

# SPONSLER CORROSIVE SERIES



## The Sponsler Corrosive Series Precision Turbine Flowmeter . . .

combines the proven design of our Standard Line Turbine Flowmeter with new materials of construction. This combination makes our corrosive series Precision Turbine Flowmeters compatible with most corrosive medias. Now the reliability, accuracy and small size of our Precision Turbine Flowmeters can be used to accurately measure such

hard to handle liquids as Hydrochloric acid, Chlorine, Muriatic and Sulfuric acid.

Materials of construction can be Teflon, CPVC, Kynar, etc. Typical applications include rate indication and totalization for batching, blending, filling and process control.

The Sponsler Corrosive Series Precision Turbine Flowmeter produces an AC sine wave signal output proportional to volumetric flow rate. When combined with our electronic controls these devices can be used for a variety of applications.

Let Sponsler design a flow measuring system specifically tailored to your specifications. Contact our sales department for details on specific applications.

## Features

- High Accuracy: Each meter is calibrated over a ten point flow curve within  $\pm 0.5\%$  linearity and  $\pm 0.1\%$  repeatability to insure a correct reading every time.
- Custom and Standard Design: Allows meter to be designed and fabricated to fit your specific application.
- Simple Installation: Mount flowmeter in line and connect leads. Light weight and small size save time and money.
- Versatile Mounting: Meter may be mounted in vertical or horizontal positions to accommodate your application without affecting accuracy. No expensive piping changes are needed.
- Materials of Construction: A wide variety of corrosion resistant materials allows meters to be matched to your specific application.
- Low Pressure Drop: 4 PSI at maximum flow. Large, high pressure pumps are not necessary.
- Flexible Applications: Directly interfaces with all SCI instrumentation. A variety of amplifiers are available for direct interface with existing instrumentation.
- Manufactured in USA.

## Specifications

- Linearity:  $\pm 0.5\%$
- Temperature: Maximum 280°F
- Repeatability:  $\pm 0.1\%$
- Pressure Drop: 4 PSI
- Outputs: Minimum 20MV peak to peak amplitude at minimum flow range
- End Connections: Flanged to ASA B 16.5
- Materials of Construction:
  - Body: Standard: CPVC, Teflon, Kynar, Polypropylene (for others consult factory)
  - Shaft: Standard: Hastelloy B, Hastelloy C, Titanium, Tantalum, and Stainless steel (for others consult factory)
  - Bearings: Teflon and Kynar (for others consult factory)

# PRECISION TURBINE FLOWMETERS

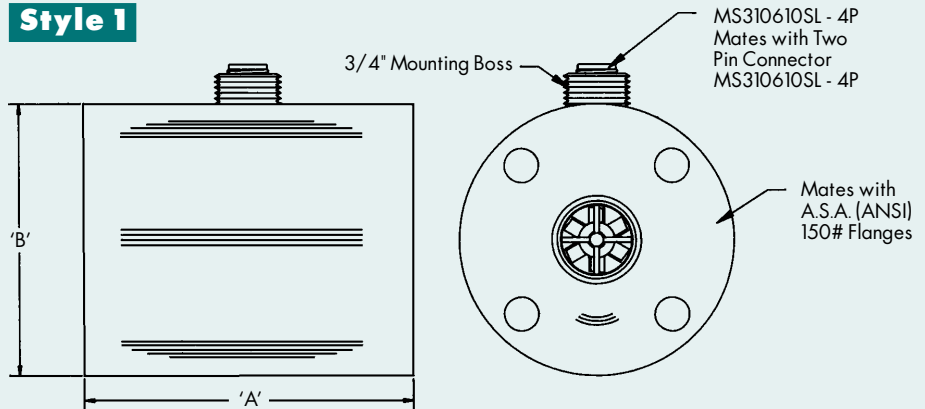
## Sizing Chart

METER SIZE (INCHES)	NOMINAL FLOW RANGES				NOMINAL METER "K" FACTOR PULSES/U.S. GAL.	APPROX. METER WT. INCLUDING PICKOFF COILS (LBS/KG)
	U.S. Gallons Per Minute					
	MINIMUM REPEATABLE	MINIMUM	MAXIMUM	EXTENDED MAXIMUM		
1/4	0.25	0.25	2.5	3.5	1200	0.5 / .23
3/8	0.3	0.75	5.0	6.0	1000	0.5 / .23
1/2	0.6	1.25	9.5	12	950	0.75 / .34
5/8	0.9	1.75	16	20	700	0.75 / .34
3/4	1.5	2.50	29	30	620	1.0 / .48
1	2.0	4.0	60	75	300	1.25 / .57
1 1/4	3.0	6.0	93	115	160	1.5 / .68
1 1/2	5.0	8.0	130	175	80	2.5 / 1.13
2	11	15	225	275	35	3.5 / 1.58
2 1/2	15	25	400	500	15	5.0 / 2.27
3	20	40	650	800	8	10.0 / 4.54
4	50	75	1250	1500	4	20.0 / 9.07

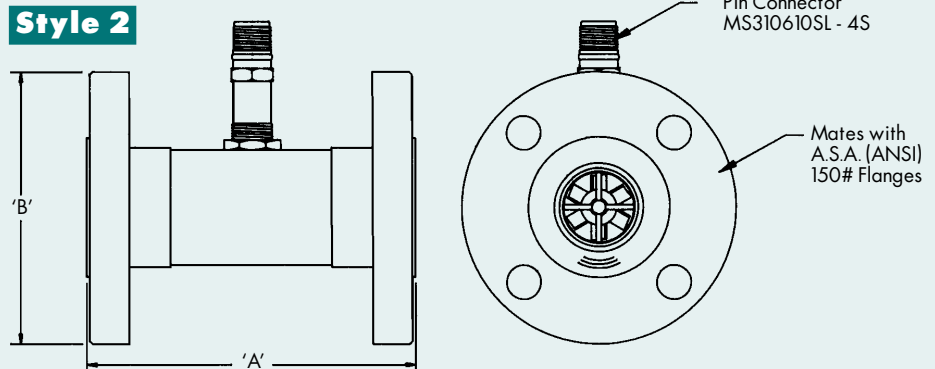
## Installation Dimensions

Size	A	B
1/4-1/2"	5.000	3.500
*5/8"	5.500	3.875
3/4"	5.500	3.875
1"	5.500	4.250
1 1/4"	6.000	4.625
1 1/2"	6.000	5.000
2"	6.500	6.000
2 1/2"	7.000	7.000
3"	10.000	7.500
4"	12.000	9.000

### Style 1



### Style 2



\*Mates to 3/4" 150# A.S.A. (ANSI) flanges.

All meter bodies constructed to **Style 1** except for 1"—4" CPVC and 2 1/2"—4" KYNAR; reference **Style 2**.

Dimensions are in inches.