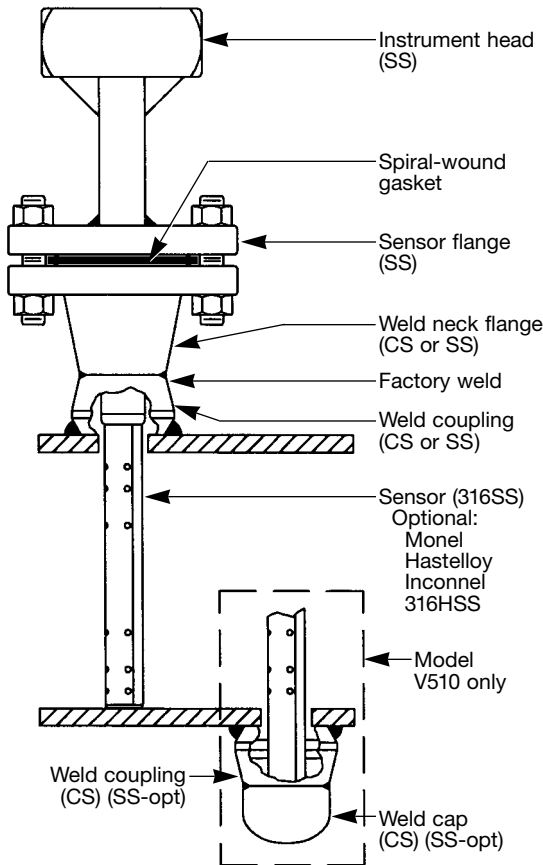


Differential Pressure Flow Sensors

**V500 Single Support**  
**V510 Double Support**  
**Flanged Components**

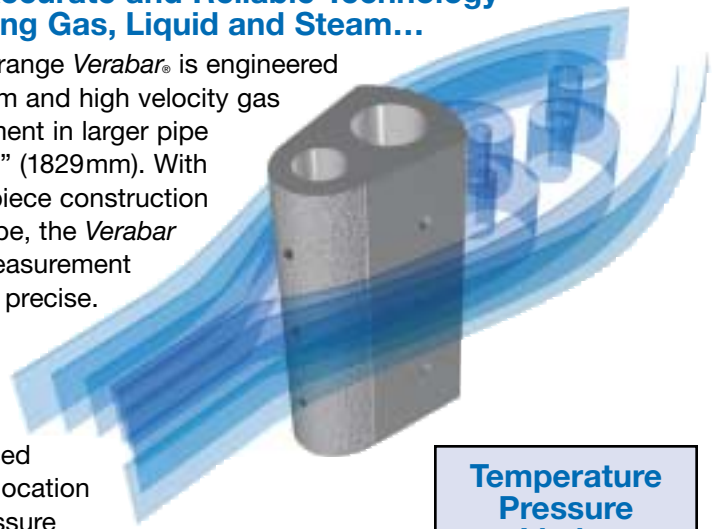
## V500 (Single Support) V510 (Double Support)



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

The extended range Verabar® is engineered for liquid, steam and high velocity gas flow measurement in larger pipe sizes, up to 72" (1829mm). 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.



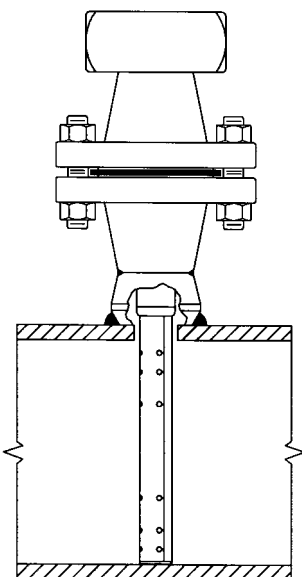
### Temperature Pressure Limits (ANSI Class)

<b>150#</b>
275 psig @ 100°F (19 Bars @ 38°C)
80 psig @ 800°F (5.5 Bars @ 426°C)
<b>300#</b>
720 psig @ 100°F (49.6 Bars @ 38°C)
330 psig @ 800°F (22.8 Bars @ 426°C)
<b>600#</b>
1440 psig @ 100°F (99.3 Bars @ 38°C)
660 psig @ 800°F (45.5 Bars @ 426°C)
<b>1500#</b>
3600 psig @ 100°F (248.2 Bars @ 38°C)
205 psig @ 1500°F (14.1 Bars @ 815°C)
<b>2500#</b>
6000 psig @ 100°F (419.6 Bars @ 38°C)
345 psig @ 1500°F (23.7 Bars @ 815°C)

Model Specs	V500 & V510
Pipe Connection	Flanged
Sensor Code	20
Sensor Diameter	2" (51mm)
ANSI Class	150#, 300#, 600#, 1500#, 2500#
Pipe Size	12"-72" (300mm-1829mm)
Instrument Connection	1/2" NPT
Components Furnished	Weld coupling, weldneck flange, gaskets, studs & nuts V510 includes additional weld coupling and pipe cap.
Flange Size	3"

## High Pressure and Temperature

Applications up to ANSI Class 2500#



## Unique Design Features

High Pressure Threaded (HPT) and High Pressure Socket (HPS) designs offer the highest possible pressure and temperature capabilities. When pressure containment and safety are primary concerns, the HPT/HPS has the strongest and safest design in the industry.

As with all Veris designs, it meets ANSI/ASME B31.1 and can be supplied with code welding (ASME Section IX), hydrostatic testing, N.A.C.E. and material traceability.

## Applications

**Main Header Steam Lines**  
Used for high pressure and temperature applications such as main header steam lines.

For these applications, pipe mounting assemblies are available in chrome-moly material (ASTM A182 F11 & F22).



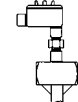
### Other Applications

- High pressure and temperature gasses and liquids
- Natural gas transmission lines
- Boiler feed water lines
- Oil well injection lines

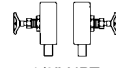

# Ordering Information

<b>Model</b>	<b>Extended Range Flanged</b>	
<b>V500</b> <b>V510</b>	Single Support Double Support	
<b>Pipe Size and Schedule or Exact ID and Wall Thickness</b>		
<b>Code</b>	<b>Sensor Pipe Size Range</b>	
<b>20</b>	12" to 72" (300mm to 1829mm)	
<b>Code</b>	<b>Pipe Orientation</b>	
<b>H</b> <b>V</b>	Horizontal Vertical	

Instrument Connections		
Parallel	Regular	RTD*
		 Explsn. Proof
<b>P</b>	<b>R</b>	<b>D</b>

Instrument Valves (Optional)	
Needle	Gate
	
1/2" NPT	1/2" NPT
<b>C2NC (CS)</b> <b>C2NS (SS)</b>	<b>C2GC (CS)</b> <b>C2GS (SS)</b>

Mounting Assembly — Select Material & Rating (Includes SS sensor flange, WN flange, weld coupling, spiral-wound gaskets, studs & nuts)		
Sensor 20 (Flange Size 3")	Mating Flange Material & ANSI Class	
<b>Code</b>		
<b>F1215C</b> <b>F1215S</b>	CS SS	150# 150#
<b>F1230C</b> <b>F1230S</b>	CS SS	300# 300#
<b>F1260C</b> <b>F1260S</b>	CS SS	600# 600#

High Pressure Instrument Head (ANSI Class 1500# & 2500#)		
HPT HPS	1/2" NPT Socket Weld	
<b>High Pressure Mounting Assembly (HPT &amp; HPS Connections)</b>		
Sensor 20 (Flange Size 3")	Mating Flange Material & ANSI Class	
<b>Code</b>		
<b>F12150C</b> <b>F12150S</b> <b>F12150F11</b> <b>F12150F22</b>	CS SS F11 F22	1500#
<b>F12250C</b> <b>F12250S</b> <b>F12250F11</b> <b>F12250F22</b>	CS SS F11 F22	2500#







  

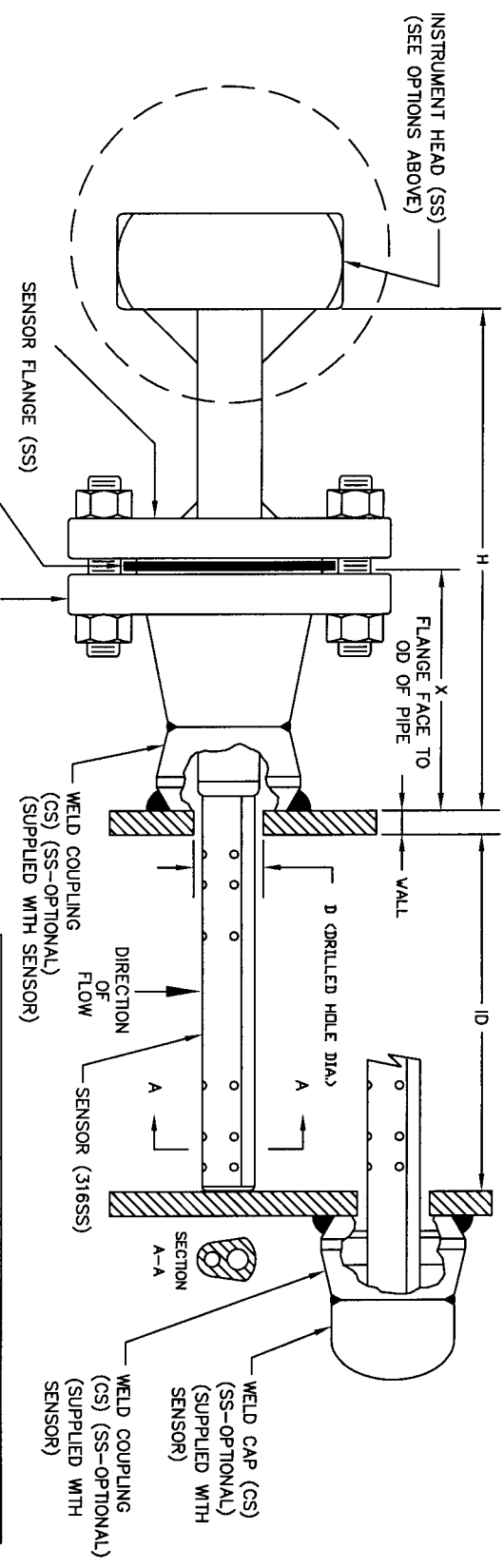
Optional

<b>V500</b>	<b>20"schstd</b>	<b>20</b>	<b>H</b>	<b>R</b>	<b>C2NC</b>	<b>F1215C</b>	<b>Typical Model Number</b>
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\* For high pressure (>500psig) and high temperature (>500°F) remote mount RTD in a thermowell is preferred.

CODE	PARALLEL	REGULAR	RTD	V AL V E S	NEEDLE	GATE
R M E O M U N T						
1/2" NPT	1/2" NPT	X PROOF	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT
C2NG (CS) C2NS (SS)	C2NG (CS) C2GS (SS)	C2NG (CS) C2GS (SS)	C2NG (CS) C2GS (SS)	C2NG (CS) C2GS (SS)	C2NG (CS) C2GS (SS)	C2NG (CS) C2GS (SS)



NOTES:  
1. CONTACT VERIS FOR DIMENSIONAL DRAWING FOR HIGH PRESSURE THREADED (HPT) & HIGH PRESSURE SOCKET (HPS)

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

ITEM	SENSOR
SENSOR DIA.	2" (51mm)
FLANGE & COUPLING SIZE	3"
DIM "D" DRILLED HOLE DIA.	2-1/8" (54mm)
DIM "H" ANSI CLASS 150#	9.9" (252mm)
DIM "H" ANSI CLASS 300#	10.8" (275mm)
DIM "H" ANSI CLASS 600#	11.3" (287mm)
DIM "X" ANSI CLASS 150#	4.63" (118mm)
DIM "X" ANSI CLASS 300#	5.00" (127mm)
DIM "X" ANSI CLASS 600#	5.38" (137mm)

\* "H" & "X" DIMENSIONS ARE APPROXIMATE (FOR SIZING PURPOSES ONLY)

**Veris, inc.**  
 6315 MONARCH PARK PLACE  
 NIWOT, CO 80503  
 PH: 303-652-8550  
 FX: 303-652-8552

VERABAR MODEL: V500/V510  
 FLANGED CONNECTION

DATE 7/10/03  
 SCALE NTS  
 REV A  
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