

Rosemount Conventional Manifolds

ROSEMOUNT 304 FEATURES AND BENEFITS

- · Factory assembled, seal-tested and calibrated
- Flange by Flange, Flange by NPT, and Wafer styles in 2, 3, and 5-valve configurations
- · Reduce total installed cost
- · Easy in-process calibration



 \overline{C}

Content

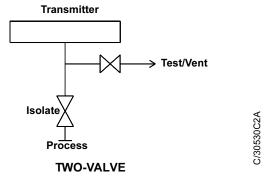
Rosemount 304 Conventional Manifolds	page 2
Specifications	page 2
Traditional Style Dimensional Drawings	page 4
Wafer Style Dimensional Drawings	page 5
Ordering Information	nage 7



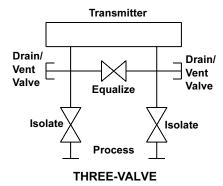


Rosemount 304 Conventional Manifolds

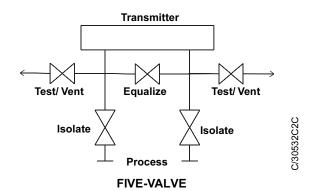
Two-valve manifold is used with Rosemount 1151 and 3051 gage and absolute pressure transmitters. The first valve provides process isolation. The second valve allows capture of vented or drained process, and simplifies in-process calibration.



Three-valve manifolds are used with 3051 and 1151 differential pressure transmitters providing two isolation valves and one equalization valve.



5–valve manifolds are used with 3051 and 1151 differential pressure transmitters providing two isolation valves, one equalization valve, and two test/vent valves. The two vent valves allow for 100% capture of vented or drained process and simplified process calibration capability.



Specifications

Process Connection

Flange by Pipe: $^{1}/_{2}$ –14 Female NPT process connection Flange by Flange: $2^{1}/_{8}$ -in. (54 mm) center to center connection; Rosemount flange adapters required for $^{1}/_{2}$ –14 Female NPT. Wafer: $^{1}/_{2}$ –14 Female NPT process connection

Instrument Connection

Direct mounted to transmitter flange, 2¹/8 in. (54 mm) center to center connection per IEC 61518, Type B shut-off device.

Estimated Weight

5.0 lbs (2.3 kg) for 2-valve traditional pipe by flange

5.5 lbs (2.5 kg) for 2-valve traditional flange by flange

5.2 lbs (2.4 kg) for 3-valve traditional pipe by flange

5.7 lbs (2.6 kg) for 3-valve traditional flange by flange

4.0 lbs (1.8 kg) for 3-valve wafer thread by flange

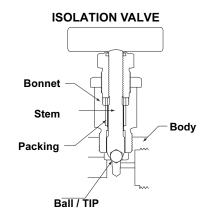
 $5.7\ lbs\ (2.6\ kg)$ for 5-valve wafer thread by flange

5.7 lbs (2.6 kg) for 5-valve traditional thread by flange

5.7 lbs (2.6 kg) for 5-valve traditional flange by flange

Test Connections

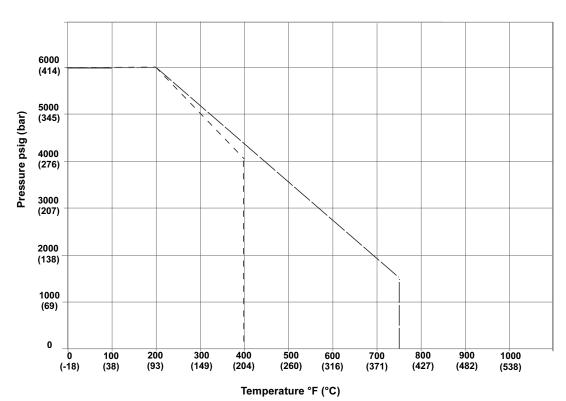
¹/₄–18 Female NPT



Note: "Typical" Valve

FIGURE 1. Conventional Manifolds - Pressure vs. Temperature

--- PTFE Packed, Integral Seat
---- Graphite Packed, Integral Seal



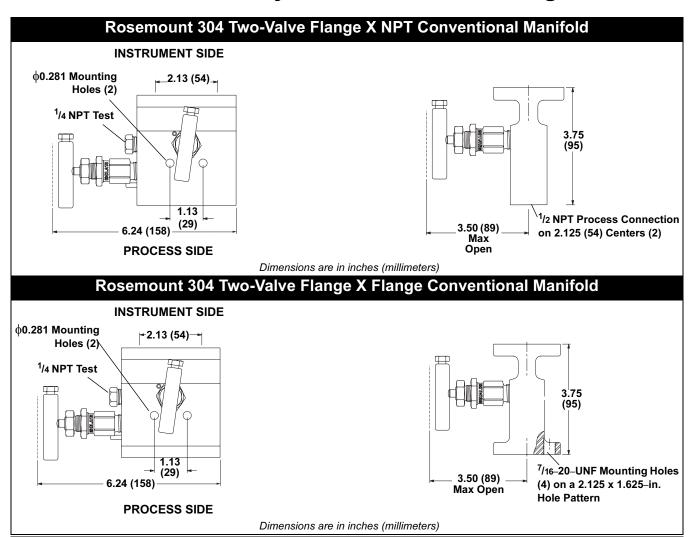
CONVENTIONAL MANIFOLDS - PRESSURE AND TEMPERATURE RATINGS

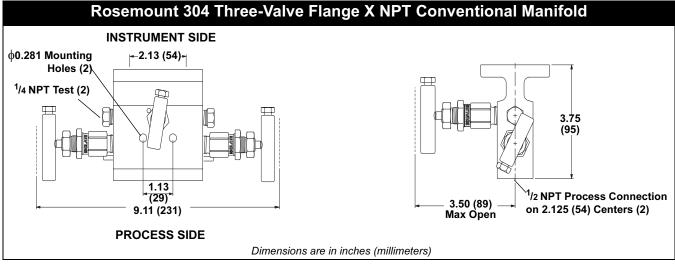
Packing	Seat	Pressure and Temperature Ratings
PTFE	Integral	6000 psi @ 200°F (414 bar @ 93°C) 4000 psi @ 400°F (276 bar @ 204°C)
Graphite	Integral	6000 psi @ 200°F (414 bar @ 93°C) 1500 psi @ 750°F (103 bar @ 399°C)

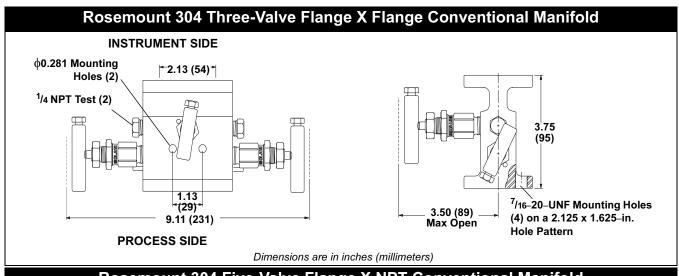
PROCESS WETTED MATERIALS OF CONSTRUCTION- TYPICAL

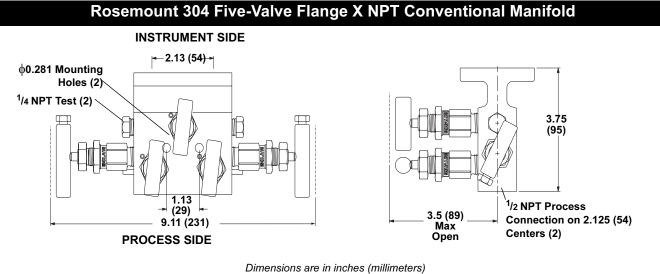
Component	316SST	cs
Body	316 SST	CS A105
Ball / Tip	316 SST /316Ti SST	Tungsten Carbide
Stem	316 SST	316 SST
Packing	PTFE / Graphite	PTFE
Bonnet	316 SST	316 SST
Pipe Plug	316 SST	CS A105

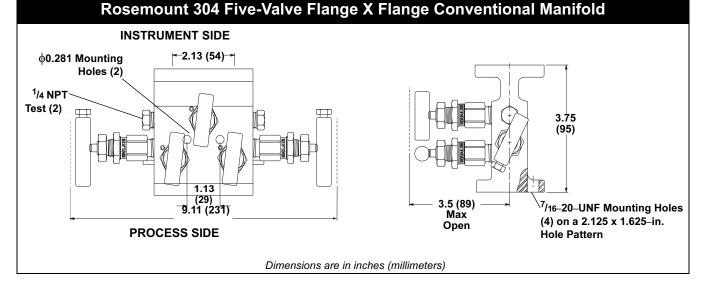
Traditional Style Dimensional Drawings



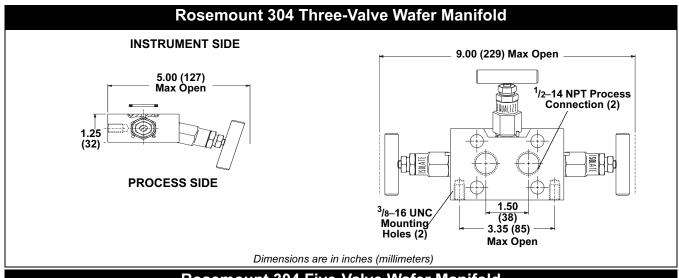


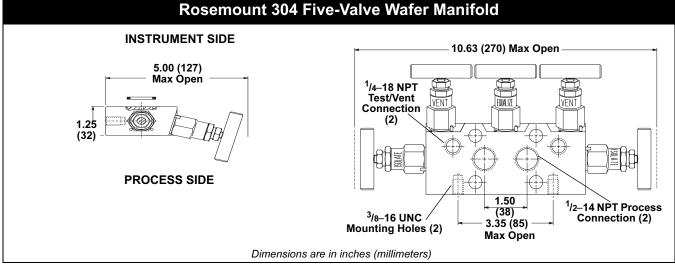






Wafer Style Dimensional Drawings





Ordering Information

TABLE 1. Rosemount 304 Ordering Information

Model	Product Description	ation				
0304	Conventional Manifold					
Code	Manufacturer					
R	Rosemount Inc.					
Code	Manifold Style					
T		r Flance x NPT)				
W ⁽¹⁾	Traditional (Flange x Flange or Flange x NPT) Wafer					
Code	Manifold Type					
2 ⁽²⁾	2-valve					
3	3-valve					
5	5-valve					
Code	Materials of Construction					
	Body	Bonnet	Stem	Tip		
1	CS A105	316 SST	316 SST	Tungsten Carbide		
2	316 SST	316 SST	316 SST	316 SST		
Code	Process Connection					
В	¹ /2-14 NPT					
F ⁽²⁾	Flanged					
Code	Packing Material					
1	Teflon					
2 ⁽¹⁾	Graphite-based					
Code	Transmitter Type					
1	Assembly to 3051 Traditional Flange					
2	Assembly to 1151 or 3051/3095 DIN Compliant Traditional Flange					
3	Assembly to 3051/3095 Coplanar Flange					
Code	Options					
	Mounting Bracket					
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					
B1	Transmitter Bracket for 2-in. pipe mounting, CS bolts					
B3 B7	Transmitter Flat Bracket for 2-in. pipe mounting, CS bolts					
B9	Transmitter B1 Bracket with series 300 SST bolts Transmitter B3 Bracket with series 300 SST bolts					
BA	Transmitter SST B1 Bracket with series 300 SST bolts					
BC	Transmitter SST B3 Bracket with series 300 SST bolts					
	Adapters					
DF ⁽³⁾	Flange Adapters					
	Bolts					
L4	Austentic 316 SST Bolts					
L5	ASTM A 193, Grade B7M Bolts					
Typical Conven	tional Manifold Model Number: 0	304RT32B11VS				

- (1) Not available with Material of Construction code 1.
- (2) Not available with Manifold Style code W.
- (3) Only allowed with both Manifold Style code T and Process Connection code F.

Product Data Sheet

00813-0100-4839, Rev AB Catalog 2006 - 2007

Rosemount 304 Manifold

Rosemount and the Rosemount logotype are registered trademarks of Rosemount Inc. Teflon is a registered trademark of E.I. du Pont de Nemours & Co. All other marks are the property of their respective owners.

Emerson Process Management

Rosemount Inc.

8200 Market Boulevard Chanhassen, MN 55317 USA T (U.S.) 1-800-999-9307 T (International) (952) 906-8888 England T 44 (0) 1243 863121 F 44 (0) 1243 867554

www.rosemount.com

Emerson Process Management

Heath Place **Bognor Regis** West Sussex PO22 9SH **Emerson Process Management Asia Pacific Private Limited**

1 Pandan Crescent Singapore 128461 T (65) 6777 8211 F (65) 6777 0947 Enquiries@AP.EmersonProcess.com

