



MeiMag 5100W/6000CT

Electromagnetic Flowmeter for potable water up to 30 °C for billing applications

Main Features

MAG 5100W

High measuring accuracy ($\pm 0,2\% \pm 1 \text{ mm/s}$ of measured value; together with MAG 6000)

Earthing electrodes integrated in the measuring tube

Simple commissioning by SENSORPROM

Coned measuring pipe by 1xDN for more accurate measurement of low flow rates

Measuring tube liner with sanitary approval

Measuring tube temperature resistant up to 70 °C (short time 90 °C)

MAG 6000CT

Approval acc. 2014/32/EU MI001 for cold water up to 30 °C

Wide measuring range, approved Ratio R160

Simple commissioning by SENSORPROM

No calibration necessary

Self diagnosis

LCD-indicator, Current output, Pulse output

Empty pipe detection

Flow-direction signal

Converter suitable for compact/remote mounting

separate mounting with cable length up to 500 m

Automatic zero point adjustment

Batch function

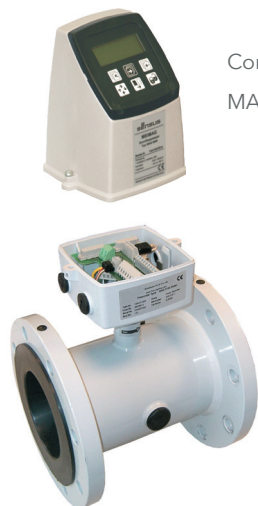
Limit switch

Pattern Approval

DK-0200MI001-001	For MAG 6000 C 30 °C DN 50 ... 300 Installation position horizontal
------------------	---

MeiMag 5100W/6000CT

Electromagnetic Flowmeter for potable water up to 30 °C for billing applications



Converter
MAG 6000CT

Sensor
MAG 5100W

Models available

The table (see right) shows the relationship between flow velocity V , flow quantity Q and sensor dimension DN .

Selecting of sensor

The sensor size should be selected that at full scale the velocity V in the meas. pipe is 2 ... 3 m/s or more.

For measuring of mediums with high solids content V should be 3 ... 5 m/s to avoid deposition

Prerequisites

Medium pumpable with a conductivity of min. 20 $\mu\text{S}/\text{cm}$ with water.

Power supply 115/230 V AC.

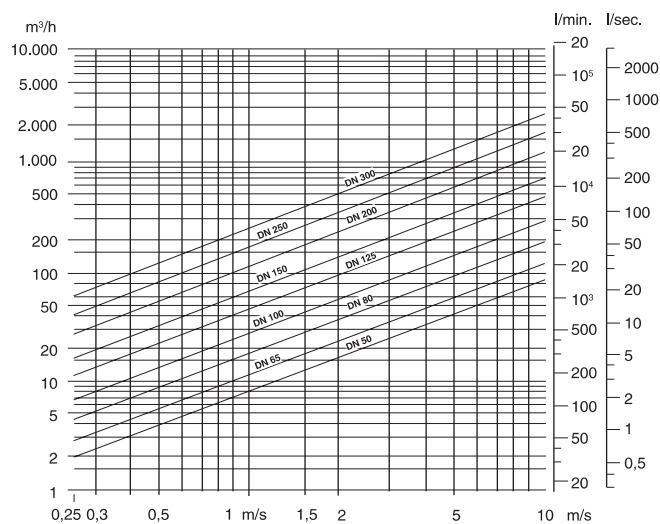
APPLICATIONS

- Measurement of water, in commercial applications, up to 30 °C
- Billing meter
- Irrigation

Installation Requirements

- The meter does not need a straight inlet or outlet pipe (U0D0 acc. OIML R49-1)
- Meter orientation horizontal
- During operation pipe must be filled with liquid.

Sizing Table (DN 50 ... DN 300)



Used materials

Flanges and housing	ASTM A105, epoxy coated 150 μm
Lining	EPDM
Electrodes	Hastelloy C

MeiMag 5100W/6000CT

Electromagnetic Flowmeter for potable water up to 30 °C for billing applications

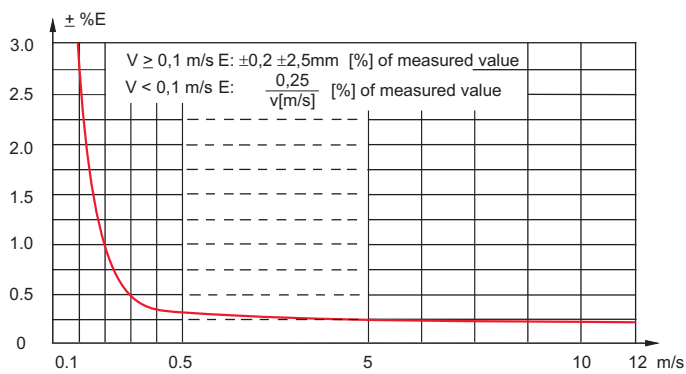
Typical Accuracy Curve

With CE certified meters the error limits acc. to 2004/22/EC are applicable

- $Q_4 \pm 2\%$
- $Q_3 \pm 2\%$
- $Q_2 \pm 2\%$
- $<Q_2$ to $Q_1 \pm 5\%$

Error limits under reference conditions
(Display, frequency, pulse output)

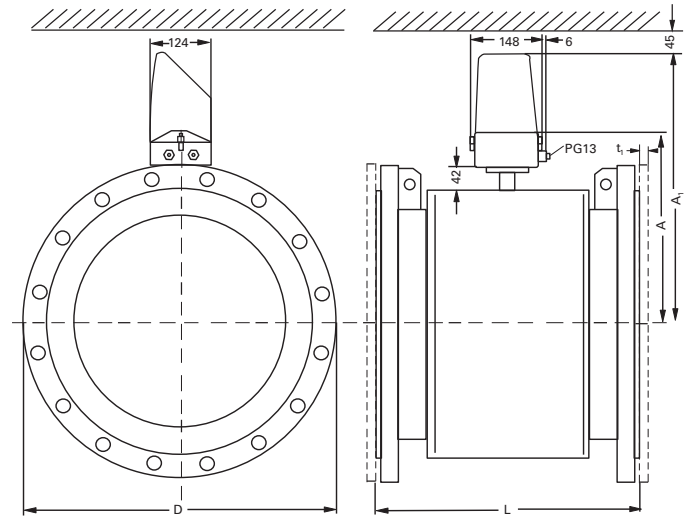
MAG 5100W / 6000CT



V = actual flow velocity (m/s)

E = Error in % of actual flow

Dimensional Diagram



Technical data

Temperature	0,1 ... 30 °C
Pressure class	PN 16
Flange connection	EN 1092-1 PN16
Protection class	IP 67

Performance Data

Nominal diameter	DN		50	65	80	100	125	150	200	250	300
Ratio Q_3/Q_1			160	160	160	160	160	160	160	160	160
Maximum flowrate	Q_4	m ³ /h	50	78.75	125	200	312.5	500	787.5	1250	2000
Nominal flowrate	Q_3	m ³ /h	40	63	100	160	250	400	630	1000	1600
Transitional flowrate	Q_2	m ³ /h	0.40	0.63	1.00	1.60	2.50	4.00	6.30	10.00	16.00
Minimum flowrate	Q_1	m ³ /h	0.25	0.39	0.63	1.00	1.56	2.50	3.94	6.25	10.00

MeiMag 5100W/6000CT

Electromagnetic Flowmeter for potable water up to 30 °C for billing applications

Dimensions and Weights

	EN 1092		ANSI		sin MAG 6000/5000	con MAG 6000/5000	peso *)
DN	PN 16		150 lb		A	A1	
mm	L **)	D	L**)	D	(mm)	(mm)	(kg)
50	200	165	200	152	172	329	9
65	200	185	200	178	180	337	11
80	200	200	200	191	185	342	12
100	250	220	250	229	203	360	15
125	250	250	250	254	223	380	20
150	300	285	300	279	238	395	26
200	350	340	350	343	263	420	48
250	450	405	450	406	297	454	89
300	500	460	500	483	314	471	86

All flange dimensions to EN 1092

*) With signal converter MAG 6000 CT mounted: Weight increases by 2 kg

**) If earthing flanges are used additionally, the thickness of the earthing flange and gasket must be added to the length

Order information MeiMag flow sensor MAG 5100W, incl. converter MAG 6000CT

DN	Q3	Length	Drilling pattern	Order no.
50	40	200	EN 1092 PN16	829725
65	63			829726
80	100			829727
100	160	829728		
125	250	829729		
150	400	300		829730
200	630	350		829731
250	1000	450		829734
300	1600	500		829735
200	630	350		EN 1092 PN10
250	1000	450	829737	
300	1600	500	829738	

Accessories	Description	Order no.
MAG 6000	Wall mounting kit for IP 67	828483
	Wall mounting enclosure, 5 pcs. M20 brackets	
Further accessories on request	Standard electrode and coil cable 3 x 1.5 mm ² PVC Length: 10 m	828892
	Special electrode cable, double screened 3 x 0.25 mm ² PVC Length: 20 m	828489
	Necessary when using the Empty pipe detection	



UK & Ireland Inquiries | Sensus UK Systems Ltd. | 3 Lindenwood Crockford Lane, Chineham Business Park | Basingstoke RG24 8QY UK | +44 1256 372800 | info.gb@xylem.com
 International Inquiries | Sensus GmbH Hannover | Meineckestr. 10 | 30880 Laatzen | Germany | +49 5102 743177 | info.int@xylem.com

©2020 Sensus. All products purchased and services performed are subject to Sensus' terms of sale, available at [sensus.com](https://www.sensus.com). Sensus reserves the right to modify these terms and conditions in its own discretion. The Sensus logo and other Sensus products or services referenced are registered trademarks of Sensus.

This document is for informational purposes only, and SENSUS MAKES NO EXPRESS WARRANTIES IN THIS DOCUMENT. FURTHERMORE, THERE ARE NO IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY. ANY USE OF THE PRODUCTS THAT IS NOT SPECIFICALLY PERMITTED HEREIN IS PROHIBITED.