

Electronic Turbine Wheel Flow Meter and Counter

for liquids



measuring • monitoring • analysing

EDM



- Measuring ranges:
 4-40...80-800 l/min water
- p_{max}: 100 bar; t_{max}: 60 °C
- Connection: R_c ½"...R_c 1"
- Material: Nylon[®], aluminium, stainless steel
- Durable lithium battery (battery life: 5 years)
- Field calibration possible



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Beschreibung

The KOBOLD EDM is very versatile and can be used in many applications. Its built-in, replaceable batteries render it independent of external power supplies. The EDM can be adjusted for use with liquids other than water, because it can be calibrated in situ.

Application Examples

- Additivs, Fuels, Petrol
- Pharmaceuticals (good rinsing)
- Perfume
- Water and demineralised water
- Non aggressive chemicals
- Food industry

Function

A turbine wheel rotates inside the device at a speed that is proportional to the flow rate of the liquid to be measured. Ferrite inserts embedded in the rotor blades generate impulses that are inductively sensed and electronically converted and displayed.

Calibration

The built-in microprocessor allows a variety of calibrations. These are required for lightly viscous liquids, for greater measuring accuracy and measurements using units other than liters (eg gallons).

Installation

The EDM can be installed in any position. It is designed for one direction of flow, which is marked by an arrow on the housing and which must be observed.

To obtain the best accuracies, the EDM should be calibrated in the installation position with the liquid to be measured; it should be inspected at regular time intervals.

Electronic Features

- 10 mm high LCD digits
- 6-segment floating point display
- Replaceable batteries (battery life: approx. 5 years) without data loss (data saving in EEPROM)

EDM-4... Flow Meter/Counter



- Local display and actual flow rate (FLOWRATE)
- Total 1: (Total amount) cannot be reset
- Total 2: (Partial amount) can be reset
- CAL A: Factory set calibration for low viscosity media which can not be deleted
- CAL B: Own calibration (in situ calibration) and for liquids

/05-2015



EDM-4... Flow meter and counter



Technical Details

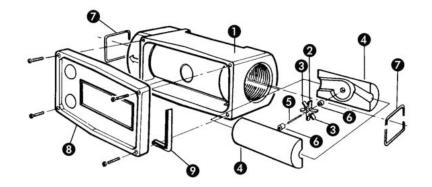
Pressure rating:	Nylon® max.10 bar, aluminium max. 20 bar, stainless steel max. 100 bar
Temperature:	-10°C+60°C
Protection:	IP65
Pressure loss:	max. 0.55 bar at maximum flow rate
Accuracy:	±2% of reading for ½"-connection ±1.5% of reading for ¾" and 1"- connection ±1% of reading for 1½" and 2"
Repeatability:	±0.1%
Supply:	two lithium batteries (battery life: 5 years), replaceable without data loss

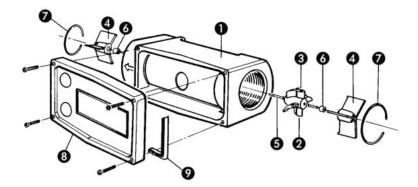
Order Details (example: EDM-4A12)

Measuring range	Connection	Order number		
(water)		Aluminium	Nylon®	Stainless steel
4-40 l/min	Rc 1⁄2			EDM-4S13
8-80 l/min	Rc ¾	-	-	EDM-4S14
10-190 l/min	Rc 1" (G 1)*	EDM-4A12	EDM-4N12	-
20-200 l/min	Rc 1"	-	-	EDM-4S15
40-400 l/min	Rc 1½"	-	-	EDM-4S16
80-800 l/min	Rc 2"	-	-	EDM-4S17

* G thread with aluminium housing







Wetted Part Materials

		Aluminium	Nylon®	Stainless steel
	Model	EDM-4A	EDM-4N	EDM-4S
1	Housing	aluminium	Nylon®	Stainless steel 1.4401 (316 SS)
2	Turbine	Nylon®	Nylon®	PVDF
3	Pulse generator	ferrite	ferrit	ferrit
4	Mounting	Nylon®	Nylon®	PVDF
5	Axle	tungsten carbide	tungsten carbide	tungsten carbide
6	Bearings	ceramics	ceramics	ceramics
7	Locking ring	stainless steel 1.4401 (316 SS)	stainless steel 1.4401 (316 SS)	stainless steel 1.4401 (316 SS)
8	Electronic housing	Nylon®	Nylon®	Nylon®
9	Gasket	rubber	rubber	rubber
	Max. pressure	20 bar	10 bar	100 bar
	Temperature	-10+60°C	-10+60°C	-10+60°C

Dimensions and Weights

	Aluminium	Nylon®	Stainless steel
Model	EDM-4A	EDM-4N	EDM-4S
Dimensions (LxWxH)	101 x 63 x 51 mm	101 x 63 x 51 mm	½" 107 x 51 x 64 mm ¾" 105 x 51 x 69 mm 1" 114 x 51 x 74 mm 1½" 135 x 69 x 85 mm 2" 160 x 84 x 100 mm
Weight	0.61 kg	0.5 kg	½": 0.9 kg 1": 1.2 kg 2": 3.2 kg

No responsibility taken for errors; subject to change without prior notice.