

Color and Catalyst Change Valve Stacks

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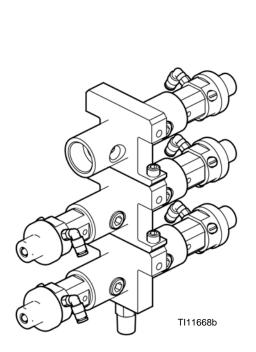
For color/catalyst changing or distribution of industrial paints and coatings or fluids.



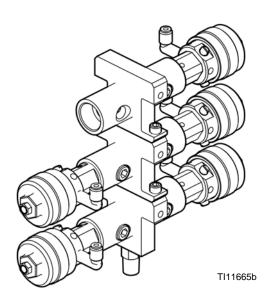
Important Safety Instructions

Read all warnings and instructions in this manual. For complete warnings and instructions see your proportioning system manual. Hazard symbols refer to specific procedure risks. Save all instructions.

See pages 3 and 4 for model information, including maximum working pressure.



Low Pressure Valve Stack 15V813



High Pressure Valve Stack 15V817

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Related Manuals

See the following manuals for additional information on the color and catalyst change valve stacks.

Manual in English	Description
312775	ProMix 2KS Manual System Installation
312776	ProMix 2KS Manual System Operation
312777	ProMix 2KS Manual System Repair-Parts
312778	ProMix 2KS Automatic System Installation
312779	ProMix 2KS Automatic System Operation
312780	ProMix 2KS Automatic System Repair-Parts
312782	Dispense Valve
312787	Color Change Module Kit

Models

Low Pressure Valve Stacks

300 psi (2.1 MPa, 21 bar) Maximum Fluid Working Pressure

Valve Stack Part No.	Series	Valve Stack Description	Valve Part No.	Valve Quantity◆
256994		1 color		2
15V812	_	2 color/catalyst change		3
256290		3 color/catalyst change		4
15V813		4 color/catalyst change	1	5
256292		5 color/catalyst change	1	6
256293		6 color/catalyst change	1	7
15V814		7 color/catalyst change	1	8
256295		8 color/catalyst change		9
256296		9 color/catalyst change		10
256297		10 color/catalyst change	1	11
256298		11 color/catalyst change		12
15V815	В	12 color/catalyst change		13
256300		13 color/catalyst change		14
256301		14 color/catalyst change		15
256302		15 color/catalyst change	15X304	16
256303		16 color/catalyst change	15/304	17
256304		17 color/catalyst change		18
256305		18 color/catalyst change	1	19
256306		19 color/catalyst change		20
256307		20 color/catalyst change		21
256308		21 color/catalyst change	1	22
256309		22 color/catalyst change		23
256310		23 color/catalyst change		24
256311		24 color/catalyst change	7	25
256312		25 color/catalyst change	1	26
256313		26 color/catalyst change	7	27
256314		27 color/catalyst change	7	28
256315		28 color/catalyst change		29
256316		29 color/catalyst change	7	30
256372		30 color/catalyst change	7	31

◆ Each stack includes one additional valve for solvent.

High Pressure Valve Stacks

3000 psi (21 MPa, 210 bar) Maximum Fluid Working Pressure

Valve Stack Part No.	Series	Valve Stack Description	Valve Part No.	Valve Quantity◆
256995		1 color		2
15V816	_	2 color/catalyst change		3
256339	1	3 color/catalyst change	-	4
15V817		4 color/catalyst change		5
256341		5 color/catalyst change		6
256342		6 color/catalyst change		7
256343		7 color/catalyst change		8
256344		8 color/catalyst change		9
256345		9 color/catalyst change		10
256346		10 color/catalyst change		11
256347		11 color/catalyst change		12
256348	В	12 color/catalyst change		13
256349		13 color/catalyst change		14
256350		14 color/catalyst change		15
256351		15 color/catalyst change	15X303	16
256352		16 color/catalyst change	15/303	17
256353		17 color/catalyst change		18
256354		18 color/catalyst change		19
256355	1	19 color/catalyst change		20
256356		20 color/catalyst change		21
256357		21 color/catalyst change		22
256358		22 color/catalyst change		23
256359		23 color/catalyst change		24
256360		24 color/catalyst change		25
256361		25 color/catalyst change		26
256362		26 color/catalyst change	7	27
256363		27 color/catalyst change		28
256364	1	28 color/catalyst change	7	29
256365	1	29 color/catalyst change	7	30
256371		30 color/catalyst change	7	31

◆ Each stack includes one additional valve for solvent.

Installation

 Connect 5/32 in. (4 mm) OD air actuation tubes from the valve solenoids to the air inlets (A) of each valve. See Fig. 1.

NOTE: The high pressure color change valve uses a spring-operated valve closure vent (20) which does not require a second air actuation line. If you are installing a bare valve, remove the elbow fitting from the top port and install the breather vent. Replace the spring with the one marked with black stain. Both the breather and the marked spring are shipped loose.

2. Connect fluid supply lines to the 1/4 npt(f) inlet (B) of each valve adapter. Supply solvent to one valve (S) at the top of the stack.

NOTE: Excessive inlet fitting torque may cause the fitting to extend past its normal depth and contact the valve needle, resulting in misalignment and leakage. After installing the inlet fitting, verify that the needle travels freely by charging the valve with air or removing the cap and manually actuating the needle.

NOTE: Paint Circulating System

The color change valves have two fluid ports for each individual valve. If you are circulating paint, plumb the valves in one port and out the other. Another option is to use a tee fitting to circulate.

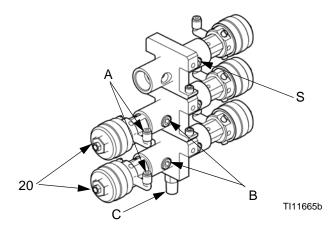
NOTE: Verify that all unused fluid ports on the color change valve stack are plugged before operation. An open port will leak fluid.

Connect the gun fluid supply line to the fluid outlet port (C) of the color change manifold.

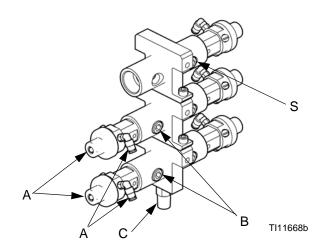
NOTE: A check valve is recommended at the inlet of all valves to prevent backflow if a valve fails, and to prevent color crossover if two dead head valves are open at the same time.

NOTE: High pressure valves are factory-set at one turn open from fully closed. This setting provides the required spring force to prevent fluid back flow from the outlet manifold to the valve at outlet manifold pressures up to 3000 psi (21 MPa, 210 bar). If valves on the stack are not being used, close the valve completely or plug the valve inlet and circulation ports.

If a valve is adjusted more than 1-1/4 turn open, back flow pressure will be reduced.



High Pressure Valve Stack

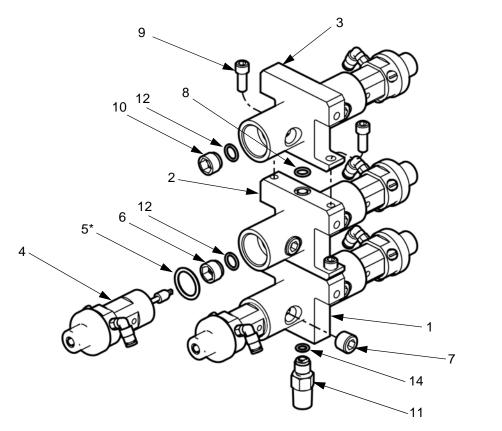


Low Pressure Valve Stack

Fig. 1. Valve Stack Connections

Parts

Low Pressure Color/Catalyst Valve Stacks - Series B



Ref.			
No.	Part No.	Description	Qty
1	20A006	MANIFOLD, Bottom, Color Change	1
2	20A004	MANIFOLD, Middle, Color Change	♦
3	20A005	MANIFOLD, Top	♦
4	15X304	VALVE, Low Pressure; includes	♦
		item 15; see manual 312782	
5*	15Y627	O-RING; PTFE, Size 116	♦
6	25B513	SEAT, Valve, Low Pressure	♦
7	101970	PLUG, Pipe	♦
8	110004	O-RING; PTFE, Size 011	♦
9	121112	SCREW, cap, socket-head; 1/4-20	♦
		x 5/8 in. (16mm)	
10	20A007	PLUG, Color Change	♦
11	16P656	FITTING, Outlet	1
12	111457	O-RING; PTFE, Size 012	•
14	104893	O-RING; PTFE, Size 010	1
15	15T871	END CAP, Color Change (Assembly 256004 only; not shown)	1
		bly 256994 only; not shown)	

◆ See the Low Pressure Valve Part Quantity Chart - Series B on page 7 to determine the quantity of each part in your valve stack.

TI11669b

- * Part included in Seal Kit 15W621 (purchase separately). Kit includes additional parts; see Dispense Valve manual 312782.
- --- These parts are not available separately.

Technical Data, Low Pressure Stacks

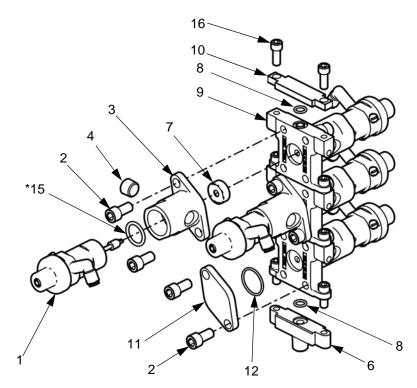
Maximum Fluid Working	
Pressure	300 psi (2.1 MPa, 21 bar)
Wetted Parts	303 sst, tungsten carbide,
	ptfe, acetal
	Color Change Valves: see
	manual 312782
Weight	see page 7

Low Pressure Valve Part Quantity Chart - Series B

Find your Valve Stack Part No. in the left column and the desired reference number in the top row to find the part quantity used in your valve stack.

Valve											
Stack Part No.	2	3	4	5	6	7	8	9	10	12	Weight lb (kg)
256994	0	0	2	2	2	2	1	2	0	2	2.35 (1.07)
15V812	0	1	3	3	3	3	1	2	1	4	4.05 (1.84)
256290	0	1	4	4	4	4	1	2	0	4	4.70 (2.13)
15V813	1	1	5	5	5	5	2	4	1	6	6.40 (2.90)
256292	1	1	6	6	6	6	2	4	0	6	7.05 (3.20)
256293	2	1	7	7	7	7	3	6	1	8	8.75 (3.97)
15V814	2	1	8	8	8	8	3	6	0	8	9.40 (4.26)
256295	3	1	9	9	9	9	4	8	1	10	11.10 (5.03)
256296	3	1	10	10	10	10	4	8	0	10	11.75 (5.33)
256297	4	1	11	11	11	11	5	10	1	12	13.45 (6.10)
256298	4	1	12	12	12	12	5	10	0	12	14.10 (6.40)
15V815	5	1	13	13	13	13	6	12	1	14	15.80 (7.17)
256300	5	1	14	14	14	14	6	12	0	14	16.45 (7.46)
256301	6	1	15	15	15	15	7	14	1	16	18.15 (8.23)
256302	6	1	16	16	16	16	7	14	0	16	18.80 (8.53)
256303	7	1	17	17	17	17	8	16	1	18	20.50 (9.30)
256304	7	1	18	18	18	18	8	16	0	18	21.15 (9.59)
256305	8	1	19	19	19	19	9	18	1	20	22.85 (10.36)
256306	8	1	20	20	20	20	9	18	0	20	23.50 (10.66)
256307	9	1	21	21	21	12	10	20	1	22	25.20 (11.43)
256308	9	1	22	22	22	22	10	20	0	22	25.85 (11.73)
256309	10	1	23	23	23	23	11	22	1	24	27.55 (12.50)
256310	10	1	24	24	24	24	11	22	0	24	28.20 (12.80)
256311	11	1	25	25	25	25	12	24	1	24	29.90 (13.56)
256312	11	1	26	26	26	26	12	24	0	26	30.55 (13.86)
256313	12	1	27	27	27	27	13	26	1	28	32.25 (14.63)
256314	12	1	28	28	28	28	13	26	0	28	32.90 (14.92)
256315	13	1	29	29	29	29	14	28	1	30	34.60 (15.70)
256316	13	1	30	30	30	30	14	28	0	30	35.25 (15.99)
256372	14	1	31	31	31	31	15	30	1	32	36.95 (16.76)

Low Pressure Color/Catalyst Valve Stacks - Series A



TI11669A

Def Ne	Dant Ma	Description	20A727	20A728
Ref. No.	Part No.	Description	*	*
1 ∻ ★	15X304	VALVE, low pressure; includes item 15; see manual 312782	2	1
2 ∻ ★	15T875	SCREW; 5/16-24 x 5/8 in. (16 mm)	4	4
3 ∻ ★	15T436	ADAPTER, manifold	2	1
4 ∻ ★	101970	PLUG, pipe	2	1
6	15T793	MANIFOLD, fluid port		
7 ∻ ★	15T574	SEAT, valve needle	2	1
8 ∻ ★	110004	O-RING; ptfe	2	2
9 ∻ ★	15T792	MANIFOLD, body	1	1
10	15T794	MANIFOLD, end cap		
11★	15X129	PLUG, housing		1
12★	109450	O-RING; ptfe		1
15*❖★	15Y627	O-RING; ptfe	2	1
16 ∻ ★	121112	SCREW, cap, socket-head; 1/4-20 x 5/8 in. (16 mm)	2	2

^{*} Part included in Seal Kit 15W621 (purchase separately). Kit includes additional parts; see Dispense Valve manual 312782.

Technical Data, Low Pressure Stacks

Maximum Fluid Working

Pressure 300 psi (2.1 MPa, 21 bar) Wetted Parts 303 sst, tungsten carbide,

ptfe, acetal

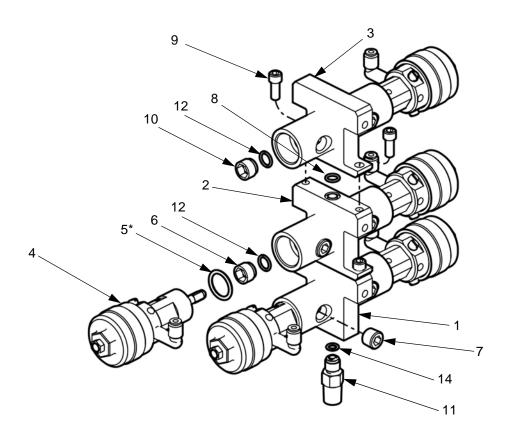
Color Change Valves: see

manual 312782

Weight See page 7

⁻⁻⁻ These parts are not available separately.

High Pressure Color/Catalyst Valve Stacks - Series B



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Ref.			
No.	Part No. I	Description	Qty
1	20A006	MANIFOLD, Bottom, Color Change	1
2	20A004	MANIFOLD, Middle, Color Change	•
3	20A005	MANIFOLD, Top	•
4	15X303	VALVE, High Pressure; includes item 15; see manual 312782	•
5*	15Y627	O-RING; PTFE, Size 116	•
6	15T725	SEAT, Valve, High Pressure	•
7	101970	PLUG, Pipe	♦
8	110004	O-RING; PTFE, Size 011	♦
9	121112	SCREW, cap, socket-head; 1/4-20 x 5/8 in. (16mm)	•
10	20A007	PLUG, Color Change	•
11	16P656	FITTING, Outlet	1
12	111457	O-RING; PTFE, Size 012	•
14	104893	O-RING; PTFE, Size 010	1
15	15T871	END CAP, Color Change (Assembly 256995 only; not shown)	1

- ◆ See the **High Pressure Valve Part Quantity Chart Series B** on page 10 to determine the quantity of each part in your valve stack.
- * Part included in Seal Kit 15U933 (purchase separately). Kit includes additional parts; see Dispense Valve manual 312782.
- --- These parts are not available separately.

Technical Data, High Pressure Stacks

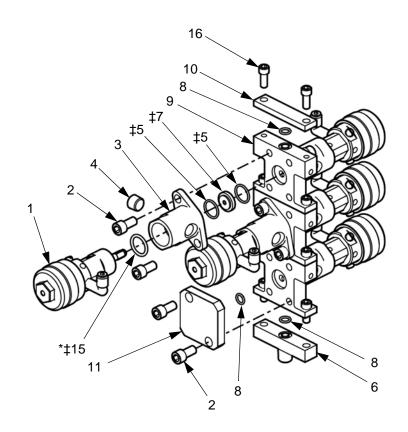
Maximum Fluid Working	
Pressure	3000 psi (21 MPa, 210 bar)
Wetted Parts	303 sst, tungsten carbide,
	ptfe
	Color Change Valves: see
	manual 312782
Weight	See page 10

High Pressure Valve Part Quantity Chart - Series B

Find your Valve Stack Part No. in the left column and the desired reference number in the top row to find the part quantity used in your valve stack.

Valve	Reference Numbers										
Stack Part No.	2	3	4	5	6	7	8	9	10	12	Weight lb (kg)
256995	0	0	2	2	2	2	1	2	0	2	2.60 (1.18)
15V816	0	1	3	3	3	3	1	2	1	4	5.05 (2.29)
256339	0	1	4	4	4	4	1	2	0	4	5.20 (2.36)
15V817	1	1	5	5	5	5	2	4	1	6	7.65 (3.47)
256341	1	1	6	6	6	6	2	4	0	6	7.80 (3.54)
256342	2	1	7	7	7	7	3	6	1	8	10.25 (4.65)
256343	2	1	8	8	8	8	3	6	0	8	10.40 (4.72)
256344	3	1	9	9	9	9	4	8	1	10	12.85 (5.83)
256345	3	1	10	10	10	10	4	8	0	10	13.00 (5.90)
256346	4	1	11	11	11	11	5	10	1	12	15.45 (7.01)
256347	4	1	12	12	12	12	5	10	0	12	15.60 (7.08)
256348	5	1	13	13	13	13	6	12	1	14	18.05 (8.19)
256349	5	1	14	14	14	14	6	12	0	14	18.20 (8.26)
256350	6	1	15	15	15	15	7	14	1	16	20.65 (9.37)
256351	6	1	16	16	16	16	7	14	0	16	20.80 (9.43)
256352	7	1	17	17	17	17	8	16	1	18	23.25 (10.55)
256353	7	1	18	18	18	18	8	16	0	18	23.40 (10.61)
256354	8	1	19	19	19	19	9	18	1	20	25.85 (11.73)
256355	8	1	20	20	20	20	9	18	0	20	26.00 (11.79)
256356	9	1	21	21	21	12	10	20	1	22	28.45 (12.90)
256357	9	1	22	22	22	22	10	20	0	22	28.60 (12.97)
256358	10	1	23	23	23	23	11	22	1	24	31.05 (14.08)
256359	10	1	24	24	24	24	11	22	0	24	31.20 (14.15)
256360	11	1	25	25	25	25	12	24	1	24	33.65 (15.26)
256361	11	1	26	26	26	26	12	24	0	26	33.80 (15.33)
256362	12	1	27	27	27	27	13	26	1	28	36.25 (16.44)
256363	12	1	28	28	28	28	13	26	0	28	36.40 (16.51)
256364	13	1	29	29	29	29	14	28	1	30	38.85 (17.62)
256365	13	1	30	30	30	30	14	28	0	30	39.00 (17.69)
256371	14	1	31	31	31	31	15	30	1	32	41.45 (18.80)

High Pressure Color/Catalyst Valve Stacks - Series A



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Ref.			
No.	Part No. I	Description	Qty
1	15X303	VALVE, high pressure; includes	
		item 15; see manual 312782	
2	15T875	SCREW; 5/16-24 x 5/8 in. (16	
		mm)	
3	15T436	ADAPTER, manifold	
4	101970	PLUG, pipe	
5‡	109450	O-RING; ptfe	
6	15T869	MANIFOLD, fluid port	
7‡		SEAT, valve needle; sst	
8	110004	O-RING; ptfe	
9	15T872	MANIFOLD, body	
10	15T871	MANIFOLD, end cap	
11	15T873	PLATE, blank	
15*‡	15Y627	O-RING; ptfe	
16	121112	, ,	
		x 5/8 in. (16 mm)	

- ‡ Parts included in Valve Seat Kit 24A861 (purchase separately). (Optional Carbide Seat Kit 15U932 is available separately.)
- * Part included in Seal Kit 15U933 (purchase separately). Kit includes additional parts; see Dispense Valve manual 312782.
- --- These parts are not available separately.

Technical Data, High Pressure Stacks

Maximum Fluid Working	
Pressure	3000 psi (21 MPa, 210 bar)
Wetted Parts	303 sst, tungsten carbide,
	ptfe
	Color Change Valves: see
	manual 312782
Weight	See page 10

Dimensions

NOTE: Mounting bracket 15U927 is available to mount the color valve stack to a ProMix 2KS Fluid Station. See manual 312787 for mounting instructions.

Low Pressure Valve Stack Dimensions - Series B

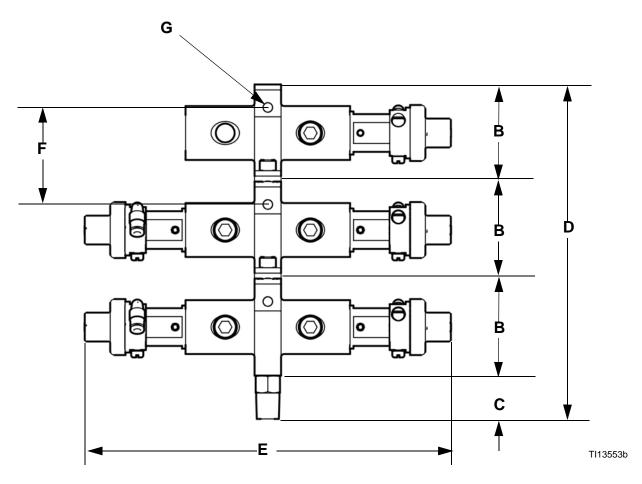


Fig. 2. Low Pressure Valve Stack Dimensions - Series B

B (manifold)	C (fluid port)	D (A+total of B+C)	E (width)	F (mounting hole dimension)	G (mounting hole size)
2.25 in. (57.2 mm)	1.07 in. (27.2 mm)	Example shown with three manifolds: 7.75 in. (197 mm)	8.43 in. (214.1 mm)	2.25 in. (57.2 mm)	1/4-20

Low Pressure Valve Stack Dimensions - Series A

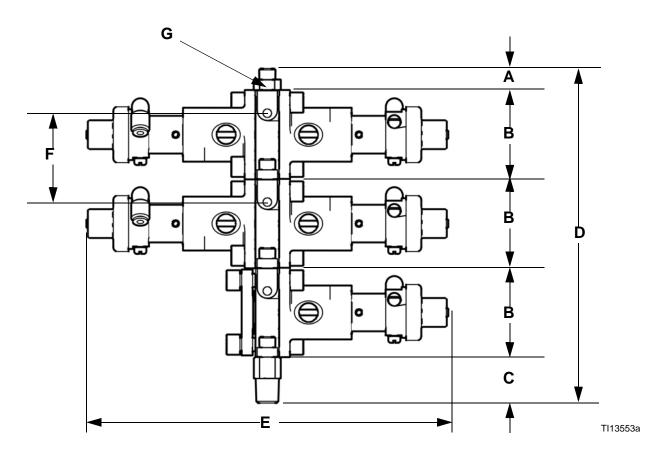


Fig. 3. Low Pressure Valve Stack Dimensions - Series A

A (manifold cap and screws)	B (manifold)	C (fluid port)	D (A+total of B+C)	E (width)	F (mounting hole dimension)	G (mounting hole size)
0.5 in. (13 mm)	2.061 in. (52.3 mm)	1.07 in. (27.2 mm)	Example shown with three manifolds: 7.75 in. (197 mm)	8.43 in. (214.1 mm)	2.061 in. (52.3 mm)	1/4-20

High Pressure Valve Stack Dimensions - Series B

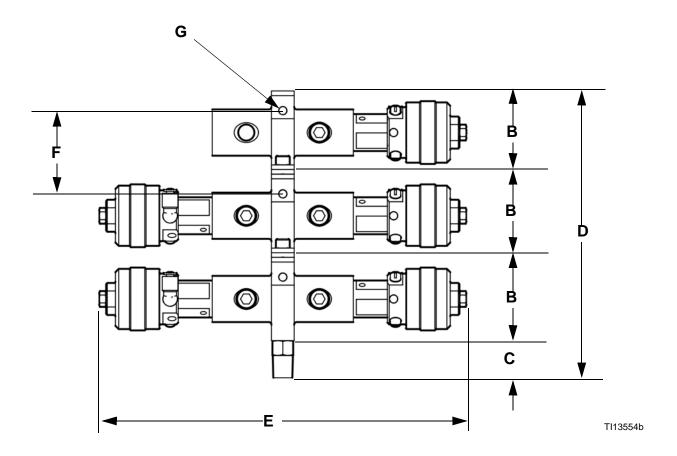
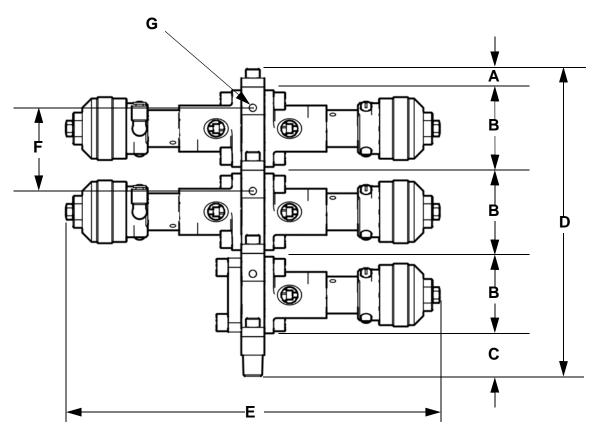


Fig. 4. High Pressure Valve Stack Dimensions - Series B

B (manifold)	C (fluid port)	D (A+total of B+C)	E (width)	F (mounting hole dimension)	G (mounting hole size)
2.25 in. (57.2 mm)	1.07 in. (27.2 mm)	Example shown with three manifolds: 7.75 in. (197 mm)	10.16 in. (258.1 mm)	2.25 in. (57.2 mm)	1/4-20

High Pressure Valve Stack Dimensions - Series A



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Fig. 5. High Pressure Valve Stack Dimensions - Series A

A (manifold cap and screws)	B (manifold)	C (fluid port)	D (A+total of B+C)	E (width)	F (mounting hole dimension)	G (mounting hole size)
0.62 in. (15.7 mm)	2.25 in. (57.2 mm)	1.07 in. (27.2 mm)	Example shown with three manifolds: 8.44 in. (214 mm)	10.16 in. (258.1 mm)	2.25 in. (57.2 mm)	1/4-20

California Proposition 65

CALIFORNIA RESIDENTS

MARNING: Cancer and reproductive harm. – www.P65warnings.ca.gov.

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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