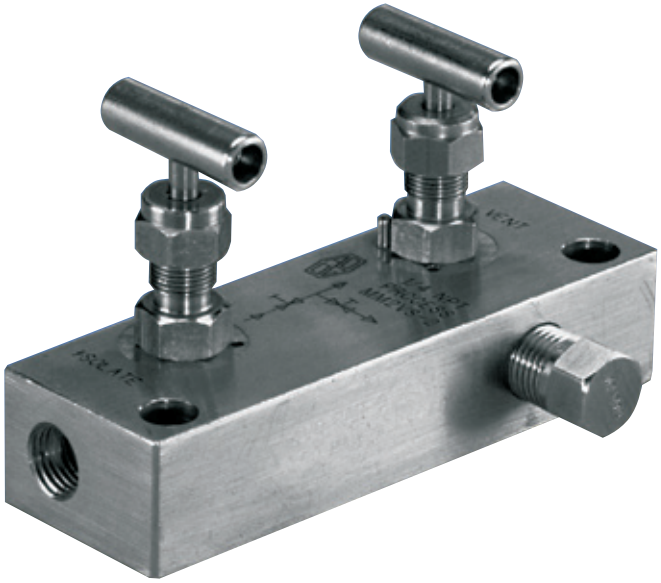
ANDERSON GREENWOOD MM2 STATIC PRESSURE MANIFOLD

Compact stainless steel block and bleed static pressure manifold incorporating mini-valve bonnets with an interchangeable hard or soft seat



FEATURES

- Remote mounting compact design requires minimum space for operation and installation.
- Reduced installation costs by manifolding the valves, eliminating several parts essential for 'piping-up.'
- Unique seat design enables conversion from metal to soft simply by fitting a soft seat and flow washer.
- Soft seats are field replaceable for easy maintenance, extending valve life.
- Rolled stem threads provide increased strength and smooth valve operation, extending valve life.
- Back seat stem prevents blowout under pressure or during operation.
- Threaded vent ports allow vent to be piped away safely. Supplied plugged as standard.
- All manifolds supplied with mounting holes as standard to enable surface or cabinet mounting.

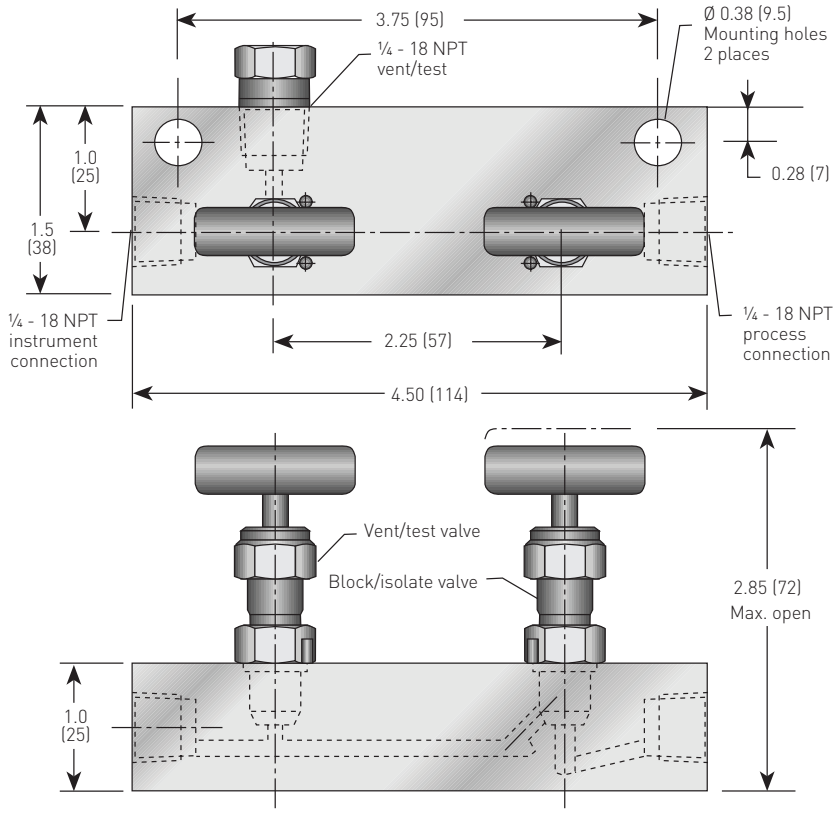
GENERAL APPLICATION

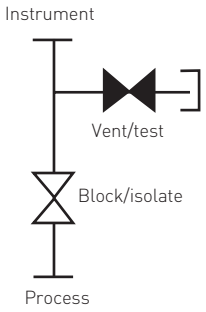
Suitable for use in compact instrument control loops for static pressure/gauge instruments; for mounting in control panels and for gas sampling equipment.

TECHNICAL DATA

Materials:	SS
Seats:	Metal or soft
Connections	
Instrument:	¼" NPT
Process:	¼" NPT
Pressure (max.):	6000 psig (414 barg)
Temperature (max.):	1000°F (538°C)

DIMENSIONS, INCHES (mm) THREADED X THREADED





STANDARD MATERIALS - METAL SEAT

Valve[1]	Body	Bonnet	Stem	Packing	Seat
SS	316 SS	316 SS	316 SS	PTFE, FKM O-ring or Grafoil®	Integral
SG[3]	316 SS	316 SS	Monel® 400	PTFE	Integral

STANDARD MATERIALS - SOFT SEAT

Valve[1]	Body	Bonnet	Stem	Packing	Flow washer	Seat
SS	316 SS	316 SS	316 SS	PTFE or FKM O-ring	316 SS	PCTFE[2]

BONNET ASSEMBLY

The MM2 features the mini-valve bonnet assembly with a compact design and a one-piece rotating stem which is 'V' tipped with a shoulder for use as a metal or soft seated valve. The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
The mini-valve bonnet comes in three designs:

- An adjustable PTFE stem packed bonnet which is suitable for panel mounting via external bonnet threads.
- O-ring bonnet assemblies which use a FKM O-ring seal below the stem thread.
- A graphite-packed bonnet suitable for temperatures of up to 1000° F (538° C) which is available for SS valves only.

SOFT SEAT

All miniature manifolds and valves feature a unique valve seat which may be converted from metal to soft simply by fitting a soft seat and flow washer. SS valves use PCTFE[2] soft seat as standard. Delrin® and PEEK seats are also available.

CONNECTIONS

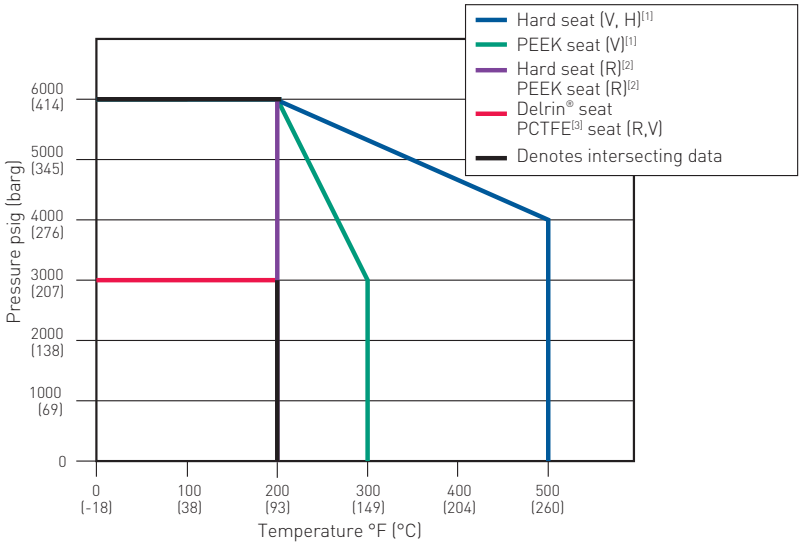
Standard connections

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

NOTES

1. Approximate valve weight: 2.0 lb (.90 kg).
   0.136-inch (3.5 mm) diameter orifice.
   Valve C_v hard seat 0.25 maximum.
   Valve C_v soft seat 0.24 maximum.
2. PCTFE (Polychlorotrifluoroethylene) is the exact equivalent of Kel-F®.
3. SG (Sour Gas) meets the requirements of NACE MR0175/ISO 15156 (for chloride conditions ⩽ 50 mg/l (ppm)) and NACE MR0103-2005.
4. Threaded connection: vent supplied with blanking plug as standard.

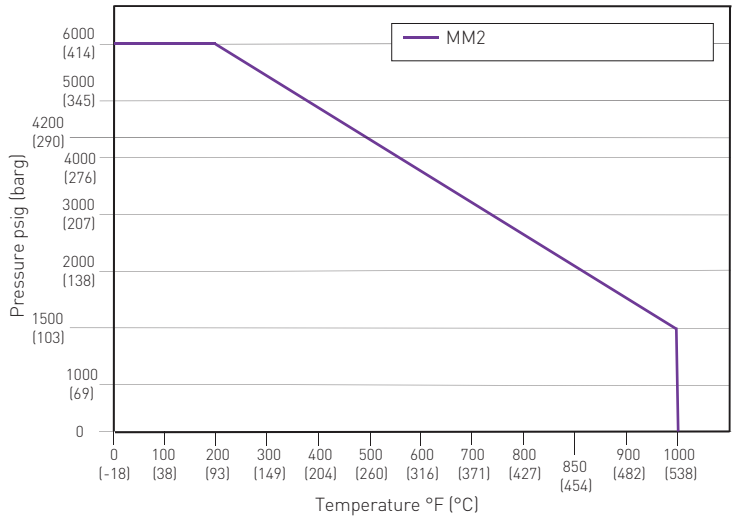
PRESSURE VS. TEMPERATURE - SS valves



NOTES

1. (V or H) = with PTFE or GRAFOIL® bonnet assemblies.
2. (R) = with O-ring bonnet assembly.
3. PCTFE (Polychlorotrifluoroethylene) is the exact equivalent of Kel-F®.

PRESSURE VS TEMPERATURE - SS valves with Grafoil® bonnet



PRESSURE AND TEMPERATURE RATINGS

Valve	PTFE packed	Grafoil® packed
Hard seat	6000 psig at 200°F (414 barg at 93°C) 4000 psig at 500°F (276 barg at 260°C)	6000 psig at 200°F (414 barg at 93°C) 1500 psig at 1000°F (103 barg at 538°C)
Delrin®/PCTFE	3000 psig at 200°F (207 barg at 93°C)	
PEEK	6000 psig at 200°F (414 barg at 93°C) 3000 psig at 300°F (207 barg at 149°C)	

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SELECTION GUIDE

Example:		MM2	V	D	S	-2	-SG
Bonnet packing							
V	PTFE						
R	O-ring bonnet						
H	GRAFOIL® (1000°F (538°C) max)						
Seat							
I	Integral (body material)						
D	Delrin®						
K	PCTFE (Polychlorotrifluoroethylene) is the exact equivalent of Kel-F®						
E	PEEK						
Body material							
S	SS, 316						
Connection							
2	¼-inch FNPT						
Options							
BSP Tr	BSP taper thread						
SG	Sour Gas meets the requirements of NACE MR0175/ISO 15156 (for chloride conditions ≤ 50 mg/l (ppm)) and NACE MR0103-2005						
OC00	Cleaned for oxygen service						
PHB	Phenolic black handle						
PHG	Phenolic green handle						
PHR	Phenolic red handle						
PM	Panel mount (PTFE packed only)						

NOTES

Monel® is a registered trademark of the Special Metals Corporation.
Delrin® is a registered trademark of E.I. du Pont de Nemours and Company.
Grafoil® is a registered trademark of GrafTech International.