



# INDUCTION FLOW METER

## FLONET FN 20XX



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Magnetic flow meters of the FLONET FN 20XX 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 precision, 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 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 counter cleaning and selection of flow units in data visualisation**. The flow meter has frequency, impulse and current outputs, as well as interfaces to the RS 232 and RS 485 communication lines.

## TECHNICAL SPECIFICATIONS

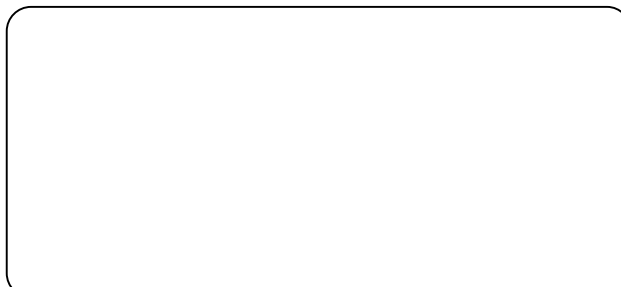
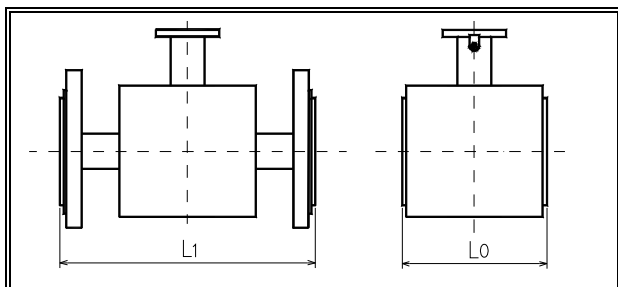
Rated inner diameter (DN)	6 ÷ 1,200
Rated pressure (PN)	6, 10, 16, 25 or 40 (related to DN)
Minimum conductivity of measured liquid	20 µS/cm, on agreement with the manufacturer down to 5µS/cm
Electrode material	Stainless steel 1.4571, Hastelloy - C4, Pt, titanium or tantalum
Ambient temperature range	-5 °C ÷ +55 °C
Sensor lining	Soft or hard rubber, PTFE
Design version	With integrated or separate electronic unit
Piping connection	Using flanges or flangeless
Maximum temperature of measured liquid	Up to +150 °C, depending on sensor lining
Maximum measurement error	<b>0.2 % for 10 ÷ 100 % q<sub>s</sub></b>
	<b>0.5 % for 5 ÷ 100 % q<sub>s</sub> (from DN40 upwards)</b>
Measuring range	0.1 ÷ 10 m/s
<b>Indication of empty piping</b>	<b>From DN 50 upwards</b>
Outputs	Current (0) 4 ÷ 20 mA ≈ (0 ÷ q <sub>s</sub> ), insulated, 500 V
	Frequency 0 ÷ 1,000 Hz ≈ (0 ÷ q <sub>s</sub> ), insulated, 500 V
	Impulse 0.1 ÷ 1,000 l/imp, insulated, 500 V
	Communication line RS 232, RS 485, insulated, 500 V
Power source	24/115/230 V ±10 %, 50 ÷ 60 Hz (AC), 15 VA; 24V ±10 % (DC)
Protection class	IP 67 (IP 68)

## DESIGN VERSION, CONFIGURATION AND TYPE DESIGNATION

Design version	INTEGRATED		WITH SEPARATE ELECTRONIC UNIT	
Configuration	ECONOMIC	COMFORT	ECONOMIC	COMFORT
Type designation	FN 20X0	FN 20X4	FN 20X1	FN 20X5

## RATED INNER DIAMETER AND SENSOR LENGTH IN PIPE [mm]

PN	40			16				10				6				
DN	20	25 - 40	50 - 80	100	125	150	200	250	300	350	400 - 600	700	800	900	1,000	1,200
L1	200	200	200	250	250	300	350	450	500	550	600	700	800	900	1,000	1,200
L0	74	104	104	104	134	134	219	-	-	-	-	-	-	-	-	-



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