



- For conductive liquids ($>5\mu\text{S/cm}$), even with a content of suspended solids
- Dn 10 ÷ 2000 mm
- $\pm 0.2\%$; $\pm 0.5\%$ accuracy
- RUBBER / PTFE lining
- 85 ÷ 265 Vac o 12; 24 Vdc/Vac power supply
- Datalogger via pendrive USB
- Configuration and displaying via O-LED display



This flowmeter is suitable for all of applications into "industrial process". Various materials for lining are available as well as electrodes made of tantalum, hastelloy c, titanium. Most common communication systems such as Modbus, Hart and by means of an app for Android smartphone via Bluetooth. It has an integrated data logger for the recording of the measurements over time. It consist in an USB pen drive which is inserted behind the removable O-LED display. The recorded data are stored into a TXT file which is compatible with Excel or other equivalent analisys software packages

TECHNICAL FEATURES

Flow rate range

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

Range dimension / lining material

PTFE DN10 ÷ DN500 / RUBBER DN65 ÷ DN2000

Sensor pipe material

SS321 standard - AISI304 / 316 optional

Housing material

epoxy painted aluminium

Electrodes material

SS316L - Hastelloy C - Titanium - Tantalum - Platinum

Measure range

$<0,1\text{m}^3/\text{h}$ ÷ $>110000\text{m}^3/\text{h}$

Accuracy

$\pm 0,5\%$ standard; $\pm 0,2\%$ optional

Repeatability

$\pm 0,1\%$

Fluid conductivity

$>5\mu\text{S/cm}$.

Power supply

85÷265Vac, 24Vac/dc, 12Vdc.

Consumption

6W, max. 8W.

Ambient Temperature Limits

Remote version operating temperature: RUBBER $-10 \div +80^\circ\text{C}$; PTFE $-40 \div +150^\circ\text{C}$

Compact version operating temperature: RUBBER $-10 \div +80^\circ\text{C}$; PTFE $-40 \div +100^\circ\text{C}$

Storage temperature: $-40 \div +85^\circ\text{C}$

Communication protocol

Modbus; Bluetooth App Android (opt.); Hart (opt.)

Data Logger

Internal data logger to USB pen drive for flow measurements and analog inputs storing; the measurement storage interval can be set from 15 to 3600 seconds

Output

4÷20mA: 0÷500Ω

Frequency output: 0,1÷10000 Hz

Pulse output: 24Vdc galvanically isolated or open collector galvanically isolated 24V 20mA (opt)

Alarm output: 2 relays, 3A 230Vac N.O.

Input signals

It has 2 active analog inputs at 24Vdc for 2-wire transmitters connection (eg. Temperature or pressure) and 1 digital input for an external contact connection for the integrated batch function restart and for partial totalizer management.

Reverse Flow

Allows measure and totalization of reverse flow.

Output Testing

Relays output: Transmitter can switch relays at testing value.

Current Source: Transmitter can be commanded to supply a specified test current between 4.0 and 20.0 mA.

Frequency Source: Transmitter can be commanded to supply a specified test frequency between 1 and 10000 Hz.

Low Flow Cutoff

Adjustable. Below selected value, instantaneous flow and outputs are driven to the zero flow rate signal level.

Humidity Limits

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

Damping

Adjustable between 1 and 99 seconds.

Compact version IP rating

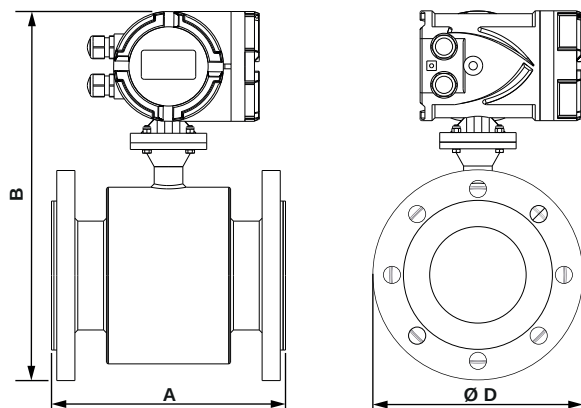
IP67

Remote version IP rating

sensor IP67 / IP68 (by request) - converter IP67

Anti-condensation filter

Anti-condensation filter installed on converter



DN (mm)	A (mm)	PN 16 - PN 40	
		B (mm)	ØD (mm)
10	200	295	90
15		295	95
20		300	105
25		300	115
32		315	140
40		335	150
50		344	165
65		360	185
80		375	200

DN (mm)	A (mm)	PN 10		PN 16		PN 40	
		B (mm)	ØD (mm)	B (mm)	ØD (mm)	B (mm)	ØD (mm)
100	250	-	-	400	220	410	235
125	250	-	-	420	250	435	270
150	300	-	-	460	285	468	300
200	350	520	340	520	340	538	375
250	450	570	395	575	405	598	450
300	500	620	445	620	460	648	515
350	550	670	505	678	520	708	580
400	600	730	565	738	580	778	660
450	600	780	615	793	640	816	685
500	600	830	670	850	715	870	755
600	600	930	780	960	840	985	890
700	700	1050	895	1080	910	-	-
800	800	1165	1015	1170	1025	-	-
900	900	1270	1115	1275	1125	-	-
1000	1000	1360	1230	1375	1255	-	-

Electromagnetic flowmeter

For conductive fluids. With sensor pipe in SS321

Medium ambient temperature range: -20° + 75°C

IP67 electronic housing with anticondensation filter

2 alarm relays (min/max)

Version	
E	Remote - accuracy 0,2% (up to DN150) - standard cable length 5m
F	Remote - accuracy 0,5% - standard cable length 5m
W	Compact - accuracy 0,2% (up to DN150) - max temperature of the fluid 100°C
Y	Compact - accuracy 0,5% - max temperature of the fluid 100°C
B	Remote - acc. 0,2% (up to DN150) - Data logger - n.2 4+20mA input - std cable length 5m (
C	Remote - acc. 0,5% - Data logger - n.2 4+20mA input - std cable length 5m
L	Compact - acc. 0,2% (up to DN150) - max temperature of the fluid 100°C - Data logger - n.2 4+20mA input
N	Compact - acc. 0,5% - max temperature of the fluid 100°C - Data logger - n.2 4+20mA input

DN flange / Max. pressure / Lining (temperature range of the fluid)	
0010B2	DN10 / 4.0MPa / PTFE (-40° + 150°C); range 0,14 ÷ 2,9m3/h; UNI 1092-1 standard
0010E2	DN10 / 1.6MPa / PTFE (-40° + 150°C); range 0,14 ÷ 2,9m3/h; UNI 1092-1 standard
0015B2	DN15 / 4.0MPa / PTFE (-40° + 150°C); range 0,3 ÷ 6m3/h; UNI 1092-1 standard
0015E2	DN15 / 1.6MPa / PTFE (-40° + 150°C); range 0,3 ÷ 6m3/h; UNI 1092-1 standard
0020B2	DN20 / 4.0MPa / PTFE (-40° + 150°C); range 0,5 ÷ 12m3/h; UNI 1092-1 standard
0020E2	DN20 / 1.6MPa / PTFE (-40° + 150°C); range 0,5 ÷ 12m3/h; UNI 1092-1 standard
0025B2	DN25 / 4.0MPa / PTFE (-40° + 150°C); range 0,6 ÷ 18m3/h; UNI 1092-1 standard
0025E2	DN25 / 1.6MPa / PTFE (-40° + 150°C); range 0,6 ÷ 18m3/h; UNI 1092-1 standard
0032B2	DN32 / 4.0MPa / PTFE (-40° + 150°C); range 1 ÷ 30m3/h; UNI 1092-1 standard
0032E2	DN32 / 1.6MPa / PTFE (-40° + 150°C); range 1 ÷ 30m3/h; UNI 1092-1 standard
0040B2	DN40 / 4.0MPa / PTFE (-40° + 150°C); range 1,8 ÷ 42m3/h; UNI 1092-1 standard
0040E2	DN40 / 1.6MPa / PTFE (-40° + 150°C); range 1,8 ÷ 42m3/h; UNI 1092-1 standard
0050B2	DN50 / 4.0MPa / PTFE (-40° + 150°C); range 3 ÷ 66m3/h; UNI 1092-1 standard
0050E2	DN50 / 1.6MPa / PTFE (-40° + 150°C); range 3 ÷ 66m3/h; UNI 1092-1 standard
0065B1	DN65 / 4.0MPa / Neoprene (-10° + 80°C); range 5,8 ÷ 120m3/h; UNI 1092-1 standard
0065B2	DN65 / 4.0MPa / PTFE (-40° + 150°C); range 5,8 ÷ 120m3/h; UNI 1092-1 standard
0065E1	DN65 / 1.6MPa / Neoprene (-10° + 80°C); range 5,8 ÷ 120m3/h; UNI 1092-1 standard
0065E2	DN65 / 1.6MPa / PTFE (-40° + 150°C); range 5,8 ÷ 120m3/h; UNI 1092-1 standard
0080B1	DN80 / 4.0MPa / Neoprene (-10° + 80°C); range 8,9 ÷ 180m3/h; UNI 1092-1 standard
0080B2	DN80 / 4.0MPa / PTFE (-40° + 150°C); range 8,9 ÷ 180m3/h; UNI 1092-1 standard
0080E1	DN80 / 1.6MPa / Neoprene (-10° + 80°C); range 8,9 ÷ 180m3/h; UNI 1092-1 standard
0080E2	DN80 / 1.6MPa / PTFE (-40° + 150°C); range 8,9 ÷ 180m3/h; UNI 1092-1 standard
0100B1	DN100 / 4.0MPa / Neoprene (-10° + 80°C); range 11 ÷ 282m3/h; UNI 1092-1 standard
0100B2	DN100 / 4.0MPa / PTFE (-40° + 150°C); range 11 ÷ 282m3/h; UNI 1092-1 standard
0100E1	DN100 / 1.6MPa / Neoprene (-10° + 80°C); range 11 ÷ 282m3/h; UNI 1092-1 standard
0100E2	DN100 / 1.6MPa / PTFE (-40° + 150°C); range 11 ÷ 282m3/h; UNI 1092-1 standard
0125B1	DN125 / 4.0MPa / Neoprene (-10° + 80°C); range 20 ÷ 450m3/h; UNI 1092-1 standard
0125B2	DN125 / 4.0MPa / PTFE (-40° + 150°C); range 20 ÷ 450m3/h; UNI 1092-1 standard
0125E1	DN125 / 1.6MPa / Neoprene (-10° + 80°C); range 20 ÷ 450m3/h; UNI 1092-1 standard
0125E2	DN125 / 1.6MPa / PTFE (-40° + 150°C); range 20 ÷ 450m3/h; UNI 1092-1 standard
0150B1	DN150 / 4.0MPa / Neoprene (-10° + 80°C); range 30 ÷ 600m3/h; UNI 1092-1 standard
0150B2	DN150 / 4.0MPa / PTFE (-40° + 150°C); range 30 ÷ 600m3/h; UNI 1092-1 standard
0150E1	DN150 / 1.6MPa / Neoprene (-10° + 80°C); range 30 ÷ 600m3/h; UNI 1092-1 standard
0150E2	DN150 / 1.6MPa / PTFE (-40° + 150°C); range 30 ÷ 600m3/h; UNI 1092-1 standard

0200C1	DN200 / 1.0MPa / Neoprene (-10° ÷ +80°C); range 50 ÷ 1100m3/h; UNI 1092-1 standard
0200C2	DN200 / 1.0MPa / PTFE (-40° ÷ +150°C); range 50 ÷ 1100m3/h; UNI 1092-1 standard
0200E1	DN200 / 1.6MPa / Neoprene (-10° ÷ +80°C); range 50 ÷ 1100m3/h; UNI 1092-1 standard
0200E2	DN200 / 1.6MPa / PTFE (-40° ÷ +150°C); range 50 ÷ 1100m3/h; UNI 1092-1 standard
0250C1	DN250 / 1.0MPa / Neoprene (-10° ÷ +80°C); range 85 ÷ 1700m3/h; UNI 1092-1 standard
0250C2	DN250 / 1.0MPa / PTFE (-40° ÷ +150°C); range 85 ÷ 1700m3/h; UNI 1092-1 standard
0250E1	DN250 / 1.6MPa / Neoprene (-10° ÷ +80°C); range 85 ÷ 1700m3/h; UNI 1092-1 standard
0250E2	DN250 / 1.6MPa / PTFE (-40° ÷ +150°C); range 85 ÷ 1700m3/h; UNI 1092-1 standard
0300C1	DN300 / 1.0MPa / Neoprene (-10° ÷ +80°C); range 110 ÷ 2400m3/h; UNI 1092-1 standard
0300C2	DN300 / 1.0MPa / PTFE (-40° ÷ +150°C); range 110 ÷ 2400m3/h; UNI 1092-1 standard
0300E1	DN300 / 1.6MPa / Neoprene (-10° ÷ +80°C); range 110 ÷ 2400m3/h; UNI 1092-1 standard
0300E2	DN300 / 1.6MPa / PTFE (-40° ÷ +150°C); range 110 ÷ 2400m3/h; UNI 1092-1 standard
0350C1	DN350 / 1.0MPa / Neoprene (-10° ÷ +80°C); range 180 ÷ 3300m3/h; UNI 1092-1 standard
0350C2	DN350 / 1.0MPa / PTFE (-40° ÷ +150°C); range 180 ÷ 3300m3/h; UNI 1092-1 standard
0350E1	DN350 / 1.6MPa / Neoprene (-10° ÷ +80°C); range 180 ÷ 3300m3/h; UNI 1092-1 standard
0350E2	DN350 / 1.6MPa / PTFE (-40° ÷ +150°C); range 180 ÷ 3300m3/h; UNI 1092-1 standard
0400C1	DN400 / 1.0MPa / Neoprene (-10° ÷ +80°C); range 220 ÷ 4200m3/h; UNI 1092-1 standard
0400C2	DN400 / 1.0MPa / PTFE (-40° ÷ +150°C); range 220 ÷ 4200m3/h; UNI 1092-1 standard
0400E1	DN400 / 1.6MPa / Neoprene (-10° ÷ +80°C); range 220 ÷ 4200m3/h; UNI 1092-1 standard
0400E2	DN400 / 1.6MPa / PTFE (-40° ÷ +150°C); range 220 ÷ 4200m3/h; UNI 1092-1 standard
0450C1	DN450 / 1.0MPa / Neoprene (-10° ÷ +80°C); range 270 ÷ 5400m3/h; UNI 1092-1 standard
0450C2	DN450 / 1.0MPa / PTFE (-40° ÷ +150°C); range 270 ÷ 5400m3/h; UNI 1092-1 standard
0450E1	DN450 / 1.6MPa / Neoprene (-10° ÷ +80°C); range 270 ÷ 5400m3/h; UNI 1092-1 standard
0450E2	DN450 / 1.6MPa / PTFE (-40° ÷ +150°C); range 270 ÷ 5400m3/h; UNI 1092-1 standard
0500C1	DN500 / 1.0MPa / Neoprene (-10° ÷ +80°C); range 320 ÷ 6600m3/h; UNI 1092-1 standard
0500C2	DN500 / 1.0MPa / PTFE (-40° ÷ +150°C); range 320 ÷ 6600m3/h; UNI 1092-1 standard
0500E1	DN500 / 1.6MPa / Neoprene (-10° ÷ +80°C); range 320 ÷ 6600m3/h; UNI 1092-1 standard
0500E2	DN500 / 1.6MPa / PTFE (-40° ÷ +150°C); range 320 ÷ 6600m3/h; UNI 1092-1 standard
0600C1	DN600 / 1.0MPa / Neoprene (-10° ÷ +80°C); range 490 ÷ 9600m3/h; UNI 1092-1 standard
0700C1	DN700 / 1.0MPa / Neoprene (-10° ÷ +80°C); range 680 ÷ 13500m3/h; UNI 1092-1 standard
0800C1	DN800 / 1.0MPa / Neoprene (-10° ÷ +80°C); range 900 ÷ 18000m3/h; UNI 1092-1 standard
0900C1	DN900 / 1.0MPa / Neoprene (-10° ÷ +80°C); range 1200 ÷ 22500m3/h; UNI 1092-1 standard
1000C1	DN1000 / 1.0MPa / Neoprene (-10° ÷ +80°C); (-10° ÷ +80°C); range 1450 ÷ 28000m3/h; UNI 1092-1 standard

Process connection

B	DIN (UNI 1092-1) flange
D	ANSI flange (price on request)
Z	Special

Electrodes material

1	SS316L Stainless steel
3	Hastelloy C
4	Titanium
5	Tantalum
6	Platinum

Power supply

A	85÷265Vac
B	24Vdc
C	24Vac - only for versions B, C, L, N
D	12Vdc
Z	Special

Accessories

0	None
1	316SS or Hastelloy C grounding rings for plastic pipe installation (price on request)
2	Protective rings against inner lining abrasion (price on request)
3	3rd electrode - price on request

Output

A	4÷20mA + pulse output (B/C/L/N versions standard with galvanic separation)
B	4÷20mA with galvanic separation + pulse + MODBUS RTU + BLUETOOTH (for B/C/L/N version only)
C	4÷20mA + pulse output + HART - only for E/F/W/Y versions
E	4÷20mA + pulse + MODBUS RTU (B/C/L/N versions standard with galvanic separation)

Pipe protection degree

1	IP67
2	IP68 (only for remote version)

