

**General Description**

Series D1V directional control valve subplates provide easy transition from NFPA and CETOP mounting patterns to common plumbing connections. Five different thread types are available for use in any application.

Manifolds provide a single location to mount several valves in a compact and manageable array for operating multiple machines or functions.

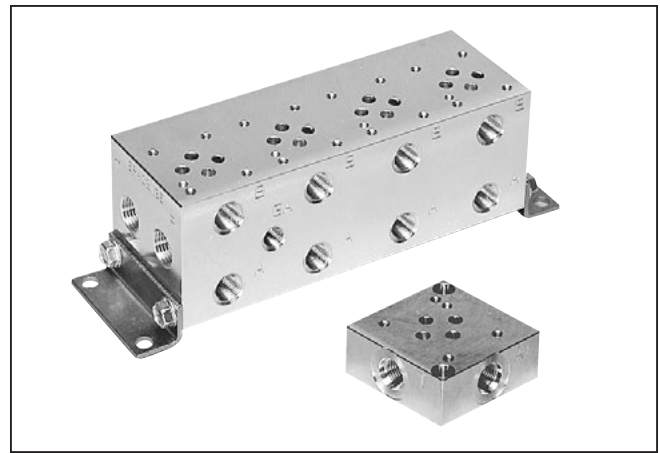
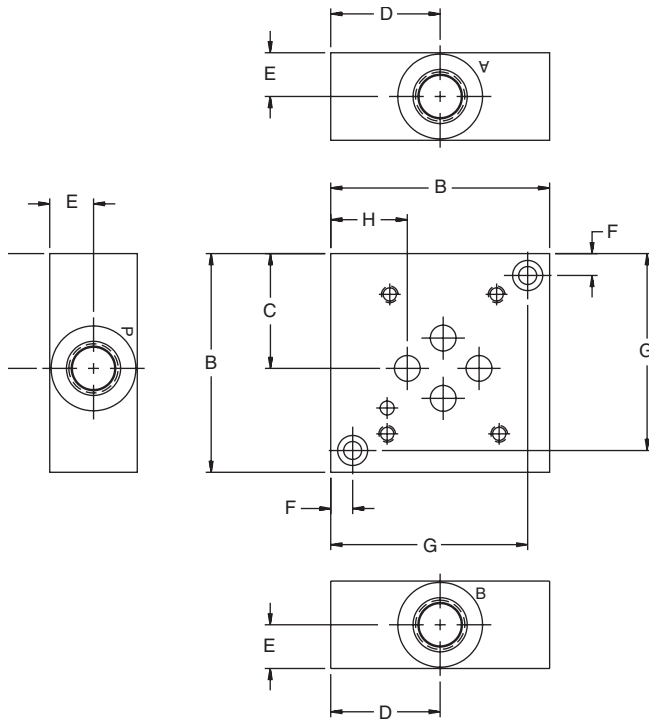
**C**

**Features**

- **Aluminum or steel available** — Flexibility for applying to different system pressures
- **NPT and SAE thread options available** — Flexibility to plumb into existing systems
- **Multiple port sizes available** — Eliminates need for reducers and expanders at subplate connection

**Side Ported Subplate — NFPA D03**

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



**Operation**

Series D1V subplates and manifolds consist of an NFPA valve mounting surface and corresponding connections for each valve port. Various port sizes and thread type are available. Cover plates, crossover and tapping plates are also available.

See Mounting Bolt Kits for bolt information.

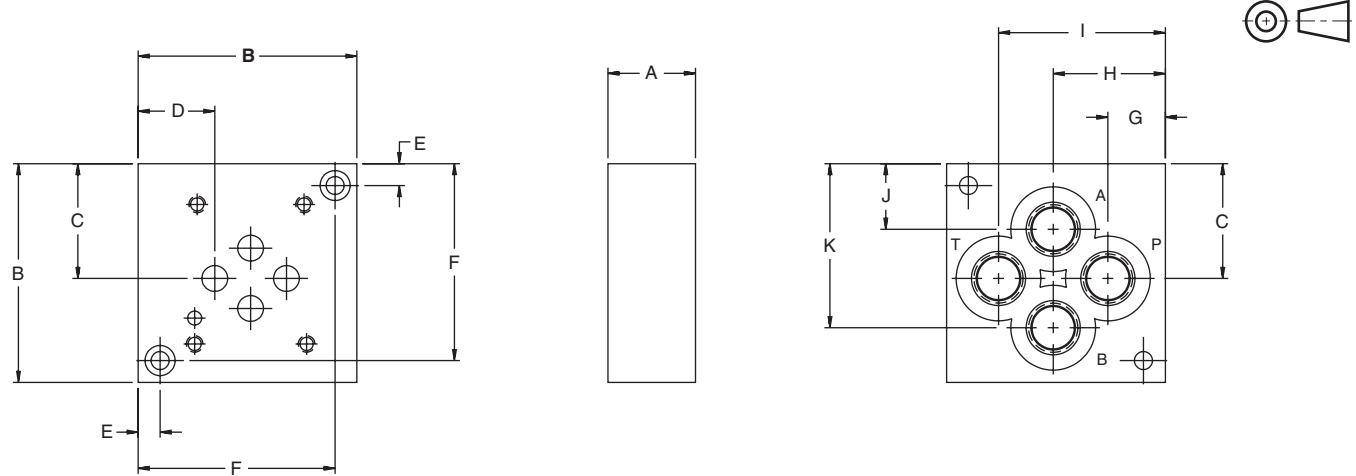
Port								
Size	A	B	C	D	E	F	G	H
2*	25.4 (1.00)	63.5 (2.50)	33.3 (1.31)	31.8 (1.25)	12.7 (.50)	6.4 (.25)	57.2 (2.25)	22.4 (.88)
3*	25.4 (1.00)	63.5 (2.50)	33.3 (1.31)	31.8 (1.25)	12.7 (.50)	6.4 (.25)	57.2 (2.25)	22.4 (.88)
4*	38 (1.50)	88.9 (3.50)	46.0 (1.81)	45.2 (1.78)	19.1 (.75)	6.4 (.25)	82.5 (3.25)	35.1 (1.38)
6*	44.5 (1.75)	101.6 (4.00)	52.3 (2.06)	51.6 (2.03)	22.4 (.88)	9.7 (.38)	92.2 (3.63)	41.4 (1.63)

**WARNING:** This product can expose you to chemicals including Lead, Nickel (Metallic), or 1,3-Butadiene which are known to the State of California to cause cancer, and Lead or 1,3-Butadiene which is known to the State of California to cause birth defects and other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**Series D1V**

**Bottom Ported Subplate — NFPA D03**

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



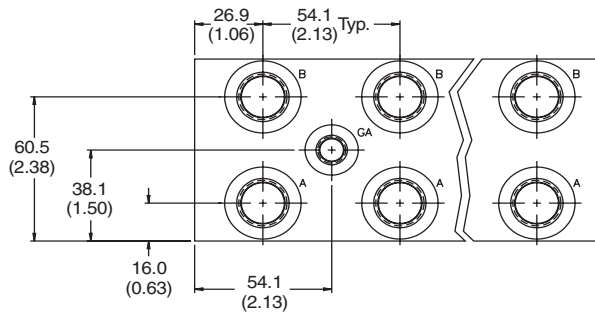
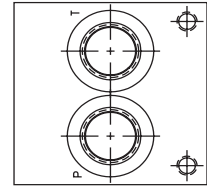
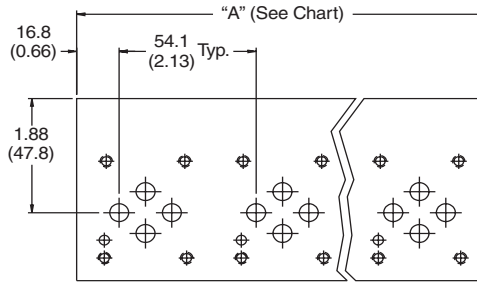
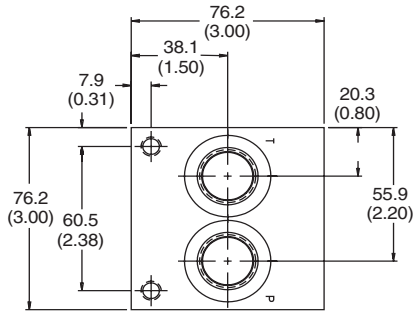
Port Size	A	B	C	D	E	F	G	H	I	J	K
2*	25.4 (1.00)	63.5 (2.50)	33.3 (1.31)	22.4 (.88)	6.4 (.25)	57.2 (2.25)	16.8 (.66)	32.5 (1.28)	48.5 (1.91)	19.1 (.75)	47.8 (1.88)
3*	25.4 (1.00)	63.5 (2.50)	33.3 (1.31)	22.4 (.88)	6.4 (.25)	57.2 (2.25)	15.0 (.59)	32.5 (1.28)	50.0 (1.97)	17.5 (.69)	49.3 (1.94)
4*	38.1 (1.50)	88.9 (3.50)	46.0 (1.81)	35.1 (1.38)	6.4 (.25)	82.6 (3.25)	17.5 (.69)	45.2 (1.78)	71.4 (2.81)	19.1 (.75)	71.4 (2.81)
6*	38.1 (1.50)	114.3 (4.50)	58.7 (2.31)	47.8 (1.88)	9.7 (.38)	104.9 (4.13)	23.9 (.94)	57.9 (2.28)	90.4 (3.56)	23.9 (.94)	90.4 (3.56)

See Mounting Bolt Kits for bolt information.

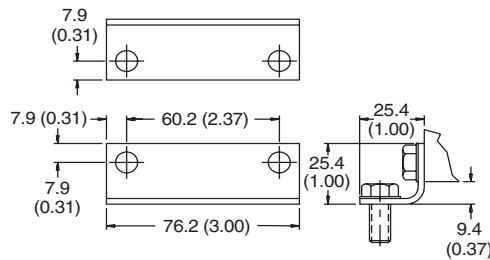


**Series D1V**  
**Manifold — NFPA D03**

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



Note: Gage port not available on single station manifold.

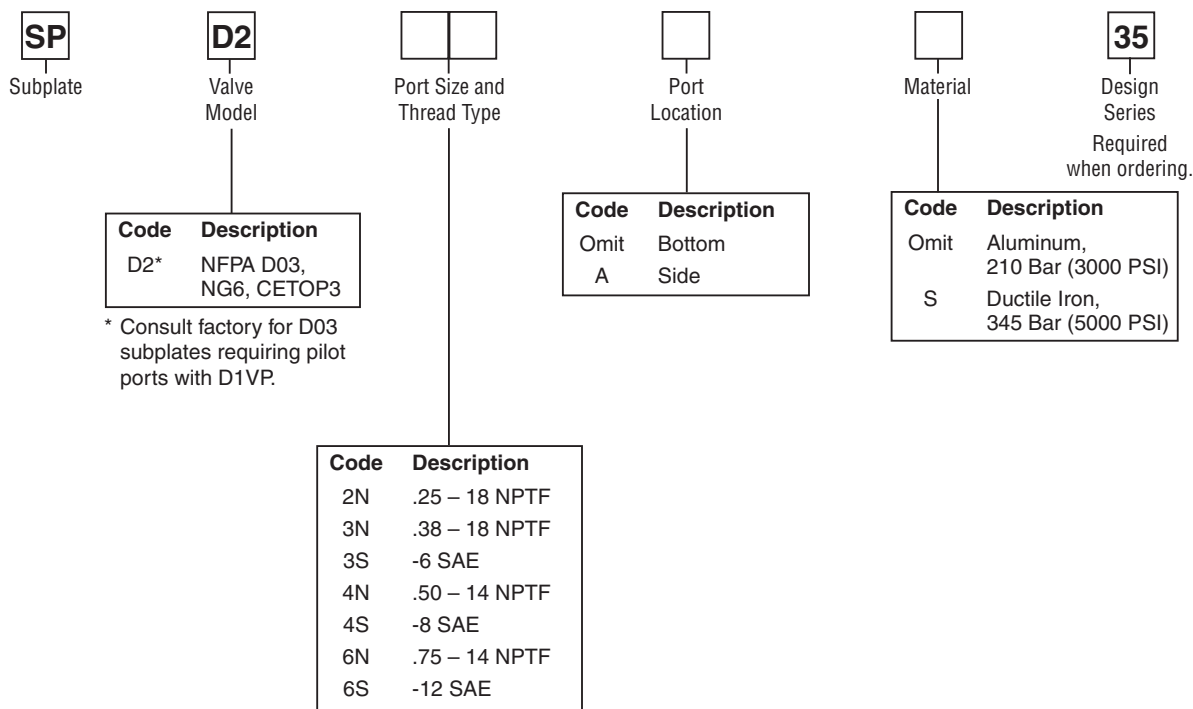


**Mounting Hardware**  
(See Ordering Information for Mounting Hardware details)

No. Stations	1	2	3	4	5	6	7	8
"A" Length mm (inch)	54.1 (2.13)	108.0 (4.25)	162.1 (6.38)	215.9 (8.50)	270.0 (10.63)	323.9 (12.75)	378.0 (14.88)	431.8 (17.00)
Wgt., Alum, kg (lbs.)	1.4 (3)	1.8 (4)	2.7 (6)	3.6 (8)	4.1 (9)	5.0 (11)	5.4 (12)	6.4 (14)
Wgt., Iron, kg (lbs.)	2.3 (5)	4.1 (9)	5.9 (13)	7.7 (17)	9.5 (21)	11.8 (26)	13.6 (30)	15.4 (34)

See Mounting Bolt Kits for bolt information.

**Series D1V Subplates**



**Note:** 35 Design Series subplates conform to NFPA mounting pattern specifications, but may be dimensionally different from previous design series.

**Mounting Bolt Kits**

UNC Bolt Kits for use with D1V Directional Control Valves & Sandwich Valves (D1V*-91 Design, Solenoid Operated)					
	Number of Sandwich Valves @ 1.58" (40mm) thickness				
	0	1	2	3	4
D1V-91	BK209 1.25"	BK243 2.88"	BK225 4.38"	BK244 6.00"	BK245 7.50"
D1V-91 Plus Tapping Plate	BK176 2.25"	BK56 3.81"	BK212 5.38"	BK107 7.00"	BK106 8.50"

**Note:** All bolts are SAE grade 8, 10-24 UNC-2A thread, torque to 5.6 N.m. (50 in.-lbs.)

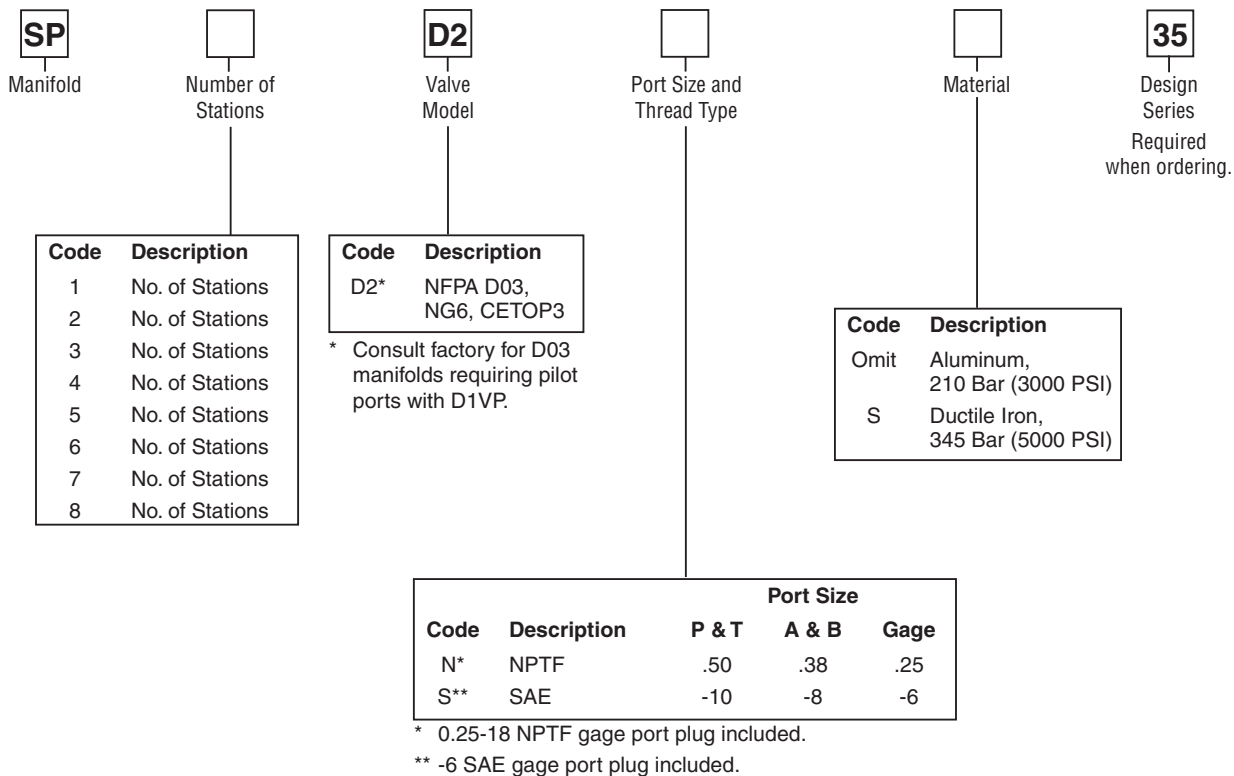
**Mounting Hardware**  
supplied with subplate includes:

Subplates	Mounting Hardware	Qty.
SPD22N**	.25-20 UNC x	2
SPD23N**	.88 LG. SHCS	
SPD23S**		
SPD24N**	.25-20 UNC x	2
SPD24S**	1.5 LG. SHCS	
SPD26N*	.38-16 UNC x	2
SPD26S*	1.50 LG. SHCS	
SPD26NA*	.38-16 UNC x	2
SPD26SA*	1.75 LG. SHCS	

Valve mounting threads:  
 #10-24 UNC x 0.63 DP.  
 Used for SAE and NPTF ports.  
 Metric M5-0.8mm ISO 6H x 16 DP.  
 Used for BSPP, BSPT and ISO ports.



**Series D1V Manifolds**



**Note:** 35 Design Series manifolds conform to NFPA mounting pattern specifications, but may be dimensionally different from previous design series.

**Mounting Bolt Kits**

UNC Bolt Kits for use with D1V Directional Control Valves & Sandwich (D1V*-91 Design, Solenoid Operated)					
	Number of Sandwich @ 1.58" (40mm) thickness				
	0	1	2	3	4
D1V-91	BK209 1.25"	BK243 2.88"	BK225 4.38"	BK244 6.00"	BK245 7.50"
D1V-91 Plus Tapping Plate	BK176 2.25"	BK56 3.81"	BK212 5.38"	BK107 7.00"	BK106 8.50"

**Note:** All bolts are SAE grade 8, 10-24 UNC-2A thread, torque to 5.6 N.m. (50 in.-lbs.)

Mounting hardware supplied with manifold includes:  
 (2) steel brackets  
 For SAE and NPTF ports: (8) 5/16-18 UNC x .63 hex washer cap screws.  
 Valve mounting threads:  
 #10-24 UNC x 0.63 DP. Used for SAE and NPTF ports.

No. Stations	1	2	3	4	5	6	7	8
Wgt., Alum, kg (lbs.)	1.4 (3)	1.8 (4)	2.7 (6)	3.6 (8)	4.1 (9)	5.0 (11)	5.4 (12)	6.4 (14)
Wgt., Iron, kg (lbs.)	2.3 (5)	4.1 (9)	5.9 (13)	7.7 (17)	9.5 (21)	11.8 (26)	13.6 (30)	15.4 (34)