RT Series Rate Totalisers

Features

▶ Self or external powered, 8 digit LCD resettable & cumulative totaliser, 5 digit rate display

▶ Robust IP66/67 universal mount or DIN panel mount version

▶ Simple programming

▶ PIN protected programming

▶ Scaleable flow inputs

▶ Multipoint linearity correction

▶ Intrinsically safe version

▶ Long battery life

▶ Non volatile memory

▶ Low frequency cutoff

▶ Dual flow inputs *(A+B, A-B, A÷B)*

Outputs

● Scaleable pulse

● Pre-amplified pulse

● 4~20mA (Loop Powered)

● High & low flow rate alarms

Also available

● Self powered totalisers

● Ecobatch batch controllers

Universal field mount

DIN panel mount

Overview

The RT is a fully programmable self powered flow rate totaliser specifically designed for computing & displaying flow rates & totals from flowmeters or machinery with frequency, sine wave or pulse outputs.

The instrument displays instantaneous flow rate, resettable (batch) total and a cumulative total in engineering units as programmed by the user.

The integral 3.6V replaceable lithium battery supports the rate & total displays and provides as much as 10 years of service.

Outputs *(under external power)*

An unscaled pulse output serves as an input signal amplifier ideally suited for coil type inputs from turbine or paddle wheel meters. The output can be transmitted over long distances & is NPN/PNP selectable (current sinking or current sourcing).

Alternatively a scaleable pulse output is available which is NPN/PNP selectable to facilitate input to any variety of PLC, counter or to drive a relay.

The RT also has low and high flow alarms, 4-20mA output, 10 point linearisation of flow input & the capability of adding, subtracting or ratioing of two separate flow inputs.

Programming

Simple PIN protected flow chart programming with English prompts guide you through the programming routine, greatly reducing the need to refer to the instruction manual.

Quality System
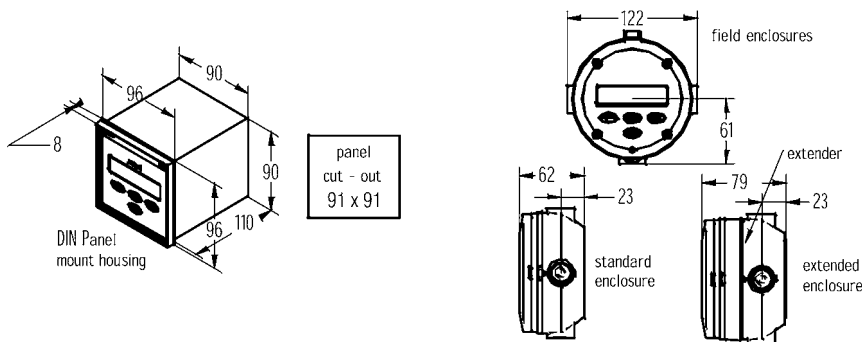
Quality Endorsed Company
ISO 9001:2000 Lic 21249
SAI Global

CE ⟨Ex⟩

Specifications

Liquid crystal display (LCD)	9mm high alpha numeric characters + subscripts
Instantaneous flow rate	5 digit to 3 decimal places, units/sec, /min, /hr or /day
Reset & accumulated totals	8 digit, programmable to 3 decimal places
Engineering units displayed	litres, gallons, m3, lbs, kgs or nil eng. units displayed
Input types (pulse & frequency)	reed switch, open collector, coil (15mV P~P min.) namur & other proximities, voltage & current pulses
dual inputs (A&B)	A+B, A-B, or A÷B (all outputs correspond)
Input frequency range (rate)	0.1hz to 10Khz (with programmable low frequency cut-off)
Input scaling range	0.001~9,999,999.999 with 3 floating decimal points
Linearisation	10 point correction, best under external power
Operating temperature	-10~+80°C (14~176°F), refer factory for higher / lower temp.
Power sources	one 3.6V lithium battery, 8~24Vdc external source and/or 4~20mA loop powered.
Also with PM version	95~260Vac (DIN panel mount version)
Rate Outputs	4~20mA into 750Ω @24Vdc, resolution 0.25% of span, low & high flow alarms (NPN/PNP solid state & relay options)
Pulse outputs	NPN/PNP selectable, non-scaleable (10Khz max.) or scaleable (50hz max.), auto-ranging pulse width : 1000 ÷ (hz x 2) = msec, max 300msec,1A max.
Enclosures (two styles)	IP66/67 (NEMA 4X) GRN field mount or DIN panel mount
Intrinsic safe option	Exia IIB T4
Mounting flexibility	meter mount, wall, surface, pipe or panel mount

IN THE INTEREST OF CONTINUED PRODUCT DEVELOPMENT THE DESIGN & SPECIFICATIONS MAY ALTER WITHOUT NOTICE

Dimensions (mm)

DIN Panel mount housing

panel cut - out 91 x 91

field enclosures

standard enclosure

extended enclosure

extender

Ordering codes (# = electrical entries: 1 = M20, 2 = 1/2" NPT, 0 = DIN housing with terminals)

FMRT 12#	flow rate totaliser with pulse, analogue & flow alarm outputs

Input type

D	digital (pulse or frequency)

Power supply (*PM version only)

0	self powered or 8~24Vdc	1	*95~135Vac	2	*190~260Vac

Housing type

FM	universal mount (field, surface, pipe, wall or panel mount)
MM	integral meter mount
PM	DIN panel mount 91 x 91mm (3.6 x 3.6in) cut out
FE	DIN Mount field enclosure IP66 (NEMA 4x)

Options

I	intrinsically safe to Exia IIB T4 (available with FM & MM)

Refer factory for mounting accessories

wall - surface mount

DIN mount field enclosure

meter mount

meter mount

batch controller

battery totaliser

other instruments