

# IOTAFLOW

TURBINE FLOW TRANSMITTER WITH LOCAL DISPLAY SERIES FL

# **SALIENT FEATURES**

- Simple and cost effective construction.
- Provides wide flow ranges.
- Outstanding accuracy for clean & low viscosity applications.
- Operates over wide ranges of Temperature & Pressure.
- Additive Feature of Remote Control Unit for Programming.
- Flame-proof, IP-65, Gr.I, IIA, IIB, CMRI certified housing for Display.

#### **DESCRIPTION**

The flowing media engages a vaned rotor causing it to rotate at an angular velocity proportional to flow rate. The pick-up coil senses the spinning motion of the rotor inside the pipe & converts it into a pulsating electrical signal. Summation of the pulsating electrical signal is directly related to the total flow. The frequency is linearly proportional to flow rate which is converted to mA signal by electronic circuitry.



### **TECHNICAL SPECIFICATIONS**

Media : Liquids (Clear)/Compressed Air

Viscosity : 50 cp max.

Line Size : 0.5 inch to 6 inch

Output : 1) 4 - 20 mA DC - 2 Wire

2) Pulse - 30 mV P-P 3) Amplified Pulse

Display : 4 Digit for Flow Rate & 8 Digit for Flow Totaliser

16 x 2 Backlit Alphanumeric LCD (Optional)

Accuracy : Better than ± 1% F. S. Response Time : Less than 100 mSec

Temperature Range : 0 - 150 ℃ max. Pressure Range : 0 - 30 Kg/cmmax

Pressure Drop : Approx. 0.28 Kg/cm²t max. Flow Temperature Drift : Less than 0.01% of F. S. per C change

Power Supply : 24 V DC, External Power Consumption : Less than 4 VA Turn down Range : 10 : 1 to 100 : 10

MOC : Body - SS 316 / Teflon / PP,

Flange - SS 316 / Teflon / PP,

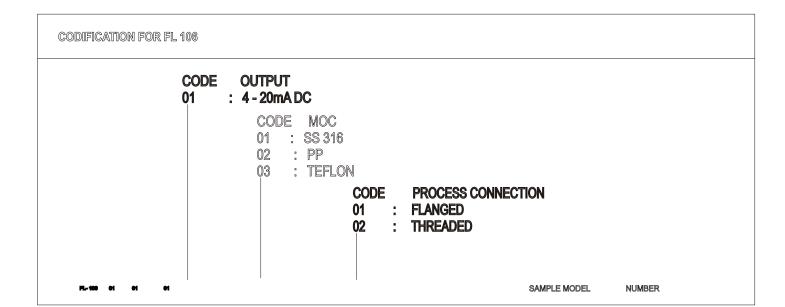
Rotor - SS 410(Optionally Teflon coated)

Process Connections : 1) Flanged 2) Threaded

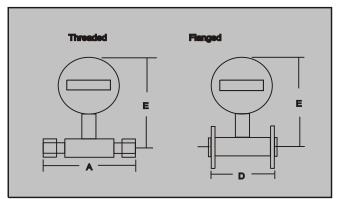
Enclosure : Flame-proof, IP-65, Gr.I, IIA, IIB, CMRI Certified

Mounting : In-Line, Horizontal





### MOUNTING DETAILS



NOTE : 1. Ranges shown are standard ranges, other than these are also possible.

2. All flanges rated for ASA 150# RF

3. Consult applications group for additional information.

# LINE SIZE SELECTOR CHART WITH RESPECT TO FLOW RANGE

Line Size (Inch)	A (mm)	C (mm)	D (mm)	Liquid Flow Ranges	
				mihr	LPM
1/2	45	208	000	0.4 to 4.0	6.6 to 66.6
3/4	60	210	000	0.8 to 8.0	13.3 to 133.3
1	75	213	75	1.6 to 16	26.6 to 266.6
1 1/2	120	220	120	3.4 to 34	56.6 to 566.6
2	150	225	150	6.8 to 68	133 to 1133
3	225	238	225	13.5 to 135	225 to 2250
4	300	250	300	27.0 to 270	450 to 4500
6	450	275	450	55.0 to 550	916 to 9166

NOTE: To maintain linear flow it is mandatory to maintain straight line of 10D at Upstream & Downstream. Also, if any foreign particals are existing in medium it is advised to install strainer on Inlet of Flow meter.

Due to our continuous product revisions, Design, Specifications and Model Numbers are subject to change without notice.



IOTA FLOW Systems Pvt Ltd A-2/13, Mayapuri Industrial Area, Phase-2,

New Delhi - 110 064 Tel.: 91-11-46254601-8 Fax: 91-11-45510993

E mail: contact@iotaflow.com
Please visit us at www.iotaflow.com