WATER METER/ ULTRASONIC

JU500

ULTRASONIC METER FOR POTABLE WATER

DN50 to DN200
Q3 = 40 toQ3 = 250m^3/h

R500

T50

MAP16

High sensitivity to low flows, accurate measurement to monitor efficiency in large potable water networks;

Clean pipe, no internai moving parts. Without maintenance needs. Performance consistency during his lifetime;

IP68 LCD display, 10 measurement digits and several status indicators;

Cast iron body with epoxy coating, adequate for harsh environments;

Several communication interfaces available:

» **wireless:** Sigfox (LoRa and GPRS soon)

» **wired:** Pulse output "open collector" (standard), RS485 (optional)

WATER METER/ ULTRASONIC

JU5OO offers:

- An accurate and reliable measurement ideal to control and monitoring in large potable water networks.
- His robust design along with the absence of internal moving parts makes JU500 the perfect equipment to resist the most challenging working conditions maintaining high standards of accuracy measurement and low maintenance costs during his lifetime.
- JU500 can be equipped with state of the art communication interfaces easily allowing utilities to create smart control systems for their water distribution networks.
- JU500's display shows total reverse flow volume and presents different error alarms.

FUNCTIONAL CHARACTERISTICS:

Maximum Admissible Pressure: MAP 16

Temperature Class: T50ºC

Accuracy class: ISO 4064 rev.2005, accuracy class 2

Orientation limitation: Vertical/Horizontal

Pressure low-Class: ΔP10

Flow Profile Sensivity Class: U0D0

Display: LCD Display indicating total volume, instantaneous flow and alarms

Connetion Type: ISO Flanges

Protection and Classes: *IP68, Environmental class C, Electromagnetic class E1, Mechanical class M1 (according to OIML R49-1)*

Battery Power: Lithium powered battery with 10 years lifetime

Body: Cast iron

Certifications: EU type examination certificate SK 16-MI001-SMU046 (model type RSO) according to Directive 2014/32 / EU in accordance with OIML recommendation R49: 2006 and EN14154: 2005 + A2: 2011.
It complies with the requirements of OIML R49: 2013 and ISO 4064: 2014.
ACS approval, conformity of materials in contact with water.

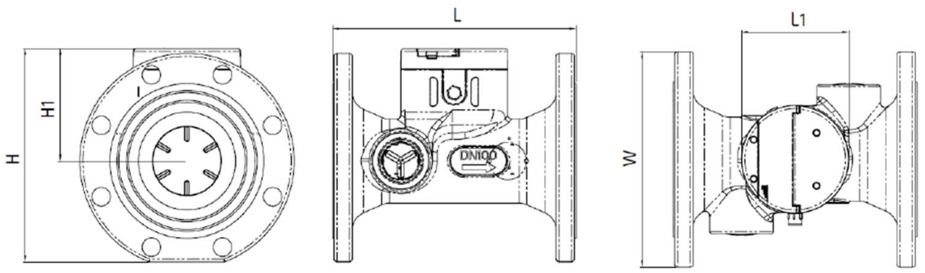
CERTIFICATE N.95/CEP.341

WATER METER/ ULTRASONIC

TECHNOLOGY AND COMMUNICATION INTERFACES

Janz Ultrasonic meter JU500 has four (4) transducers inside the pipe placed face-to-face in each one of the two parallel channels of the equipment.
A high accuracy measurement is achieved through a channel strenghten. Additionally, to avoid flow disturbances, a flow stabilizer is placed near the sensor. That allows a high measurement Ratio (R500) and a proper utilization of the equipment both in upstream and downstream applications (U0D0).

JU500 is equipped with a pulse connector "open collector" type (M 12 5 pins). It can optionally be equipped with a RS485 output.
For wireless communication systems JU500 can be equiped with the following technologies: Sigfox (available), LoRa and GPRS soon.



TECHNICAL DATA:

DN			50	65	80	100	125	150	200
Ratio Q3/Q1	(R)		500	500	500	500	500	500	500
Permanent Flowrate	Q3	(m^3/h)	40	63	63	100	160	250	400
Overload Flowrate	Q4	(m^3/h)	50	80	80	125	200	313	500
Transitional Flowrate	Q2	(dm^3/h)	Q1 × 1,6						
Minimum Flowrate	Q1	(dm^3/h)	Q3 / R						
Starting Flowrate*	(L/h)		20	35	35	50	65	125	200
			9999999			99999999			

* configurable: 1/4 of minimum flowrate

DIMENSIONS:

NOMINAL DIAMETER	DN		50	65	80	100	125	150	200
Length	L	(mm)	200	200	225	250	250	300	350
Length	L1	(mm)	110	110	110	110	110	110	110
Width	W	(mm)	165	185	200	220	250	285	340
Height	H1	(mm)	97	103	108	115	127	134	152
Height	H	(mm)	182,5	198,5	215,5	233,5	250	275,5	312
Weight		Kg	10	12	13	15	18	26	36

CERTIFICATE N.95/CEP.341

JANZ

WATER METER/
ULTRASONIC

LCD SCREEN AND SYMBOLOGY

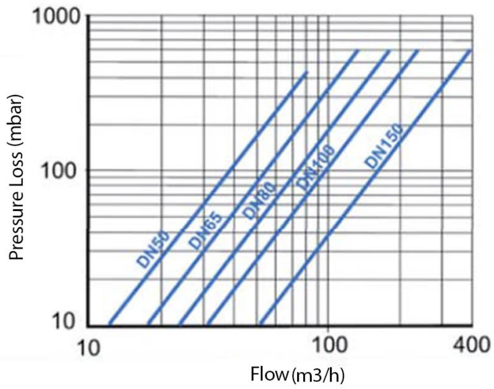
To show the data read by the meter in the display, various windows have been created as functions that can be called up in succession to display the assigned system information (e.g. flow rate, volume…)

Net volume Units: m3, L, GAL, ft3	0000022222 m³		
Forward volume Same units	0000022222 m³	Reverse volume With "–" Sign Same units	-000022222 m³
Actual flow rate (if reverse flow "-" Sign) Units : m3/h, L/h, GPM	-3321 L PER h	Metrology F/W version & Checksum	104 969A
Active events codes "E" + events numbers	E 7 2	Service alarms codes "S" + hex number.	S 0001

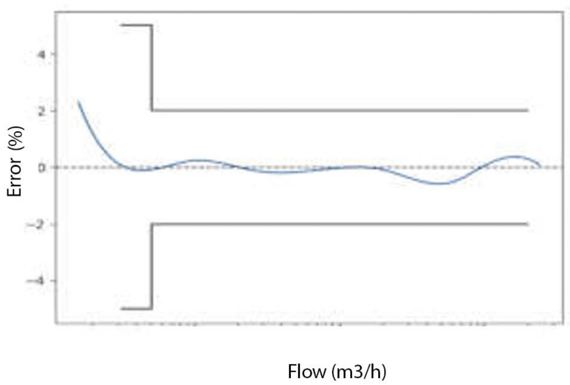
Flow direction (live indication)	▲ Forward flow > Qstart	▼ Reverse flow < - Qstart
	Both indicators are off if no water in pipe or |Q| < |Qstart|	
Exclamation mark	Switched on when user error or service error is ON only	
Reverse flow indicator	Is set under specific conditions	

Low battery	Remaining battery life	
Water detection	Wet (water in pipe)	Dry (no water in pipe)
Indicator	Positive index	Negative index
	Verification mode	Factory mode

PRESSURE DROP DIAGRAM



TYPICAL CURVE ERROR



For more information, please contact:

Av. Infante D. Henrique 286 | 288, 1950-421 Lisboa, Portugal
T. (+351) 218 316 000 | geral@cgf.janz.pt
WWW.JANZ.PT

JANZ