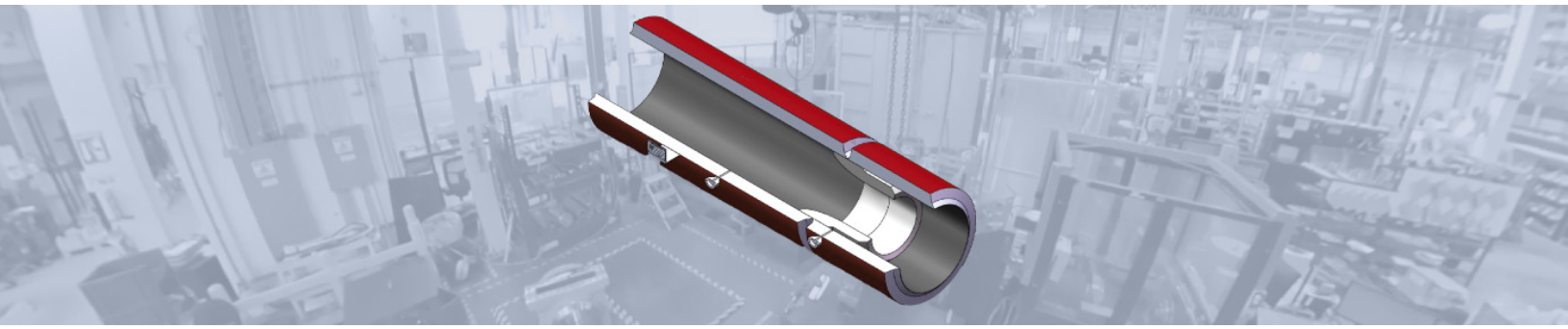
Decades Proven. Field Chosen.™

Differential Pressure Flow Products
Flow Nozzle



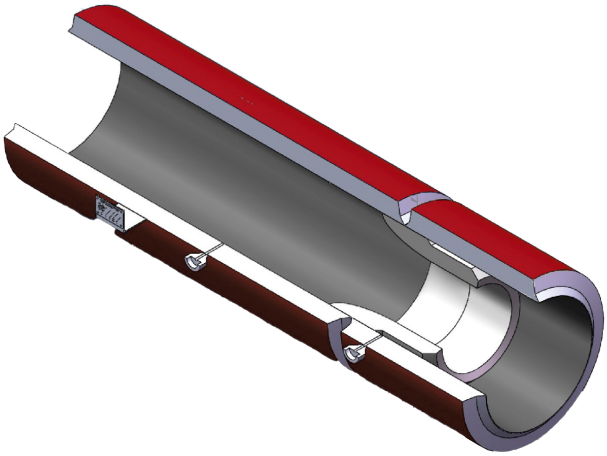
Product Introduction

The Daniel® Flow Nozzle combines the simplicity of an orifice plate with the hydrodynamic efficiency of a Venturi tube, making it ideal for high-pressure, high-temperature applications.

With a rugged, sloping profile, it offers exceptional durability and high accuracy in fluid measurement.

Designed for challenging environments, the Flow Nozzle ensures minimal permanent pressure loss while delivering reliable performance in measuring liquids, gases, and steam.

Available in multiple configurations, including flanged, tapped, weld-in, and holding ring, it adapts to diverse industrial requirements.



Design Specifications

- **Size Range:**
  2–24 inches (standard); larger sizes available upon request.
- **Pressure Ratings:**
  ANSI 150 to 2500.
- **Beta Ratios:**
  0.4, 0.5, 0.6, 0.7 (additional options available).
- **Material Options:**
  Stainless steel, carbon steel, duplex alloys, or other weldable materials.
- **End Configurations:**
  Flanged, tapped, weld-in, holding ring.
- **Compliance:**
  ASME standards; CE-PED 2014/68/EU certified.

Product Information

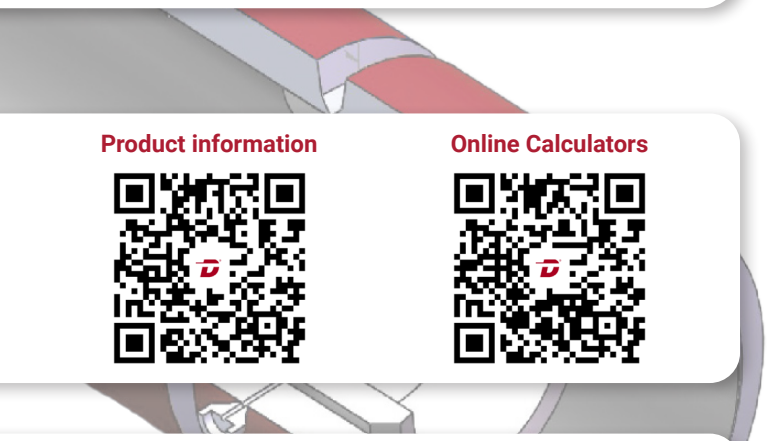
The Flow Nozzle determines flow rate by creating a restriction and measuring the differential pressure across the device.

Its sloping profile reduces wear and maintenance requirements, while its compact size ensures easy installation between flanges.

With various configuration and material options, the Flow Nozzle is adaptable to demanding industrial applications such as power generation and petrochemical processing.

How Daniel® Solves Your Problems!

Potential Error	Impact on Operations	Solution
Material Erosion	Reduces measurement accuracy and lifespan.	Durable, customizable materials resist wear.
Incorrect Beta Ratio	Causes inaccurate flow measurements.	Custom beta ratios ensure precise performance.
Improper Installation	Leads to misaligned flow readings.	Compact design simplifies installation and alignment.
High Pressure Loss	Increases operational energy costs.	Sloping profile minimizes permanent pressure loss.
Non-compliance with Standards	Risks penalties and operational inefficiencies.	Built to ASME standards and certified for global use.



Product information

Online Calculators

Online Store

Daniel® Measurement App

GET IT ON Google Play

Download on the App Store

Typical Applications

- High-pressure steam measurement in power plants.
- Custody transfer of liquids and gases.
- Flow measurement in refineries and petrochemical plants.

Application Sites

- Oil refineries and gas processing facilities.
- Power plants and steam distribution networks.
- Chemical processing and industrial manufacturing plants.

Features and Benefits

- **Enhanced Accuracy:**
  ±0.8% standard, with ±0.25% available upon calibration.
- **High Flow Capacity:**
  Handles up to 60% more flow than an orifice plate with the same beta ratio.
- **Durable Construction:**
  Designed for high-pressure and high-temperature environments
- **Low Maintenance**
  No moving parts ensure reliable, long-term operation.
- **Versatile Configurations:**
  Available in flanged, tapped, weld-in, and holding ring designs.

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With over 90 years of industry experience, Daniel® Measurement and Control is a trusted leader in flow measurement and control solutions.

Our innovative, high-performance products are designed to deliver accuracy, reliability, and efficiency in the most demanding applications.

Backed by a legacy of excellence, Daniel® solutions continue to set the standard for precision and durability, helping customers worldwide achieve operational success with confidence.

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