



S103SX Electromagnetic flowmeter

Specific for installations with "0 diameters" near curves, fittings etc ...

Dn 50 + 800 mm

Accuracy: $\pm 0.2\% \pm 0.5\%$

ABS sensor and lining

Battery powered, 6 years battery life; 12+24Vdc

Battery-powered S103SX flowmeters do not require external power supply, therefore they are a valid alternative to conventional mechanical measuring systems and in isolated applications without power supply. S103SX thanks to the particular internal geometry is less influenced by the proximity of disturbing elements such as fittings, curves etc. and can therefore be installed at "ZERO DIAMETERS". The S103SX meter is suitable for use with a wide range of conductive liquids, also chemically aggressive, thanks to the possibility of selecting the most suitable electrode material for the application..

Technical Feature

Flow rate range

S103SX is able to process signals from fluids with flow rates of up to 10m³/s in both directions (bidirectional meter).

Range dimension / lining material

50 7 800 \ R BB R

Sensor material

SS321

Electronic housing material

SS316 \ ABS

Electrodes material

SS316L - Hastelloy (

Measure range

<0.9m³/h 7 >9048m³/h

Accuracy

$\pm 0.5\%$ standard;

Repeatability

$\pm 0.1\%$

Fluid conductivity

>5 μ S/cm.

Power supply

Battery, 6 years life; 12/24Vdc

Operating temperature Limits

Remote version

-10 7 +80°(

Compact version

-10 7 +80°(

Storage temperature: -40/85°(

Communication protocol

Modbus RTU

Output

Frequency: 0,175000 Hz

Pulse: open collector

Reverse Flow

Allows measure and totalization of reverse flow

Output test

Frequency output: the transmitter can force the output signal from 0.1 to 5000 Hz to a test value.

Startup time

0.5s from zero flow.

Cutoff

Adjustable 0.0 7 9.9% of the Qmax. Below the set value the display of the instantaneous flow and the outputs are forced to zero.

Humidity Limits

0-100% RH to 150 °F (65 °C), not condensing.

Damping

Adjustable between 1 and 99 seconds.

Compact version IP rating

IP67

Remote version IP rating

sensor IP67 / IP68 (by request) - converter IP67

Anti-condensation filter

Anti-condensation filter installed on converter

S103SX Battery electromagnetic flowmeter

Zero diameter mounting.
 For conductive fluids. With sensor pipe in SS321
 External sensor and flanges in carbon steel
 Medium ambient temperature range: -20° ÷ 50°C
 Fluid temperature range: -10° ÷ 80°C
 Calibration via remote control
 3rd electrode for grounding

Version	
A	Remote - accuracy 0,5% - standard cables 5m (Price on request each additional meter - max 50m)
D	Remote - accuracy 0,5% - with integrated GPRS antenna - standard cables 5m (Price on request each additional meter - max 50m)
G	Remote - accuracy 0,5% - with separate GPRS antenna - standard cables 5m (Price on request each additional meter - max 50m)
H	Compact - accuracy 0,5%
P	Compact - accuracy 0,5% - with integrated GPRS antenna
R	Compact - accuracy 0,5% - with separate GPRS antenna
DN flange / Max. pressure / Lining	
0050E1	DN50 / 1.6MPa / Neoprene - range 1,5 ÷ 35m ³ /h
0065E1	DN65 / 1.6MPa / Neoprene - range 2,4 ÷ 59m ³ /h
0080E1	DN80 / 1.6MPa / Neoprene - range 3,7 ÷ 92m ³ /h
0100E1	DN100 / 1.6MPa / Neoprene - range 6 ÷ 141m ³ /h
0125E1	DN125 / 1.6MPa / Neoprene - range 9 ÷ 220m ³ /h
0150E1	DN150 / 1.6MPa / Neoprene - range 13 ÷ 318m ³ /h
0200E1	DN200 / 1.6MPa / Neoprene - range 23 ÷ 565m ³ /h
0250E1	DN250 / 1.6MPa / Neoprene - range 35 ÷ 833m ³ /h
0300C1	DN300 / 1.0MPa / Neoprene - range 51 ÷ 1272m ³ /h
0300E1	DN300 / 1.6MPa / Neoprene - range 51 ÷ 1272m ³ /h
0350C1	DN350 / 1.0MPa / Neoprene - range 70 ÷ 1731m ³ /h
0350E1	DN350 / 1.6MPa / Neoprene - range 70 ÷ 1731m ³ /h
0400C1	DN400 / 1.0MPa / Neoprene - range 90 ÷ 2262m ³ /h
0400E1	DN400 / 1.6MPa / Neoprene - range 90 ÷ 2262m ³ /h
0450C1	DN450 / 1.0MPa / Neoprene - range 114 ÷ 2863m ³ /h
0450E1	DN450 / 1.6MPa / Neoprene - range 114 ÷ 2863m ³ /h
0500C1	DN500 / 1.0MPa / Neoprene - range 141 ÷ 3534m ³ /h
0500E1	DN500 / 1.6MPa / Neoprene - range 141 ÷ 3534m ³ /h
0600C1	DN600 / 1.0MPa / Neoprene - range 203 ÷ 5089m ³ /h
0600E1	DN600 / 1.6MPa / Neoprene - range 203 ÷ 5089m ³ /h
0700C1	DN700 / 1.0MPa / Neoprene - range 277 ÷ 6927m ³ /h
0700E1	DN700 / 1.6MPa / Neoprene - range 277 ÷ 6927m ³ /h
0800C1	DN800 / 1.0MPa / Neoprene - range 362 ÷ 9048m ³ /h
0800E1	DN800 / 1.6MPa / Neoprene - range 362 ÷ 9048m ³ /h
Process connection	
B	DIN flanges - UNI 1092-1
D	ANSI flanges (price on request)
Z	Special
Electrodes material	
1	SS316L
3	Hastelloy C276
Power supply	
D	Battery - 6 years life
Accessories	
0	None
1	316SS or Hastelloy C grounding rings for plastic pipe installation (prices on MA page)
5	Data logger on SD card
Output	
A	Pulse
E	Pulse + MODBUS (not with GPRS)
F	Analogic (not with GPRS)
G	Analogic + MODBUS (not with GPRS)
N	None
Protection degree	
3	IP68 (compact version - with data logger accessory -> IP67)
4	Converter IP67 / Sensor IP67 (remote version)
5	Converter IP67 / Sensor IP68 (remote version)
6	Converter IP68 (with data logger accessory -> IP67) / Sensor IP68 (remote version)