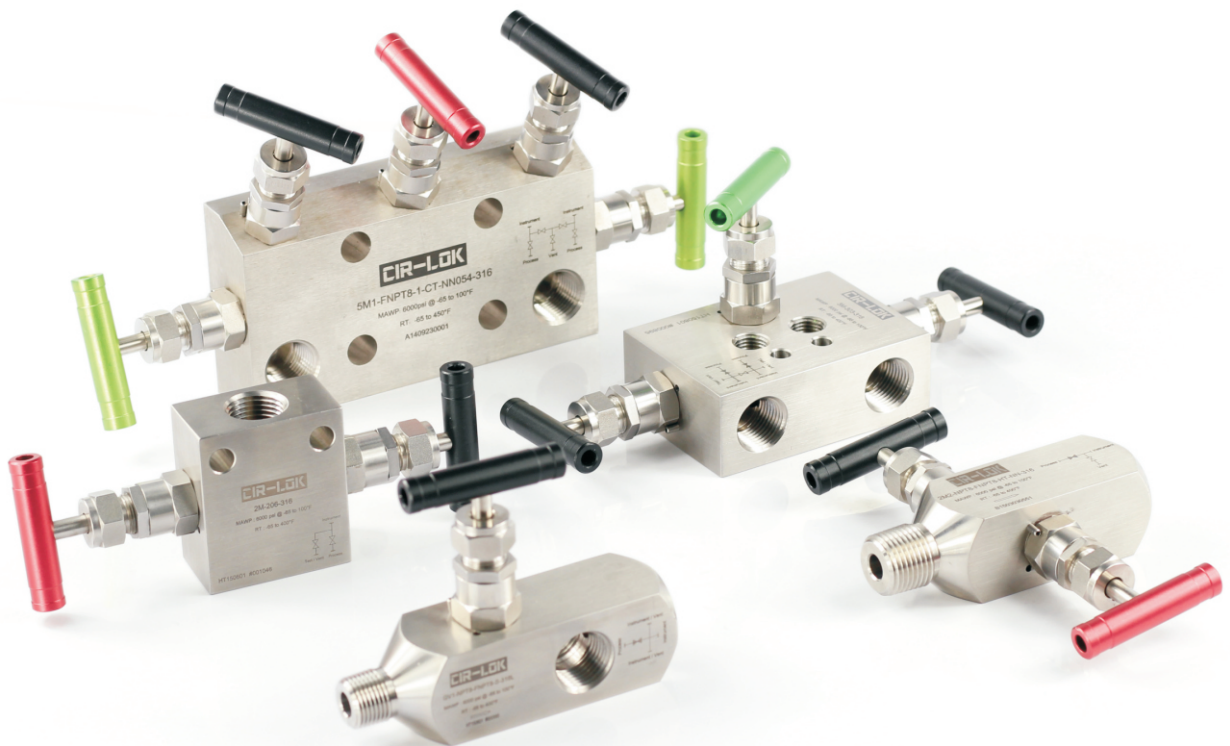


Instrument Manifolds

2M, 3M and 5M Series



- ❖ Instrument manifold are manufactured in accordance with ANSI B31.1, B31.3 and MSS-SP-105
- ❖ 2-valve manifold are used with pressure gauges or pressure transmitters
- ❖ 3-valve and 5-valve manifold are used with differential pressure transmitters
- ❖ Working pressures up to 6000 psig (413 bar)
- ❖ Working temperatures from -65°F to 1200°F (-54°C to 649°C)
- ❖ Orifice: 0.157 in. (4.0 mm), CV: 0.35

General Information

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

Features

- ❖ working pressures:
 - 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 (-54°C to 232°C)
 - Graphite packing from -65°F to 1200°F (-54°C to 649°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

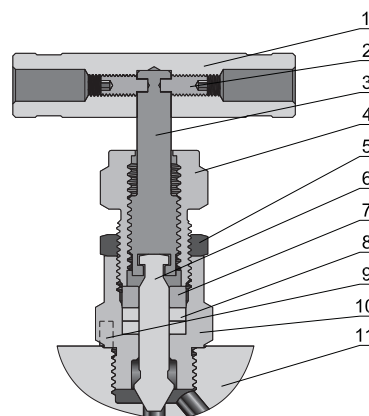
Pressure-Temperature Ratings

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)	—

1. Based on graphite stem packing.

Standard Materials of Construction

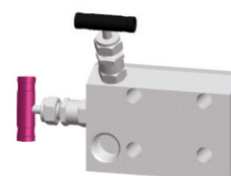
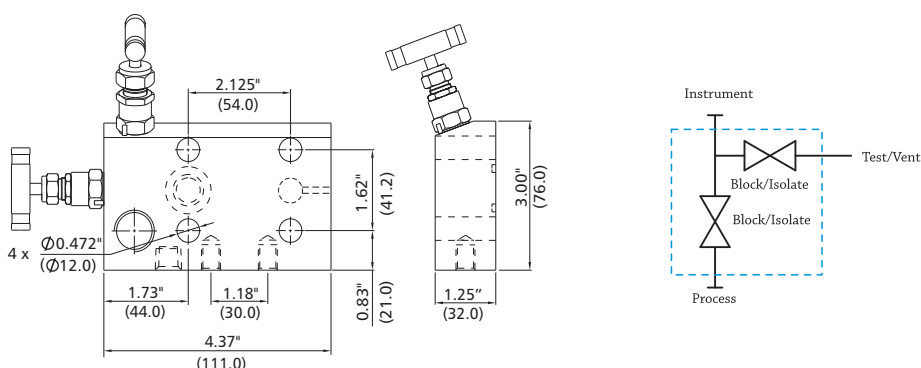
Item	Component	Material Grade/ASTM Specification		
		316 S.S.	Alloy 400	Alloy C-276
1	Handle	Anodized aluminum		
2	Screw	Nickel cadmium-plated steel		
3	Upper Stem	316 S.S./A276		
4	Packing Bolt	316 S.S./A276		
5	Nut	316 S.S./B783		
6	Lower Stem	Chrome-plated 316 S.S./A276	Alloy R-405/B164	Alloy C-276/B574
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



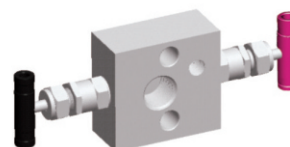
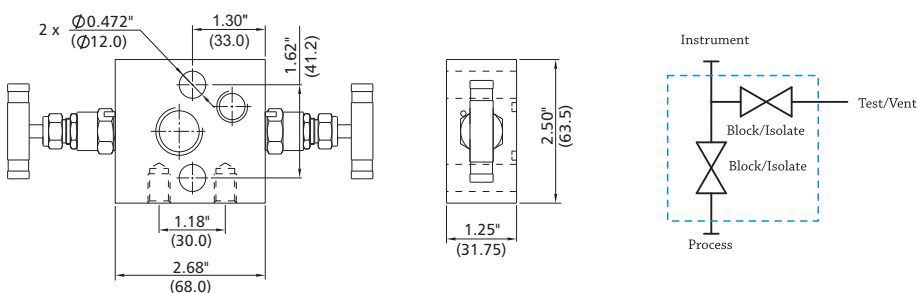
Handle color codes for functions
BLACK: Isolate/block
RED: Test/vent
GREEN: Equalize

2-valve Manifolds

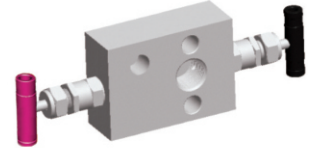
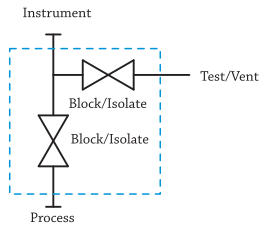
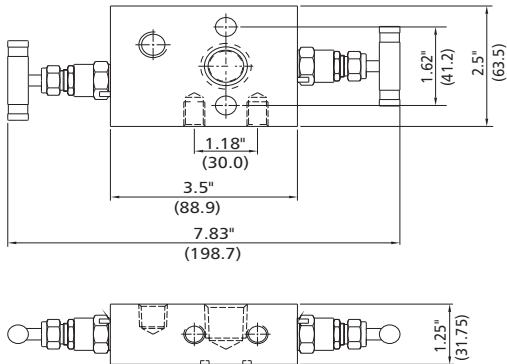
Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
2M1-FNPT8-1-AT-NN-316	1/2 Female NPT	Flanged	1/4 Female NPT



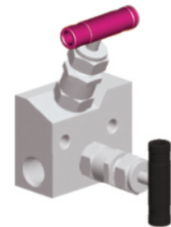
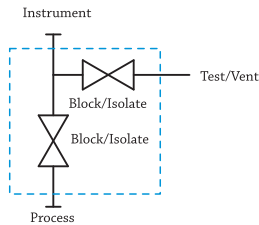
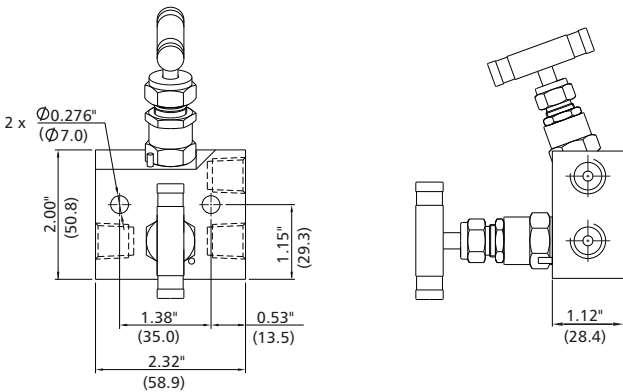
Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
2M1-FNPT8-1-IT-NN-316	1/2 Female NPT	Flange	1/4 Female NPT



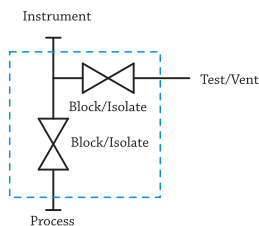
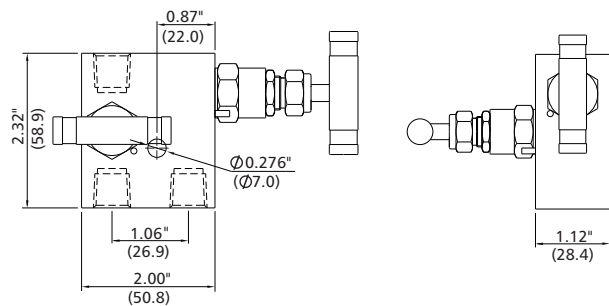
Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
2M1-FNPT8-1-HT-NN-316	1/2 Female NPT	Flange	1/4 Female NPT



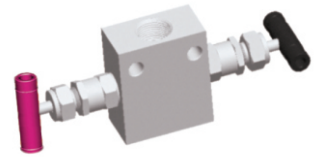
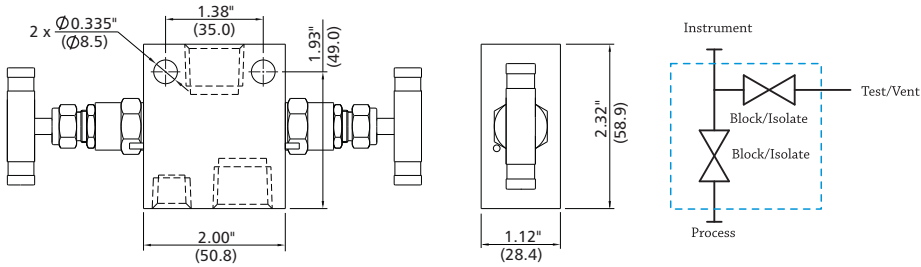
Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
2M2-FNPT4-2-AT-NN-316	1/4 Female NPT	1/4 Female NPT	1/4 Female NPT



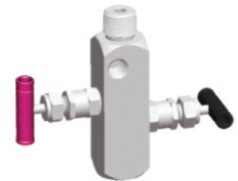
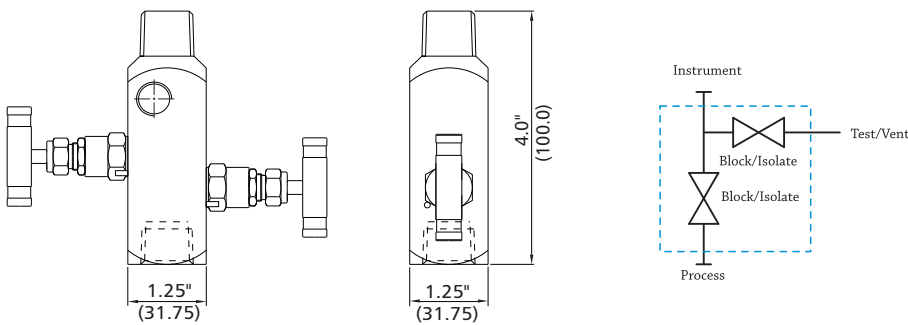
Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
2M2-FNPT4-2-CT-NN-316	1/4 Female NPT	1/4 Female NPT	1/4 Female NPT



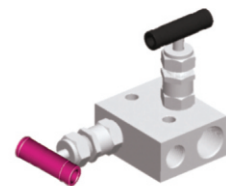
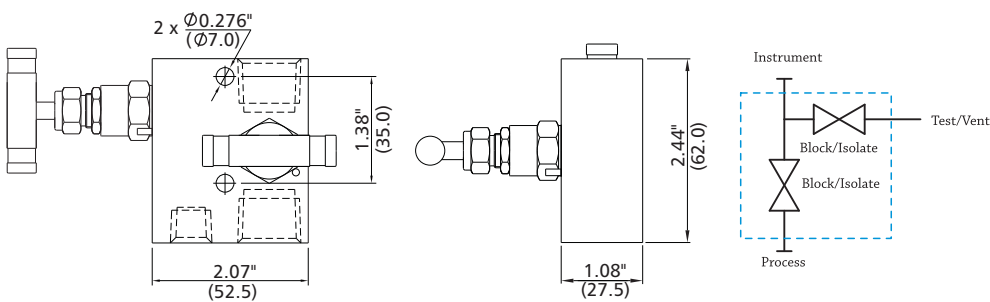
Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
2M2-FNPT8-2-IT-NN-316	1/2 Female NPT	1/2 Female NPT	1/4 Female NPT



Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
2M2-FNPT8-NPT8-HT-NN-316	1/2 Female NPT	1/2 Male NPT	1/4 Female NPT

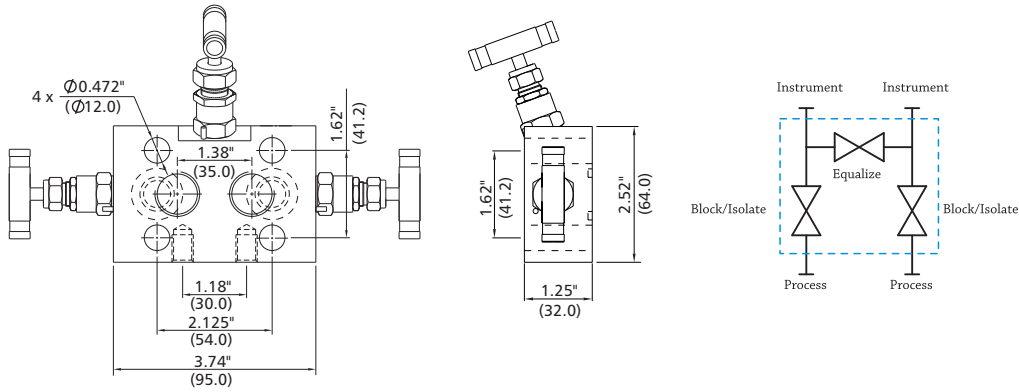


Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
2M2-FNPT8-2-VT-NN-316	1/2 Female NPT	1/2 Female NPT	1/4 Female NPT

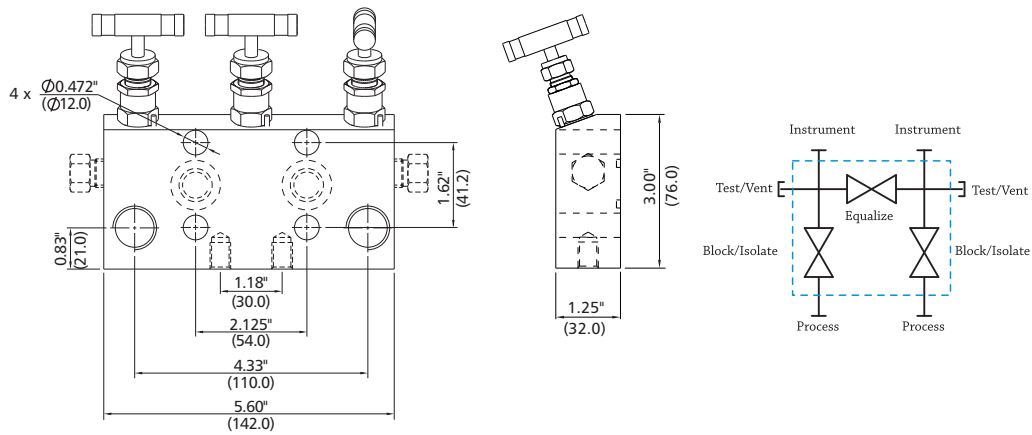


3-valve Manifolds

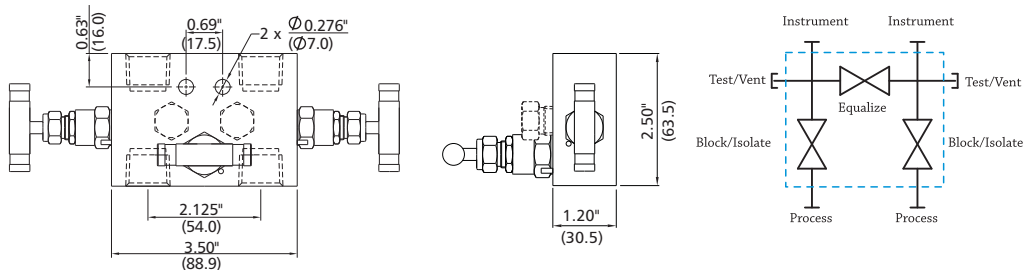
Ordering Number	Inlet/Process	Outlet/Instrument
3M1-FNPT8-1-AT-NN054-316	1/2 Female NPT	Flange



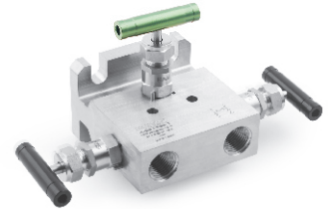
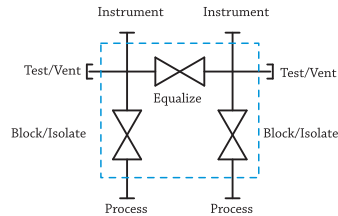
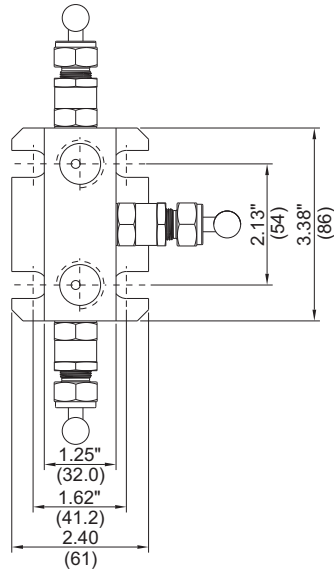
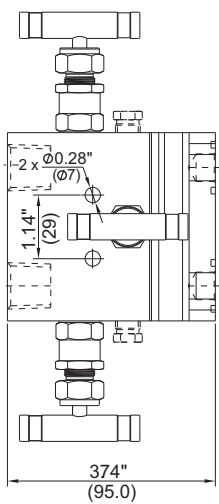
Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
3M1-FNPT8-1-IT-TN054-316	1/2 Female NPT	Flange	Optional



Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
3M2-FNPT8-2-VT-NN054-316	1/2 Female NPT	1/2 Female NPT	Optional

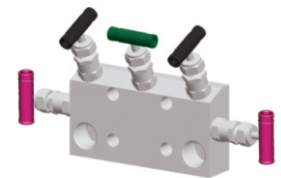
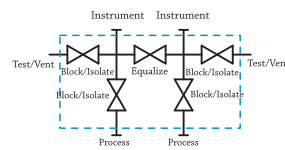
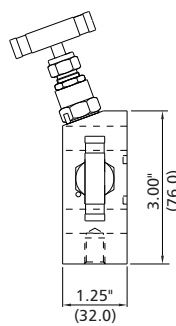
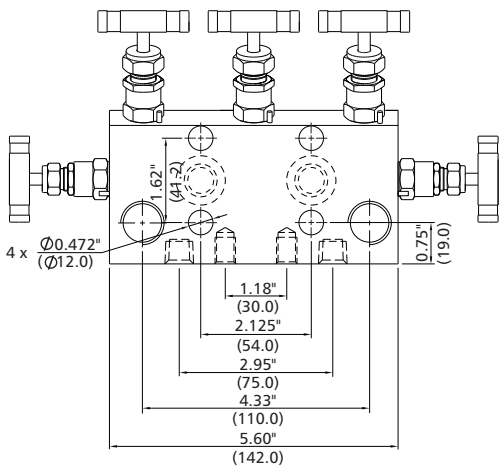


Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
3M1-FNPT8-1-VT-NN054-316	1/2 Female NPT	Flanged	Optional

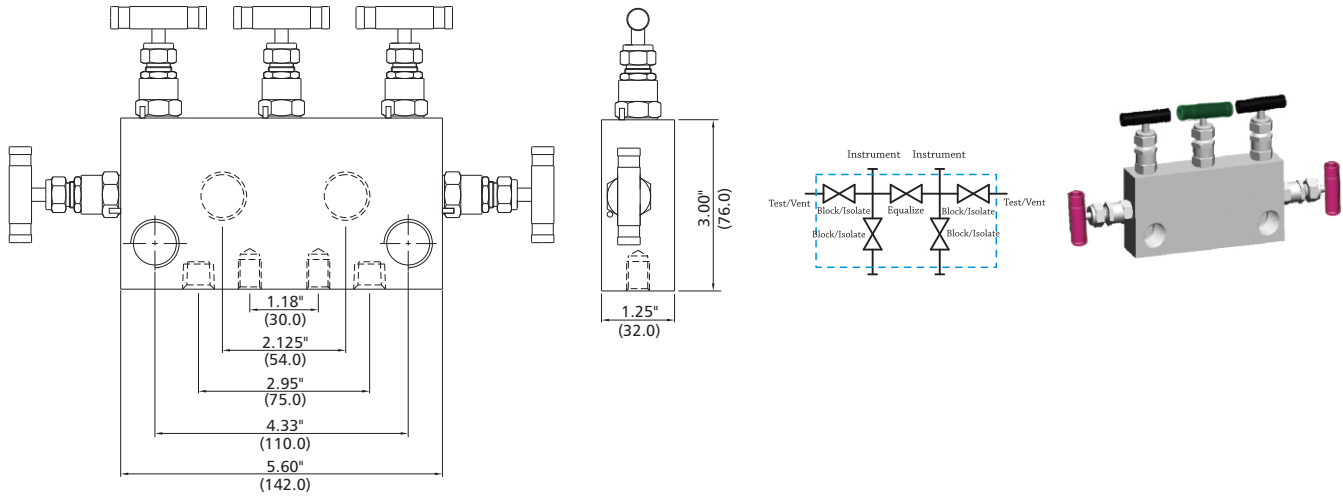


5-valve Manifolds

Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
5M1-FNPT8-1-AT-NN054-316	1/2 Female NPT	Flange	1/4 Female NPT

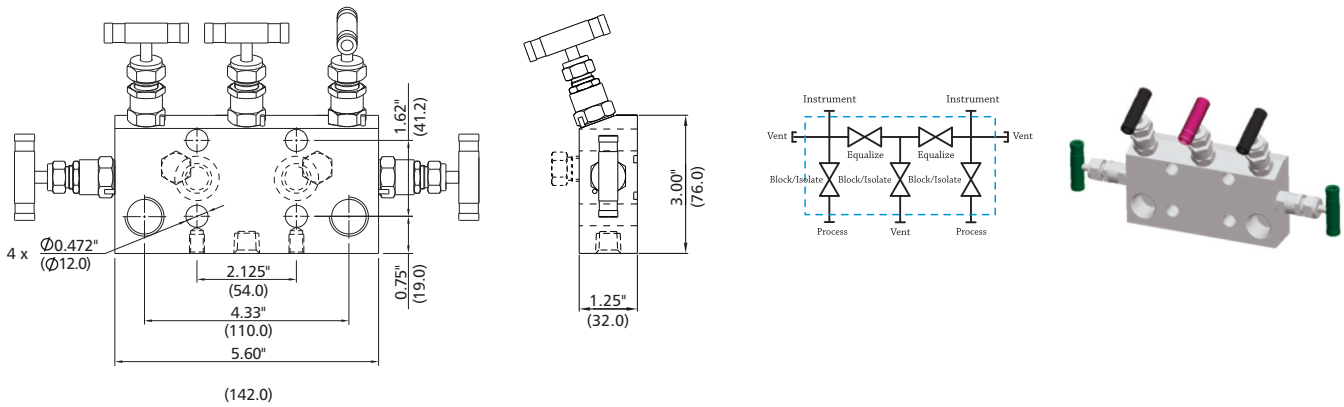


Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
5M1-FNPT8-1-IT-NN054-316	1/2 Female NPT	1/2 Female NPT	1/4 Female NPT

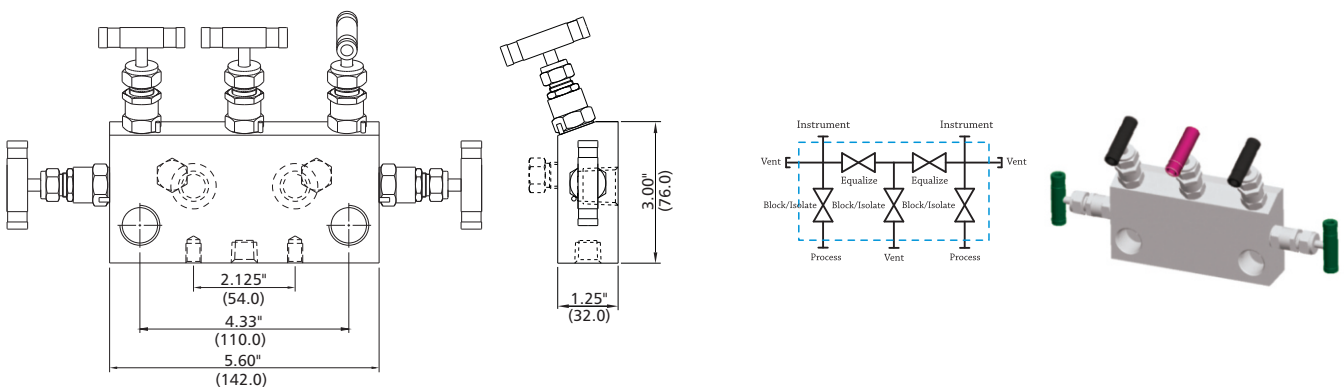


5-valve Custody Transfer/Fiscal Metering Manifold

Ordering Number	Inlet/Process	Outlet/Instrument	Vent	Test
5M1-FNPT8-1-DT-NN054-316	1/2 Female NPT	Flanged	1/4 Female NPT	Optional



Ordering Number	Inlet/Process	Outlet/Instrument	Vent	Test
5M2-FNPT8-2-AT-NN054-316	1/2 Female NPT	1/2 Female NPT	1/4 Female NPT	Optional

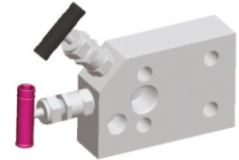
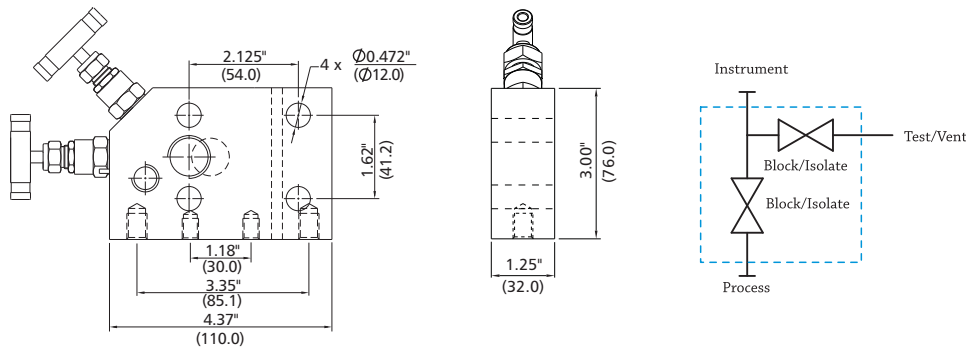


Integral Manifolds

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

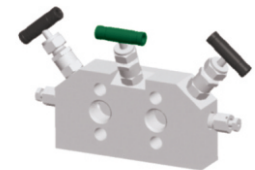
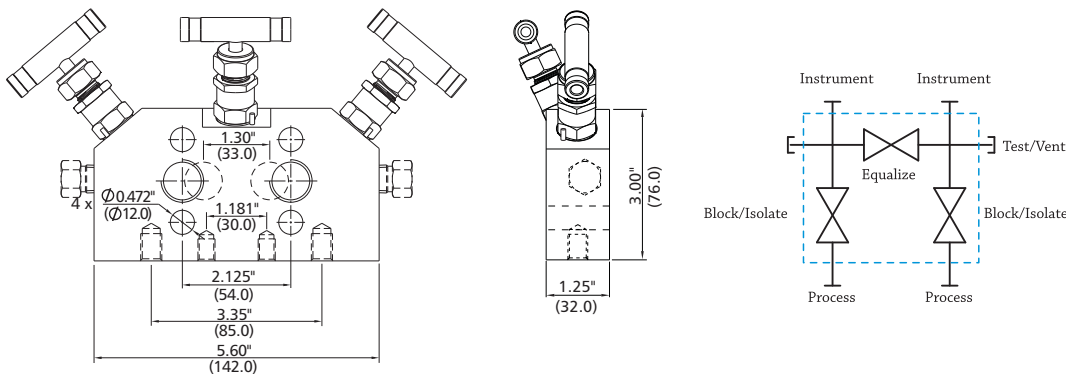
2-valve Manifolds

Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
2M1-FNPT8-1-RT-NN-316	1/2 Female NPT	Flanged	1/4 Female NPT



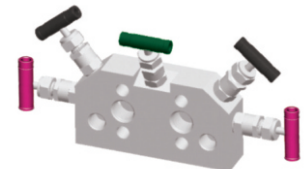
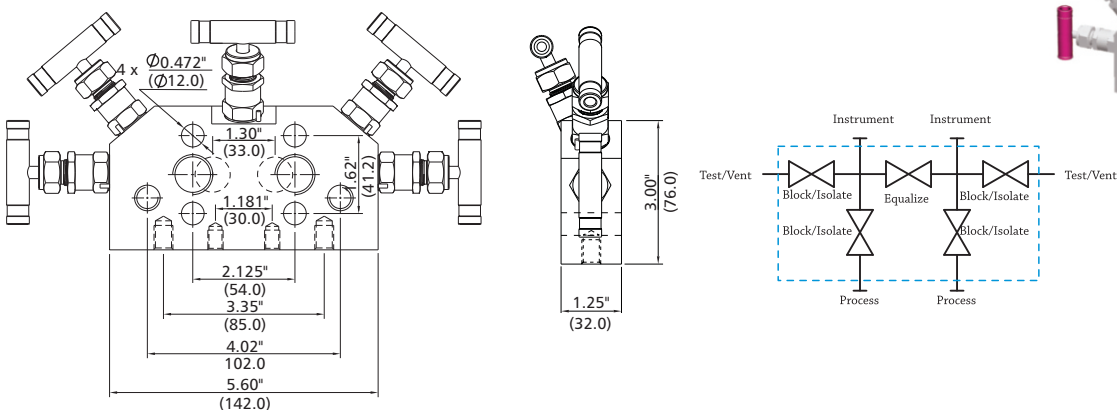
3-valve Manifolds

Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
3M1-FNPT8-1-RT-NN054-316	1/2 Female NPT	Flange	Optional



5-valve Manifolds

Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
5M1-FNPT8-RT-NN038-316	1/2 Female NPT	Flange	1/4 Female NPT



How to Order

3M1 — FNPT8 — 2 — HG — TY154 — 316

Manifold Series	Mount Type	Inlet Type	Inlet Size	Outlet		Body Style	Packing Sealing Material	Test Ports & Plugs	Mounting Bracket	For direct mount only		Body Material
				Outlet Type	Outlet Size					Flange Fasteners	Flange Outlet Centerline	
2M 2-valve	1 Direct Mount	FNPT Female NPT	4 1/4 in.	1 type Flanged		A Angle Pattern	T PTFE	N No	N No	0 7/16 - 20 UNF x 1.75 in.	54 2.125" (54 mm)	316
3M 3-valve	2 Remote Mount	FBT Female BSPT	6 3/8 in. or 6 mm	2 type Same as Inlet		D Double equalize Function	G Graphite	T 1/4 Female NPT with Relief Valve	Y Yes	1 7/16 - 20 UNF x 3 in.	33 1.30" (33 mm)	316L
5M 5-valve		M Metric Tube Fitting	8 1/2 in. or 8 mm			C Compact Pattern		1/4 Female NPT with Plug		2 M10 x 40 mm	56 2.188" (55.6 mm)	304
		F Fractional Tube Fitting	10 10 mm			I Valves In-Line Pattern				3 M12 x 40 mm	57 2.250" (57.2 mm)	304L
		FMS Female Metric Thread (for RP)	12 3/4 in. or 12 mm			R Rosemount						Duplex 250
		UGJ Nut + Gasket +Metric Bulge Nipple	14 14 mm									Titanium
		FL Flanged	16 16 mm									Alloy 20
			20 M20 X 1.5									Alloy 400
												Alloy 600
												Alloy
												C-276