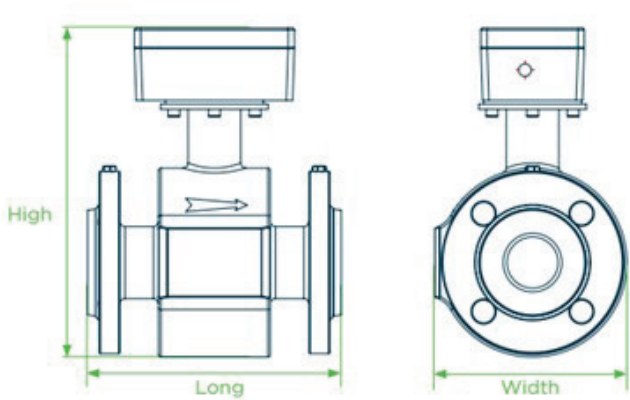




TECHNICAL DATA

- No obstacles in the pipe. No pressure drop.
- U3 - D0 installation conditions.
- Variety of electrode coatings and materials.
- Programmable at low square excitation frequency.
Digital processing, better noise resistance.
- High- definition backlit LCD display with alarm indication. RS232 digital communication port (for 220VAC and 24VDC versions).
- Separate version up to 100 metres.

WATER METER SELECTION RANGE

DN	Q- m3/h	Q- m3/h
mm	(0,5 m/sg)	(5 m/sg)
50	3,53	35,34
65	5,97	59,70
80	9,05	90,45
100	14,14	141,35
125	22,09	220,88
150	31,81	318,05
200	56,50	565,00
250	88,35	883,50
300	127,20	1.272,00
350	173,15	1.731,50
400	226,15	2.261,50

APPLICATION

Clean water, raw water (water treatment plants), pumping stations / pivot irrigation application.

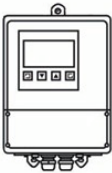
SPECIFICATION

- Type: Electromagnetic technology flow meter.
- Maximum working pressure:16 bar
- Maximum working temperature: 0 - 80°C
- Accuracy: 2%.
- Relative humidity: 5% to 90%.
- Minimum fluid conductivity: 5 µS/cm.

DIMENSIONS

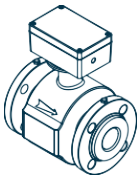
DN	Long	Width	High	Weight
50	200	160	260	8,5
65	180	250	280	11,5
80	240	200	300	13,5
100	240	220	320	16,9
125	240	250	360	21,5
150	300	280	390	26,1
200	350	340	430	35,0
250	410	440	500	55,5
300	460	500	560	64,5
350	520	550	600	87,0
400	580	600	660	106,0

TECHNICAL SPECIFICATIONS



CONVERTER

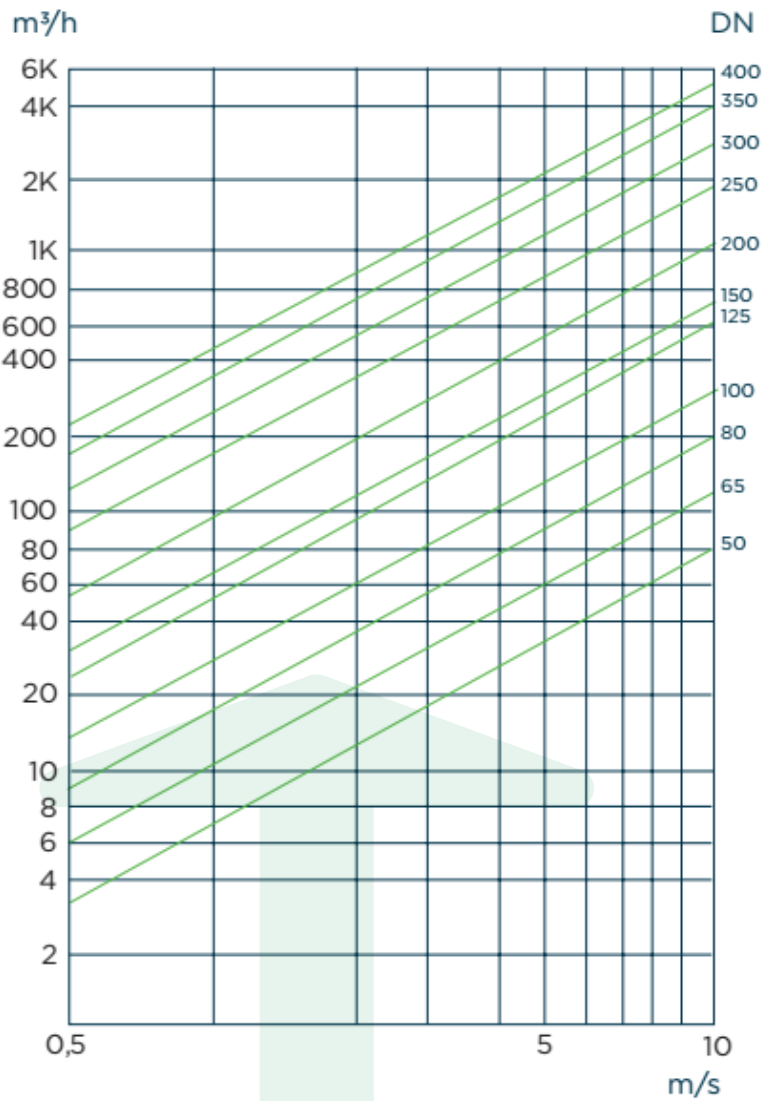
	AC-DC	INTERNAL BATTERY
Electricity supply	85 VAC - 250VAC (45 - 63Hz) 20 VDC - 36 VDC	Internal battery
Average consumption	7.62 watts.	--
Digital outputs	Pulse, frequency (1 - 5000 HZ).	Pulse burst mode
Display	LCD and keypad - 2 X 16 characters.	LCD and keypad - 2 X 16 characters
Protection	IP 54	IP 54
Version	Separate	Separate
Analogue output	4-20mA	
Communication interface	RS-232	
Communication protocol	MODBUS	



SENSOR

COMPATIBLE FOR AC-DC AND INTERNAL BATTERY	
Nominal pressure	PN 16 (optional: PN10)
Electrode material	316L stainless steel (optional: titanium, tantalum, hastelloy, B&C)
Coating	Rubber lining (optional: PTFE)
Protection	IP 67
Maximum fluid velocity	15m/s
Flange material	Carbon steel
Accuracy	± 2%
Sensor material	Stainless steel 304

ABACUS FOR DIAMETER SELECTION



FUNCTIONALITY

Operating profiles based on the recording consumption and communications records requirements:

MODE	AUTONOMY	COMUNICATION	DATA HISTORY RECORD
Normal -24	12 years	24 h	1 h
Normal -8	TBD	8 h	1 h
Medium	TBD	12 h	30 min
Extreme	TBD	6 h	15 min

*TBD (to be determined). 24 maximum storage and sending readings: each sending allows accumulating up to 24 values for each communication interval.

AARMS

- Leakage alarm:**

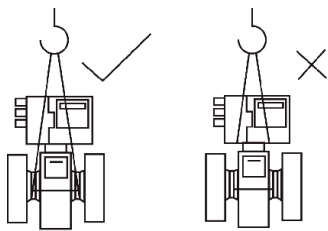
Detection of continuous consumption for a maximum period of time. Configuration adjusted by communications.
- Water meter stopped alarm:**

The alarm is activated if no consumption is detected for a maximum period of time. Configuration adjusted by communications.
- Under-dimensioned water meter alarm:**

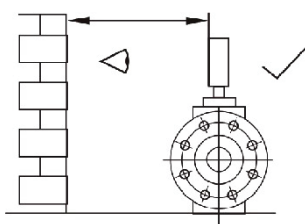
Detection of flow rate higher than the overload flow rate for a maximum period of time. Configuration adjusted by communications.
- Battery status alarm:**

Various battery alarm levels are activated depending on the remaining battery life.

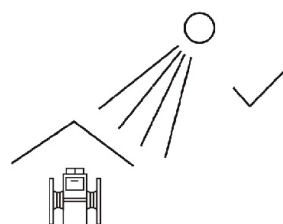
TECHNICAL SPECIFICATIONS



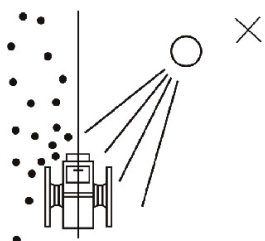
Correct hanging



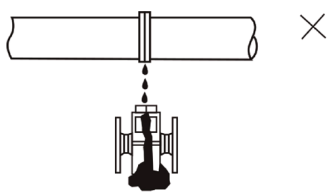
For proper reading



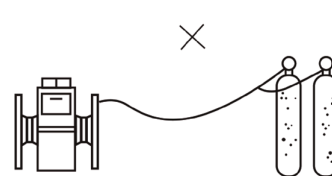
Protect from direct sunlight



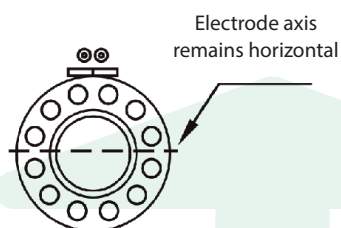
Avoid extreme temperature changes



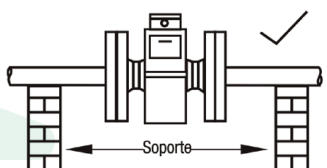
Keep away from possible leaks



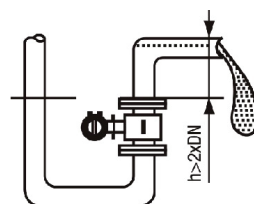
Keep away from fires



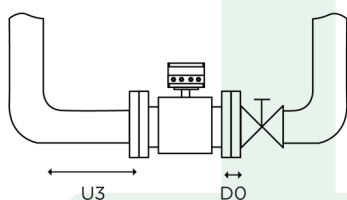
Installation level



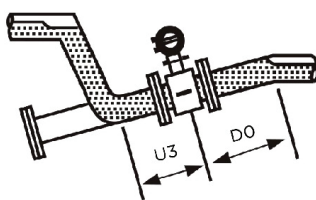
Use sufficient support



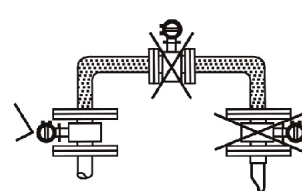
Install on a filled pipe



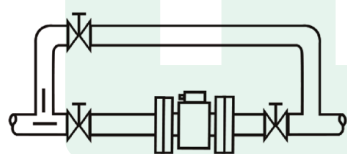
Check straight grid requirements



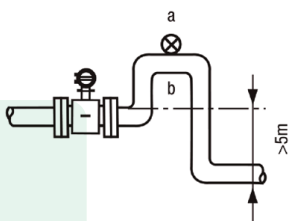
Precipitated water measurement



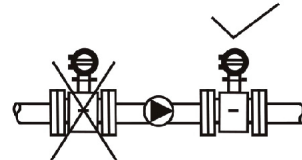
Avoid air bubbles in the fluid



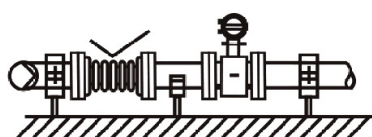
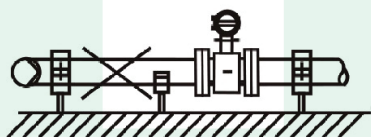
Easy maintenance and cleaning



Avoid negative pressure and empty pipes



Do not install before a pump inlet



Avoid sudden movements

AUTOMATIC METER READING

Adding the IRIS communications module to the water meter will enable automatic remote readings. IRIS devices allow mechanical meters to access the world of IoT communications. Its great versatility allows it to be integrated with a wide range of meters.

The IRIS communications module is integrated with the Demeter system. It supports the integration of a wide range of devices using various communication technologies to suit the needs of the installation.



NB-IoT	
Belts	LTE NB2/B1/B2/B3/B3/B4/B5/B8/ B12/B13/ B17/B18/B19/ B20/B25/B28/B66/ B70/B85
Transmission power	23 dBm +/-2dB
Firmware Update	Via FOTA

M-Bus wireless	
	868 MHz
	OMS T1 and C1

GPRS	
Frequency	- Quad-band: GSM850, ESM900, DCS1800,PCS1900. - The module can search for these frequency bands automatically. - The frequency bands can be configured by AT command. - GSM Phase 2/2+ compliant
Transmission power	Class 4 (2W) on GSM850 and EGSM900 Class 1 (1 W) on DCS 1800 and PCS1900
Bidirectional	Yes/Half-duplex
SIM	MFF2 eSIM and nano SIM card supported

LoRaWAN		
Modulation	CSS	CSS
Frequency	EU868* ISM band	ISM band US915, AU915, AS923**/ ***
Power	14 dBm	20 dBm
Sensitivity	168 dBm	168 dBm
Bandwidth	125 kHz	125 kHz
LoRaWAN Configuration	SF12	SF12
Bidirectional	Yes/Half-duplex	Yes/Half-duplex
Encryption	AES128	AES128
Standardisation	LoRa-Alliance	LoRa-Alliance

sigfox			
Geographical availability	RC1*	RC2**	RC4***
Modulation	BPSK	BPSK	BPSK
Frequency	Tx Freq. : 868.13MHz Rx Freq : 869.525MHz	Tx Freq : 902.2MHz Rx Freq : 905.2MHz	Tx Freq : 920.8MHz Rx Freq : 922.3MHz
Power	14 dBm (max) @600bps	+24dBm (max.) @600bps	+24dBm (max.) @600bps
Sensitivity	-127dBm @600bps	-129dBm(min.) @600bps	-129dBm(min.) @600bps
Bandwidth	100 Hz	100 Hz	100 Hz
Bidirectional	Limited/Half-duplex	Limited/Half-duplex	Limited/Half-duplex