RT7 RATE TOTALISER

The RT7 takes the pulsed output from any flowmeter and displays the flow rate and total of your process liquid.

Easy to use



Quick and easy to set up Large easy to read displays Preset to your requirements

Improves flowmeter performance

Makes readings more accurate Improve product quality Monitor costs Reduce waste and save money

Optional high and low alarms

Monitor your process Protect your equipment

Robust design

Tough aluminium case Splash proof keypad

High quality manufacture

ISO 9001 certified company



Application

The RT7 gives you a display of flow rate and total volume. It can be used for monitoring, controlling, dispensing or blending of liquids.

Operation

The RT7 takes a pulse input from your flowmeter and simultaneously displays the flowrate and total. It also displays a non resettable accumulated total at the touch of a button. High and low flow rate alarms can be used as part of a safety system to protect your plant. There is a scaled pulse output and an analogue 4-20mA output for transmission to other instruments or control equipment.

Installation and Setup

The setup is easy using the keypad. The RT7 can be supplied preconfigured for your application.

Operator access to the setup menu can be inhibited.

Optional Outputs

Alarms: Two flow rate alarms are available. The low alarm relay will energise when your flow rate falls below a preset value. The high alarm relay will energise when your flow rate rises above a preset value.

The relays can be used for audible or visual alarms or to safely shutdown systems to protect equipment. The LED's on the front panel will indicate when there is a high or low alarm condition.

Analogue output:

An optional 4-20mA output is available for transmission to other instruments or control equipment. It is scaleable to your requirements and provides an accurate and fast response to changes in flow rate.

Features

Linearisation: The accuracy of any flowmeter can be improved by programming the calibration errors of the flowmeter into the RT7.

Damping: Decreases the response time to steady the display of the flow rate. The level of damping can be adjusted depending on how erratic the readings are due to liquid turbulence, pump pulsation or fast valve actuation.

Construction

The RT7 has a tough aluminium case in standard ¼ DIN format for mounting in a panel. The front bezel and keypad has a splashproof seal that is resistant to most chemicals.



Rate Totaliser

Specification

Construction:

Panel mounting instrument

Enclosure materials:

Case: Black powder coated aluminium
Bezel: High impact phenolic plastic
Front keypad: Polyester with red anti-glare

Protection: IP65 - bezel / face IP21 - rear case

Dimensions: H 96mm X W 96mm X D 175.4mm

Panel Cut-out: 92mm X 92mm

Weight: 1.2 kgs

Power input:

Mains: Factory set 110 or 230 V AC 45-65 Hz

DC Supply: 12 - 24 V DC

300mA typical

Power output: 8 - 24 V DC 50 mA **Display:** 6 digit 14mm high LED

6 digit 10mm high LED

Time reference: Quartz crystal **Temperature range:** 0 - 45°C

Adequate ventilation is required round the

instrument to ensure natural convection

cooling

Connections: 2 rows of through panel terminals

Input signals

1. Pick-off Coil:

Sine wave min: 30mV all frequencies
Sine wave max: 35V high frequency

15V low frequency

2. Preamplifier:

Switch level: Low level < 8mA High level > 12mA

Input current max:50mA

3. Switch:

Low frequency: DC to 400Hz High frequency: DC to 5kHz

4. Pulse:

Switch threshold: Selectable 2.5V or 1.4V 5. Proximity switch: Namur DIN 19234

Switch threshold: 2.2 V

Switch level: Low level < 1mA

High level > 3mA

Outputs

Pulse Output:

Scaled pulse: Open collector switching transistor

Pulse duration: 50 msec

Analogue Output:

4-20mA: The set points are selectable 0-10V: The set points are selectable

Accuracy: 0.2%

Flow Alarm Relays:

Control relay: 2 SPDT relays Switching voltage: 250 V AC 30 V DC

Switching current: 8 A

Rate Format:

Range: 0.0001 to 999999
Linearity points: Up to 8 factors
Linearity correction: Up to +/- 9.99%

Total Format:

Total Resolution: Total can be preset to display 1, 0.1 or 0.01

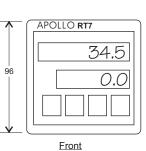
3mm LED Status indication:

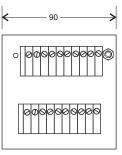
Relay 1: When the flow rate drops below the low

flow alarm level, relay 1 will be energised and the 'relay 1' LED will come on.

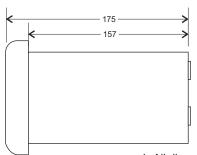
Relay 2: When the flow rate rises above the high

flow alarm level, relay 2 will be energised and the 'relay 2' LED will come on.





Rear



- 1. All dimensions in millimeters.
- 2. Panel cut-out to be 92 x 92.

Contact our flow measurement specialists for advice on your application

Tel: 01922 645647

Fax: 01922 640326

Manufacturered

e:mail sales@apolloflow.co.uk

website www.apolloflow.co.uk

Apollo Flowmeters, Charles Street, Walsall WS2 9LZ

APOLLO



