

Rosemount Manifolds

- *Factory assembled, leak-tested, and calibrated*
- *Full breadth of offering including integral, conventional, and inline designs*
- *Integral design enables “flangeless” valve integration*
- *2, 3, and 5 valve configurations*
- *Compact, lightweight design*
- *Easy in-process calibration*
- *Direct-mount capability*



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Rosemount Manifolds

Factory assembled, leak-tested, and calibrated

Rosemount manifolds and transmitters can be pre-assembled at the factory, resulting in an integrated assembly that is easier to order, install, operate, and maintain.

Full breadth of offering

The Rosemount manifold product offering has a variety of process connections, platforms, and styles for use in any application.

Integral manifold design enables “flangeless” valve integration

Rosemount integral manifolds are assembled directly to the transmitter sensor body, eliminating the need for the transmitter flange. This results in a compact design that has 50% fewer leak points, requires less hardware, and is lighter and more streamlined compared to a traditional transmitter / flange / manifold interface.

Rosemount quality

Rosemount manifolds are designed and built to the same exceptional quality standards as Rosemount transmitters. From basic to demanding applications, Rosemount manifolds provide industry leading reliability at an exceptional value.

Rosemount Pressure Solutions

Rosemount 3051S Series of Instrumentation

Scalable pressure, flow and level measurement solutions improve installation and maintenance practices.

Rosemount 3095 Mass Flow Transmitter

Accurately measures differential pressure, static pressure and process temperature to dynamically calculate fully compensated mass flow.

Rosemount 305, 306 and 304 Manifolds

Factory-assembled, calibrated and seal-tested transmitter-to-manifold assemblies reduce installation costs.

Rosemount 1199 Diaphragm Seals

Provides reliable, remote measurements of process pressure and protects the transmitter from hot, corrosive, or viscous fluids.

Orifice Plate Primary Element Systems: Rosemount 1495 and 1595 Orifice Plates, 1496 Flange Unions and 1497 Meter Sections

A comprehensive offering of orifice plates, flange unions and meter sections that are easy to specify and order. The 1595 Conditioning Orifice provides superior performance in tight fit applications.

Annubar[®] Flowmeter Series: Rosemount 3051SFA *ProBar*[®], 3095MFA Mass *ProBar*[®], and 485

The state-of-the-art, fifth generation Rosemount 485 *Annubar* combined with the 3051S or 3095 *MultiVariable* transmitter creates an accurate, repeatable and dependable insertion-type flowmeter.

Compact Orifice Flowmeter Series: Rosemount 3051SFC, 3095MFC, and 405

Compact Orifice Flowmeters can be installed between existing flanges, up to a Class 600 (PN100) rating. In tight fit applications, a conditioning orifice plate version is available, requiring only two diameters of straight run upstream and two downstream.

ProPlate[®] Flowmeter Series: Rosemount 3051SFP *ProPlate*, 3095MFP Mass *ProPlate*, and 1195

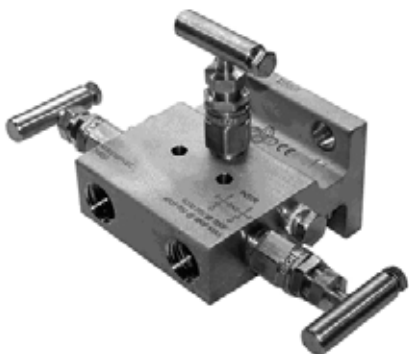
These integral orifice flowmeters eliminate the inaccuracies that become more pronounced in small orifice line installations. The completely assembled, ready to install flowmeters reduce cost and simplify installation.

Rosemount Manifolds Selection Guide

ROSEMOUNT 304 CONVENTIONAL MANIFOLD

See "Ordering Information" on page 21.

- Attaches to transmitter flange
- 2, 3, and 5-valve configurations
- Traditional (Flange x Flange, Flange x NPT) & Wafer styles
- Factory assembled, seal-tested and calibrated



Rosemount 304 Conventional Manifold-Traditional Style

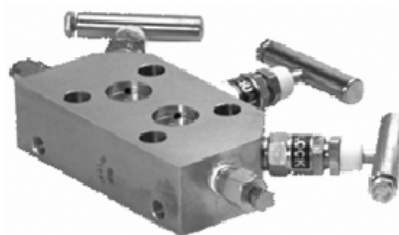


Rosemount 304 Conventional Manifold-Wafer Style

ROSEMOUNT 305 INTEGRAL MANIFOLD

See "Ordering Information" on page 21.

- Assembles directly to transmitter, eliminating need for flange
- 2, 3, and 5-valve configuration
- Available in Coplanar™ and traditional styles
- Compact, lightweight assembly
- Factory assembled, seal-tested and calibrated
- 50% fewer leak points than conventional transmitter / flange / manifold interface



Rosemount 305 Integral Manifold Coplanar Style

ROSEMOUNT 306 INLINE MANIFOLD

See "Ordering Information" on page 21.

- Assembled directly to inline pressure transmitters
- Block-and-Bleed and 2-valve configurations
- Male or Female threaded NPT process connection



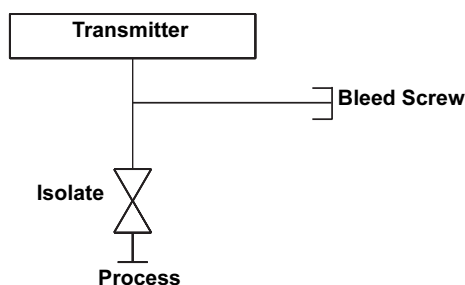
Rosemount 306 Inline Manifold

Valve Configuration

BLOCK-AND-BLEED

The block-and-bleed configuration is available on the Rosemount 306 Manifold for use with inline gage and absolute pressure transmitters. A single block valve provides instrument isolation, and a plug provides drain/vent capabilities.

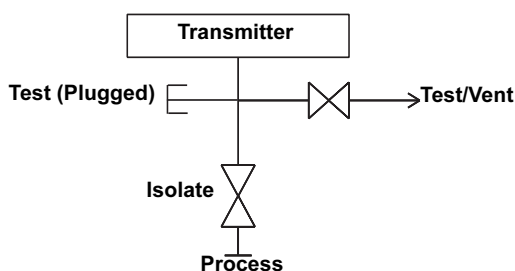
306 Manifold



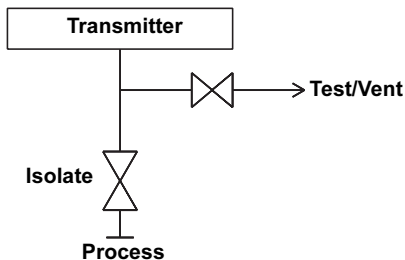
TWO-VALVE

The two-valve configuration is available on Rosemount 304, 305, and 306 Manifolds for use with absolute and gage pressure transmitters. A block valve provides instrument isolation, and a drain/vent valve allows venting, draining, or calibration.

304 Manifold



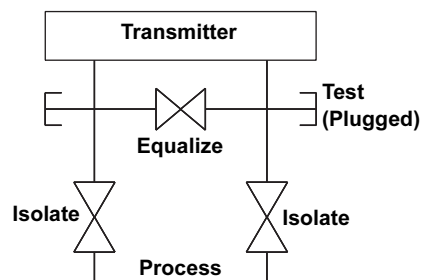
305 & 306 Manifolds



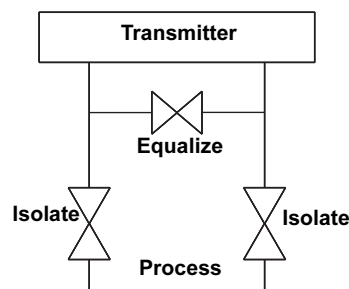
THREE-VALVE

The three-valve configuration is available on Rosemount 304 and 305 Manifolds for use with differential pressure and multivariable transmitters. Two block valves provide instrument isolation, and one equalize valve is positioned between the high and low transmitter process connections.

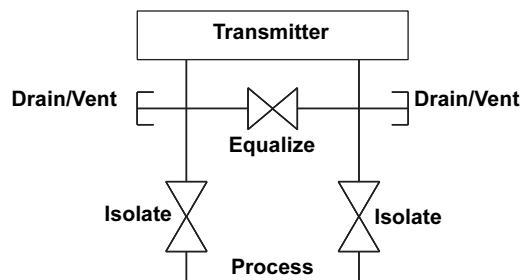
304 (Traditional) Manifold



304 (Wafer) Manifold



305 Manifold



NOTE

Test/Vents receive plastic caps to protect threaded connections unless otherwise noted.

NOTE

Test (Plugged) connections receive 1/4-in. NPT plugs unless otherwise noted.

Product Data Sheet

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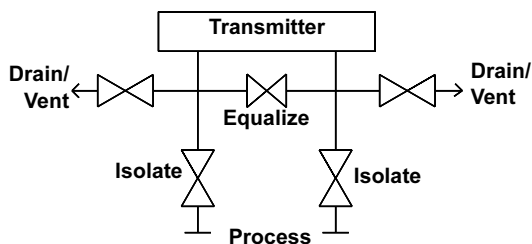
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Rosemount Manifolds

FIVE-VALVE

The five-valve configuration is available on Rosemount 304 and 305 Manifolds for use with differential pressure and multivariable transmitters. Two block valves provide instrument isolation, and one equalize valve is positioned between the high and low transmitter process connections. In addition, two drain/vent valves allow for controlled venting, 100% capture of vented or drained process, and simplified in-process calibration capability.

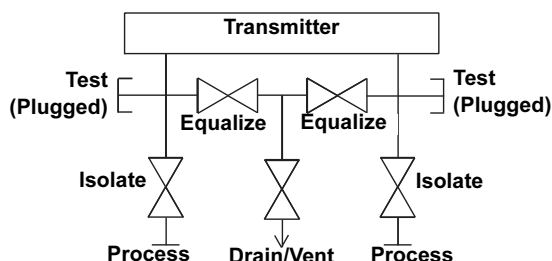
304 (Wafer) & 305 Manifolds



FIVE-VALVE NATURAL GAS

The five-valve natural gas configuration is available on the Rosemount 304 and 305 Manifolds for use with differential pressure and multivariable transmitters. Two block valves provide instrument isolation, and a single drain/vent valve allows for controlled venting, 100% capture of vented or drained process, and simplified in-process calibration capability. In addition, two equalize valves provide extra protection from leaking to ensure DP signal integrity.

304 (Traditional) & 305 Manifolds



NOTE

Test/Vents receive plastic caps to protect threaded connections unless otherwise noted.

NOTE

Test (Plugged) connections receive 1/4-in. NPT plugs unless otherwise noted.

Specifications

Pressure and Temperature Ratings

FIGURE 1. 304 Conventional Manifolds - Pressure vs. Temperature

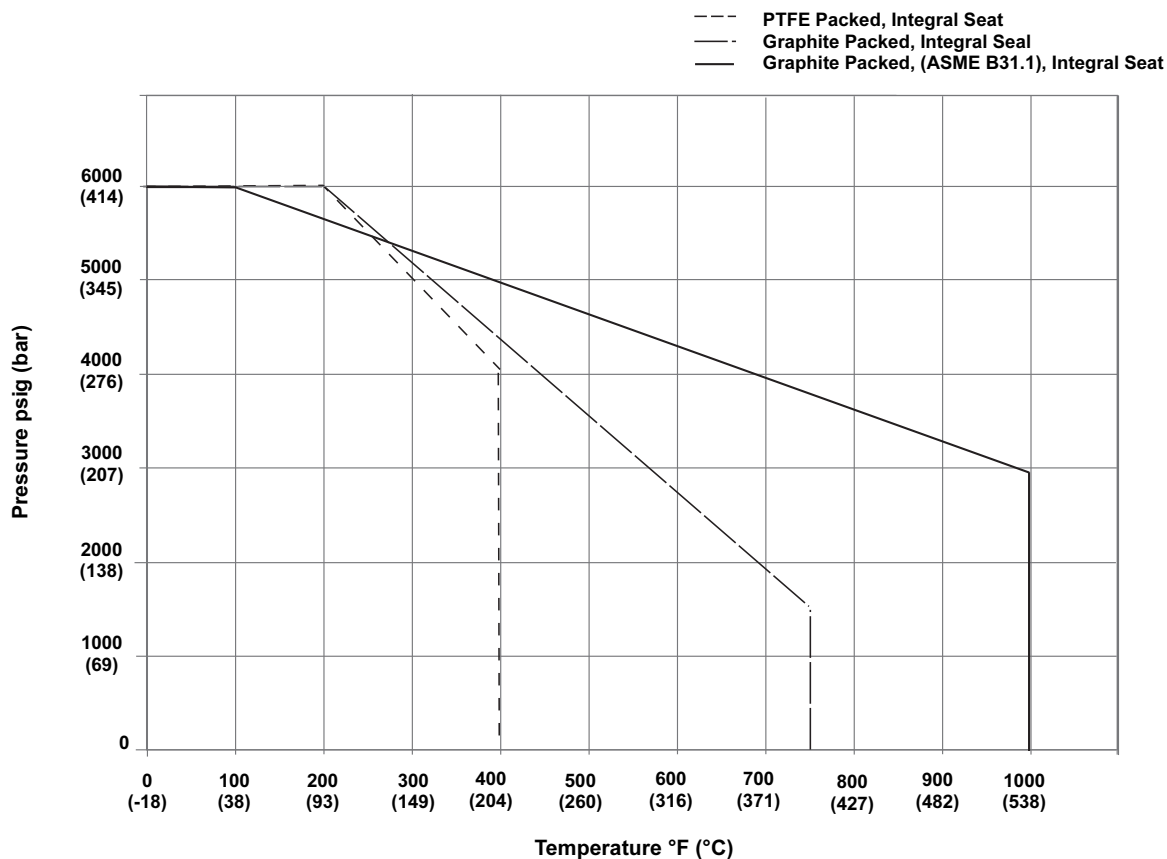


TABLE 1. 304 Conventional Manifolds - Pressure and Temperature Ratings

Packing	Seat	Pressure and Temperature Ratings
PTFE	Integral	6000 psi @ 200°F (414 bar @ 93°C) 4000 psi @ 400°F (276 bar @ 204°C)
Graphite	Integral	6000 psi @ 200°F (414 bar @ 93°C) 1500 psi @ 750°F (103 bar @ 399°C)
Graphite (ASME B31.1)	Integral	6000 psi @ 100°F (414 bar @ 38°C) 2915 psi @ 1000°F (201 bar @ 538°C)

FIGURE 2. 305 Integral Manifolds - Pressure vs. Temperature

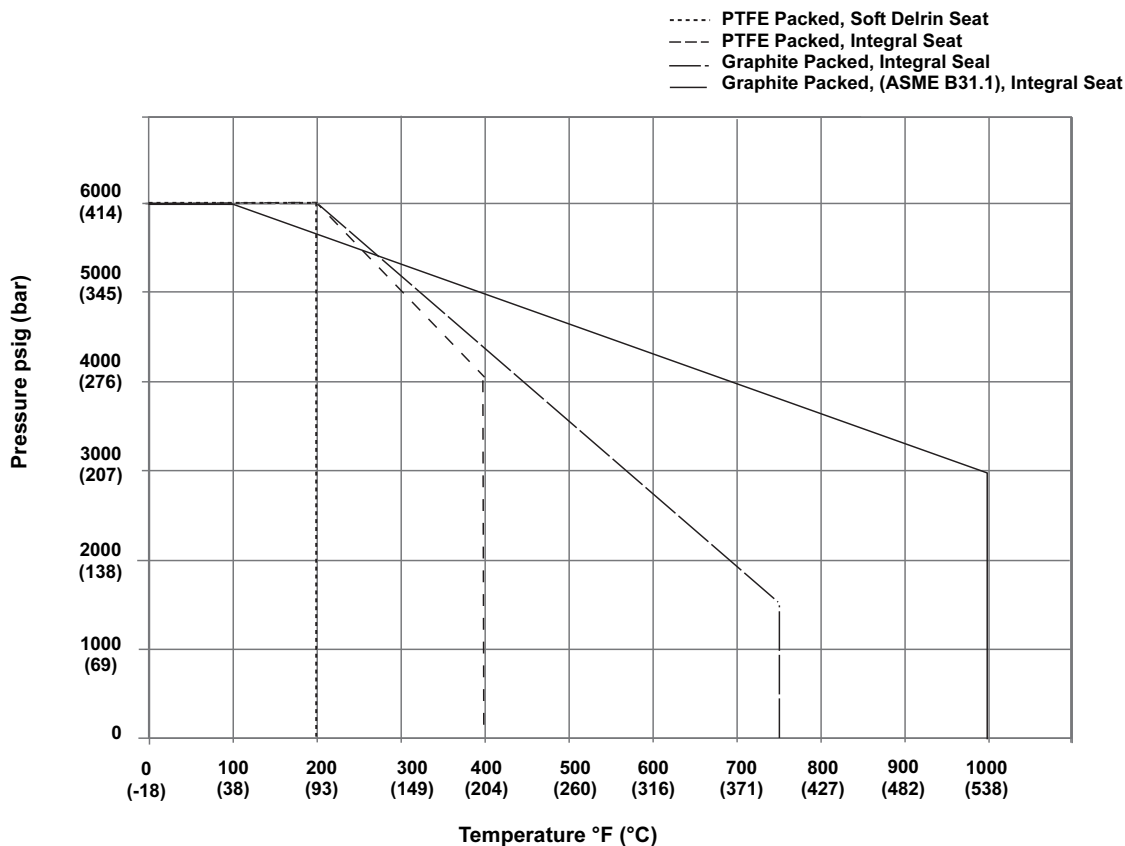


TABLE 2. 305 Integral Manifolds - Pressure and Temperature Ratings⁽¹⁾

Packing	Seat	Pressure and Temperature Ratings
PTFE	Integral	6092 psi @ 200°F (420 bar @ 93°C) 4000 psi @ 400°F (276 bar @ 204°C)
PTFE	Soft Delrin	6092 psi @ 200°F (420 bar @ 93°C)
Graphite	Integral	6092 psi @ 200°F (420 bar @ 93°C) 1500 psi @ 750°F (103 bar @ 399°C)
Graphite (ASME B31.1)	Integral	6092 psi @ 100°F (420 bar @ 38°C) 2915 psi @ 1000°F (201 bar @ 538°C)

(1) Except option HK:

PTFE, Integral seat: 2324 psi @ 200 °F (160 bar @ 93 °C), 1680 psi @ 400 °F (116 bar @ 204 °C)

Graphite, Integral seat: 2324 psi @ 200 °F (160 bar @ 93 °C), 1125 psi @ 750 °F (78 bar @ 399 °C)

FIGURE 3. 306 integral Manifolds - Pressure vs. Temperature

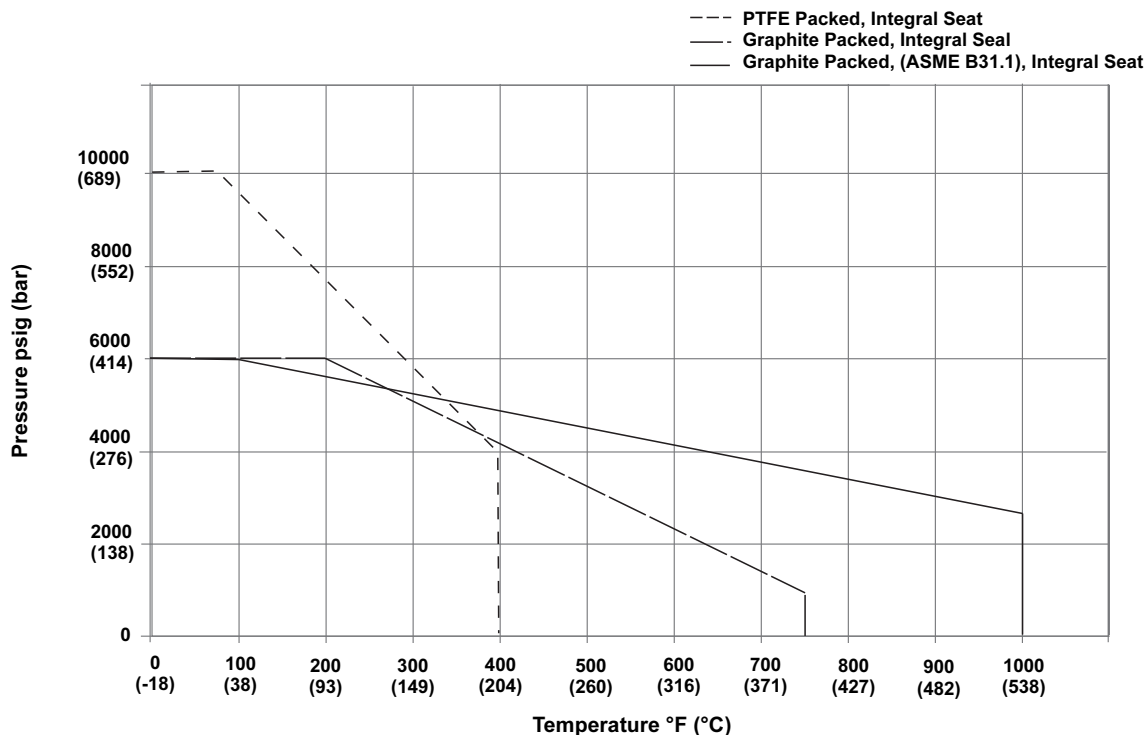


TABLE 3. 306 Integral manifolds - Pressure and Temperature Ratings

Packing	Seat	Pressure and Temperature Ratings
PTFE	Integral	10000 psi @ 85°F (689 bar @ 29°C) 4000 psi @ 400°F (276 bar @ 204°C)
Graphite	Integral	6000 psi @ 200°F (414 bar @ 93°C) 1500 psi @ 750°F (103 bar @ 399°C)
Graphite (ASME B31.1)	Integral	6000 psi @ 100°F (414 bar @ 38°C) 2915 psi @ 1000°F (201 bar @ 538°C)

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Rosemount Manifolds

Process Connections

TABLE 4. Process Connections

Model	Style	Connection
304	Flange by Pipe Flange by Flange Wafer	$\frac{1}{2}$ - 14 Female NPT
		2 $\frac{1}{8}$ -in. (54 mm) center-to-center connection (Process Adapters required)
		$\frac{1}{2}$ - 14 Female NPT
		<u>Process Adapters</u> $\frac{1}{2}$ - 14 Female NPT Flange Adapter $\frac{1}{2}$ -in. Ferrule Flange Adapter 12-mm Ferrule Flange Adapter
305	Coplanar Traditional	$\frac{1}{2}$ - 14 Female NPT
		$\frac{1}{4}$ - 18 Female NPT (Process Adapters optional)
		<u>Optional Process Adapters</u> $\frac{1}{2}$ - 14 Female NPT flange adapter
306	Block-and-Bleed 2-Valve	$\frac{1}{2}$ - 14 Male NPT
		$\frac{1}{2}$ - 14 NPT (Male or Female)

Instrument Connections

TABLE 5. Manifold - Transmitter Interface

Model	Connection
304	Mounted to Coplanar or traditional transmitter flange, 2 $\frac{1}{8}$ -in. (54 mm) center-to-center connection per IEC 61518, Type B shut-off device (without SPIGOT)
305	Mounted directly to Coplanar sensor module of transmitter, 1.3-in. (287 mm) center-to-center process isolators
306	$\frac{1}{2}$ - 14 Male NPT

Test / Vent Connections

$\frac{1}{4}$ -18 Female NPT

Manifold Bolts

Standard material is plated carbon steel per ASTM A449, Type 1

Alternative bolt materials offered through Option Codes

- L4 Austenitic 316 Stainless Steel Bolts
- L5 ASTM-A-193, Grade B7M Bolts
- L8 ASTM-A-193, Class 2, Grade B8M Bolts

Estimated Weight

Model and Description	Weight
304	2-valve traditional flange x NPT
	5.0 lbs (2.3 kg)
	2-valve traditional flange-x flange
	5.5 lbs (2.5 kg)
	3-valve traditional flange x NPT
	5.2 lbs (2.4 kg)
	3-valve traditional flange x flange
	5.7 lbs (2.6 kg)
305	3-valve wafer flange x NPT
	4.0 lbs (1.8 kg)
	5-valve wafer flange x NPT
	5.7 lbs (2.6 kg)
	5-valve traditional flange x NPT
	5.7 lbs (2.6 kg)
	5-valve traditional flange x flange
	5.7 lbs (2.6 kg)
306	2-valve Coplanar
	4.5 lbs (2.0 kg)
	2-valve traditional
	6.0 lbs (2.7 kg)
	3-valve Coplanar
	4.7 lbs (2.1 kg)
306	3-valve traditional
	6.0 lbs (2.7 kg)
	5-valve Coplanar
	6.5 lbs (3.0 kg)
306	Block-and-Bleed
	1.1 lbs (0.5 kg)
306	2-valve
	2.5 lbs (1.1 kg)

TABLE 6. 304 Conventional Manifolds - Process Wetted Materials of Construction

Component	SST	CS	SST with SG Option
Body	316 SST	CS	316 SST
Ball / Tip	316 SST /316Ti SST	316 SST	<i>Hastelloy® C-276</i>
Stem	316 SST	316 SST	<i>Hastelloy C-276</i>
Packing	PTFE / Graphite	PTFE	PTFE / Graphite
Bonnet	316 SST	316 SST	316 SST
Pipe Plug	316 SST	CS	316 SST

TABLE 7. 305 Integral Manifolds - Process Wetted Materials of Construction

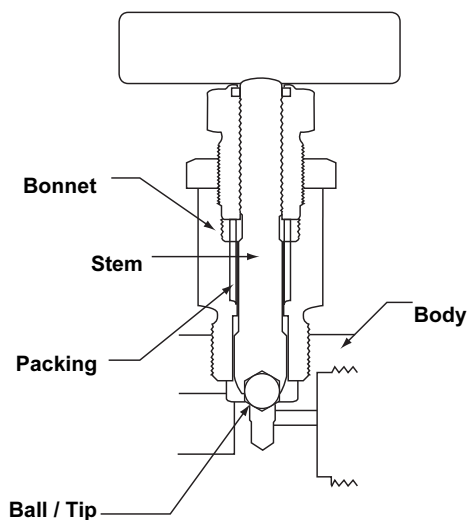
Component	SST	<i>Hastelloy C</i>	<i>Monel</i>	316 SST with SG option
Body	316 SST	<i>Hastelloy C-276</i>	<i>Monel® 400</i>	316 SST
Ball / Tip	316 SST /316Ti SST	<i>Hastelloy C-276</i>	<i>Monel 400 / K500</i>	<i>Hastelloy C-276</i>
Stem	316 SST	<i>Hastelloy C-276</i>	<i>Monel 400 / R-405</i>	<i>Hastelloy C-276</i>
Packing	PTFE / Graphite	PTFE / Graphite	PTFE / Graphite	PTFE / Graphite
Bonnet	316 SST	<i>Hastelloy C-276</i>	<i>Monel 400 / R-405</i>	316 SST
Pipe Plug	316 SST	<i>Hastelloy C-276</i>	<i>Monel 400 / R-405</i>	316 SST
Drain / Vent Valve	316 SST	<i>Hastelloy C-276</i>	<i>Monel 400</i>	<i>Hastelloy C-276</i>

TABLE 8. 306 Inline Manifolds - Process Wetted Materials of Construction

Component	SST	<i>Hastelloy C</i>	<i>Monel</i>	316 SST with SG option
Body	316 SST	<i>Hastelloy C-276</i>	<i>Monel 400</i>	316 SST
Ball / Tip	316 SST /316Ti SST	<i>Hastelloy C-276</i>	<i>Monel 400 / K500</i>	<i>Hastelloy C-276</i>
Stem	316 SST	<i>Hastelloy C-276</i>	<i>Monel 400 / R-405</i>	<i>Hastelloy C-276</i>
Packing	PTFE / Graphite	PTFE / Graphite	PTFE / Graphite	PTFE / Graphite
Bonnet	316 SST	<i>Hastelloy C-276</i>	<i>Monel 400 / R-405</i>	316 SST
Pipe Plug	316 SST	<i>Hastelloy C-276</i>	<i>Monel 400 / R-405</i>	316 SST
Bleed Screw	316 SST / 316Ti SST	<i>Hastelloy C-276</i>	<i>Monel 400 / R-405 / K500</i>	<i>Hastelloy C-276</i>

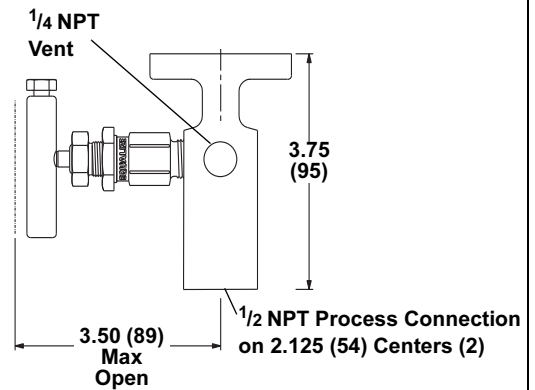
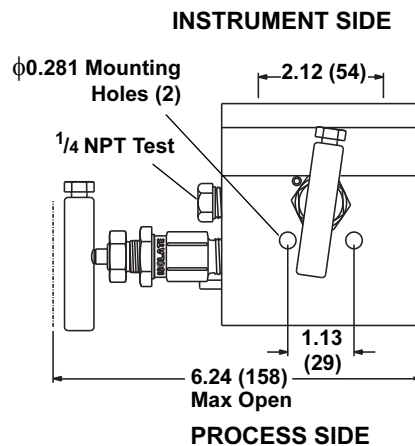
Materials of Construction - Typical

FIGURE 4. Typical Rosemount Manifold Valve



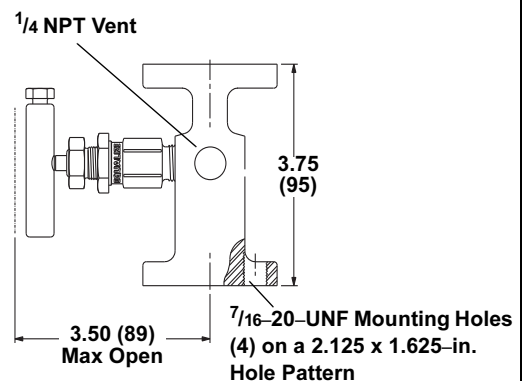
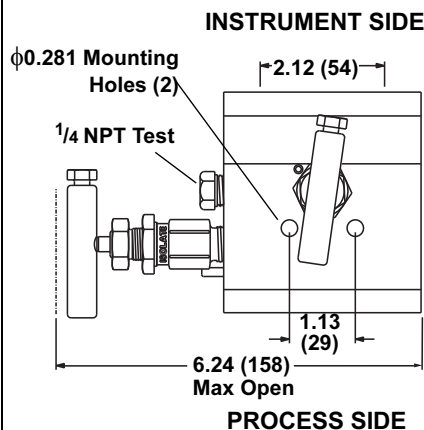
Dimensional Drawings

Rosemount 304 Two-Valve Flange X NPT Conventional Manifold



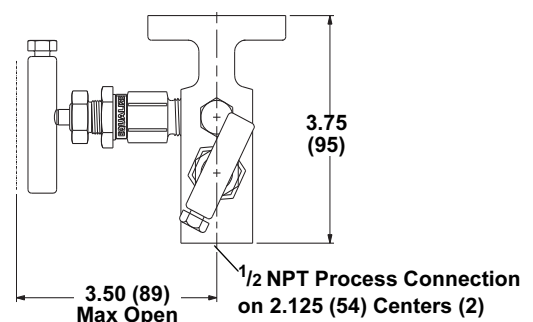
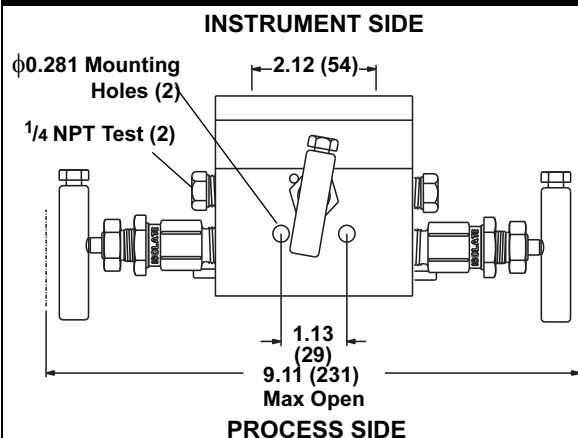
Dimensions are in inches (millimeters)

Rosemount 304 Two-Valve Flange X Flange Conventional Manifold



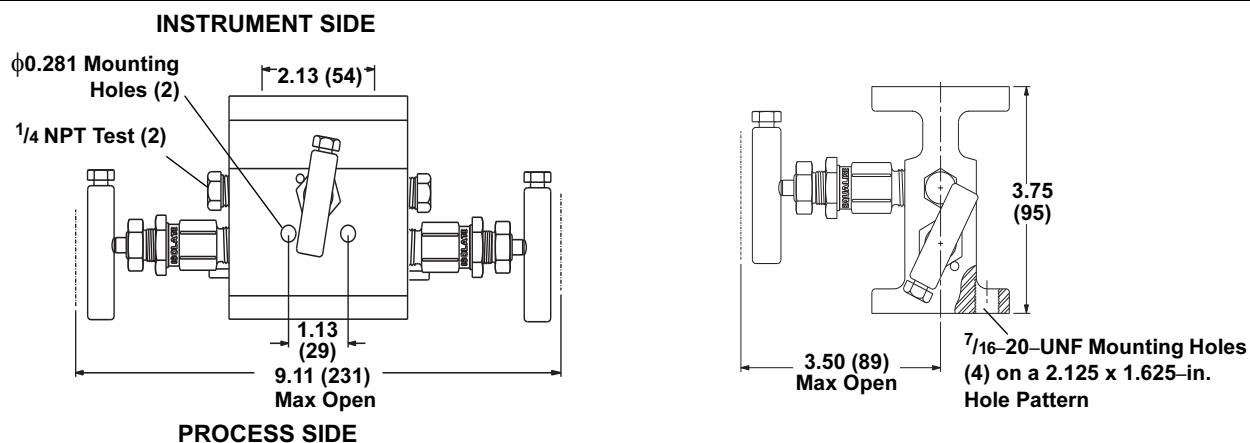
Dimensions are in inches (millimeters)

Rosemount 304 Three-Valve Flange X NPT Conventional Manifold



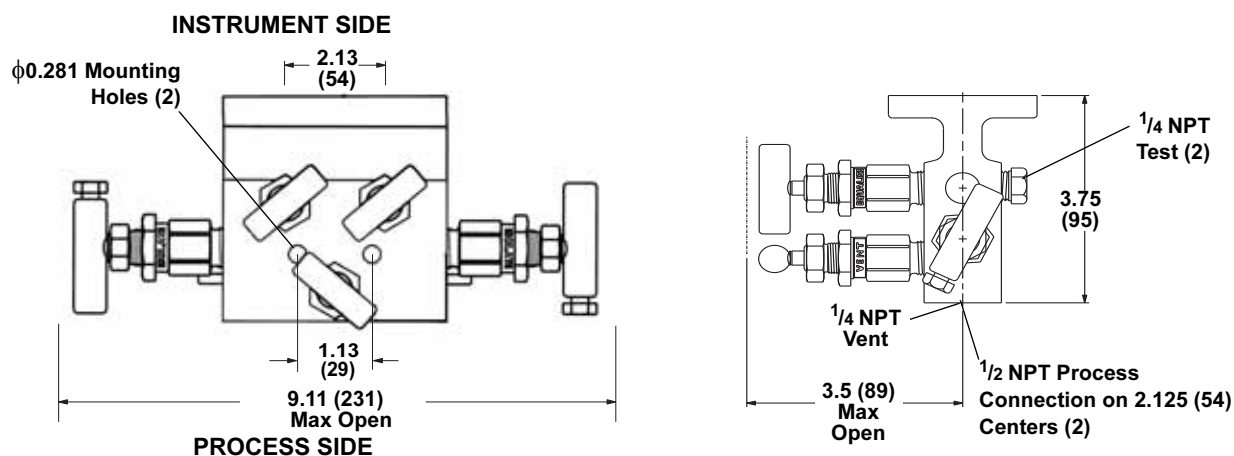
Dimensions are in inches (millimeters)

Rosemount 304 Three-Valve Flange X Flange Conventional Manifold



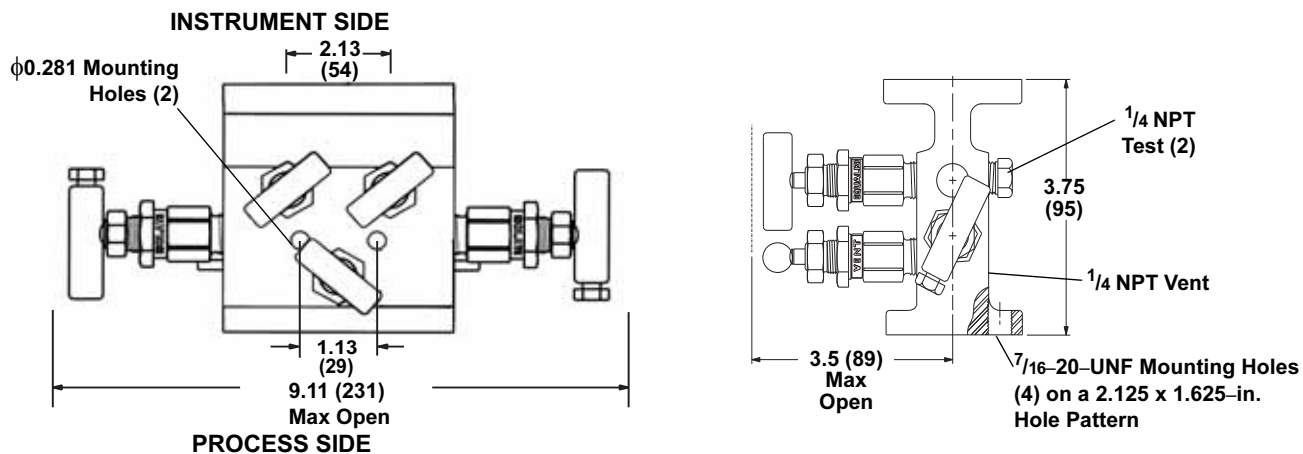
Dimensions are in inches (millimeters)

Rosemount 304 Natural Gas Five-Valve Flange X NPT Conventional Manifold



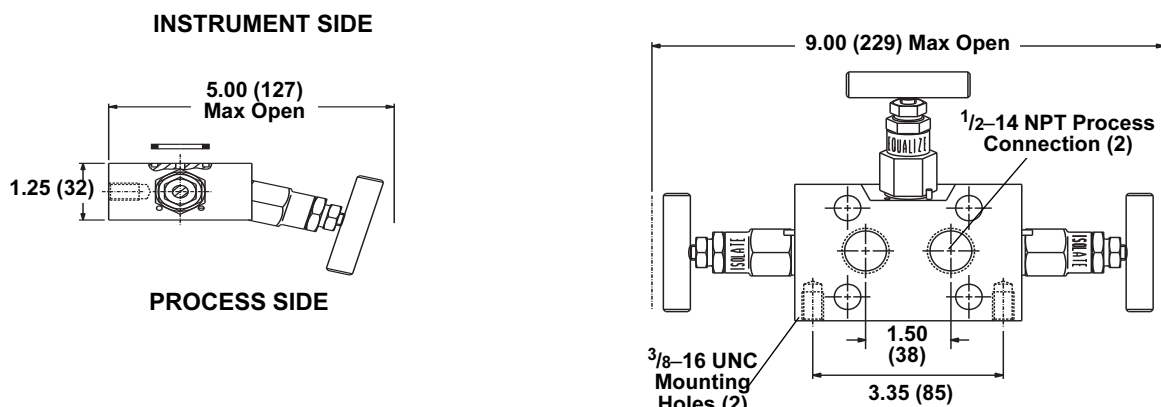
Dimensions are in inches (millimeters)

Rosemount 304 Natural Gas Five-Valve Flange X Flange Conventional Manifold



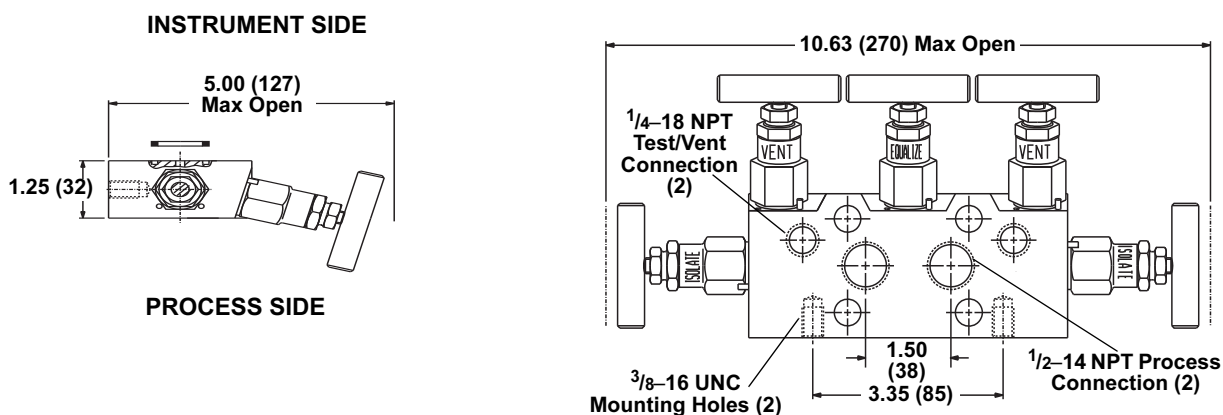
Dimensions are in inches (millimeters)

Rosemount 304 Three-Valve Wafer Manifold



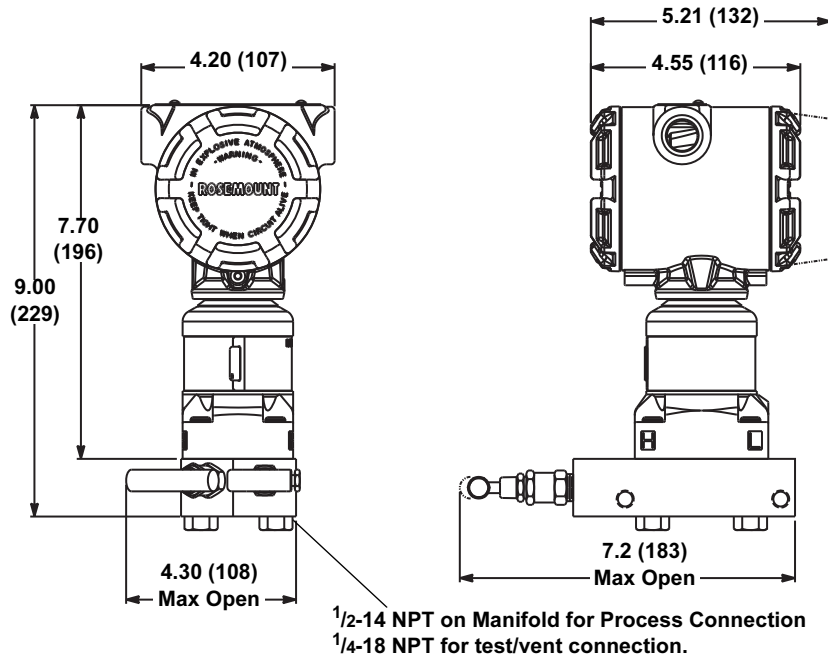
Dimensions are in inches (millimeters)

Rosemount 304 Five-Valve Wafer Manifold



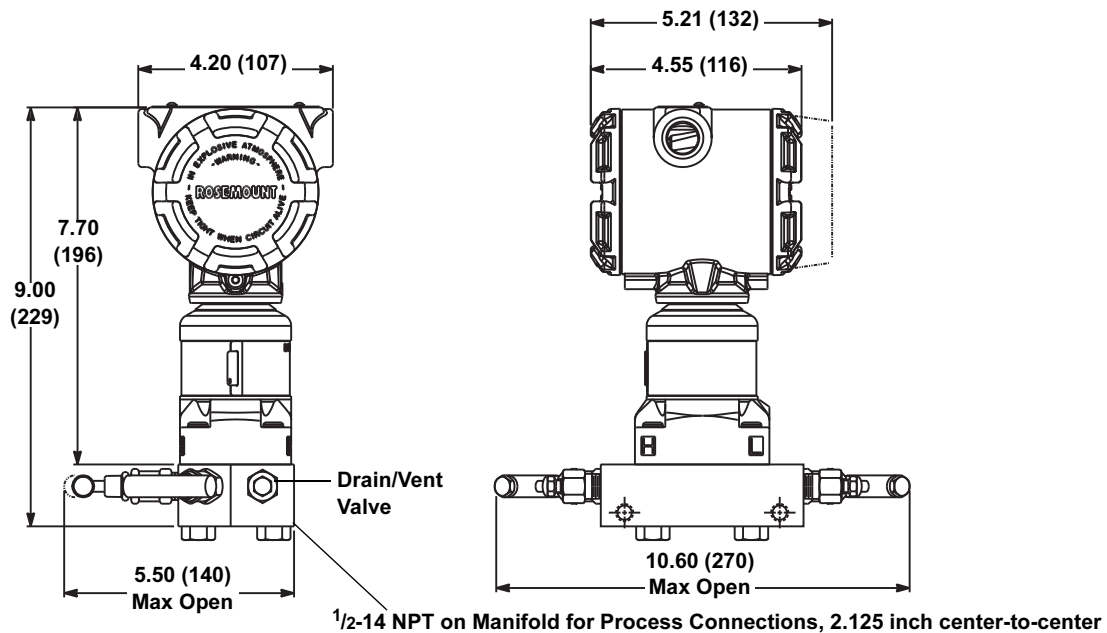
Dimensions are in inches (millimeters)

Rosemount 305R Two-Valve Coplanar Style Manifold



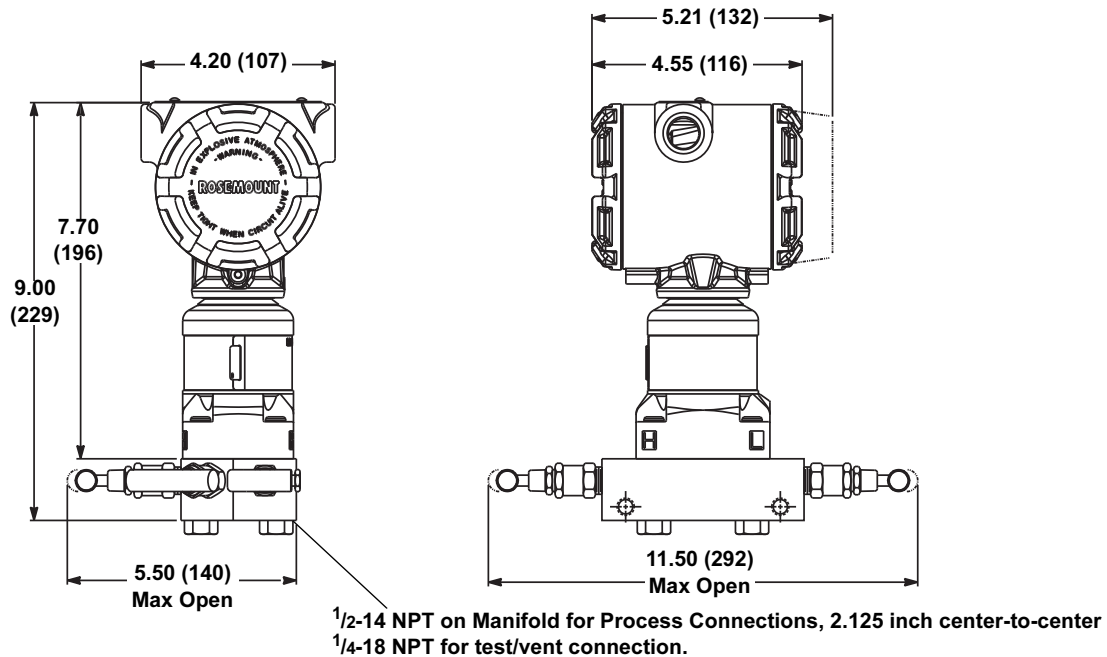
Dimensions are in inches (millimeters)

Rosemount 305R Three-Valve Coplanar Style Manifolds



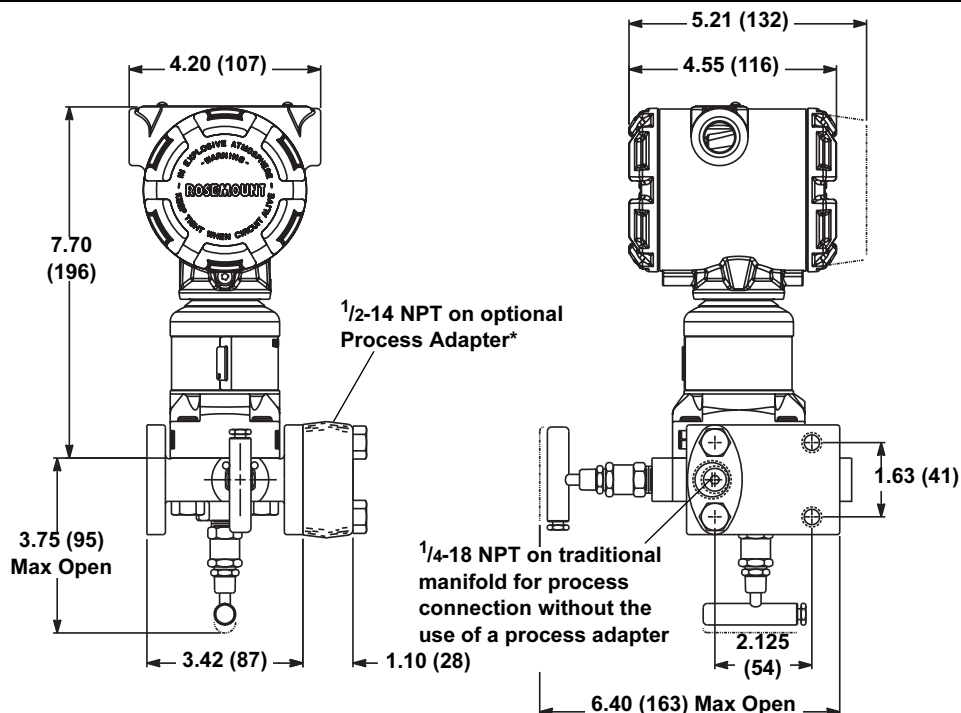
Dimensions are in inches (millimeters)

Rosemount 305R Five-Valve Coplanar Style Manifold



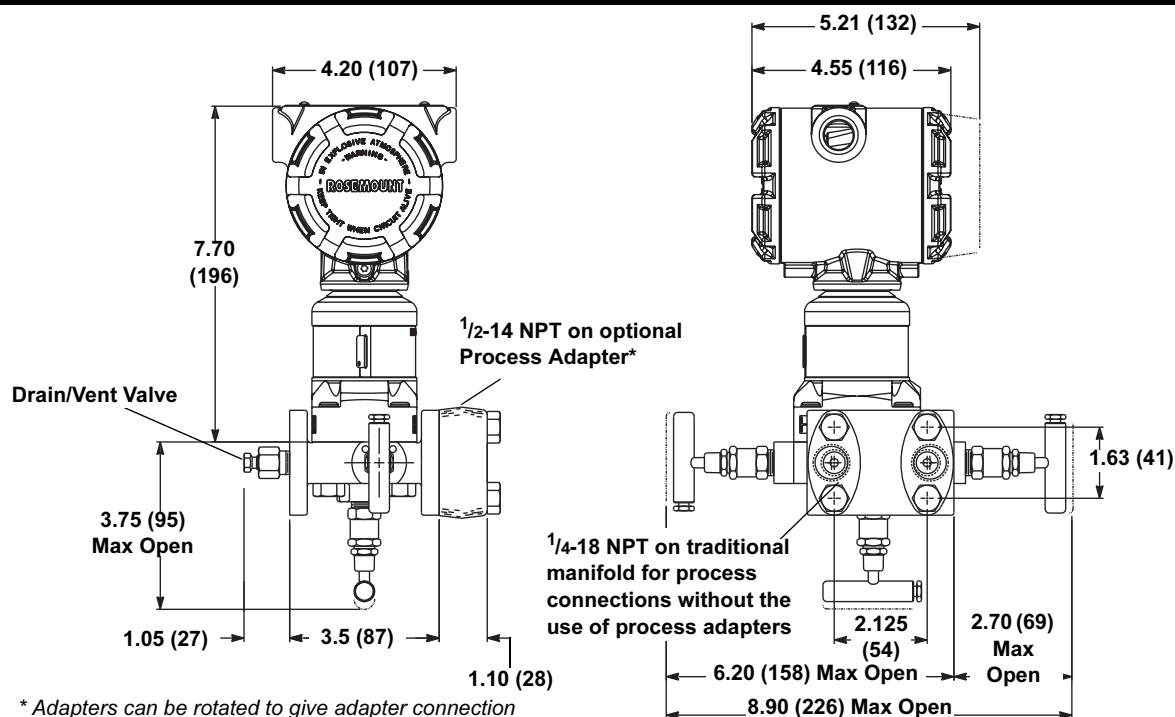
Dimensions are in inches (millimeters)

Rosemount 305RT Two-Valve Traditional Style Manifold



Dimensions are in inches (millimeters)

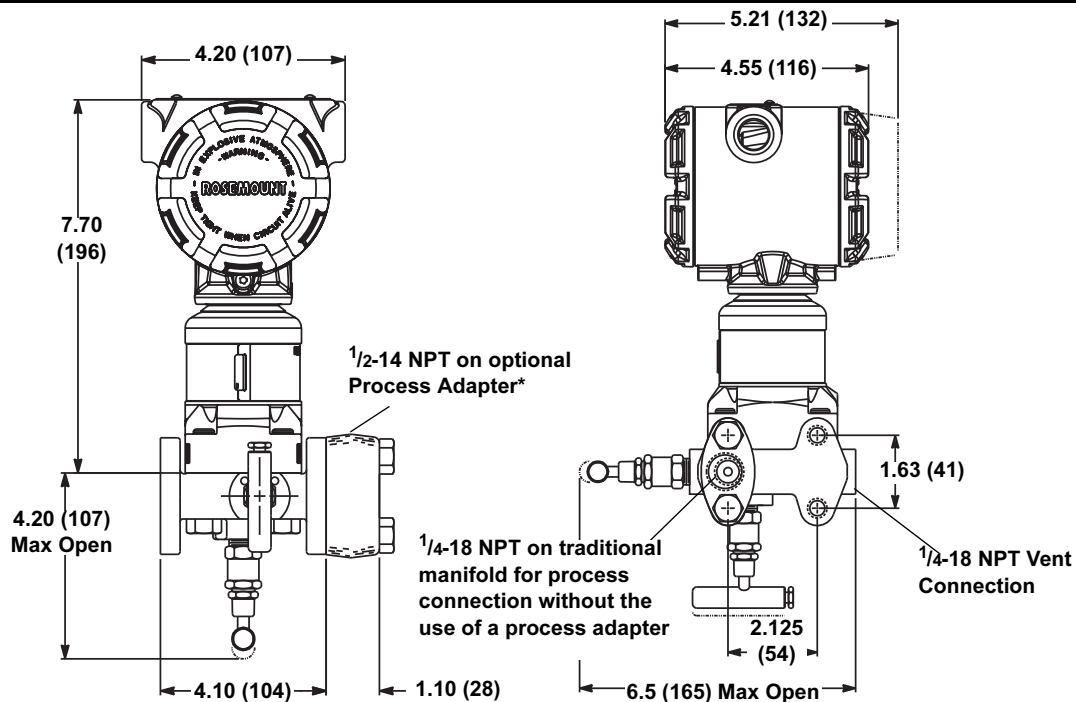
Rosemount 305RT Three-Valve Traditional Style Manifold



* Adapters can be rotated to give adapter connection centers of 2.0 (51), 2.125 (54), or 2.25 (57).

Dimensions are in inches (millimeters)

Rosemount 305RM Two-Valve Traditional Style Manifold



Dimensions are in inches (millimeters)

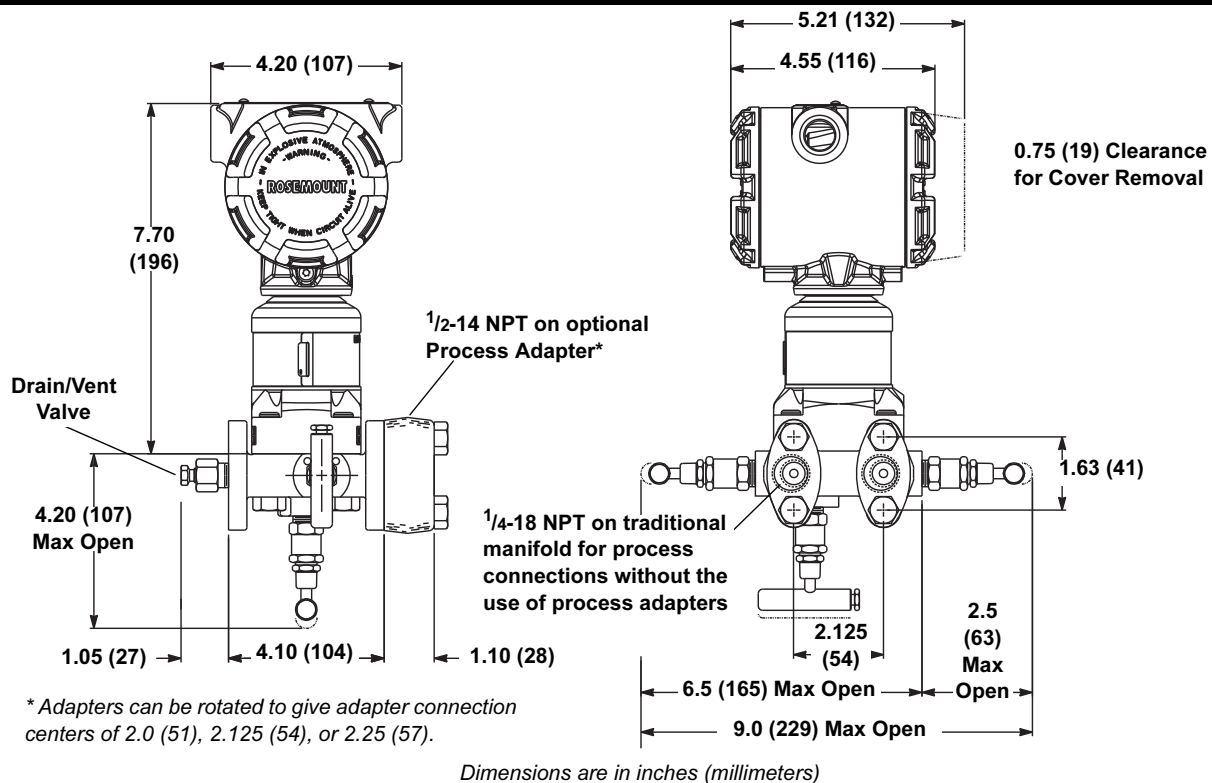
Product Data Sheet

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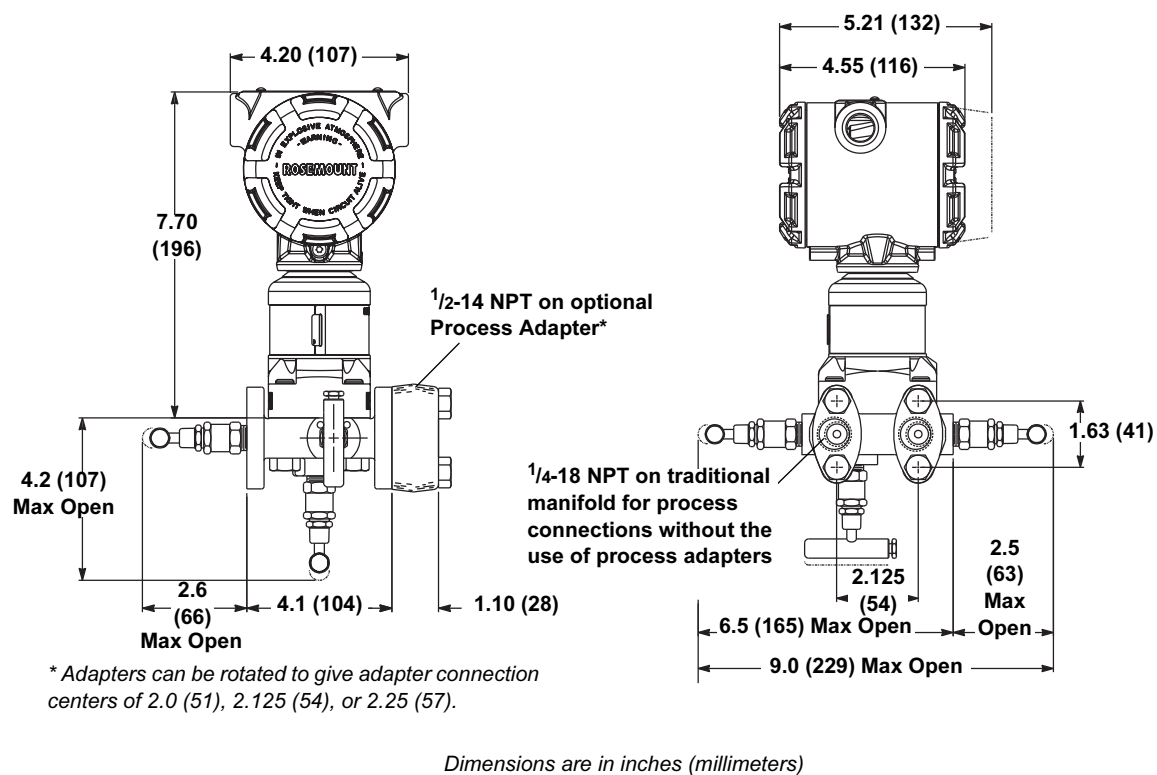
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Rosemount 305RM Three-Valve Traditional Style Manifold

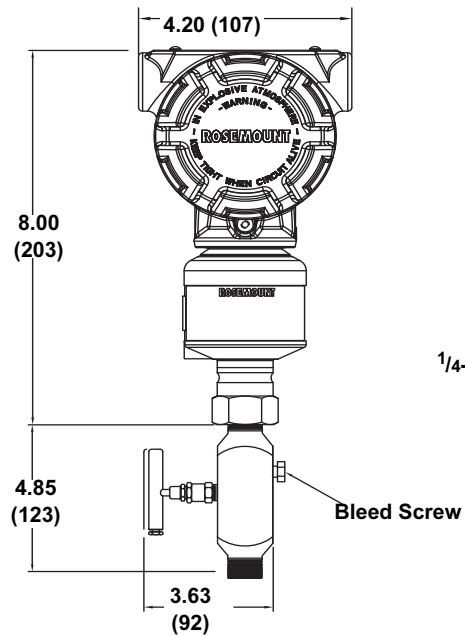


Rosemount 305RM Five-Valve Traditional Style Manifold

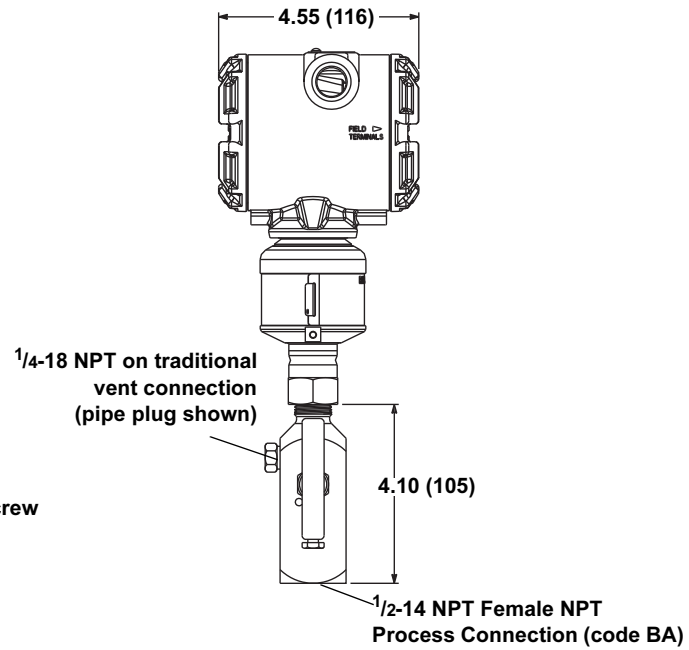


Rosemount 306R Pressure Style Manifold (3051T Shown)

BLOCK AND BLEED STYLE



TWO-VALVE STYLE



Dimensions are in inches (millimeters)

Product Data Sheet

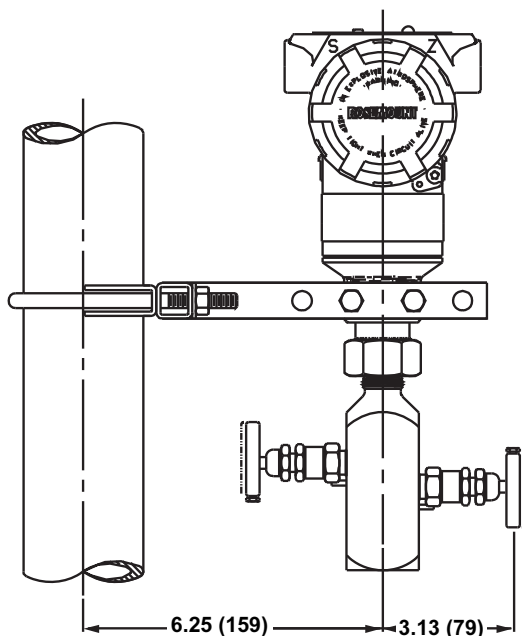
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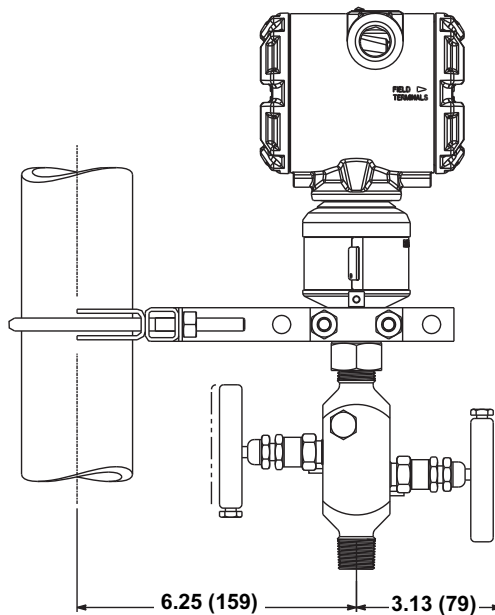
Rosemount Manifolds

Installations for Rosemount 3051T and 3051S_T Transmitters for 2-in. Pipe Mounting

ROSEMOUNT 3051T



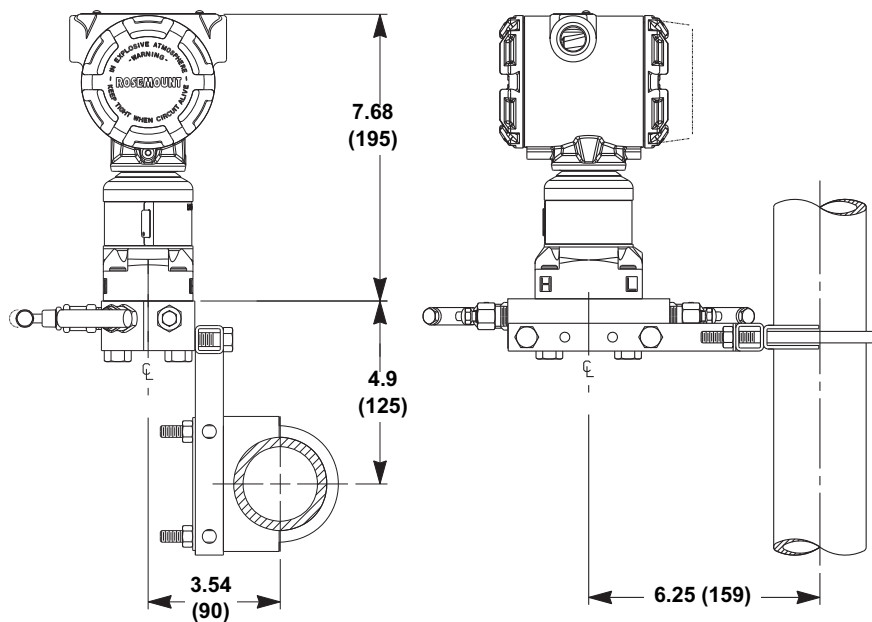
ROSEMOUNT 3051S_T



NOTE: Dimensions are in inches (millimeters).

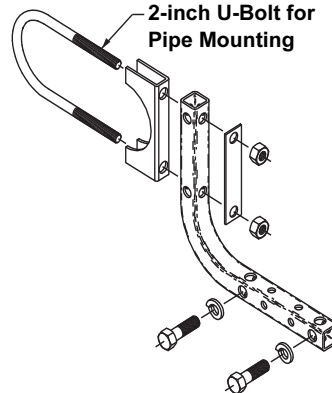
Dimensions are in inches (millimeters)

Coplanar Manifold with Optional Bracket for 2-in. Pipe Mounting



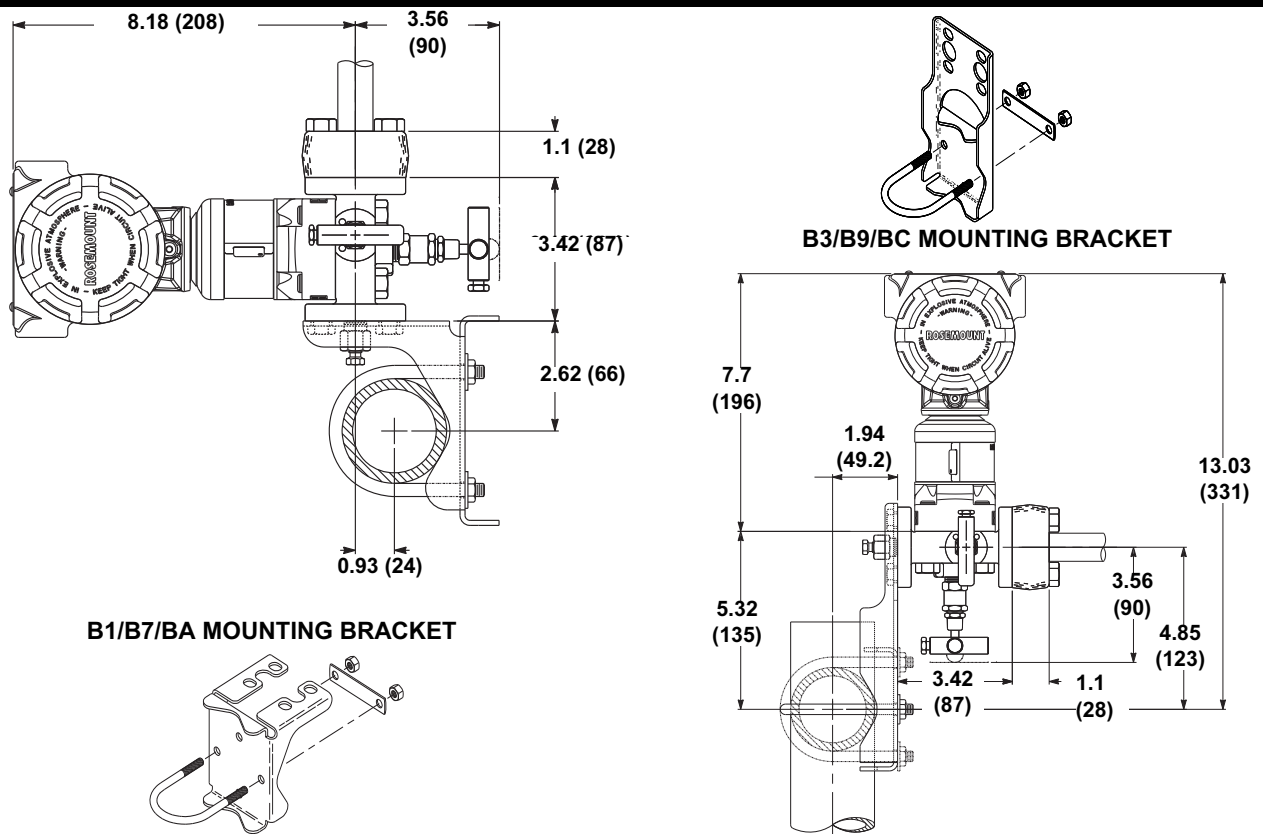
OPTION CODE B4

2-inch U-Bolt for
Pipe Mounting



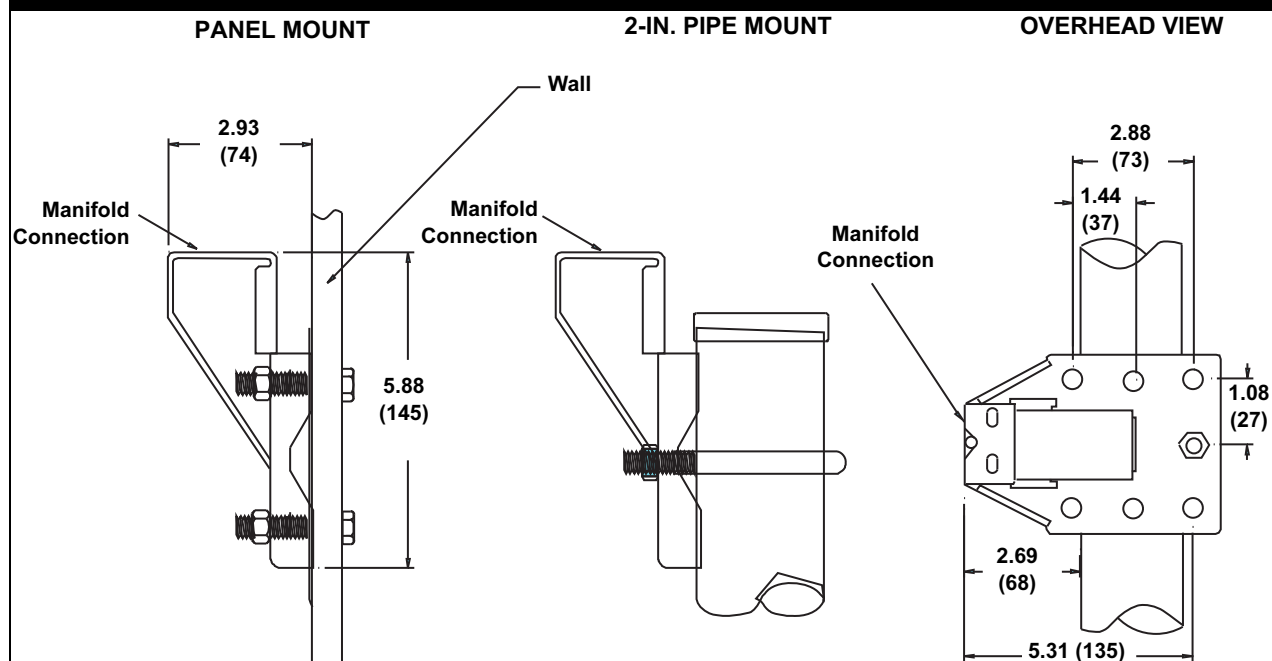
Dimensions are in inches (millimeters)

Traditional Manifold with Optional Brackets for 2-in. Pipe Mounting



Dimensions are in inches (millimeters)

VS/VC Heavy Duty Manifold Mounting Bracket



Dimensions are in inches (millimeters)

Ordering Information

Rosemount 304 Conventional Manifolds

Note: Shaded areas indicate configurations that are special order.

Model	Product Description			
0304	Conventional Manifold			
Code	Manufacturer			
R	Rosemount Inc.			
Code	Manifold Style			
T	Traditional (Flange x Flange or Flange x NPT)			
W ⁽¹⁾	Wafer			
Code	Manifold Type			
2 ⁽²⁾	2-valve			
3	3-valve			
5 ⁽³⁾	5-valve			
6 ⁽²⁾	5-valve Natural Gas Metering Pattern			
7 ⁽²⁾⁽⁴⁾	2-valve (per ASME B31.1[ANSI] power and piping code)			
8 ⁽²⁾⁽⁴⁾	3-valve (per ASME B31.1[ANSI] power and piping code)			
Code	Materials of Construction			
	Body	Bonnet	Stem	Tip
2	316 SST	316 SST	316 SST	316 SST
5	CS	316 SST	316 SST	316 SST
Code	Process Connection			
B	1/2-14 NPT			
F ⁽²⁾	Flanged			
Code	Packing Material			
1	PTFE			
2 ⁽¹⁾	Graphite-based			
Code	Transmitter Type			
1	For assembly to 3051 Traditional Flange			
2	For assembly to 3051/3095 DIN Compliant Traditional Flange			
4	For assembly to 1151 (ranges 3 - 5 only)			
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Rosemount Manifolds

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Code	Options
Mounting Brackets	
VC ⁽²⁾	Manifold Heavy Duty Mounting Bracket, CS for Traditional Style
VS ⁽²⁾	Manifold Heavy Duty Mounting Bracket, SST for Traditional Style
B4	Manifold SST Mounting Bracket for 2-in. pipe mount with series 300 SST bolts for wafer style
Flange Adapters	
DF ⁽⁵⁾	1/2-14 NPT Female Flange Adapter
DT ⁽⁵⁾	1/2-in. ferrule flange adapter
DQ ⁽⁵⁾	12 mm ferrule flange adapter
Bolts	
L4 ⁽⁶⁾	Austenitic 316 SST Bolts
L5	ASTM A 193, Grade B7M Bolts
L8	ASTM A 193, Class 2, Grade B8M Bolts
Material Recommendations for NACE	
SG ⁽¹⁾⁽⁷⁾	Sour Gas (Meets NACE MR 0175 / ISO 15156, MR 0103)
Cleanings	
P2 ⁽⁸⁾	Cleaning for special service
Heater Block Kits	
SB	Steam block kit, 1/4-in. NPT connection
Typical Model Number: 0304 R T 3 2 B 1 1 VS	

(1) Only allowed with Material of Construction code 2.

(2) Not available with Wafer Manifold Style code W.

(3) Not available with Traditional Manifold Style code T.

(4) Only available with 316 SST materials of construction and graphite-based packing.

(5) Only allowed with both Manifold Style code T and Process Connection code F. Not allowed with Graphite-based Packing Code 2.

(6) Not available with Manifold Type codes 7, 8.

(7) Materials of construction comply with recommendations per NACE MR 0175 / ISO 1516 for sour oil field production environments. Environmental limits apply to certain materials. Consult latest standard for details. Selected materials also conform to NACE MR 0103 for sour refining environments.

(8) Not available with Graphite-Based Packing Material code 2.

Rosemount 305 Integral Manifolds

Note: Shaded areas indicate configurations that are special order.

Model	Product Description			
0305	Integral Manifold			
Code	Manufacturer			
R	Rosemount			
Code	Manifold Style			
C	Coplanar			
T	Traditional			
M	Traditional (Rosemount 3095-compatible; DIN-compliant flange)			
Code	Manifold Type			
2	2-valve			
3	3-valve			
5 ⁽¹⁾	5-valve			
6 ⁽²⁾	5-valve Natural Gas Metering Pattern			
7 ⁽²⁾⁽³⁾	2-valve (per ASME B31.1[ANSI] power and piping code)			
8 ⁽²⁾⁽³⁾	3-valve (per ASME B31.1[ANSI] power and piping code)			
9 ⁽²⁾⁽³⁾	5-valve (per ASME B31.1[ANSI] power and piping code)			
Code	Materials of Construction			
	Body	Bonnet	Stem and Tip / Ball	Drain/Vent
2	316 SST	316 SST	316 SST	316 SST
3 ⁽⁴⁾⁽⁵⁾	Hastelloy C	Hastelloy C	Hastelloy C	Hastelloy C
4 ⁽⁴⁾	Monel	Monel	Monel	Monel
Code	Process Connection			
A	¹ / ₄ –18 NPT (Traditional manifold styles T and M)			
B	¹ / ₂ –14 NPT (Coplanar manifold style only)			
Code	Packing Material			
1	PTFE			
2 ⁽⁶⁾	Graphite-based			
Code	Valve Seat			
1	Integral			
5	Soft delrin (only available with natural gas metering pattern)			
Continued on Next Page				

Rosemount Manifolds

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Code	305R Options
Traditional Mounting Brackets	
B1	Bracket for 2-in. pipe mounting, CS bolts
B3 ⁽⁷⁾	Flat bracket for 2-in. pipe mounting, CS bolts
B7	B1 bracket with series 300 SST bolts
B9 ⁽⁷⁾	B3 bracket with series 300 SST bolts
BA	SST B1 bracket with series 300 SST bolts
BC ⁽⁷⁾	SST B3 bracket with series 300 SST bolts
BD	SST Bracket with Series 300 SST Bolts for 305RM5 Manifolds
Coplanar Options	
B4	SST bracket for 2-in. pipe mount with series 300 SST bolts
Bolts	
L4 ⁽⁸⁾	Austenitic 316 SST bolts
L5	ASTM-A-193-B7M bolts
L8	ASTM-A-193, Class 2, Grade B8M bolts
Cleanings	
P2 ⁽⁹⁾	Cleaning for special services
Material Recommendations for NACE	
SG ⁽⁵⁾⁽¹⁰⁾	Sour Gas (Meets NACE MR 0175 / ISO 15156, MR 0103)
Flange Adapters	
DF ⁽¹¹⁾	1/2-14 NPT female flange adapter
DQ ⁽¹¹⁾	12 mm ferrule flange adapter
Process Flange Bolting Connection	
HK ⁽¹²⁾	10mm (M10) process flange bolting connection
HL ⁽¹²⁾	12mm (M12) process flange bolting connection
Typical Coplanar Integral Manifold Model Number: 305RC32B11B4	
Typical Transmitter Model Number: 3051CD2A02A1AS5	

(1) Not available with traditional manifold style T.

(2) Only available with Coplanar manifold style code C.

(3) Only available with 316SST materials of construction code 2 and graphite-based packing code 2.

(4) Not available with traditional manifold Style code M.

(5) Materials of Construction comply with recommendations per NACE MR 0175/ISO 15156 for sour oil field production environments. Environmental limits apply to certain materials. Consult latest standard for details. Selected materials also conform to NACE MR0103 for sour refining environments.

(6) Includes graphite tape on drain/vent valves and plugs.

(7) Not compatible with the Rosemount 3095 transmitter.

(8) Not available with ASME B31.1 manifold type codes 7, 8, and 9.

(9) Not available with Graphite-Based Packing Material code 2.

(10) Only available with 316 SST Materials of Construction Code 2: 316 SST body and bonnets; Hastelloy C stems, tip/balls, and drain/vents.

(11) Only allowed with Manifold Style code T. Not allowed with Graphite-Based Packing code 2.

(12) Only available with traditional manifold style code M.

Rosemount 306 Inline Manifolds

Note: Shaded areas indicate configurations that are special order.

Model	Product Description			
0306	Pressure Manifold			
Code	Manufacturer			
R	Rosemount Inc.			
Code	Manifold Style			
T	Threaded			
Code	Manifold Type			
1	Block-and-bleed			
2	2-valve			
3 ⁽¹⁾	2-valve (per ASME B31.1 [ANSI] power and piping code)			
Materials of Construction				
Code	Body	Bonnet	Stem and Tip / Ball	Drain/Vent Plug
2	316 SST	316 SST	316 SST	316 SST
3 ⁽²⁾⁽³⁾	Hastelloy C	Hastelloy C	Hastelloy C	Hastelloy C
Code	Process Connection			
AA	1/2–14 male NPT			
BA ⁽²⁾	1/2–14 female NPT			
Code	Packing Material			
1	PTFE			
2 ⁽⁴⁾	Graphite-based			
Code	Valve Seat			
1	Integral			
Code	306RT Options			
Cleanings				
P2 ⁽⁵⁾	Cleaning for special services			
Material Recommendations for NACE				
SG ⁽³⁾⁽⁶⁾	Sour Gas (Meets NACE MR 0175 / ISO 15156, MR 0103)			
Typical Integral Manifold Model Number: 3 0 6 R T 2 2 B A 1 1				
Typical Transmitter Model Number: 3051TG3A2B21AS5B4				

(1) Only available with 316SST materials of construction and graphite-based packing.

(2) Not available with block-and-bleed manifold type

(3) Materials of Construction comply with recommendations per NACE MR0175/ISO 15156 for sour oil field production environments. Environmental limits apply to certain materials. Consult latest standard for details. Selected materials also conform to NACE MR0103 for sour refining environments.

(4) Includes graphite tape on plugs.

(5) Not available with Graphite-Based Packing Material code 2.

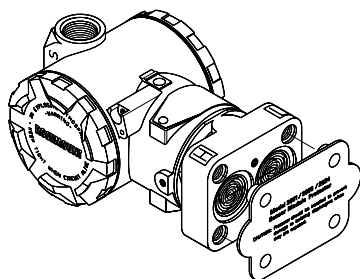
(6) Only available with 316 SST material of construction code 2. Manifolds with SG option are built with 316 SST body and bonnets; Hastelloy stems, tips/balls.

OPTIONS

Module Guard

A sensor module guard is available to protect the transmitter process isolating diaphragms. This guard should be used whenever the transmitter is removed from the integral manifold to avoid damage to the isolating diaphragms.

- Part number: 00305-1000-0001 (5/pack)



P2 Cleaning for Special Services

This option minimizes process contaminants by cleaning wetted surfaces with a suitable detergent.

SG Sour Gas

Materials of Construction comply with recommendations per NACE MR 0175/ISO 15156 for sour oil field production environments. Environmental limits apply to certain materials. Consult latest standard for details. Selected materials also conform to NACE MR0103 for sour refining environments.

Heat Block Kits

Rosemount 304 Manifolds are available with steam heat block kits for cold environments and services. The steam block attaches directly to the manifold to prevent the process from freezing.

ASME B31.1 (ANSI)

Rosemount Manifolds are available in configurations that meet the requirements of ASME B31.1(ANSI) Power and Piping Code. This code specifies design criteria for most air, gas, steam, water, and oil systems used in electric generating systems, central and district heating systems, industrial power plants and geothermal plants. ASME B31.1(ANSI) includes requirements for manifolds, valves, and piping. Transmitters and other measuring devices do not fall within the scope of this code.

Marking

Manifolds are tagged with a part number, schematic drawing, temperature and pressure limits.

Other Publications

For additional information, go to www.rosemount.com.

SPARE PARTS LIST

TABLE 9. Rosemount 304 Conventional Manifold

Part Description	Part Number (Traditional Style)	Part Number (Wafer Style)
Mounting Brackets (qty. 1)		
Manifold Heavy Duty Mounting Bracket, CS	01166-8005-0002	NA
Manifold Heavy Duty Mounting Bracket, SST	01166-8005-0001	NA
Manifold SST Mounting Bracket for 2-in. Pipe Mount	NA	00305-0405-0001
O-Rings (set of 12)		
Manifold-to-Flange O-Ring, PTFE	03031-0019-0003	03031-0019-0003
Manifold-to-Flange O-Ring, Graphite	03031-1302-0002	03031-1302-0002
Manifold-to-Flange Bolt Kits (set of 4)		
Consult factory for part numbers		
Heater Block Kits (qty. 1)		
Steam Block Kit	00305-00406-0001	NA

TABLE 10. Rosemount 305 Integral Manifold

Part Description	Part Number (Traditional Style)	Part Number (Coplanar Style)
Mounting Brackets (qty. 1)		
Manifold SST Mounting Bracket for 2-in Pipe Mount	NA	00305-0405-0001
Bolt Kits (set of 4)		
CS Bolt Kit	03031-0312-0001	03031-0311-0001
SST Bolt Kit	03031-0312-0002	03031-0311-0002
ANSI/ASTM-A-193-B7M Bolt Kit	03031-0312-0003	03031-0311-0003
Drain/Vents (qty. 1)		
316 SST Drain/Vent for use with 3-valve 305 Manifold	01151-0028-0012	01151-0028-0012
Hastelloy Drain/Vent for use with 3-valve 305 Manifold	01151-0028-0013	01151-0028-0013
Coplanar Flange Kits (qty. 1)		
Differential Flange Kit, SST	NA	00305-1001-0001
Gauge Flange Kit, SST	NA	00305-1001-1001
O-Rings (set of 12)		
Manifold-to-Module O-Ring, PTFE	03031-0234-0001	03031-0234-0001
Manifold-to-Module O-Ring, Graphite	03031-0242-0001	03031-0242-0001
Sensor Guard (set of 5)		
Coplanar Module Sensor Guard	00305-0405-0001	00305-0405-0001

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