



## FLOWSTREAM Orifice Flanged Meter Runs

### **For Topside Flow Measurement**

#### Flow Measurement Excellence

Widely recognized by the Oil, Gas & Petrochemical industries worldwide, Solartron ISA offers more than 45 years experience in the design and manufacture of primary Differential Pressure flow meter devices.

Solartron ISA: Engineering a solution for the metering community.

#### Orifice Flanged Meter Runs

Orifice Flanged Meter Runs are designed for use on many different process applications and conditions. These devices are carefully designed and manufactured to achieve an optimum flow metering uncertainty, ensuring that installation of the orifice plate, adjacent pipework and tappings are compliant with ISO 5167 and AGA 3.

Orifice Flanged Meter Runs are an economical and simple design used for many applications within the industry. Calibration and Dimensional Certificates are available for square edge orifice plates for use in Fiscal and Allocation metering, if required.

Orifice plate available designs include:

- Square edge orifice plates
- Conical entrance & quarter circle
- Eccentric plates

There are a range of benefits for the available orifice plate designs including:

- Process Flow Measurement of hydrocarbons, most gases and liquids
- Allocation, custody transfer and fiscal flow metering
- Applications with low Reynolds numbers
- Flow measurement of viscous, dirty and contaminated fluids
- Flow metering of fluids with suspended solids or entrained gas

#### Benefits

Solartron ISA offer Orifice Flanged Meter Run designs to suit many different pipe-work configurations, lengths, orientations and end connection requirements for any flow measurement application, using proven flow metering technology to all industry standards.

We provide complete Engineering support from initial design and sizing concepts to manufactured final products.



#### Applications

- ✓ Hydrocarbon Gas & Liquids
- ✓ Process Measurement Allocation
- ✓ Custody Transfer & Fiscal Measurement

#### Key Parameters

- ✓ Proven Technology
- ✓ Accurate Flow Measurement
- ✓ Suitability For Most Process Conditions
- ✓ No Moving Parts

#### Standards

- ✓ ISO 5167-2
- ✓ ISO TR-15377
- ✓ ASME MFC-3M
- ✓ AGA3
- ✓ ISO 9001
- ✓ PED-97/23/EC

## FLOWSTREAM Orifice Flanged Meter Runs

### **Specifications**

#### **Functional Specifications**

##### **Line Size**

DN25 (1/2") to DN1200 (48")

Larger Sizes Available on request

##### **Pressure Ratings**

Ranging from ANSI 150# to API 15K PSI

#### **Types of Orifice Flanged Meter Runs**

##### **Flanged (API / ASME), Hubs, Butt-Weld**

Further connections are available on request

##### **Types of Orifice Plates**

Square Edge, Conical Entrance, Quarter Circle, Eccentric

##### **Types of Tappings**

##### **Flanged, Thread O'let / Socket O'let**

Further types are available on request

##### **Beta Ratio**

Typically 0.15 to 0.80 (Plate type dependent)

##### **Reynolds Number**

From 80 to an unlimited maximum

(Dependent on design of plate)

##### **Accuracy (Flow Rate)**

Typically  $\pm 3\%$  un-calibrated,  $\pm 1\%$  calibrated

#### **NDT Testing**

Hydro-testing, Dye Penetrant, Radiography

Additional options:

Magnetic Particle, PMI

Further testing is available on request

#### **Flow Turndown**

Typically >10:1, depending on Transmitter configuration

#### **Orifice Flanged Meter Run Material**

Carbon Steel, Low Temperature Carbon Steel, Stainless Steel, Chrome Moly Steel, Duplex, Super Duplex, Monel, Hastelloy, Inconel

Others available on request

#### **Orifice Plate / Carrier Material**

304ss / 316ss / 321ss / UNS S31803

UNS S32760 / UNS S31254

Alloy 400 / 625 / 825 / C276

Tantalum / Titanium

Others available on request



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