The 214Di will batch a preset quantity of liquid in Intrinsically Safe areas.

**Easy to use**
- Quick and easy to set up
- Simply press the run button to batch
- Displays batch quantity
- Stores an accumulated total
- Preset to your requirements

**Simple to install**
- Minimal cabling required
- Mounts on the pipe, wall or flowmeter

**Accurately batches liquids**
- Save time
- Reduce waste and costs
- Improve product quality
- One or two stage valve control

**Versatile**
- Works with most flowmeters
- Watertight front

**Application**
This instrument is used in hazardous areas to automatically batch a precise quantity of liquid. It accepts pulsed frequency signals such as those generated by turbine, positive displacement or pelton wheel flowmeters.

**Operation**
To start a batch you simply press the run button. It will control pumps and valves to deliver your required volume of liquid. One display will show you the batch count whilst the other will show the preset quantity.

**Setup**
The setup is easy using the keypad and it can be supplied preset for your application.
The displays can be set for any units e.g. litres or gallons. During setup the pulses per litre, decimal point positions and valve delays are entered.

**Installation**
The 214Di requires a DC power supply and batteries provide back up so that totals are not lost if power is interrupted.
It is mounted directly on to your flowmeter, wall or pipe.

The two transistor outputs can be used to control valves and pumps. This allows for one or two stage batching with slow start up and/or slow shutdown of the batching process. The first output will energise at the start of the batch and de-energise when the batch is complete. The second output can be set to energise at a fixed time after the start, and to de-energise at a fixed quantity before the end of the batch.

**Intrinsically Safe Installation**
The 214Di is certified for use in Class 1 Zone 1 hazardous areas with approved sensors and solenoids such as the Apollo IS coil and Namur sensor.

**Construction**
The instrument is housed in a polycarbonate enclosure that is weatherproof. Cables are inserted through waterproof cable glands.
214Di Batch Controller

**Specifications**

**Display:** LCD which is continuously powered

**Batch total:** 7 digits 10mm high

**Accumulated total:** Displayed when the ACCUM TOT button is pressed

**Preset:** 4 digits 8.5 mm high

**K-factor:** The pulses per unit of measurement (eg pulses/litre) is programmable in the range 0.0001 to 999,999

**Decimal points:** The decimal point positions are adjustable

**Frequency range:** 0.1 Hz to 5 KHz

**Signal type:** Selectable for sinewave (15mV peak to peak min), open collector, reed switch or pulse.

**DC power input:** 9-28 V at 4mA maximum

**Battery backup**

**Type:** Two lithium battery packs

**Battery function:** The backup batteries will power the instrument for up to 5 years if no DC power is provided. The batteries will not power a sensor or solenoids.

**Outputs**

**Outputs:** Two open collector outputs suitable for driving DC solenoids or external relays.

**Switching power:** 200 mA 30 VDC maximum

**Saturation voltage:** 0.8 V DC max across the output in the “on” state.

**Isolation:** Both outputs are separately isolated. A barrier is required to provide DC power to the instrument and to power the I.S solenoids or relays. Only certified intrinsically safe solenoids may be used for I.S applications. Generally, it is preferable to use a pneumatic system with the solenoid valves controlling the air to larger pneumatic valves.

**Physical**

**Temperature:** -20°C to 60°C

**Mounting:** Universal mounting bracket supplied for mounting on a wall or panel.

**Mounting options:**
1. Pipe mounting kit available to fix the unit on to a pipe.
2. Adapter for mounting the instrument on to flowmeters.

**Protection:** Sealed to IP67

**Cable entry:** By cable glands.

**Hazardous Area Approval**

ATEX: II 2G EEx ia IIB T3

Maximum ambient temp: 60 °C

The maximum input parameters from certified coils or other I.S devices which produce a pulse output are:

\[ U_i = 24V \quad P_i = 320mW \quad I_i = 20mA \]

The maximum allowed capacitance and inductance including any cabling is:

\[ C_{(ext)} = 60 \mu F \quad L_{(ext)} = 1.5H \]

The maximum voltage and current produced by the 214i is:

\[ U_o = 10.0V \quad I_o = 9.0mA \]

**Dimensions**

All dimensions in mm.

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Contact our flow measurement specialists for advice on your application

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ATEX Approved Intrinsically Safe