Product Data Sheet
00813-0100-4733, Rev NB
January 2011

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*

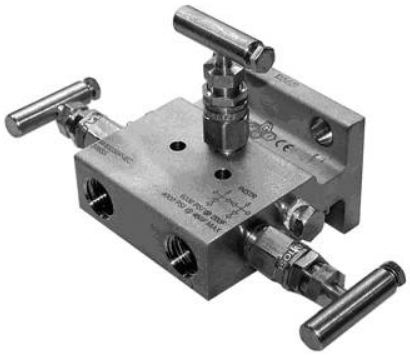
Contents

Rosemount Manifolds Selection Guide

ROSEMOUNT 304 CONVENTIONAL MANIFOLD

See “Options” on page 27.

- 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 “Options” on page 27.

- 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 “Options” on page 27.

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

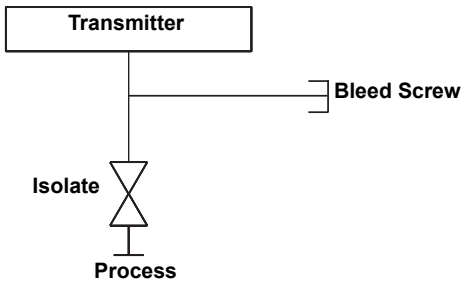
Rosemount 306 Inline Manifold

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.

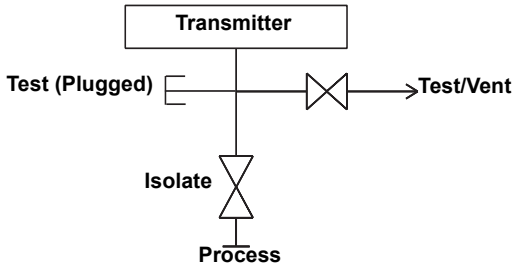
306 Manifold



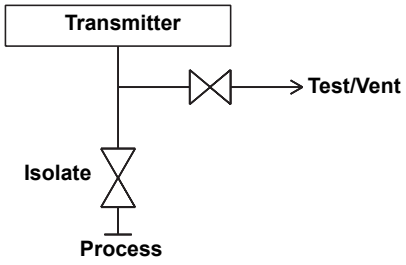
TWO-VALVE

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



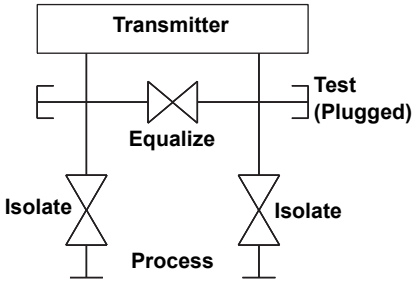
305 & 306 Manifolds



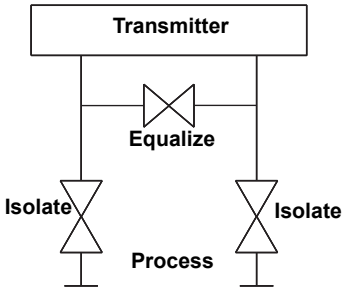
THREE-VALVE

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.

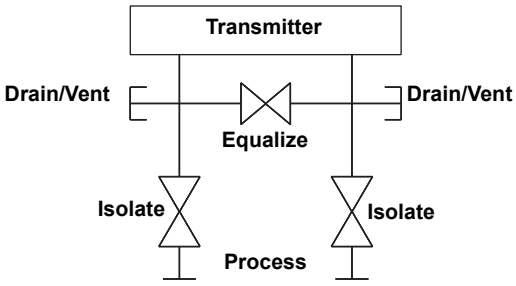
304 (Traditional) Manifold



304 (Wafer) Manifold



305 Manifold



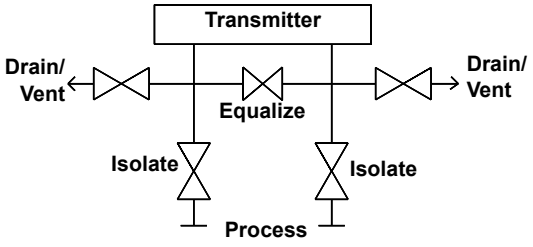
NOTE
Test/Vents receive plastic caps to protect threaded connections unless otherwise noted.

NOTE
Test (Plugged) connections receive ¼-in. NPT plugs unless otherwise noted.

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.

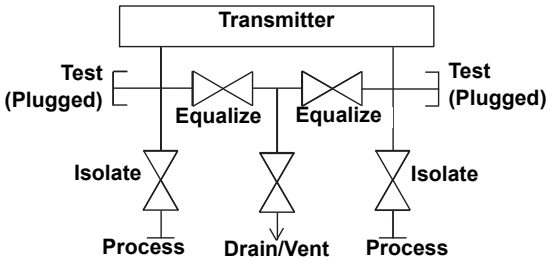
304 (Wafer) & 305 Manifolds



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 ¼-in. NPT plugs unless otherwise noted.

Ordering Information

Rosemount Manifolds can be ordered as a stand-alone product or as an integrated assembly that is attached to a transmitter.

Stand-Alone Manifold:

1. Reference the “Rosemount Manifolds Selection Guide” (see page 2) for assistance on choosing the type of manifold needed.
2. Specify a completed model number by referencing the applicable ordering table for the selected manifold type:
   a. Rosemount 304 Conventional Manifold, see page 6.
   b. Rosemount 305 Integral Manifold, see page 8.
   c. Rosemount 306 Inline Manifold, see page 10.

Transmitter / Manifold Assembly:

1. Specify a completed Rosemount transmitter model number by referencing the applicable product data sheet.
2. Specify a completed manifold model number by referencing the applicable ordering table for the selected manifold type:
   a. Rosemount 304 Conventional Manifold, see page 6.
   b. Rosemount 305 Integral Manifold, see page 8.
   c. Rosemount 306 Inline Manifold, see page 10.
3. Verify the transmitter model number contains the correct “Process Connection” code or “Manifold Option” code for the desired transmitter manifold assembly (see Table 1).

Table 1. Ordering Codes for a Transmitter / Manifold Assembly

Transmitter	Manifold	Process Connection Code	“Manifold” Option Code
3051S	304	A12	–
	305	A11	–
	306	A11	–
3051/2051/3095	304	–	S6
	305	–	S5
	306	–	S5
1151	304	S6	–
	305	–	–
	306	–	–
2088	304	–	–
	305	–	–
	306	–	S5

Rosemount 304 Conventional Manifolds

Table 2. Rosemount 304 Conventional Manifold Ordering Information

★ The Standard offering represents the most common options. The starred options (★) should be selected for best delivery.
The Expanded offering is subject to additional delivery lead time.

Model	Product Description				
0304	Conventional Manifold				
Manufacturer					
Standard					**Standard**
R	Rosemount Inc.				★
Manifold Style					
Standard					**Standard**
T	Traditional (Flange x Flange or Flange x NPT)				★
Expanded					
W(1)	Wafer				
Manifold Type					
Standard					**Standard**
2(2)	2-valve				★
3	3-valve				★
5(3)	5-valve				★
6(2)	5-valve Natural Gas Metering Pattern				★
Expanded					
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)				
	Body	**Bonnet**	**Stem**	**Tip**	
Standard					**Standard**
2	316 SST	316 SST	316 SST	316 SST	★
5	CS	316 SST	316 SST	316 SST	★
Process Connection Style					
Standard					**Standard**
B	1/2-14 NPT				★
F(2)	Flanged				★
Packing Material					
Standard					**Standard**
1	PTFE				★
Expanded					
2(1)	Graphite-based				
Bolts					
Standard					**Standard**
1	For assembly to 2051/3051 Traditional Flange				★
2	For assembly to 2051/3051/3095 DIN Compliant Traditional Flange				★
3	For assembly to 2051/3051/3095 Coplanar Flange				★
Expanded					
4	For assembly to 1151 (Ranges 3-5)				

Options

Mounting Brackets		
Standard		**Standard**
VC(2)	Manifold Heavy Duty Mounting Bracket, CS for Traditional Style	★
VS(2)	Manifold Heavy Duty Mounting Bracket, SST for Traditional Style	★
B4(3)	Manifold SST Mounting Bracket for 2-in. pipe mount with series 300 SST bolts for wafer style	★
Adapters		
Standard		**Standard**
DF(5)	1/2-14 NPT Female Flange Adapter	★
DT(5)	1/2-in. ferrule flange adapter	★
DQ(5)	12 mm ferrule flange adapter	★

Table 2. Rosemount 304 Conventional Manifold Ordering Information

★ The Standard offering represents the most common options. The starred options (★) should be selected for best delivery.
The Expanded offering is subject to additional delivery lead time.

Bolt Material		
Standard		**Standard**
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		
Standard		**Standard**
SG[1][7]	Sour Gas (Meets NACE MR 0175 / ISO 15156, MR 0103)	★
Cleanings		
Expanded		
P2[8]	Cleaning for special service	
Heater Block Kits		
Standard		**Standard**
SB	Steam block kit, ¼-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 code 2 and graphite based packing code 2.

(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

Table 3. Rosemount 305 Integral Manifold Ordering Information

★ The Standard offering represents the most common options. The starred options (★) should be selected for best delivery.
The Expanded offering is subject to additional delivery lead time.

Model	Product Description			
0305	Integral Manifold			
Manufacturer				
Standard				**Standard**
R	Rosemount			★
Manifold Style				
Standard				**Standard**
C	Coplanar			★
T	Traditional			★
M	Traditional (Rosemount 3095-compatible; DIN-compliant flange)			★
Manifold Type				
Standard				**Standard**
2	2-valve			★
3	3-valve			★
5(1)	5-valve			★
6(2)	5-valve Natural Gas Metering Pattern			★
Expanded				
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)			
	Body	**Bonnet**	**Stem and Tip / Ball**	
Standard				**Standard**
2	316 SST	316 SST	316 SST	★
Expanded				
3(4)	Alloy C-276	Alloy C-276	Alloy C-276	
4	Alloy 400	Alloy 400	Alloy 400 / K-500	
Process Connection Style				
Standard				**Standard**
A(5)	1/4–18 NPT female			★
B(6)	1/2–14 NPT female			★
Packing Material				
Standard				**Standard**
1	PTFE			★
Expanded				
2(7)	Graphite-based			
Valve Seat				
Standard				**Standard**
1	Integral			★
5	Soft delrin (only available with natural gas metering pattern)			★

Options

Mounting Brackets		
Standard		**Standard**
B1	Bracket for 2-in. pipe mounting, CS bolts	★
B3(8)	Flat bracket for 2-in. pipe mounting, CS bolts	★
B4	SST Mounting Bracket for 2-in. pipe mounting, 300 SST bolts	★
B7	B1 bracket with series 300 SST bolts	★
B9(8)	B3 bracket with series 300 SST bolts	★
BA	SST B1 bracket with series 300 SST bolts	★
BC(8)	SST B3 bracket with series 300 SST bolts	★

Table 3. Rosemount 305 Integral Manifold Ordering Information

★ The Standard offering represents the most common options. The starred options (★) should be selected for best delivery.
The Expanded offering is subject to additional delivery lead time.

Bolt Materials		
Standard		**Standard**
L4[9]	Austenitic 316 SST bolts	★
L5	ASTM-A-193-B7M bolts	★
L8	ASTM-A-193, Class 2, Grade B8M bolts	★
Cleanings		
Standard		**Standard**
P2[10]	Cleaning for special services	★
Material Recommendations for NACE		
Standard		**Standard**
SG[4][11]	Sour Gas (Meets NACE MR 0175 / ISO 15156, MR 0103)	★
Adapters		
Standard		**Standard**
DF[12]	1/2-14 NPT female flange adapter	★
Expanded		
DQ[12]	12 mm ferrule flange adapter	
Process Flange Bolting Connection		
Standard		**Standard**
HK[13]	10 mm (M10) process flange bolting connection	★
HL[13]	12 mm (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 316 SST materials of construction code 2 and graphite based backing code 2.

(4) 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.

(5) Only available with traditional manifold style codes T and M.

(6) Not available with traditional manifold style code M.

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

(8) Not compatible with the Rosemount 3095 transmitter.

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

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

(11) Only available with 316 SST Materials of Construction Code 2: 316 SST body and bonnets; Alloy C-276 stems, tip/balls, and drain/vents.

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

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

Rosemount 306 Inline Manifolds

Table 4. Rosemount 306 Inline Pressure Manifold Ordering Information

★ The Standard offering represents the most common options. The starred options (★) should be selected for best delivery.
The Expanded offering is subject to additional delivery lead time.

Model	Product Description			
0306	Pressure Manifold			
Manufacturer				
Standard				**Standard**
R	Rosemount Inc.			★
Manifold Style				
Standard				**Standard**
T	Threaded			★
Manifold Type				
Standard				**Standard**
1	Block and bleed			★
2	2-valve			★
Expanded				
3(1)	2-valve (per ASME B31.1 Power Piping Code)			
	Body	**Bonnet**	**Stem and Tip / Ball**	
Standard				**Standard**
2	316 SST	316 SST	316 SST	★
Expanded				
3(2)(3)	Alloy C-276	Alloy C-276	Alloy C-276	
Process Connection				
Standard				**Standard**
AA	1/2–14 male NPT			★
BA(2)	1/2–14 female NPT			★
Packing Material				
Standard				**Standard**
1	PTFE			★
Expanded				
2(4)	Graphite-based			
Valve Seat				
Standard				**Standard**
1	Integral			★

Options

Cleanings		
Expanded		
P2(5)	Cleaning for special services	
Material Recommendations for NACE		
Standard		**Standard**
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 316 SST 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; Alloy C-276 stems, tips/balls.

Specifications

Pressure and Temperature Ratings

Figure 1. 304 Conventional Manifolds - Pressure vs. Temperature

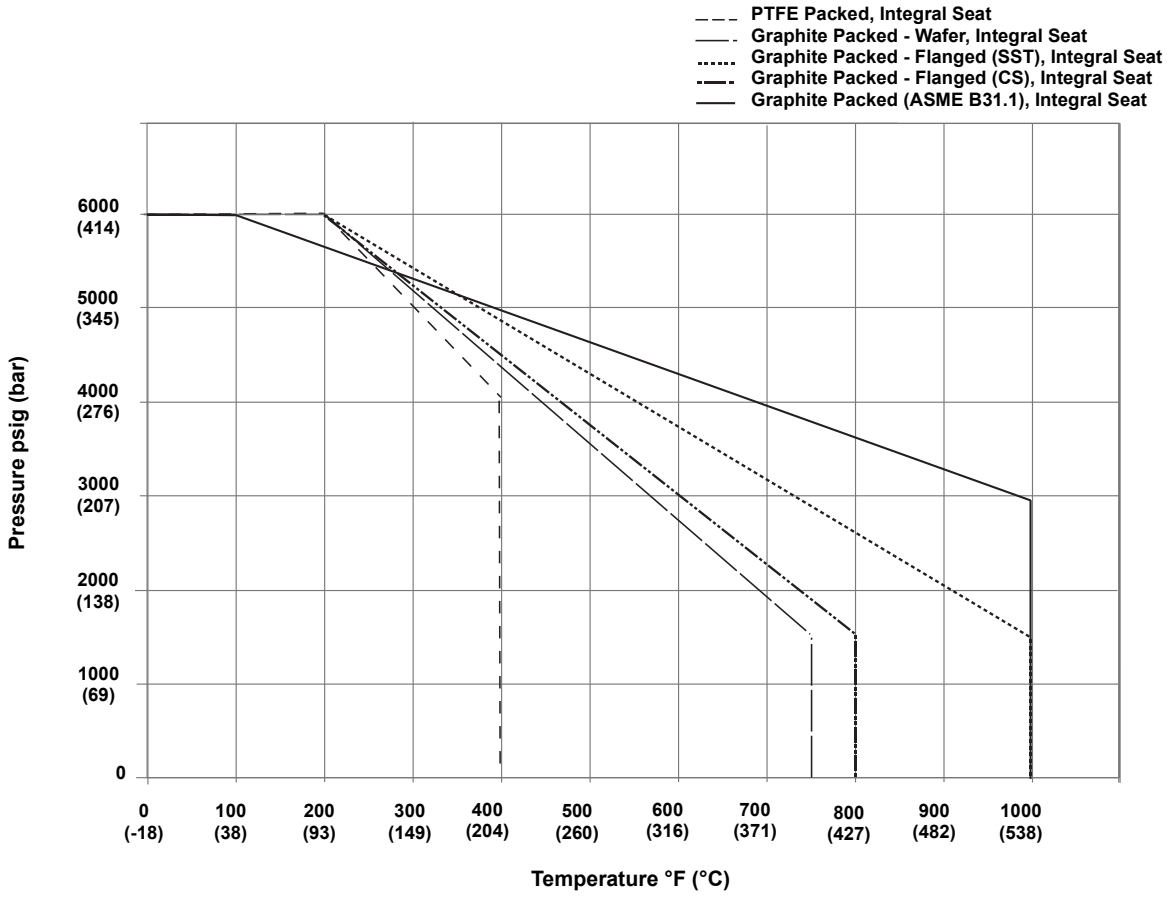


Table 5. 304 Conventional Manifolds - Pressure and Temperature Ratings

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 - Wafer	Integral	6000 psi @ 200 °F (414 bar @ 93 °C) 1500 psi @ 750 °F (103 bar @ 399 °C)
Graphite - Flanged (SST)	Integral	6000 psi @ 200 °F (414 bar @ 93 °C) 1500 psi @ 1000 °F (103 bar @ 538 °C)
Graphite - Flanged (CS)	Integral	6000 psi @ 200 °F (414 bar @ 93 °C) 1500 psi @ 800 °F (103 bar @ 427 °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

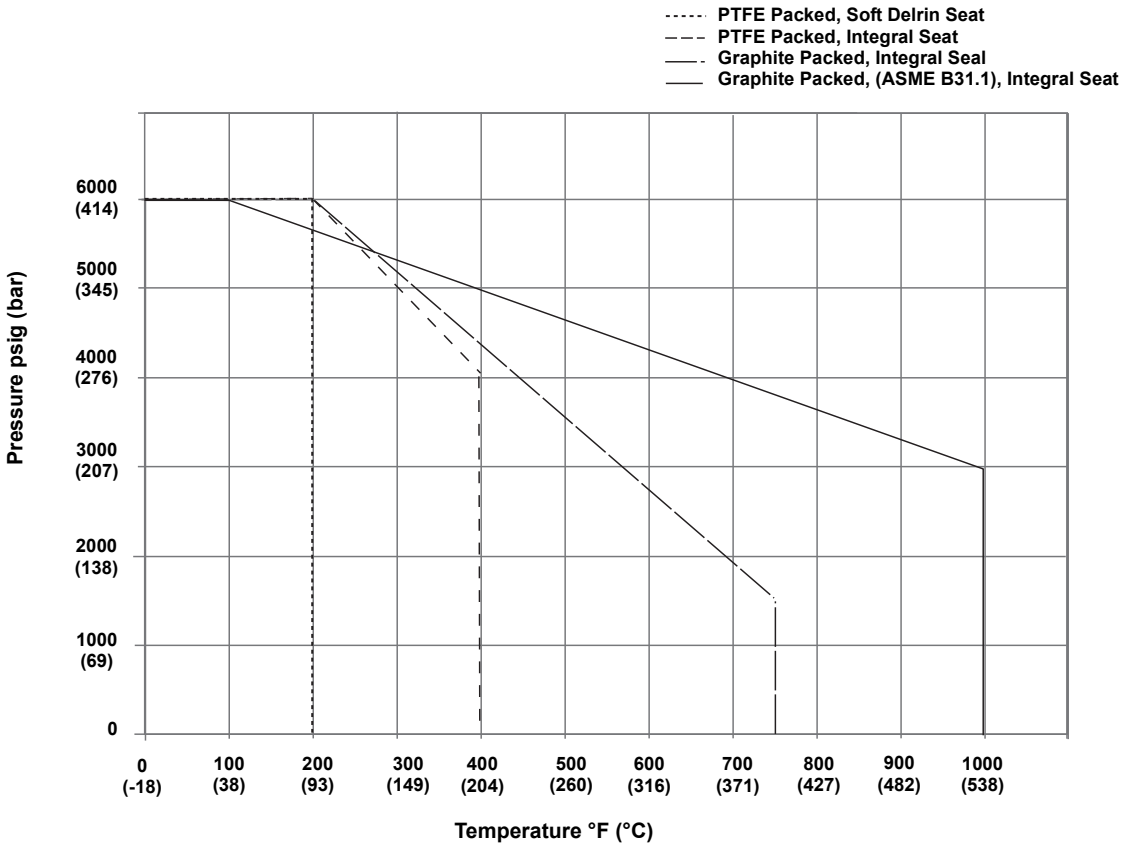


Table 6. 305 Integral Manifolds - Pressure and Temperature Ratings[(1)]

Packing[(1)]	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 @ 38 °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

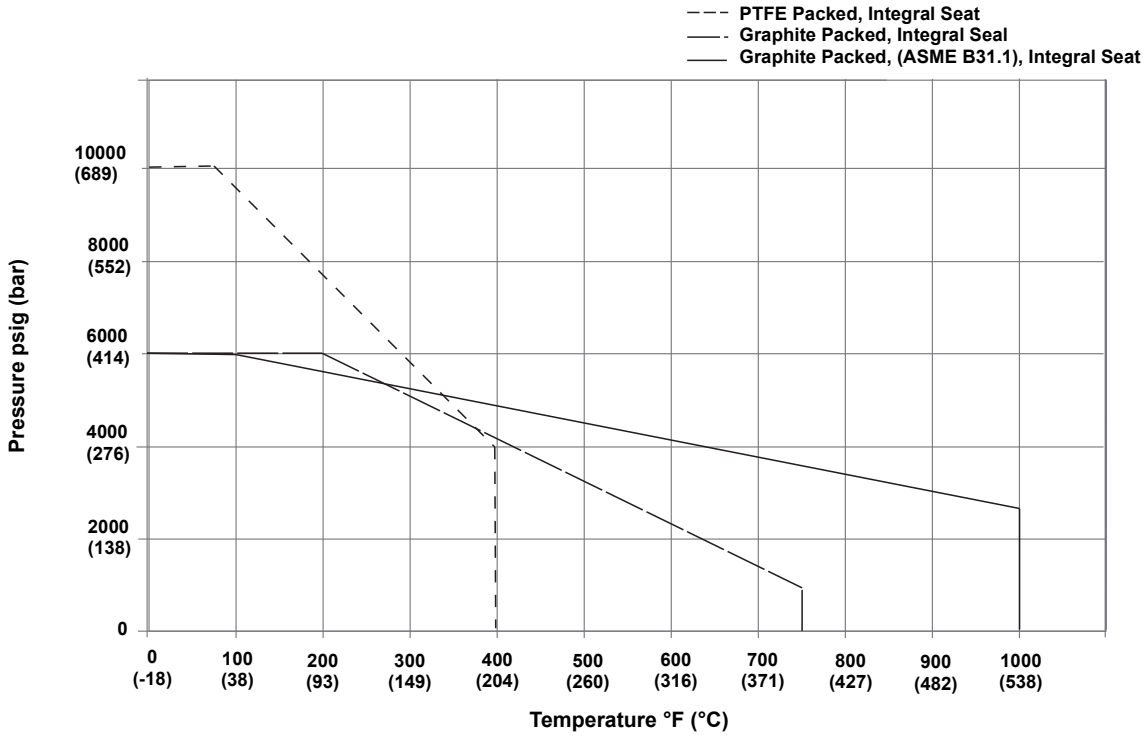


Table 7. 306 Integral Manifolds - Pressure and Temperature Ratings

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)

Process Connections

Table 8. Process Connections

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

Instrument Connections

Table 9. Manifold - Transmitter Interface

Model	Connection
304	Mounted to traditional transmitter flange, 2 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	1/2 - 14 Male NPT

Test / Vent Connections

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

O-Rings

Figure 4. 304 Manifold O-Rings

Manifold-to-Flange O-Rings
Same material as specified by manifold "Packing Material" selection:

- **"1" = PTFE**
- **"2" = Graphite**

Flange Adapter O-Rings
Glass-filled PTFE

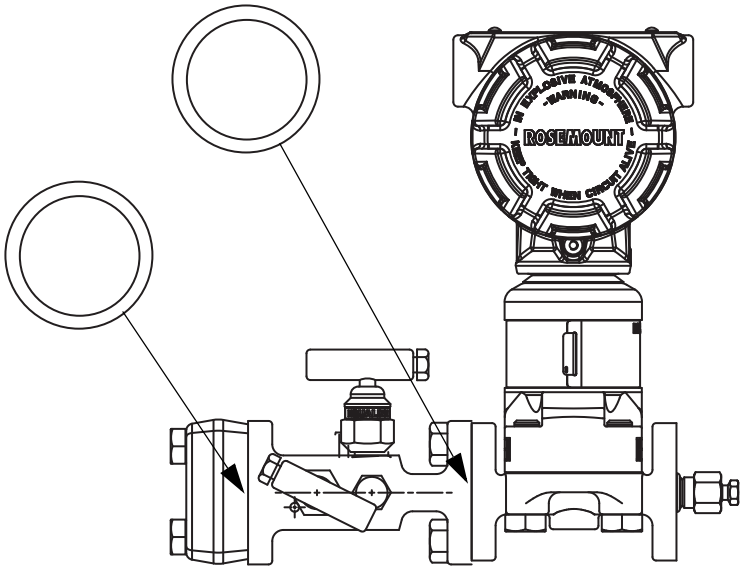


Figure 5. 305 Manifold O-Rings

Sensor Module-to-Manifold O-Rings
Specified in the transmitter model number

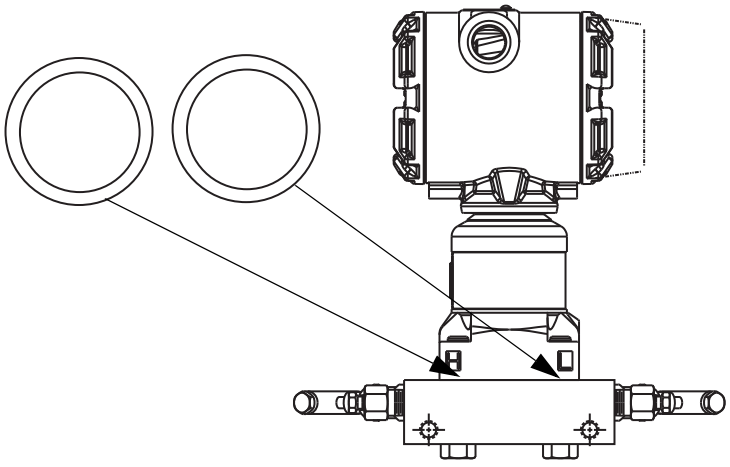


Table 10. 304 Conventional Manifolds - Process Wetted Materials of Construction

Component	SST	CS	SST with SG Option	
Body	316 SST	CS	316 SST	
Ball / Tip	316 SST /316Ti SST	316 SST	Alloy C-276	
Stem	316 SST	316 SST	Alloy C-276	
Packing	PTFE / Graphite	PTFE	PTFE / Graphite	
Bonnet	316 SST	316 SST	316 SST	
Pipe Plug	316 SST	CS	316 SST	

Table 11. 305 Integral Manifolds - Process Wetted Materials of Construction

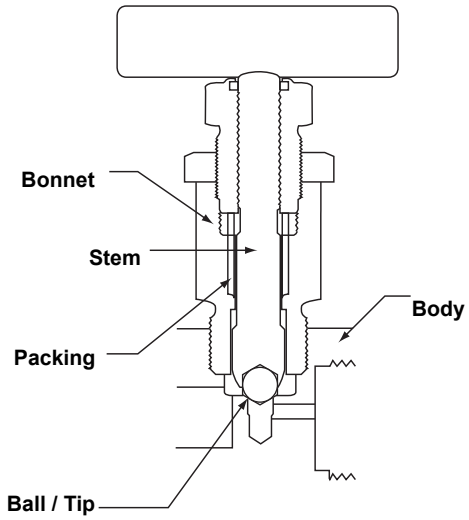
Component	SST	Alloy C-276	316 SST with SG option	
Body	316 SST	Alloy C-276	316 SST	
Ball / Tip	316 SST /316Ti SST	Alloy C-276	Alloy C-276	
Stem	316 SST	Alloy C-276	Alloy C-276	
Packing	PTFE / Graphite	PTFE / Graphite	PTFE / Graphite	
Bonnet	316 SST	Alloy C-276	316 SST	
Pipe Plug	316 SST	Alloy C-276	316 SST	
Drain / Vent Valve	316 SST	Alloy C-276	Alloy C-276	

Table 12. 306 Inline Manifolds - Process Wetted Materials of Construction

Component	SST	Alloy C-276	316 SST with SG option	
Body	316 SST	Alloy C-276	316 SST	
Ball / Tip	316 SST /316Ti SST	Alloy C-276	Alloy C-276	
Stem	316 SST	Alloy C-276	Alloy C-276	
Packing	PTFE / Graphite	PTFE / Graphite	PTFE / Graphite	
Bonnet	316 SST	Alloy C-276	316 SST	
Pipe Plug	316 SST	Alloy C-276	316 SST	
Bleed Screw	316 SST / 316Ti SST	Alloy C-276	Alloy C-276	

Materials of Construction - Typical

Figure 6. Typical Rosemount Manifold Valve

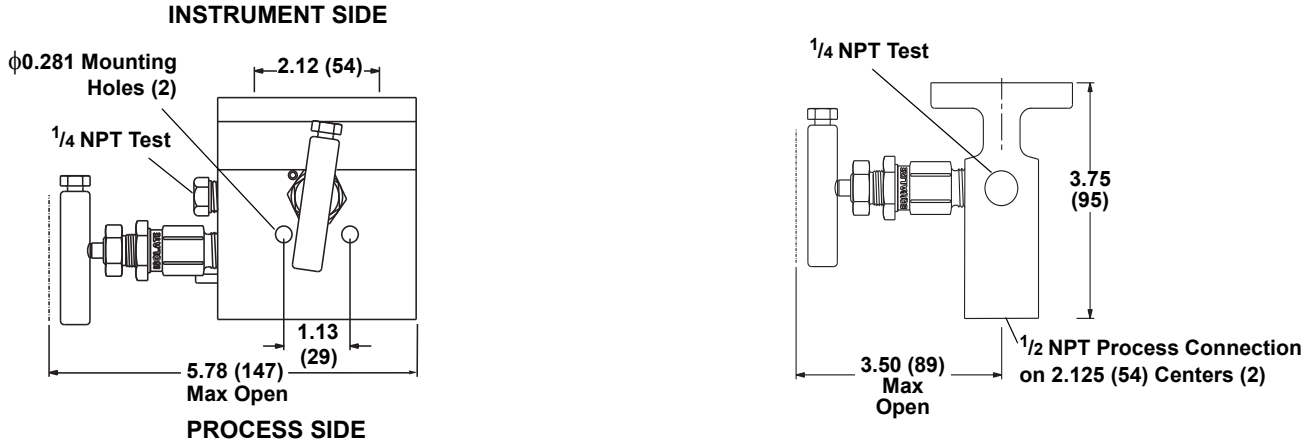


Estimated Weight

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)
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)
305	
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)
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)
2-valve	2.5 lbs (1.1 kg)

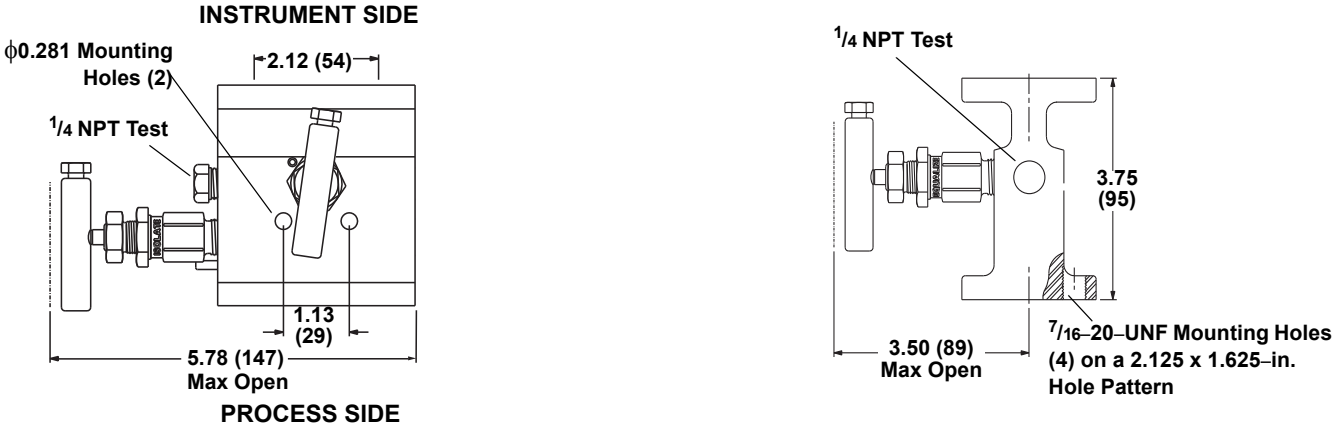
Dimensional Drawings

Rosemount 304 Two-Valve Flange X NPT Conventional Manifold



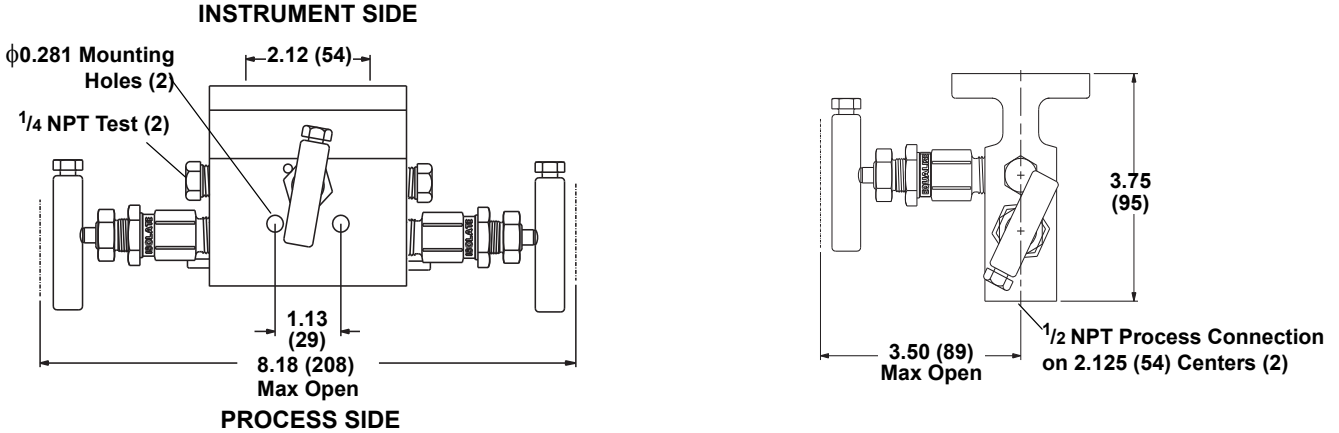
Dimensions are in inches (millimeters)

Rosemount 304 Two-Valve Flange X Flange Conventional Manifold



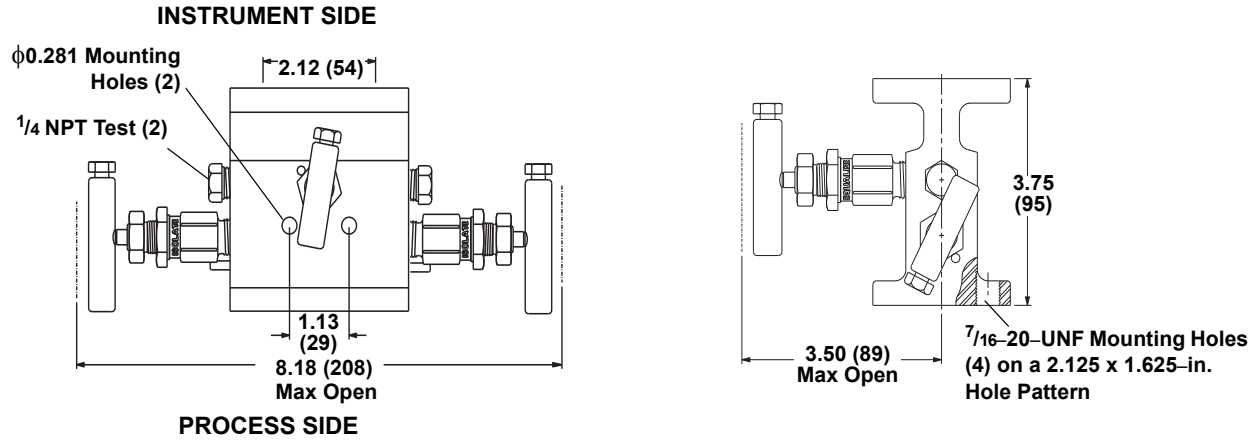
Dimensions are in inches (millimeters)

Rosemount 304 Three-Valve Flange X NPT Conventional Manifold



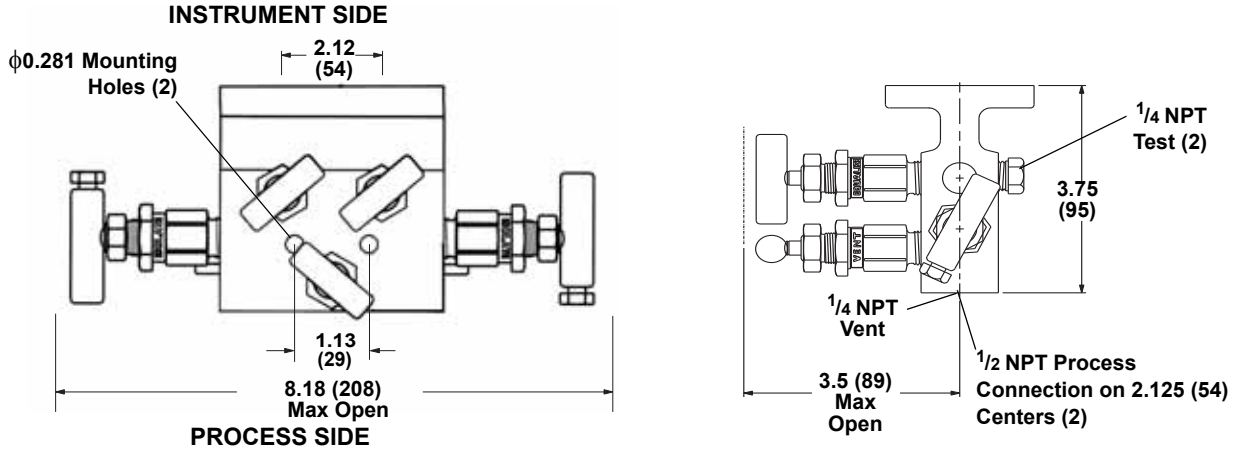
Dimensions are in inches (millimeters)

Rosemount 304 Three-Valve Flange X Flange Conventional Manifold



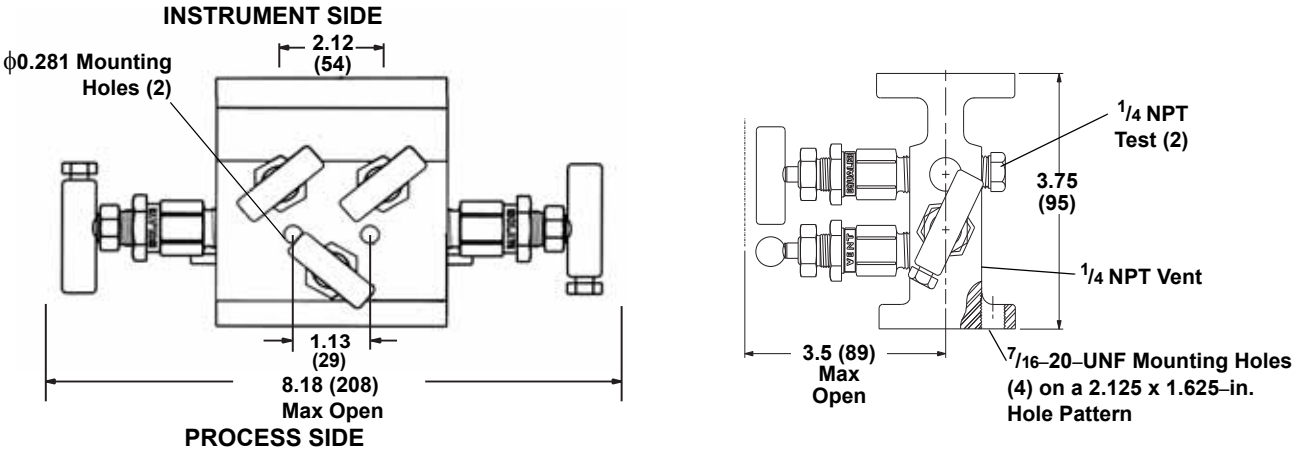
Dimensions are in inches (millimeters)

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



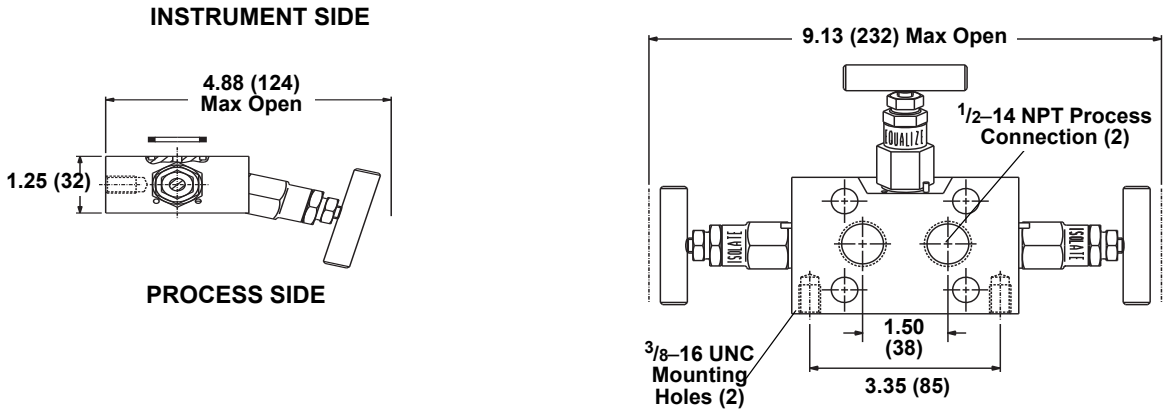
Dimensions are in inches (millimeters)

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



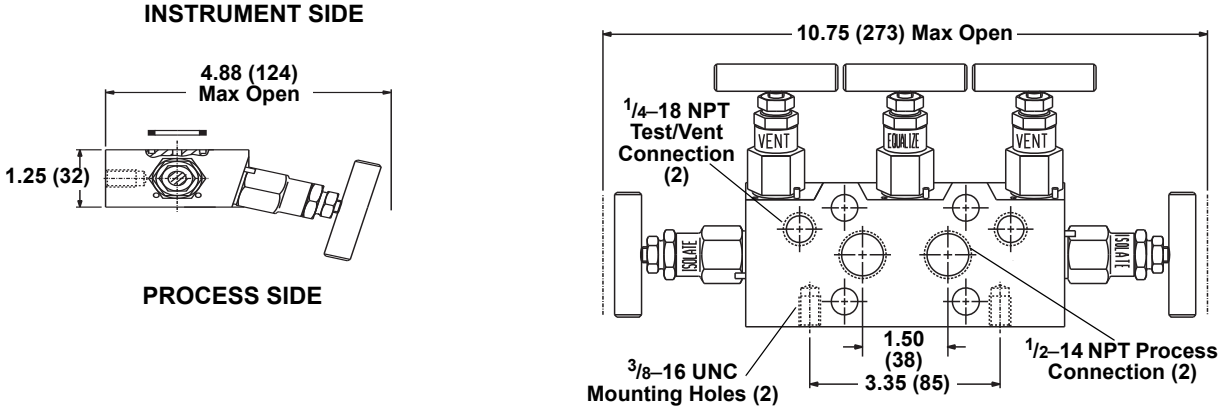
Dimensions are in inches (millimeters)

Rosemount 304 Three-Valve Wafer Manifold



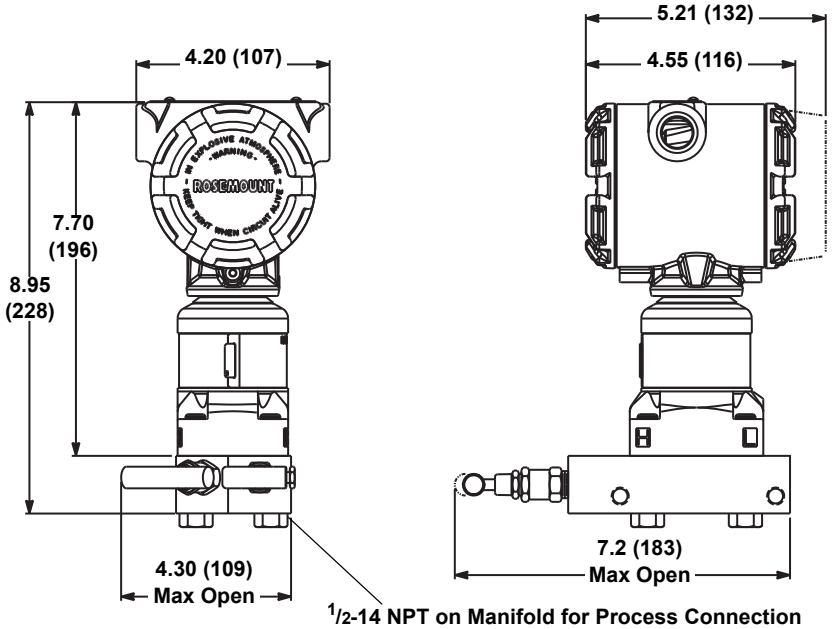
Dimensions are in inches (millimeters)

Rosemount 304 Five-Valve Wafer Manifold



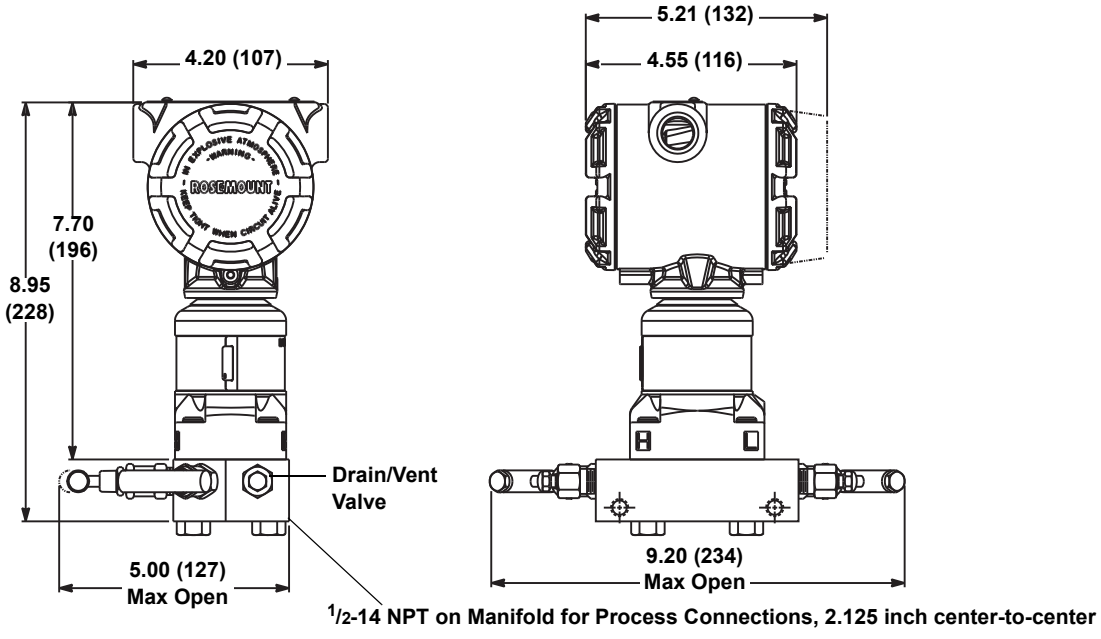
Dimensions are in inches (millimeters)

Rosemount 305R Two-Valve Coplanar Style Manifold



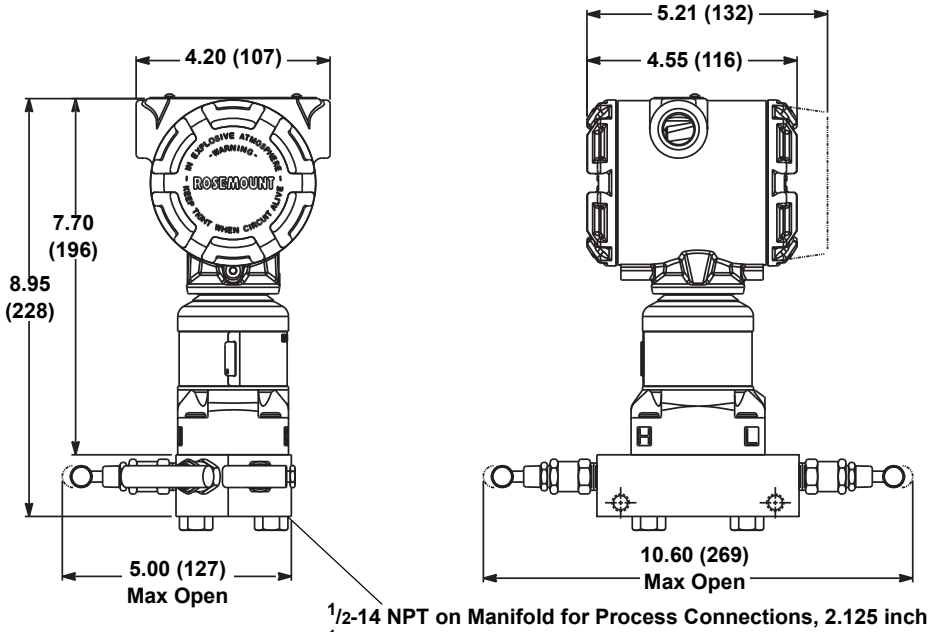
Dimensions are in inches (millimeters)

Rosemount 305R Three-Valve Coplanar Style Manifolds



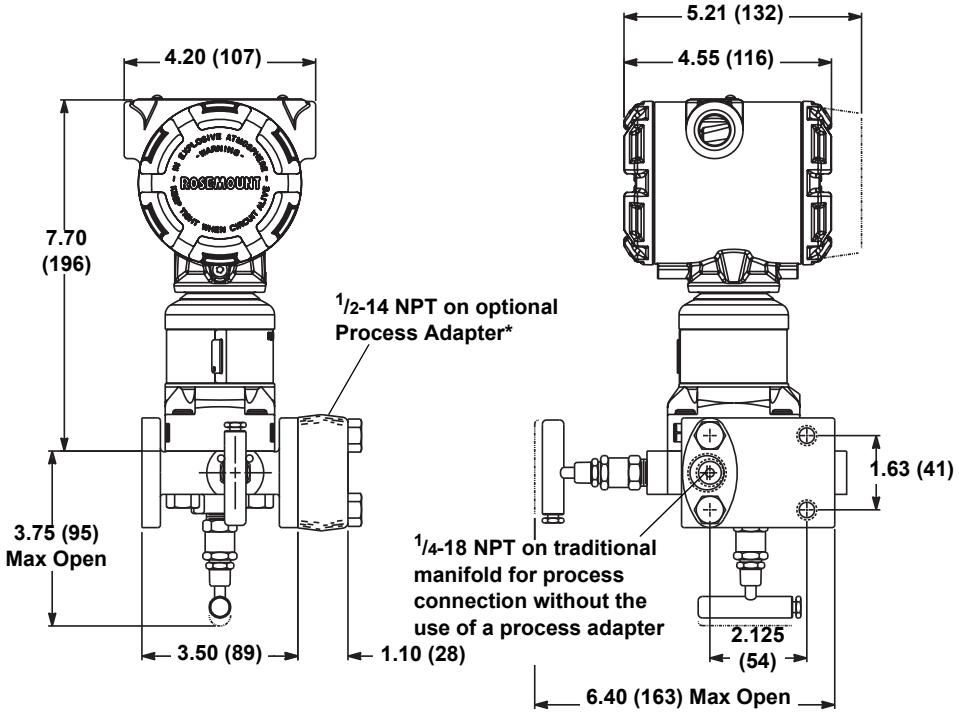
Dimensions are in inches (millimeters)

Rosemount 305R Five-Valve Coplanar Style Manifold



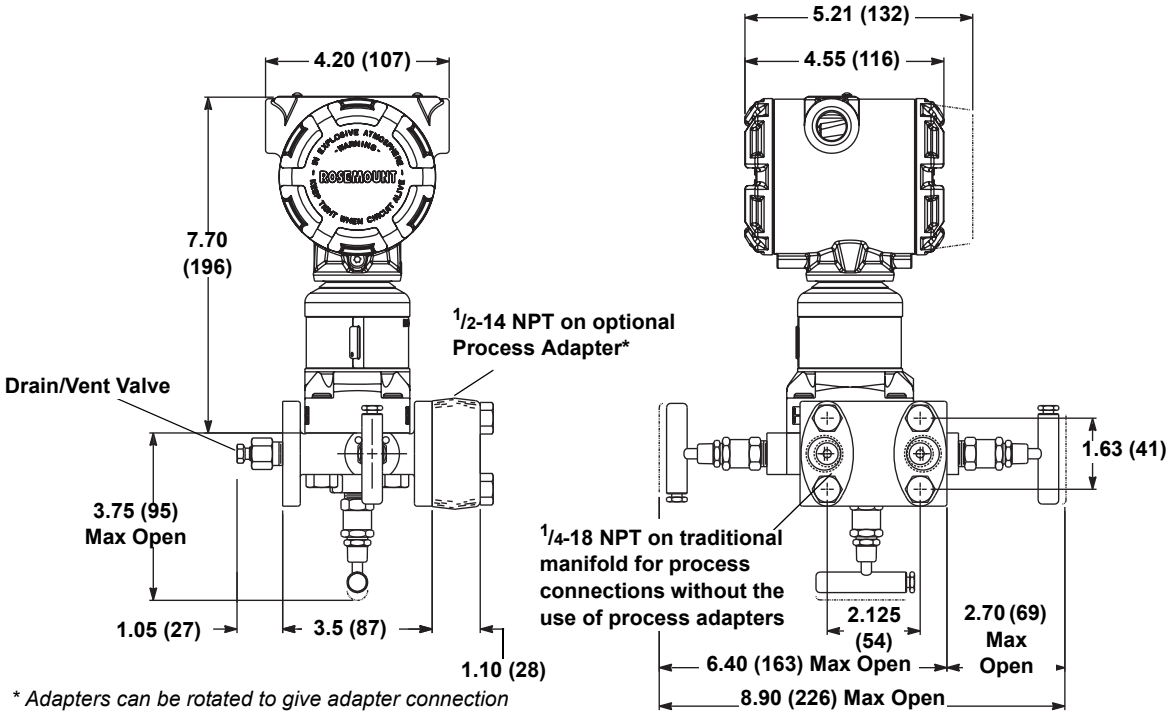
Dimensions are in inches (millimeters)

Rosemount 305RT Two-Valve Traditional Style Manifold



Dimensions are in inches (millimeters)

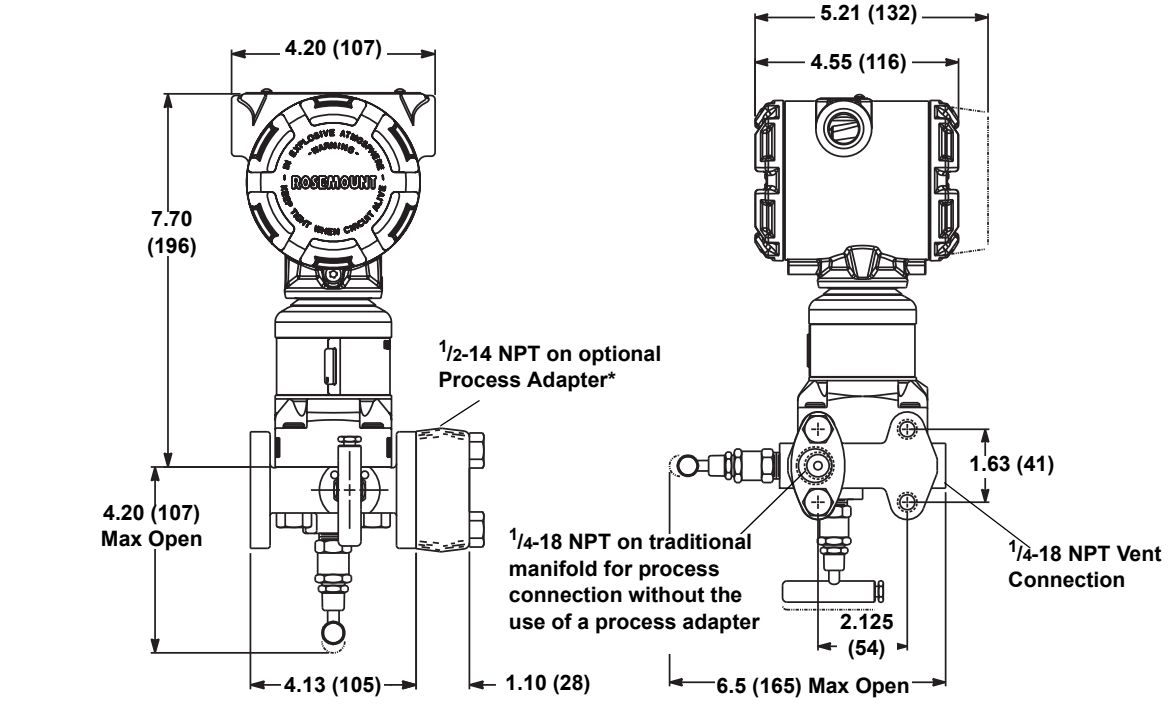
Rosemount 305RT Three-Valve Traditional Style Manifold



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

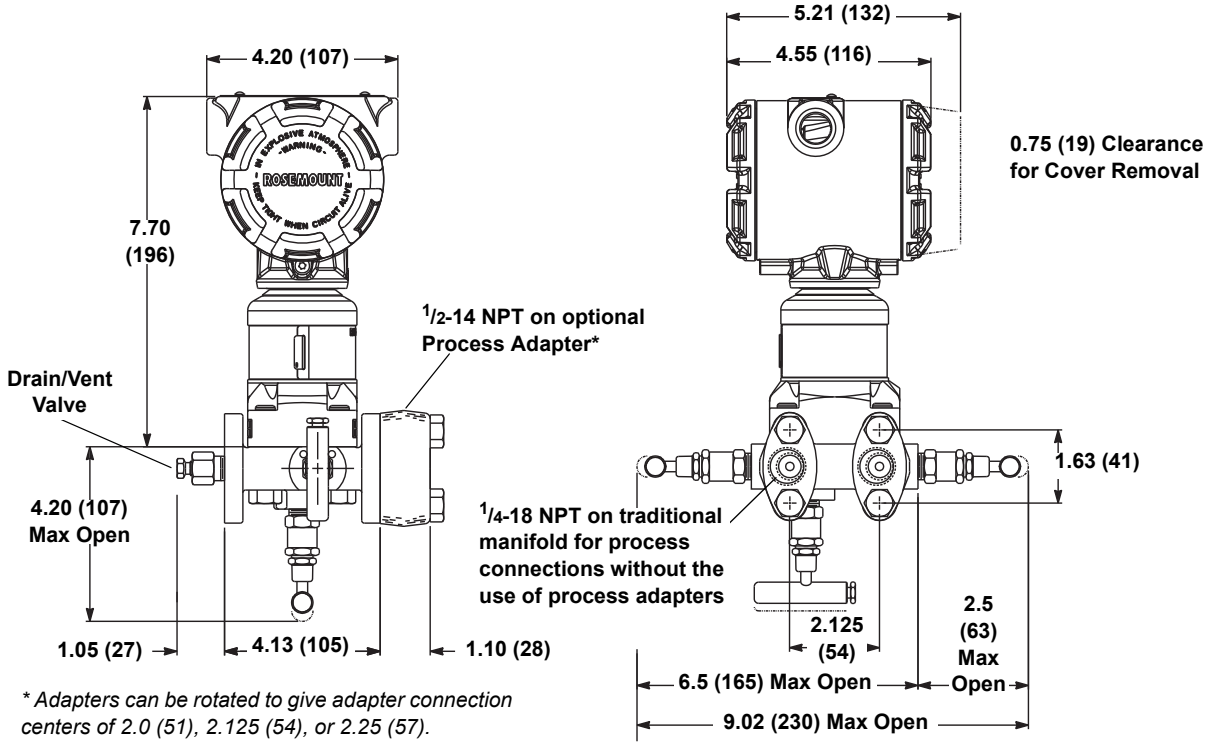
Dimensions are in inches (millimeters)

Rosemount 305RM Two-Valve Traditional Style Manifold



Dimensions are in inches (millimeters)

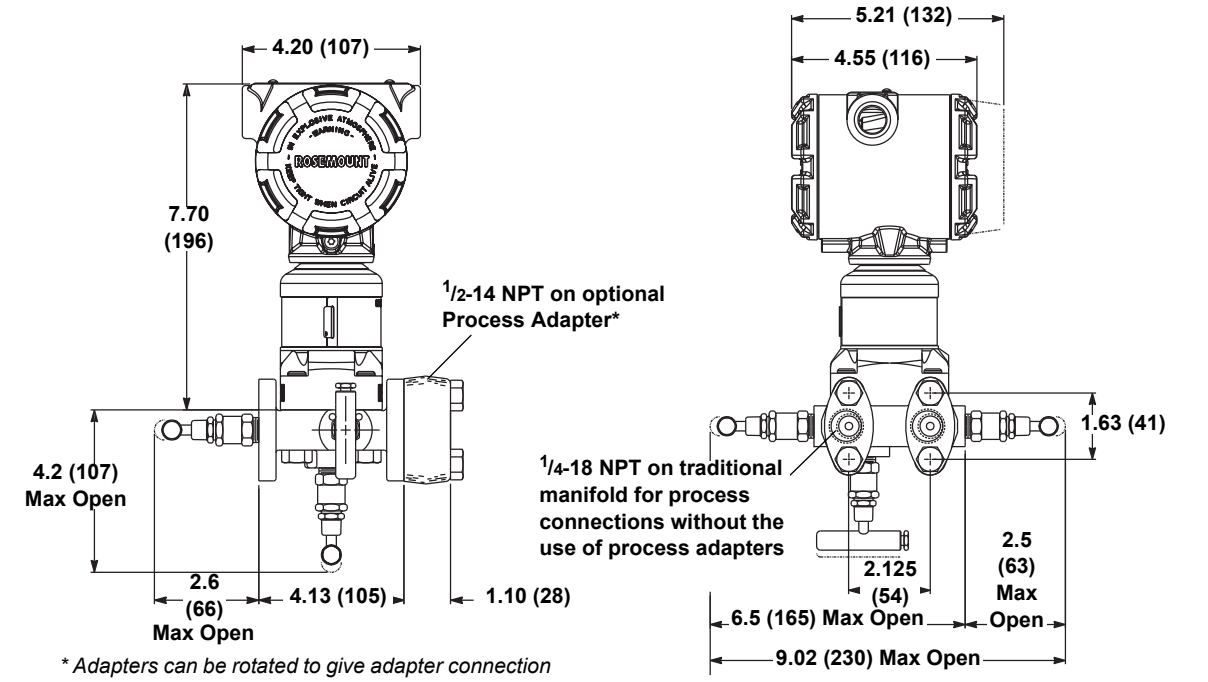
Rosemount 305RM Three-Valve Traditional Style Manifold



** 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 Five-Valve Traditional Style Manifold

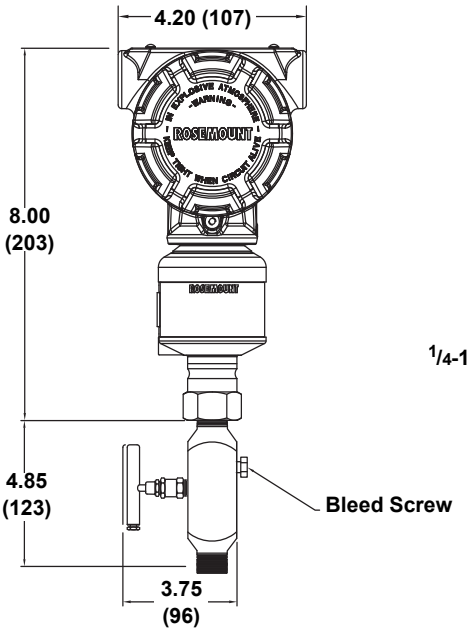


** Adapters can be rotated to give adapter connection centers of 2.0 (51), 2.125 (54), or 2.25 (57).*

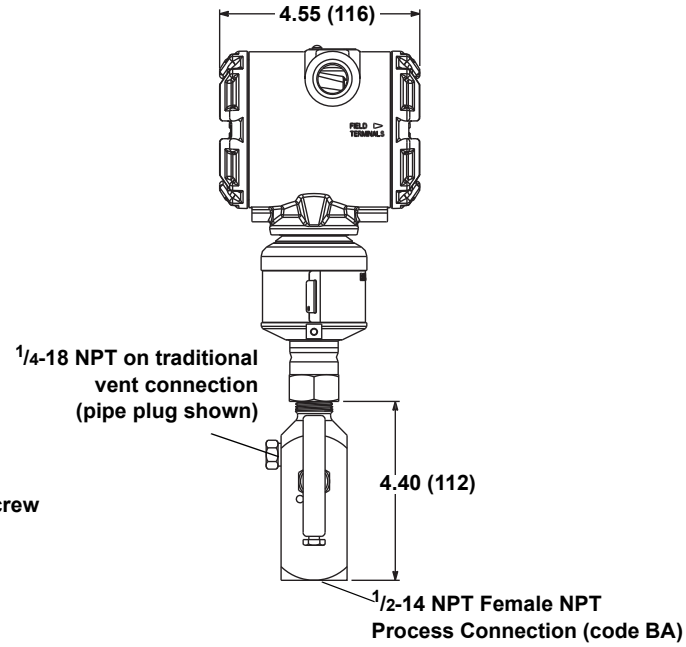
Dimensions are in inches (millimeters)

Rosemount 306R Pressure Style Manifold (3051S_T Shown)

BLOCK AND BLEED STYLE



TWO-VALVE STYLE

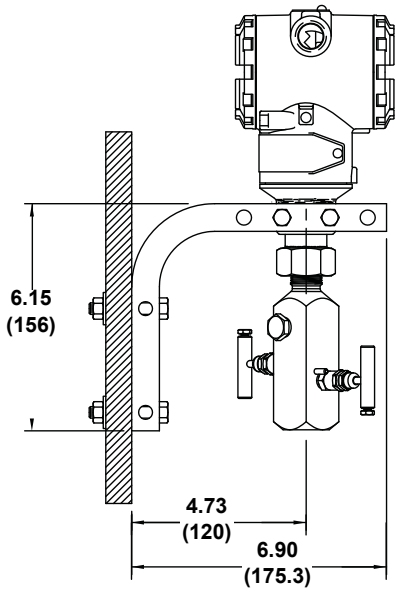


Manifold valve orientation may vary with respect to transmitter mounting holes.

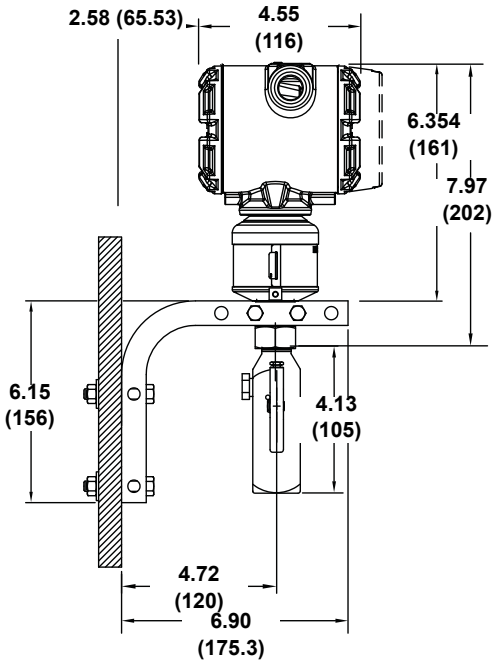
Dimensions are in inches (millimeters)

Installations for Rosemount 3051T and 3051S_T Transmitters for Panel Mounting

ROSEMOUNT 3051T



ROSEMOUNT 3051S_T

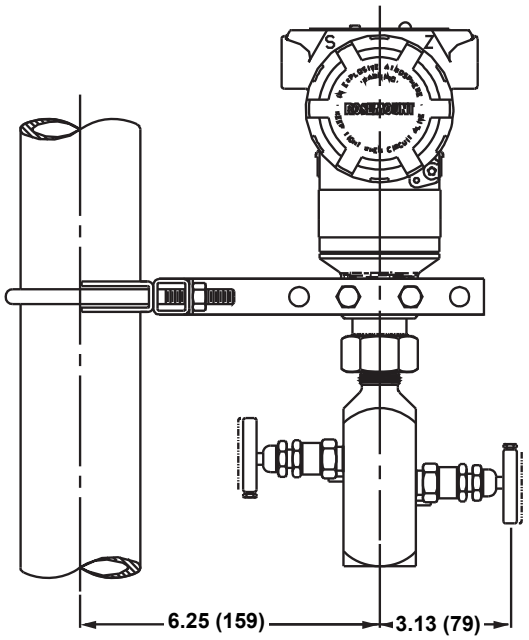


Manifold valve orientation may vary with respect to transmitter mounting holes.

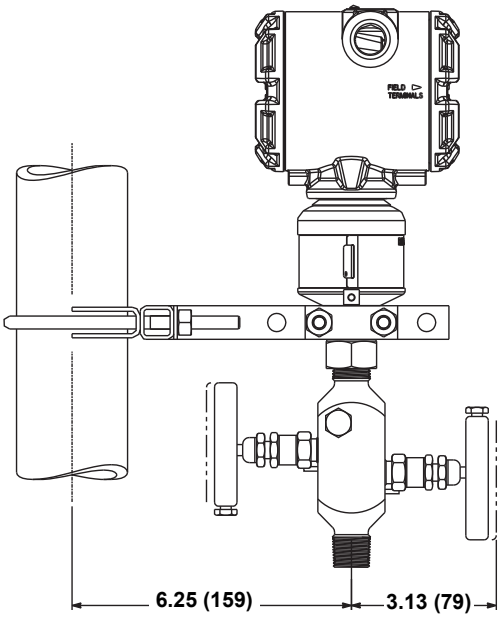
Dimensions are in inches (millimeters)

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

ROSEMOUNT 3051T



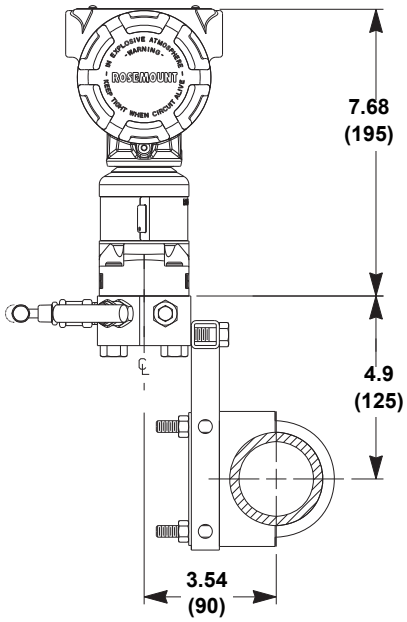
ROSEMOUNT 3051S_T

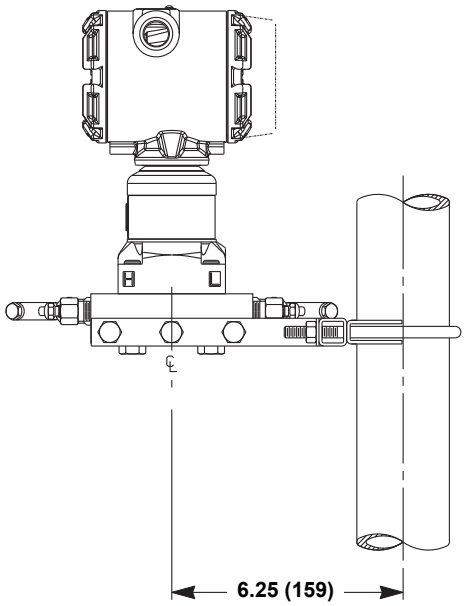


Manifold valve orientation may vary with respect to transmitter mounting holes.

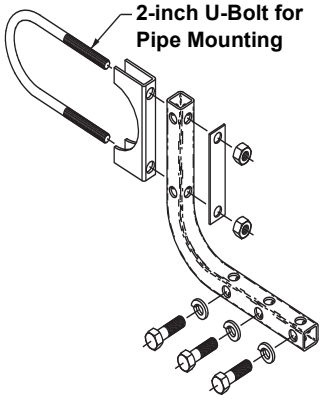
Dimensions are in inches (millimeters)

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



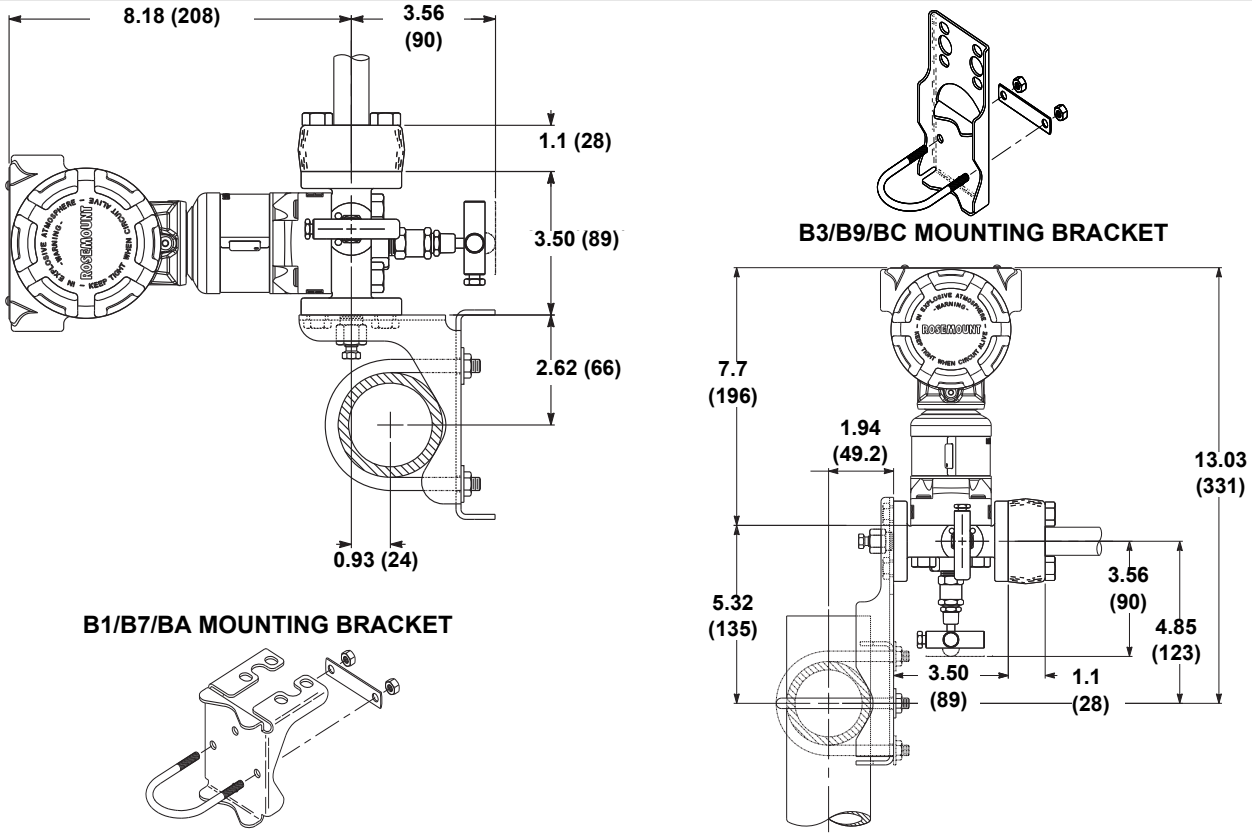


OPTION CODE B4



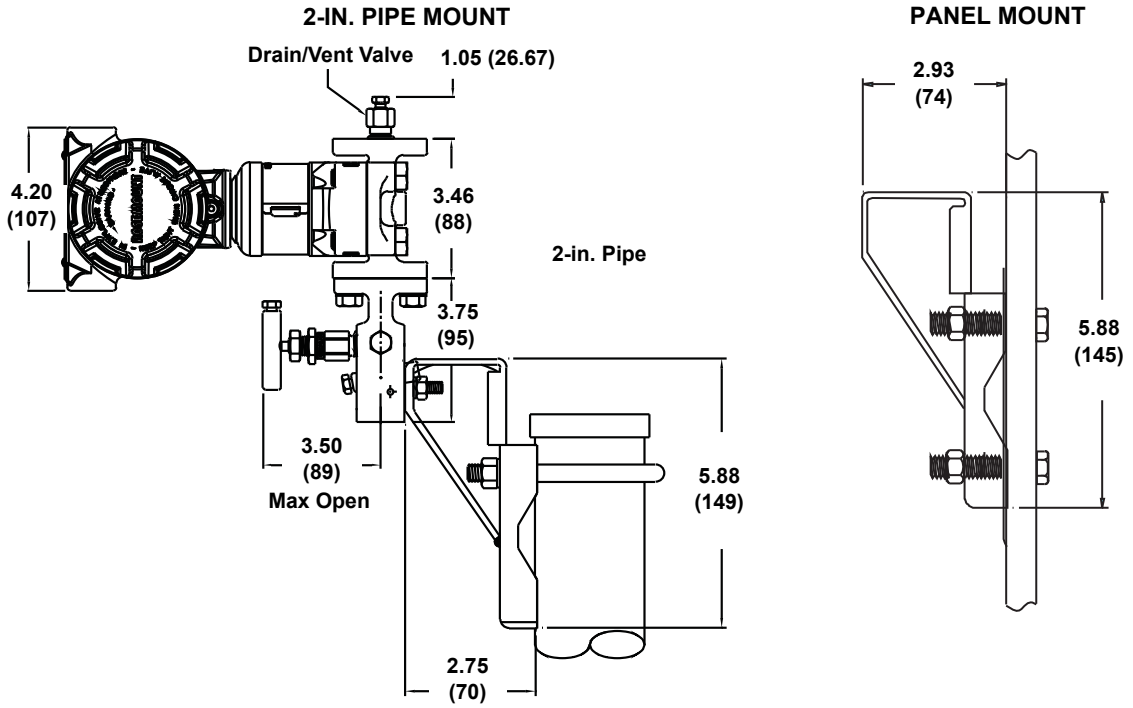
Dimensions are in inches (millimeters)

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



Dimensions are in inches (millimeters)

VS/VC Heavy Duty Manifold Mounting Bracket



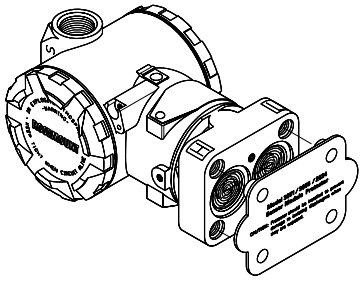
Dimensions are in inches (millimeters)

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

Per ASTM G93-96, 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 Power Piping Code

Rosemount Manifolds are available in configurations that meet the requirements of the ASME B31.1 Power 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 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 13. 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, Glass-filled PTFE	03031-0019-0003	03031-0019-0003
Manifold-to-Flange O-Ring, Graphite-filled PTFE	03031-1302-0002	03031-1302-0002
Manifold-to-Flange Bolt Kits (set of 4)		
Consult factory for part numbers	Consult Factory	Consult Factory
Heater Block Kits (qty. 1)		
Steam Block Kit	00305-0406-0001	NA

Table 14. 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
Alloy C-276 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, Glass-filled PTFE	03031-0234-0001	03031-0234-0001
Manifold-to-Module O-Ring, Graphite-filled PTFE	03031-0234-0002	03031-0234-0002
Sensor Guard (set of 5)		
Coplanar Module Sensor Guard	00305-1000-0001	00305-1000-0001

Rosemount Manifolds

Product Data Sheet
00813-0100-4733, Rev NB
January 2011

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00813-0100-4733 Rev NB, 1/11

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