Manifolds - Two Valve

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

TECHNICAL DATA

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 ⁷/₁₆" 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.



1

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.



Instrument

Process

Vent/test

Block/isolate

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.



Manifolds - Two Valve

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

ProcessThreaded ½-inch NPT to ANSI/ASME B1-20-1.VentThreaded ¼-inch NPT to ANSI/ASME B1-20-1.InstrumentFlanged 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 ⁷/₁₆-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 S31803316 SS and Monel® valves are suitable for most process applications, however for
severe service, A30 valves are also available in the exotic materials listed.6MO UNS S31254severe service, A30 valves are also available in the exotic materials listed.Hastelloy® C276For any other material requirements, please consult the factory.Inconel 625Severe service, A30 valves are also available in the exotic materials listed.

NOTE

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

Standard Materials

Valve ^[1]	Body	Bonnet	Stem	Ball seat ^[3]
316 SS	SS, A479 316	316 SS	316 SS	316 SS
Monel®	Monel [®] 400	Monel [®] 400	Monel [®] 400	Monel [®] K500
SG ^[2]	SS, A479 316	316 SS	Monel [®] 400	Monel [®] K500
SG3 ^[4] Hastelloy [®] 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 \leq 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)).



Manifolds - Two Valve

Pressure and Tempertaure

Pressure vs. Temperature



Temperature °F [°C]

Pressure and Temperature Ratings

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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 ter	nperature	
316 SS	6000 psig at 200°F	[414 barg at 93°C]	
	1500 psig at 1000°F	[103 barg at 538°C]	



Manifolds - Two Valve

Selection Guide

A30T	v	I	S	-4	-SG
BASIC SERIES	BONNET PACKING	SEAT	BODY MATERIAL	PROCESS CONNECTIONS	OPTIONS
A30T	V PTFE	1 Integral (body material)	S 316 SS	2 1/4-inch FNPT	AM AGCO Mount kit for 2-inch pipestand mounting CS
	H Graphite		M 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 MRO175/ISO15156 (for chloride conditions <_50 mg/l (ppm)) and NACE MRO103-2005
					SG3 (Sour Gas) Meets the requirements of NACE MR0175/ISO15156 (for chloride conditions > 50 mg/l (ppm)) Hastelloy Material used for all 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

