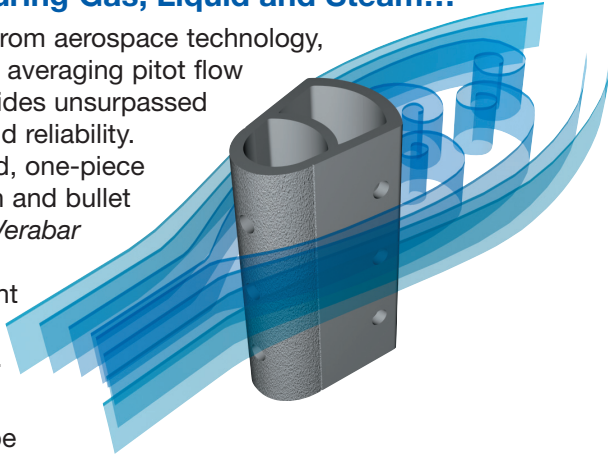


Differential Pressure Flow Sensors

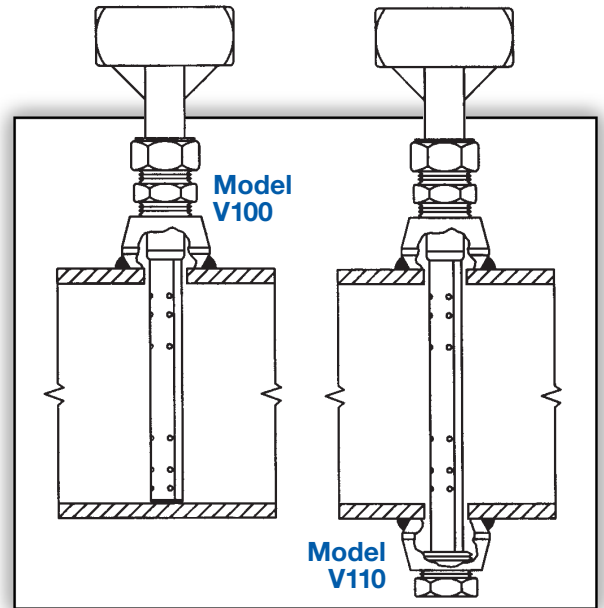
V100 & V110 Compression Fitting

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

Developed from aerospace technology, the Verabar® averaging pitot flow sensor provides unsurpassed accuracy and reliability. With its solid, one-piece construction and bullet shape, the Verabar makes flow measurement leak proof and precise.



The unique sensor shape reduces drag and flow induced vibration. The location of the low-pressure ports eliminates the potential for clogging and improves signal stability.



V100 Single Support V110 Opposite Support	
Pipe Connection	Threaded (NPT)
Mounting Type	Tube fitting
Features and Benefits	<ul style="list-style-type: none"> • Most cost effective model • Installed in less than one hour • Low and medium pressures
Applications	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Custom mounting, lengths, materials, instrument connections, etc. • Short straight run

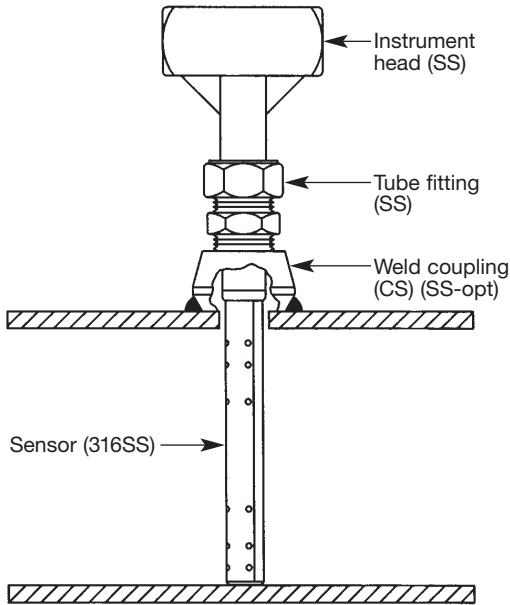
Temperature Pressure Limits (ANSI Class)*
300#
740 psig @ 100°F (51.0 Bars @ 38°C)
410 psig @ 800°F (28.3 Bars @ 426°C)
600#
1440 psig @ 100°F (99.3 Bars @ 38°C)
825 psig @ 800°F (56.9 Bars @ 426°C)

Model Specifications	V100 and V110	
Sensor Code	05	10
Sensor Diameter	7/16" (11mm)	7/8" (22mm)
Accuracy	±1% of flow rate; ±0.5% if calibrated	
ANSI Class*	600#	300#
Pipe Size	2" - 6" (50mm-150mm)	6" - 48" (150mm-1200mm)
Instrument Connection	1/2" NPT	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

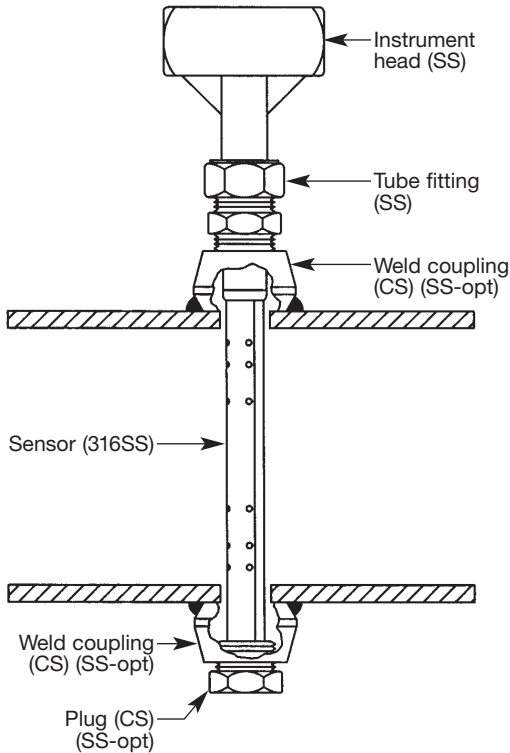
* DIN and JIS flanges available. Consult factory.

Verabar® Regular Models

V100 (Single Support)

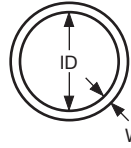


V110 (Double Support)

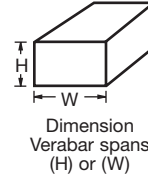


Furnish the following information:

1. Enter Pipe Dimensions or Duct Dimensions

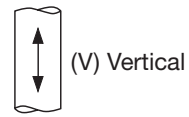
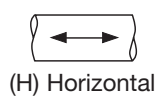


Pipe Size ____ Sch ____
 Pipe ID ____ and
 Wall ____ Pipe Mat'l ____



Height (H) ____
 Width (W) ____
 Wall ____
 Duct Mat'l ____

2. Pipe or Duct Orientation



3. Enter Flow Conditions

Fluid Name:		Maximum	Normal	Minimum	Units
Flow Rate					
All Fluids	Temperature @ Flow				
	Pressure @ 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





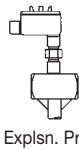

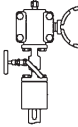
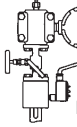
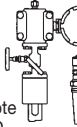
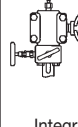


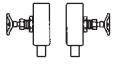
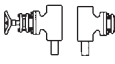
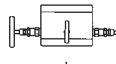
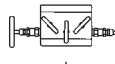
Use the Ordering Information table on Page 3 to determine your model number.

5. Flow Calculation



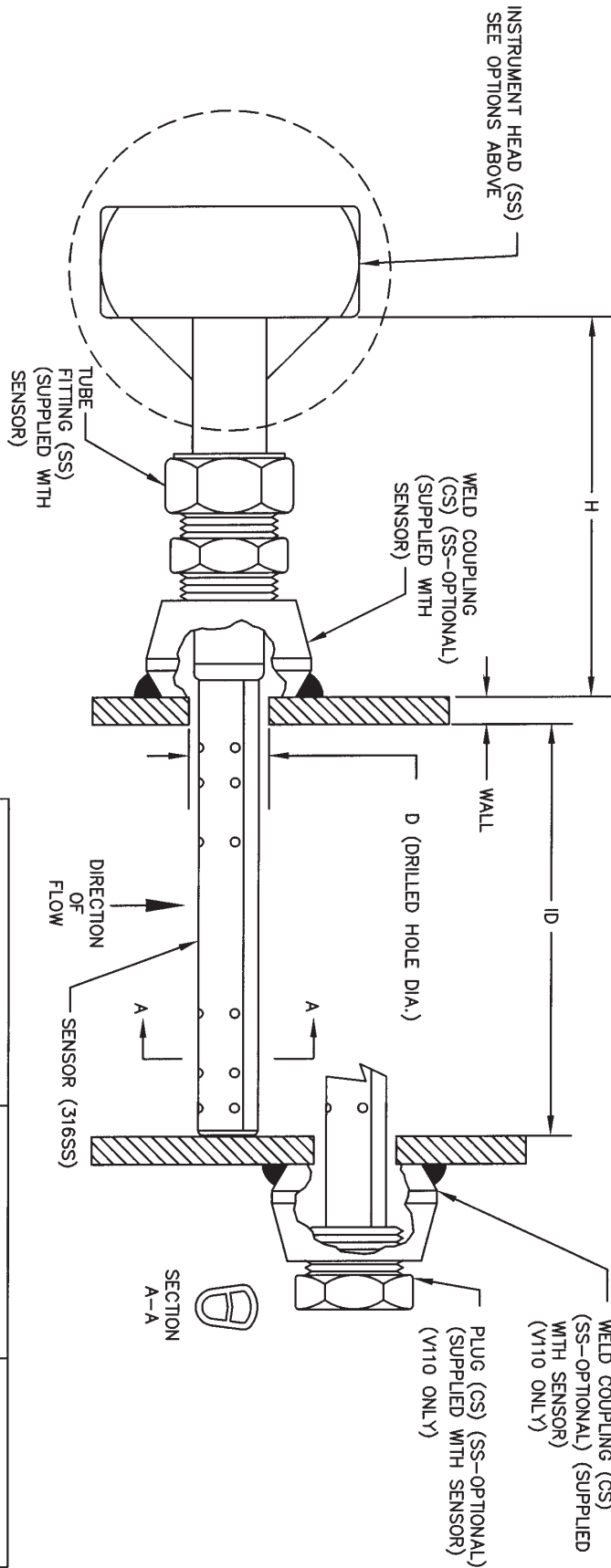
All Verabar applications require a flow calculation to verify the DP, pressure and temperature limits, structural limits and to size the transmitter. The Veracalc PC Program is for use by representatives and end users. It is easy to operate and **includes steam tables**.

Ordering Information

Model	Regular						
V100 V110	Compression Fitting (Single Support) Compression Fitting (Double Support)						
Pipe Size and Schedule or Exact ID and Wall Thickness							
Code	Sensor Pipe Size Range						
05 10	2" to 6" (50mm to 150mm) 6" to 48" (150mm to 1200mm)						
Code	Pipe Orientation						
H V	Horizontal 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	
		 Explsn. Proof	 Integral		 Integral RTD	 Remote RTD	 Integral
P	R	D	T	F	G	E	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	
C2NC (CS) C2NS (SS)		C2GC (CS) C2GS (SS)		F3SC (CS) F3SS (SS)		F3HC (CS) F3HS (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.

R M O M O N T E	PARALLEL	REGULAR	RTD	VALVE	V A L V E S	NEEDLE	GATE		
CODE	P	R	D	T	S	1/2" NPT C2NC (CS) C2NS (SS)	1/2" NPT C2GC (CS) C2GS (SS)		
D M I R U E N T	TRANSMOUNT	MASS TRANSMOUNT	MANIFOLD	MANIFOLDS	3-VALVES	5-VALVES			
CODE	F	G	E	M	INTEGRAL	SOFT SEAT F3SC (CS) F3SS (SS)	HARD SEAT F3HC (CS) F3HS (SS)	SOFT SEAT F5SC (CS) F5SS (SS)	HARD SEAT F5HC (CS) F5HS (SS)



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)

CUSTOMER: _____
 PROJECT: _____
 ORDER NO: _____
 TAG NO: _____
 PIPE SIZE & SCHEDULE: _____
 CATALOG NO: _____
 SERIAL NO: _____
 CERTIFIED BY: _____ DATE: _____

Veris, inc.
 6315 MONARCH PARK PLACE
 NIWOT, CO 80503
 PHONE: 303-652-8550
 FAX: 303-652-8552

VERABAR MODEL: V100/110
 TUBE FITTING, THREADED

DATE 09/20/01 DWG NO. SUB-3934
 SCALE NTS REV A PAGE 1 OF 1