

Transmitter specifications MAGB1



Measurable media	Conductive fluids
Min. media electrical conductivity	$\geq 5\mu\text{S/cm}$ or $\geq 20\mu\text{S/cm}$ for demineralized water
Flow range	0.1 to 10 m/s
Displayed values	Actual flow (m^3/h l/s, l/m, US.gal/min, UK.gal/min), volume (m^3 , l, US.gal, UK.gal), positive, negative, total volume and auxiliary (clearable) volume
Accuracy	$\pm 0.5\%$ of actual value for sizes up to 150 mm and $\pm 2\%$ for 200 mm and bigger sizes (0.5-10 m/s)
Power supply	2-pack or 5-pack - internal lithium battery
Communication	USB (Modbus RTU), RS485 (Modbus RTU) or 3G/GPRS/GSM
Flow direction	Bi-directional measurement
Ambient temperature	-20 to 60°C (-4 to 140°F)
Display	LCD 128 x 64 px graphical, contrast setup, sleep mode
Control	Touch button, USB (standard), RS485 (optional)
Low flow cut-off	OFF, 0.5%, 1%, 2%, 5%, 10% of Flow Q_n
Electronics weight (including housing)	1.5 kg
Housing material	Aluminium (powder coated)
Housing dimensions	\varnothing 144 mm
Cable terminals	1+1xM16x1.5 IP68 cable glands
Electronics protection	IP68
Other features	Test of excitation coils Empty pipe detection Zero flow adjustment Flow simulator Verification tool available
Excitation frequency	1/60 Hz, 1/30 Hz, 1/15 Hz, 1/5 Hz, 1.5625 Hz, 3.125 Hz, 6.25 Hz
Real time	Clock function for data-logging
Outputs	Pulse output with programmable volume function and pulse width
Adjustable filter constant	1 - 30 samples
Error logger	Logging last 10 errors
Data logger	1820 records, selectable interval of logging (5min - 24h)
Certification	EMC, ES, PED, IP68, OIML R49, MID

Sensor specifications MAGB1



Connection types	DIN, ANSI, JIS flanges. Other types on request
Flange	Carbon steel as standard. Dimensions according to DIN EN 1092-1, ASME B 16.5, JIS B 2239
Nominal size	DN20-DN600
Maximum nominal pressure	PN 40/300 psi
Max.media temperature	70°C (158°F) for Hard Rubber liner, 130°C (266°F) for PTFE liner in remote version
Ambient temperature	-20 to 60°C (-4 to 140°F)
Sensor protection	Remote IP68 (NEMA 6)
Liner	Hard Rubber, PTFE and other materials on request WRAS approved material available for all standard sizes
Electrodes	Hastelloy C-276 as a standard, other materials on request
Measuring tube	Stainless steel 1.4301 dimensions according to EN 10027-2
Outer casing	Carbon steel (1.0036) as standard
External coating	Lacquered finish (anticorrosive)
Accessories options	Earthing rings for plastic and lined pipes
Coils resistance	100 Ω
Other features	Earthing through 3 rd and 4 th electrodes

The MAGB1 MID version flowmeters (DN25 – DN300) are designed to measure, memorise and display the volume at metering conditions of water passing through the measurement transducer in the sense of the Directive 2014/32/EU of the European Parliament and of the Council of the harmonization of the laws of the Member States relating to the making available on the market of measuring instruments, as amended.

The MAGB1 OIML version flowmeters (DN25 – DN300) have been type tested and internationally proven and endorsed to the accuracy class 2 for cold and hot potable water meters – OIML R49-1 (Organisation Internationale de Métrologie Légale).

For OIML certificates, visit https://www.oiml.org/en/oiml-cs/certificat_view and for MID certificates visit <http://typover.cmi.cz/index.pl?switchlang=2>

Technical Drawing Data-Sheet IP68 Transmitter MAGB1

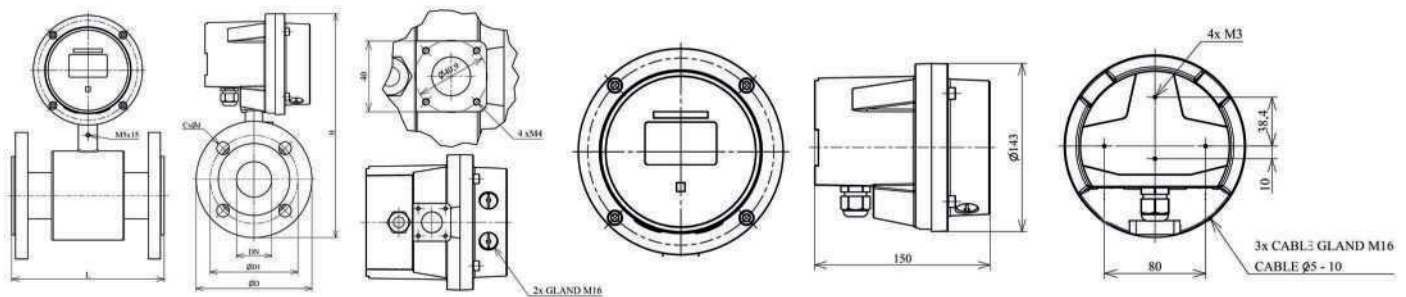
DIN

DN	ØD	D1	CxØd	L	H-compact	H-remote
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
10	90	60	4x14	200	257	160
15	95	65	4x14	200	262	165
20	105	75	4x14	200	269	172
25	115	85	4x14	200	275	178
32	140	100	4x18	200	293	196
40	150	110	4x18	200	302	205
50	165	125	4x18	200	316	219
65	185	145	8x18	200	336	239
80	200	160	8x18	200	354	257
100	220	180	8x18	250	374	277
125	250	210	8x18	250	407	310
150	285	240	8x22	300	440	343
200	340	295	12x22	350	496	399
250	405	355	12x26	400	566	469
300	460	410	12x26	500	615	518
350	520	470	16x26	500	683	586

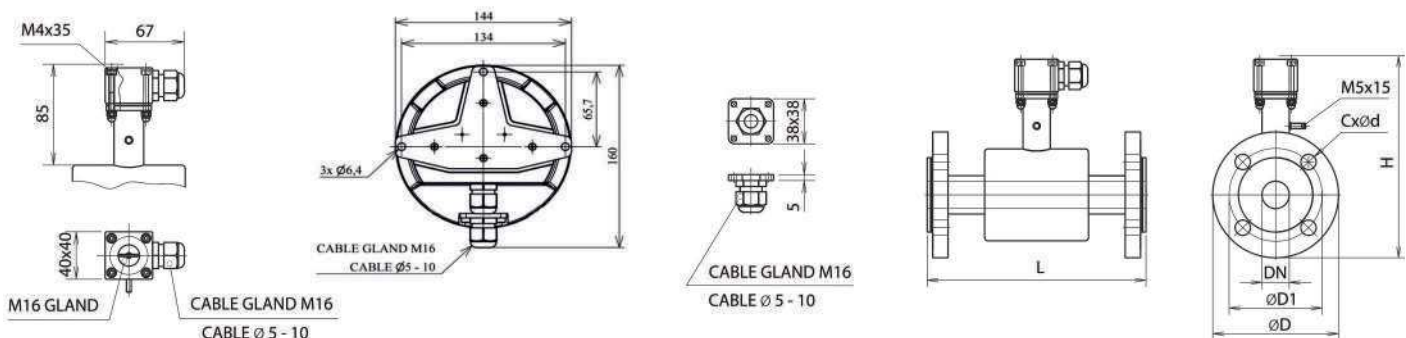
ANSI

DN	ØD	ØD1	CxØd	L	H-compact	H-remote
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
1/2"	88.9	60.5	4x15.7	200	258	161
3/4"	98.6	69.9	4x15.7	200	266	169
1"	108	79.2	4x15.7	200	271	174
1.1/4"	117.3	88.9	4x15.7	200	282	185
1.1/2"	127	98.6	4x15.7	200	290	193
2"	152.4	120.7	4x19.1	200	309	212
2.1/2"	177.8	139.7	4x19.1	200	332	235
3"	190.5	152.4	4x19.1	200	349	252
4"	228.6	190.5	8x19.1	250	378	281
5"	254	215.9	8x22.4	250	409	312
6"	279.4	241.3	8x22.4	300	437	340
8"	342.9	298.5	8x22.4	350	497	400
10"	406.4	362	12x25.4	400	566	469
12"	482.6	431.8	12x25.4	500	626	529
14"	533.4	476.3	12x28.4	500	690	593

Compact version:



Remote version:



Tolerance of built-in length:
DN 10 – DN 150 L ± 5 mm
DN 200 – DN 1000 L ± 10 mm

Standard pressure:
DN 10 – DN 50 PN 40 / 150 lbs.
DN 65 – DN 150 PN 16 / 150 lbs.

Electronics weight (Including Housing)	1.5 kg
Housing material	Aluminium + powder coating
Housing dimensions	Ø 144 mm
Cable terminals	1+1xM16x1.5 IP68 cable glands
Electronics protection	IP68 / NEMA 6