

**Flomec LCD display FRT12** is a fully programmable self-powered flow rate totaliser specifically designed for computing & displaying flow rates & totals from flow meters with pulse, sine wave or frequency outputs.

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

### 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 distance & is NPN/PNP selectable (current sinking or current sourcing).

### Features /Benefits

- Self or external powered, 8 digit LCD total & 8 digit cumulative totaliser, 5 digit rate display
- Robust IP66/67~NEMA 4X universal mount or DIN Panel mount version
- Aluminium/GRN field & panel mountable housing
- Scaled pulse, 4-20mA (Loop Powered) Output, Dual flow inputs (A+B, A-B, A÷B), multi point linearization of flow input or frequency inputs
- High & low flow alarms & Low Frequency cutoff
- PIN protected programming
- Simple flow chart touch key programming
- Reverse polarity protection
- Non volatile memory, Long battery life
- Relay board with SPDT outputs (Optional)
- Flowmeter & pipe mount kits available
- Optional Intrinsically safe version to Exia IIB T4 version (IECEX & ATEX approved)



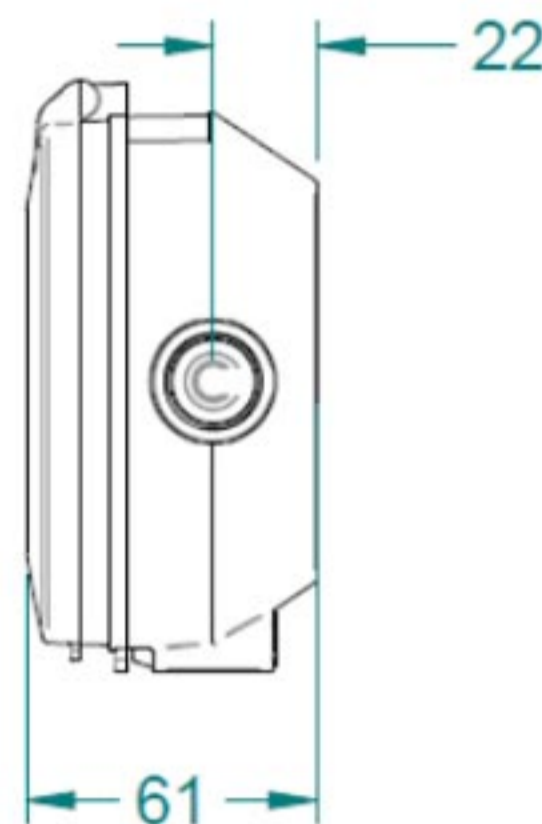
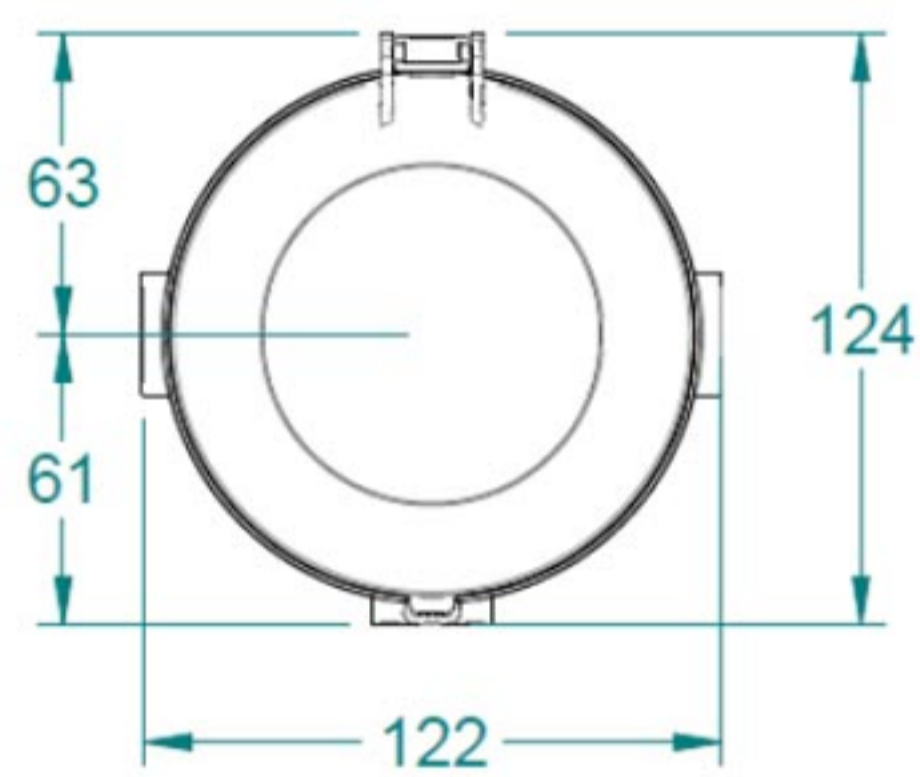
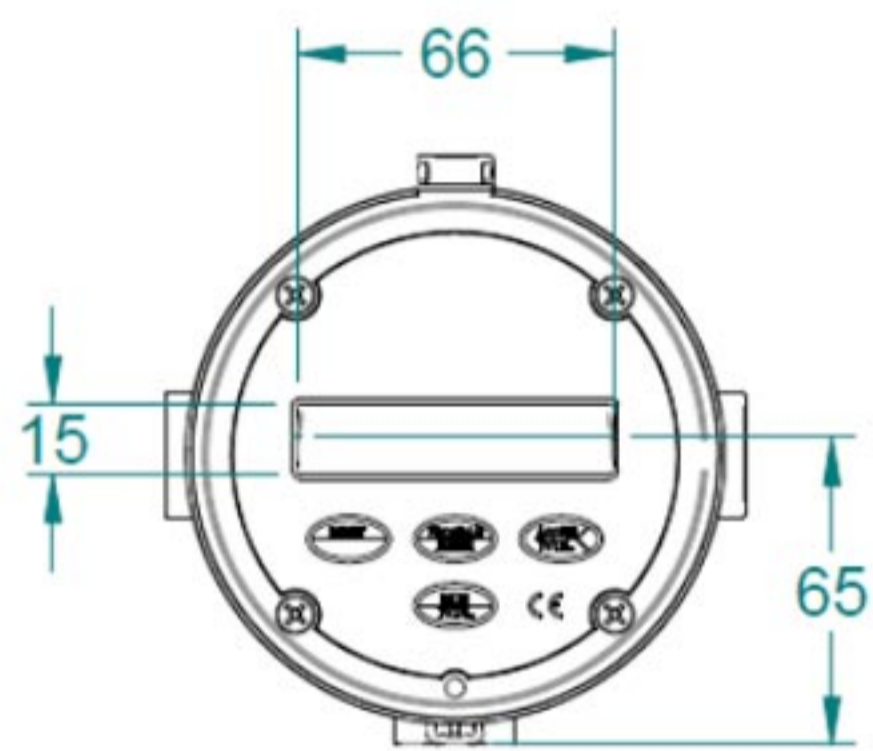
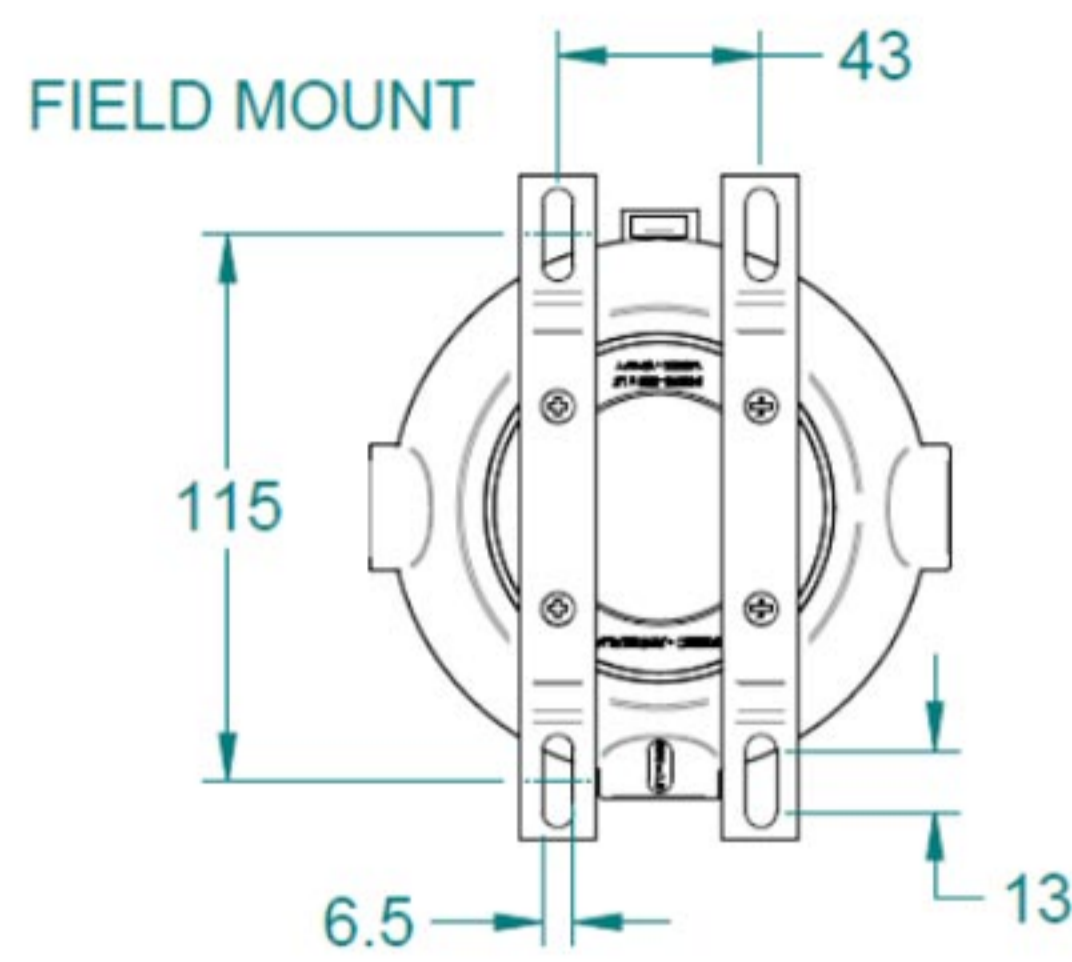
### Specifications

Model prefix :	FRT12
Displays	8 digit numeric display with LCD character 8 digit reset & cumulative totaliser 5 digit rate display
Memory	All programmed & accumulative data is stored permanently in non-volatile memory
Temperature range	-20°C ~ +80°C max. (-4°F ~ 176°F max.)
Signal Input	Pulse/frequency Input with reed switch Hall Effect, Voltage, Current & Coil, dual inputs (A+B,A-B,A÷B)
Pulse Output	NPN transistor, Scalable (20hz, 100mA max.)
Rate Outputs	4~20mA into 750 ohms@24Vdc, NPN/PNP solid state & relay options
Linearisation	10-point correction
Intrinsic safe option	Exia IIB T4
Battery power	Life expectancy 5 years* (Unit draws about 70µA under battery)
External Power	Regulated 8~24Vdc x 50mA min (Reverse polarity protected)
Configuring	PIN Protected data entry
Protection class	IP66/67 (NEMA4X) 3 x M20 or 1/2" NPT female conduit entries for GRN Housing 3 x M16 female conduit entries for Aluminium housing
K-factor range	Scale factor i.g. pulses/litre, gallon etc. programmable range 0.001 ~ 99,999.999
Engineering Units	Selectable Ltr, gal, m <sup>3</sup> ,kgs, lbs (total)/sec, /min. /hr or day (rate)

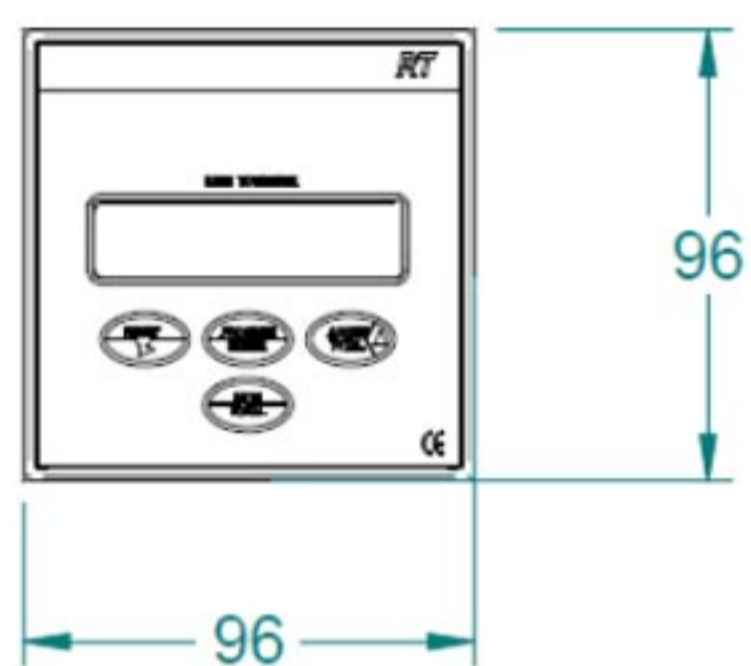
\* Battery life reduces when rate is more often displayed & there is no external power connected.

## Over all Dimensions:

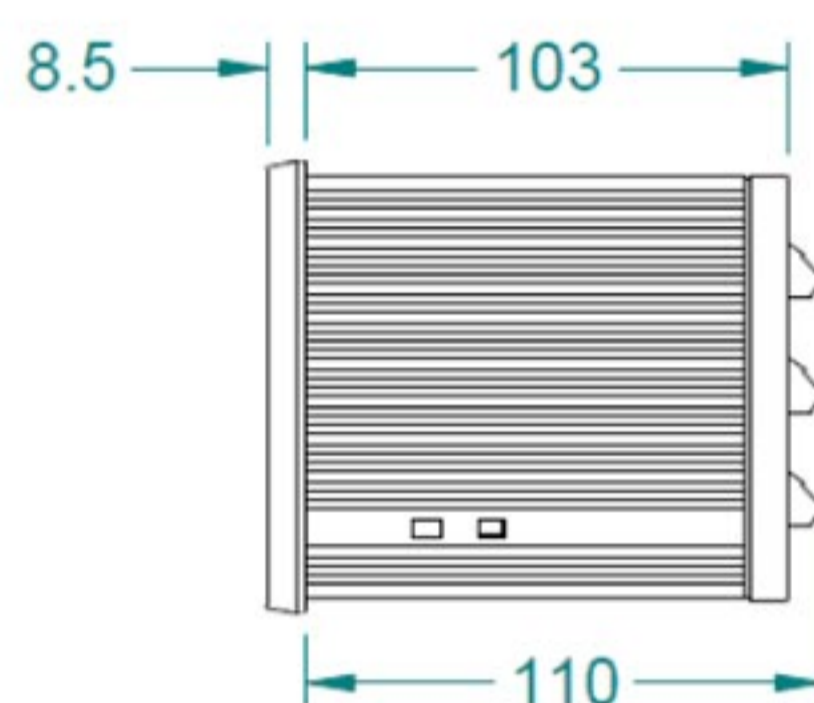
### STANDARD ENCLOSURE



### DIN PANEL MOUNT ENCLOSURE



CUTOUT DIMENSIONS  
91mm x 91mm



#### Model Code:

**FRT12** Flow rate totaliser with 4~20mA, scalable pulse & alarm outputs, dual flow inputs

#### Electrical access

- 1 M20 x 1.5mm (M16 x 1.5 for Aluminium housing) female threaded conduit entry ports
- 2 1/2" NPT female threaded conduit entry ports (Not available on aluminium housing)

#### Flow Input type

- D Digital (pulse or frequency)

#### Power supply

- 0 Self powered (battery) or regulated 8~24 Vdc

#### Housing type

- FM Universal mount (field or panel) - GRN Housing
- MM Integral meter mount- GRN Housing\*
- FA Universal mount (field or panel) - Aluminium Alloy Housing\*
- MA Integral meter mount- Aluminium Alloy Housing\*

\* Only order MA when retro fitting instrument to OM series pulse meter

#### Electrical options

- R Control output relay board interface with two SPDT relays
- I I.S intrinsically safe to Exia IIB T4 - IECEX & ATEX approved

#### Mechanical options

- P Facia protector - for Aluminium housing only (3mm clear polycarbonate protection plate)

#### Model No. Example

FRT12 1 D 0 FM - I

### Other Instruments also available:

- Battery totalisers (FBT11)
- Automatic batch controllers (FEB10)
- Flow rate totaliser with backlit large digit LCD, alarm & scalable outputs (FRT40)

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