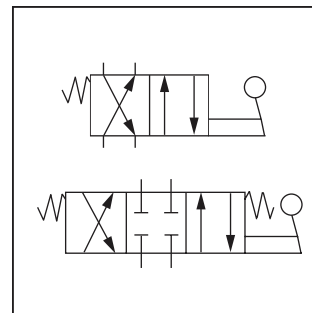
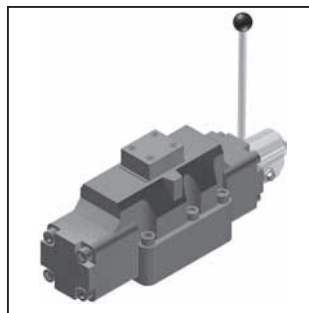


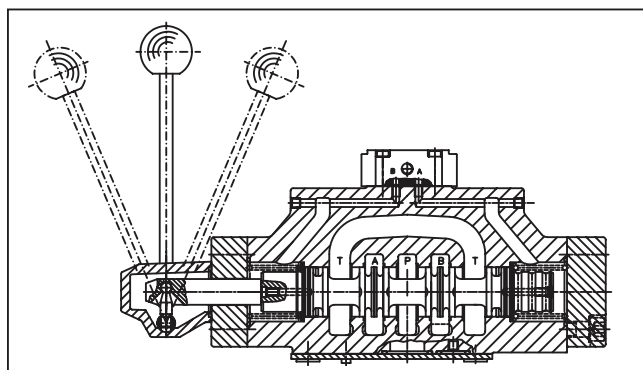
General Description

Series D9L directional control valves are 5-chamber, 4 way, 2 or 3-position valves. 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

- Streamlined internal channels ensure minimum pressure drop at maximum flow.
- Hardened spools provide long life.



Specifications

General		Hydraulic (cont.)	
Actuation	Lever	Fluid	Hydraulic oil in accordance with DIN 51524 / 51525
Size	NG25	Fluid Temperature	-25°C to +70°C (-13°F to +158°F)
Mounting Interface	DIN 24340 A25 ISO 4401 NFPA D08 CETOP RP 121-H	Viscosity Permitted	2.8 to 400 cSt / mm ² /s (13 to 1854 SSU)
Mounting Position	Unrestricted, preferably horizontal	Viscosity Recommended	30 to 80 cSt / mm ² /s (139 to 371 SSU)
Ambient Temperature	-25°C to +50°C (-13°F to +122°F)	Filtration	ISO 4406 (1999); 18/16/13 (meet NAS 1638: 7)
Hydraulic		Maximum Flow	700 LPM (185.2 GPM)
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)	Leakage at 350 Bar (5075 PSI)	up to 800 ml per minute (per flow path) (depending on spool)



A

D
 Directional Control Valve

9
 Basic Valve

NFPA D08
 CETOP 8
 DIN NG25
 32 mm

Actuator

Code	Actuation
L	Lever Side B
LB	Lever Side A

Spool

Style

Pilot Supply and Drain

Code	Description
2*	External Pilot External Drain
5**	External Pilot Internal Drain

* Pressure T-port < 10 bar
 ** Pressure T-port > 10 bar

Seal

Code	Description
N	Nitrile
V	Fluorocarbon

Design Series

NOTE:
 Not required when ordering.

Code	Symbol	Code	Symbol
01		09	
02		14	
03		15	
04		20	
07		30	

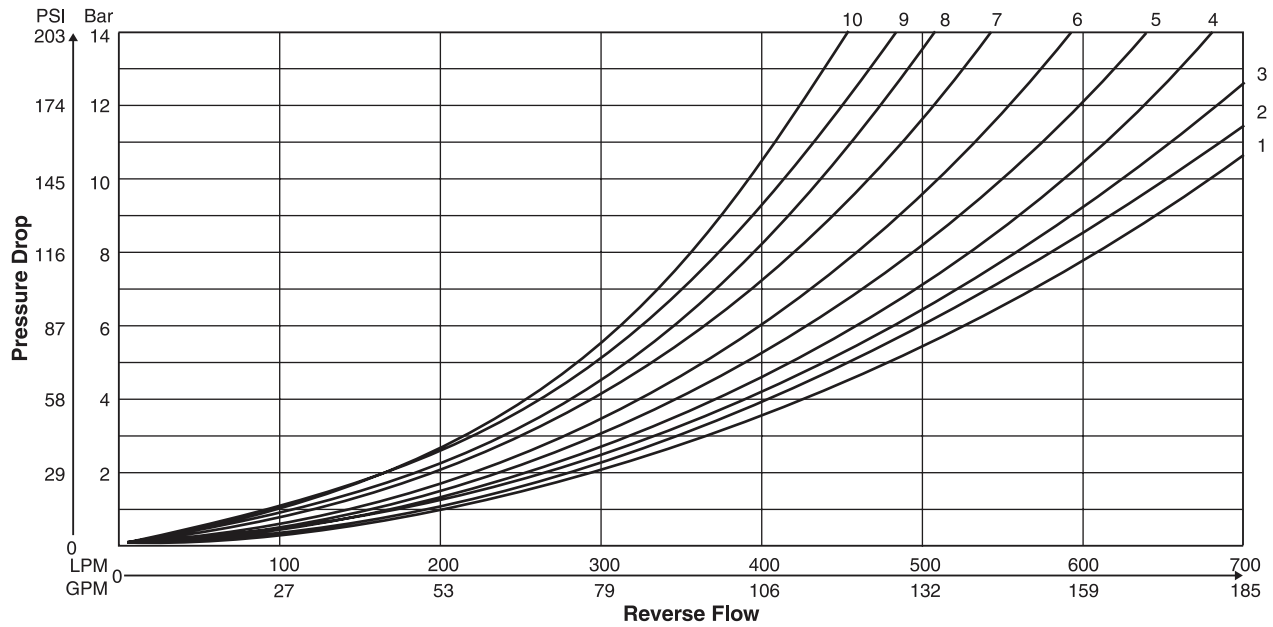
Code	Description	Symbol
B	Single operator, 2 position, spring offset.	
C	Double operator, 3 position, spring centered.	
D	Double operator, 2 position, detent.	
E	Single operator, 2 position, spring centered.	
H	Single operator, 2 position, spring offset.	
K	Single operator, 2 position, spring centered.	
N	Double operator, 3 position, detent.	

Weight: 17.0 kg (37.5 lbs.)

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.



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

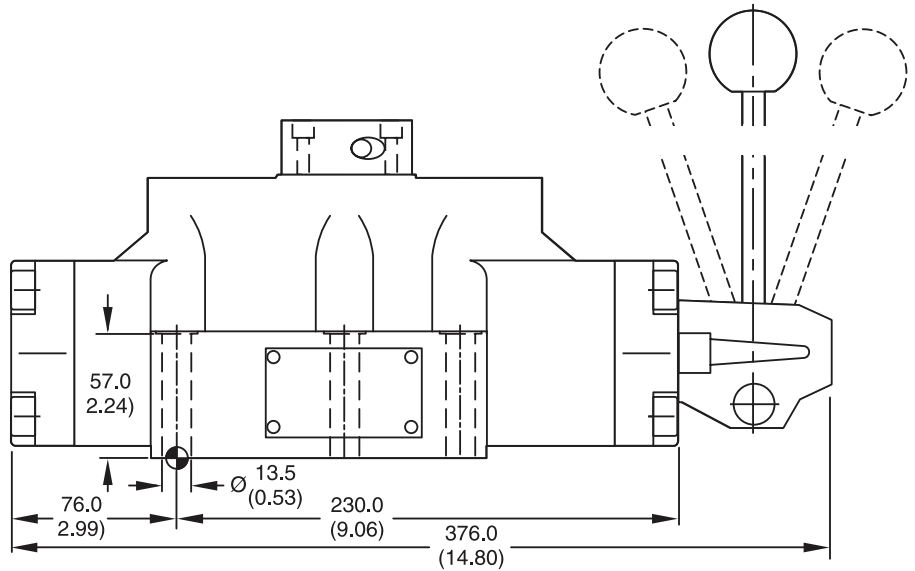
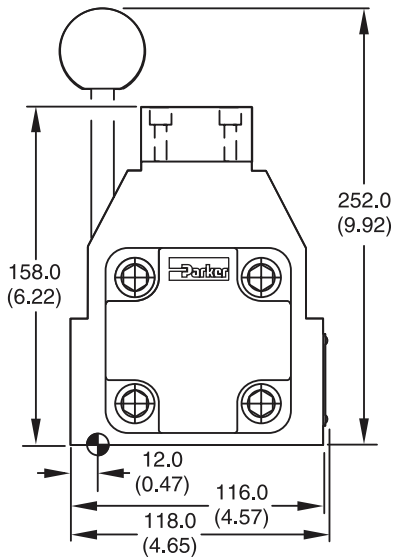


Inch equivalents for millimeter dimensions are shown in (**)

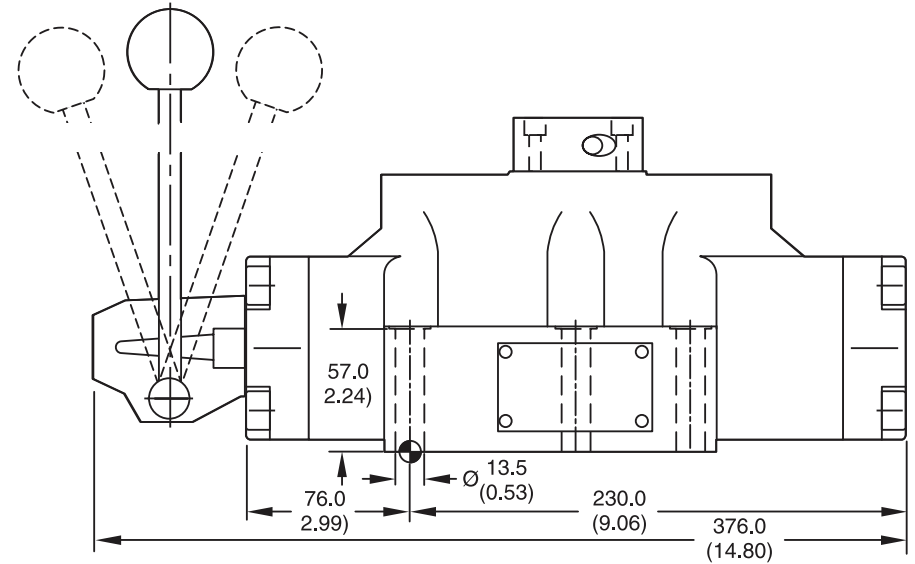
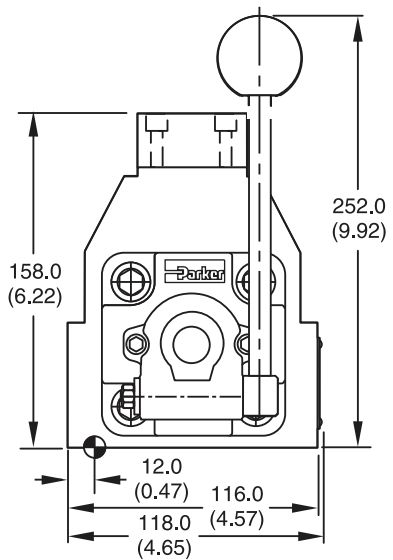


A

D9L



D9LB



Surface Finish	Kit			Seal Kit
	BK360	6x M5x75 DIN 912 12.9	108 Nm ±15%	Nitrile: SK-D9LN Fluorocarbon: SK-D9LV