Manifolds - Two/Four Valve

The simplest and most effective means to install and calibrate Rosemount® Coplaner™ style transmitters

General Application

AS6 manifolds are designed for use with transmitters on general liquid and gas flow or liquid level measurement. They are all designed to be bolted directly onto a standard Shell mounting plate

TECHNICAL DATA

Materials

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

Seats:

Metal

Connections:

Instrument:

1/2" NPT (AS6B 2/5 only)

G1/2"

Process: G 1/4"

Pressure (max):

6000 psig (414 barg)

Temperature range (min/max):

-70°F to 1000°F (-57°C to 538°C)



Features

- Compact design reduces installation costs and potential leakage points.
- Process inlet and vent connections supplied G ¼" parallel threaded fitted withtube/compression fittings. ¼" NPT female option available.
- Suitable for liquid or gas service.
- Fully self draining.
- Equalize and vent valves fitted with an anti tamper facility.
- Choice of manifold configurations to suit the application:

AS6 2/1 - Double isolate, equalize, vent

AS6 2/2 - Double isolate, double vent

AS6 2/3 - Single isolate, vent/ block

AS6B 2/5 - Single isolate, vent/ block (threaded connections).

- Designed to be generally compatible with Shell M.E.S.C specification 60.98.56. XXX
- NACE /sour gas service option available.
- Choice of accessories:
 Seal pot, filling connectors
 Heater (steam/electric)
 Mounting plate
 Sun shade



AS6 SERIES

Manifolds - Two/Four Valve

Product Overview

Integral mounted AS6 TVIS 2/1, 2, 3

The Integral manifold system provides true direct mounting to the transmitter sensor module, eliminating the need for Coplaner $^{\text{TM}}$ or traditional flange adaptors, extra bracketing and minimizing pipework.

They are designed to be used with the following Rosemount® Coplaner™ style pressure/differential pressure transmitters:

- Model 3051
- Model 2051
- Model 4088 multivariable™ transmitter

AS6 TVIS 2/1

A double isolate/equalize/vent block manifold for general liquid and gas flow measurement using DP transmitters. It has been designed to be fitted with a full range of accessories.

Applications

- Differential pressure transmitters.
- Flow measurement.
- Level measurement.
- Integral manifold option of MESC 60.98.56.201 (Type A).

Differential/Pressure Transmitter

NOTE Process
Approximate weight: 11.46 lb (5.2 kg).

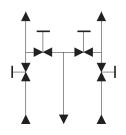
AS6 TVIS 2/2

A double isolate/double vent block for applications with differential pressure transmitters, where contamination of process systems is not permitted.

Applications

- Differential pressure transmitters.
- Flow measurement.
- Level measurement.
- Integral manifold option of MESC 60.98.56.201 (Type B).

Differential/Pressure Transmitter



NOTE
Approximate weight: 11.46 lb (5.2 kg).

AS6 TVIS 2/3

A single isolate/ vent block designed for low pressure applications with differential pressure transmitters and level measurement on atmospheric tanks. It can also be used with pressure transmitters of the differential pressure body design and has been designed to be fitted with a full range of accessories.

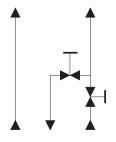
Applications

- Low pressure differential pressure transmitters.
- Pressure transmitters of the differential body design.
- Level measurement.
- Flow measurement.
- Pressure measurement.
- Integral manifold option of MESC 60.98.56.201 (Types C and D).

NOTES

- 1. Coplaner™ and multivariable are trademarks of Emerson Process Management
- 2. Rosemount® is a registered trademark of Emerson Process Management

Differential/Pressure Transmitter



Process NOTE
Approximate weight: 11.02 lb (5.0 kg).



Manifolds - Two/Four Valve

Threaded outlet AS6B TVIS 2/5

A compact single isolate/vent block designed for applications with pressure transmitters/gauges using threaded connections, which are made directly into the manifold's standard G $\frac{1}{2}$ " female instrument connection. An alternative rotatable adaptor can be provided which allows the instrument to be positioned through 360°.

It is compatible with the following threaded Rosemount® pressure transmitters:

- Model 3051T
- Model 2088
- Model 2051

Applications

- Pressure measurement.
- Pressure transmitters using threaded connections.
- Pressure transmitter options of MESC 60.98.56.301 (Types E, F, G).

NOTES

1.Rosemount® is a registered trademark of Emerson Process Management

Process Process

NOTE

Approximate weight: 11.02 lb (5.0 kg).

Bonnet assemblies

The metal-seated bonnet assemblies have a rotating stem with free swivel ball-type 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.

The high-temperature bonnet assemblies incorporate adjustable graphite packing and back-up pressure rings to ensure a leak-free stem seal.



Valve bonnet Anti Tamper facility

AS6 SERIES

Manifolds - Two/Four Valve

Standard materials

Valve	Body	Bonnet	Stem	Ball seat	Non-wetted parts	
316 SS	A479-316SS	316 SS	316 SS	316 SS	Austenitic SS	
SG	A479-316SS	316 SS	Alloy 400	Alloy K500	Austenitic SS	

Standard material traceability

Standard material traceability to EN10204-3.1, manifold body only.

Valve packings

PTFE (standard)

Maximum pressure: 6000 psig (413 barg)

Maximum temperature: 500°F (260°C)

Graphite (optional)

Maximum pressure: 6000 psig (413 barg) Maximum temperature: 1000°F (538°C) Minimum temperature: -70°F (-57°C)

Valve bonnet identification

Dust cap coding

Function ring label

Each valve bonnet is identified with a coloured stainless steel ring label.

Blue - isolate Green - equalize Red - vent

NOTE

Manifold transmitter bolting AS6 2/1, 2, 3

1. Instrument mounting: four 7/16" UNF stainless steel mounting bolts (Grade ASTM A193 B8.2) are supplied as standard.

Special materials

For severe service, manifolds are available in the following exotic materials:

Monel® alloy 400 Duplex S31803 Hastelloy® C276 6MO UNS S31254

AT - Anti tamper bonnet

Valve bonnets are available with a removable T-bar key to prevent unauthorized operation of valves.

K - Key for anti tamper bonnet Valves are available with lockable anti-tamper bonnets which can be supplied for padlocking,

providing added security.

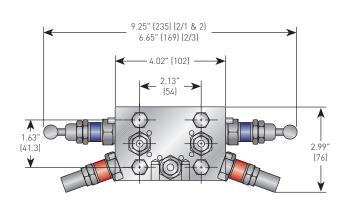
LAT - Lockable anti tamper bonnet

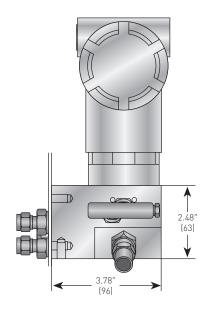


Manifolds - Two/Four Valve

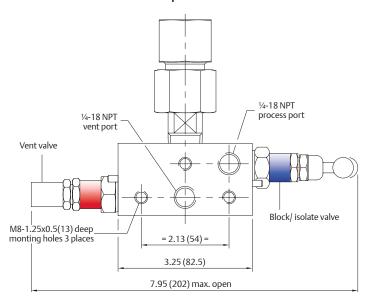
Dimensions, inches (mm)

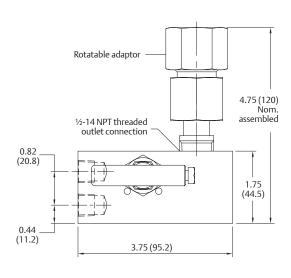
Integral mounted AS6 TVIS 2/1,2,3





Threaded outlet AS6B TVIS 2/5





Accessories



FC - Filling connector



BF - Blind flange



SP - Seal pot



VPB - Vent purge block



AS6 SERIES

Manifolds - Two/Four Valve

Selection Guide - AS6 Manifolds

AS6T		V		1		S		-2		/3		MA4		SG
BASIC SERIES		BONNET PACKING		SEAT TYPE	М	BODY ATERIAL ^[2]		OCESS/VENT NNECTIONS	MANIFOLD FUNCTION		INSTRUMENT CONNECTION (AS6B 2/5 ONLY)		MANIFOLD OPTIONS	
AS6T	V	PTFE	ı	Integral	S	Stainless Steal	2	G ¼-inch	/1	Double isolate, equalize, vent	MA4	½-inch NPTmale (rotatable adaptor)	SG	Sour gas service
AS6BT (/5 only)	Н	Graphite							J 2	Double isolate, double vent	FA4	½-inch NPT female (rotatable adaptor)	KEY	Anti-tamper bonnet key
									/3	Single isolate, vent	FA4BSP	G ½-inch female (rotatable adaptor)		
									 5	Single isolate, vent				

GY-M

PROCESS/VENT CONNECTION FITTINGS				
GY-M	Gyrolok metric (10 mm OD)			
GY-I	Gyrolok imperial (3/8-inch OD)			
SK-M	Swagelok metric (10 mm OD)			
SK-I	Swagelok imperial (3/8-inch OD)			

NOTES

Compression fitting

- 1. SK-I can be substituted with SK-M, GY-I, GY-M SK-M = Swagelok Metric 10 mm OD tube SK-I = Swagelok Imperial %-inch OD tube GY-M = Gyrolok Metric 10 mm OD tube GY-I = Gyrolok Imperial %-inch OD tube
- 2. Manifolds are available in Monel® and Hastelloy®. Please consult the factory for availability and delivery. For other makes and sizes consult factory

Accessories

VPBVIS-S	Vent purge block - single - 316 SS	AT - Key	Anti-tamper key - 316 SS
VPBVIS-D	Vent purge block - double - 316 SS	2S	Sunshade, plastic
SP.2HIS	Seal pot - 316 SS (consult factory)	IL9	GRP enclosure
FC.2S	Filling connector -316 SS	MPA1	Mounting plate for AS6T (316 SS Type A1)
STB-2	Steam block - 316	MPA2	Mounting plate for AS6T (316 SS Type A2)
MH-B4	Electrical heater block - 30 watt	MPB1	Mounting plate for AS6T (316 SS Type B1)
BFS	Blind flange - 316 SS	MPB2	Mounting plate for AS6T (316 SS Type B2)

