b". No center or offset position.
H		Spring offset in position "a". Operated in position "b".

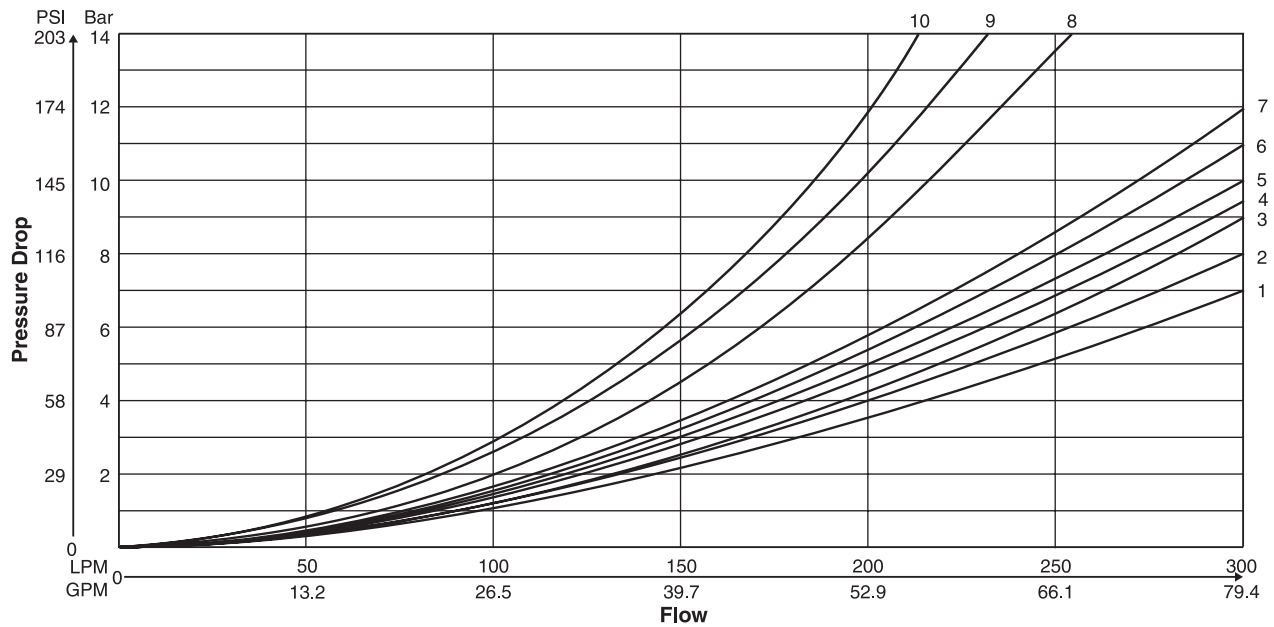
Weight: 9.0 kg (19.8 lbs.)

Further spool types and position control on request.

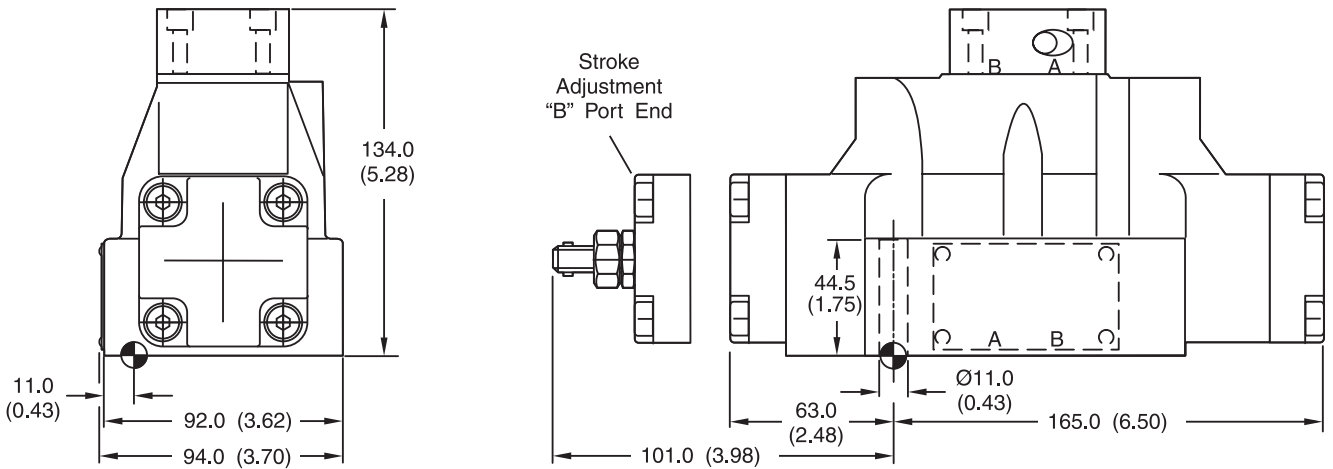
The flow curve diagram shows the flow versus pressure drop curves for all spool types. The relevant curve number for each spool type, operating position and flow direction is given in the table below.

A

Spool Code	Curve Number				
	P-A	P-B	P-T	A-T	B-T
1	1	1	-	4	5
2	1	2	6	4	6
3	1	2	-	5	6
4	1	1	-	5	5
5	2	2	-	3	5
6	1	2	-	3	6
7	1	1	6	4	5
9	2	9	8	7	10
11	1	1	-	4	5
14	1	1	6	4	5
15	1	2	-	4	6
16	2	2	-	3	5
20	3	5	-	3	5
21	2	8	-	2	-
22	8	2	-	-	3
26	3	5	-	-	-
30	2	3	-	6	7
54	2	3	-	6	7



Inch equivalents for millimeter dimensions are shown in (**)



Surface Finish	Kit			Seal Kit
	 BK320	 4x M10x60 2x M6x55 DIN 912 12.9	 63 Nm (46.5 lb.-ft.) 13.2 Nm (9.7 lb.-ft.) ±15%	 Nitrile: SK-D41VW-N-91 Fluorocarbon: SK-D41VW-V-91