



HPmeter¹™

www.epsltd-uk.com

High Pressure Single Chamber Orifice Fitting

Energy Project Solutions HPmeter¹™ (High Pressure) Single Chamber Orifice fittings are manufactured to meet stringent industry standards and safety guidelines and are designed to meet the end users expectations.

All our products are designed using DFM (Design For Manufacture) and DFA (Design For Assembly) techniques. This has resulted in products differentiated by their simplicity, reduced level of complex parts, and consequently provide the end user with a product that is remarkably simple to use, and is virtually maintenance free.

The “HPmeter¹” product range has been rationalised to the extent that we can offer significantly reduced lead times on this range.



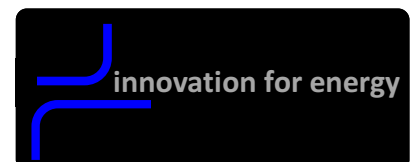
Benefits

- High Accuracy, precision machined orifice fitting.
- Minimal maintenance required.
- Plate⁰® Quick release plate system that is impossible to install backwards
- Use of modern seals and simplest designs
- Field-repairable

Options

- Exotic Materials for demanding service – Duplex, Inconel.
- High Pressure solutions
- Wide Temperature ranges.
- Stainless Internals as standard
- Meter Runs and accessories
- Bespoke design service available

The HPmeter¹™ single chamber orifice fitting can be installed into horizontal or vertical lines. Each product has been fully FEA (Finite Element Analysis) tested at design stage ensuring maximum safety to the user and the system. Upon product assembly, each product is fully pressure tested to satisfy industry safety, European pressure guidelines and product expectations.





Size and Pressure Rating

Size (mm)	ANSI Class	API Class
2" (50)	1500, 2500	4,000 - 10,000
3" (80)	1500, 2500	4,000 - 10,000
4" (100)	1500, 2500	4,000 - 10,000
6" (150)	1500, 2500	4,000 - 10,000
8" (200)	1500, 2500	4,000 - 10,000
10" (250)	1500, 2500	4,000 - 10,000
12" (300)	1500, 2500	4,000 - 10,000

Notes:

For sizes not listed, contact sales@epsltd-uk.com

Body Configurations

Flange x Flange, Flange x Weld or Weld x Weld
FF (Flat Face), RF (Raised Face), RTJ (Ring Type Joint)

Flanges available in the following formats;

- ANSI 16.5, 16.47
- Techlok & SPO
- Graylok
- API 6A

Standard Materials of Construction

- Body Casting – ASTM A487 4D
- Internal components – Stainless Steel 316
- Seals – Selected per application
- External Bolting – ASTM A194 L7 (HDG)
- Other materials are available upon request

Orifice Plates

The HPmeter¹, meter¹ and meter² orifice fittings use industry standard orifice plate thicknesses as per the guidelines set out within ISO 5167 and API 14.3.

Design Codes

- ASME B31.8 Gas Transmission and Distribution Piping
- NACE MR-01-75
- ASME B31.1 Power Piping
- ASME B31.3 Liquid Petroleum Transportation Piping Systems
- PED 97/23/EC – Pressure Equipment Directive

Measurement Standards

ISO 5167
API MPMS 14.3.2 (AGA Report No.3)

Maximising the HPmeter¹™

To ensure absolute metering accuracy, it is recommended that meter tubes are purchased and manufactured to complement the orifice fitting. This ensures concentricity between the pipe and the fitting, and eliminates uncertainties associated with misalignment. EPS can supply the following items for a **complete metering solution**;

- Orifice fitting with Meter Tube including straightening vane/profiler
- DP transmitters and Process Transmitters
- Flow Computer and Enclosure

