



Electromagnetic Flowmeters



Insertion Sensors MUT 2660



Sensor MUT 2660

EUROMAG INTERNATIONAL Insertion flowmeters represent the best answer when low costs and good performance are needed. The MUT2660 sensors are suitable for small pipes (80 mm < DN < 500 mm), under a maximum pressure of 10 bar. They are made of a 34mm probe, which has to be inserted into the tube for 1/8 of its internal diameter. The sensor is installed through a 1.1/4" threaded brass muff, to be welded to the pipe.

1. Body

MUT2660 sensors are made of AISI 304 stainless steel supplied together with a bronze muff. In the separate version they have an IP68 protection degree for immersion in 1.5 meters.

The junction box placed on top of the sensor, has two glands for the cables connection. The MUT 2660 models are available with several lengths, to fit various pipe diameters.

2. Electrodes

The electrodes are in AISI 316 L stainless steel.

3. Maximum liquid temperature

In the separate version, the maximum liquid temperature is $+180^{\circ}$ C. While in the compact version, it depends on the environmental temperature since the converter may not work properly over 60° C.

Coupling and connection to converter

MUT2660 sensors are compatible with all EUROMAG INTERNATIONAL converters. In the separate version the sensor is connected to the converter through two cables, whose length depends on the liquid conductivity and must not exceed 100 metres (see fig. 1). In the compact version, the converter is mounted directly on the junction box.

To install MUT2660 sensors, the pipe must be empty.

5. Assembly

MUT2660 sensors must be installed on empty pipes, through a 1.1/4" threaded brass muff, to be welded to the pipe to which connect the sensor. The probe has to be inserted into the tube for 1/8 of its internal diameter. When installing the sensor, the minimum distances of 10 diameters upstream and 5 diameters downstream must be respected, making a 90° angle with the pipe as per fig. 2.

6. Calibration and maximum error

MUT2660 sensors belong to the reference Group B1 (ISO 11631). Each sensor is calibrated on our hydraulic bench according to the reference weighing system SIT. Upon a correct installation the measuring accuracy is 2% of the read value, with a flow velocity higher than 0.3 m/s.

7. Reference standards

EUROMAG INTERNATIONAL magnetic meters are marked CE and are manufactured according to the following standards:

- * CEI EN 61010-1
- * UNI EN ISO 6817
- * EN 14154
- * EN 50081 1
- * EN 50082 1

Maximum length of cables according to the liquid conductivity



fig. 1

Sensor MUT2660 General characteristics

Size range	Minimum pipe diameter		80 mm	
	Maximum pipe diameter		500 mm	
Available Electrodes [*]	AISI 316L			
Body material	AISI 304 Stainless Steel			
Head of sensor	PTFE			
Standard operating pressure	10 bar			
Liquid temperature	40°C ÷ +180°C			
Protection Degree	IP68 for immersion in 1,5m (IEC 529) (separate version)			
Converter compatibility	MC 106	MC 108	MC 308	MC 308 C
Total length [mm][1]	317			
Parts in contact with liquid	Head of sensor	Ele	ectrodes	Pipe end
	PTFE		[*]	AISI 304 Stainless Steel
Electric connections	Cable gland PG 11 + Terminal block + sealing resin			
Weight [2]	2 kg			

[1] See fig. 3. [2] Maximum weight of sensor without cables in the separate version.

table 1

Installation





References

1	FEMALE COUPLING 1.1/4" BSP / NPT
2	1.1/4" MALE BSP / NPT FIXING DEVICE
3	BLOCKING NUT
4	SENSOR MUT 2660
5	CONNECTION BOX
LC	General length fixing device (*)
RL	Available travel = Ltot - Li - S - LC
Li	Insertion length = (De - 2S) / 8

(*) To appraise after muff welding

The data shown in this catalogue are subject to modification without prior notice