

PROCON PSignature Series *AVM Venturi by Amity Flow*

The PSignature Series AVM is a proprietary design venturi based upon the original designs of R.W. Miller, perfected using the Amity Computation Module. All PSignature Series AVM flowmeters are designed to provide the best performance with regards to the four critical sections of a Venturi class meter:

- Inlet contraction
- Throat length
- Pressure tap locations and size
- Diffuser included angle

Amity Venturi Meters are available in three models: AVM-R, AVM-S, and AVM-T.

Venturi Cylindrical Throat Next Back

Carbon Steel
 8-9% Chrome-Moly Steel
 Chrome-Moly Steel Grade 11
 Chrome-Moly Steel G
 Stainless Steel

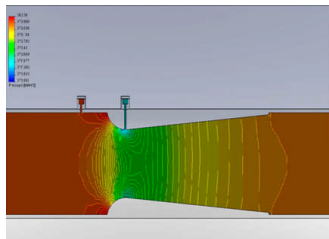
300

Venturi Next Back

Enter Discharge Coefficients

Machined Inlet (Machined) 7 Degree Exit Cone
 Rough Cast Inlet (Cast) 7 Degree Exit Cone
 Rough Welded Sheet Iron Inlet (Fabricated) 7 Degree Exit Cone
 Machined Inlet (Machined) 15 Degree Exit Cone
 Rough Cast Inlet (Cast) 15 Degree Exit Cone
 Rough Welded Sheet Iron Inlet (Fabricated) 15 Degree Exit Cone

AVT-R-I AVT-R-P AVT-R-F
 AVT-S-I AVT-S-P AVT-S-F
 AVT-T-I AVT-T-P AVT-T-F

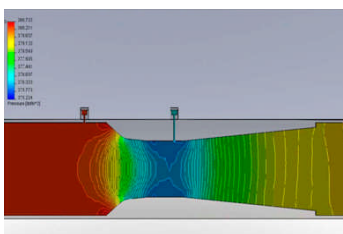
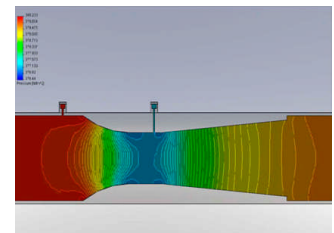


AVM-R - Amity Venturi Meter Model R

The Amity Venturi Meter Model R is designed to have a lower-overall pressure loss while producing a higher differential at a given flow rate than a standard ASME Venturi. These meters are widely used in the Water and Waste industries where overall pressure loss is important.

AVM-S - Amity Venturi Meter Model S

The Amity Venturi Meter Model S is used for accurate metering in the laboratory and power industries. These meters can be considered equivalent to the throat tap nozzle and closely replicate the theoretical boundary theory developed specifically for accurate extrapolation outside the range of the laboratory calibration data.



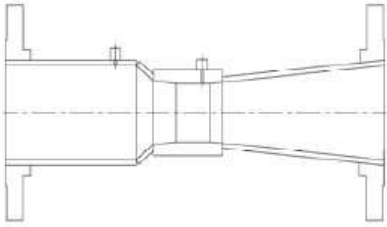
AVM-T - Amity Venturi Meter Model T

The Amity Venturi Meter Model T has a reduced overall length compared to an ASME Venturi and meets or exceeds the ASME Venturi standard

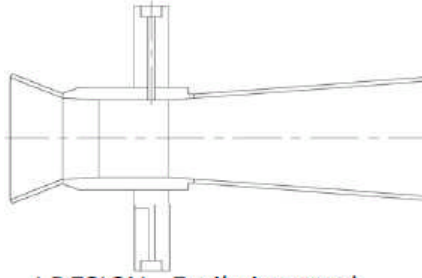
Each model (AVM-R,S,T) is available in three installation designs: **F**, **I** and **P**.

- **F** ---> **F**langed: ASME Venturi diffuser section with flanges / welded installation
- **I** ----> **I**nsertion: Easily inserts between existing flanges.
- **P** ---> **P**rep (for weld): Minimizes overall length with lower overall pressure loss than F design

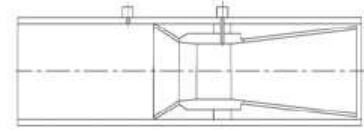
All models and installation designs can accurately be used on any fluid and for liquid, gas, and vapor flows.



F DESIGN - ASME Venturi diffuser section with flanges/welding installation.



I DESIGN - Easily inserted between existing flanges.



P DESIGN - Minimizes overall length with lower overall pressure loss than F design.

SPECIFICATIONS

FLUIDS: Gases or liquids (for slurry applications, see Segmental Wedge Venturi)

LINE SIZES: <1 TO 96" NPS

DESIGN PRESSURES: ANSI/ASME CL 150 - 2500

DESIGN TEMPERATURES: to 500 C

FLOW DESIGN: PROPRIETARY

ACCURACY: to +/- 0.25%

WETTED MATERIALS:

Carbon steel

5-9% Chrome-moly steel

Chrome-moly Grade 11

Chrome-moly Grade 22

Stainless steel (300 | 304 | 316 | 400 ...)

Hastelloy B

Hastelloy C

Inconel X, annealed

Haynes Stellite 25

Yellow brass

Beryllium Copper 25

Cupronickel 30%

Monel

Alloy 20

Tantalum

PVC

etc...



Specializing in the design, engineering and manufacture of venturi flowmeters coupled with 35 years experience.

R.W. Miller & Associates

Engineering expertise for flow measurement, fluid dynamics, flow-meter design, technical marketing, piping analysis, standards, flow laboratory design, laboratory operation and general fluid metering applications.

PRESSURE DESIGNS: B31.3

APPROVALS: CRN

