



SISMA

G. GIOANOLA

METERING EFFICIENCY

ESF ULTRASONIC TECHNOLOGY



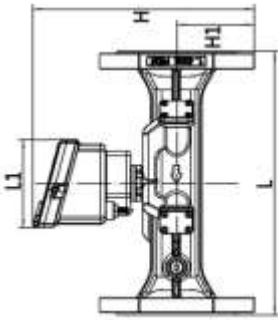
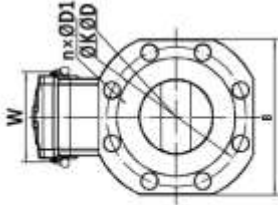
R500
MODELS (mm – inches)
50-2" – 65-2.1/2" – 80-3" – 100-4"
125-5" – 150-6" – 200-8"



- ❖ **Ultrasonic** water meter
- ❖ Mod. **ESF** with sizes from DN 50 to DN 200, temperature class T50, measuring range R500 with pulse output (see attached table)
- ❖ Very low start-up flow rate and 70% lower minimum flow rate than conventional meters
- ❖ Temperature detection, fault indication and abnormal water consumption
- ❖ No moving mechanical parts, very low wear and tear and very high durability
- ❖ Liquid crystal display with IP68 protection rating and magnetic button
- ❖ Certified according to Directive **2014/32/EU**
- ❖ Installation allowed in any position: in any case, the meter must always be filled with water in order to operate correctly

Models ESF
Temperature Class T50

DN50 / 65 / 80 / 100 / 125 / 200
R500

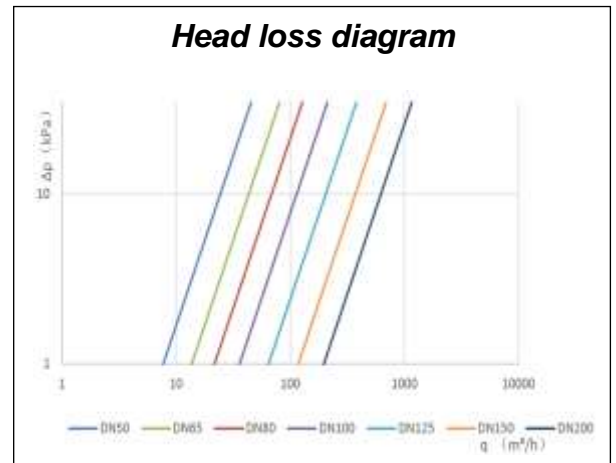


Technical data – DN in mm	50	65	80	100	125*	150	200*
Permanent flow rate Q3 (m³/h)	25	40	63	100	160	250	400
Overload flow rate Q4 (m³/h)	31,25	50,00	78,75	125,00	200,00	312,50	500,00
Transitional flow rate Q2 (m³/h)	0,080	0,128	0,202	0,320	0,512	0,800	1,280
Minimum flow rate Q1 (m³/h)	0,050	0,080	0,126	0,200	0,320	0,500	0,800
Pressure drop	25	25	25	25	25	25	25
Measuring range R (Q3 / Q1)	500	500	500	500	500	500	500
Pulse value	K10	K10	K10	K10	K100	K100	K100
Pulse duration (ms)	100	100	100	100	100	100	100
L) Length (mm)	200	200	225	250	250	300	350
L1	120	120	120	120	123	120	120
H) Height (mm)	245	250	275	290	380	400	470
H1) Distance between pipe and counter support surface (mm)	65	70	90	100	125	130	170
W	123	123	123	123	123	123	123
B) Maximum overall diameter (mm)	172	190	205	230	250	285	340
D	165	185	200	220	250	285	340
K	125	145	160	180	210	240	295
n x ØD1	4 x Ø18	4 x Ø18	8 x Ø18	8 x Ø18	8 x Ø18	8 x Ø22	8 x Ø22

*DN 125 and DN 200: steel body (other versions have cast iron body)

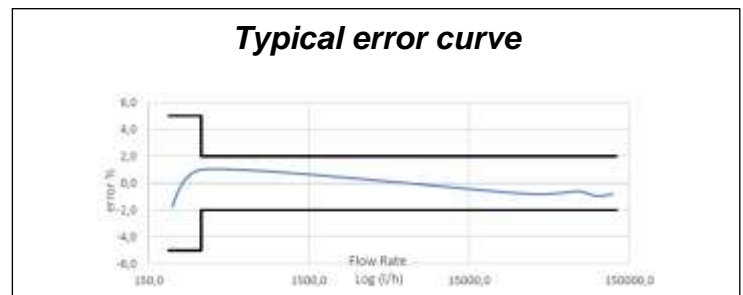
Hydraulic performances

Maximum reading m³/h	DN 50-DN 100	9999999.99999
	DN 125-DN 200	99999999.99999
Maximum operating pressure	1,6 MPa (1,0 MPa on demand)	
Temperature class	T50 (T30 on demand)	
Sensitivity class to installation conditions	H U3-D0, V U10-D5	
Protection class	IP68 (IP65 by external power supply)	
Power supply	3.6 V lithium battery (220 V ac, 24 V dc on request)	
Battery life	13 years	
Environmental and mechanical conditions	Class C (class B, class I on request)	
Electromagnetic class	Class E1 (class E2)	
Liquid	Water	
Installation position	Any	



Connections

Conductor	Signal	Description
White	Pulses	Signal with both forward and reverse flow
Yellow	Direction	Closed contact = reverse flow
Green	Tampering	Contact open = tampering
Brown	Mass	Common
Grey	Forward pulse count	In case of reverse flow the counter records the volume internally. When normal flow is restored, no pulses will be generated until the previously totalled volume value is reset.



The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. Illustrations are not binding.02-25