

# FMC Technologies Measurement Solutions

## OrificeMaster

### Single Chamber Orifice Fitting

**OrificeMaster is engineered** and manufactured by FMC Technologies Measurement Solutions to ensure complete safety in addition to superior measurement accuracy, simplicity of operation and economy. Its single chamber design allows for time efficient orifice plate inspections when the process line can be shut down or bypassed. As an economical alternative to an orifice flange union, OrificeMaster provides the accuracy and convenience of an orifice fitting.

OrificeMaster fully complies with the stringent requirements of the latest editions of AGA #3, API 14.3 and ISO 5167. Each and every OrificeMaster fitting is 100% tested, inspected and documented during manufacturing and assembly for casting and tap hole integrity, eccentricity, and positive orifice plate seal and code compliance.

Its simple, yet effective, design enables OrificeMaster to be installed either vertically or horizontally with no fitting changes required. In addition, all parts can be replaced without removing the fitting from the line.

Safety, accuracy and ease of operation – key requirements for gas measurement – are the basic elements built into every OrificeMaster.

#### Advantages

- Standard sized o-ring seals for immediate, worldwide availability
- Superior o-ring seals for cover bar compared to composite gaskets
- Rugged clamping bar bolts resist breakage
- Proven safety record



#### Fast Track Delivery Program

FMC Measurement Solutions stocks 2" through 6" OrificeMaster fittings for immediate delivery. Contact us for quantity availability and pricing.

#### Applications

- Gas production and gathering systems
- Gas transmission
- High pressure gas injection
- Fuel gas
- Industrial process systems

#### Highest Measurement Standards

Both OrificeMaster and MeasureMaster are in compliance with the latest editions of:

- API 14.3, Chapter 14 Natural Gas Fluids Measurement, Section 3 Concentric, Square-edged Orifice Meters (AGA Report No. 3, American Gas Association)
- GPA 8185-90, Part 2, Gas Processors Association
- ISO 5167-1-2003, applicable to fittings 4" and larger
- BS 1042, applicable to fittings smaller than 4"

#### Features and Benefits

- Simple operating procedures.
- All parts can be replaced without removing the fitting from the line.
- Slip-lock design prevents cover plate blow-off in the event the line has not been depressurized.
- Designed to provide maximum safety to the operator during operation, service and inspection.
- Tested for positive plate sealing, pressure tap integrity, seal protrusion and eccentricity.
- Meets all AGA and ISO industry specifications and tolerances.
- 100% inspection and testing with documentation.

# FMC Technologies



## Complete Product Offering

Offering products and services necessary for a complete gas measurement solution is the primary objective of FMC Technologies. To provide this solution to our customers, OrificeMaster is available in a wide range of sizes and pressure ratings for application versatility. The fitting is available in sizes 2" through 24" and in several design configurations and ANSI ratings to meet specific application requirements<sup>1</sup>.

As a compliment to the fit the fittings themselves, FMC Technologies offers orifice plates, meter tubes and replacement parts for a total orifice fitting package. In addition, our flow nozzles and venturi tube product lines are available when application requirements specify a device capable of

measuring demanding flow streams or in applications where flange connections are not desirable or accepted. Choosing and applying the right gas measurement solutions is possible with the broad product range offered by FMC Technologies.

## Design Codes

- ASME B31.8 Gas Transmission and Distribution Piping
- NACE MR-01-75 – standard orifice fitting design compliance for sour gas applications. Stainless steel trim, full stainless steel or other alloy construction are available as options

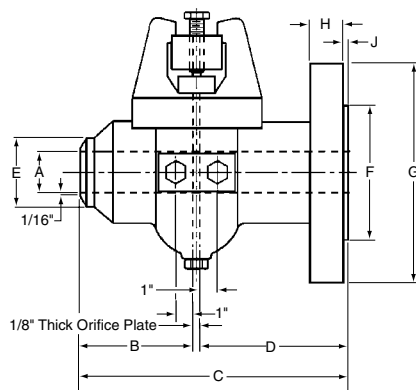
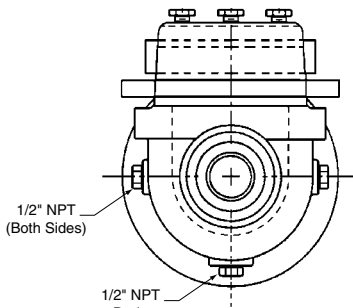
Also in compliance with: ASME B31.1 Power Piping; ASME B31.3 Process Piping.

## FMC Technologies

FMC Technologies a market leader in design, manufacture and supply of petroleum exploration, production, measurement and transportation technology.

Since 1933 Measurement Solutions, the measurement group of FMC Technologies, has been a world leader in flow measurement and control of petroleum products through the delivery of technical superiority via a complete range of liquid/gas custody transfer solutions.

## Dimensions<sup>1</sup>



- A - Bore size to be specified by customer
- K - No. of studs
- L - Diameter of studs
- M - Length of studs
- N - Diameter of bolt circle

Size	B	C	D	E	F	G	H	J	K	L	M	N	Pressure
2	2.81	6.69	3.75	2.47	3.63	6	.69	.06	4	.63	3.25	4.75	150
3	3.56	7.94	4.25	3.56	5	7.5	.88	.06	4	.63	3.75	6	150
4	3.56	8.19	4.5	4.63	6.19	9	.88	.06	8	.63	3.75	7.5	150
6	4.44	10.13	5.56	6.78	8.5	11	.94	.06	8	.75	4	9.5	150

<sup>1</sup> For dimensions and pressures ratings other than those shown, refer to Bulletin No. SSOR005. Dimensions are shown in inches to the nearest tenth and independently dimensioned from respective engineering drawings.

## FMC Technologies

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