

INSTRUMENTS • CONTROLS • VALVES

CLICK TO VISIT OUR WEBSITE



3317 Gilmore Industrial Blvd.
Louisville, KY 40213

Engineering, Inc.

SINCE 1954

www.arcoengineering.com

Ph: (502) 966-3134

Fx: (502) 966-3135

Large bore, 5-valve manifold for natural gas

The M66 manifold is a large bore, 5-valve manifold for natural gas applications, designed with the Measurement Technician in mind.

While providing all the benefits of a traditional large bore 5-valve manifold, the M66 repositions the equalizer and vent valves to provide maximum clearance for hands and fingers during operation. The M66 accomplishes this while maintaining the same sleek manifold profile without comprising body wall thickness and maintain the same space requirements as our standard Large Bore Manifold.

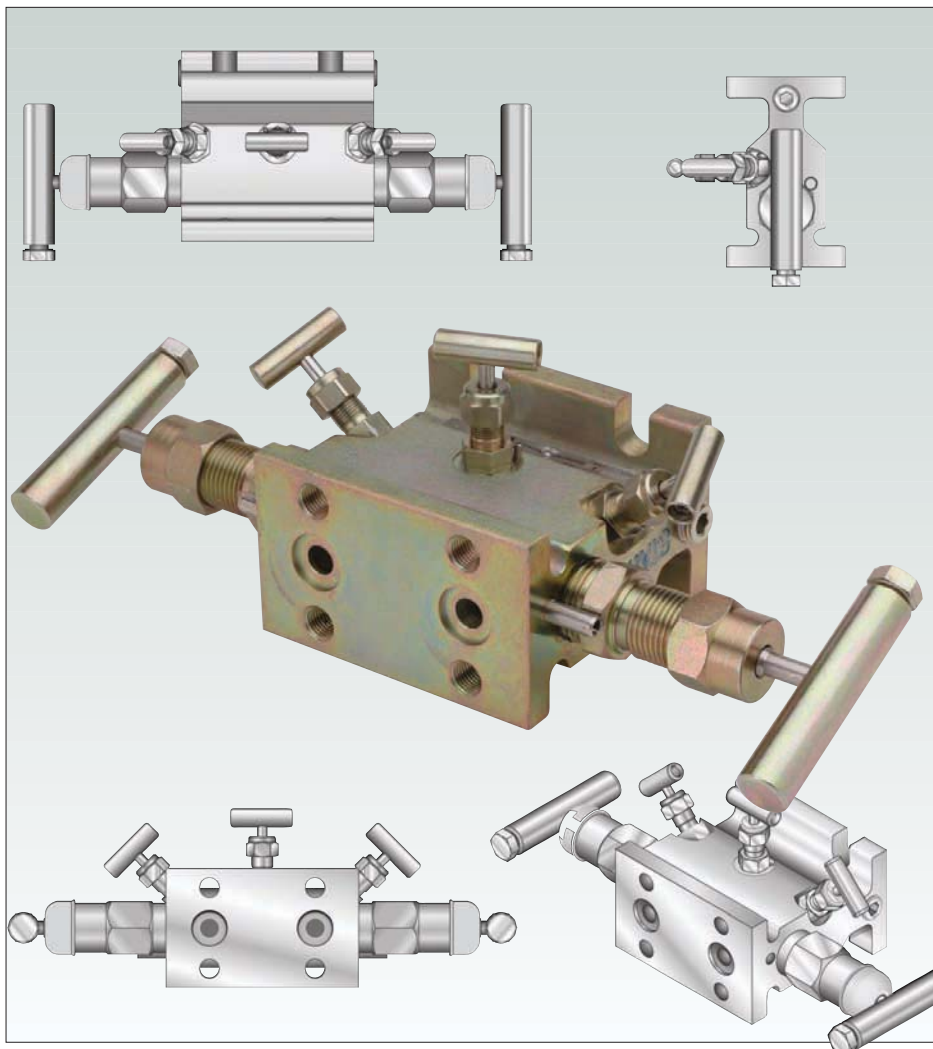
The M66 is available in Carbon Steel and 316 SS, and in 1/2" FNPT x Flange, and Flange x Flange configurations. The M66 carries the same pressure and temperature rating of the M65 and the same easy calibration port access. We also use only B7 carbon steel bolts, B8M 316 SS bolts, or 18-8 SS bolts.

Product Overview 3/8-inch [9.5 mm] Orifice

This product series parallels the M6A series but with the larger 3/8-inch [9.5 mm] orifices. The series was developed to answer two needs: 1) a larger valve orifice to assure positive line drainage where wet gas and hydrates are a problem; and 2) to match the flange tap drilling of 3/8-inch [9.5 mm] reducing signal variance when pulsating flow is experienced and the manifold (M66A) is mounted as close to the flange outlet as practical.

Features and Benefits

- **The valves are identical** for all three manifold configurations:
 - M66T - pipe x flange
 - M66A - flange x flange
 - M669A - 90° flange x flange



- **The M66T and M66A may be pipe-stand mounted** with the appropriate AGCO Mount Kit to support a differential transmitter. Advantages of AGCO Mount are: that installation may be made prior to availability of the transmitter; and, easier and faster removal of transmitter for maintenance since transmitter is supported only by the manifold.
- **Soft seats** are available in a variety of materials to suit sweet or sour gas.
- **The seats are field replaceable** without removing the manifold.
- **Bonnet assemblies have blow-out proof stems** that seal and isolate the packing when the valve is fully open.
- **O-ring Packing** is below the stem threads for corrosion protection.

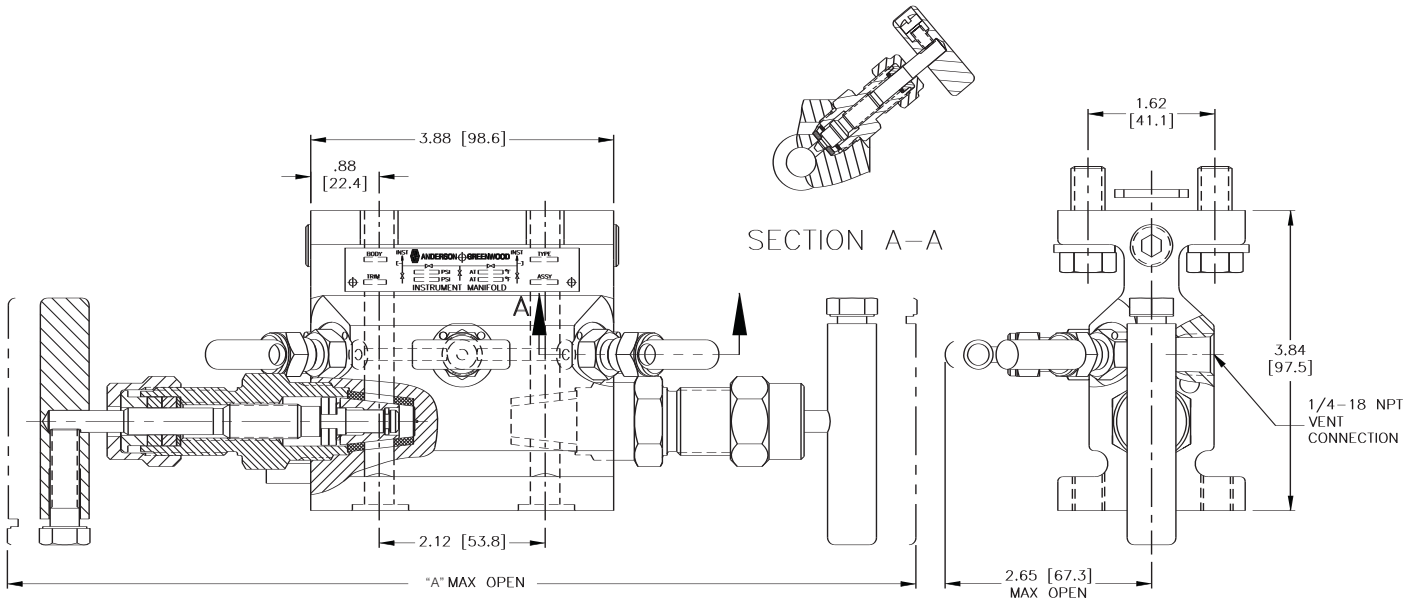
tyco / Flow Control

Total Flow Control Solutions™

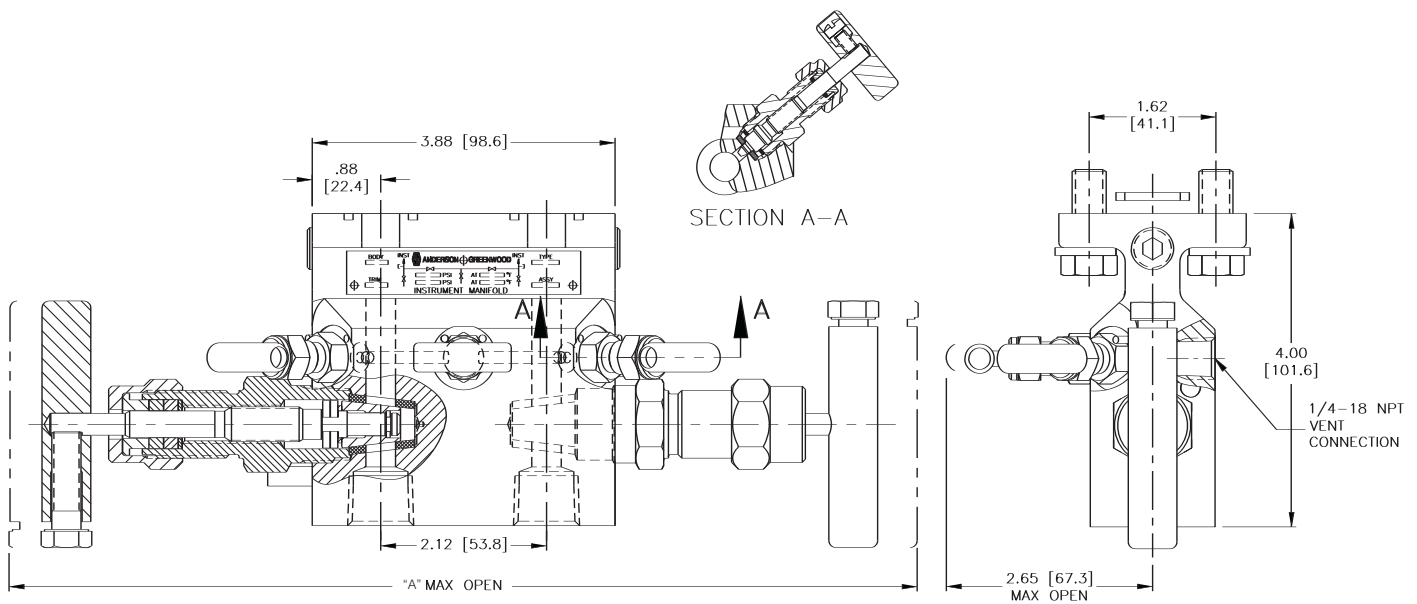
Anderson Greenwood Instrumentation Products is either a trademark or registered trademark of Tyco International Services AG or its affiliates in the United States and/or other countries. All other brand names, product names, or trademarks belong to their respective holders.

Specifications

M66A Dimensions, inches [mm]



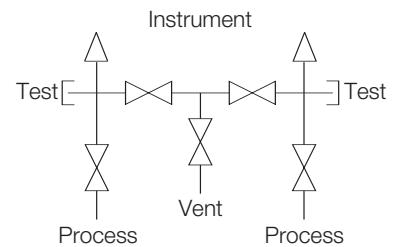
M66T Dimensions, inches [mm]



Packing	A
Teflon®	11.90 [302.3]
O-ring	11.36 [288.5]

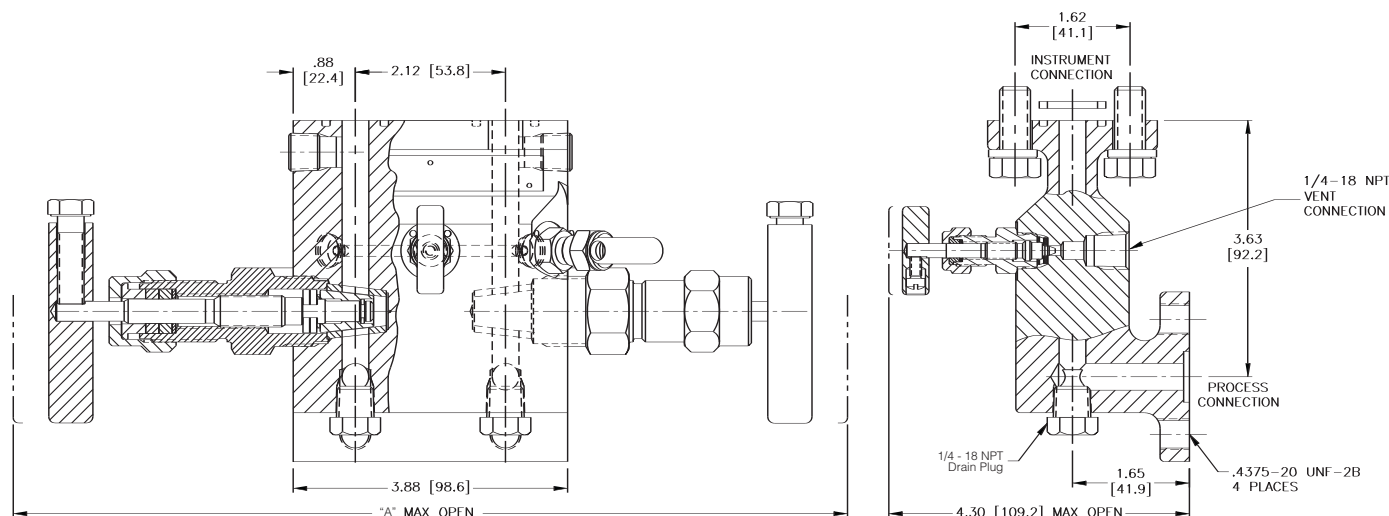
Notes

1. Approximate valve weight: 7.6 lb [3.4 kg].
0.375-inch [9.5 mm] diameter orifice.
Valve C_v 3.0 maximum.
2. Bottom static pressure connections 1/4-inch - 18 NPT available.
3. Installation Kit consists of 4 bolts
7/16-inch - 20 x 1-inch A193-B7, 4 washers,
and 2 Teflon® gaskets.



Specifications

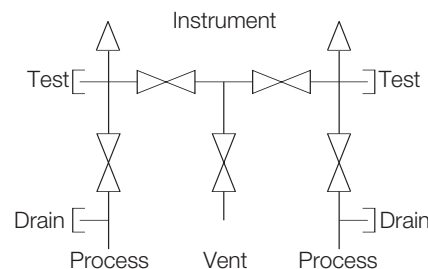
M669A Dimensions, inches [mm]



Packing	A
Teflon®	11.90 [302.3]
O-ring	11.36 [288.5]

Notes

1. Approximate valve weight: 9.8 lb [4.5 kg].
2. Installation Kit consists of 4 bolts 7/16-inch - 20 x 1-inch A193-B7, 4 washers, and 2 Teflon® gaskets.



Standard Materials

Valve	Seat	Body	Bonnet	Stem	Flow Washer
CS ¹	Soft	A105	A108	A582-303	316
SS	Soft	A479-316	A479-316	A276-316	316
SG ²	Soft	A479-316	A479-316	Monel® R405	316
SG3 ³	Soft	A494-CW12MW	Hastelloy® C-276	Hastelloy® C-276	Hastelloy®

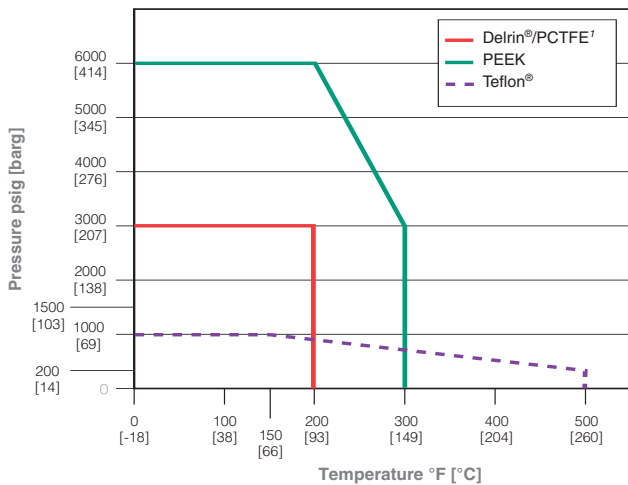
Pressure and Temperature Ratings

Packing	Seat Material	Seat	Standard Bolting	SS Bolting
Teflon®, O-ring	Delrin® PCTFE ⁴	Soft	3000 psig @ 200°F [207 barg @ 93°C]	3000 psig @ 200°F [207 barg @ 93°C]
Teflon®, O-ring	PEEK	Soft	6000 psig @ 200°F [414 barg @ 93°C] 3000 psig @ 300°F [207 barg @ 149°C]	4500 psig @ 100°F [310 barg @ 38°C] 3000 psig @ 300°F [207 barg @ 149°C]
Teflon®	Teflon®	Soft	1000 psig @ 150°F [69 barg @ 66°C] 200 psig @ 500°F [14 barg @ 260°C]	1000 psig @ 150°F [69 barg @ 66°C] 200 psig @ 500°F [14 barg @ 260°C]

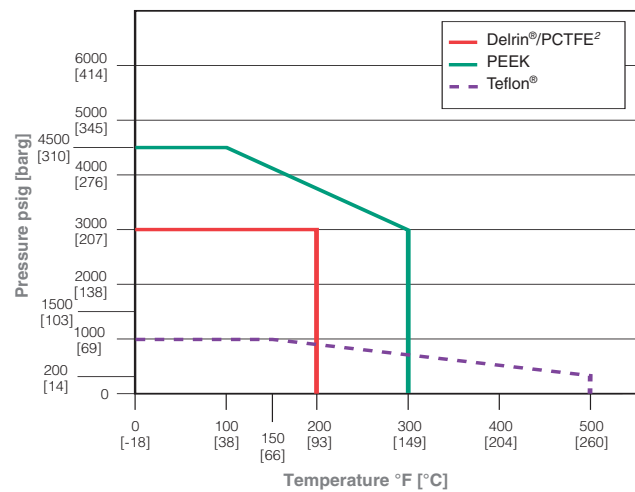
Notes

1. CS parts are zinc cobalt plated.
2. -SG NACE MR0175/ISO 15156-3 Corrigendum 2 (for Chloride conditions ≤ 50 mg/l [ppm]) and NACE MR0103-2005
3. -SG3 NACE MR0175/ISO 15156-3 Corrigendum 2 (for Chloride conditions > 50 mg/l [ppm])
4. PCTFE (Polychlorotrifluoroethylene) is the exact equivalent of Kel-F®.
5. Teflon® Delrin® are a registered trademarks of E.I. du Pont de Nemours Company.
7. Hastelloy® is a registered trademark of Haynes International.
8. Monel® is a registered trademark of Special Metals Corporation; always initial cap and registered.

Pressure vs. Temperature – Standard Bolting¹



Pressure vs. Temperature – SS Bolting²



Notes

1. PCTFE (Polychlorotrifluoroethylene) is the exact equivalent of Kel-F®.
2. 316 SS bolts lower pressure ratings to a maximum of 4500 psi [310 barg]. Consult factory for full rating with 316 SS bolts.

Ordering Information

M66A V D S -4 -SG

Valve Type

3/8-inch [9.5 mm] orifice

- M66T – Pipe x Flange
- M66A – Flange x Flange
- M669A – 90° Flange x Flange

Packing

- V – Teflon® (patent protected)
- R – O-ring

Seat (cone)

Soft (Block valves only)

- V – Teflon®
- D – Delrin®
- E – PEEK
- K – PCTFE

Body Material

- C – CS (zinc cobalt plated to resist corrosion), A105
- S – SS, A479-316

Process Connections

- M66T Only
- 4 – 1/2-inch FNPT

Options Code

Refer to column at right or catalog AGIMC-0344 (page 130) for more options

- AM AGCO Mount Kit for 2" pipestand mounting of manifold (AGIMC-0344, pg 138).
- BC Accessory bracket for mounting conduit with AGCO Mount.
- BP Accessory bracket for mounting purge meters with AGCO Mount.
- CL Cleaned for Chlorine Service.
- HD Hydrostatic testing - includes test report (MSS-SP-61)
- OC Cleaned for Oxygen Service.
- R3V Add when mounting to Rosemount® Model #3051C, 2024, -3095. Specify on all components. Use SS columns for rating.
- SG NACE MR0175/ISO 15156-3 Corrigendum 2 (for Chloride conditions ≤ 50 mg/l [ppm]) and NACE MR0103-2005 (B7 mounting bolts standard, SS mounting bolts optional) (SS valves only) (not available for O-ring packed valves)
- SG3 NACE MR0175/ISO 15156-3 Corrigendum 2 (for Chloride conditions > 50 mg/l [ppm])
- SSA SS flange bolts (Grade 18-8) - Max pressure rating 4500 psi [310 barg]
- SSC SS flange bolts (316 SS) - Max pressure rating 4500 psi [310 barg]
- TB Static/Test Ports (bottom of manifold) 1/4" -18 NPT, 2 places, M66A, M66T only
- EL () Installed street elbows in static test ports
 EL1 – Elbow facing bottom of manifold (M66A, M66T only)
 EL2 – Elbow facing outlet of manifold
 EL3 – Elbow facing top of manifold
- SP Special Requirements - provide complete description of requirements.

www.tycoflowcontrol.com

Tyco Flow Control (TFC) provides the information herein in good faith but makes no representation as to its comprehensiveness or accuracy. This data sheet is intended only as a guide to TFC products and services. Individuals using this data sheet must exercise their independent judgment in evaluating product selection and determining product appropriateness for their particular purpose and system requirements. TFC MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT(S) TO WHICH THE INFORMATION REFERS. ACCORDINGLY, TFC WILL NOT BE RESPONSIBLE FOR DAMAGES (OF ANY KIND OR NATURE, INCLUDING INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES) RESULTING FROM THE USE OF OR RELIANCE UPON THIS INFORMATION. Patents and Patents Pending in the U.S. and foreign countries. Tyco reserves the right to change product designs and specifications without notice.