

# **ELECTO SONIC**



#### **ELECTRONIC ULTRASONIC METER**

ElecTo SONIC is the ultrasonic meter offering built-in data communication thanks to its innovative electronic register with multi-protocol radio communication facilities. It ensures excellent performance in all installation conditions and is insensitive to the chemical and physical characteristics of water. It is the ideal solution for Utility installations. Its wide 9-characters LCD display (digits and symbols) makes it very easy to read, while providing additional information to both users and operators. ElecTo SONIC supports remote data reading with fixed and mobile system, while offering maximum interoperability.



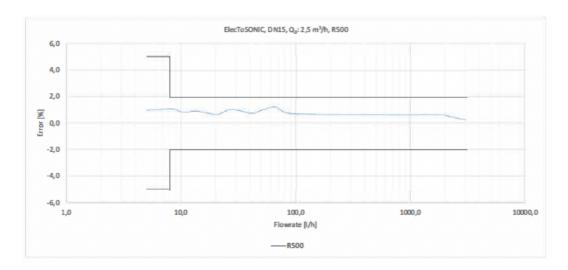
## **ELECTO SONIC**

#### **FEATURES**

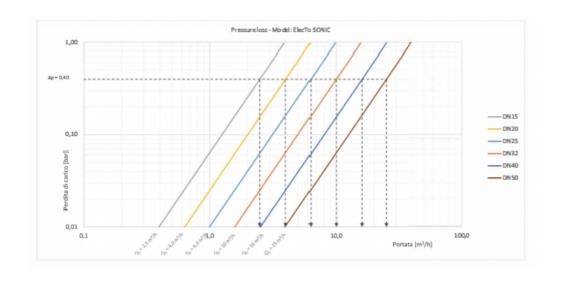
- Ultrasonic measuring technology
- DN: 15 to 50
- MID certificate: R MAX 800
- Health certifications available for a number of countries
- IP68 protection rating
- 9-characters display (digits and symbols)
- Datalogging with a storage capacity of over 11,000 values
- Integrated wM-Bus and LoRaWAN radio (battery life with default configuration 16 years)
- Integrated radio option NB-IoT (13 years by default in ELCO)
- Optimized antenna for maximum radio range
- Fault detection: low water temperature, low battery, empty line / air, overconsumption, no consumption, reversed meter, leakage, backflow and expiry of testing period
- Local NFC interface
- Programming and testing kit available upon request
- For further information on electronic register and radio transmission functions, please refer to the instruction manual



#### **TYPICAL ERROR CURVE**



#### **HEAD LOSS DIAGRAM**



## **METROLOGICAL PERFORMANCE**

Size	mm	15	20	25
	in	1/2	3/4	1

Module B no.	dule B no. IT-041-22-2213						
Module D no.		0119-SJ-A010-08					
Q <sub>3</sub> /Q <sub>1</sub> = R Referred to installation position	on	Any ≤ 500 Any ≤ 800 Any ≤ 500 Any ≤ 800					
MID standard performance *							
Q <sub>3</sub>	m³/h	1,6	2,5		4,0	6,3	
Q <sub>4</sub>	m³/h	2	3,13		5	7,88	
R		315	500	315	50	00	
Q <sub>1</sub>	l/h	5,08	5	7,	94	12,60	
Q <sub>2</sub>	l/h	8,13	8	12	2,7	20,16	

<sup>\*</sup> Other values of R available upon request.

## **TECHNICAL DATA**

Maximum permissible error between Q1 and Q2 (excluded)	+/- 5%					
Maximum permissible error between Q₂ (included) and Q₄	+/- 2% with water temperature \( \) 30°C					
Temperature class		Т50				
Flow profile sensitivity classes		U0 – D0				
Starting flow rate I/h	2,5	4	7			
Head loss		ΔΡ40				
Nominal pressure bar		16				
Maximum reading m <sup>3</sup>		999.999				
Minimum reading	0,001					
Indicative weight kg	0,99	1,10	2,2			

## **METROLOGICAL PERFORMANCE**

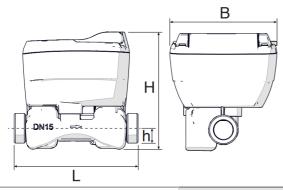
Size	mm	32	40	50	
Size	mm	32	40	50	
	in	1 1/4	1 ½	2	
Module B no.		IT-041-22-2213			
Module D no.		0119-SJ-A010-08			
Q <sub>3</sub> /Q <sub>1</sub> = R Referred to installation position		Any ≤ 800			
MID standard performa	nce *				
Q <sub>3</sub>	m³/h	10	16	25	
Q <sub>4</sub>	m³/h	12,50	20	31,25	
R		500			
Q <sub>1</sub>	l/h	20	32	50	
Q <sub>2</sub>	l/h	32	51,2	80	

<sup>\*</sup> Other values of R available upon request.

## **TECHNICAL DATA**

Maximum permissible error between Q <sub>1</sub> and Q <sub>2</sub> (excluded)	+/- 5%					
Maximum permissible error between Q <sub>2</sub> (included) and Q <sub>4</sub>		+/- 2% with water temperature ≤ 30°C +/- 3% with water temperature > 30°C				
Temperature class		T50				
Flow profile sensitivity classes	U0 – D0					
Starting flow rate I/h	10	16	25			
Head loss	ΔΡ40					
Nominal pressure bar		16				
Maximum reading m <sup>3</sup>	999.999					
Minimum reading	0,001					
Indicative weight kg	2,2	2,6	3,1			

## **DIMENSIONS**



Size	mm	15	20	25
	in	1/2	3/4	1

Thread	in	G 34 B   G 1 B	G 1 B	G 1 1/4 B
L	mm	110/145/165	105*/130/165/190	150/160/260
Н	mm	104	105	119
h	mm	19	21,5	25
В	mm		95	
Size	mm	32	40	50
	in	1 1/4	1 ½	2
Thread	in	G 1 ½ B	G 2 B	G 2 ½ B
L	mm	160/260	200/300	300
Н	mm	119	126	143
h	mm	29	34	38,5
В	mm	·	95	

\* only R500

