202i RATE TOTALISER

The 202i 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

Optional 4-20mA output ✓

Optional high & low alarms ✓

Optional Intrinsically Safe Version ✓

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 202 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 turbine, positive displacement and pelton wheel flowmeters. The battery powered version is ideal for areas where a power supply is not available.

Operation

The flowrate and resettable total are displayed simultaneously. The 202 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 202 can be mounted directly on to your flowmeter, wall mounted or pipe mounted. Cables are installed via waterproof cable glands.

Optional Features

1. Analogue 4-2OmA output

   An optional two wire 4-2OmA output is available for transmitting the flow rate to other instruments or control equipment. It is scaleable to your requirements and provides a fast response to changes in flowrate. The operating power is drawn from the 4-2OmA 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.

Construction

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

APOLLO

202i 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 0.2 to 29,999
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 to 5 kHz
Signal type:	Switch settable for sinewave (40mV 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:	0.5% of range
Update Time:	0.5 seconds
Connection:	Two wire
Voltage Drop 202:	14 V maximum
Voltage Drop 202i:	16V maximum

DC Power and Flow Alarms (202 only)

Outputs:	Two open collector outputs are available for high and low flow alarms. The alarm points are programmable.
Switching power:	200mA. 30V DC Max
DC power input:	12-28 Volt maximum

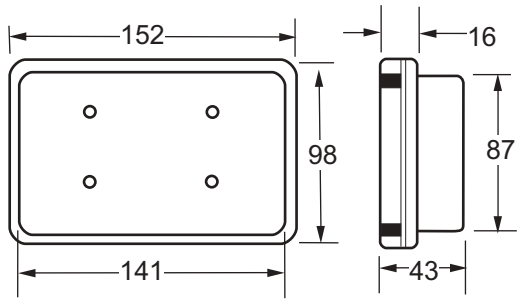
Physical

Temperature:	-20°C to 70°C for the 202 -20°C to 60°C for the 202i
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.

Hazardous Area Approval

ATEX	II 2G EEx ia IIB T4	
Maximum temp.	60°C	
Max input parameters for certified coils:		
U_o= 10.0 V	L_i = 0 mH	I_o = 9.0 mA
U_i = 24V	$C_{(ext)}$ = 60 F	I_i = 20 mA
$L_{(ext)}$ = 1.5H	P_i = 320mW	C_i = 0 F

Dimensions



All dimensions in mm.