



ELIS PLZEŇ a.s.



**INDUCTION FLOW METER FLONEX FXx11x**

## FLONEX FXx11x

FLONEX FXx11x is an induction flow meter for a measurement of flow of conductive liquids in chemically hazardous environment. It satisfies the most stringent requirements as to the accuracy and long-term stability of measurement and hygienic standards for measurement of drinking water. The flow measurement is carried out in both directions. The meter sensor doesn't have any mechanical moving parts and its installation into the piping system has no impact on fluid stability and pressure of measured liquids.

The transmitter supplies power and processes signals coming from the sensor. Thanks to the OLED display the data are easy to read even in the extreme frost. The basic configuration doesn't require opening of flow meter, since the control is exercised using optical sensors. The flow meter has pulse, frequency and current outputs. For data communication there is available MODBUS RTU protocol.

### METER SPECIFICATION

nominal diameter / size	DN15 to DN300 / 1/2" to 12"
nominal pressure [bar / psi]	10, 16 or 40 (related to diameter) / 150 (related to size)
min. conductivity of measured liquid	10 µS/cm
electrode material	stainless steel, grade 1.4571 (316Ti), Hastelloy C276, Titanium, Tantalum
ambient temperature max. range	-35°C to +60°C (-31°F to 140°F) depending on temperature class: T3 to T6
sensor lining	soft or hard rubber for potable water, PTFE
design version	compact or with remote transmitter
piping connection	flanges EN1092-1, ASME B16.5
protection class	IP 67
ATEX / IEC approval	II 2G Ex db eb ib [ib] IIB T6...T3 Gb II 2D Ex tb IIIC T80°C...T155°C Db
measurement accuracy EN ISO 4064-1 (OIML R 49) *)	2
metrological certificate MID	TCM 142/20-5738
measurement repeatability	± 0.15%
measuring range	0.025 to 10 m/s (0.08 to 33 ft/s), R = 400
outputs	current 4 to 20 mA, insulated 2x multifunctional outputs (pulse, frequency 0 to 10kHz, binary) insulated
communication protocol	MODBUS RTU
power supply	95 to 250V, 50 to 60Hz (AC) or 24V ± 20% (DC) 19.2 to 28.8V

\*) optional calibration for accuracy of measurement ±0.3% in the range 5 to 100% Q<sub>s</sub>

### TEMPERATURE RANGE OF SENSORS

DN 15 to DN 25/ 1/2" to 1"

max. temperature of measured medium	temperature class 2G	surface temperature 2D
-35°C to +48°C (-31°F to 118°F)	T6	+80°C (176°F)
-35°C to +63°C (-31°F to 145°F)	T5	+95°C (203°F)
-35°C to +98°C (-31°F to 208°F)	T4	+130°C (266°F)
-35°C to +123°C (-31°F to 253°F)	T3	+155°C (311°F)

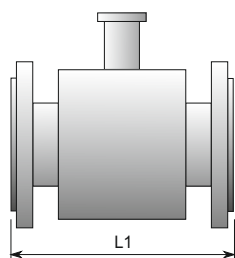
DN 32 to DN 300 / 1 1/4" to 12"

max. temperature of measured medium	temperature class 2G	surface temperature 2D
-35°C to +64°C (-31°F to 146°F)	T6	+80°C (176°F)
-35°C to +79°C (-31°F to 174°F)	T5	+95°C (203°F)
-35°C to +114°C (-31°F to 237°F)	T4	+130°C (266°F)
-35°C to +139°C (-31°F to 282°F)	T3	+155°C (311°F)

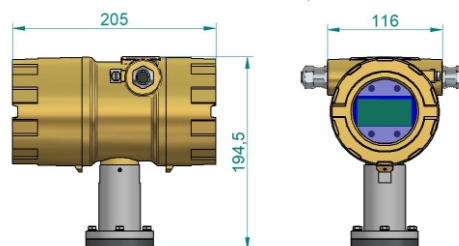
### RATED INTERNAL DIAMETER AND SENSOR LENGTH [mm]

pressure	40 bar / 150lb			16 bar / 150lb				10 bar / 150lb	
diameter [mm]	20	25 to 50	65 to 80	100	125	150	200	250	300
size [in]	3/4"	1" to 1 1/2"	2" to 3"	4"	5"	6"	8"	10"	12"
L1 [mm]	200	200	200	250	250	300	350	450	500

FLANGED VERSION



TRANSMITTER C12, C13



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