VERIS Verabar®

Regular Models

V100 & V110 Compression Fitting

The Most Accurate and Reliable Technology for Measuring Gas, Liquid and Steam…

Developed from aerospace technology, the VERIS Verabar® averaging pitot flow sensor provides unsurpassed accuracy and reliability.

V100

With its solid, one-piece construction and bullet shape, the VERIS Verabar® makes flow measurement leak resistant and precise. The unique sensor shape reduces drag and flow induced vibration. The location of the low-pressure ports significantly reduces the potential for clogging and improves signal stability.

V110

V100 Single Support and V110 Opposite Support	
Pipe Connection	Threaded (NPT)
Mounting Type	Tube fitting
Features and Benefits	• Most cost effective model • Installed in less than one hour • Low and medium pressures
Applications	• Pipes (steel, PVC, FRP, copper) • Air (compressed, combustion) • Natural gas • Stack/flue gas • Water (raw, cooling, feedwater) • Low pressure steam • Non-hazardous fluids
Special Designs — Consult Factory	• Custom mounting, lengths, materials,instrument connections, etc. • Short straight run

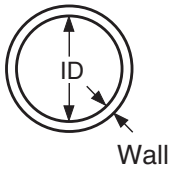
Temperature Pressure Limits (ANSI Class)*
300#
740 psig @ 100°F (51.0 bar @ 38°C)
410 psig @ 800°F (28.3 bar @ 426°C)
600#
1440 psig @ 100°F (99.3 bar @ 38°C)
825 psig @ 800°F (56.9 bar @ 426°C)

Model Specifications	V100 and V110	
Sensor Code	**05**	**10**
Sensor Diameter	7/16” (11mm)	7/8” (22mm)
Accuracy	±1% of flow rate; up to +/-0.5% if calibrated	
ANSI Class*	600#	300#
Pipe Size	2”- 6” (50mm-150mm)	6”- 48” (150mm-1200mm)
Instrument Connection	1/2” NPT or Direct Mount	
Components Furnished	Weld coupling, tube fitting; V110 includes additional weld coupling and plug	
Weld Coupling Size	3/4” NPT	1” NPT

* DIN and JIS flanges available. Consult factory.

Armstrong®

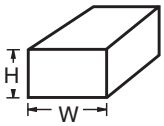
1. Enter Pipe Dimensions or Duct Dimensions



Pipe Size _____ Sch _____

Pipe ID _____ and

Wall _____ Pipe Material _____



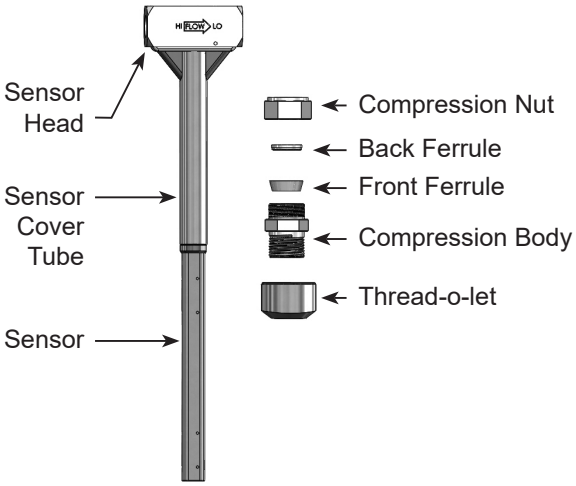
Dimension Verabar® spans (H) or (W)

Height (H) _____

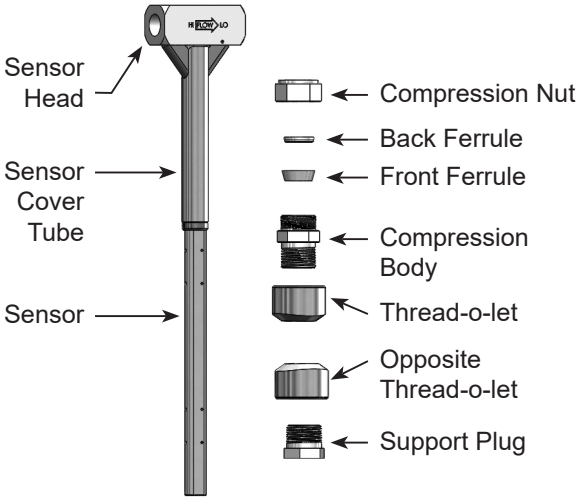
Width (W) _____

Wall _____

Duct Material _____

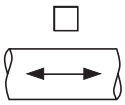


Verabar® Model V100

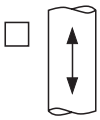


Verabar® Model V110

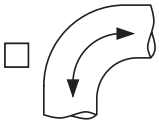
2. Pipe or Duct Orientation (Check one box)



(H) Horizontal



(V) Vertical



Short Straight Run

Consult Factory

3. Enter Flow Conditions

Fluid Name:		Maximum	Nominal	Minimum	Units
Flow Rate					
All Fluids	Pressure @ Flow				
	Temperature @ Flow				
Gas	Specific Gravity, or Molecular Weight				
Liquid	Specific Gravity				
Steam	VeraCalc Program can calculate Density from Temperature and Pressure				

4. Select Model from Page 3

Use the Ordering Information table on Page 3 to determine your model number.

5. Flow Calculation

All VERIS Verabar® applications require a flow calculation to verify the DP, pressure and temperature limits, structural limits and to size the transmitter. VeraCalc is for use by representatives and end users. It is easy to operate and includes steam tables.

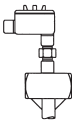
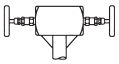
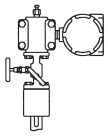
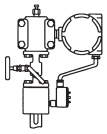
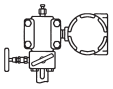
Model	Regular
V100	Compression Fitting (Single Support)
V110	Compression Fitting (Double Support)

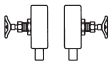
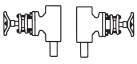
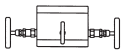
Pipe Size and Schedule or Exact ID and Wall Thickness

Code	Sensor Pipe Size Range
05	2” to 6” (50mm to 150mm)
10	6” to 48” (150mm to 1200mm)

Code	Pipe Orientation
H	Horizontal
V	Vertical

Instrument Connections (Select Remote or Direct Mount)
(Transmitter sold separately)

Remote Mount Transmitter (1/2” NPT)				Direct Mount Transmitter (Flanged 450°F/232°C Max.)†		
Parallel	Regular	RTD*	Valve	Transmount	Mass Transmount	Manifold
			 Integral		 Integral RTD	 Integral
P	R	D	T	F	G	M

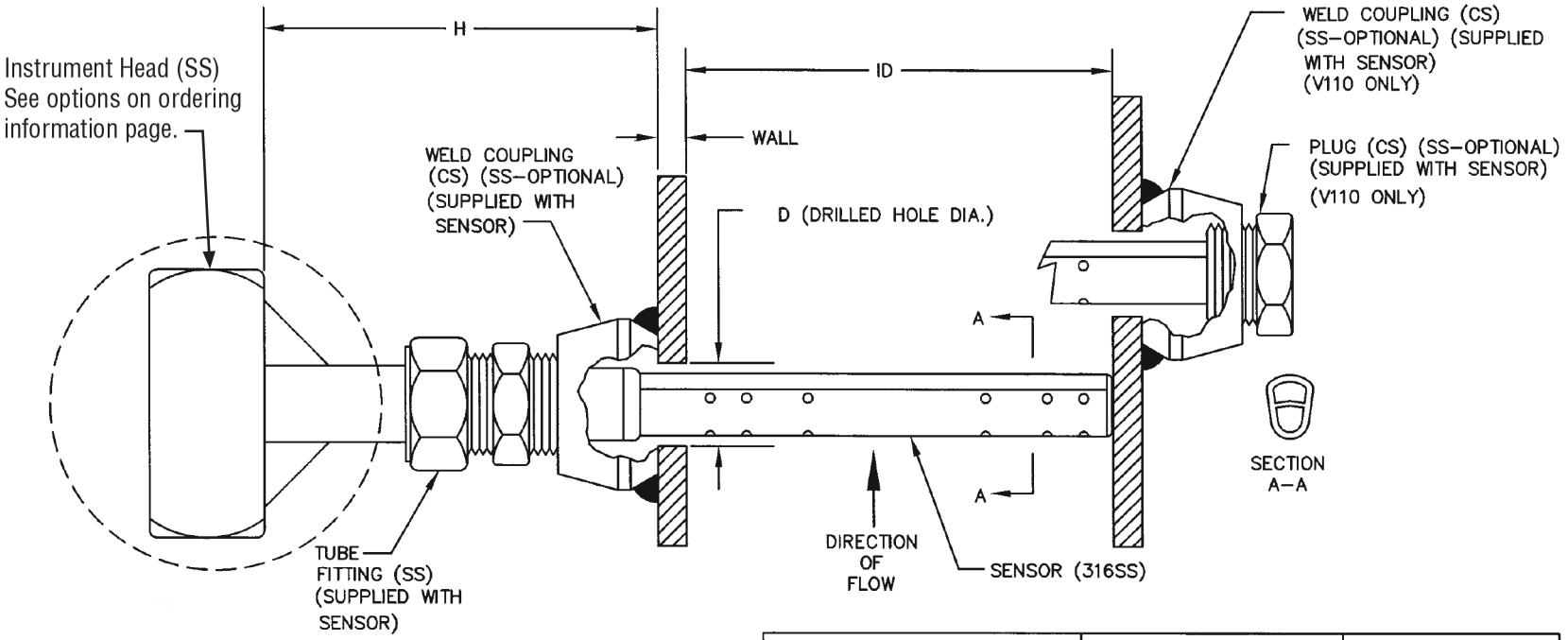
Instrument Valves (Opt.)		Manifolds (Optional)			
Remote Mount		Direct Mount			
Needle	Gate	3-Valve		5-Valve	
 1/2” NPT	 1/2” NPT	 Soft Seat	Hard Seat	 Soft Seat	Hard Seat
C2NC (CS) **C2NS** (SS)	**C2GC** (CS) **C2GS** (SS)	**F3SC** (CS) **F3SS** (SS)	**F3HC** (CS) **F3HS** (SS)	**F5SC** (CS) **F5SS** (SS)	**F5HC** (CS) **F5HS** (SS)

Optional

Code	Options
WNS	For stainless steel pipes. For V100, furnished with one SS weld coupling. For V110, furnished with two SS weld couplings and one SS plug.

V100	8”sch40	10	H	R	C2NC	Typical Model Number

* For high pressure (>500psig) or high temperature (>500°F), remote mount RTD in a thermowell is preferred.
† Assuming adequate heat dissipation for transmitter.



ITEM	SENSOR –05	SENSOR –10
ANSI RATING	CLASS 600#	CLASS 300#
SENSOR DIA.	7/16" (11mm)	7/8" (22mm)
DIM 'D' DRILLED HOLE DIAMETER	1/2" (13mm)	1" (26mm)
FITTING SIZE	5/8" TUBE X 3/4" NPT	1" TUBE X 1" NPT
COUPLING SIZE	3/4" NPT	1" NPT
DIM 'H'	4.0" (102mm)	5.5" (140mm)

Armstrong VERIS Flow Measurement Group armstrongintenational.com/veris	**VERIS Verabar® V100 & V110 Tube Fitting, Threaded**	
DATE: 09/20/01	DWG. No. **SUB-3934**	
Scale: NTS	Rev: A	Page 1 of 1

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