### **General Description**

Series D3A directional control valves are high performance, 4-chamber, direct operated, air pilot controlled, 3 or 4-way valves. They are available in 2 or 3-position and conform to NFPA's D05/CETOP 5 mounting patterns.

#### Features

- Low pilot pressure required 4.1 Bar (60 PSI) minimum.
- Manual overrides standard.
- High flow, low pressure drop design.

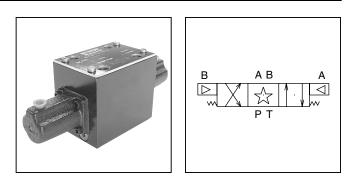
### **Specifications**

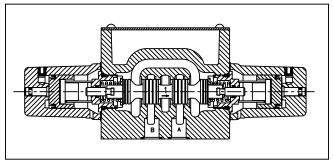
Mounting Pattern	NFPA D05, CETOP 5, NG 10		
Maximum Pressure	Operating: Tank Line:	345 Bar (5000 PSI) 34 Bar (500 PSI)	
Maximum Flow	See Spool Reference Chart		
Pilot Pressure	Air Minimum Air Maximum	4.1 Bar (60 PSI) 6.9 Bar (100 PSI)	

# Air Operated

**Shift Volume.** The air pilot chamber requires a volume of  $1.8 \text{ cc} (.106 \text{ in}.^3)$  for complete shift from center to end.

**Pilot Piston.** The pilot piston area is 506 mm<sup>2</sup> (.785 in.<sup>2</sup>). Pilot piston stroke is 3.4 mm (.135 in.).





## Response Time\* (ms)

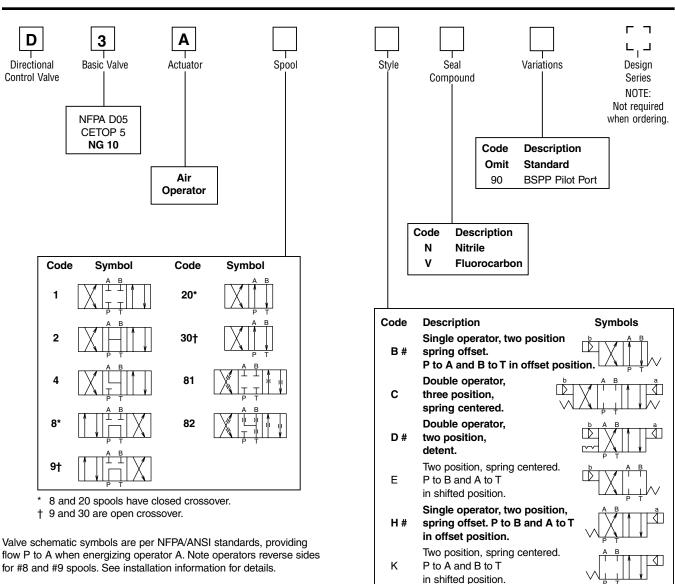
Signal to 95% spool stroke measured at 172 Bar (2500 PSI) and 75 LPM (20 GPM)

Pilot Pressure	Pull-In	Drop-Out
60 PSI	23.0 ms	23.0 ms
100 PSI	19.0 ms	38.0 ms

Chart is for reference only. Response time will vary with pilot line size, length, air pressure and air valve flow capacity (Cv).

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# B, D & H styles available with 20 and 30 spools only.

▷ Indicates air pilot.

Valve Weight:	4.1 kg (9 lbs.)
Standard Bolt Kit:	BK98
Metric Bolt Kit:	BKM98

## **Mounting Bolt Kits**

UNC Bolt Kits for use with D3A Directional Control Valves & Manapak/Cartpak						
		Number of Manapaks/Cartpaks @ 2.00" (50mm) thickness				
		0	1	2	3	
D3A	Standard:	BK98 1.62"	BK141 3.50"	BK142 5.50"	BK143 7.50"	
	Metric:	BKM98 40mm	BKM141 90mm	BKM142 140mm	BKM143 190mm	

NOTE: All bolts are SAE grade 8, 1/4-20 UNC-2A thread, torque to 16 Nm (12 ft-lbs)

Bold: Designates Tier I products and options.

Non-Bold: Designates Tier II products and options. These products will have longer lead times.

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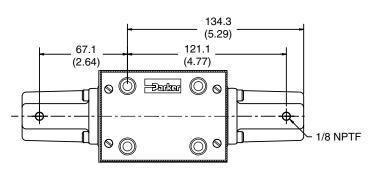
This condition varies

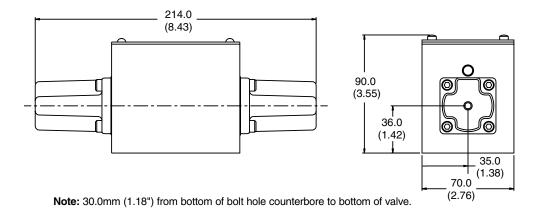
with spool code.

▲ `

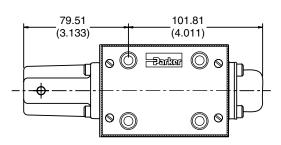
Inch equivalents for millimeter dimensions are shown in (\*\*)

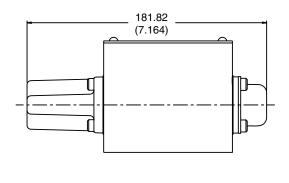
## Air Operated, Double Pilot

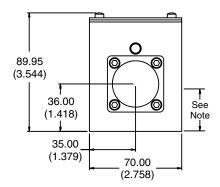




## Air Operated, Single Pilot









Note: 30.0mm (1.18") from bottom of bolt hole counterbore to bottom of valve.

2502-A2.p65, dd

