

# Differential Pressure Flow Products **Wedge Meter**



## **Product Introduction**

The Daniel® Wedge Meter is a versatile differential pressure flow element designed for challenging applications, including abrasive, corrosive, and viscous fluids.

Its unique V-shaped wedge geometry allows debris and sludge to pass through without buildup, ensuring accuracy and minimizing maintenance.

With no moving parts and bidirectional flow capability, it delivers reliable performance in harsh conditions.

Built to ISO 5167-6 standards, the Wedge Meter is ideal for industries ranging from petrochemicals to wastewater treatment.



# **Design Specifications**

· Sizes:

2-24 inches (larger sizes available).

• Pressure Ratings:

ANSI 150 to 2500.

· Beta Ratios:

0.2, 0.3, 0.4, 0.5 (additional ratios available).

Material Options:

Stainless steel, carbon steel, duplex alloys, or other weldable materials.

End Configurations:

Flanged, threaded, beveled, welded, and hub ends.

Compliance:

ISO 5167-6 guidelines for wedge meter installation and performance.

## **Product Information**

The Wedge Meter uses an inset v-shaped wedge to create a differential pressure, which calculates flow rate using Bernoulli's principle. Its customizable pressure tap configurations, including flush rings for cleaning, ensure optimal performance across various applications. Designed for long-term durability, it withstands harsh conditions and provides consistent measurements for clean, mixed, and highly contaminated flows.

# **Typical Applications**

- Measurement of slurries, fracking fluids, and viscous hydrocarbons.
- Flow monitoring in wastewater and sewage systems.
- Custody transfer of liquids in petrochemical facilities.



### How Daniel® Solves Your Problems!

Potential Error	Impact on Operations	Solution
Build-Up in Wedge Area	Reduces measurement accuracy and increases maintenance.	V-shaped wedge design minimizes fouling.
Material Corrosion	Shortens lifespan in aggressive environments.	Customizable materials resist corrosion and wear.
Incorrect Beta Ratio	Causes inaccurate flow measurement.	Adjustable beta ratios ensure precision.
Improper Installation	Results in misaligned readings.	ISO 5167-6 compliance ensures correct setup.
High Pressure Loss	Increases operational energy costs.	Engineered geometry minimizes pressure drop.



#### **Product information**





**Online Store** 



#### Daniel® Measurement App







## **Application Sites**

- Refineries and chemical processing plants.
- · Asphalt, cement, and tar-sand operations.
- Sewage systems and wastewater treatment plants.

## Features and Benefits

· Durable Design:

No moving parts ensure long-term reliability.

Versatile Performance:

Handles liquids, gases, slurries, and mixed flows.

Build-Up Resistance:

V-shaped geometry prevents fouling and reduces downtime.

High Accuracy:

±0.5% calibrated accuracy, repeatability of ±0.2%.

Bidirectional Flow:

Supports flow measurement in both directions.

## Decades Proven. Field Chosen.

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.

Daniel® Measurement & Control www.daniel.com

Daniel Corporate Headquarters 9750 W. Sam Houston Pkwy N., Suite 100 Houston, TX 77064 USA Tel: +1 (346) 509-3700

