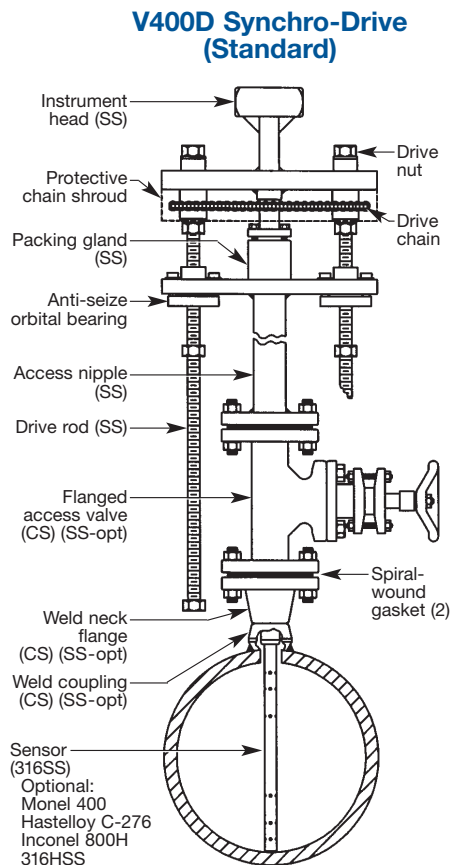


Extended Range Hot Tap Models

Differential Pressure Flow Sensors

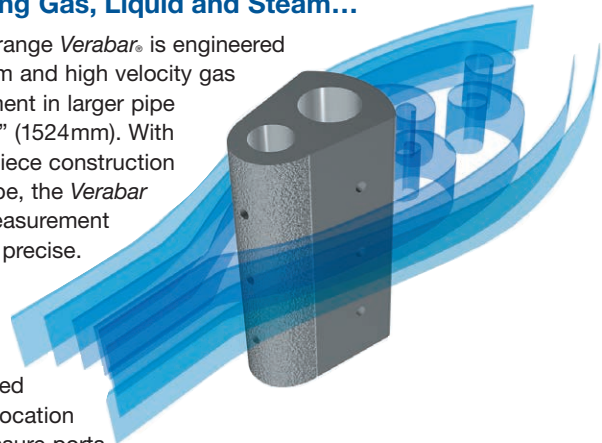
V400D Double Rod Flanged Components



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 60" (1524mm). 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.



Model Specs	V400D
Pipe Connection	Flanged
Sensor Code	20
Sensor Diameter	2" (51mm)
Accuracy	±1% of flow rate; ±0.5% if calibrated
ANSI Class*	150#, 300#, 600#
Drive Rods	2
Pipe Size	12"-60" (300mm-1524mm)
Instrument Connection	1/2" NPT
Components Furnished	Weld coupling, weld neck flange, gaskets, studs & nuts
Flange Size	3"

Temperature Pressure Limits (ANSI Class)*
150#
275 psig @ 100°F (19 Bars @ 38°C)
80 psig @ 800°F (5.5 Bars @ 426°C)
300#
720 psig @ 100°F (49.6 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)

Synchro-Drive Description

Synchro-Drive is standard on all -20 sensors. Two drive rods are coupled together by a protected chain drive system. Turning either drive nut simultaneously rotates both rods.

Synchro-Drive Benefits

- 95% faster and easier insertion and retraction
- Equal load distribution over both rods maintains sensor alignment and eliminates binding

* DIS and JIS flanges available. Consult factory.

Ordering Information

Model	Extended Range Hot Tap • Screw Drive
V400D	Double Rod, Insert/Retract
Pipe Size and Schedule or Exact ID and Wall Thickness	
Code	Sensor Pipe Size Range
20	12" to 60" (300mm to 1524mm)
Code	Pipe Orientation
H	Horizontal
V	Vertical

Instrument Connections		
Parallel	Regular	RTD*
P	R	D
		Explsn. Proof

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

Mounting Assembly — Select Valve Type, Material & ANSI Class (Includes valve, WN flange, weld coupling, spiral-wound gaskets, studs & nuts)			
Ball Valve Flange		Gate Valve Flange	
Sensor 20 (Valve Size 3")	Material & ANSI Class	Sensor 20 (Valve Size 3")	Material & ANSI Class
Code		Code	
B12CF15	CS 150#	G12CF15	CS 150#
B12SF15	SS 150#	G12SF15	SS 150#
B12CF30	CS 300#	G12CF30	CS 300#
B12SF30	SS 300#	G12SF30	SS 300#
B12CF60	CS 600#	G12CF60	CS 600#
B12SF60	SS 600#	G12SF60	SS 600#

Code	Options
WPS	SS Wetted Components (Furnished with SS weld coupling, flanges & access nipple) Must be ordered with SS access valve

V400D	20"schstd	20	H	R	C2NC	G12CF30	Typical Model Number
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* For high pressure (>500psig) or high temperature (>500°F), remote mount RTD in a thermowell is preferred.

NOTES:

- Δ H=ID+WALL+X+19.0" (SENSOR -20 INSERTED),
H=2(ID+WALL+X)+19.6" (SENSOR -20 RETRACTED).
- INSTRUMENT HEAD AND ACCESS VALVE ORIENTATION SHOWN 90 DEGREES FROM ACTUAL ORIENTATION FOR CLARITY.

CODE	R M E O U N T	PARALLEL	REGULAR	RTD	VALVE	NEEDLE	GATE
P	1/2" NPT					1/2" NPT C2NG (CS) C2NS (SS)	1/2" NPT C2GC (CS) C2GS (SS)

ITEM	SENSOR
SENSOR DIA.	2" (51mm)
FLANGE SIZE	3"
DIM 'D' DRILLED HOLE DIAMETER	2-1/8" (54mm)
DIM 'X' ANSI CLASS 150#	12.63" (320mm)
DIM 'X' ANSI CLASS 300#	16.13" (410mm)
DIM 'X' ANSI CLASS 600#	19.38" (492mm)

* 'H' & 'X' DIMENSIONS ARE APPROXIMATE (FOR SIZING PURPOSES ONLY).

CUSTOMER: _____

PROJECT: _____

ORDER NO: _____

TAG NO: _____

PIPE SIZE & SCHEDULE: _____

CATALOG NO: _____

SERIAL NO: _____

CERTIFIED BY: _____ **DATE:** _____

VERIS, inc.
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NIMOT, CO 80503
PHONE: 303-652-8550
FAX: 303-652-8552

VERABAR MODEL: V400 DOUBLE ROD FLANGED SYNCHRO

DATE 7/10/03	DWG NO. SUB-5104
SCALE NTS	REV A PAGE 1 OF 1

ISO 9001 Certified

Veris, Inc. is in compliance with this standard to ensure that our customers are receiving the highest quality products available.

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