

General Description

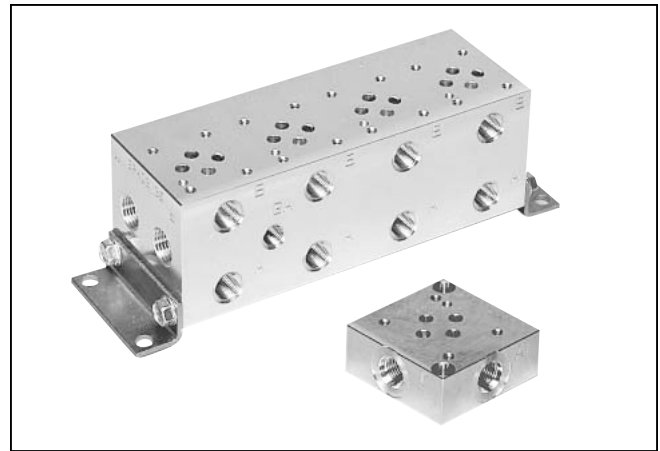
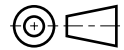
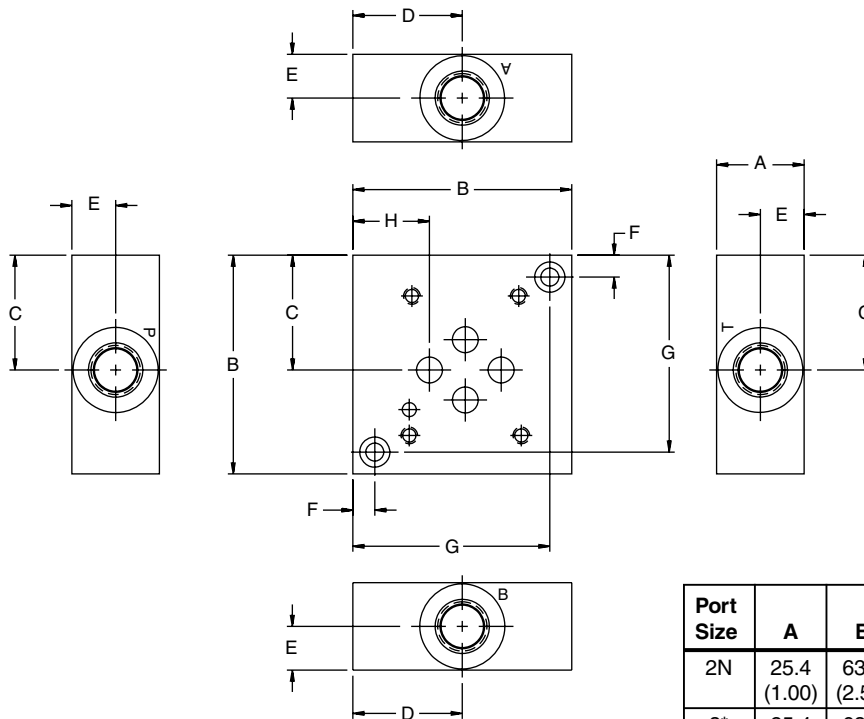
Series D1V directional control valve subplates provide easy transition from NFPA and CETOP mounting patterns to common plumbing connections. Five different thread types are available for use in any application. Manifolds provide a single location to mount several valves in a compact and manageable array for operating multiple machines or functions.

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.

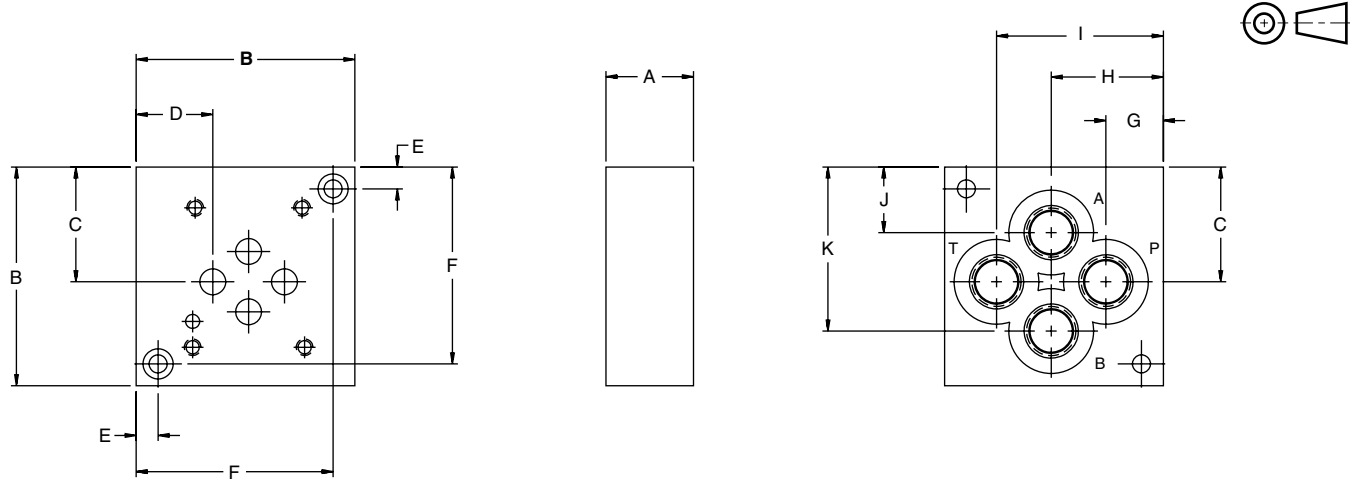
Port Size	A	B	C	D	E	F	G	H
2N	25.4 (1.00)	63.5 (2.50)	33.3 (1.31)	31.8 (1.25)	12.7 (.50)	6.4 (.25)	57.2 (2.25)	22.4 (.88)
3*	25.4 (1.00)	63.5 (2.50)	33.3 (1.31)	31.8 (1.25)	12.7 (.50)	6.4 (.25)	57.2 (2.25)	22.4 (.88)
4*	38 (1.50)	88.9 (3.50)	46.0 (1.81)	45.2 (1.78)	19.1 (.75)	6.4 (.25)	82.5 (3.25)	35.1 (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)

See Mounting Bolt Kits for bolt information.

Series D1V

Bottom Ported Subplate — NFPA D03

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



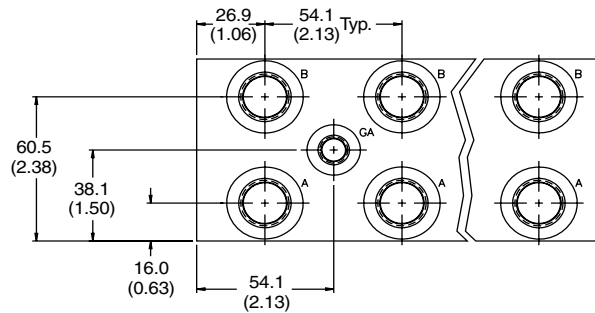
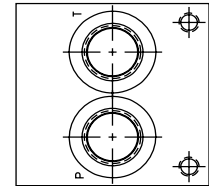
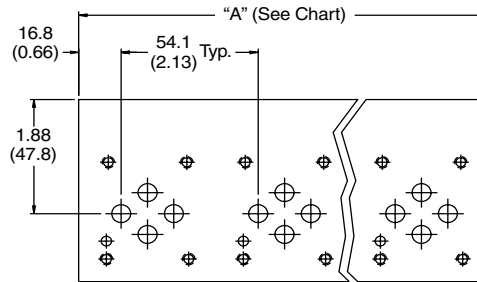
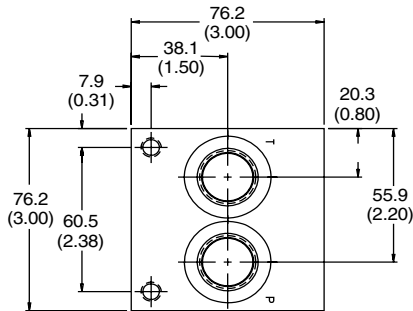
Port Size	A	B	C	D	E	F	G	H	I	J	K
2N	25.4 (1.00)	63.5 (2.50)	33.3 (1.31)	22.4 (.88)	6.4 (.25)	57.2 (2.25)	16.8 (.66)	32.5 (1.28)	48.5 (1.91)	19.1 (.75)	47.8 (1.88)
3*	25.4 (1.00)	63.5 (2.50)	33.3 (1.31)	22.4 (.88)	6.4 (.25)	57.2 (2.25)	15.0 (.59)	32.5 (1.28)	50.0 (1.97)	17.5 (.69)	49.3 (1.94)
4*	38.1 (1.50)	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.

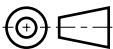
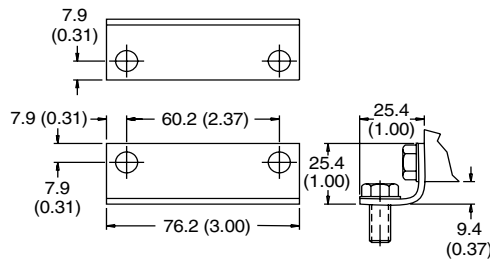


Series D1V
Manifold — NFPA D03

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



Note: Gage port not available on single station manifold.

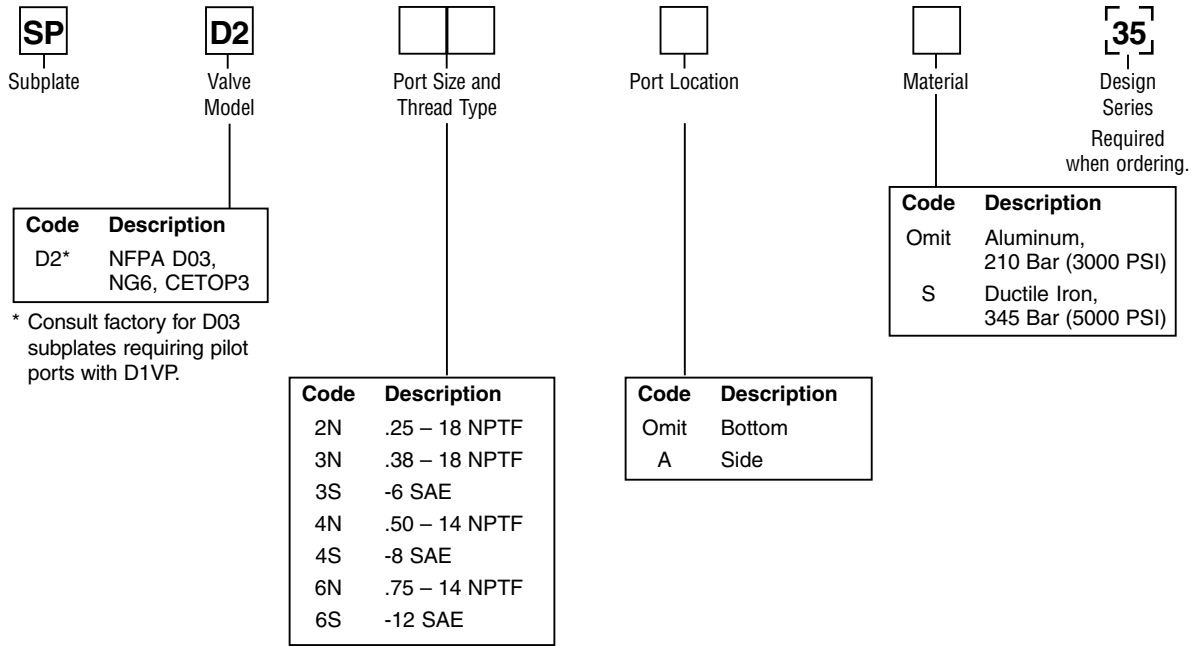


Mounting Hardware
(See Ordering Information for Mounting Hardware details)

No. Stations	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
"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)	485.9 (19.13)	539.8 (21.25)	593.9 (23.38)	647.7 (25.50)	701.8 (27.63)	755.7 (29.75)	809.8 (31.88)	863.6 (34.00)
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)	7.3 (16)	8.2 (18)	9.1 (20)	9.5 (21)	10.0 (22)	10.9 (24)	11.8 (26)	12.3 (27)
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)	17.3 (38)	19.1 (42)	21.3 (47)	23.1 (51)	25.0 (55)	26.8 (59)	28.6 (63)	30.9 (68)

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 & Manapaks/Cartpaks (D1V*-75 Design, Solenoid Operated)					
	Number of Manapaks/Cartpaks @ 1.58" (40mm) thickness				
	0	1	2	3	4
D1V-75	BK209 1.25"	BK243 2.88"	BK225 4.38"	BK244 6.00"	BK245 7.50"
D1V-75 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

SP
 Manifold

Number of Stations

D2
 Valve Model

Port Size and Thread Type

Material

35
 Design Series
 Required when ordering.

Code	Description
1	No. of Stations
2	No. of Stations
3	No. of Stations
4	No. of Stations
5	No. of Stations
6	No. of Stations
7	No. of Stations
8	No. of Stations
9	No. of Stations
10	No. of Stations
11	No. of Stations
12	No. of Stations
13	No. of Stations
14	No. of Stations
15	No. of Stations
16	No. of Stations

Code	Description
D2*	NFPA D03, NG6, CETOP3

* Consult factory for D03 manifolds requiring pilot ports with D1VP.

Code	Description
Omit	Aluminum, 210 Bar (3000 PSI)
S	Ductile Iron, 345 Bar (5000 PSI)

Code	Description	Port Size		
		P & T	A & B	Gage
N*	NPTF	.50	.38	.25
S**	SAE	-10	-8	-6

* 0.25-18 NPTF LSPP gage port plug included.

** -6 SAE gage port plug included.

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 & Manapak/Cartpaks (D1V*-75 Design, Solenoid Operated)					
	Number of Manapak/Cartpaks @ 1.58" (40mm) thickness				
	0	1	2	3	4
D1V-75	BK209 1.25"	BK243 2.88"	BK225 4.38"	BK244 6.00"	BK245 7.50"
D1V-75 Plus Tapping Plate	BK176 2.25"	BK56 3.81"	BK212 5.38"	BK107 7.00"	BK106 8.50"

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.

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

No. Stations	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
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)	7.3 (16)	8.2 (18)	9.1 (20)	9.6 (21)	10.1 (22)	11.0 (24)	11.9 (26)	12.3 (27)
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)	17.4 (38)	19.2 (42)	21.5 (47)	23.3 (51)	25.1 (55)	27.0 (59)	28.8 (63)	31.1 (68)