

meimag

5100W

Electromagnetic Flowmeter

DN 25 ... DN 1200

for water up to 70 °C



Main Features

MAG 5100W

High measuring accuracy (± 0.25 % of measured value; together with MAG 6000)

Earthing electrodes integrated in the measuring tube

Simple commissioning by SENSORPROM

DN 50...300 with coned measuring pipe by 1xDN for improvement of low flow performance

Liner with WRC Approval

Temperature resistant up to 70 °C (short time 90 °C)

MAG 5000

High measuring accuracy (± 0.5 % of measured value)

Wide measuring range

Simple commissioning by SENSORPROM

No calibration necessary

Self diagnosis

LCD-indicator, Current output, Pulse output

Empty pipe detection

Flow-direction signal

Converter for compact/remote mounting

Automatic zero point adjustment

MAG 5000 CT with pattern approval for cold water

Pattern Approval Sign

6.221

For MAG 5000 CT and MAG 6000 CT

05.21

30 °C

MAG 6000

High measuring accuracy (± 0.25 % of measured value)

Batch function

Limit switch

MAG 6000 CT with pattern approval for cold water

Further features see MAG 5000

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GmbH Hannover





Converter
MAG 5000 / MAG 6000

Sensor
MAG 5100W

Models available

Sensor MAG 5100W

DN 25 ...	DN 1200	70 °C (short time 90 °C)
DN 25 ...	DN 40	PN 40
DN 50 ...	DN 150	PN 16
DN 200 ...	DN 1200	Standard PN 10; optional PN 16

Liner material: EPDM (with WRC-approval)
DN 50... 300

Electrodes: Stainless steel

Pipe connections: Flanges acc. to EN 1092

Earthing electrodes: Stainless steel

Converter MAG 5000 115/230 V AC

Converter MAG 5000 24 V AC/DC

Converter MAG 6000 115/230 V AC

Converter MAG 6000 24 V AC/DC

Converter MAG 5000 CT 115/230 V AC

Converter MAG 6000 CT 115/230 V AC

- Other models on request

Applications

Measurement of water up to 70 °C

Process control

District metering

Batching of fluids (MAG 6000)

Installation Requirements

Upstream unrestricted straight pipe min. 5 x DN

Downstream unrestricted straight pipe min. 2 x DN

May be installed at any angle

Pipe must always be filled with liquid.

Measuring Range

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

Selecting of sensor

Normally, the sensor is chosen so that at full scale velocity V in the meas. pipe is 2 ... 3 m/s or more.

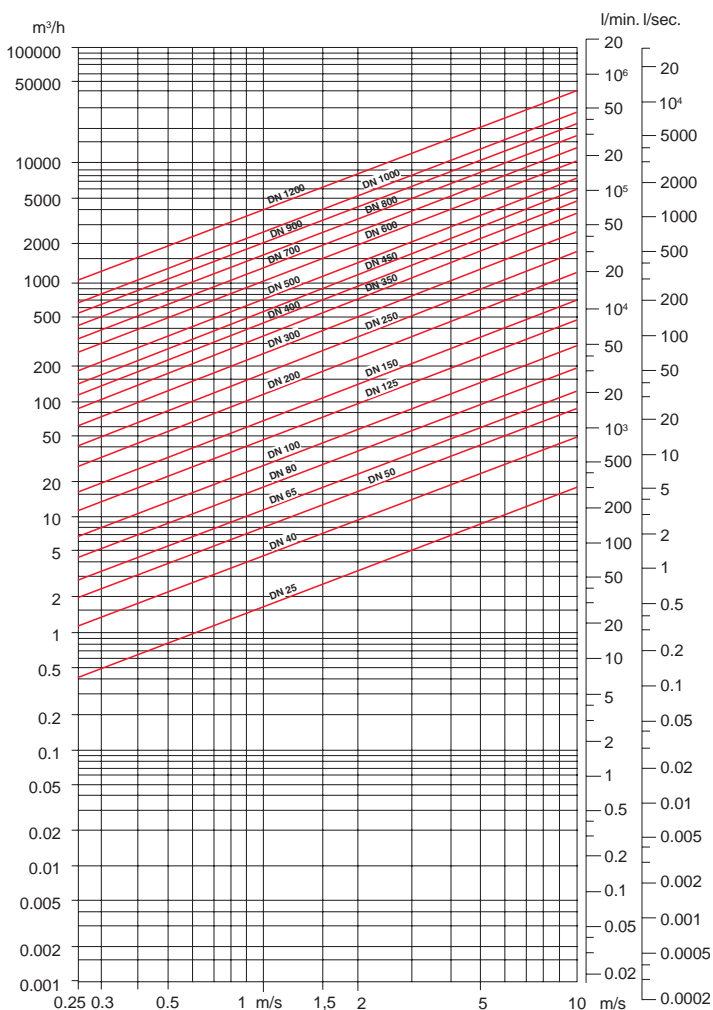
For measuring of mediums with high solids content V should be 3 ... 5 m/s to avoid deposition

Prerequisites

Medium pumpable with a conductivity of min. 5 μ S/cm.

Power supply 115/230 V AC or 24 V AC/DC.

Sizing Table (DN 25 ... DN 1200)



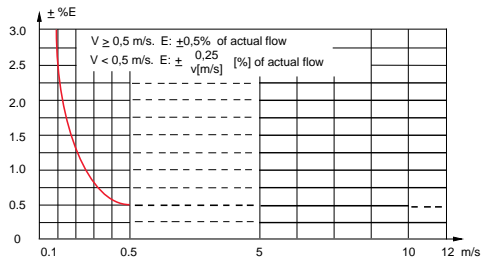
meimag 5100W

Accuracy

under reference conditions

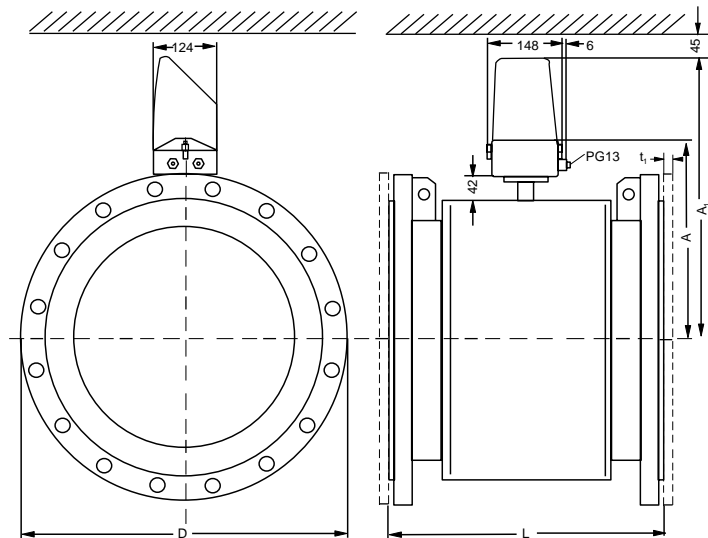
(Display, Frequency, Pulse output)

MAG 5100W/5000 · MAG 5100W/6000



V: actual flow velocity (m/s), E: Error in % of actual flow

Dimension Pictures



Dimensions and Weights

DN mm	EN 1092		ANSI		without MAG 6000/5000		with MAG 6000/5000		weight *) (kg)
	PN 16		PN 40		150 lb		A	A1	
	L **)	D	L **)	D	L **)	D	(mm)	(mm)	
25			200	115	200	108	162	319	4
40			200	150	200	127	172	329	7
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	69
300	500	460			500	483	314	471	86
350	550	520			550	533	334	491	125
400	600	580			600	597	358	515	143
450	600	640			600	635	389	546	173
500	600	715			600	699	414	571	223
600	600	840			600	813	464	621	338
700	700	910					561	718	314
800	800	1025					612	769	396
900	900	1125					662	819	474
1000	1000	1255					713	870	600
1200	1200	1485					814	971	885

All flange dimensions to EN 1092 or ANSI B 16.5

*) With signal converter MAG 6000/5000 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.

meimag 5100W

Available Design

	Description	DN	PN	Order-No. PN 10	Order-No. PN 16 (40)
Sensor MAG 5100W	Sensor Meimag 5100W	25	40		829379 (40)
		40	40		829380 (40)
	- Liner: EPDM (with WRC-approval)	50	16		829381
	- Electrodes: AISI 316 Ti (stainless steel)	65	16		829382
	- Flanges: ST 35, EN 1092	80	16		829383
	- Accuracy: ±0,5 %	100	16		829384
	- Pressure rate: see table	125	16		829385
	- Temperature: 0 ... 70 °C	150	16		829386
	- Protection class: IP 67	200	10	829387	829388
		250	10	829389	829390
		300	10	829391	829392
	- Integrated earthing electrodes (no additional earthing flanges necessary)	350	10	829393	829394
		400	10	829395	829396
		500	10	829397	829398
	Other pressure rating, flanges and electrodes on request	600	10	829399	829400
		700	10	829401	829402
	800	10	829404	829405	
	900	10	829407	829408	
	1000	10	829410	829411	
	1200	10	829414	829413	

	Description	Code-No.	Order-No.
Accessories MAG 5100W	Submersible kit (IP 68 10 m WG) For use with standard MAG 5100W, if the sensor is buried or permanently submerged	085U0220	828478
	Earthing and protection flange Type C (additional inlet protection for abrasive media)	Please mention size and pressure rate	

	Description	Application	Protection class	Code-No.	Order-No.
Converter MAG 5000	Converter MAG 5000 compact mounted	115/230 V AC 50/60 Hz	IP 67, glass fibre reinforced polyamide	083F5018	828479
			IP 00, 19"-Insert	083F5020	on request
	24 V DC (11 ... 30 V)	IP 67, glass fibre reinforced polyamide	083F5017	829260	
		IP 00, 19"-Insert	083F5021	on request	
	Converter MAG 5000 CT pattern approved version	115/230 V AC 50/60 Hz	IP 67, glass fibre reinforced polyamide	083F5050	829416
			IP 67, glass fibre reinforced polyamide	083F5046	829421
Converter MAG 6000	Converter MAG 6000 compact mounted	115/230 V AC 50/60 Hz	IP 67, glass fibre reinforced polyamide	083F5014	828480
			IP 00, 19"-Insert	083F5023	on request
	Converter MAG 6000 CT pattern approved version	115/230 V AC 50/60 Hz	IP 67, glass fibre reinforced polyamide	083F5015	829261
			IP 67, glass fibre reinforced polyamide	083F5010	829420

	Description	Code-No.	Order-No.	
Accessories MAG 5000 MAG 6000 Further accessories on request.	Wall mounting kit for IP 67 Wall mounting enclosure, 5 pcs. M20 brackets,	085U1001	828483	
	Standard electrode and coil cable 3 x 1.5 mm2 PVC Length:	10 m	083F0221	828892
		20 m	083F0210	828485
		40 m	083F0211	828486
		60 m	083F0212	828487
		100 m	083F0213	828488
Special electrode cable, double screened PVC Length: (recommended for long distances and if empty pipe detection is used)	10 m	083F0221	828892	
	40 m	083F3094	828490	
	60 m	083F3093	828491	
	100 m	083F3092	828492	

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