

► Brunata HGW – static electronic water meter

Approved for utility water and prepared for remote reading

Characteristics

- Measuring range 1:1500, approved for > 1:250
- High accuracy
- Separate display with backlight ensuring easy and accurate reading
- Robust flow sensor without any moving parts, low pressure drop
- Insensitive to impurities, overload not possible
- The flow sensor can be installed in any position requested; horizontally, vertically etc.
- No requirements for straight pipe distance before and after the meter
- Monitoring and remote reading via databus or direct connection LON / Mbus / RS232
- Data back-up in EEPROM
- Analogue output available
- 24-months log
- Recording of overflow possible
- Approved according to OIML R49, class 2, TS no. 22.36.004



The Brunata HGW-meter has a logically structured menu recording maximum flow every month for 12 months with information about date and time. An advanced version is available; it contains a 24-months log and a special register allowing for summing up according to time or flow criterion. Furthermore, there is the possibility of the HGW-meter functioning as pulse collector with display readings on consumption from other water meters, heat meters, electricity meters etc.

Further information

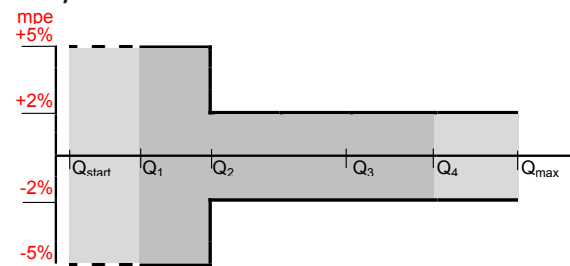
The HGW water meter is approved for registration and billing of utility water. It is, however, also suitable as flow and volume meter for the registration of other conductive fluids. The meter consists of a flow sensor with electrodes of polished, stainless steel and a spatter-proof, advanced microprocessor-based electronic unit for wall mounting.

Approval according to the latest requirements (OIML R49) which ensures long and stable metering even at low flow rates.

The Brunata HGW-meter is fully electronic and the measuring principle is based on Faraday's magnetic induction principle. The water passes through a well-defined lining of Polysulfone / Ultrason S. The water flow induces a voltage signal which is transferred to the electronic unit.

The meter has a straight passage and contains no moving parts which can be worn or choked up. Overloading is not possible; the upper limit for maximum flow is only limited by the pump's capacity. The flow sensor can be installed according to your requirements – vertically, horizontally etc.

Accuracy limits according to OIML R49, class 2



Specification of flow areas:

$$Q_2 = Q_1 + 60\%, Q_4 = Q_3 + 25\%, Q_{\max} = Q_3 + 50\%$$

$$Q_3/Q_1 = 250, Q_3/Q_{\text{start}} = 1000, Q_{\max}/Q_{\text{start}} = 1500$$

Brunata is a 100 % Danish owned company. We have more than 85 years of experience within developing and producing heat cost allocators and heating accounts. Brunata als has implemented a quality system in accordance with EN ISO 9001. Please contact us for further information on our products!

Technical data

		HGW2	HGW6	HGW10	HGW16
Max. flow (q _{max})	m ³ /h	2.4	9.5	15	24
Upper flow limit (q ₁)	m ³ /h	2.0	7.9	12.5	20
Nominal flow (q ₃)	m ³ /h	1.6	6.3	10	16
Transitional flow (q ₂)	l/h	10.2	40.3	64	102
Minimum flow (q ₁)	l/h	6.4	25.2	40	64
Starting flow (q _{start})	l/h	1.6	6.3	10	16

Meter types and dimensions

Type	Max flow m ³ /h	Connection D	Length with- out coupling L	DN x length using loose flanges
HGW2-R0-77x	2.4	G¾B	110	
HGW2-R2-77x	2.4	G1B	105	
HGW2-R3-77x	2.4	G1B	130	
HGW2-R4-77x	2.4	G1B	190	DN32 x 260/ DN40 x 300
HGW6-R4-77x	9.5	G1B	190	DN32 x 260 / DN40 x 300
HGW6-R6-77x	9.5	G1¼B	260	
HGW10-R4-77x	15	G1B	190	DN40 x 300 / DN50 x 270
HGW10-R6-77x	15	G1¼B	260	
HGW16-R4-77x	24	G1B	190	DN40 x 300 / DN50 x 270
HGW16-R6-77x	24	G1¼B	260	
HGW16-R8-77x	24	G2B	300 *)	

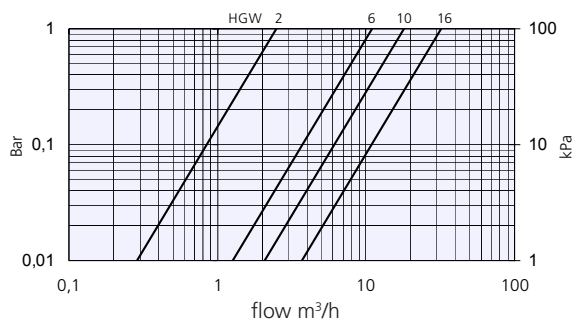
*) with adapter

Versions: - 774 is the standard version showing peak values in the user menu and a 12-months log
- 778 is the advanced version with a 24-months log and special register for recording of overflow, or consumption in a specific period of time, consumption during the night for instance.

Cable length: Standard 1.5 metres. 3.5 and 8 mtr. are optional

Options: Pulse collector for other meters
Communication module RS232, M-Bus or LON

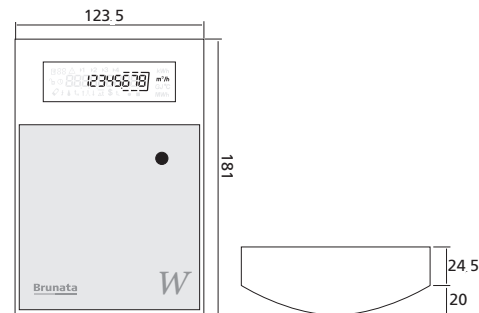
Pressure loss curve



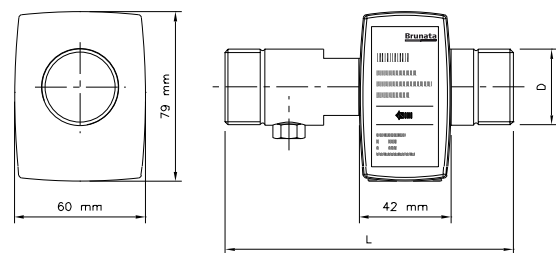
Technical data

Supply/Consumption	230 or 24 Volts AC/3 Watts
Dynamic measuring range	1:1500, approved for 1:250
Display value	999'999'999
No. of decimals	Max. 3
Information and error registration	Present error and date/time as well as previous error with error type and date. Duration in hours with erroneous function is recorded.
Protection class	Electronics: IP44, flow sensor: IP54
Surrounding temperature	5 – 55 °C
Data communication	Mbus protocol
Pulse output	Potential free, open collector, max 20 mA, 28 V
Other outputs	5 V DC, HF signal for test equipment
Pulse input	External pulse meters (2 units), active signal course/potential free contact, 50
Pressure class	PN16
Liquid temperature	T _{max} = 120 °C
Installation requirements	None
Conductivity requirements	> 2 mS/m [20 µS/cm]

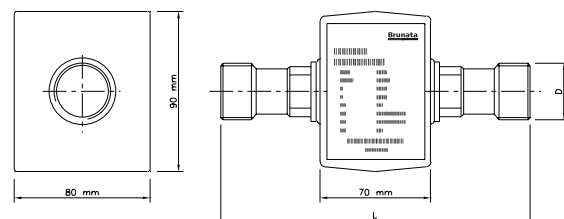
Dimensional outlines



Electronics HGW



Flow sensor HGW2



Flow sensor HGW6, 10 and 16