

FLOWMETERS BY HOFFER

The Turbine Flowmeter Company

SADDLE TURBINE SERIES
Economy Insertion Flowmeters
for Liquids

Product Bulletin HFC-S-100C

TECHNICAL DATA SHEET

FEATURES

- ◆ Low cost.
- ◆ Low pressure drop.
- ◆ Wide flow turndown ranges for liquids.
- ◆ Linearity +/-2% of reading or better.
- ◆ Insertion meter for pipe sizes 2", 3" and 4".
- ◆ Industrial grade construction.
- ◆ 3-Point one centistoke calibration at minimum, mid-range & maximum linear or extended range.

THEORY OF OPERATION

The Saddle Turbine Series of Insertion Flowmeters are designed for measuring liquid flow in 2", 3" and 4" diameter pipes with accuracies inherent in the flowmeter at a substantially lower price than in-line flowmeters.



SPECIFICATIONS:

Line Size:	Linear Flow Range:	Extended Flow Range:
2" schedule 40 pipe & 80 pipe	25 GPM TO 275 GPM	20 GPM TO 300 GPM
3" schedule 40 pipe & 80 pipe	58 GPM TO 650 GPM	54 GPM TO 825 GPM
4" schedule 40 pipe & 80 pipe	150 GPM TO 1650 GPM	No extended range

REPEATABILITY:	±.25%	OUTPUT SIGNAL:	Output level - 10 mV RMS. minimum.
BEARING TYPE:	Hard Carbon Composite Sleeve Bearings.	MAGNETIC COIL:	Wave shape - sinusoidal. DC resistance of sense coil - 2000 OHMS. Coil - magnetic pickup type. M-L 3/8X1.52 with flying leads.
MATERIALS:	Housing insert and rotor support are 316 stainless steel. Rotor - 17.4 stainless steel (standard). Saddle is PVC.	MAX TEMPERATURE:	140 DEG. F
LINEARITY:	±2% or better.	MAX PRESSURE:	235 PSI.

Designed for installation in metal, composite or plastic piping, the Saddle Series is an economical alternative to full-bore, in-line flow liquid flowmeters while providing good measurement performance in a rugged package. The rotor and signal housing is interchangeable for 2", 3" and 4" sizes in order to maximize its flexibility and requires only a change in the saddle fixture to change from one size to the next. The use of 316 stainless steel for the housing insert, 17-4 pH for the rotor, hard carbon composite sleeve bearings and PVC installation saddles also enable the meter to be used in a variety of liquid services.

ORDERING INFORMATION

MODEL ST - A - B - C - D - E - F - G

A. Process Pipe Style:

2/40	2" Pipe Schedule 40
2/80	2" Pipe Schedule 80
3/40	3" Pipe Schedule 40
3/80	3" Pipe Schedule 80
4/40	4" Pipe Schedule 40
4/80	4" Pipe Schedule 80

B. Minimum Flow Range in GPM:

	<u>Linear</u>	<u>Extended</u>
2"	25	20
3"	58	54
4"	150	N/A

C. Maximum Flow Range in GPM:

	<u>Linear</u>	<u>Extended</u>
2"	275	300
3"	650	825
4"	1650	N/A

D. Bearing:

C Hard Carbon Composite Sleeve Bearing

E. Pickup Coil:

M/X M-L-3/8x1.52 with flying leads.

Note: A 1" MNPT riser is supplied standard. It is not explosion-proof but is used as a riser for transmitters and local displays.

F. Saddle Size:

2PVC	2" PVC Saddle for Schedule 40 or 80 pipe.
3PVC	3" PVC Saddle for Schedule 40 or 80 pipe.
4PVC	4" PVC Saddle for Schedule 40 or 80 pipe.

G. Special Features:

CE	CE Mark required for Europe.
X	None.

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The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.

The quality system covering the design, manufacture and testing of our products is certified to International Standard ISO 9001.



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Hoffer Flow Controls Company