

Gauge Valves and Instrument Manifolds

60G, 60PG Series

2-valve, 3-valve and 5-valve Manifold Series



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Gauge Valves

60G Series and 60PG Series

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Gauge Valves

60G Series and 60PG Series

Maximum working pressure:

Stainless steel: up to 6000 psig (414 bar)

Alloy 400: up to 5000 psig (345 bar)

60G series working temperature:

PTFE packing: -65°F to 450°F (-54°C to 232°C)

Graphite packing: -65°F to 1200°F (-54°C to 649°C)

60PG series working temperature:

Acetal seat: -20°F to 250°F (-28°C to 121°C)

PEEK seat: -20°F to 400°F (-28°C to 204°C)

PFA seat: -20°F to 400°F (-28°C to 204°C)

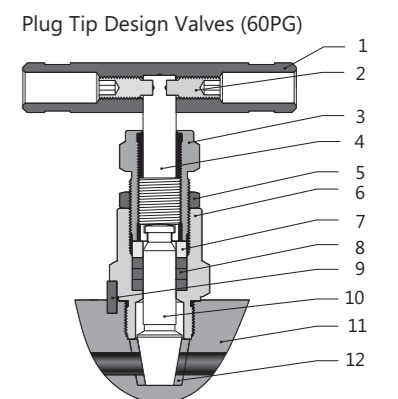
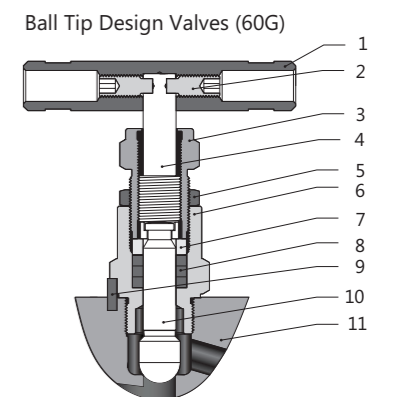
Features

- ☆ Non-rotating lower stem, ball tip and plug tip designs
- ☆ Safety back seating seals in fully open position
- ☆ Rolled spindle operating threads
- ☆ Lubricant for stem thread isolated from the media
- ☆ Externally adjustable gland
- ☆ Bonnet locking pin fitted as standard
- ☆ Low torque operating T bar handle
- ☆ Steady and durable fastening of the handle by double lock-pins
- ☆ Leak-tight performance testing for every valve with nitrogen at the maximum working pressure

Standard Materials of Construction

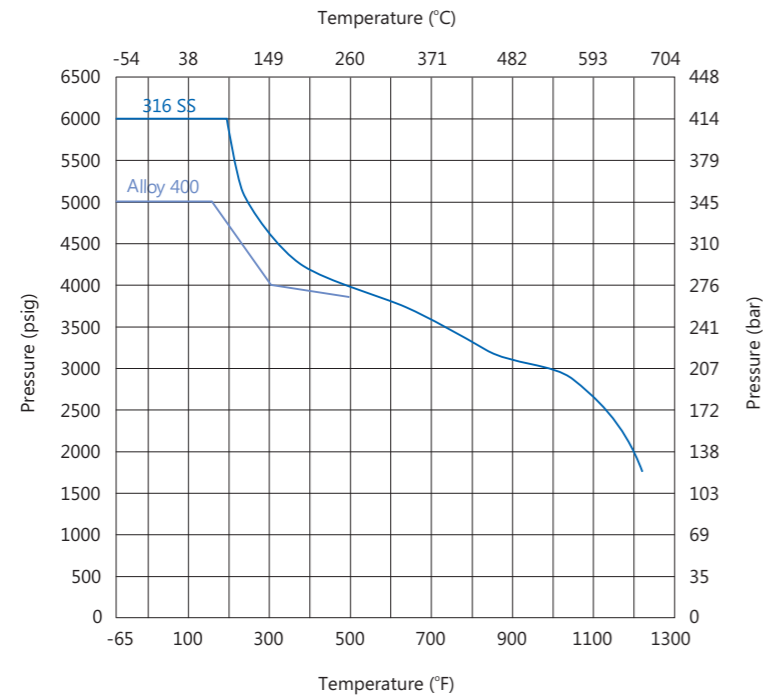
Item	Part	Valve Body Material		
		316 SS	Alloy 400	NACE MR0175
1	Handle	Anodized aluminum		
2	Set Screw	Nickel cadmium-plated steel		
3	Packing Bolt	321 SS/A276		
4	Upper Stem	316 SS/A276		
5	Lock Nut	316 SS/B783		
6	Bonnet	316 SS/A479	Alloy R-405/B164	Annealed 316 SS/A479
7	Gland	316 SS/A276		
8	Packing	PTFE or graphite		
9	Lock Pin	304 SS/A276		
10	Lower Stem	Chrome-plated 316 SS/A276	Alloy R-405/B164	Alloy R-405/B164
11	Body	316 SS/A479 316 SS/A182	Alloy 400/B164, B127,B564	Annealed 316 SS/A479
12	Seat	Acetal or PEEK or PFA		
	Lubricant	Molybdenum disulfide-based		

Process interface valves for sour gas service are available. Materials are selected in accordance with NACE MR0175/ISO 15156. Contact the authorized representative or FINELOK if any request.



Ball Tip Design Valves (60G)

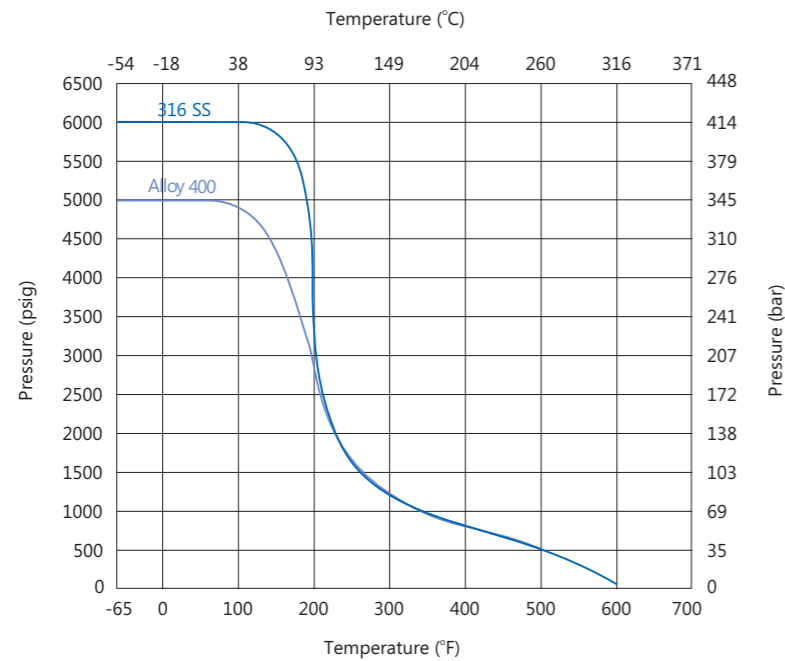
Pressure vs. Temperature



Based on graphite stem packing.

Plug Tip Design Valves (60PG)

Pressure vs. Temperature

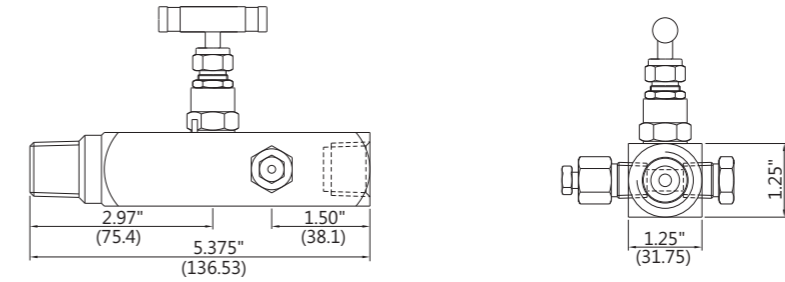
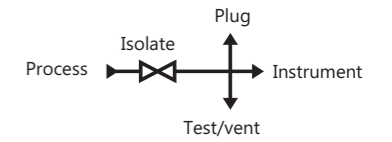


- Rating limited to 250°F (121°C) max. with acetal seat material, not recommended for temperature higher than 200°F (93°C) for water and steam application.
- Based on PEEK seat and graphite stem packing.

Types and Dimensions

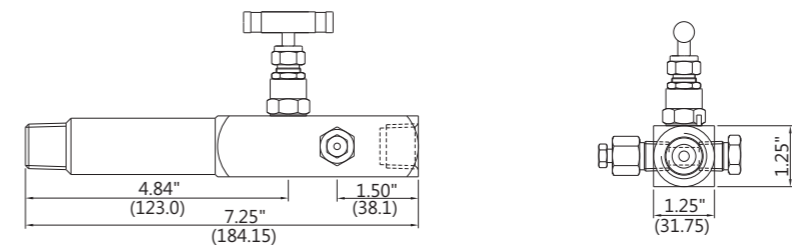
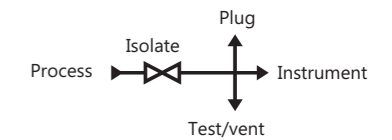
Standard Type

Basic Ordering Number	Design	Inlet/Process	Outlet/Instrument	Test/Vent/Plug
-60G-NT8-FNT8	Ball Tip	1/2 Male NPT	1/2 Female NPT	1/2 Female NPT
-60PG-NT8-FNT8	Plug Tip	1/2 Male NPT	1/2 Female NPT	1/2 Female NPT
-60G-NT12-FNT12	Ball Tip	3/4 Male NPT	3/4 Female NPT	1/2 Female NPT
-60PG-NT12-FNT12	Plug Tip	3/4 Male NPT	3/4 Female NPT	1/2 Female NPT



Lagging Extension Body Type

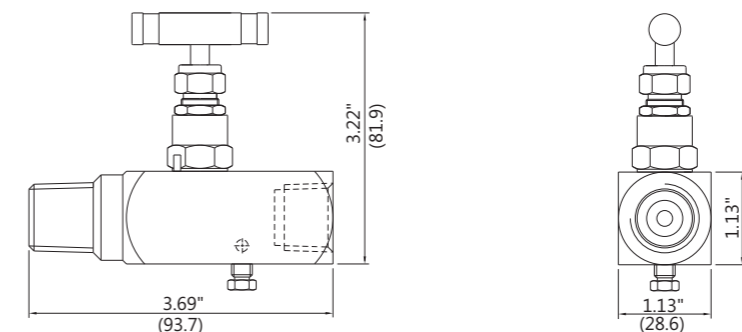
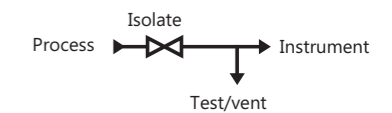
Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent/Plug
-60G-NT8-FNT8-E	1/2 Male NPT	1/2 Female NPT	1/2 Female NPT
-60PG-NT8-FNT8-E			

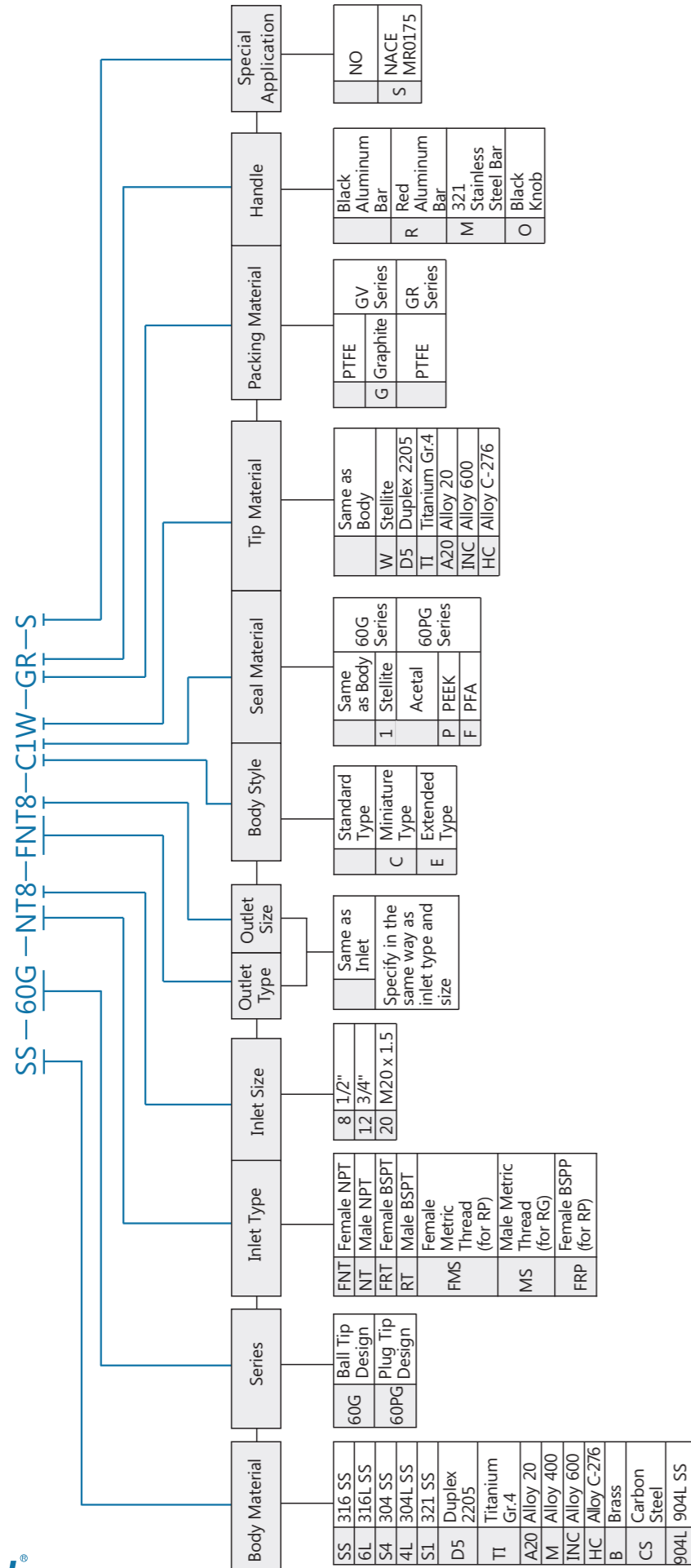


Lagging extension body is inserted through pipe for insulation.

Miniature Type

Basic Ordering Number	Inlet/Process	Outlet/Instrument
-60G-NT8-FNT8-C	1/2 Male NPT	1/2 Female NPT
-60PG-NT8-FNT8-C		





Cleaning and Packaging :

FC-01: Standard cleaning and packaging for general industrial procedures.

FC-02: Special cleaning and packaging for wetted system components to ensure compliance with product cleanliness requirement as stated in ASTM G93 Level C.

Instrument Manifolds

General Information

Maximum working pressure:

Stainless steel: up to 6000 psig (414 bar)

Alloy C-276: up to 6000 psig (414 bar)

Alloy 400: up to 5000 psig (345 bar)

Working temperature:

PTFE packing: -65°F to 450°F (-54°C to 232°C)

Graphite packing: -65°F to 1200°F (-54°C to 649°C)

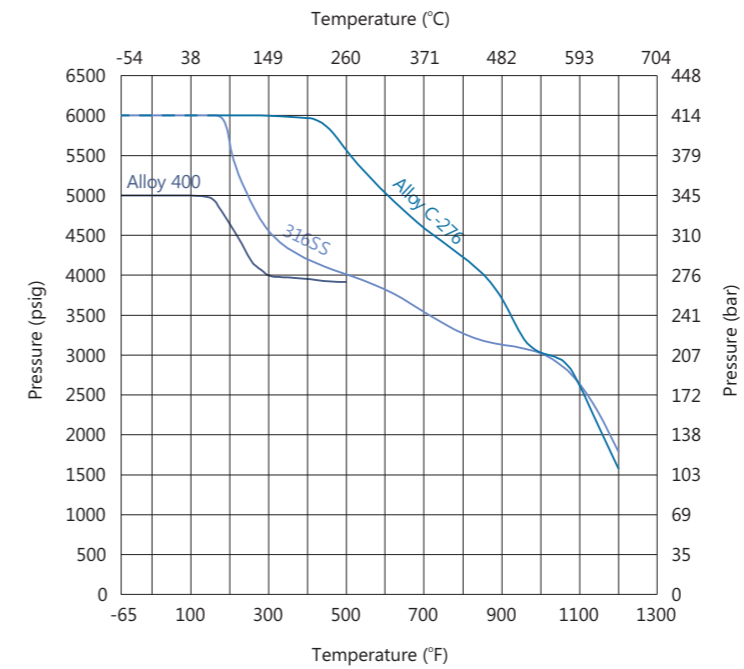
Orifice: 0.157" (4.0 mm), CV: 0.35



Features

- ☆ Two-stem design: thread hardened upper stem and smooth surface hardened lower stem
- ☆ Upper stem thread lubricant isolated from system media
- ☆ Linearly instead of helical movement of the nonrotating lower stem, avoiding galling damage to the seat and tip, as well as reducing the total friction area between the packing and the lower stem
- ☆ Safety back seating seals in fully open position
- ☆ Steady and durable fastening of the handle by double lock-pins
- ☆ Leak-tight performance testing for every valve with nitrogen at the maximum working pressure

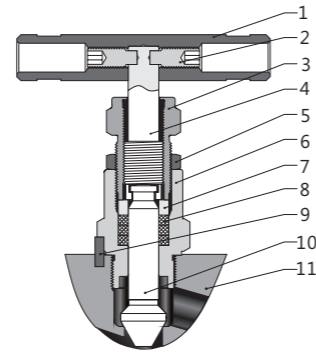
Pressure vs. Temperature



1. Based on graphite stem packing.
2. Contact the authorized representative or FINELOK for curve graph of other materials.

Standard Materials of Construction

Item	Part	Valve Body Material		
		316 SS	Alloy 400	Alloy C-276
1	Handle	Anodized aluminum		
2	Set Screw	Nickel cadmium-plated steel		
3	Packing Bolt	321 SS/A276		
4	Upper Stem	316 SS/A276		
5	Lock Nut	316 SS/B783		
6	Bonnet	316 SS/A479	Alloy R-405/B164	Alloy C-276/B574
7	Gland	316 SS/A276		
8	Packing	PTFE or PEEK or graphite		
9	Lock Pin	304 SS/A276		
10	Lower Stem	Chrome-plated 316 SS/A276	Alloy R-405/B164	Alloy C-276/B574
11	Body	316 SS/A479 316 SS/A182	Alloy 400/B164, B127,B564	Alloy C-276/B564
	Lubricant	Molybdenum disulfide-based		



Process interface valves for sour gas service are available. Materials are selected in accordance with NACE MR0175/ISO 15150. Contact the authorized representative or FINELOK if any request.

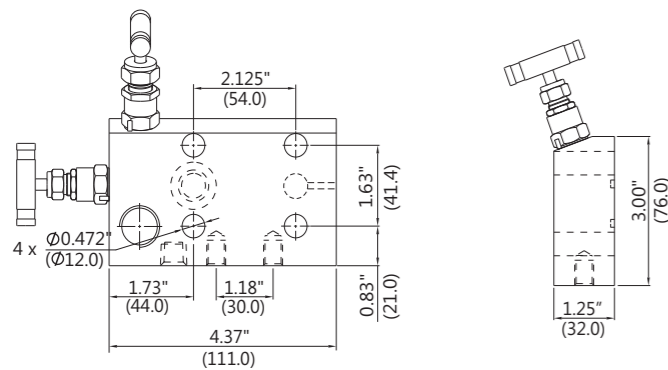
Instrument Manifolds

- ☆ Instrument manifolds are manufactured in accordance with ANSI B31.1 and B31.3, specifications meet MSS-SP-105. Flange design meets the requirements of MSS SP-99.
- ☆ 2-valve manifold are used with pressure gauges or pressure transmitters.
- ☆ 3-valve and 5-valve manifold are used with differential pressure transmitters.

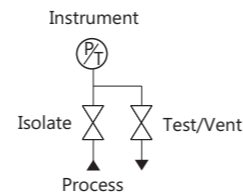
2-valve Manifolds

Consist of one block valve and one bleed valve

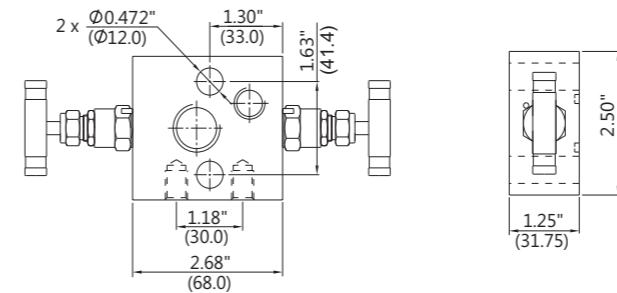
Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-2D-FNT8-A	1/2 Female NPT	Flanged	1/4 Female NPT



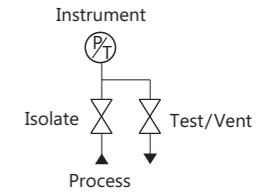
Every manifold is supplied with one PTFE sealing ring for manifold-to-instrument and four 7/16" UNF x 1.75" high tensile bolts.



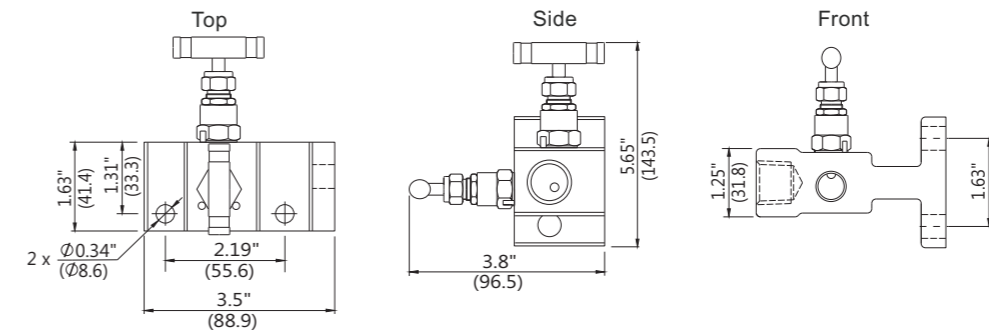
Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-2D-FNT8-L	1/2 Female NPT	Flange	1/4 Female NPT



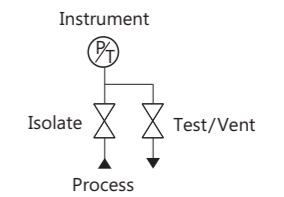
Every manifold is supplied with one PTFE sealing ring for manifold-to-instrument and two 7/16" UNF x 1.75" high tensile bolts.



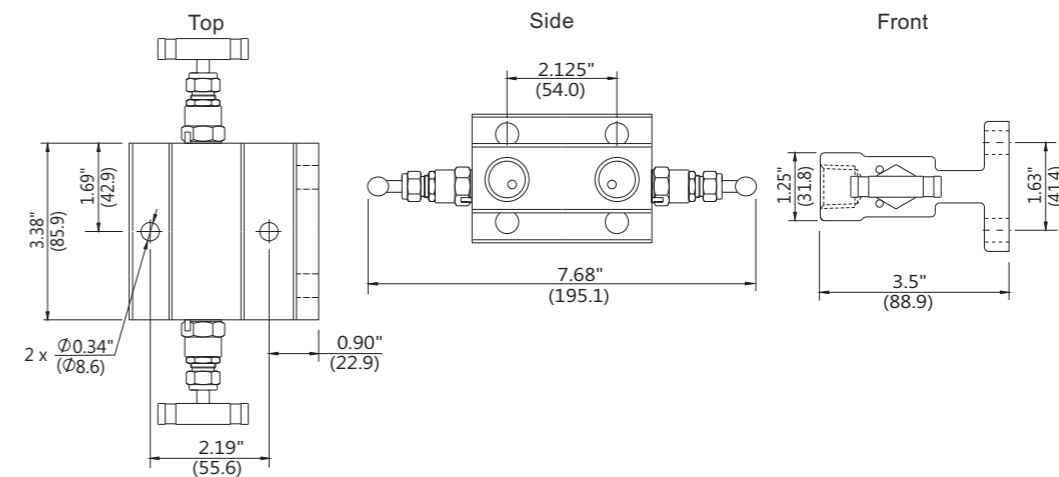
Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-2D-FNT8-T	1/2 Female NPT	Flange	1/4 Female NPT
-2D-S8-T	1/2" FINELOK	Flange	1/4 Female NPT



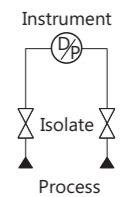
Every manifold is supplied with one PTFE sealing ring for manifold-to-instrument and two 7/16" UNF x 1" high tensile bolts.



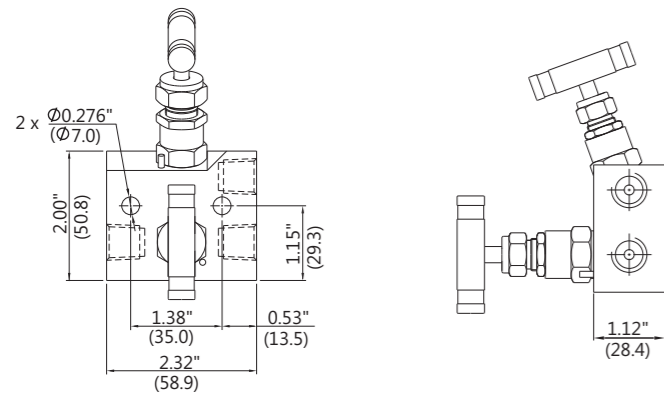
Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-2D-FNT8-H	1/2 Female NPT	Flange	1/4 Female NPT
-2D-S8-H	1/2" FINELOK	Flange	1/4 Female NPT



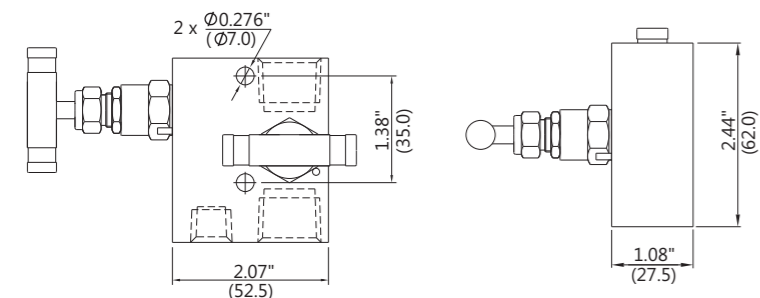
Every manifold is supplied with one PTFE sealing ring for manifold-to-instrument and two 7/16" UNF x 1" high tensile bolts.



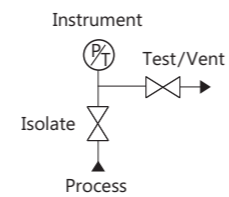
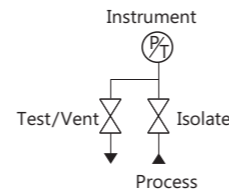
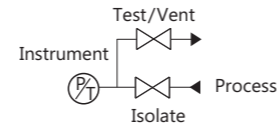
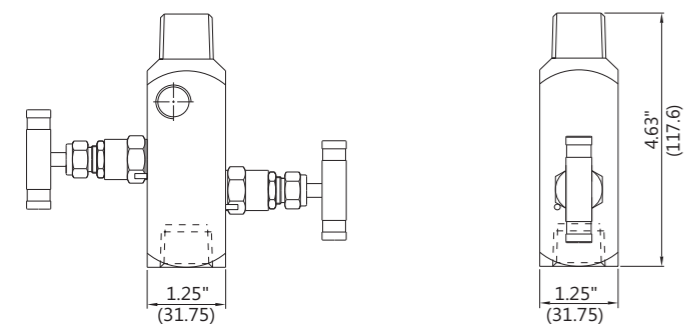
Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-2R-FNT4-A	1/4 Female NPT	1/4 Female NPT	1/4 Female NPT
-2R-FNT8-A	1/2 Female NPT	1/2 Female NPT	1/4 Female NPT



Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-2D-FNT8-V	1/2 Female NPT	1/2 Female NPT	1/4 Female NPT



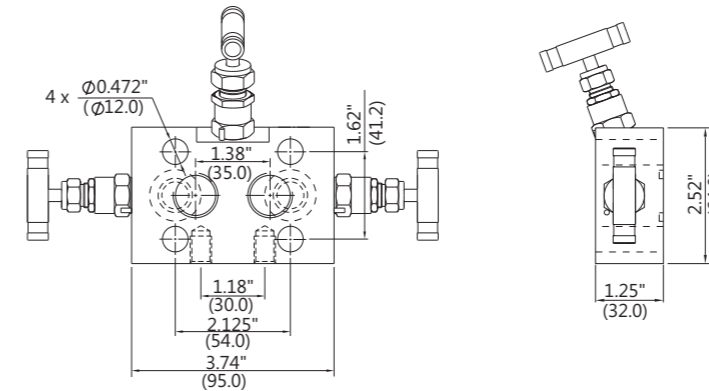
Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-2R-FNT8-NT8-H	1/2 Female NPT	1/2 Male NPT	1/4 Female NPT
-2R-NT8-H	1/2 Male NPT	1/2 Male NPT	1/4 Female NPT



3-valve Manifolds

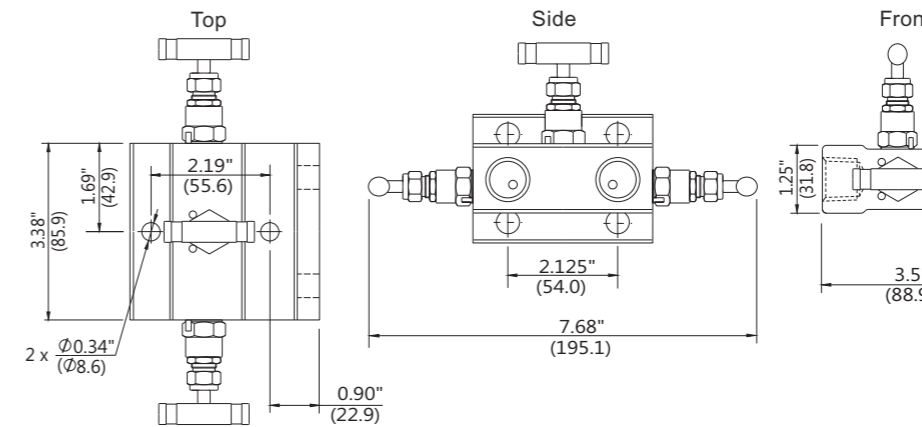
Consist of two block valves and one equalizer valve

Basic Ordering Number	Inlet/Process	Outlet/Instrument
-3D-FNT8-A	1/2 Female NPT	Flange
-3D-S8-A	1/2" FINELOK	Flange



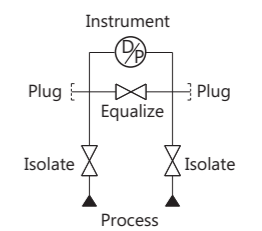
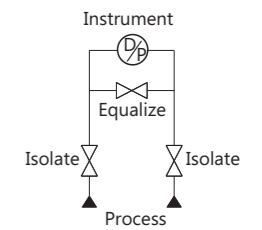
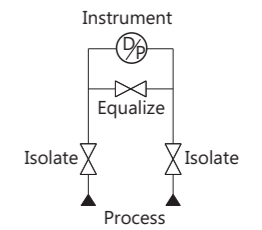
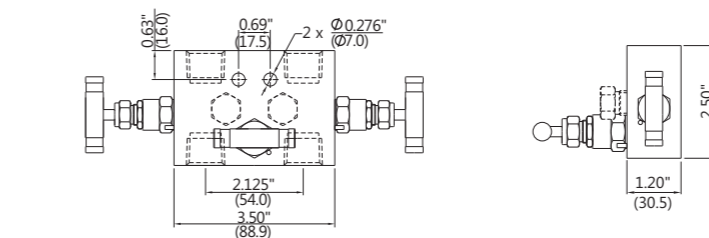
Every manifold is supplied with two PTFE sealing rings manifold-to-instrument and four 7/16" UNF x 1.75" high tensile bolts.

Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-3D-FNT8-T	1/2 Female NPT	Flange	Optional
-3D-S8-T	1/2" FINELOK	Flange	Optional



Every manifold is supplied with two PTFE sealing rings for manifold-to- instrument and four 7/16" UNF x 1.75" high tensile bolts.

Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-3R-FNT8-V	1/2 Female NPT	1/2 Female NPT	Optional
-3R-S8-V	1/2" FINELOK	1/2" FINELOK	Optional

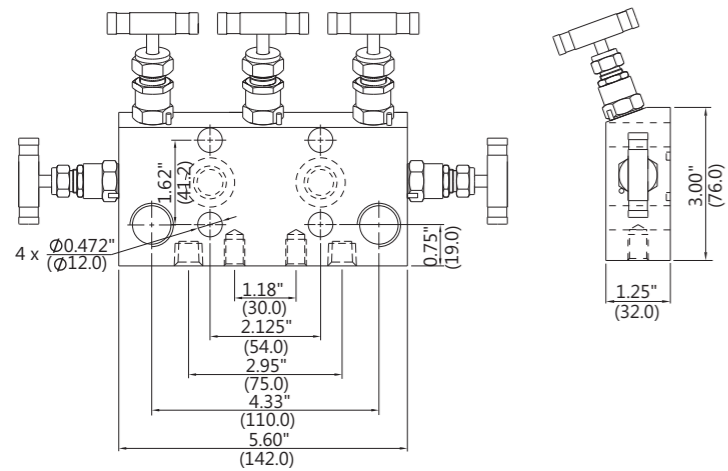


5-valve Manifolds

Double-bleed Function of 5-valve Manifold

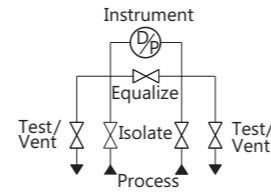
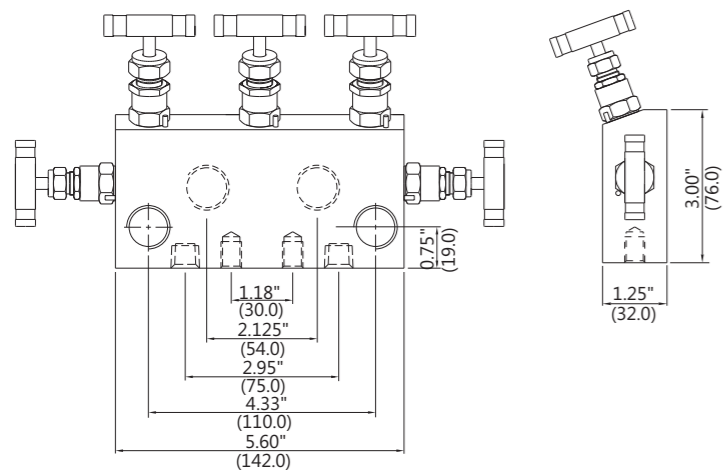
Consist of two block valves, two bleed valves, and one equalizer valve

Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-5D-FNT8-A	1/2 Female NPT	Flange	1/4 Female NPT
-5D-S8-A	1/2" FINELOK	Flange	1/4 Female NPT



Every manifold is supplied with two PTFE sealing rings for manifold-to-instrument and four 7/16" UNF x 1.75" high tensile bolts.

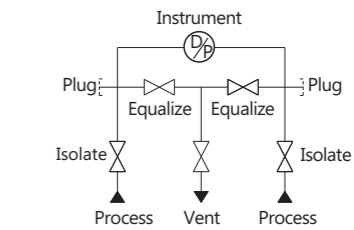
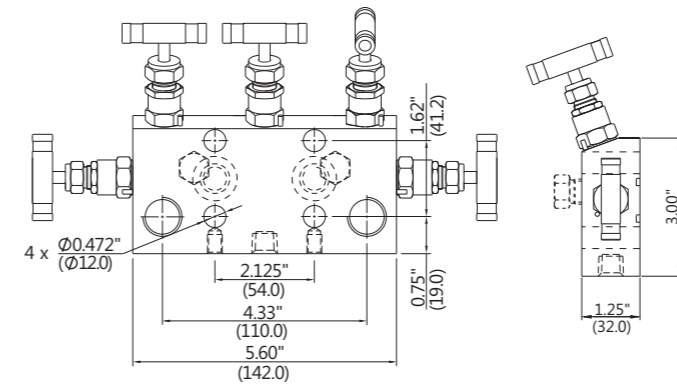
Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-5R-FNT8-A	1/2 Female NPT	1/2 Female NPT	1/4 Female NPT
-5R-S8-FNT8-A	1/2" FINELOK	1/2 Female NPT	1/4 Female NPT



5-valve Custody Transfer/Fiscal Metering Manifold

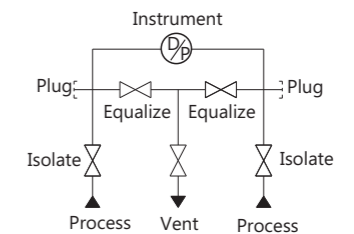
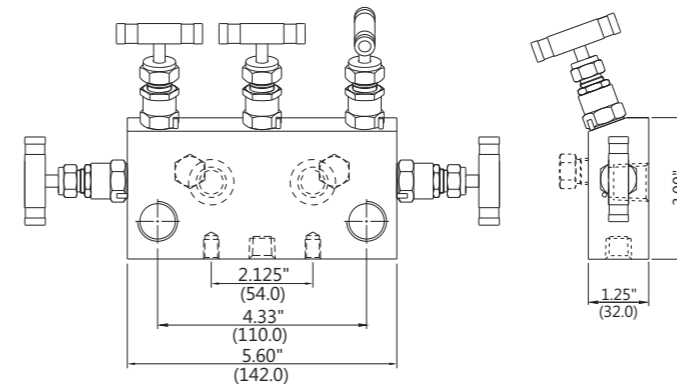
Consist of two block valves, one bleed valve, and two equalizer valves

Basic Ordering Number	Inlet/Process	Outlet/Instrument	Vent	Test
-5D-FNT8-B	1/2 Female NPT	Flanged	1/4 Female NPT	Optional
-5D-S8-B	1/2" FINELOK	Flanged	1/4 Female NPT	Optional



Every manifold is supplied with two PTFE sealing rings for manifold-to-instrument and four 7/16" UNF x 1.75" high tensile bolts.

Basic Ordering Number	Inlet/Process	Outlet/Instrument	Vent	Test
-5R-FNT8-B	1/2 Female NPT	1/2 Female NPT	1/4 Female NPT	Optional
-5R-S8-FNT8-B	1/2" FINELOK	1/2 Female NPT	1/4 Female NPT	Optional



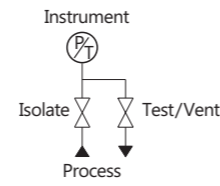
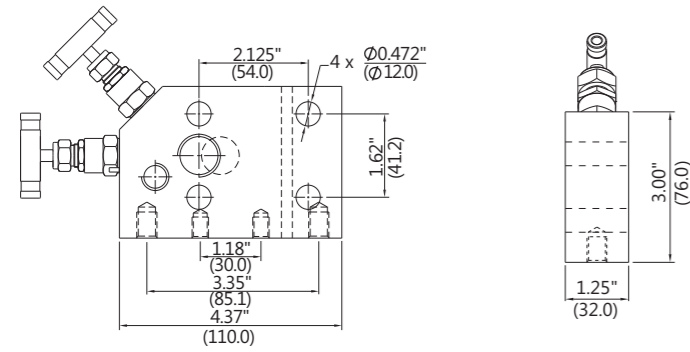
C Integral Manifolds

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.

Each of the following manifold contains four 7/16" UNF x 1.75" high tensile bolts.

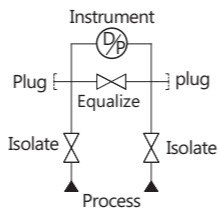
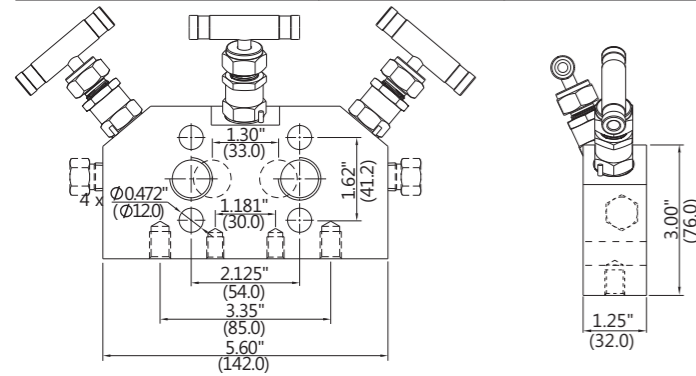
2-valve Manifold

Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-2D-FNT8-C	1/2 Female NPT	Flanged	1/4 Female NPT



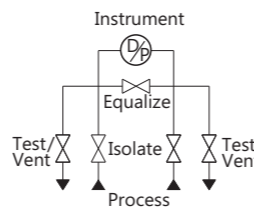
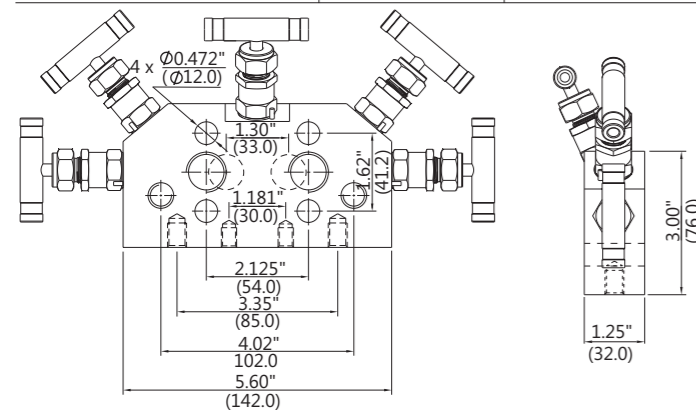
3-valve Manifold

Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-3D-FNT8-C	1/2 Female NPT	Flange	Optional
-3D-S8-C	1/2" FINELOK	Flange	Optional



5-valve Manifold

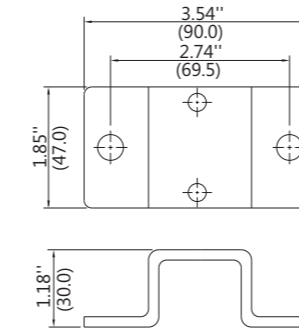
Basic Ordering Number	Inlet/Process	Outlet/Instrument	Test/Vent
-5D-FNT8-C	1/2 Female NPT	Flange	1/4 Female NPT
-5D-S8-C	1/2" FINELOK	Flange	1/4 Female NPT



Manifold Bracket Supports

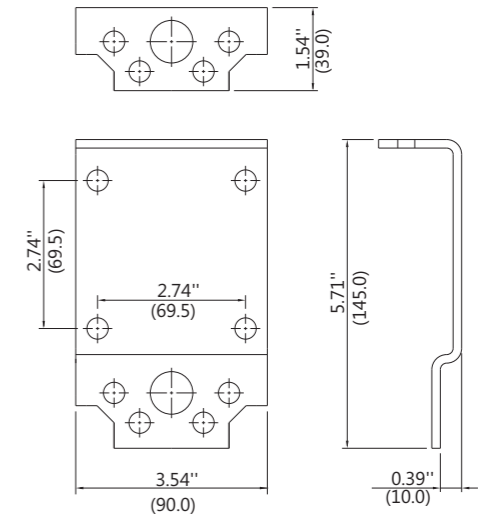
SS-MBS-2BK

- The integral assembly including: bracket, U-bolts, bolts, gaskets, nuts



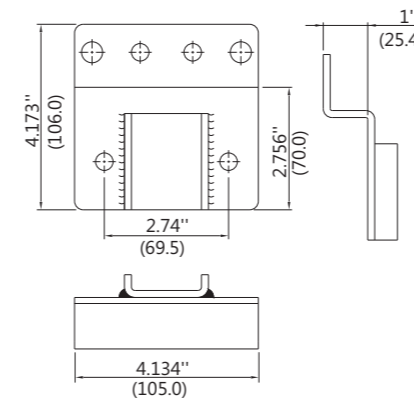
SS-MBS-4BK

- Install support design is available for horizontal or vertical installation
- The integral assembly including: bracket, U-bolts, bolts, gaskets, nuts



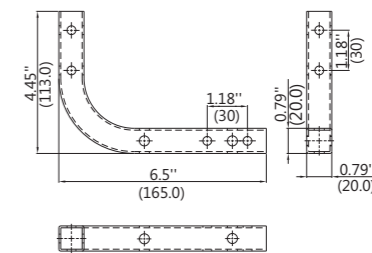
SS-MBS-6BK

- The integral assembly including: bracket, U-bolts, bolts, gaskets, nuts



SS-MBS-8BK

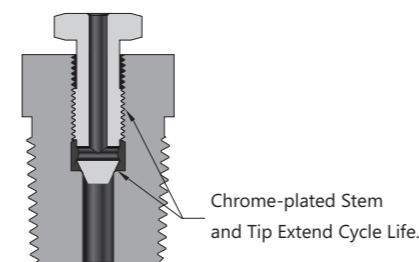
- Install support design is available for horizontal or vertical installation
- The integral assembly including: bracket, U-bolts, bolts, gaskets, nuts



For more installation information regarding other manifolds, please contact the authorized representative or FINELOK.

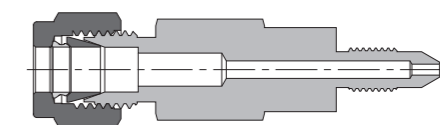
Relief Valve

- ☆ BL series SS-BL-NT4 Bleed Valve is used as standard test/vent valve.
- ☆ For more information, refer to FINELOK Bleed Valve BL series.



Calibration Fitting

- ☆ The calibration fittings can be connected directly with the bleed port of transmitter so that the calibration process can be simplified.
- ☆ For more information, refer to FINELOK Calibration Fitting.



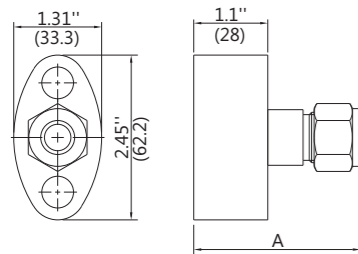
Accessories

Kidney Flange and Eccentric Flange

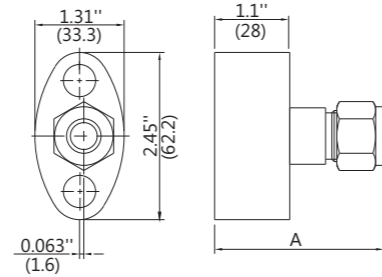
Features

- ☆ Working temperature :
 - PTFE: -65°F to 450°F (-54°C to 232°C)
 - Graphite: -65°F to 1000°F (-54°C to 538°C)
- ☆ Integral forged body
- ☆ Standard material: A182 F316

Kidney Flange



Eccentric Flange



The process connection type of transmitter can be transformed to other connection types.

Ordering Information

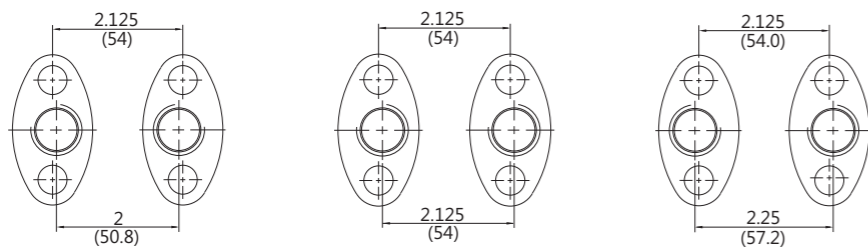
Basic Ordering Number	Connection Type and Size	Dimension in. (mm)
		A
SS-KF-FNT4	1/4 Female NPT	1.1 (28)
SS-KF-FNT8	1/2 Female NPT	1.1 (28)
SS-KF-S8	1/2" FINELOK	2.48 (63)
SS-KF-BW8	1/2 BW	2.1 (53.3)

A kidney flange set contains a PTFE flange seal ring and two 7/16 - 20 UNF high tensile bolts.

The Selection of Flange Seal Materials

The standard flange seal material is PTFE, graphite is an option, to order graphite flange seal material, add -G as a suffix.

Various Combinations of Eccentric Flange Set



Combinations of eccentric flange set can give different center line distances of 2.0" (50.8 mm) , 2.125" (54 mm) and 2.25" (57 mm).

Ordering Information

Basic Ordering Number	Connection Type and Size	Dimension in. (mm)
		A
SS-EF-FNT4	1/4 Female NPT	1.1 (28)
SS-EF-FNT8	1/2 Female NPT	1.1 (28)
SS-EF-S8	1/2" FINELOK	2.48 (63)
SS-EF-BW8	1/2 BW	2.1 (53.3)

1. Eccentric flange needs to be ordered in whole set.
2. A whole eccentric flange set contains two eccentric flanges, two PTFE flange seal rings and four 7/16 - 20 UNF high tensile bolts.

Ordering Information

