



ELIS PLZEŇ a.s.



ULTRASONIC FLOW METERS FLOMIC FL 3005

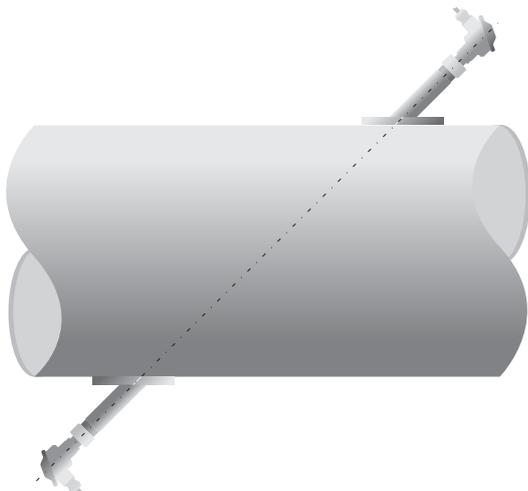
FLOMIC FL 3005

The battery-powered ultrasonic flow meters of the type series FLOMIC FL 3005 with the ultrasonic probes fitted directly into the piping are intended for measurement and storage of data on instantaneous flow rate and total volume of the liquid passed through the metering point in fully-flooded piping of large sizes. The measurement principle consists of determination of the difference between the times the ultrasonic waves need to cross the distance between the sender and receiver probes when travelling in and against the flow direction of the measured fluid. Of the measured fluid it is only required that it allows for undisturbed propagation of ultrasonic waves. The high measurement accuracy is achieved thanks to the theoretical calibration performed using the manufacturer's original calibration method. The FLOMIC FL 3005 flow meter does not require an external power source; the guaranteed battery lifetime is 4 years. The electronic accessories of the meter make possible, apart from measurement and visualisation of the data on instantaneous flow rate and aggregate volume of the fluid passed through the meter, storage of the data measured in regular intervals in own data logger, and data communication via standard electric outputs to a master control system.

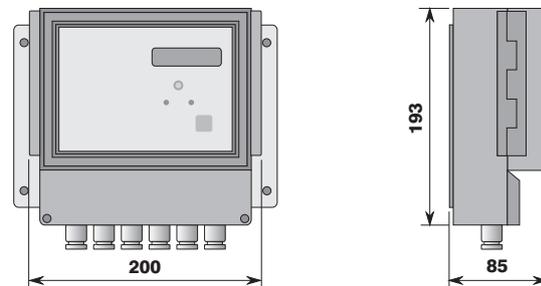
METER SPECIFICATION

nominal diameter of piping DN	DN 200 to DN 2000
measurement accuracy	$\pm 2\%$ for velocity of the measured liquid $v > 0.5\text{m/s}$
nominal pressure PN	max. PN 40
temperature of measured liquid	0 to 150 °C
protection class (electronic unit)	IP 65
protection class (ultrasonic probes)	IP 54 (IP 68)
ultrasonic probes	2 pieces US 2.1 (manufactured by ELIS PLZEŇ a.s.)
probe fitting	directly into piping
flow-rate sampling period	1 sec
display unit	single-line 8-digit LC display
power supply	battery, life time min. 4 years
probe connecting cabbles	max. 20m
output	passive pulse $U = 5$ to 30V , $I_{\text{max}} = 10\text{mA}$
communication interface	RS 232
optional accesories	passive current output 4 to 20mA, $U_{\text{max}} = 24\text{V}$ communication iteface M-Bus storage of measured data optical interface, GSM communication probe protection class IP 68 measuring in two directions with indication of measurement direction

ULTRASONIC PROBES US 2.1 WELDED DIRECTLY INTO PIPING



ELECTRONIC UNIT



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