



## FLOWSTREAM Averaging Pitot Tube

### **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.

#### Averaging Pitot Tube

Solartron ISA Averaging pitot tubes use multiple sensing ports to continually average the flow profile and generate a differential pressure that represents the mean flow rate across the pipeline.

Averaging Pitot Tubes offer an accurate measurement and low permanent pressure loss, typically <10% of DP. There are two measurement principles and designs;

High Flow have a single static pressure port outside of the flowing fluid region. This results in a lower DP, and enables the accuracy figure to be sustained over a wider turn-down and at higher flow rates

Low Flow have a dual ports which are both within the flowing region. The position produces a suction effect at the ports which magnifies the available range of differential pressure, enabling the Averaging Pitot Tube to be used in low velocity systems

Solartron ISA offer the Averaging Pitot Tube design to suit the needs of any pipe-work configuration, with different connections & orientations available. We provide complete Engineering support from initial design and sizing concepts to manufactured final products.

#### Benefits

- Low Permanent Pressure Loss
- Wide flow turn-down



#### **Applications**

- ✓ Air Ducts
- ✓ Low Permanent Pressure Loss
- ✓ Process Measurement

#### **Key Parameters**

- ✓ Proven Technology
- ✓ Robust design
- ✓ Low Permanent Pressure Loss
- ✓ Accurate Flow Measurement
- ✓ Suitability for clean process conditions

#### **Standards**

- ✓ ISA Standard Design
- ✓ ASME B31.3
- ✓ ISO 9001
- ✓ PED 97/23/EC

## FLOWSTREAM Averaging Pitot Tube

### Specifications

#### Functional Specifications

##### Line Size

DN50 (1") to DN2000 (80")

Larger line sizes available on request

##### Pressure Ratings

Ranging from ANSI 150# to 2500#

##### Connection Types

Flanged, Compression Fittings

Further connections are available on request

##### Types of Tappings

Flanged / NPT / Socket Weld Further types are available on request

##### Product Type

High Flow

Low Flow

##### Reynolds Number

Ranging from  $10^4$  up to  $10^7$

##### Accuracy

Better than  $\pm 5\%$

##### Upstream Straight Lengths

8D – Single 90 degree bend

10D – Double 90 degree bend

##### NDT Testing

Hydro-testing, Dye Penetrant,  
Additional options:

PMI

Further testing is available on request

##### Flow Turndown

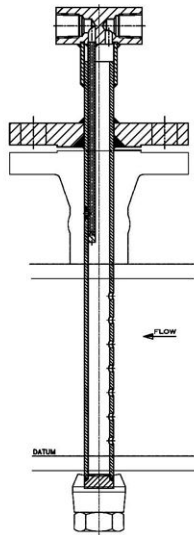
Typically  $>10:1$ , depending on Transmitter configuration

##### Averaging Pitot Tube Material

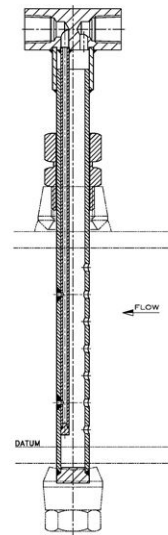
Stainless Steel, Duplex, Super Duplex, 6 Mo, Monel 400

Inconel 625

Further materials are available on request



High Flow Model



Low Flow Model

## AMETEK<sup>®</sup>

SOLARTRON ISA

Hackworth Industrial Park, Shildon, County Durham, DL4 1LH, UK  
Tel: +44 (0)1388 773065 • Fax: +44 (0)1388 774888

e-mail: [sales.solartronisa@ametek.com](mailto:sales.solartronisa@ametek.com) • [www.solartronisa.com](http://www.solartronisa.com)

Houston Sales and Services

4903 W. Sam Houston Parkway, N., Suite A-400, Houston, TX 77041  
Tel: +1 713-466-4900 • Fax: +1 713-849-1924