

## ANDERSON GREENWOOD M25/M25A/M25B/M251/M251B MANIFOLDS

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



### FEATURES

- Remote mounting compact design requires minimum space for operation and installation.
- Reduced installation costs by manifolding the valves, eliminating several components essential for 'piping-up'.
- Free-swivelling ball end stem ensures perfect alignment, providing repetitive 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.

### GENERAL APPLICATION

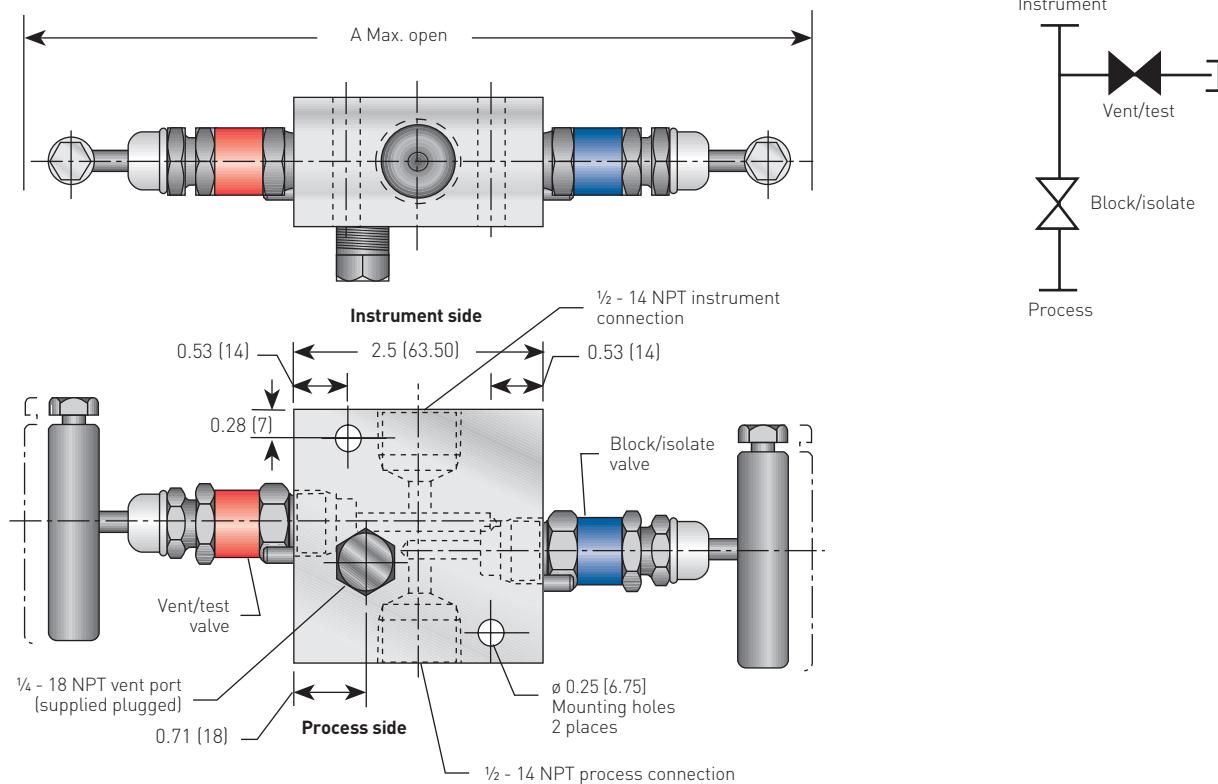
Especially designed for use with pressure transmitters, gauges and switches in liquid and vapor service, all models are for instrument isolation with the ability to vent or calibrate to a separate threaded port.

### TECHNICAL DATA

Materials:	SS, Monel and other exotic materials
Seats:	Metal
Connections	1/2" NPT threaded
Instrument:	1/2" NPT threaded or flanged
Process:	flanged
Pressure (max.):	10000 psig (689 barg)
Temperature (max.):	1000°F (538°C)

# ANDERSON GREENWOOD M25/M25A/M25B/M251/M251B MANIFOLDS

## M25 AND M251 DIMENSIONS, INCHES (mm) THREADED X THREADED - FRONT VENT



## DIMENSIONS, INCHES (mm)

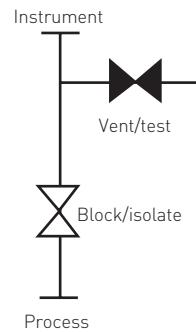
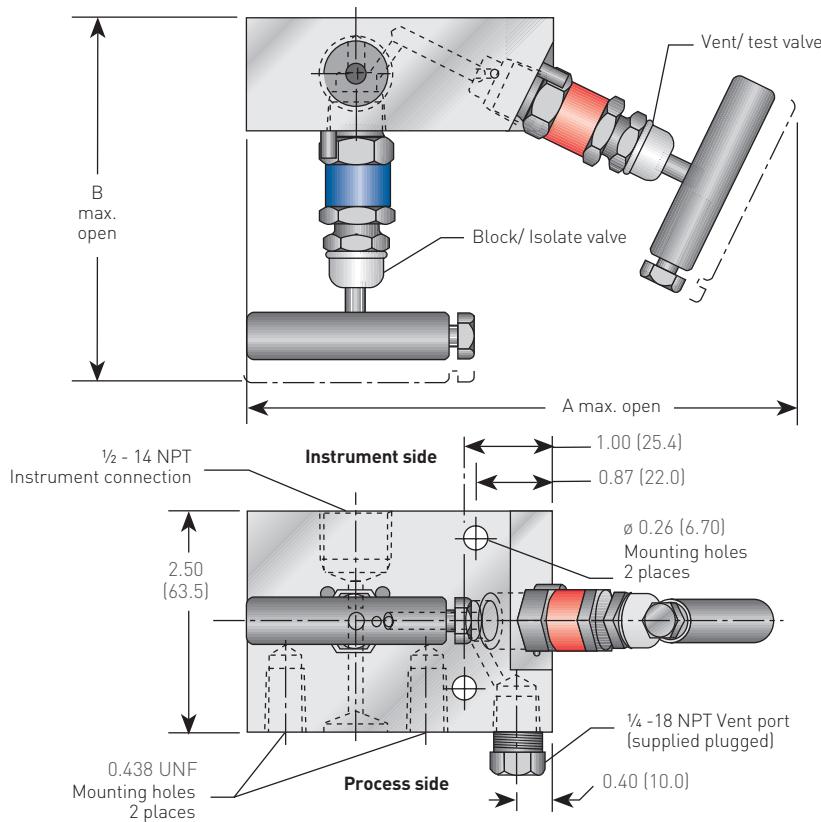
Packing	A
PTFE	7.87 (200)
GRAFOIL®	8.98 (228)

## NOTES

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

# ANDERSON GREENWOOD M25/M25A/M25B/M251/M251B MANIFOLDS

## M25A DIMENSIONS, INCHES (mm) FLANGED X THREADED (BOTTOM VENT)



## DIMENSIONS, INCHES (mm)

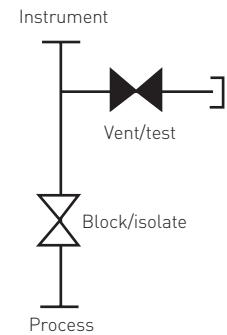
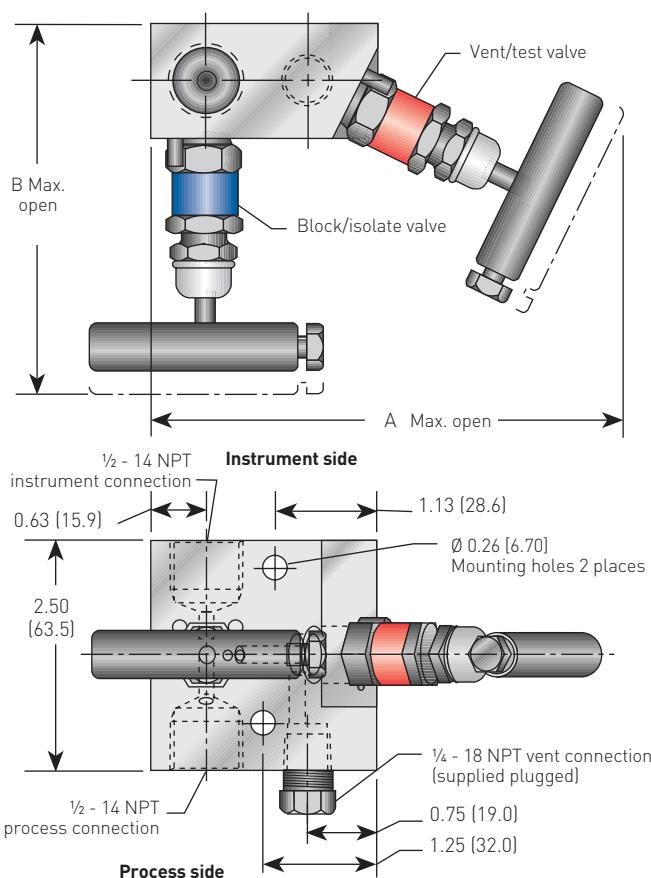
Packing	A	B
PTFE	6.26 (159)	3.95 (100)
GRAFOIL®	6.70 (170)	4.57 (116)

## NOTES

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

# ANDERSON GREENWOOD M25/M25A/M25B/M251/M251B MANIFOLDS

M25B AND M251B DIMENSIONS, INCHES (mm) THREADED X THREADED  
(Bottom vent)



## DIMENSIONS, INCHES (mm)

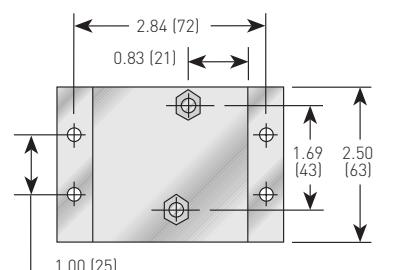
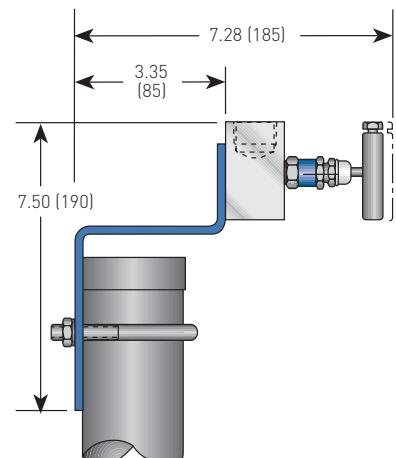
Packing	A	B
PTFE	5.38 (134)	3.95 (100)
GRAFOIL®	5.71 (145)	4.57 (116)

## AGCO MOUNT AM

The AGCO 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 AGCO 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.

# ANDERSON GREENWOOD M25/M25A/M25B/M251/M251B MANIFOLDS

## VALVE BONNET IDENTIFICATION

**Dust cap coding:** the valve bonnet dust caps are color coded to identify the gland packing/stem.  
White: Standard bonnet assembly PTFE packing.  
Blue: High pressure bonnet assembly PTFE packing.  
Green: Sour Gas service PTFE packing.

## SPECIAL SEVERE SERVICE MATERIALS

Duplex UNS S31803  
6MO UNS S31254  
Hastelloy® C276  
Inconel 625

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 1/2 inch NPT to ANSI/ASME B1-20-1.

M25A has a flanged inlet connection.

Vent Threaded 1/4 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 <sup>2</sup>	Body	Bonnet	Stem	Ball seat
SS	316 SS	316 SS	316 SS	316 SS
Monel®	Monel® 400	Monel® 400	Monel® 400	Monel® K500
SG <sup>3</sup>	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.

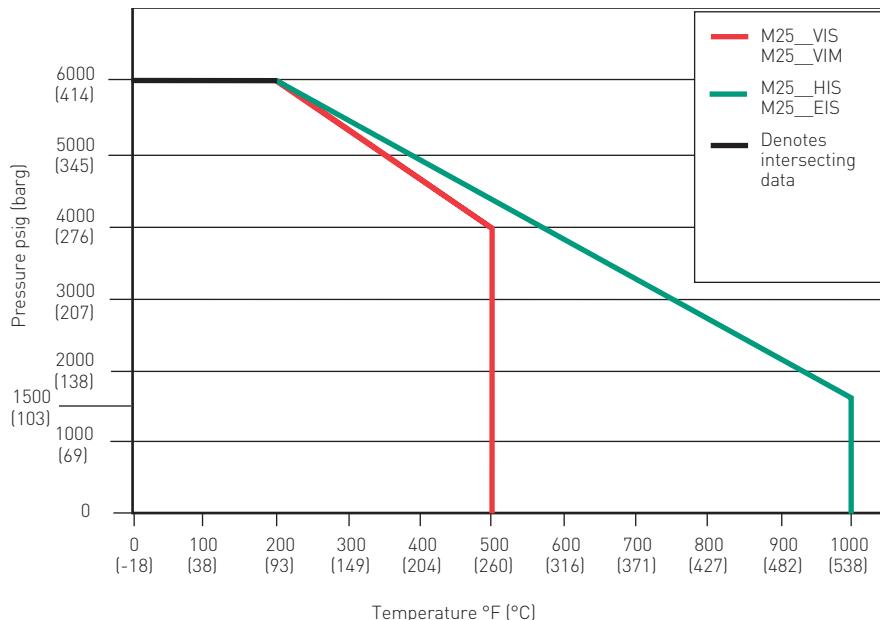
## BONNET ASSEMBLIES

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 a patented PTFE 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.

# ANDERSON GREENWOOD M25/M25A/M25B/M251/M251B MANIFOLDS

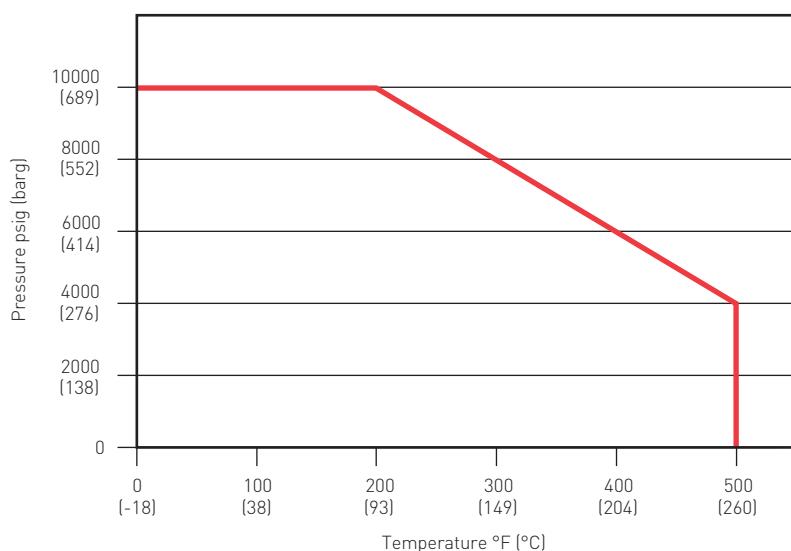
## PRESSURE VS. TEMPERATURE - M25, M25A AND M25B



## PRESSURE AND TEMPERATURE RATINGS - M25, M25A AND M25B

Valve	PTFE bonnet (standard)	
SS and Monel®	6000 psig at 200°F	(414 barg at 93°C)
	4000 psig at 500°F	(276 barg at 260°C)
Valve	High temperature	
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	
SS	10000 psig at 200°F	(689 barg at 93°C)
	4000 psig at 500°F	(276 barg at 260°C)

# ANDERSON GREENWOOD M25/M25A/M25B/M251/M251B MANIFOLDS

## SELECTION GUIDE - M25, M25A, M25B

Example:	M25A	V	I	S	-4	-SG
<b>Valve type</b>						
<b>M25</b> Threaded x threaded (front vent)						
<b>M25A</b> Flanged x threaded (bottom vent)						
<b>M25B</b> Threaded x threaded (bottom vent)						
<b>Packing</b>						
<b>V</b> PTFE						
<b>H</b> GRAFOIL®						
<b>E</b> Low emissions graphite						
<b>Seat</b>						
<b>I</b> Integral						
<b>Body material</b>						
<b>S</b> SS						
<b>M</b> Monel®						
<b>Process connections</b>						
<b>M25A - Inlet x outlet</b>						
<b>4</b> Flanged x 1/2 inch FNPT	<b>2</b>	1/4 inch FNPT x 1/4 inch FNPT				
	<b>4</b>	1/2 inch FNPT x 1/2 inch FNPT				
<b>Options</b>						
<b>-BL</b> Bonnet lock device						
<b>-K</b> Key for -AT						
<b>-AMW</b> Wall mounting bracket [M25A, M25B only]						
<b>-AM</b> AGCO Mount 2NB pipestand						
<b>-OC00</b> Cleaned for oxygen service						
<b>-PD</b> Padlock for -LAT						
<b>-SG</b> Sour Gas meets the requirements of NACE MR0175-latest revision [SS valves only]						
<b>-ST</b> Stellite ball ended stem						
<b>-AT</b> Tamper proof bonnet						
<b>-LAT</b> Lockable tamper proof bonnet						

# ANDERSON GREENWOOD M25/M25A/M25B/M251/M251B MANIFOLDS

## SELECTION GUIDE - M251, M251B

Example:	M251	V	I	S	-4	-SG
<b>Valve type</b>						
<b>M251</b> Threaded x threaded (front vent)						
<b>M251B</b> Threaded x threaded (bottom vent)						
<b>Packing</b>						
<b>V</b> PTFE						
<b>Seat</b>						
<b>I</b> Integral						
<b>Body material</b>						
<b>S</b> SS						
<b>M</b> Monel®						
<b>Process connections (inlet x outlet)</b>						
<b>2</b> 1/4 inch FNPT x 1/4 inch FNPT						
<b>4</b> 1/2 inch FNPT x 1/2 inch FNPT						
<b>Options</b>						
<b>-BL</b> Bonnet lock device						
<b>-K</b> Key for -AT						
<b>-AMW</b> Wall mounting bracket (M251B only)						
<b>-AM</b> AGCO Mount 2NB pipestand						
<b>-OC00</b> Cleaned for oxygen service						
<b>-PD</b> Padlock for -LAT						
<b>-SG</b> Sour Gas meets the requirements of NACE MR0175-latest revision (SS valves only)						
<b>-ST</b> Stellite ball ended stem						
<b>-AT</b> Tamper proof bonnet						
<b>-LAT</b> Lockable tamper proof bonnet						

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