



ELIS PLZEŇ a.s.



**ELECTROMAGNETIC FLOW METER FLONET FN20xx.1**

# FLONET FN20xx.1

Electromagnetic flow meter FLONET FN20xx.1 is intended for professional application and measurement of flow rates of electrically-conductive liquids in water and heat-supply systems, food-processing and chemical industries. They meet the most demanding requirements on high measurement accuracy, long-term stability and hygienic standard. Measurements in both directions of flow are possible. The meter sensor has no movable mechanical parts and its inclusion in the piping system will have no effect on the hydraulic or pressure flow conditions. The converter unit provides for sensor energising and processing of the sensor signals, and also offers functions of liquid batching control, detection of empty piping, internal meter status diagnostics, automatic cleaning of electrodes and selection of flow units in data visualisation. The flow meter has frequency, pulse and current outputs, as well as interfaces to the USB and RS 485 communication lines.

## METER SPECIFICATION

nominal diameter / size	DN6 to DN1200 / 1/4" to 48"
nominal pressure [bar / psi]	6, 10, 16, 25 or 40 (related to diameter) / 150, 300, 600 (related to size)
min. conductivity of measured liquid	20µS/cm, on agreement with the manufacturer down to 5µS/cm
electrode material	Stainless steel, grade 1.4571 (316Ti), Hastelloy C276, Titanium, Tantalum, Platinum-Rhodium (PtRh10)
ambient temperature	-5°C to 55°C (23° to 131°F)
sensor lining	soft rubber, hard rubber, rubber for drinking water, PTFE, E-CTFE
design version	compact or remote transmitter
piping connection	flanged or flangeless
max. temperature of measured liquid	up to 150°C (302°F), depending on sensor lining
measurement accuracy EN ISO 4064-1 (OIML R 49) *)	2
measuring range	0.1 to 10 m/s (0.33 to 33 ft/s)
indication of empty piping	from DN50 / 2" upwards
displayed units	l, m <sup>3</sup> , US gal, US bbl
outputs (insulated)	current (0) 4 to 20mA frequency 0 to 1,000Hz pulse, 0.001 to 1,000 litres per pulse communication line USB, RS 485
power supply	24/115/230V ±10%, 50 to 60Hz (AC), 24V ±10% (DC)
protection class	IP 67 (IP 68)

\*) optional measurement accuracy ± 0.2% for 10 to 100 % of Q<sub>4</sub>; ± 0.5% for 5 to 100 % of Q<sub>4</sub>

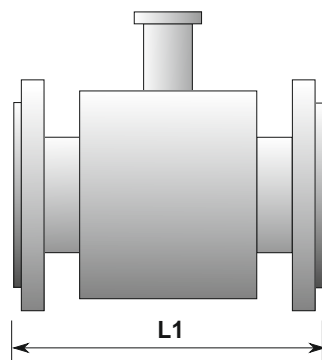
## DESIGN VERSION, CONFIGURATION AND TYPE DESIGNATION

design version	COMPACT		REMOTE	
configuration	ECONOMIC	COMFORT	ECONOMIC	COMFORT
type designation - flanged	FN2010.1	FN2014.1	FN2011.1	FN2015.1
- flangeless	FN2020.1	FN2024.1	FN2021.1	FN2025.1

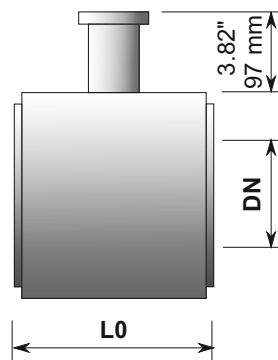
## RATED INTERNAL DIAMETER AND SENSOR LENGTH [mm]

pressure	40 bar / 150lb		16 bar / 150lb					10 bar / 150lb				6 bar / 150lb				
diameter [mm]	20	25-40	50-80	100	125	150	200	250	300	350	400-600	700	800	900	1000	1200
size [in]	3/4"	1"-1 1/2"	2"-3"	4"	5"	6"	8"	10"	12"	14"	16"-24"	28"	32"	36"	40"	48"
L1 [mm]	200	200	200	250	250	300	350	450	500	550	600	700	800	900	1000	1200
L1 [in]	7.9	7.9	7.9	9.8	9.8	11.8	13.8	17.7	19.7	21.7	23.6	27.6	31.5	35.4	39.4	47.2
L0 [mm]	74	104	104	104	134	134	219	-	-	-	-	-	-	-	-	-
L0 [in]	2.9	4.1	4.1	4.1	5.3	5.3	8.6	-	-	-	-	-	-	-	-	-

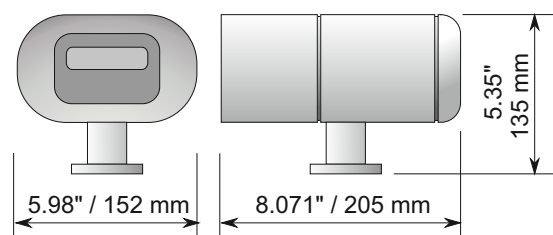
### FLANGED VERSION



### FLANGELESS VERSION



### TRANSMITTER



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