

# enelean

*We Measure*

## NO STRAIGHT DISTANCE REQUIRED ELECTROMAGNETIC FLOWMETERS



Flow



Pressure



Level



Temperature



Datalogger



Control and  
Automation

[en.ensan.com](http://en.ensan.com)



**NO STRAIGHT PIPE DISTANCE REQUIRED ELECTROMAGNETIC FLOWMETERS**

Standard electromagnetic flowmeters need liner flow for correct measurement. Therefore it needs straight pipe before and after flowmeter to prevent turbulence. Due to its specific design, Enelsan ETRANS-M0 Electromagnetic flowmeter offers "no straight pipe need" for correct measurement which is very economic and customer friendly for difficult mechanical processes.

**Square Designed Remote Type  
Electromagnetic Flowmeter**



IP68

ETRANS-M0410R (Teflon)  
ETRANS-M0210R (Ebonite)

**Square Designed Compact Type  
Electromagnetic Flowmeter**



IP67

ETRANS-M0410C (Teflon)  
ETRANS-M0210C (Ebonite)

**Circle Designed Compact Type  
Electromagnetic Flowmeter**



IP67

ETRANS-M0410K (Teflon)  
ETRANS-M0210K (Ebonite)



TURKAK Accredited  
Calibration Opportunity



Made In Türkiye



**Technical Specifications**

<b>Pipe Sizes</b>	DN50...DN3000
<b>Measuring Range</b>	0,2 ... 12 m/s
<b>Accuracy</b>	±0.50% or ±0.2% (of Measured Value)
<b>Process Temperature</b>	Ebonite -10°C ... +60°C / Teflon(PTFE) -20°C ... +150°C
<b>Process Conductivity</b>	>5 µS/cm (>20 µS/cm for demineralised water)
<b>Process Pressure</b>	PN10, PN16, PN25, PN40, PN100 (depend on pipe size)
<b>Power Supply</b>	85-265 VAC 50-60 Hz, 24 VDC, Battery Operated
<b>Output</b>	Pulse, Frequency, RS485 MODBUS, 4-20mA, (Opt. HART)
<b>Alarms</b>	1x passive pulse (12-36VDC, 100 mA, 1.5 kΩ) (selectable one of Empty Pipe, Sensor Error, Over Limit)
<b>Straight Pipe Distance</b>	It does not require straight pipe distance
<b>Indicator</b>	3 Line 30 digit with 4 push buttons LCD
<b>Special Options</b>	Stainless Steel Body, Loose Flange, Wafer Type

**FLOWMETER THAT REQUIRES NO STRAIGHT PIPE RUNS; MINIMUM SPACE REQUIREMENT**

In standard electromagnetic flowmeters, achieving high measurement accuracy requires a straight pipe length of 5 times the diameter before the flowmeter and 2 times the diameter after it. Additionally, there should be no turbulence-inducing elements, such as valve outlets or elbows, on the pipeline. However, the electromagnetic flowmeter that requires no straight pipe runs eliminates these challenges, enabling precise flow measurements without the need for costly modifications to the existing pipeline.

- ▶ Contains no mechanical parts that obstruct flow or reduce pressure.
- ▶ Offers a measurement range 10 times greater compared to other flowmeters.
- ▶ All measurements and adjustments can be performed or displayed on an integrated or wall-mounted LCD screen.
- ▶ The user interface can be customized according to the process and fluid properties (e.g., density settings can be input).
- ▶ The menu can be secured with a password.
- ▶ Instantaneous and total flow can be observed simultaneously on the LCD screen.

- ▶ Historical data can be reviewed daily, weekly, monthly, or yearly using the report feature.
- ▶ Total flow can only be reset with a password.
- ▶ Capable of measuring flow velocities between 0.3 and 15 m/s, with the velocity displayed on the LCD screen.
- ▶ Calibration can be performed via the menu when the pipe is fully filled and stable fluid flow is present.
- ▶ Measurement accuracy is ensured at  $\pm 0.2\%$ .
- ▶ Conductivity measurement can be performed and displayed on the LCD screen.
- ▶ Suitable for homogeneous conductive fluids with conductivity above  $5 \mu\text{S}$ .
- ▶ Provides resistance against environmental electrical noise through the grounding electrode.
- ▶ Features reliable, easy, and long-lasting installation thanks to its flange connection.
- ▶ The metal housing offers protection against external factors.

