

MODEL 103D

FEATURES

- Pulse Output
- High and Low Flow Rate Alarms
- Fully Programmable
- Displays Rate, Total and Accumulated Total
- DC Powered
- Panel, Wall and Pipe Mounting
- Watertight to IP67 (Nema 4X)
- CE Compliant

DC POWERED

Rate Totaliser



The 103D is a DC powered Rate Totaliser and is designed to operate with Turbine, Positive Displacement and Paddlewheel Flowmeters in applications such as irrigation systems and pipelines, and as a replacement for mechanical registers.



Field Mounting Rate Totaliser

PROVEN IN THOUSANDS OF FIELD INSTALLATIONS THROUGHOUT THE WORLD.

The 103D is a high accuracy Rate Totaliser designed to operate with digital output flowmeters. Having an IP67 weatherproof case, tactile keyboard and various mounting options, makes it a very versatile unit.

The 103D is powered from a 9-28 Volts DC supply. For installation in hazardous areas a certified intrinsically safe version is available (please see Model 202D).

The DC powered version will operate from an external power source between 9 and 28 Volts and draws no more than 4mA. This enables the 103D to be powered from AC mains adaptors and eliminates the need to run mains voltages in the field.

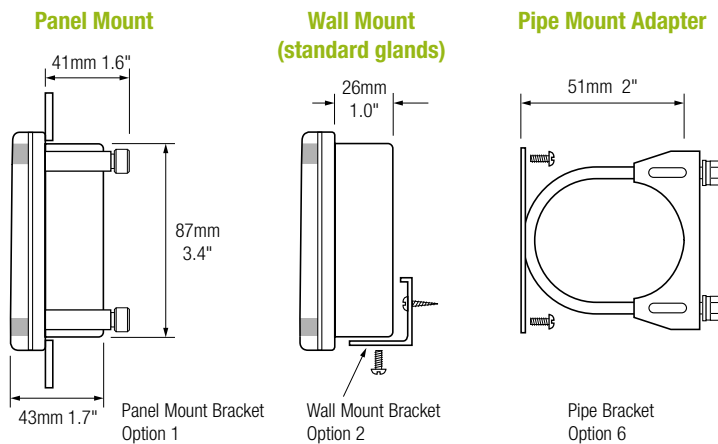
Lithium batteries provide totaliser and programming retention if the DC power supply is interrupted.

The 103D Rate Totaliser is housed in a rugged, yet attractive, IP67 (Nema 4X) polycarbonate enclosure which is completely watertight. A wall mounting bracket (no gland holes) is supplied as standard, while panel and pipe mounting brackets are available as options.

DIMENSIONS

Overall Sizes

151mm (5.9") width
98mm (3.9") height
43mm (1.3") depth



TERMINAL DESCRIPTIONS

Terminal Inputs & Outputs	
Number	
1	DC Power 0 Volts
2	DC Power 9-28 Vdc
3	Low Alarm (-)
4	Low Alarm (+)
5	High Alarm (-) or Pulse (-)
6	High Alarm (+) or Pulse (+)
7	Signal Input (-)
8	Signal Input (+)

PRODUCT CODES

Product Code & Mounting Types		
103D	•	Rate Totaliser
Enclosure	0	Wall Mounting (no gland holes)
Mounting	1	Panel Mount Brackets
	2	Wall Mounting (standard glands)
	6	Pipe Mount Adapter

Typical Part Number: 103D .2

GENERAL SPECIFICATIONS

Operating

Temperature Limits: -20 to +60°C, -4 to +140°F

Enclosure

Cable Entry: By cable gland

Materials: Polycarbonate and ABS

Display

Total: 7 digit 10mm (0.4") high LCD (continuously powered). *Note: The Reset Total is resettable from the front panel and the Accumulated Total is displayed when the ACCUM TOT key is pressed*

Rate: 5 digit 8.5mm (0.33") high LCD (continuously powered)

K-factor Range: The pulses per unit of measure (eg.pulses/gallon) is programmable in the range 0.00001 to 999,999

Decimal Points: Fully programmable for Rate and Total

Time Base: Rates can be displayed in units per second, minute, hour or day

Frequency Range: 0.01Hz to 10kHz

Signal Type: Switch settable for sine wave (15mV P-P minimum), open collector, reed switch or pulse

Interference: CE compliance

High & Low Alarms

Type: 4 x open collector output alarms suitable for driving DC solenoid or external relays. The outputs provide: 1. high-high, 2. high, 3. low, 4. low-low

Switching Power: 200mA, 30Vdc maximum

Saturation Voltage: 0.8Vdc across the output in the "ON" state

Isolation: All outputs are separately opto-isolated

Battery

Type: 2 x Lithium batteries

Battery Life: 2 years

Instruments within the Contrec family:

100 Series – Accurate process instruments for field mounting applications

200 Series – Intrinsically safe, precise and reliable process instruments

400 Series – Rugged and dependable batch and flow control solutions

505 Series – Next generation flow instruments for a variety of applications

515 Series – Precise flow and batch control for more complex applications

1000 Series – Robust load computers for petroleum and chemical applications

TRAC 40 – Vehicle mount custody transfer approved registers



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