



FLOWSTREAM Restriction Orifice Plate

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.

Restriction Orifice Plate

Restriction Orifice Plates are widely used for many applications within the industry. Although the design is very similar to an orifice plate, the function is different. Restriction plates are used to suit a number of different purposes including:

- Reduction in line pressure
- Control flow rates by restricting flow, regardless of downstream conditions

Design considerations

- Prevent critical flow
- Removal of cavitation
- Reduce noise levels

Solartron ISA provides complete Engineering support from initial restriction design and sizing concepts to manufactured final products.

We offer a number of different restriction designs to suit the needs of your application including:

- Restriction Plates (Standard applications)
- Multi-Hole Restriction Plates (Used to reduce noise)
- Multi-Stage Restriction Units (Flanged / Butt-Weld):
 - o Gas Applications – To prevent critical flow
 - o Liquid Applications – To reduce cavitation

Benefits

- Proven design technology
- Products designed in accordance with R.W.Miller - Flow Engineering Handbook
- Plate thickness calculations designed in accordance with ASME B31.3
- Designs available to accommodate site restrictions and noise limitations,
- Prevent critical flow or cavitation issues



Applications

- ✓ Hydrocarbon Gas & Liquids
- ✓ Controlled Pressure Reduction
- ✓ Blow-Down Service
- ✓ Pressure Vessels
- ✓ Noise Reduction

Key Parameters

- ✓ Proven Technology
- ✓ Prevent Critical Flow or Cavitation Issues
- ✓ Reduce Site Restrictions and Noise Levels

Standards

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

FLOWSTREAM Restriction Orifice Plate

Specifications

Functional Specifications

Line Size

DN15 (1/2") to DN1800 (72")

Designs

Restriction Plate

Full-Face Restriction Plate

Restriction Carrier

Multi-Hole Restriction Plate

Multi-Stage Restriction Unit

Reynolds Number

Unlimited range

Physical Specifications

Plate / Carrier Material

Stainless Steel / Duplex / Super Duplex / 6 Mo / Alloy 400 /

Inconel 625 / Inconel 825 / Hastelloy C276 / Titanium

Others available on request

Installation Method (Between)

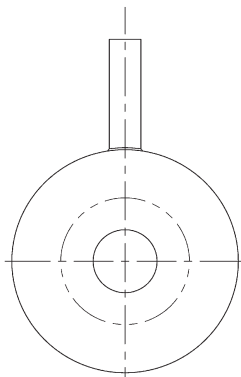
Flanged (API / ASME)

Hubs

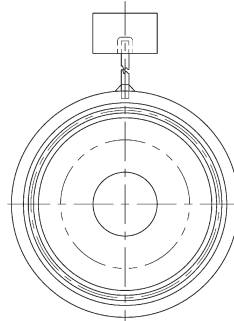
Carriers

Welded Directly into Piping

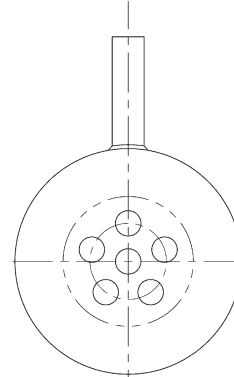
Multi-Stage Units Supplied Flanged or Butt-Weld



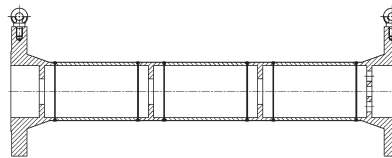
RF Type



RTJ Type



Multi-hole Type



Multi-stage Type



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