

General Description

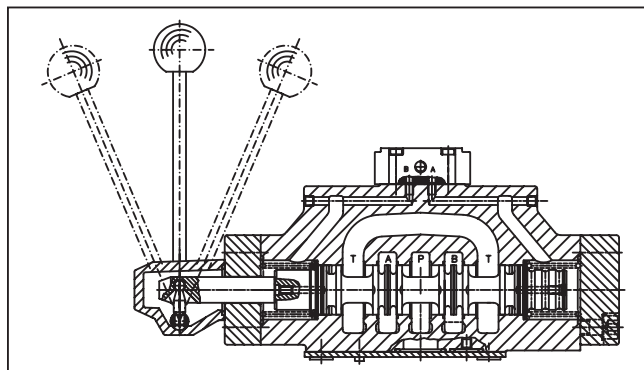
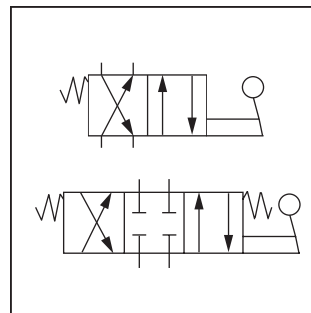
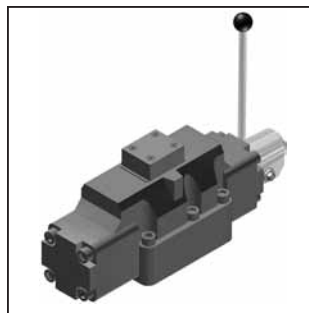
A

Series D4L valves are 5 chamber, directional control valves and are available in 2 or 3-position styles. They are operated by a hand lever which is directly connected to the spool.

The hand lever can be located either on the A or B side. Spring offset and detent designs are available.

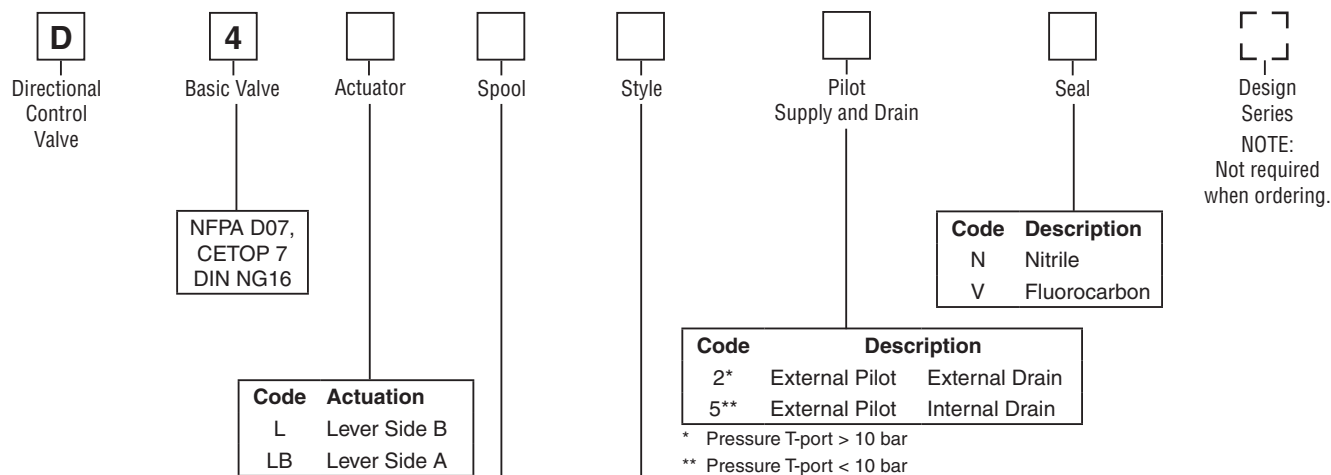
Features

- Low force required to shift spool.
- Hardened spools provide long life.
- Low pressure drop design.



Specifications

General		
Design		Directional spool valve
Actuation		Lever
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)
Hydraulic		
Maximum Operating Pressure		External Drain: P, A B, T 350 Bar (5075 PSI); X, Y 10 Bar (145 PSI) Internal Drain: P, A B 350 Bar (5075 PSI); T, X, Y 10 Bar (145 PSI)
Fluid		Hydraulic oil in accordance with DIN 51524 / 51525
Fluid Temperature	[°C]	-25 ... +70; (-13°F...+158°F)
Viscosity Permitted	[cSt] / [mm²/s]	2.8...400 (13...1854 SSU)
Recommended	[cSt] / [mm²/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)



3 Position Spools		
Code	Spool Type	
	a	0 b
1		
2		
3		
4		
6		
7		
9		
11		
14		
15		

2 Position Spools		
Code	Spool Type	
	a	b
20		
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".
F		2 positions. Spring offset in position "b".
K		2 positions. Spring offset in position "0".
M		2 positions. Spring offset in position "a".
N		3 positions, detent. Operated in position "a", "0" or "b".
R		2 positions, detent. Operated in position "0" or "b".
S		2 positions, detent. 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.)

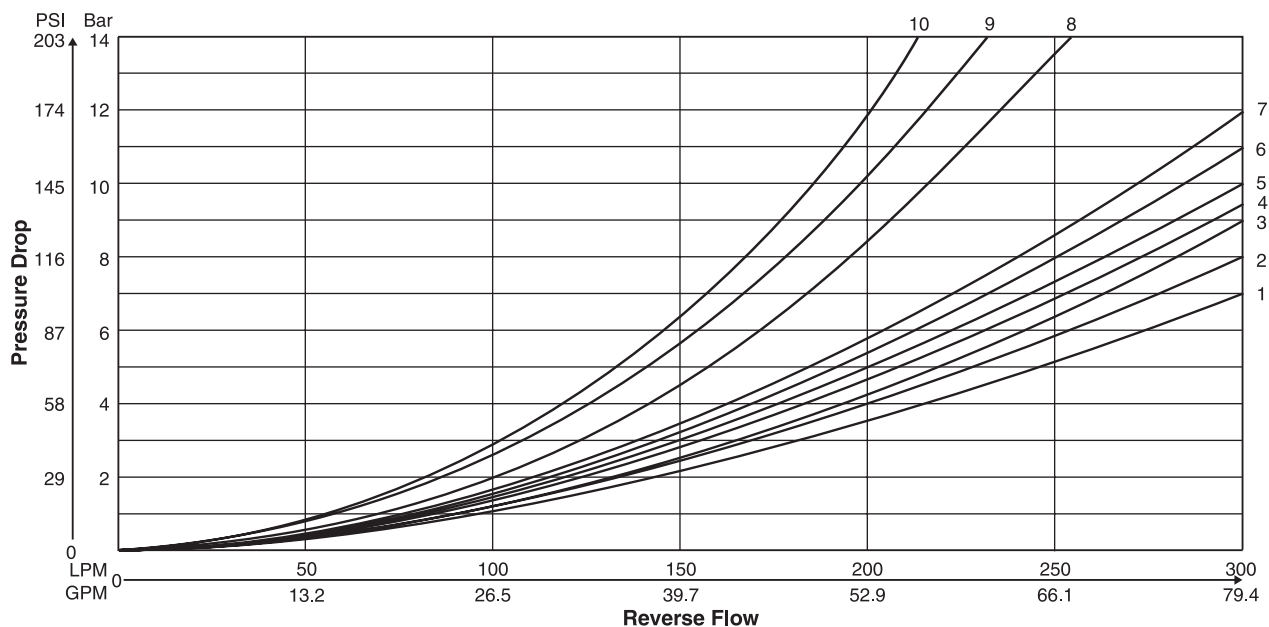
Further spool types on request.

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

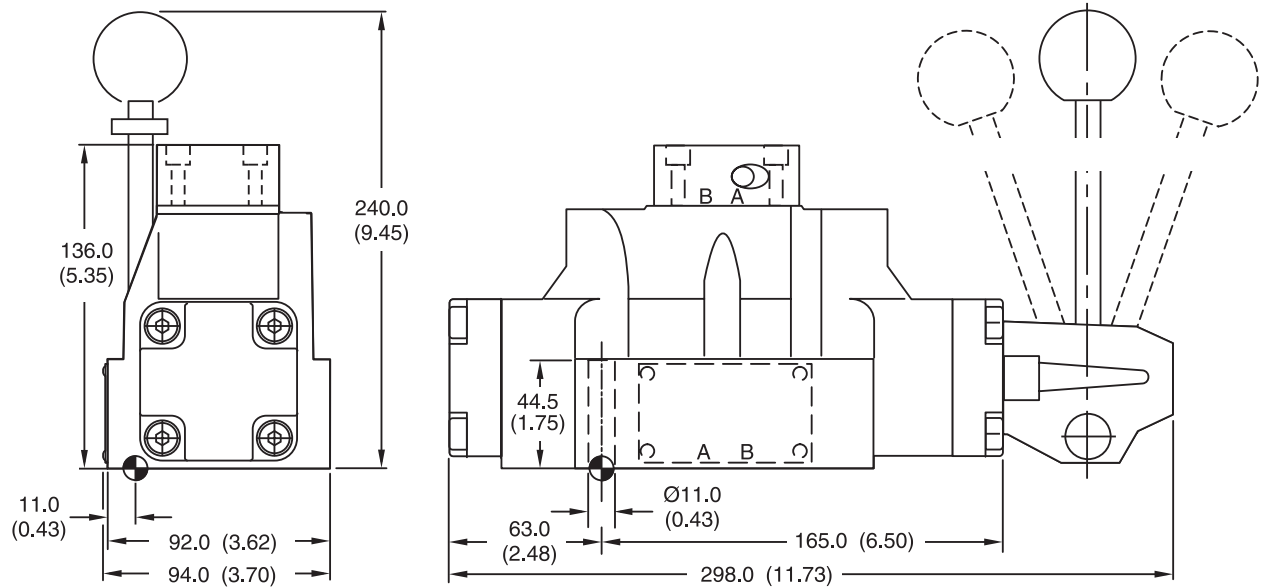
Spool Code	Curve Number				
	P-A	P-B	P-T	A-T	B-T
1	1	1	—	4	5
2	1	2	6	4	6
3	1	2	—	5	6
4	1	1	—	5	5
6	1	2	—	3	6
7	1	1	6	4	5
9	2	9	8	7	10
11	1	1	—	4	5
14	1	1	6	5	4
15	2	1	—	6	5
20	3	5	—	3	5
30	2	3	—	6	7

All characteristic curves measured with HLP46 at 50°C.



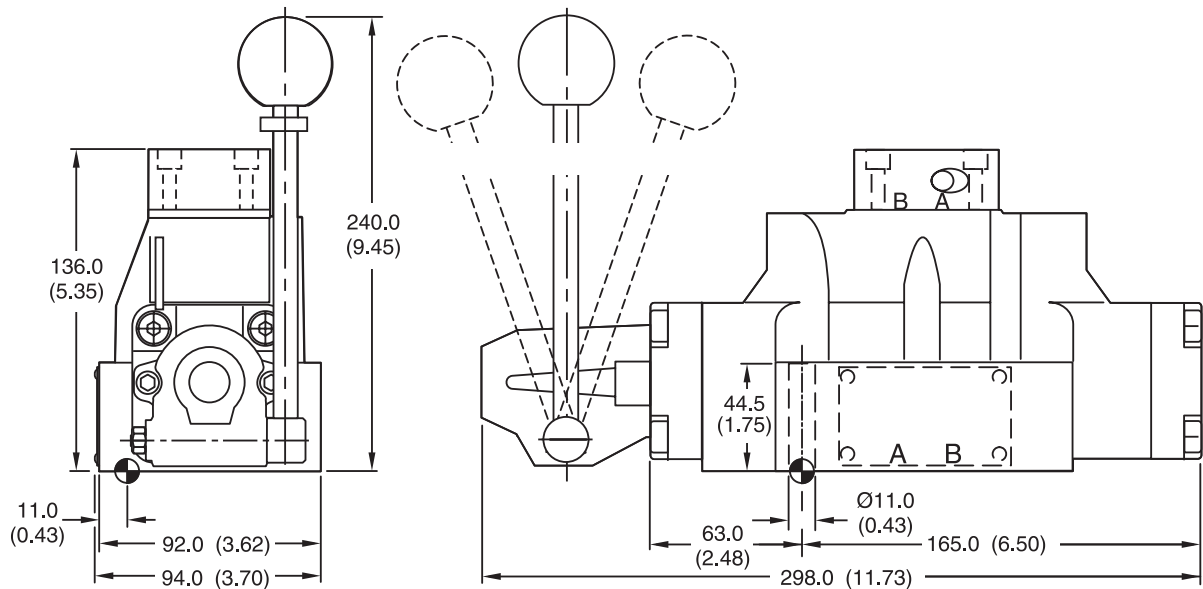
Inch equivalents for millimeter dimensions are shown in (**)

D4L



A

D4LB



Surface Finish	Kit			Seal Kit
$\sqrt{R_{max} 6.3}$ $\square 0.01/100$	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-D4LN60 Fluorocarbon: SK-D4LV60