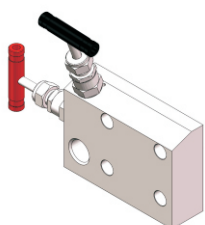


Instrumentation Manifolds

2M, 3M and 5M Series

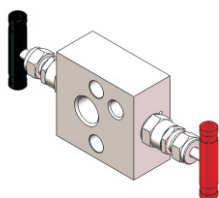
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2M-201-316



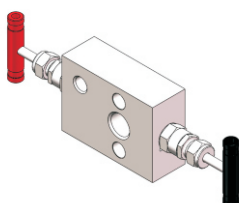
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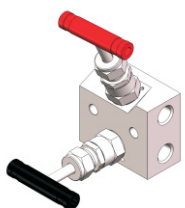
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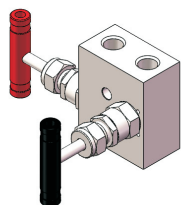
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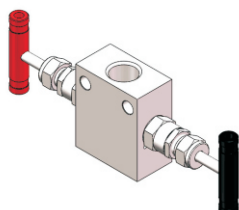
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2M-205-316



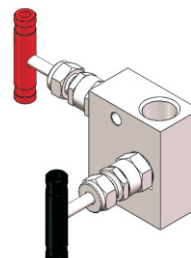
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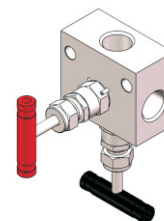
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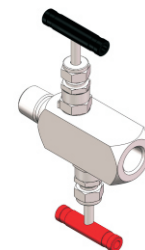
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2M-210-316



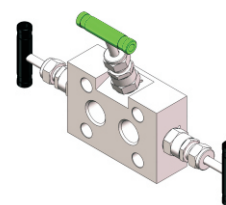
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2M-XX-XX-316



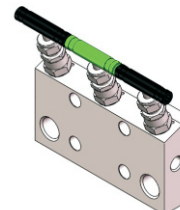
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3M-301-316



10-20

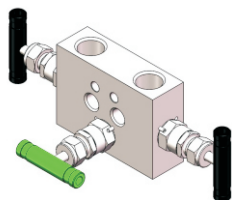
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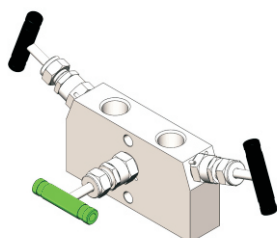
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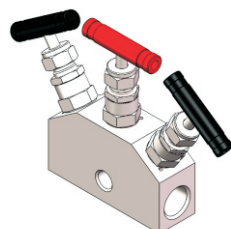
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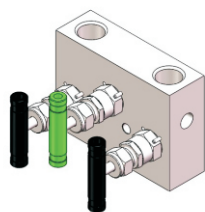
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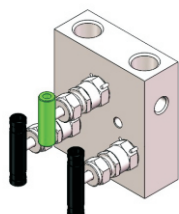
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3M-306-316



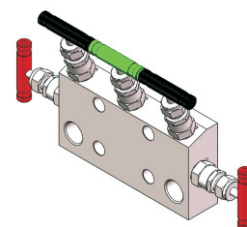
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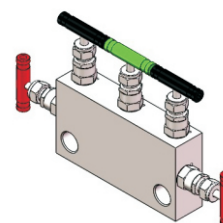
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5M-501-316



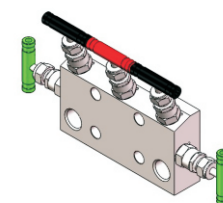
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5M-502-316



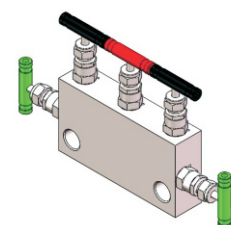
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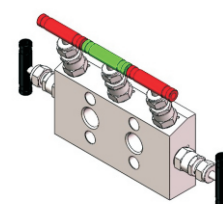
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5M-504-316



10-23

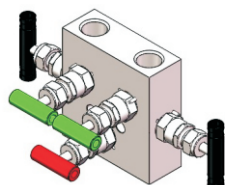
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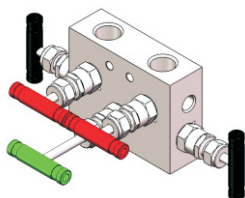
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5M-506-316



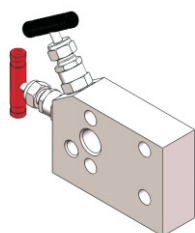
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5M-507-316



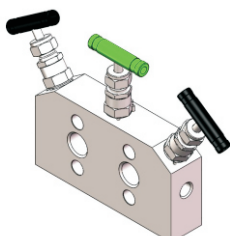
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2M-201R-316



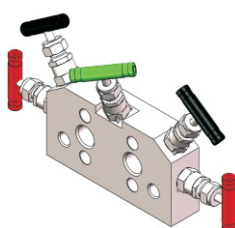
10-25

3M-301R-316



10-25

5M-501R-316



10-25

General Information

- ❖ Instrument manifolds are manufactured in accordance with ANSI B31.1, B31.3 and MSS-SP-105
- ❖ 2-valve manifolds are used with pressure gauges or pressure transmitters
- ❖ 3-valve and 5-valve manifolds are used with differential pressure transmitters

Features

- ❖ Working pressure:
 - Stainless steel up to 6000 psig (413 bar)
 - Alloy C-276 up to 6000 psig (413 bar)
 - Alloy 400 up to 5000 psig (345 bar)
- ❖ Working temperatures:
 - PTFE** packing from -65°F to 450°F (-53°C to 232°C)
 - Graphite** packing from -65°F to 1200°F (-53°C to 648°C)
- ❖ Orifice: 0.157 in. (4.0 mm), CV: 0.35
- ❖ Upper stem and lower stem design, Stem threads above packing protected from system media
- ❖ Safety back seating seals in fully open position
- ❖ Testing for every valve with nitrogen at the maximum working pressure

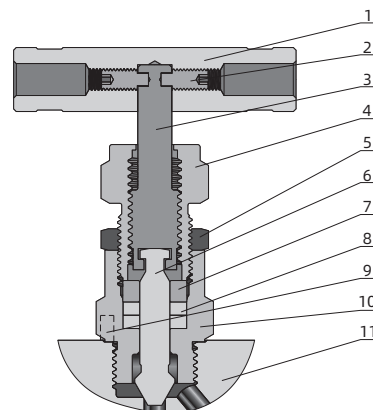
Pressure-Temperature Ratings

Body Material	316 Stainless steel	Alloy C-276	Alloy 400
Temperature, °F (°C)	Working Pressure, psig (bar)		
-65(-53) to 100 (37)	6000 (413)	6000 (413)	5000 (344)
200 (93)	5260 (355)	6000 (413)	4400 (303)
300 (148)	4660 (321)	6000 (413)	4120 (283)
400 (204)	4280 (294)	5880 (405)	3980 (274)
500 (260)	3980 (274)	5540 (381)	3960 (272)
600 (315)	3760 (259)	5040 (347)	—
700 (371)	3600 (248)	4730 (325)	—
800 (426)	3460 (236)	4230 (291)	—
900 (482)	3220 (221)	3745 (258)	—
1000 (537)	3030 (208)	3030 (208)	—
1100 (593)	2685 (184)	2685 (184)	—
1200 (648)	1745 (118)	1545 (106)	—

- ❖ Based on graphite stem packing.

Standard Materials of Construction

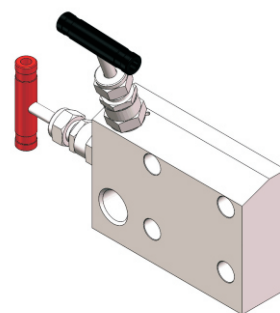
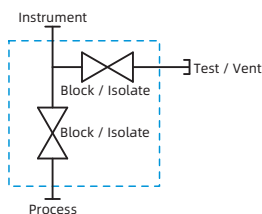
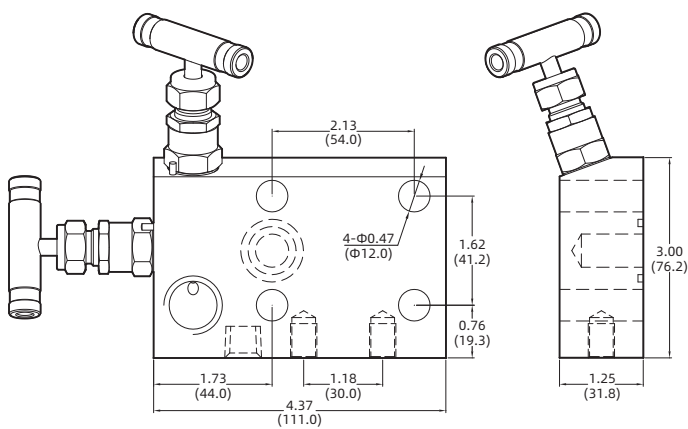
Item	Component	Material Grade / ASTM Specification		
		316 S.S.	Alloy 400	Alloy C-276
1	Handle	Anodized aluminum		
2	Screw	Galvanized steel		
3	Upper Stem	316 S.S. / A276		
4	Packing Bolt	316 S.S. / A276		
5	Nut	630 S.S. / B783		
6	Lower Stem	Chrome-plated 316 S.S. / A276	Alloy R-405 / B164	Alloy C-276 / B574
7	Gland	316 S.S. / A276		
8	Packing	PTFE or Graphite		
9	Pin	304 S.S.		
10	Bonnet	316 S.S. / A479	Alloy R-405 / B164	Alloy C-276 / B574
11	Body	316 S.S. / A479 316 S.S. / A182	Alloy 400 / B164, B127, B564	Alloy C-276 / B564



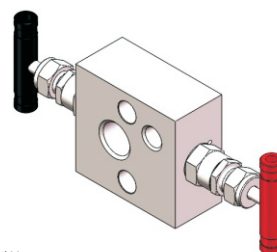
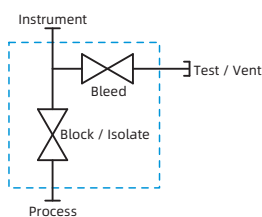
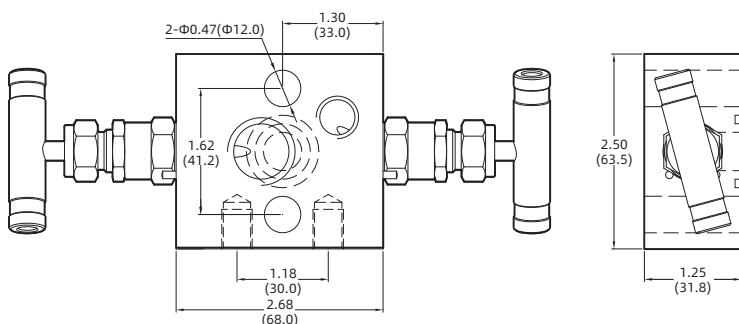
Handle color codes for functions
BLACK: Isolate / block
RED: Test / vent
GREEN: Equalize

2-valve Manifolds

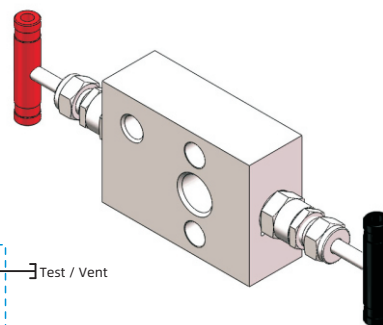
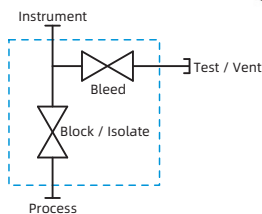
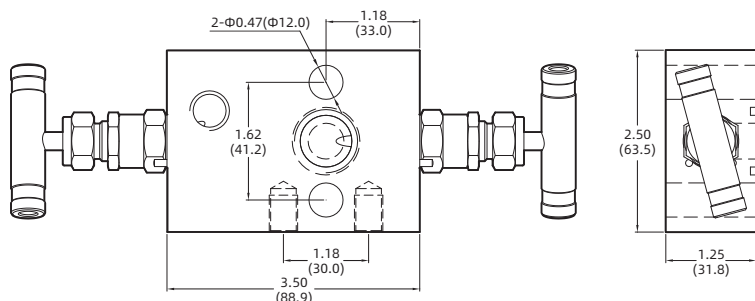
Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
2M-201-316	1/2" Female NPT	Flanged	1/4" Female NPT



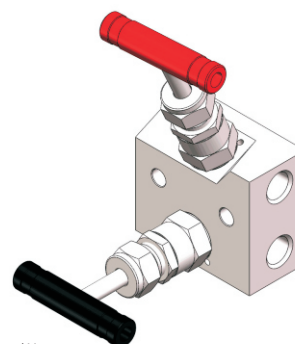
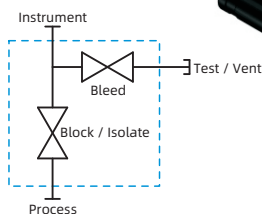
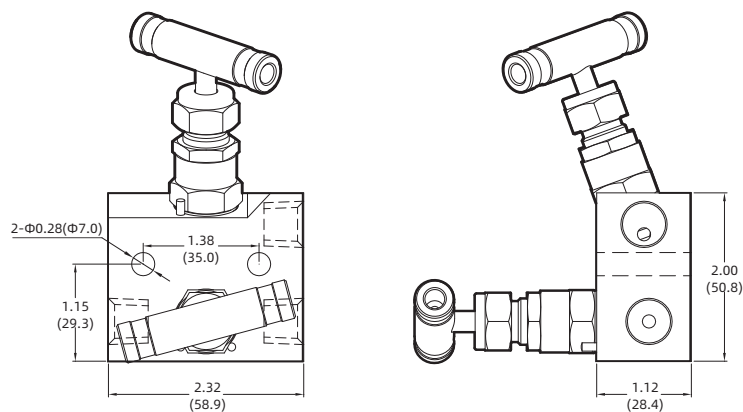
Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
2M-202-316	1/2" Female NPT	Flange	1/4" Female NPT



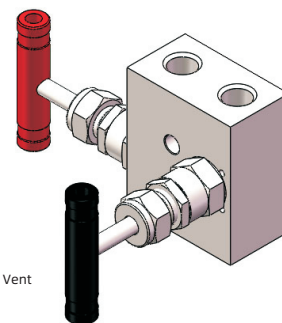
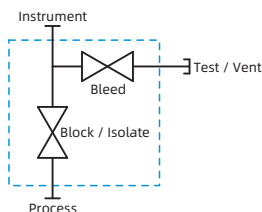
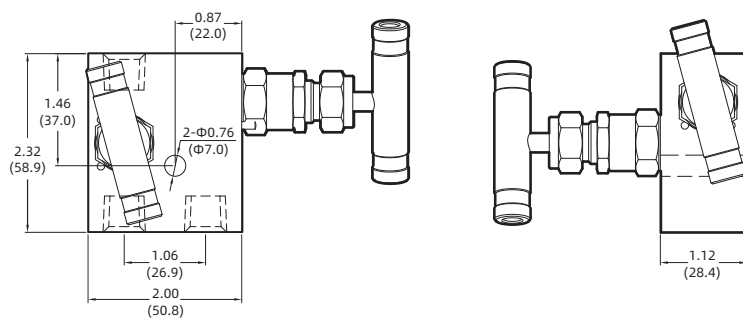
Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
2M-203-316	1/2" Female NPT	Flange	1/4" Female NPT



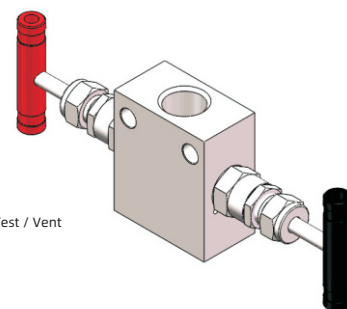
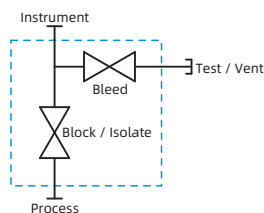
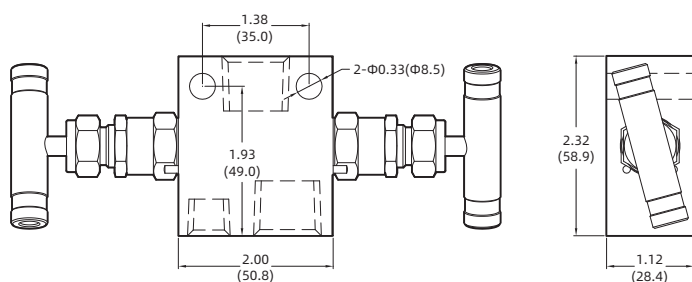
Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
2M-204-316	1/4" Female NPT	1/4" Female NPT	1/4" Female NPT



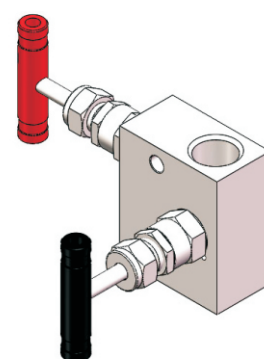
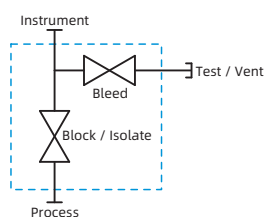
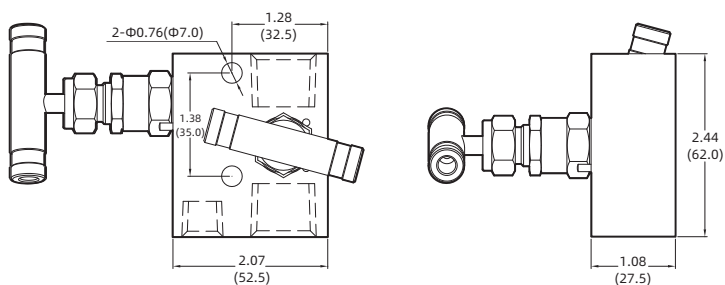
Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
2M-205-316	1/4" Female NPT	1/4" Female NPT	1/4" Female NPT



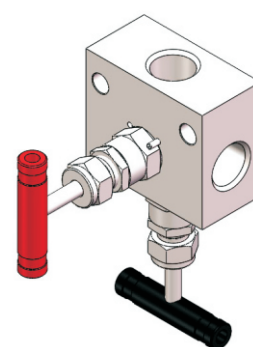
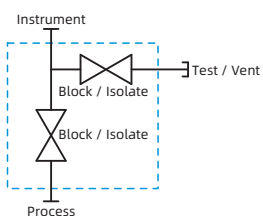
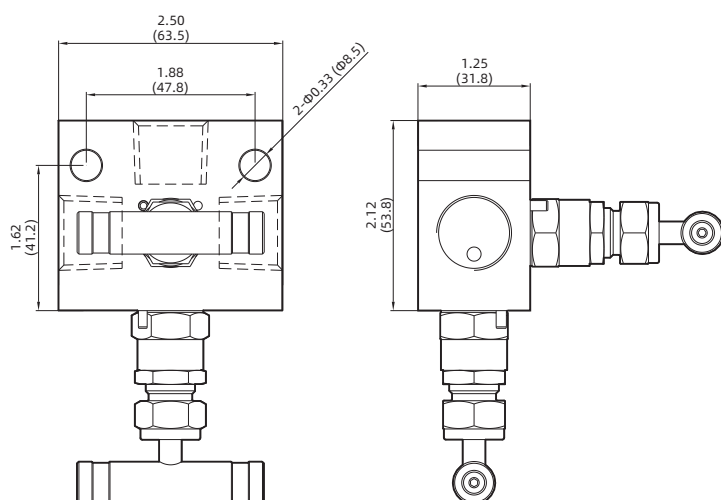
Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
2M-206-316	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT



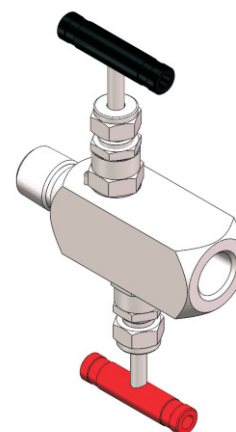
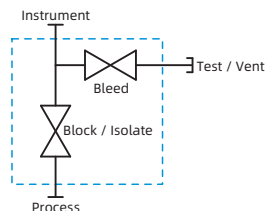
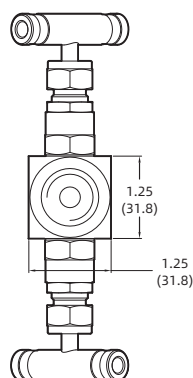
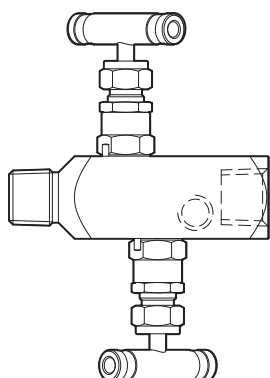
Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
2M-207-316	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT



Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
2M-210-316	1/2" Female NPT	1/2" Female NPT	1/2" Female NPT



Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
2M-XX-XX-316	See ordering information	See ordering information	1/4" Female NPT



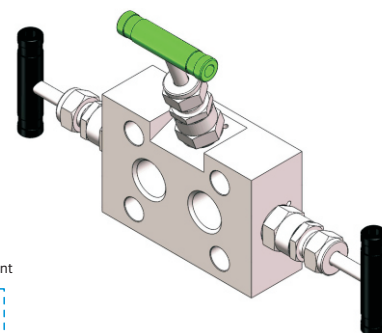
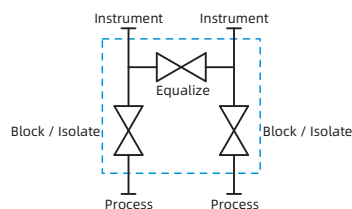
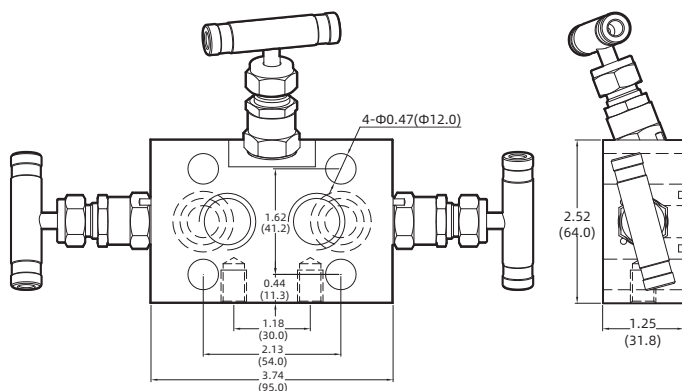
How to Order

2M — **NPT8** — **FNPT8** — **G** — **P** — **316**

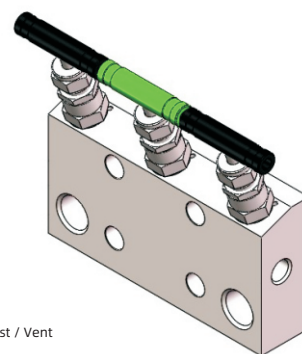
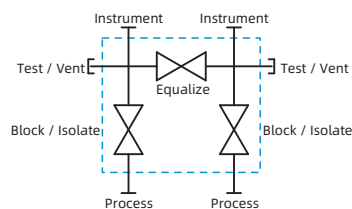
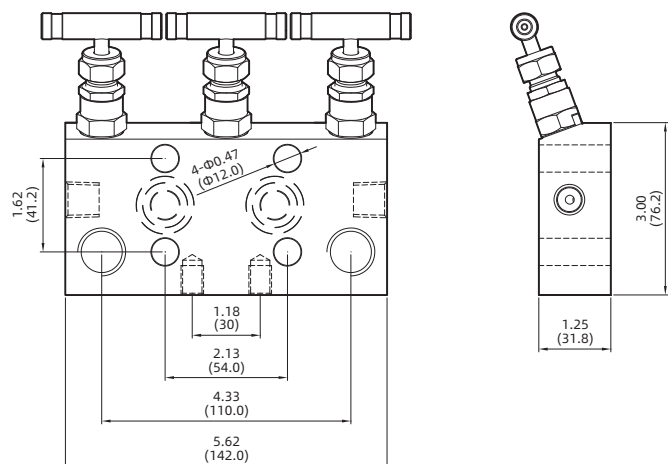
Series	Inlet Type	Inlet Size	Outlet Type	Outlet Size	Packing Material	Plug	Body Material	
2M	FNPT Female NPT	4 1/4 in.	Same as inlet type and inlet size If outlet and inlet are the same, eliminate the outlet designator		PTFE	No Plug	316 316 S.S.	
	NPT Male NPT	6 3/8 in. or 6 mm				G Graphite	P Plug	316L 316L S.S.
	FBT Female BSPT	8 1/2 in. or 8 mm						304 304 S.S.
	MBT Male BSPT	10 10 mm						304L 304L S.S.
	FMS Female Metric	12 3/4 in. or 12 mm						A276 Alloy C276
	MS Male Metric (for BG)	14 M14x1.5 or 14 mm						A400 Alloy 400
	FBP Female BSPP	20 M20x1.5 or 20 mm						
	MBP Male BSPP (for BG)							
	F Fractional Tube Fitting							
M Metric Tube Fitting								

3-valve Manifolds

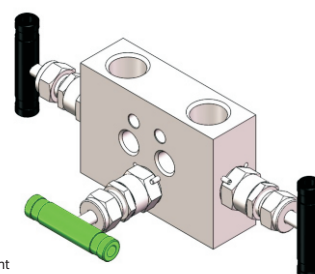
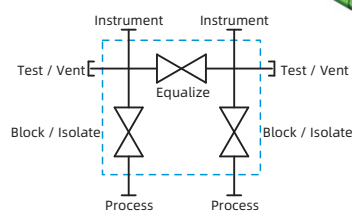
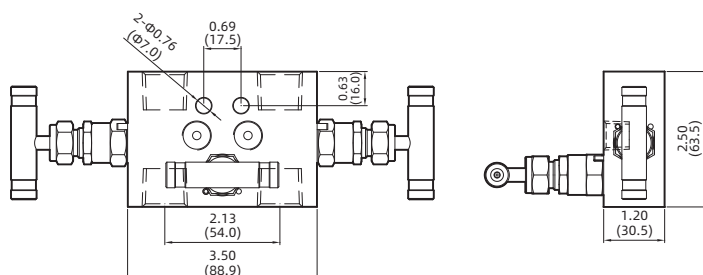
Ordering Number	Inlet / Process	Outlet / Instrument
3M-301-316	1/2" Female NPT	Flange



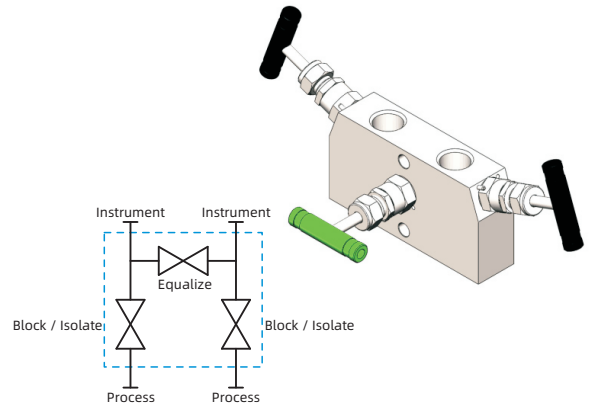
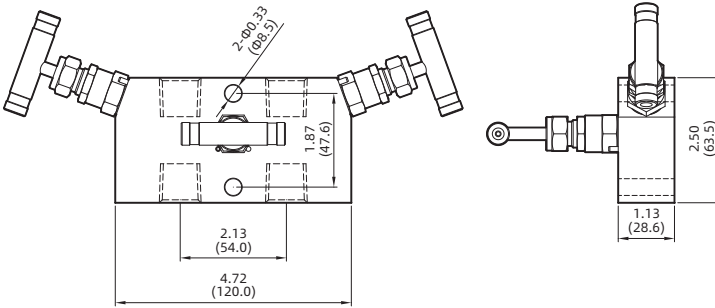
Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
3M-302-316	1/2" Female NPT	Flange	1/4" Female NPT



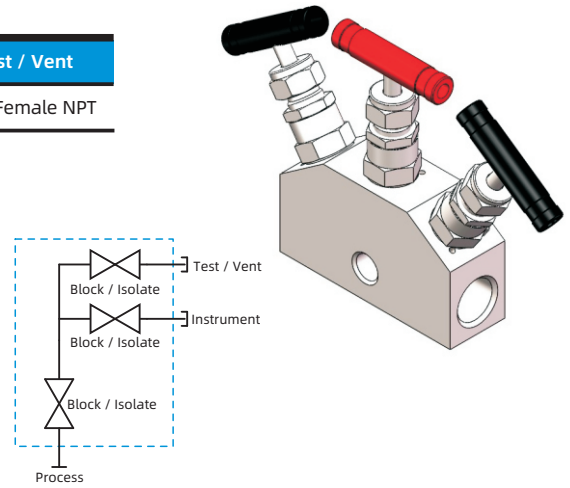
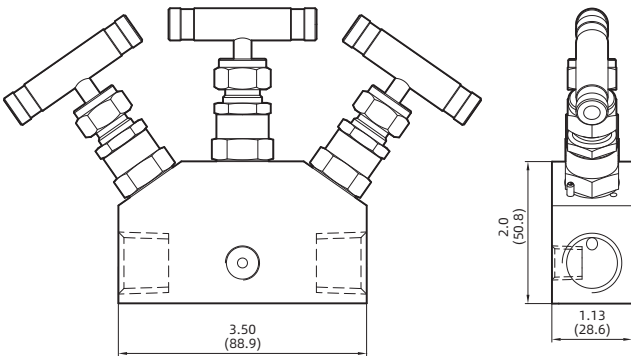
Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
3M-303-316	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT



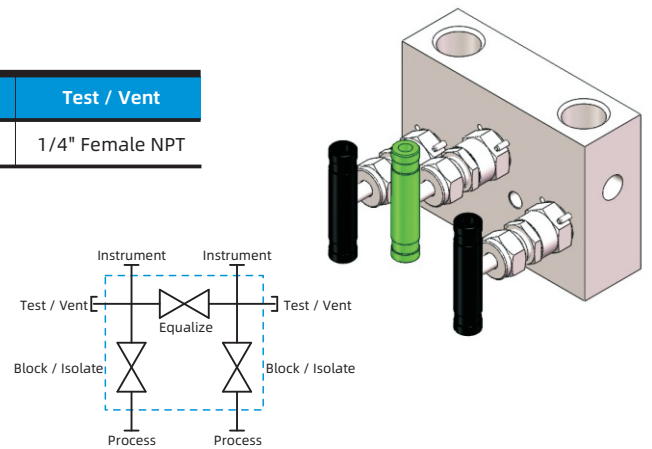
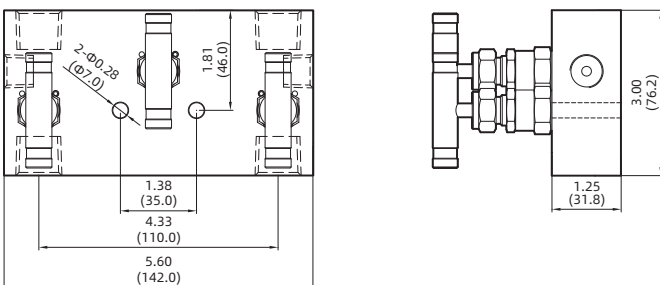
Ordering Number	Inlet / Process	Outlet / Instrument
3M-304-316	1/2" Female NPT	1/2" Female NPT



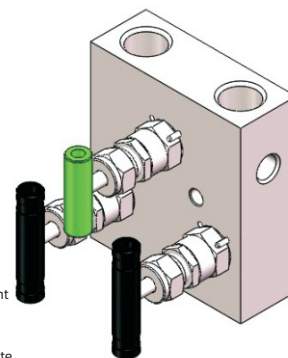
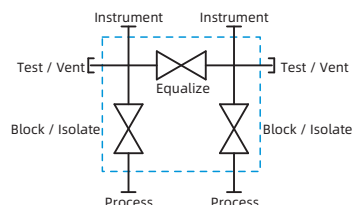
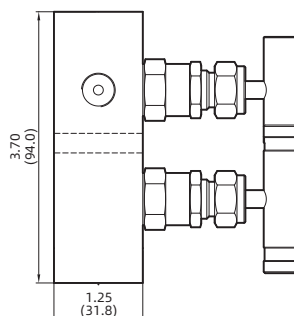
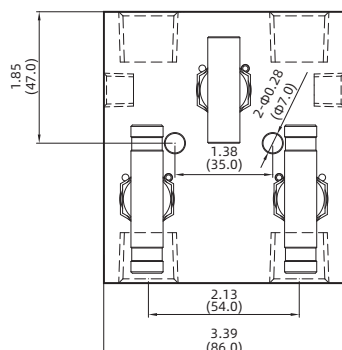
Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
3M-305-316	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT



Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
3M-306-316	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT

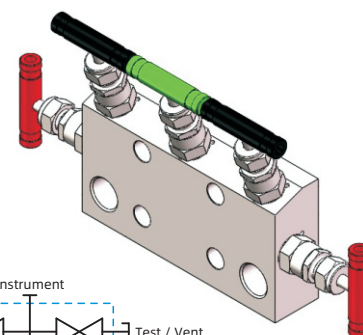
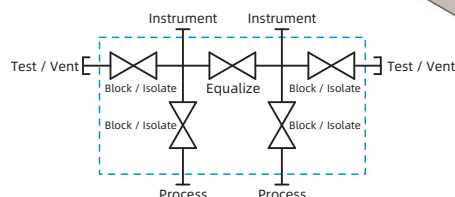
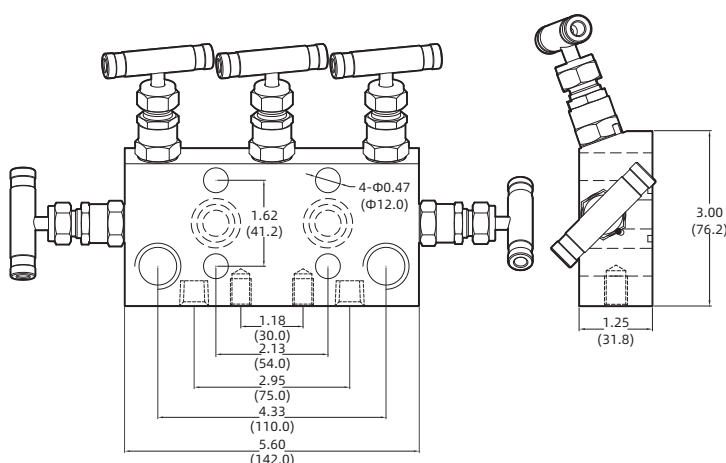


Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
3M-307-316	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT

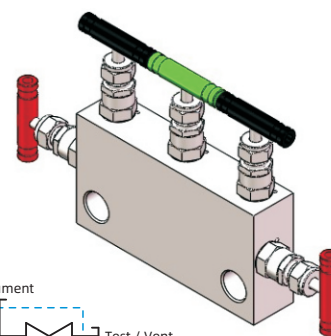
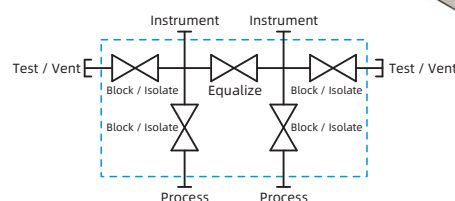
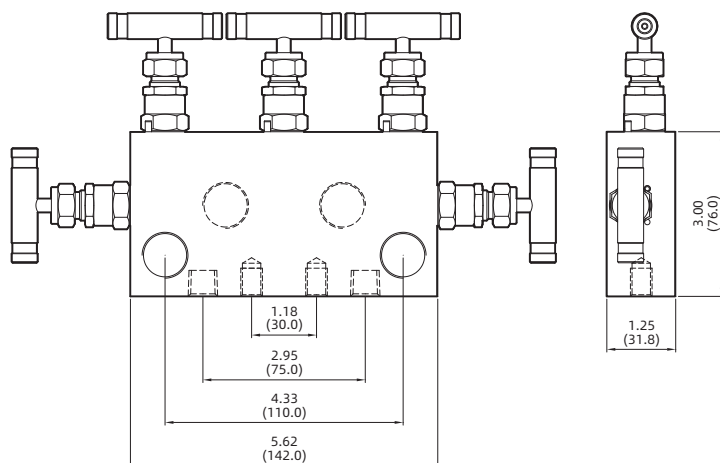


5-valve Manifolds

Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
5M-501-316	1/2" Female NPT	Flange	1/4" Female NPT

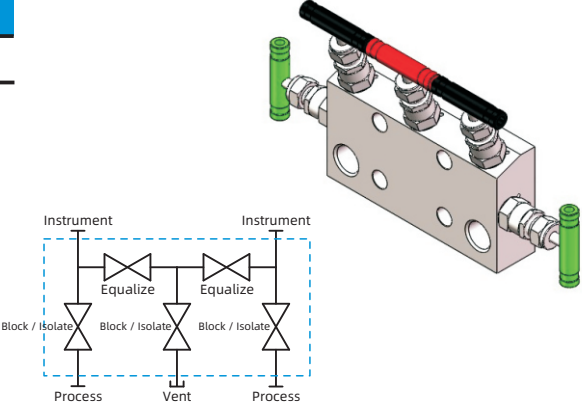
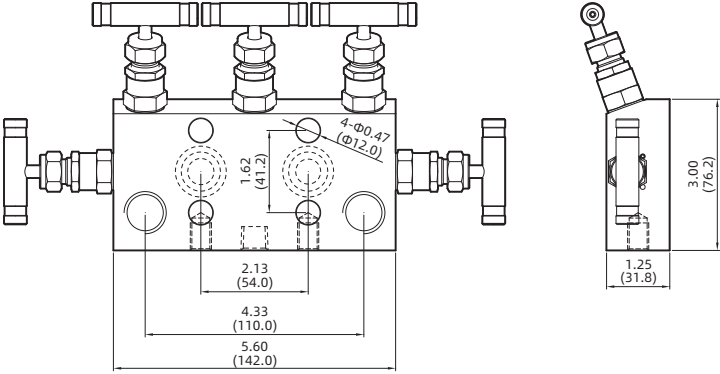


Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
5M-502-316	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT

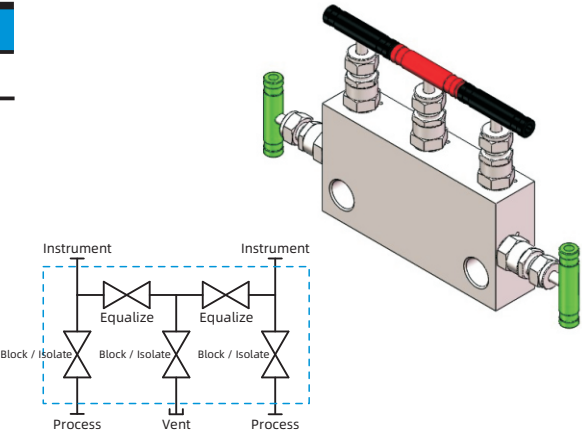
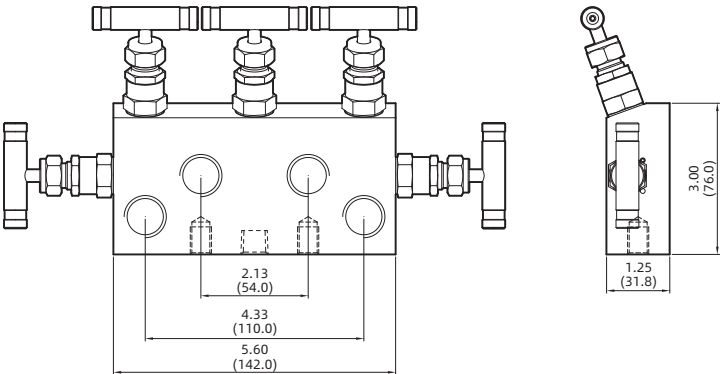


5-valve Custody Transfer/Fiscal Metering manifolds

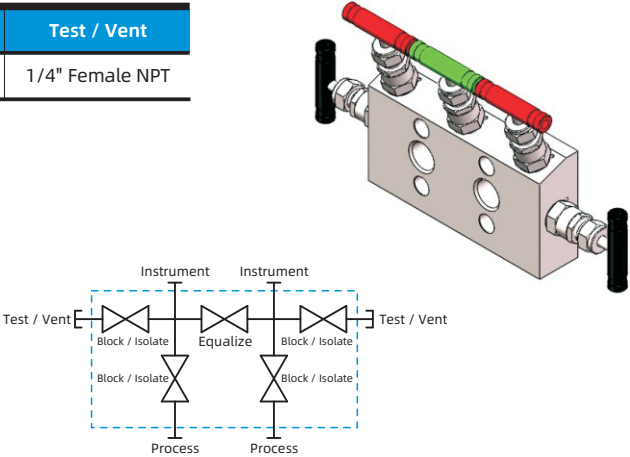
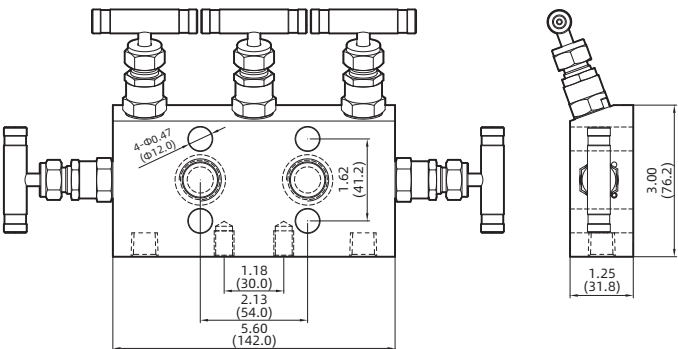
Ordering Number	Inlet / Process	Outlet / Instrument	Vent
5M-503-316	1/2" Female NPT	Flanged	1/4" Female NPT



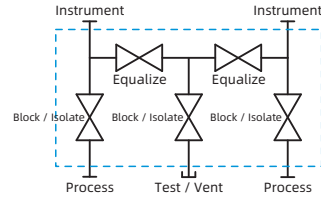
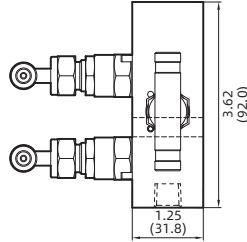
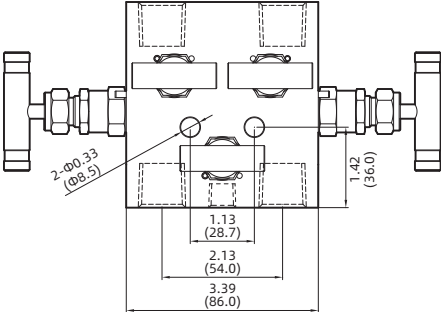
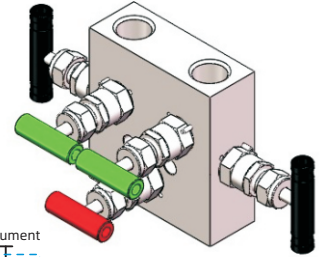
Ordering Number	Inlet / Process	Outlet / Instrument	Vent
5M-504-316	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT



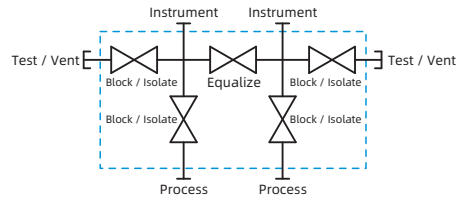
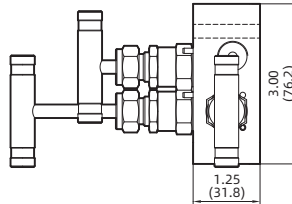
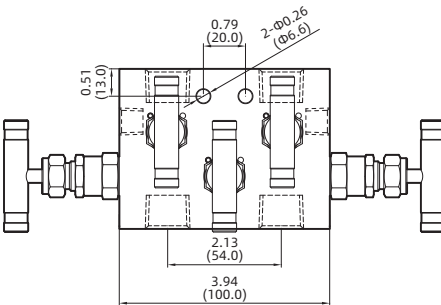
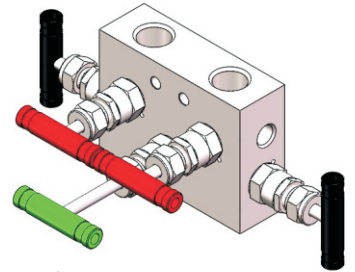
Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
5M-505-316	1/2" Female NPT	Flanged	1/4" Female NPT



Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
5M-506-316	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT



Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
5M-507-316	1/2" Female NPT	1/2" Female NPT	1/4" Female NPT

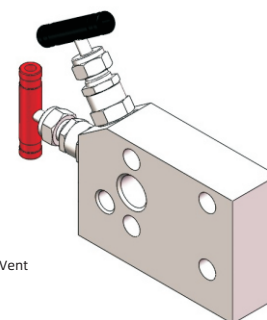
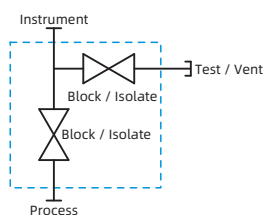
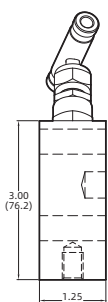
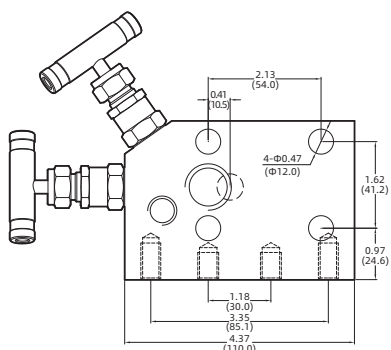


Integral Manifolds

❖ This section is presently characterized by manifolds designed specifically for Rosemount[®] coplanar[™] pressure transmitters including the model 3051C, model 3051P, model 2024 and the model 3095.

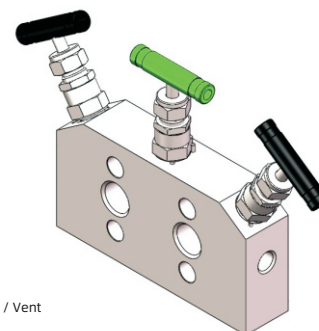
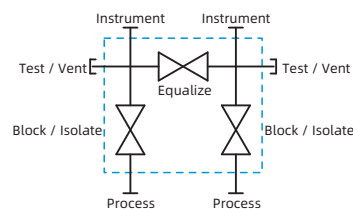
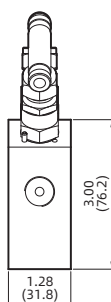
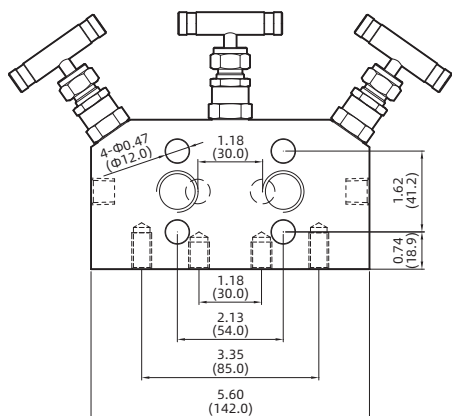
2-valve Manifolds

Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
2M-201R-316	1/2" Female NPT	Flanged	1/4" Female NPT



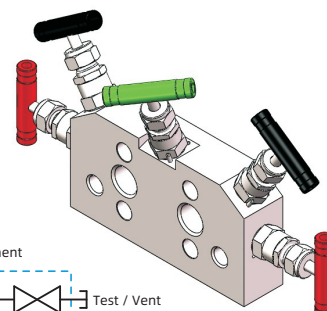
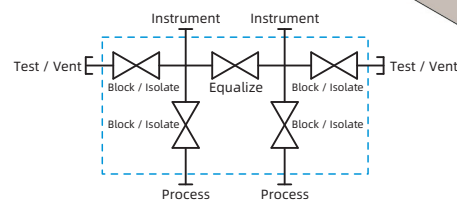
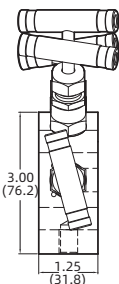
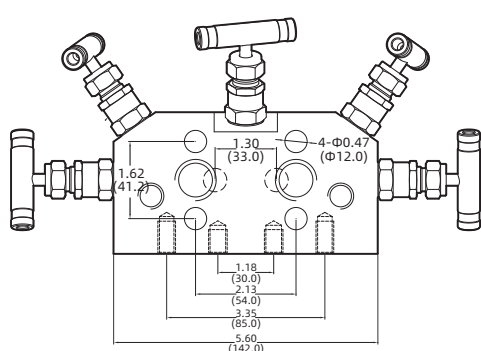
3-valve Manifolds

Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
3M-301R-316	1/2" Female NPT	Flanged	Optional



5-valve Manifolds

Ordering Number	Inlet / Process	Outlet / Instrument	Test / Vent
5M-501R-316	1/2" Female NPT	Flanged	1/4" Female NPT



- ❖ All direct mount manifolds are provided with 4 of 7/16-20UNFx1.75" high tensile zinc plated carbon steel bolts and 2 of PTFE seal rings
- ❖ Bleed valve and plug must be ordered separately. To order plug, add "-P" suffixes to ordering number, for example: **2M-201-P-316**
- ❖ To order Graphite packing, add "-G" suffixes to ordering number, for example: **3M-301-G-316**