

MODEL 102A

FEATURES

- Linear or Square Law Inputs
- Pulse Output
- High and Low Rate Alarm
- Fully Programmable
- Displays Rate, Total and Accumulated Total
- Powered by 4-20mA Loop
- Panel, Wall and Pipe Mounting
- Watertight to IP67 (Nema 4X)
- CE Compliant



LOOP POWERED

Rate Totaliser



The 102A Rate Totaliser is designed to operate with any flowmeter which produces a 4-20mA output, including Differential Pressure Devices, Magnetic or Vortex Flowmeters. The unit is powered entirely from the 4-20mA current loop.



Field Mounting Rate Totaliser

PROVEN IN THOUSANDS OF FIELD INSTALLATIONS THROUGHOUT THE WORLD.

The 102A is a high accuracy Rate Totaliser designed to operate with analogue output flowmeters. Having an IP67 weatherproof case, tactile keyboard and various mounting options, makes it a very versatile unit.

The Rate Totaliser is fully programmable with linear or square law input relationships, programmable span, cut-offs and conversion factors. A non-volatile memory stores all set-up parameters and totals in the event of a power failure.

High and low alarms are standard via optically isolated solid state relay outputs. Alternatively, the high alarm output can

be programmed to provide a scaled pulse output proportional to the total.

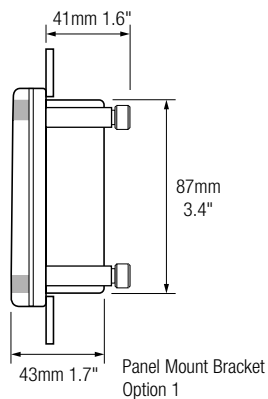
The 102A Rate Totaliser is housed in a rugged, yet attractive, IP67 (Nema 4X) polycarbonate enclosure which is completely watertight. A wall mounting bracket (no gland holes) is supplied as standard, while panel and pipe mounting brackets are available as options.

DIMENSIONS

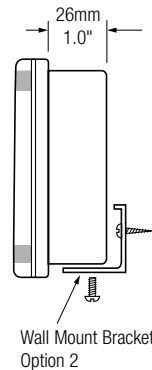
Overall Sizes

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

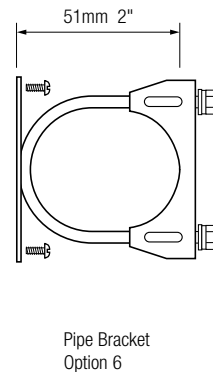
Panel Mount



Wall Mount (standard glands)



Pipe Mount Adapter



TERMINAL DESCRIPTIONS

| Terminal Inputs & Outputs | |
|---------------------------|-----------------------------|
| Number | Description |
| 3 | Signal Input (-) |
| 4 | Signal Input (+) |
| 5 | Low Alarm (-) |
| 6 | Low Alarm (+) |
| 7 | High Alarm (-) or Pulse (-) |
| 8 | High Alarm (+) or Pulse (+) |

PRODUCT CODES

| Product Code & Mounting Types | | Rate Totaliser |
|-------------------------------|---|---------------------------------|
| 102A | • | |
| Enclosure | 0 | Wall Mounting (no gland holes) |
| Mounting | 1 | Panel Mount Brackets |
| | 2 | Wall Mounting (standard glands) |
| | 6 | Pipe Mount Adapter |

Typical Part Number: 102A .2

GENERAL SPECIFICATIONS

Operating

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

Enclosure

Protection: IP67 (Nema 4X) watertight

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)

Input

Signal Type: 4-20mA

Resolution and Linearity: 0.05% of span

Accuracy: 0.5% of span @ 25°C, 0.1% (typ) of span, full temperature range

Update Time: 0.5 second

Connection: 2-wire

Voltage Drop: 2.5 volts maximum

Alarm / Pulse Outputs

Type: 2 x solid state relay outputs suitable for driving DC solenoid relays

Switching Power: 200mA, 30Vdc maximum

Saturated Voltage: 0.8Vdc typical across the output in the 'ON' state

Isolation: Both outputs are separately opto-isolated

Pulse Duration (for pulse output):

- 1ms if output frequency is >50Hz
- 10ms if output frequency is 5...50Hz
- 100ms if output frequency is <5Hz

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

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1000 Series – Robust load computers for petroleum and chemical applications

TRAC 40 – Vehicle mount custody transfer approved registers



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