A direct mounting two-valve manifold which combines an isolation valve and a vent/calibrate valve in a single unit for static pressures

## **General Application**

A direct mounting two-valve manifold which combines an isolation valve and a vent/calibrate valve in a single unit for static pressures



#### Materials

316 SS, Monel®, Hastelloy® and other exotic materials

#### Seats:

Metal

#### **Connections:**

**Instrument:** Flanged, direct mount to instrument

**Process:** 1/2" NPT

#### Pressure (max):

6000 psig (414 barg) standard 1000 psig (690 barg) optional

### Temperature (min/max):

-70°F to 1000°F (-57°C to 538°C)



### **Features**

- Direct mounting compact design requires minimum space for operation and installation, with fewer potential leak points.
- 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 while in operation.
- Threaded vent ports allow vent to be safely piped away. Supplied plugged as standard.
- Two <sup>7</sup>/<sub>16</sub>" UNF bolts and an instrument seal ring supplied as standard.
- Standard pipe bracket bolts directly to the manifold providing a rigid support for the transmitter.
  Instrument can be removed easily for service or repair.

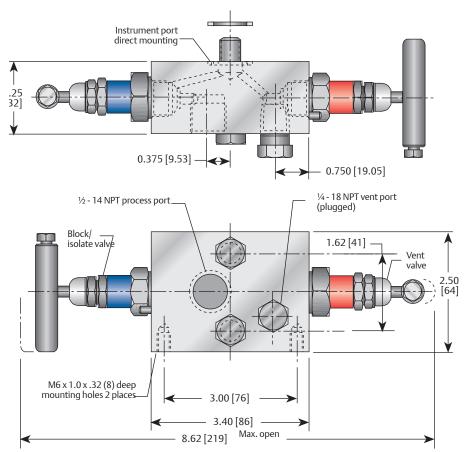


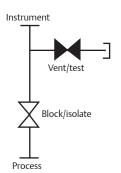
## **A30 SERIES**

## Manifolds - Two Valve

### **A30 Dimensions**

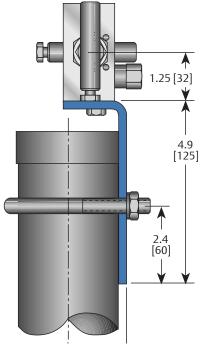
### Dimensions, inches (mm) Threaded x Flanged





## **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.



## **AGCO Mount AM**

A30 is available with a mounting bracket suitable for 2-inch [50 mm] pipestand. Supplied in zinc plated CS as standard. Stainless steel is also available.



### 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.

Green: Sour Gas service PTFE packing.

**Ring labels:** The valve bonnets have color coded ring labels for service identification.

Red: Vent valves Blue: Isolate valves

## **Connections**

### **Standard connections**

Process Threaded ½-inch NPT to ANSI/ASME B1-20-1. Vent Threaded ¼-inch NPT to ANSI/ASME B1-20-1. Instrument Flanged for direct mounting to transmitters.

#### Other connections

Threaded BSP Tr to BS21

BSP F to BS2779

Please consult the factory for availability.

#### NOTES

- 1. Threaded connection: vent supplied with blanking plug as standard.
- 2. All manifolds are supplied with a seal ring and two <sup>7</sup>/<sub>16</sub>-inch UNF HT steel mounting bolts. A PTFE seal ring is supplied with the standard bonnet; a graphite seal ring is supplied with the high temperature bonnet.

## **Special Severe Service Materials**

Duplex UNS S31803 6MO UNS S31254 Hastelloy® C276 316 SS and Monel® valves are suitable for most process applications, however for severe service, A30 valves are also available in the exotic materials listed.

For any other material requirements, please consult the factory.

NOTE

Inconel 625

1. Hastelloy® is a registered trademark of Haynes International, Inc.

## **Standard Materials**

| Valve <sup>[1]</sup> | Valve <sup>[1]</sup> Body      |                       | Bonnet Stem      |             |
|----------------------|--------------------------------|-----------------------|------------------|-------------|
| 316 SS               | 316 SS SS, A479 316            |                       | 316 SS           | 316 SS      |
| Monel® Monel® 400    |                                | Monel® 400 Monel® 400 |                  | Monel® K500 |
| SG <sup>[2]</sup>    | SG <sup>[2]</sup> SS, A479 316 |                       | Monel® 400       | Monel® K500 |
| SG3 <sup>[4]</sup>   | Hastelloy®<br>C-276            | Hastelloy® C-276      | Hastelloy® C-276 | Elgiloy®    |

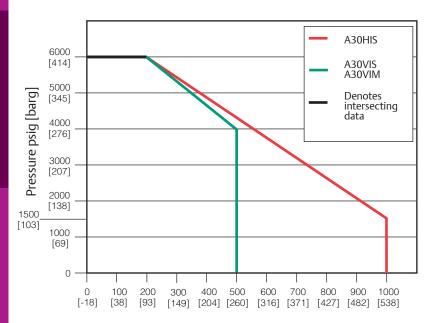
## **NOTES**

- 1. Approximate valve weight: 3.5 lb [1.6 kg]. 0.136-inches [3.5 mm] diameter orifice. Valve Cv 0.25 maximum.
- 2. SG (Sour Gas) meets the requirements of NACE MR0175/ISO 15156 (for chloride conditions ≤ 50 mg/l (ppm)) and NACE MR0103-2005.
- 3. Metal seats are integral with the body.
- 4. SG3 (Sour Gas) meets the requirements of NACE MR0175/ISO 15156 (for chloride conditions > 50 mg/l (ppm)).



# **Pressure and Tempertaure**

## Pressure vs. Temperature



Temperature °F [°C]

## Pressure and Temperature Ratings

| Valve  | PTFE bonnet (standard) |                     |  |  |
|--------|------------------------|---------------------|--|--|
| 316 SS | 6000 psig at 200°F     | [414 barg at 93°C]  |  |  |
| 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] |  |  |  |

# **Selection Guide**

| A30T            | V                 | ı                                | S                | -4                     | -SG  |
|-----------------|-------------------|----------------------------------|------------------|------------------------|--|
| BASIC<br>SERIES | BONNET<br>PACKING | SEAT                             | BODY<br>MATERIAL | PROCESS<br>CONNECTIONS | OPTIONS  |
| A30T            | <b>V</b> PTFE     | 1 Integral<br>(body<br>material) | <b>S</b> 316 SS  | 2 1/4-inch FNPT        | AM AGCO Mount kit for 2-inch pipestand mounting CS   |
|                 | <b>H</b> Graphite |                                  | <b>M</b> Monel®  | 4 1/2-inch FNPT        | AMS AGCO Mount kit for 2-inch pipestand mounting 316 SS  |
|                 |                   |                                  | J Hastelloy®     |                        | OC00 Gaseous oxygen clean  |
|                 |                   |                                  |                  |                        | R3V Installation kit for Rosemount® model 3051C (SS 18-8 bolts)  |
|                 |                   |                                  |                  |                        | SG (Sour Gas) Meets the requirements of NACE<br>MRO175/ISO15156 (for chloride conditions<br><_50 mg/l (ppm)) and NACE MRO103-2005                                |
|                 |                   |                                  |                  |                        | SG3 (Sour Gas) Meets the requirements of NACE<br>MRO175/ISO15156 (for chloride conditions ><br>50 mg/l (ppm)) Hastelloy Material used for all<br>wetted material |
|                 |                   |                                  |                  |                        | SSC 316 flange bolt (B8M) - maximum pressure rating 4500 psi (310 barg)  |
|                 |                   |                                  |                  |                        | SSB 316 SS flange bolt (B8M Class 2) - will provide full pressure rating   |
|                 |                   |                                  |                  |                        | ST Stellite ball ended stem  |
|                 |                   |                                  |                  |                        | AT Tamper proof bonnet   |
|                 |                   |                                  |                  |                        | LAT Lockable tamper proof bonnet   |
|                 |                   |                                  |                  |                        | K Key for AT   |
|                 |                   |                                  |                  |                        | PD Padlock for LAT   |
|                 |                   |                                  |                  |                        | SS 316 SS material of all non wetted components  |

