

SureShot®



Dual & Single Chamber
Orifice Fittings



The SureShot® Family of Orifice Fittings



With input from engineering firms, measurement specialists, and field personnel, TMCO has strengthened the advantages of orifice metering by implementing features that improve the performance of your meter runs, simplify your operations, reduce maintenance costs, and keep your people safe in the field.

SureShot®

Single Chamber Orifice Fitting

Single chamber fittings are the most widely accepted means for flow measurement of gas and other hydrocarbons in the oil, gas & petrochemical industry.

The SureShot® Single Chamber is a rugged, field-proven unit that does the work you need it to do — easily, reliably, and safely.

- One piece body allows for quick, inexpensive orifice plate changes
- Metal-to-metal seat against the downstream face significantly reduces seal ring compression and downstream shift of orifice plate
- · Orifice plate seal design extends service life
- Factory-set dowel pin enforces repeatable plate alignment





SureShot®	MODEL		
ORIFICE FITTINGS	Dual Chamber	Dual Chamber	Single Chamber
Sizes (Inches)	2, 3, 4, 6, 8, 10, 12, 16	3	2, 3, 4, 6
ANSI Class	150, 300, 600	900	150, 300, 600
PSI CWP	285, 740, 1480	2160	285, 740, 1480
Temperature Ranges	- 20°F to 275°F (-29°C to 120°C)		
End Connections	Weld x Flange, Flange x Flange, Raised Face, Ring Type Joint (RTJ)		
Telemetering Taps	Standard on Single and Dual Chamber Models		
Regulatory Requirements	AGA 3/API 14.3, ISO 5167		
	ASME B31.3, ASME B16.5, MSS SP-55		
	NACE MR-01-75-2000		



SureShot®

Dual Chamber Orifice Fitting

Isolating Eccentric Plug Valve Assembly & Removeable End Caps

Each design feature of this patented differentiator ensures overall Lower Cost of Ownership – fewer parts, easier and cleaner maintenance routines, heightened operator safety, and less uncertainty of measurement.

- Greaseless design delivers clean, positive isolation between upper and lower chambers
- Teflon seal and stainless steel retainer ensures optimal sealing with minimum drag across seat of plug valve, minimizing maintenance over the life of the fitting
- Two handed open/close Standard Operating Procedure helps prevent accidental opening while the upper chamber is under pressure
- Elimination of grease, springs, and slide valve, simplifies operations and lowers maintenance costs
- Removeable end caps enable inspection and/or replacement of the plug valve sub-assembly without removing the upper chamber





Safety Device and SureLock™ Lockout/Tagout

- Spring-loaded design locks the Eccentric Plug into the closed position, preventing accidental engagement while the upper chamber is open
- Lockout/Tagout (LOTO) option prevents tampering or operation of fitting without first unlocking the SureLock device to actuate the Eccentric Plug
 - For additional safety, Eccentric Plug will not close if the plate carrier is improperly positioned, forcing operator attention and proper placement of the carrier

Orifice Plate Carrier

PRECISION MACHINED CARRIER

 Design allows for secured plate positioning, eliminating downstream movement of the orifice plate during high differential pressure

FOUR POINT ALIGNMENT SYSTEM

 Factory-set internal screws, located at the bottom and sides of the fitting's internal body, and a ball plunger located in the top of the plate carrier, ensures accurate and repeatable positioning and concentricity

METAL TO METAL SEAT

 Metal-to-metal seat against the downstream face significantly reduces seal ring compression and downstream shift of orifice plate





The Measurement Company

Established in 2003, TMCO is a leader in the design and manufacture of orifice fittings for the measurement of gas in energy and process control industries. The technology and manufacturing center is based in Wewoka, Oklahoma where an experienced and highly skilled workforce manages product design, machining, assembly, testing, and quality. Executive, administration and sales offices are headquartered in Houston, Texas and a worldwide network of sales and product support representatives ensure global coverage.

TMCO is a unique company. From the executive office to the production floor — each team member is laser-focused on advancing the accuracy, performance and safety of orifice metering.

Orifice metering remains one of the most robust, cost effective, and efficient measurement technologies for allocation, custody transfer and process applications. The technology addresses a broad range of tough field conditions better than many other meter technologies and functions well in the presence of vapor, liquids, CO_2 , or solids. Because of the above, and the fact that orifice meters are broadly accepted and understood by field personnel, they remain an effective and viable option across market sectors.

The TMCO team - backed by an install base of more than 150,000 meters - believes that with the design advances they have made to the SureShot fitting, orifice technology can continue to provide safe, cost effective and operationally excellent solutions to the most demanding gas measurement challenges.











www.tmcousa.com

support@tmcousa.com
TMCO Administration & Sales (713) 465-3255
TMCO Technology & Manufacturing (405) 257-9373





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