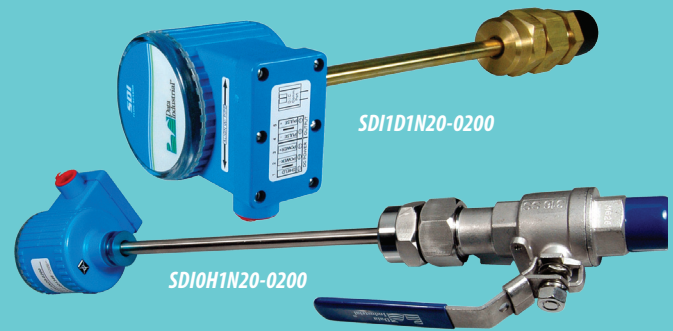


Insert Meter, Small Diameter Impeller (SDI)

Ideal For Pipe Sizes 1-1/2" To Over 36"



DESCRIPTION

The Veris direct insert style liquid flow sensor with stainless steel/PPS plastic or PEEK plastic tip combines flow sensing with a built-in transmitter for an all-in-one flow measuring system. This device fits all 1-1/2" to over 36" (38 to 915 mm) pipes, and it is intended for direct installation into the pipe through a 1" NPT hole.

This sensor is available with or without hot tap capability. In the hot tap installation, the sensor is mounted in the pipe under pressure by attaching a service saddle or weld-on fitting to the pipe. Then the sensor assembly is attached to an isolation valve and extended into the pipeline to measure flow. Hot tap installations are often required in retrofit projects, but even in new construction, a hot tap sensor can be desirable for service considerations.

A301-20 software and programming cable are required to operate these meters. If the meter will be used for hot tap installation, the A1027 tool is also needed (see Ordering Information).

APPLICATIONS

- Flow measuring projects
- True hot tap installations
- BTU applications (requires temperature sensors and transmitter/monitor)

FEATURES

- NEMA 4 electronics housing...rugged and weather-proof
- Scaled pulse and 4-20mA output available
- Viton® O-ring seal...no leaks
- Stainless steel impeller, tungsten carbide shaft and polyamide-imide bearing...highly durable

SPECIFICATIONS

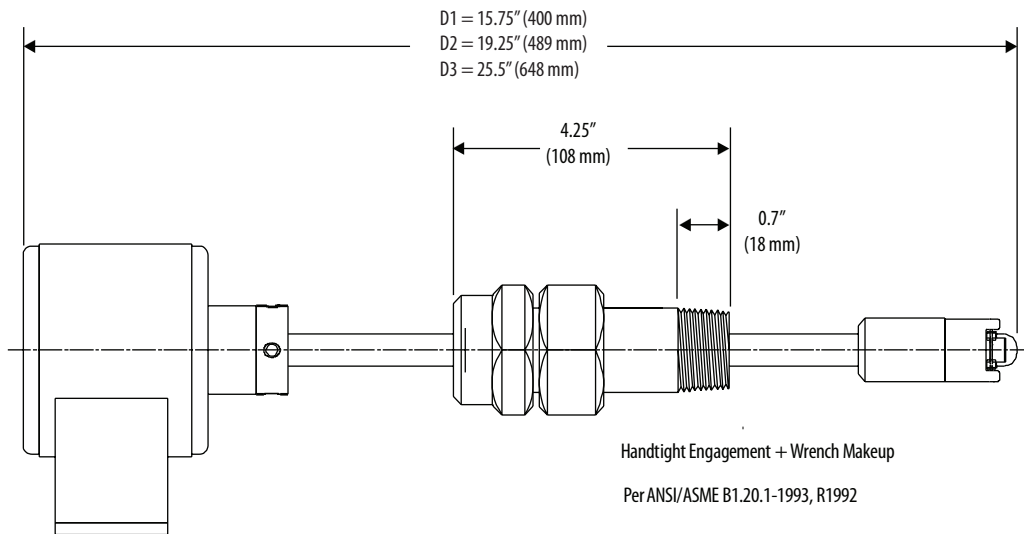


Recommended Design Flow Range	0.3 to 20 ft./sec
Pressure Rating	1000 psi @ 21°C (70°F)
Maximum Temperature Rating	135°C (300°F)
Operating Temperature	Electronics: 20° to 65°C (14° to 150°F)
Pressure Drop	0.5 psi or less @ 10 ft/sec for all pipe sizes 1.5" dia and up
Accuracy	±1% of rate over optimum flow range*
Repeatability	±0.5%

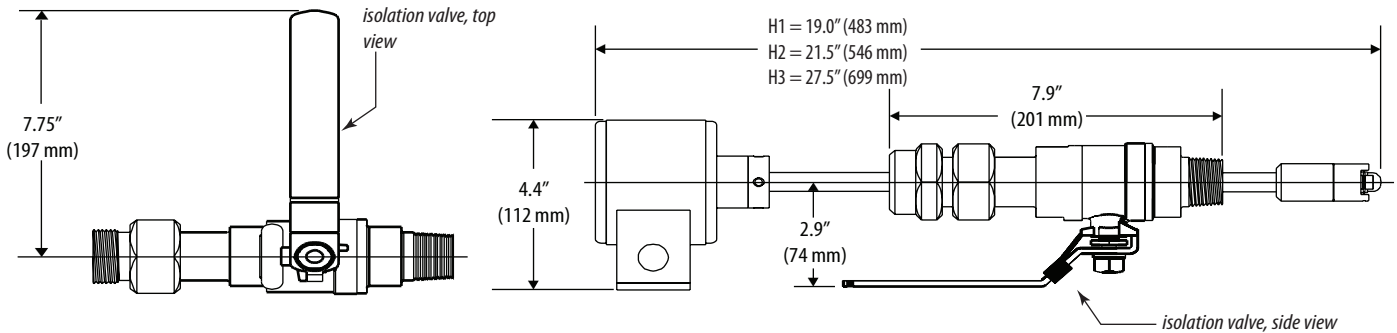
* ≥10 upstream and ≥5 downstream straight pipe diameters, uninterrupted flow.

DIMENSIONAL DRAWINGS

SDI1D1N20-0200



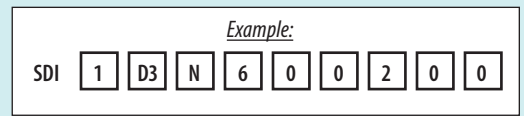
SDI0H1N20-0200



ORDERING INFORMATION

MODEL	MANUF. PART #	DESCRIPTION
U001-0020	A301-20*	Flow, Programming Cable with CD for Badger/DI prod
U001-0021	SDI0D1N10-0200	Flow, SDI, SS, 1.5 to 10, 4-20mA, No Display
U001-0022	SDI0H1N10-0200	Flow, SDI, Hot Tap, SS, 1.5 to 10, 4-20mA, No Display
U001-0050	A1027**	Flow, Tool, Hot Tap Adapter, 1" machine to 1" NPT
U001-0063	SD10D1N00-0200	Flow, SDI, SS, 1.5 to 10, Frequency, No Display
U001-0064	SD10H1N00-0200	Flow, SDI, SS, 1.5 to 10, Hot Tap, Frequency, No Display

* A301-20 software and programming cable required for analog, Modbus, LonWorks, BACnet transmitter and meter products.
 ** A1027 required to adapt SDI hot tap sensor 1" machine thread to 1" NPT for hot tap drilling tools.



Other models available:

Material	Type	Electronic Housing	Output	Display	O-Ring	Shaft	Impeller	Bearing
SDI		N					0	0
0 = Stainless Steel/PPS plastic Tip	D1 = Direct Insert for Pipe 1½ - 10"	= NEMA 4X	0 = Frequency (standard)	0 = No Display	0 = Viton® (standard)	0 = Zirconia Ceramic (optional)	= Stainless Steel	= Torion®
1 = Brass/PPS plastic Tip (no Hot Tap)	D2 = Direct Insert for Pipe 12 - 36"		1 = Analog 4-20mA	1 = LCD Option (requires output option 1 or 2)	1 = EDPM	1 = Hastelloy® C-276 (optional)		
2 = Stainless Steel/PEEK plastic Tip	D3 = Direct Insert 36" and up		2 = Scaled Pulse		2 = AFLAS®	2 = Tungsten Carbide (standard)		
	H1 = Hot Tap for Pipe 1½ - 10"		5 = Bidirectional, analog, 4-20mA (hot tap SS only)					
	H2 = Hot Tap for Pipe 12 - 36"		6 = Bidirectional, scaled pulse (hot tap SS only)					
	H3 = Hot Tap 36" and up							