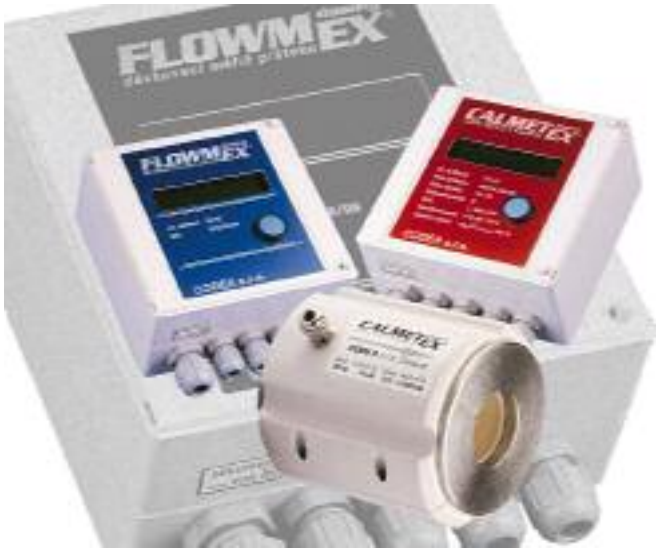
CALMETEX liquid
heat meter for liquids

FLOWMEX classic
magnetic flowmeter for liquids



FLOWMEX® classic was designed as a magneto-inductive flow meter for measurement of liquid volume in fully flooded pipelines.

FLOWMEX® dosing could accurately measure and control present batch of liquid. It has rapid response, control outputs for pumps or electromagnetic valves and very simple interface for the user.

CALMETEX® liquid is designed for measuring the volume of heat or cool energy carried by the liquid.

All models are available for applications in waterworks, chemical and food industry, long distance heating systems, large apartments and commercial buildings and other places.

Main advantages

- Accurate measurement - standard error < 1 % of value
- Measurement without any pressure loss.
- Continuous changing in composition, density, viscosity, pollution and pressure does not affect the measurement.
- Instrument is without mechanic parts so as they can not be wore out.
- New communication and technical options of the converter of a meter

Meter with ceramic lining

- Possibility of measuring liquids with high temperature and pressure - up to 180 °C and 40 bars
- Lining is highly resistant against abrasive and aggressive liquids
- Hygienic unobjectionable measurement, suitable for food industry - design with food grade connections
- Instrument is approved by ČMI as an invoicing meter – **TCM 311/99 – 3098, TCM 142/99 - 3115**

Options

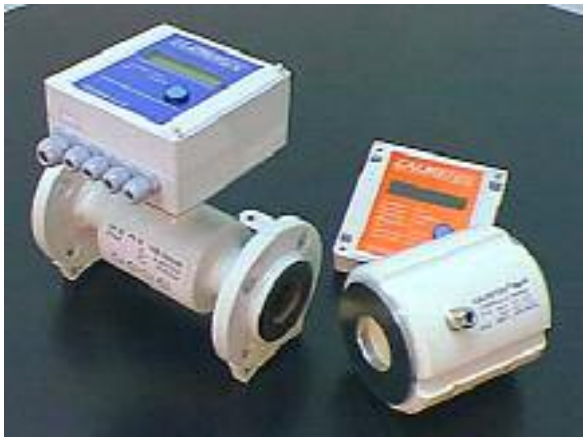
- flanged or flange-less flow meters, compact or remote design
- flow sensor with ceramic lining in sizes 8-200 mm ID – max. fluid temperature 160° C
- flow sensor with rubber lining in sizes 25 - 1000 mm ID - max. fluid temperature 80° C, resistant rubber 90° C
- flow sensor with teflon lining in sizes 25 - 1000 mm ID - max. fluid temperature 145° C

Displayed counters and values

- ✓ Current values of V,E
- ✓ Temperatures, Δt (heat meter)
- ✓ Mass flow counter
- ✓ Totalized values of V,E
- ✓ Bidirectional counters
- ✓ Dual-rate counters
- ✓ Billing counters of V,E
- ✓ Resetable counter
- ✓ Data memory
- ✓ Adjustment of communication

Table of certified ranges of measurement (registration of flow possible at 10% Qmin)

Dimension	DN	8	10	15	20	25	32	40	50	65	80	100	150	200
Qmin	m^3/h	0,03	0,042	0,098	0,18	0,27	0,45	0,68	1,08	1,80	2,70	4,20	9,75	17,25
Qmax	m^3/h	2,4	3,36	7,8	14,4	21,6	36,0	54,0	86,4	144,0	216,0	336,0	780,0	1380



Pulses of flow | *Output 4-20 mA* | *Modul GSM/SMS* | *Direct comm. CS*

OUTPUTS - OUTPUTS - OUTPUTS - OUTPUTS

Pulses of energy | *RS 232, 485, 422* | *2,4 to 19,2 kbps*

Tech. parameters of flow sensors with ceramic lining

Dimensions	8 to 200 mm I.D.
Max. temp. of liquid	160°C
Max. pressure	25 or 40 bars
Level of protection	IP 67, IP 68 at request
Material in contact with medium	ceramic (99,7% AL_2O_3), galvanized steel, or SS 316 (on request), silicon

Tech. parameters of flow sensors with rubber, teflon lining

Dimensions	15 to 1000 mm I.D.
Max. temp. of liquid	90°C resistant rubber 80°C standard rubber (hard or soft) 145°C teflon
Max. pressure	16 bar till 200, 10 bar from 250 mm
Level of protection	IP 67
Material in contact with medium	rubber, teflon, stainless electrodes

Technical datas of converter:

Power supply of voltage.....230V ± 10%, 50Hz
Power consumption.....approx. 9 VA
Level of protection.....IP 65
Environment temperature.....max. 55 °C
Size of the meter.....120 x 120 x 60 mm
Weight.....approx. 850 g
Typical error of measuring.....less than 1%
Conductance of medium.....min. 2μS/cm
Outputs: pulsed (frequencional), analog (4-20mA), digital (serial communication), local (display)
After power loss the data backup lasts for at least 30 years in **EEPROM**

***CODEA** Ltd. , 709 00 Ostrava, Přemyslovců 30, Czech republic*
phone/fax: +420 596 621 395, 596 621 397, e-mail : codea@codea.cz