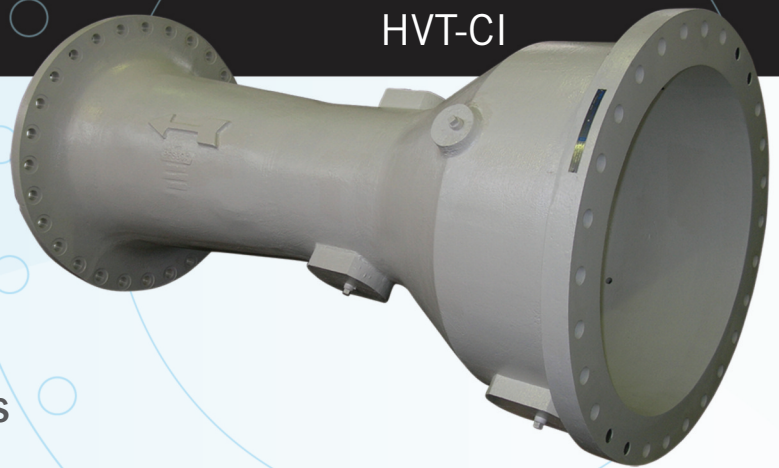


HVT-CI Halmi Cast Iron Meter

The Industry Standard
in Flow Metering for Liquid and Gas

Primary Flow Signal, Inc. is a leader in the design and manufacture of Venturi differential flow meters. Field-proven in hundreds of thousands of installations worldwide, differential metering ensures the most accurate and reliable metering available anywhere. Through innovation, coupled with peerless engineering and technical expertise, PFS delivers customers versatile, ultra-long lasting liquid and gas metering solutions for a variety of applications and industries.

The **HVT-CI Halmi Cast Iron Venturi** flow meter is the industry standard for high accuracy and reliable, properly substantiated (2 Sigma), differential producing flow measurement.



The HVT-CI is well proven in municipal water and wastewater flow measurement and control applications, as well as air (methane) and other gases. It is best used in combination with close-coupled butterfly valves to form highly efficient and effective rate controllers for filter effluent control. The Sealed Metering System (HVT-SM) version makes sewage flow measurement cost effective, accurate, and reliable without concern for blocked pressure taps. A ductile iron (HVT-DI) version is available for high line pressure applications.

Adding the PFS-FM FlowMaster can further extend the intrinsic benefits of the HVT-CI primary flow element by providing fully integrated control, management, and reporting capabilities.

HVT-CI Halmi Cast Iron Meter Features

Accuracy:

+/- 0.50% of actual reading
(2 Sigma)

+/- 0.25% of actual reading
or better based on hydraulic
calibration

Beta ratios: custom sized and
designed for Beta ratio from
0.30 to 0.75

Line size: range is unlimited, with
examples between 4" and 96" in
service

Service capability: gas or liquid,
including dirty, contaminated,
or slurry

Materials: standard cast iron body,
or ductile cast iron (HVT-DI) 304
or 316 stainless steel throat

End configuration: flange ends
(PFS-WMF), threaded ends (PFS-
WMT), weld ends (PFS-WMW),
plain, mechanical joint, or other
ends available as required

Temperature: 150° F to 400° F
as limited by capabilities of
the associated secondary
device(s) used

Line pressure capacity: from full
vacuum to 350 PSI capability

HVT-CI Halmi Cast Iron Meter Features

Line fluid capabilities:

- Gas or liquid
- Clean, or with minimal particulate
- Contaminated flow and 75,000 R_D is empirically established and highly repeatable

Pipe Reynolds number R_D

capability: discharge coefficient is constant above 75,000 R_D ; discharge coefficient bias and random error between 12,000 and 75,000 R_D is empirically established and highly repeatable

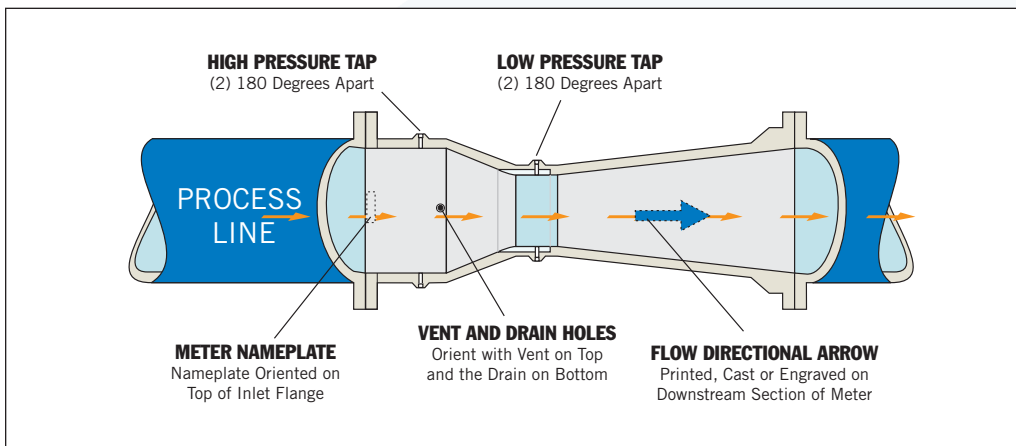
Permanent pressure loss:

Varies from 3% of differential and up depending on Beta ratio and recovery cone geometry

Ratios including Beta and exit cone truncation can be engineered to meet requirements

Installation: horizontal, vertical, or any angle is possible

HVT-CI Halmi Cast Iron Meter Typical Configuration



Liquid Applications: impulse piping needs a minimum of 1 inch per foot, DOWN to flow transmitter(s). Transmitter should be located below meter center line.

Gas Applications: impulse piping needs a minimum of 1 inch per foot, UP to the flow transmitter(s). Transmitter should be located above meter center line.

For applications where this is not possible, PFS developed solutions to resolve most impulse line/DP transmitter orientations.

When installing: 1) orient pressure taps horizontally: recommend 45°-90° from center vertical centerline of impulse tap components; 2) provide adequate clearances; 3) tighten flange bolts to industry flange assembly standards to avoid leakage; 4) ensure tolerances are within industry standards.

Support Services

In addition to a wide range of differential producing Venturi flow meters, orifice plates, WedgeType™ flow meters, and open channel flow elements, PFS provides comprehensive, specialized services for new and existing flow meters, including rehabilitation, hydraulic analysis, and full engineering support.

Certifications

ISO 9001, ASME S, U, R; European PED Module H; and other internationally recognized certifications, such as GOST, IBR, and CRN.

Contact a Field Application Engineer for assistance.



All PFS products are proudly made in the U.S.A.



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