ELIS PLZEŇ a.s.

INDUCTION FLOW METERS FLONET FN20XX.1

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Induction flow meters of the FLONET FN20XX.1 type series are 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 1.4571, Hastelloy-C4, platinum, tantalum
ambient temperature	-5°C to 55°C (23° to 131°F)
sensor lining	soft or hard rubber, Teflon
design version	compact or with remote electronic unit
piping connection	flanges or wafer
max. temperature of measured liquid	up to 150°C (302°F), depending on sensor lining
measurement accuracy	±0.2% for 10 to 100% q_s ±0.5% for 5 to 100% q_s
measuring range	0.1 to 10 m/s (0.33 to 33 ft/s)
indication of empty piping	from DN 50 upwards
displayed units	l, m^3, 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)

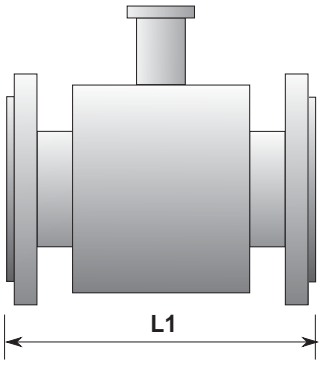
DESIGN VERSION, CONFIGURATION AND TYPE DESIGNATION

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

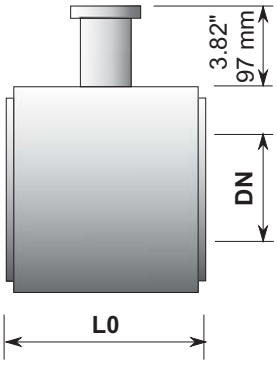
RATED INTERNAL DIAMETER AND SENSOR LENGTH [mm]

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 [inch]	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 [inch]	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 [inch]	2.9	4.1	4.1	4.1	5.3	5.3	8.6	-	-	-	-	-	-	-	-	-

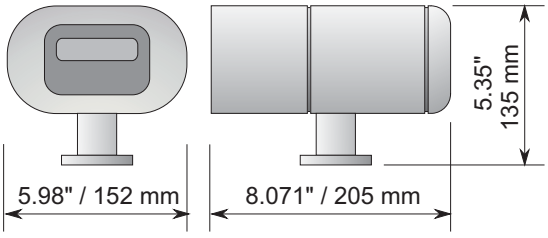
FLANGED VERSION



WAFER VERSION



ELECTRONIC UNIT



ELIS PLZEN a. s., LUCNI 15
P. O. BOX 126, 304 26 PLZEN
CZECH REPUBLIC

Phone: +420 377 517 711
FAX: +420 377 517 722
e-mail: sales@elis.cz
http://www.elis.cz