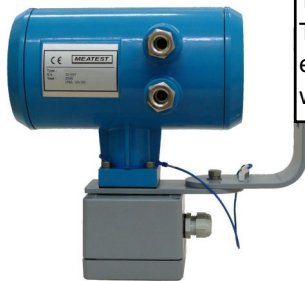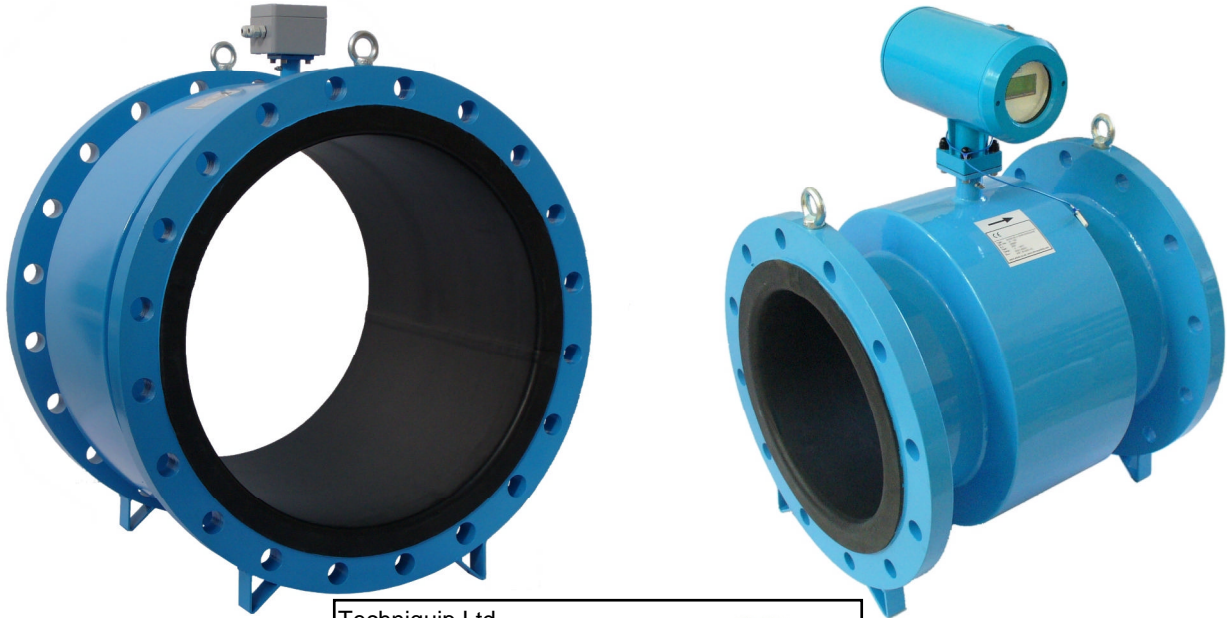# M-910E  *Electromagnetic Flowmeter*

Techniquip Ltd
The Old Brewery
Norton Fitzwarren
Taunton
TA2 6RN
Tel 01823-351255
eMail sales@technquip.co.uk
www.techniquip.co.uk

**Techniquip**

## cal dimensions

| | Length [mm] |
|---|---|
| | 150 |
| | 200 |
| 100 - 125 | 250 |
| 150 | 300 |
| 200 | 350 |
| 250 | 450 |
| 300 | 500 |
| 350 | 550 |
| 400 - 600 | 600 |
| 700 | 700 |
| 800 | 800 |

## Main Features:

- Range of diameter 10 to 800 mm
- Compact version IP67, remote version sensor IP68
- Mounting of electronic unit in two work planes
- Power supply voltage selectable 115/230 VAC or 24VACDC, 50/60 Hz
- Non-touch basic manual control with magnetic pointer
- 2 programmable digital outputs, analog output 4-20mA
- Pipe self diagnostic

## Application:

- Water and wastewater flowrate and total volume measuring
- Chemical industry (acids, alkaline solutions)

## Technical data

| | |
|---|---|
| Nominal size | DN10 to DN800 |
| Nominal pressure | PN10 to PN40 (depending on diameter) |
| Flow range | 0.1 to 10 m/s (0.02 to 5000 l/s) |
| Accuracy | 0.5 % (0.5 to 10 m/s) of reading value<br>1 % (0.1 to 0.5 m/s) of reading value |
| Maximum media temperature | 70$^o$C (158$^o$F) for rubber liner<br>130$^o$C (266$^o$F) for PTFE liner in remote version |
| Ambient temperature | -20 to 60 °C (-4 to 140°F) |
| Power supply | • 115/230V ( +10%, -15%),  50/60Hz, selectable<br>• 12V, 24V, 48V DC/50/60Hz as option |
| Power consumption | 10 VA |
| Liner | • hard rubber<br>• PTFE |
| Electrodes | • CrNi (stainless) steel 1.4571<br>• Hastelloy C276<br>• Tantalum |
| Measuring tube | Stainless steel 1.4201, dimensions according to DIN 17457 |
| Flange | Steel 1.0402 or higher<br>Dimensions according to EN1092, DIN2501 (BS 4504), ANSI B16.5, Sanitary (DIN11851 or Tri Clamp), flangeless wafer style |
| Protection category | • Compact version: IP67<br>• Remote version:  sensor IP68, converter IP65 – optionally IP67 |
| Outputs | • Frequency 0 to 12 kHz with programmable flowrate and function<br>• Pulse 0 to 50 Hz with programmable volume, function and pulse width<br>• Current loop 4 to 20 mA with programmable flowrate and function |
| Communication | RS232 |
| Displayed values | • Flowrate (m3/h, l/s, US.Gal/min, user)<br>• Volume (m3, l, US.Gal, user)<br>• Positive, total, negative and auxiliary (clearable, daily) volume |
| Control | • Magnetic pointer<br>• RS232 |
| Low-flow cutoff | Programmable value |
| Time constant | Settable in range 1 to 20 s |
| Other features | • Test of excitation coils, status of pipe line |
| Conformity requirements | • LVD (safety) according to EN 61010-1, EN61010-1/A2<br>• PED according to directive 97/23/EC<br>• EMC according to EN 61000 part 3-2, 3-3, EN 61000 4-3, 4-4, 4-5, 4-6, 4-8, 4-11, EN 61000 part 6-2, EN 50081-1 |

**Inductive flow meter M-910E** is a device designed for measuring, indicating and storing flow and passed through volume data of conductive liquids. Flow meter M-910E records both positive and negative flow. As there are neither moving nor mechanical parts in the flow profile the device can be applied to measure extremely polluted liquids containing even solid pollution. The only limitation is that the device can be used solely with conductive liquids.

**Range of applications.** Inductive flow meter M-910E is designed to be used in the chemical industry, paper industry, waterworks maintenance, waste-water maintenance etc.

**Features.** Inductive flow meter M-910E is a highly accurate and stable device. The construction of the M-910E indicator uses components with a long-term time and temperature stability. Configuration data is backed up and can be recovered after a power failure. The back-up structure enables data recovery in case of a partial loss of data (as a result of e.g. high level electrostatic discharge or high noise of power supplying). Internal CPU provides all functions usually built in electronic flow meters, incl. low flow rate correction, frequency response setting, bandwidth of sensitivity setting at low flow rates, etc.

**Inputs / Outputs.** Flow meter M-910E is equipped with four isolated outputs as standard. Digital outputs (frequency and pulse) are user configurable. Current output 4-20 mA can be used as passive or active type. For communication is available RS232 output.

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