

FLOW RATE INDICATOR Model - 7000 FRT

Smooth Flowmeters



Features:

- ◆ Compact 1 / 8 DIN size case
- ◆ Two pulse and three control inputs
- ◆ 2 relays (NO) of 5 A and 250 V
- ◆ RS232 / RS485 port for serial communication
- ◆ Password security for function keys
- ◆ + 24 V DC unregulated O/P for AC powered unit
- ◆ NVRAM to retain data on power failure
- ◆ Both inputs can have up-to 16 points linearizing K factor
- ◆ IP66 Design , CE , UL approved. RoHS compliant

Pulse Inputs :

The 7000 FRT can accept two pulse inputs (A & B). It computes rate and total of A, B, A+B and A-B. The rate is computed within 300 ms per input. To stabilize the rate display, the user can select normalizing factor, which allows weighted average to be shown.

Reset Options :

The entire unit, i.e. all counters and control outputs, or Counter A, Counter B, Counter A+B, Counter A-B, Control O/P A and Control O/P B can be individually programmed to be reset on pressing the front panel RST key and also through any of the Control I/P s C, D and E.

Serial Communications :

The serial port can be used for serial printing or also for data acquisition. The unit can communicate with a master device through a Modbus-RTU protocol.

Lockout :

The unit program and presets can be protected with a Lock code to prevent unauthorized front panel changes. This code can be assigned with a maximum of 4 digits and is user selectable. It can be entered through front panel LOCK key OR by configuring any of the Control I/P s to "Lock unit".

Specification :

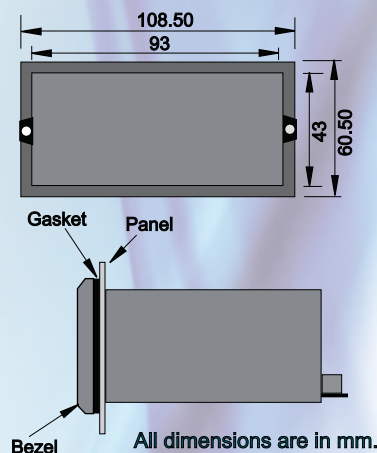
Input Power	: AC : 80 to 240 V/6.5 VA DC : + 24 V DC
Input Current	: 250 mA DC maximum
Output Power	: + 24 VDC \pm 10%, 2 W Max.
Display	: 2 lines of 16 characters back lit LCD
Bezel	: IP65 rated membrane keypad
Temperature	: Operating : 0 $^{\circ}$ to 50 $^{\circ}$ C Storage : -20 $^{\circ}$ to 80 $^{\circ}$ C
Humidity	: 10% to 90% (Non condensing)
Size	: Bezel: 61 H X 109 W X 100 D mm
Panel cutout	: 44 H X 92 W mm
Immunity to ESD	: Level 3 as per IEC1000-4-2
Immunity to Transients	: Level 3 as per IEC1000-4-4
Immunity to Radiated RF	: Level 3 as per IEC1000-4-3
Immunity to Conducted RF	: Level 3 as per IEC1000-4-6
Emissions	: EN55011 CISPR A

Function Keys :

The 7000 FRT has 6 keys. The table below gives a brief description of the keys and their functions:

Key	At run time	In program mode
PROG	Enter PROG mode	Toggle between menus
VIEW	View key to scroll between selected viewing parameters	Left key to shift digits in numerical entry/ character in Message mode
PRE A	PRE A key for Preset A to be changed if unit is not locked	UP key to increment digit/ character selection
CLR PRE B	PRE B key for Preset B to be changed if unit is not locked	CLR key clears the numerical field
ENT LOCK	Lock key to enter Lock Code to Lock/ Unlock the unit	ENT key to save changes and proceed
RST	Reset counters (With or without confirmation)	Unit comes out of programming at any level

Dimensions :



TERMINAL DESIGNATIONS :

- 01 - AC1
- 02 - AC2
- 03 - RELAY B
- 04 - COMMON
- 05 - RELAY A
- 06 - COMMON
- 07 - (+) 24VDC OUT
- 08 - (-) 24VDC OUT
- 09 - ANALOG O/P (+)
- 10 - ANALOG O/P (-)
- 11 - CTRL I/P E
- 12 - CTRL I/P D
- 13 - CTRL I/P C
- 14 - PULSE I/P B
- 15 - PULSE I/P A
- 16 - INPUT GND

We Measure And Control Every Drop & Molecule



ABOUT SMOOTH FLOWMETERS

The industries have now become more advanced and thanks to the highly developed solutions providers!!! One such name is Smooth Flowmeters. As the very name implies, our company deals with flow meters required by many industries to accurately monitor, measure and control the flow. Mr. Sushant Sahu, the Founder of Smooth Flowmeters, established the company in 2012 with a dream to serve efficiently as a manufacturer, importer & exporter of Flow meters such as Turbine Flowmeter, Electromagnetic Flowmeter Hydraulic oil Flowmeter and the so on. The driving force of our company is the pioneering spirit of the founder & promoter and the zeal to achieve complete satisfaction of our customers. Apart from creating our own range, we partnered with a German based company – KRACHT GmbH. The products range from KRACHT Gear and Screw type PD Flowmeters. Besides this, In 2014, M/S EPO Signal, Russia also partnered with us to market their products like Ultrasonic based air and gas Flowmeters and EVC. Also, we provide the After Sales Service.

OUR INFRASTRUCTURE

Smooth Flowmeters is a company which deals with a complete flow and pressure measurement solutions to various Industries. Our large factory is located in a prime location of Thane, a city in the Indian state of Maharashtra. The manufacturing of flowmeters is carried out by making use of progressive tools and equipments. The facility is upgraded a several times since establishment to keep it in pace with the latest technology to meet the increasing requirements. The units wherein the operations are conducted are:

R&D unit

Manufacturing unit

Quality testing unit

Warehouse and packaging unit

HISTORY

Previously, the Company started with commissioning and After Sales Services of Instruments. Wherein, the customers started relying on our services, we expanded our domains by entering into manufacturing and marketing field. The founder, an Instrumentation Engineer, utilized his more than 12 years of on-site experience of handling Flowmeters, Gas Meters and Regulating skid to start his own business. He leveraged his knowledge, skills and experience in oil and gas sector to grow his business.

WATER FLOW CALIBRATION SETUP

Smooth Flowmeters is having a well equipped Calibration Laboratory. The system is designed in standard (ISO-RP-31) Gravimetric Method with master weighing Scale. The calibration is done on the most precise weighing scale having least count of 100 gms on the maximum scale of 2000 Kgs. 10gms on the maximum scale of 100 Kgs. Both Weighing Scales are Calibrated in NABL Accreditation LAB. The Weighing Scale accuracy is endorsed by the Weights & Measures Dept. of Govt. of Maharashtra. The setup is designed for calibration of size ranging from 10 mm to 150 mm. We do 100% Calibration of each unit at our precise calibration setup.

OTHER FLOWMETERS FROM SMOOTH



Turbine Flowmeters



Electromagnetic Flowmeters



Hydraulic Oil Tester



Screw Type PD Flowmeter



Ultrasonic Gas Flowmeter

Note: Development Dictates That From Time To Time The Data Shown Above Is Subject To Change Without Notice..pl Obtain A Offer.

Smooth Flowmeters

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