

# 104D RATE TOTALISER

The 104D has an LCD display of flowrate and flow total. It takes the output from flowmeters and can be used for local or remote indication.

## Easy to use ✓

- Quick and easy to setup
- Preset to your requirements
- Displays rate, total & accumulated total

## Loop powered 4-20mA output ✓

## High & low alarms ✓

## 10 point linearisation ✓

## Highly accurate ✓

- Improve product quality
- Reduce waste and save money

## Versatile ✓

- Works with most flowmeters
- Waterproof enclosure
- Mounts on the pipe, wall or flowmeter
- Battery or DC powered



### Application

The 104D Rate Totaliser is designed to display the flow rate and total of your process liquid. You can use it for monitoring, controlling, dispensing, blending or filling of any liquid when used with a wide variety of flowmeters.

### Operation

The flowrate and resettable total are displayed simultaneously. The 104D also stores a non resettable total to monitor long term consumption.

### Setup

The rate and totals can be displayed in any engineering units, for example litres per minute and barrels. The setup is easy via the front keypad and it can be preset for your requirements.

### Installation

The 104D can be mounted directly on to your flowmeter, wall mounted or pipe mounted. Cables are installed via waterproof cable glands.

### Additional Features

#### 1. Analogue 4-20mA output

A two wire loop powered 4-20mA output is available for transmitting to other instruments or control equipment. It is scalable to your requirements and provides a fast response to changes in flowrate. The operating power is drawn from the 4-20mA loop so that the batteries will last indefinitely.

#### 2. High and low flow alarms

Two flow rate alarms are available for monitoring the flow. The output will trigger when the flow rises above or falls below the high and low alarm levels. This option requires a DC power supply.

#### 3. Pulse Output

In place of the high alarm option, the 104D can be programmed to give a scaleable pulse output for transmitting to remote instrumentation.

### Construction

The instrument is housed in a polycarbonate enclosure that is completely watertight.

# 104D Rate Totaliser

## Specifications

Display:	LCD which is continuously powered
Resettable total:	7 digits 10mm high Resettable from the front panel
Accumulated total: (Non resettable)	Displayed when the ACCUMTOT button is pressed
Rate:	4 digits 8.5 mm high
K-factor:	The pulses per unit of measurement ( eg pulses/litre) is programmable in the range 0.0000001 to 999,999
Decimal points:	Decimal point positions are selectable for both rate and total
Timebase:	Rate can be displayed in units per second minute, hour or day
Frequency range:	0.01 to 5 kHz
Signal type:	Switch settable for sinewave (15mV peak to peak min), open collector, reed switch or pulse.

## Batteries

Type:	Two lithium battery packs
Battery life:	Battery life is dependent on the percentage of time that the instrument is totalising flow.

Time Totalising	Typical Battery Life
10% of the time	5 years
50% of the time	3 Years
Continuously	2 Years
4-20 mA option installed	indefinitely

## 4-20mA Option

Scale:	The 4mA and 20mA points are selectable
Accuracy:	0.1% of span
Update Time:	0.5 seconds
Connection:	Two wire
Loop Power Supply:	9-28V dc

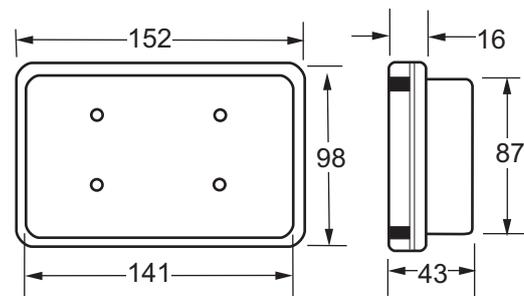
## DC Power & Flow Alarms / Pulse Output Option

Outputs:	Two open collector outputs are available for high and low flow alarms or pulse output and low alarm.
Switching power:	200mA. 30V DC Max
DC power input:	9-28V at 4mA

## Physical

Temperature:	-20°C to 60°C
Mounting:	Universal mounting bracket supplied for mounting on wall or panel.
Mounting options available:	1. Pipe mounting kit to fix the unit on to a pipe. 2. Adapter for mounting the instrument on to flowmeters.
Protection:	Sealed to IP67
Cable entry:	Via cable glands.

## Dimensions



All dimensions in mm.

**Contact our flow measurement specialists for  
advice on your application**

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