

Anderson Greenwood Instrumentation Manifolds - Two Valve

Versatile two-valve static pressure manifolds with a variety of inlet and outlet connections that enable isolation, calibration and venting within a single unit.

General Application

Specifically designed for use with pressure transmitters, gauges and switches in liquid and vapor service, all models are ideal for instrument isolation and provide the ability to vent or calibrate to a separate threaded port.

TECHNICAL DATA

Materials:

316 SS, Monel® and other exotic materials

Seats:

Metal

Connections:

Instrument: ½" NPT threaded

Process: ½" NPT threaded or flanged

Pressure (max):

10,000 psig (689 barg)

Temperature (min/max):

-313°F to 1000°F

(-192°C to 538°C)

Monel® is a registered trademark of Special Metals Corporation.



Features

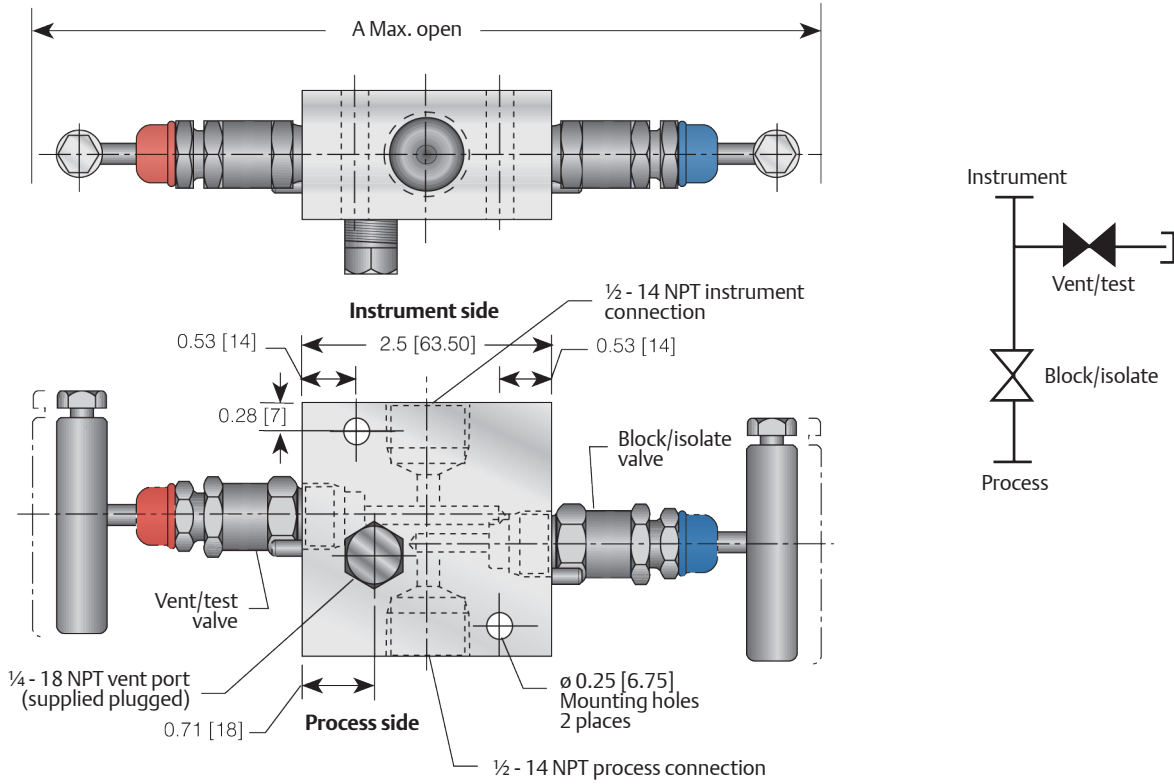
- Remote mounting compact design requires minimum space for operation and installation.
- Reduce installation costs by manifolding the valves, eliminating several components essential for 'piping-up'.
- Free-swivelling ball end stem ensures perfect alignment, providing repeated and consistent bubble-tight shutoff and long life.
- PTFE or graphite packing below stem threads prevents lubricant washout and thread corrosion.
- Back seat stem prevents blowout or accidental removal.
- Threaded vent ports allow vent to be piped away safely. Supplied plugged as standard.
- All manifolds supplied with mounting holes as standard to enable pipe bracket mounting.

M25/M251 SERIES

Anderson Greenwood Instrumentation Manifolds - Two Valve

M25 & M251 Dimensions

M25 and M251 dimensions, Inches (mm) Threaded x Threaded - Front Vent



Dimensions, Inches (mm)

| Packing | A |
|---------------------|--------------|
| PTFE & Graphite | 7.80 (198.1) |
| E Series / Graphite | 8.46 (215) |

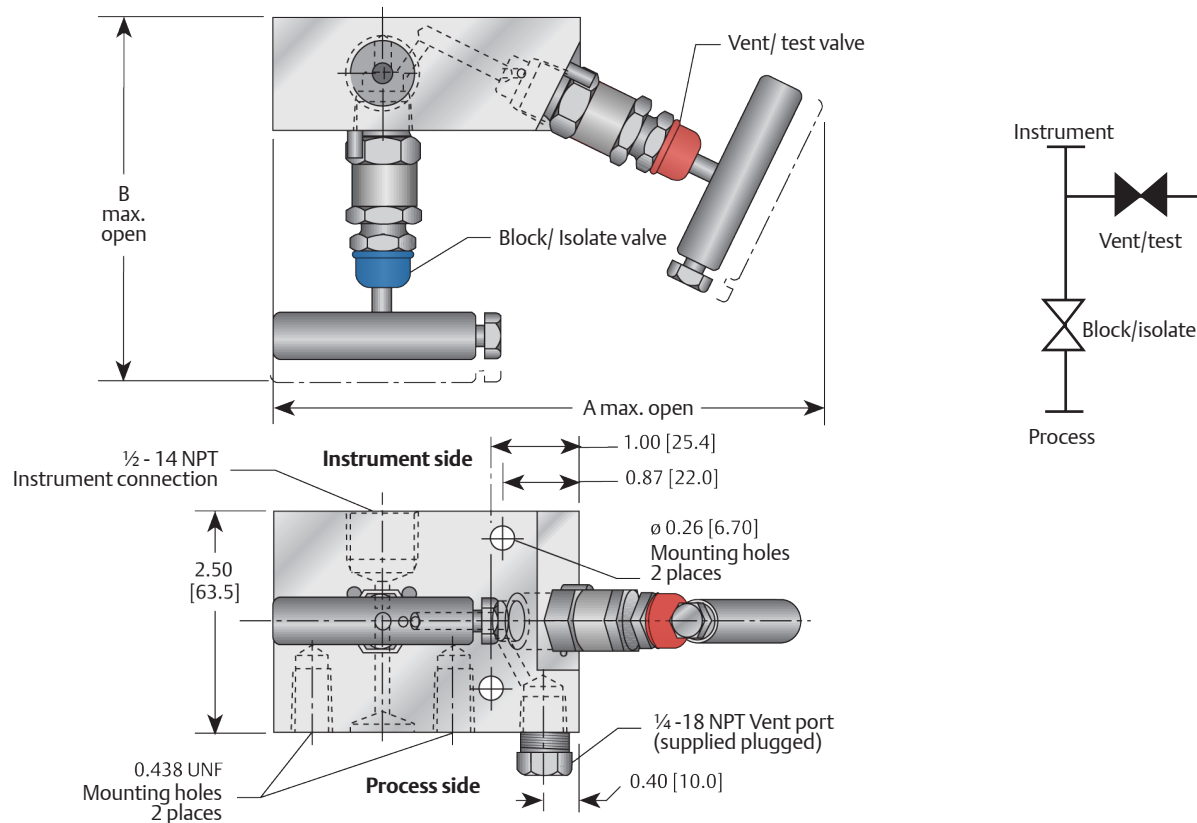
NOTES

1. Approximate valve weight: 2.2 lb [1.0 kg]. 0.187-inch [4.8 mm] diameter orifice. Valve Cv 0.52 maximum.
2. The M25 and M251 are supplied as standard with two 0.26-inch [6.7 mm] diameter mounting holes.

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M25A Dimensions

M25A Dimensions, Inches (mm) Flanged x Threaded (Bottom Vent)



Dimensions, Inches (mm)

| Packing | A | B |
|---------------------|--------------|-------------|
| PTFE & Graphite | 6.15 (156.2) | 3.90 (99.1) |
| E Series / Graphite | 6.44 (164) | 4.31 (109) |

NOTES

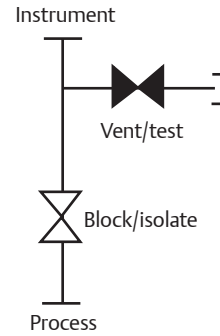
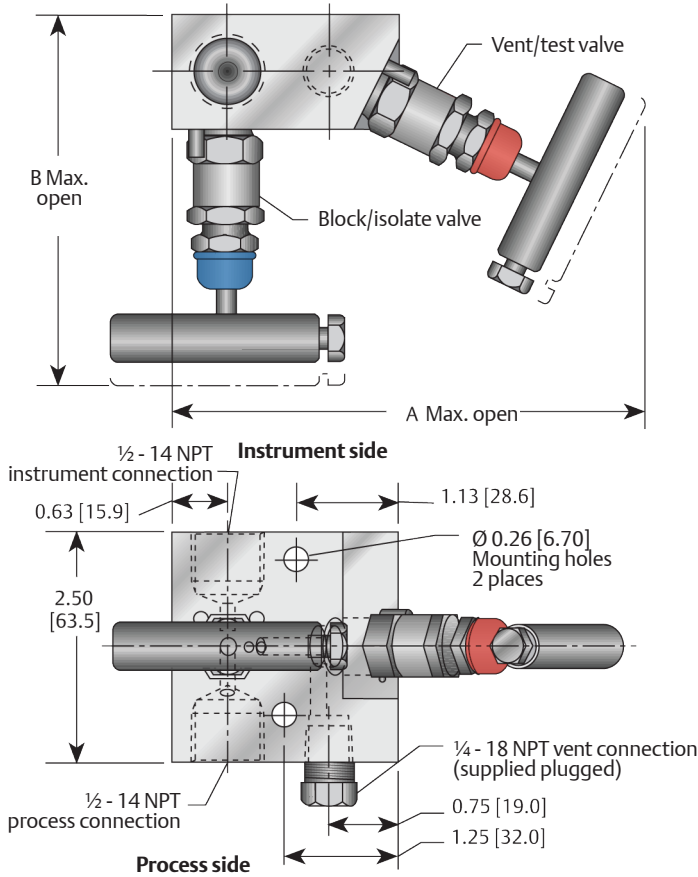
1. Approximate valve weight: 3.3 lb [1.5 kg]. 0.187-inch [4.8 mm] diameter orifice. Valve Cv 0.52 maximum.
2. The M25A is supplied as standard with two 0.26-inch [6.7 mm] diameter mounting holes.

M25A/M25B/M251B SERIES

Anderson Greenwood Instrumentation Manifolds - Two Valve

M25B & M251B Dimensions

M25B and M251B Dimensions, inches (mm) Threaded x Threaded (Bottom vent)



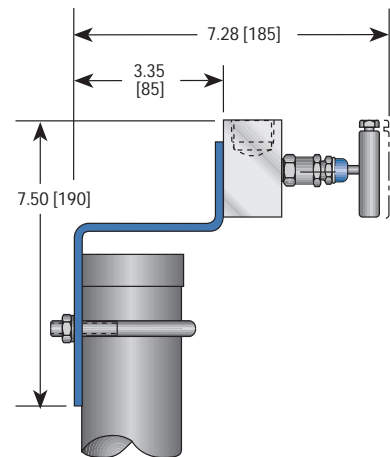
| Dimensions, Inches (mm) | | |
|-------------------------|-------------|------------|
| Packing | A | B |
| PTFE & Graphite | 5.15(130.8) | 3.90(99.1) |

Mount AM

The AGI Mount principle is to mount the manifold not the instrument enabling easier loop installation and lower on-going maintenance costs. M25A, M25B and M251B are available with an AM AGI Mount suitable for 2-inch NB pipestand. Supplied in zinc plated CS as standard.

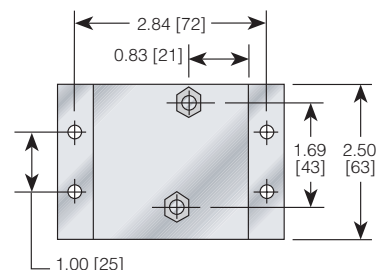
NOTES

1. Approximate valve weight: 2.2 lb [1.0 kg].
0.187-inch [4.8 mm] diameter orifice.
Valve Cv 0.52 maximum.
2. The M25B and M251B are supplied as standard with two 0.26-inch [6.7 mm] diameter mounting holes.



Wall Mounting Bracket AMW

A wall mounting bracket is available suitable for M25A, M25B, M251B.



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Valve Bonnet Identification

Dust cap or ring label coding: The valve bonnet dust caps are color coded to identify functionality.

Blue: Isolation

Red: Vent

Bonnet Assemblies

The metal-seated bonnet assemblies have a rotating stem with free swivel ball-end seat for long service life. The specially hardened ball seat is ideal for both gas and liquid service.

All stem threads are rolled and lubricated to prevent galling and reduce operating torque. The stem seal is PTFE or Graphite packing gland which is adjustable in service. All bonnets are assembled with a bonnet locking pin to prevent accidental removal while in service and a protective dust cap is fitted to contain stem lubricant and prevent the influx of contaminants.



Special Severe Service Materials

Duplex UNS S31803

6MO UNS S31254

Hastelloy® C276

Inconel 625

316 SS and Monel® valves are suitable for most process applications, however for severe service, M25/M251 valves are also available in the above exotic materials. For any other material requirements, please consult the factory.

Connections

Standard Connections

Process and instrument M25, M251 M25B and M251B:

Threaded ½-inch NPT to ANSI/ASME B1-20-1.
M25A has a flanged inlet connection.

Vent Threaded ¼-inch NPT to ANSI/ASME B1-20-1.

Other connections

Threaded BSP Tr to BS21
BSP F to BS2779

Please consult the factory for availability.

Standard Materials

| Valve ^[2] | Body | Bonnet | Stem | Ball seat |
|----------------------|------------|------------|------------|-------------|
| 316 SS | 316 SS | 316 SS | 316 SS | 316 SS |
| Monel® | Monel® 400 | Monel® 400 | Monel® 400 | Monel® K500 |
| SG ³ | 316 SS | 316 SS | Monel® 400 | Monel® K500 |

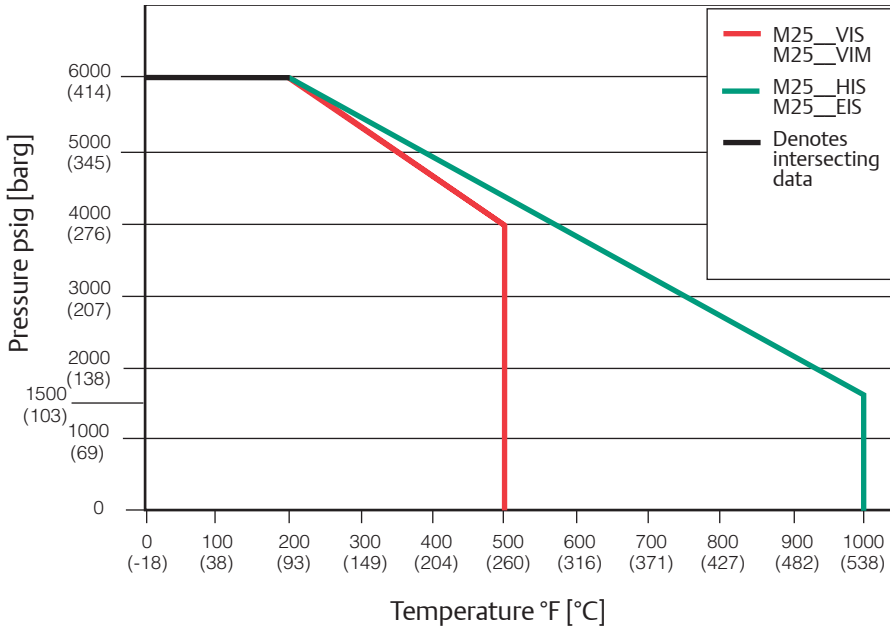
NOTES

1. Threaded connection: vent supplied with blanking plug as standard.
2. Approximate valve weight: 3.3 lb [1.5 kg]. 0.187-inch [4.8 mm] diameter orifice. Valve Cv 0.52 maximum.
3. SG (Sour Gas) meets the requirements of NACE MR0175/ISO 15156 (for chloride conditions ≤ 50 mg/l (ppm)) and NACE MR0103-2005.

M25/M25A/M25B/M251/M251B SERIES

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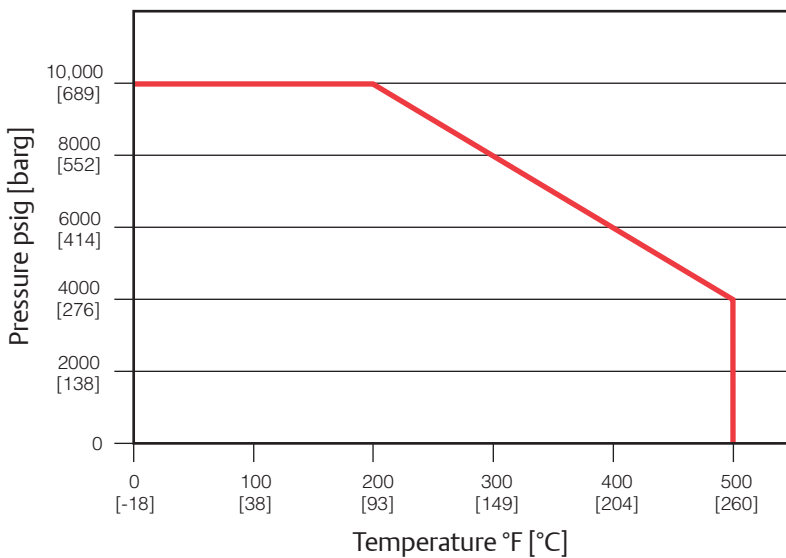
Pressure vs. Temperature - M25, M25A and M25B



Pressure and Temperature Ratings - M25, M25A and M25B

| Valve | PTFE bonnet (standard) | |
|------------|------------------------|---------------------|
| 316 SS | 6000 psig at 200°F | [414 barg at 93°C] |
| and Monel® | 4000 psig at 500°F | [276 barg at 260°C] |
| Valve | High Temperature | |
| 316 SS | 6000 psig at 200°F | [414 barg at 93°C] |
| | 1500 psig at 1000°F | [103 barg at 538°C] |

Pressure vs. Temperature - M251 and M251B



Pressure and Temperature Ratings - M251 and M251B

| Valve | High Pressure | |
|--------|---------------------|---------------------|
| 316 SS | 10000 psig at 200°F | [689 barg at 93°C] |
| | 4000 psig at 500°F | [276 barg at 260°C] |

Anderson Greenwood Instrumentation Manifolds - Two Valve

Selection Guide - M25, M25A, M25B

| M25A | | V | I | S | -4 | -SG |
|--------------|-----------------------------------|--------------------------|------------|---------------|--|---|
| BASIC SERIES | | PACKING | SEAT | BODY MATERIAL | PROCESS CONNECTIONS | OPTIONS |
| M25 | Threaded x threaded (front vent) | V PTFE | I Integral | S- 316 SS | M25A - Inlet x Outlet 4 Flanged x ½-inch FNPT | BL Bonnet lock device |
| M25A | Flanged x threaded (bottom vent) | H Graphite | | M Monel® | M25/M25B - Inlet x Outlet 2 ¼-inch FNPT x ¼-inch FNPT Vent | K Key for -AT |
| M25B | Threaded x threaded (bottom vent) | E Low emissions graphite | | | 4 ½-inch FNPT x ½-inch FNPT Vent | AMW Wall mounting bracket (M25A, M25B only) AM AGCO Mount 2NB pipestand OC00 Cleaned for oxygen service PD Padlock for -LAT SG SG (Sour Gas) meets the requirements of NACE MR0175/ISO 15156 (for chloride conditions ≤ 50 mg/l (ppm)) and NACE MR0103-2005 ST Stellite ball ended stem SST 316SS Circular Tag (10 Character max) AT Tamper proof bonnet LAT Lockable tamper proof bonnet PMI00 PMI Body PMI01 PMI Body and Bonnet PMI02 PMI Body, Bonnet and Stem SS All 316 SS material for non wetted components LT Low Temperature 316SS valves -313°F (-192°C) @ 2500 psi (172 bar) for integral seat (I) graphite packing. Must include -SBB option to use |

M251/M251B SERIES

Anderson Greenwood Instrumentation Manifolds - Two Valve

Selection Guide - M251, M251B

| M251 | | V | I | S | -4 | -SG |
|---|---------|------------|---------------|------------------------------------|---|-----|
| BASIC SERIES | PACKING | SEAT | BODY MATERIAL | PROCESS CONNECTIONS INLET X OUTLET | OPTIONS | |
| M251 Threaded x Threaded (Front Vent) | V PTFE | I Integral | S 316 SS | 2 ¼-inch FNPT x ¼-inch FNPT Vent | BL Bonnet lock device | |
| M251B Flanged x Threaded (Bottom Vent) | | | M Monel® | 4 ½-inch FNPT x ½-inch FNPT Vent | K Key for -AT AMW Wall mounting bracket (M251B only) AM AGCO Mount 2NB pipestand OC00 Cleaned for oxygen service PD Padlock for -LAT SG SG (Sour Gas) meets the requirements of NACE MR0175/ISO 15156 (for chloride conditions ≤ 50 mg/l (ppm)) and NACE MRO 103-2005 ST Stellite ball ended stem and NACE MRO 103-2005 SST 316SS Circular Tag (10 Characters Max) AT Tamper proof bonnet LAT Lockable tamper proof bonnet SS All 316 SS material for non wetted components | |