







MAGX2

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**Agrimag** 

Flow Measurement & Control Specialists



## MAG 2: Modular design suitable from most basic to most advanced applications

- The MAGX2 has an innovative modular design "Plug & Play"
- Accuracy ±0.2% of actual value
- Sizes from DN10 to DN1000
- Connection: DIN, ANSI, JIS, other on request
- Communication protocol: all communications via Modbus RTU
- Temperature sensor
- Graphic display with multi-language menu
- Intelligent sensor design: digital communication allows communication between the transmitter and the sensor up to 500m. Calibration data stored in the sensor
- GPRS, TCP/IP, GSM-SMS and Bluetooth communication available
- Data-logging on a standard micro-SD card
- **6** touch buttons to operate



Control, monitor, set up your flowmeter from your office!

- Wireless communication system, which is performed by the GPRS network
- The measurement can be done anywhere in the world and read from your office
- No need to visit the site

#### **APPLICATIONS**

Wireless control of, and communication between transmitter and the PC or PLC systems





"Built in design" for upgrades

#### **GSM - SMS module**

Getting data from the flowmeter in your mobile phone number!

- Receives flow rate and total volume from MAGX2 by SMS in a specific intervals
- Specific interval of SMS transmissions can be set up through the MAGX2 software
- SMS is sent to a specific phone number or SMS server (up to 3 phone numbers)



## MAGB1: Battery powered flowmeter

- Suitable for irrigation, remote applications, any other application where power supply lines are difficult or expensive to instal
- Modbus RTU communication protocol via USB or RS485
- Data logger: 1820 records, selectable interval of logging (5min 24h)
- Sizes from DN20 to DN250, other on request
- Connection: DIN, ANSI, JIS, other on request
- Accuracy ±0.5% of actual value
- **Empty pipe detection**
- Battery life up to 5 years (up to 15 years with external battery pack)
- Graphic display and touch button for operation and instant access to information

## MAGS1 : Stand-alone flowmeter

- MAGS1 is a stand-alone version flowmeter, which does not need a transmitter and can be operated on its own
- Suitable for applications where the flowmeter is connected to a PLC on RS485 Modbus RTU protocol
- Powered with 24VDC, has a standard RS485 line with Modbus RTU protocol as a unique output/communication
- Connection: DIN, ANSI, JIS, other on request
- Liner: Hard Rubber, PTFE, other material on request
- Maximum nominal pressure: PN 40/300 psi









Agrimag and AgrimagP: User friendly low cost plastic flowmeter for agricultural and multiple applications

- Available in 3 sizes (25, 50 and 80mm)
- Manifold clamping flanges connections, compatible with fitting kits for DIN, BSP, NPT and other common connections
- Accuracy: ±1% from 10% to 100% of full scale range
- LCD display 128×64 PX graphical
- Empty pipe detection and battery saving mode
- Body material: glass filled polypropylene
- Working pressure 150psi or 10.3 bars



On/Off Batch Batch Reset Tols

**Agrimag**: powered by 6 standard AA batteries, easily interchangeable

**AgrimagP**: powered by 9-35 VDC power supply, one frequency output

#### Parshall flumes: for open channels measuring

- Arkon parshall flumes are primary flow devices with a wide range of applications, for measuring open channel flow
- They can be used for flow measurement in creeks, irrigation and/or drainage channels, sewer outfalls, waste water treatment plants
- Flowrates from 0.26 to 1841 l/s. Relatively low energy loss (3-4 times lower than in sharp-crested weirs)
- Velocities inside Parshall flumes are high enough to prevent them from the deposition of sediments or accumulation of debris
- Minimum maintenance requirements
- Long lifetime



## MQU ultrasonic flowmeter: easy solution to use combined with a flume to measure open channels

- Innovative and high-power transmitter for every applications
- Digital display, data logger for 2 month capacity, 4-20mA and pulse output and Modbus RTU via RS485
- Applications: Water treatment, Chemical, Food, Pharmaceutical industry, Power, Civil engineering, Agriculture
- Accuracy ±1.8% to ±4% of range



#### **MHU ultrasonic level meter**

- For ranges from 0.5 to 6 meters
- Digital display, data logger for 2 month capacity, 4-20mA and pulse output and Modbus RTU via RS485
- Accuracy ±1.8% to ±4% of range

## Flow indicators: smart solution for high temperature, aggressive applications with low accuracy required

- Ball flow indicators
- Paddle wheel flow indicators



Plain sight flow indicators



Flap flow indicators









#### **Applications**

- 🜓 Water & Wastewater distribution networks, irrigation, sludge/sewage, water treatment, leakage management, desalination, marine, checking of pumps and water wells
- Public utilities water supply system, sewage systems, wastewater, industrial water, sludge, human waste etc.
- Petrochemical/chemicals corrosive liquids, chemicals, industrial water, waste water
- Paper & Pulp low concentration of pulp, additives, bleeches, colourands, liquor
- **Construction** building material slurry, sediment slurry, cement slurry, industrial water, etc.
- 🜓 Hygienic/Sanitary potable water metering, food & beverages, pharmaceutical, medium and high density fluids, blending, dosing, batching

#### **Advantages**

The MAGX2 has an innovative modular design "Plug & Play" it is a fit-all, flexible, low-cost flow meter all at the same time. The transmitter consists of the low-cost basic unit plus optional modules according to the end-user's requirements. Each module is in fact a small electronic board, the size of a large stamp, which can be freely installed and removed from the main board in seconds.

You do not pay for options you do not want or need. You can build a flowmeter exactly as per your requirements. You can upgrade your flowmeter at anytime in the future.

"Built in design" for upgrades

#### **STANDARD**

Transmitter Power supply modules (12VDC/24VDC/90-250VAC) Sensor communication module CD + free Software Sensor





#### **UPGRADES**

Choose your communication Choose your outputs Use SD card









#### **Features**

- **Accuracy**  $\pm 0.2\%$  (0.5 10 m/s) of actual value
- **Temperature sensor** to measure temperature of the measured medium
- **Communication protocol** all communications via Modbus RTU
- **Autocleaning** automatic electrodes cleaning
- Unique design any upgrade, extra features inside of the flowmeter, extra protection - "Built in design"
- **Graphic display** multi-language menu. Higher protection via lock-out system for touch buttons and 3 levels of passwords - User, Service, Factory settings.
- Intelligent sensor design digital communication allows communication between the transmitter and the sensor up to 500 m. Calibration data are stored in the sensor communication module. If the transmitter is changed for whatever reason, all the calibration data will be taken from the sensor directly. No calibration download mistakes.

#### **Data logger**

The MagX2 uses a standard micro SD card for data-logging purposes, a 2GB micro SD card could be ordered with the flowmeter and a higher capacity card could be inserted as an upgrade if required. It can be easily installed and ejected from the data socket. Data is stored in \*.CSV format (compatible with Excel, Open Office & other programs). Record intervals are selectable from 1 minute to 24 hours.







#### **MAGX2 BASIC WORKING VERSION CONSISTS OF:**





Power supply
You can choose from 3 options
(12VDC, 24VDC or 230VAC)



**Sensor** (all sensors include 4 electrodes, auto cleaning electrodes system and empty pipe detection)

That is basic configuration for a MAGX2 working unit. It only allows communication with the flowmeter via keypad and does not include any output or data-logging function. Flowrate and totalizer can be checked on the display only.

Arkon offers a wide range of optional modules which are not necessary for a working unit but can be added to the basic configuration to add extra features.

#### **Currently the following optional modules are available:**

Communication modules to allow communication via Modbus (except GSM-SMS - it has its own system using sms messages)











**RS485** 



**RS232** 



**USB** 

GPRS GSM-SMS Bluetooth TCP/IP

Arkon offers two output options: one 4-20 mA and two pulse output option both options can be used separately or combined. Out of the two pulse options only one pulse option could be used or installed at any given time.







Data-logging option

MAGX2 motherboard includes a real time clock. For data-logging you just need a standard micro SD memory card. We can supply it for you or you can buy it yourself locally.



Current output 4-20mA

Pulse output

Pulse 230

The most important advantage of Arkon's modular system is the flexibility for the customer to design his own solution for each application. Modular system also allows big savings by selecting and paying exactly for the required features on each application.

The MAGX2 flowmeter can be updated easily at any time by adding or exchanging modules.





#### **Choose your communication**

Modbus RTU can be used with all communication modules.



#### **BLUETOOTH**

Cables are not required to check your flowmeter, within a 200 meter range.

A mobile network is not required.









#### **GPRS**

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Wireless communication system, which is performed by the GPRS network.

- The measurements can be evaluated from anywhere in the world
- You will always have your flowmeter under control
- Another communication module is required for setting up the GPRS module



#### Standard solution for GPRS

VS

Flowmeter plus communication cable plus mounting devide for GPRS plus extra power supply.



**Our solution for GPRS** 

3 step installation: open, plug in, close







## **Technical Specifications**

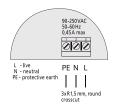


#### **Optional power supply modules**

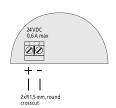
All power supply modules have an automatic electronic fuse. Max.  $15\,\mathrm{VA}$ 

90-250 VAC	90-250 VAC 50/60HZ
24 VDC	24VDC±5% (22.8-25.2VDC)
12 VDC	12VDC±5% (11.4-12.6VDC)

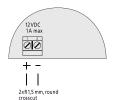












#### Sensor to transmitter connection cable

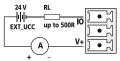


#### **Optional analogue output modules**

VDC

R1

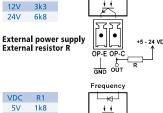


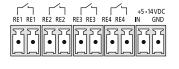




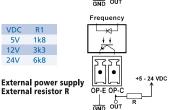
Current Loop output module	4-20 mA, with programmable flowrate and function
Pulse output module	4 output relays with programmable flowrate and function (max. 100 VDC/0.5 A), Input signal for batching purposes (5-14 V), Frequency output 2 – 1000 Hz with adjustable duty cycle
Pulse 230	2 output relay s and 2 open collector outputs, max relay voltage (RE2, RE3) 250VAC/220VDC at 120VA/60W, output frequency 2-1000Hz max input voltage (batching) +5-14V DC

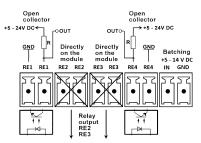






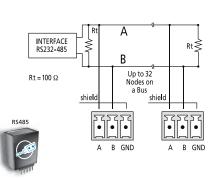






#### **Optional digital outputs/communication modules**

#### Only one of the following modules can be used/installed at the same time



RS232	Including RS232 cable
RS485	Terminators may be needed
USB	Including USB cable
BLUETOOTH	Outside up to 200 m/Inside up to 50 m
TCP/IP	TCP/IP internet communication, amplifiers may be needed
GPRS	GSM850, GSM900, DCS1800, PCS1900
GSM-SMS	GSM850, GSM900, DCS1800, PCS1900













Modbus RTU can be used with all communication modules, except GSM - SMS - it has its own system using sms messages.







# **Transmitter specifications MAGX2**



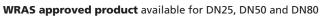
Measurable media	Conductive fluids
Min. media electrical conductivity	$\geq$ 5 $\mu$ S/cm or $\geq$ 20 $\mu$ S/cm for demineralized water
Flow range	0.1 to 10 m/s
Displayed values	Actual flow (m³/h l/s, l/m, US.gal/min, UK.gal/min), volume (m³, l, US.gal, UK.gal), positive, negative, total volume and auxiliary (clearable) volume, sensor temperature
Accuracy	±0.2% (0.5 - 10 m/s) of actual value
Power supply options	90-250 VAC 50/60 Hz or 24 VDC or 12 VDC
Power consumption	Max. 15VA
Communication protocol	Modbus RTU can be used with all the communication modules i.e. RS232, RS485, USB, BLUETOOTH, TCP/IP, GPRS
Flow direction	Bi-directional measurement
Ambient temperature	-20°C to 60°C (-4°F to 140°F)
Display	LCD 128 x 64 PX graphical, contrast setup
Controls	6 touch-buttons + communication modules (optional)
Low flow cut-off	OFF, 0.5%, 1%, 2%, 5%, 10% of Flow Qn
Adjustable filter constant	1 - 120 samples; default value is 15 samples
Max. electronics weight (including housing)	2kg
Housing material	Aluminium (powder coated)
Housing dimensions	Ø 134 - 132 mm
Cable terminal	3+1xM16x1.5 IP68 cable glands
Electronics protection	Standard IP67 / NEMA 5
Other features	Auto-diagnostics Multi-language options (English, Spanish or Russian, other languages possible) Indicative temperature measurement up to 150°C Test of excitation coils Empty pipe detection Zero flow adjusting Flow simulator
Excitation frequency	3.125 Hz or 6.25 Hz
Real time	Clock function for data-logging
Analogue outputs	Optionals: Current 4-20 mA, Pulse, Pulse 230
Digital outputs (communication)	Optionals: USB, RS232, RS485, BLUETOOTH, GPRS, TCP/IP, GSM-SMS
Data logger	Micro SD card

# **Sensor specifications MAGX2**



Connection types	DIN, ANSI, JIS flanges. Other types on request
Flange	Steel 1.0036 or higher, Dimensions according to DIN EN 1092-1, ASME B 16.5, JIS B 2239
Nominal size	10-1000 mm (1/2" - 40")
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), Compact IP67 (NEMA 5)
Liner	Hard Rubber, PTFE other material on request, WRAS approved material available for sizes up to DN600
Electrodes	CrNi (Stainless) steel 1.4571 / 316Ti, 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	80 / 100 Ω
Other features	Earthing through 3 <sup>rd</sup> and 4 <sup>th</sup> electrode Automatic electrode cleaning









## **Technical Drawing Data-Sheet**

## MAG 2

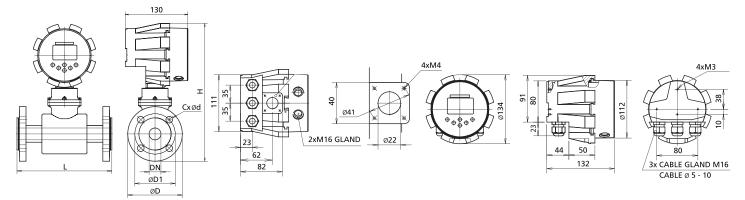
#### DIN

DN	ØD	D1	CxØd	L	H-compact	H-remote
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
10	90	60	4x14	200	275	180
15	95	65	4x14	200	280	185
20	105	75	4x14	200	288	193
25	115	85	4x14	200	293	198
32	140	100	4x18	200	312	217
40	150	110	4x18	200	320	225
50	165	125	4x18	200	334	239
65	185	145	8x18	200	354	259
80	200	160	8x18	200	373	278
100	220	180	8x18	250	393	298
125	250	210	8x18	250	419	324
150	285	240	8x22	300	458	363
200	340	295	12x22	350	514	419
250	405	355	12x26	400	584	489
300	460	410	12x26	500	633	538
350	520	470	16x26	500	701	606
400	580	525	16x30	600	754	659
450	640	585	20x30	600	797	702
500	715	650	20x33	600	865	770
600	840	770	20x36	600	982	887

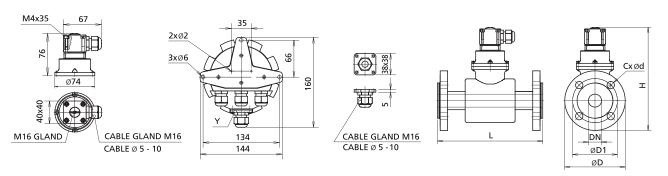
#### **ANSI**

DN	ØD	D1	CxØd	L	H-compact	H-remote
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
1/2"	88.9	60.5	4x16	200	277	182
3/4"	98.6	69.9	4x20	200	284	189
1"	108	79.2	4x20	200	290	195
1.1/4"	117.3	88.9	4x20	200	300	205
1.1/2"	127	98.6	4x23	200	309	214
2"	152.4	120.7	8x20	200	328	233
2.1/2"	177.8	139.7	4x20	200	350	255
3"	190.5	152.4	4x20	200	368	273
4"	228.6	190.5	8x20	250	397	302
5"	254	215.9	8x23	250	421	326
6"	279.4	241.3	8x23	300	455	360
8"	342.9	298.5	8x23	350	515	420
10"	406.4	362	12x26	400	584	489
12"	482.6	431.8	12x26	500	644	549
14"	533.4	476.3	12x29	500	708	613
16"	596.9	539.8	16x29	600	762	667
18"	635	577.9	16x32	600	795	700
20"	698.5	635	20x32	600	856	761
24"	812.8	749.3	20x35	600	968	873

#### **Compact version:**



#### Remote version:



Tolerance of built-in length: DN 10 – DN 150  $\,$  L  $\pm$  5 mm DN 200 – DN 1000  $\,$  L  $\pm$  10 mm

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

Max. electronics weight (including housing)	2 kg
Housing material	Aluminium + powder coating
Housing dimensions	Ø 134 - 132 mm
Cable terminal	3+1xM16x1.5 IP68 cable glands
Electronics protection	Standard IP67 / NEMA 5



MAGB1

#### **Applications**

Water & Wastewater - distribution networks, irrigation, sludge/sewage, water treatment, desalination, marine, checking of pumps and water wells

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- Petrochemical/chemicals/sanitary corrosive liquids, dosing of additives, chemicals, industrial water, waste water, potable water metering, food, pharmaceutical industry, medium and high density fluids, blending
- Paper & Pulp additives, bleaches, colourands, liquor

#### **Advantages**

Possibility to install a reliable flowmeter virtually anywhere without sacrificing accuracy or performance. Top accuracy is ±0.5% of actual value. No mains power required. Suitable for irrigation, remote applications any other application where power supply lines are difficult or expensive to install.

#### **Features**

- **Battery** powered electromagnetic flowmeter
- Accuracy: ±0.5% of actual value (DN20 DN150)
- Empty pipe detection, automatically turns off the excitation to prolong battery life
- The Graphic display and keypad for simple operation and instant access to information about 4 totalizers: total +, total -, total, aux. Modbus RTU communication protocol via USB or RS485
- Standard USB interface for configuration and data collection using MAGB1 software
- Easy access to data on-site
- Isolated binary output (pulse per liters or alarm or flowrate functions)
- Error detection
- Data logger: 1820 records, selectable interval of logging (5 min 24 h)
- **GSM-SMS** module

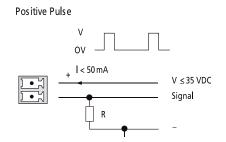


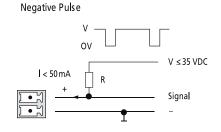
- ► Adjustable time constant 1 30 samples
- Maintenance free
- Two built-in earthing electrodes
- No moving parts in measuring tube

#### **Battery**

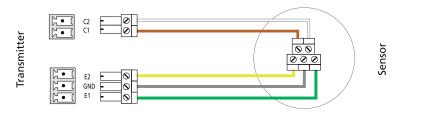
- Unit powered by 2 x 3.6 V batteries placed inside the transmitter (see picture), 5x3.6 V battery pack optional
- Battery life up to 5 years (up to 15 years with external battery pack)
- Battery conservation when the pipe is empty

#### **Binary output**





#### Sensor to transmitter connection cable



C1 - Coil 1 C2 - Coil 2 GND - Ground E1 - Electrode1 E2 - Electrode 2







MAGB1

## **Transmitter specifications MAGB1**



Measurable media	Conductive fluids
Min. media electrical conductivity	$\geq$ 5 $\mu$ S/cm or $\geq$ 20 $\mu$ S/cm for demineralized water
Flow range	0.1 to 10 m/s
Displayed values	Actual flow (m³/h l/s, l/m, US.gal/min, UK.gal/min), volume (m³, 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
Power supply	3.6 V internal lithium battery - 38 000 mAh
Communication	Modbus RTU over USB or RS485
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
Low flow cut-off	OFF, 0.5%, 1%, 2%, 5%, 10% of Flow Qn
Electronics weight (including housing)	1.5 kg
Housing material	Aluminium (powder coated)
Housing dimensions	Ø 134 - 132 mm
Cable terminals	1+1xM16x1.5 IP68 cable glands
Electronics protection	Standard IP67/ NEMA 5
Other features	Test of excitation coils Empty pipe detection Zero flow adjusting Flow simulator
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 (5 min - 24 h)

# **Sensor specifications MAGB1**



Connection types	DIN, ANSI, JIS flanges. Other types on request
Flange	Steel 1.0036 or higher, Dimensions according to DIN EN 1092-1, ASME B 16.5, JIS B 2239
Nominal size	20-250 mm, other sizes on request
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), Compact IP67 (NEMA 5)
Liner	Hard Rubber, PTFE other material on request WRAS approved material available for all standard sizes
Electrodes	CrNi (Stainless) steel 1.4571 / 316Ti, 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 <sup>rd</sup> and 4 <sup>th</sup> electrodes
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MAGB1 can be verified by VeriMAG device, which is a smart stand-alone field testing instrument, which has the capability to test the integrity of an installed flowmeter, for functionality of the connection between the sensor and the transmitter unit, and all other important internal components of the flowmeter.











## **Technical Drawing Data-Sheet**

## MAGB1

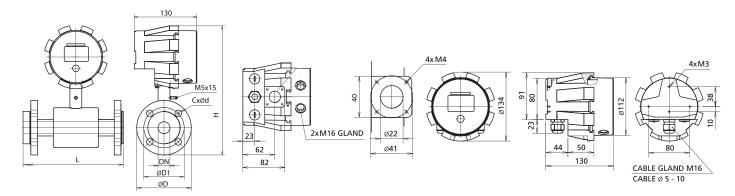
#### DIN

DN	ØD	D1	CxØd	L	H-compact	H-remote
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
10	90	60	4x14	200	250	165
15	95	65	4x14	200	255	170
20	105	75	4x14	200	263	178
25	115	85	4x14	200	268	183
32	140	100	4x18	200	287	202
40	150	110	4x18	200	295	210
50	165	125	4x18	200	309	224
65	185	145	8x18	200	329	244
80	200	160	8x18	200	348	263
100	220	180	8x18	250	368	283
125	250	210	8x18	250	394	309
150	285	240	8x22	300	433	348
200	340	295	12x22	350	489	404
250	405	355	12x26	400	559	474
300	460	410	12x26	500	608	523
350	520	470	16x26	500	676	591

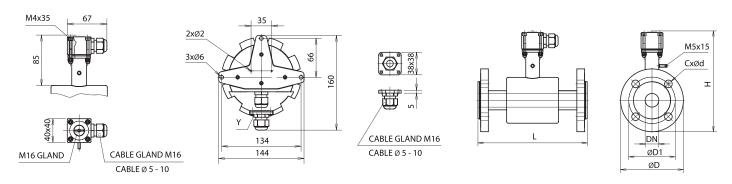
#### **ANSI**

DN	ØD	ØD1	CxØd	L	H-compact	H-remote
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
1/2"	88.9	60.5	4x16	200	252	167
3/4"	98.6	69.9	4x20	200	259	174
1"	108	79.2	4x20	200	265	180
1.1/4"	117.3	88.9	4x20	200	275	190
1.1/2"	127	98.6	4x23	200	284	199
2"	152.4	120.7	8x20	200	303	218
2.1/2"	177.8	139.7	4x20	200	325	240
3"	190.5	152.4	4x20	200	343	258
4"	228.6	190.5	8x20	250	372	287
5"	254	215.9	8x23	250	396	311
6"	279.4	241.3	8x23	300	430	345
8″	342.9	298.5	8x23	350	490	405
10′′	406.4	362	12x26	400	559	474
12"	482.6	431.8	12x26	500	619	534
14′′	533.4	476.3	12x29	500	683	598

#### **Compact version:**



#### **Remote version:**



Tolerance of built-in length: DN 10 – DN 150  $L \pm 5$  mm DN 200 – DN 1000  $L \pm 10$  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 134 - 132 mm
Cable terminals	1+1xM16x1.5 IP68 cable glands
Electronics protection	Standard IP67 / NEMA 5





#### **Applications**

- **Water & Wastewater** distribution networks, irrigation, sludge/sewage, water treatment, leakage management, desalination, marine, checking of pumps and water wells
- Petrochemical/chemicals corrosive liquids, dosing of additives, chemicals, industrial water, waste water, pulp liquids
- **Paper & Pulp** colourands, bleaches, additives
- **Construction** building material slurry, industrial water
- **Sanitary** potable water metering, food & beverage, pharmaceutical, medium and high density fluids, blending, dosing, batching

#### **Advantages**

MAGS1 is a stand-alone version of flowmeter, which does not need a transmitter and can be operated on its own. If you need a low cost flowmeter without read out on display and outputs, this will be the right one!

Inexpensive solution for application with existing PLC System with RS485 Modbus RTU communication system. No display fully operational electromagnetic flowmeter.

Cost-effective solution for installations where local display is not needed.

#### **Features**

The simple version is fed with 24VDC and has output/communication a standard RS485 line on Modbus RTU protocol.

- Auto-diagnostics
- ≥ ±0.2% accuracy
- Cable lenght up to 500m

#### **Technical specifications**

Power supply	24VDC ± 10% @ 0.5A max
Communication	RS485 - Modbus RTU
Min. media electrical conductivity	≥5µS/cm ≥20µS/cm for demineralized water
Flow range	0.1 to 10 m/s
Accuracy	±0.2% (0.5 to 10m/s) of actual value
Connection types	DIN, ANSI, JIS flanged. Other types on request
Flange material	Steel 1.0036 or higher, Dimensions according to DIN EN 1092-1, ASME B 16.5, JIS B 2239
Nominal size	25 – 250 mm (1"-10")
Maximum nominal pressure	PN40/300 psi
Max. media temperature	70°C (158°F) for Hard Rubber liner, 130°C (266°F) for PTFE liner
Ambient temperature	-20 to 60°C (-4 to 140°F)
Sensor protection	IP68 (Nema 6), IP67 (Nema 5)
Liner	Hard Rubber, PTFE, other material on request, WRAS approved material available for sizes up to DN600
Electrodes	CrNi (Stainless) steel 1.4571 / 316Ti, 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	80/100 Ω
Other features	Earthing through 3rd and 4th electrode Automatic electrode cleaning Empty pipe detection Auto-diagnostics Test of excitation coils Zero flow adjusting







## **AgrimagP**

#### **Applications**

Plastic flowmeter with power supply for multiple applications.

- Industrial wastewater discharge
- Water Recycling Systems
- Irrigation
- Water Well Pump Stations

#### **Advantages**

AgrimagP is a user friendly low cost flowmeter.

Rigid polypropylene casing powered by external power supply.

Available in DN 25, 50, 80 mm (1", 2" and 3") sizes.

Connections offered: Manifold clamping flanges.

Compatible with fitting kits for DIN, BSP, NPT and other common connections.

Accuracy rating of 1%.

- One frequency output open collector
- **External power supply**
- No moving parts
- No earthing rings required

#### **Features**

- Sizes available: 25, 50, 80 mm
- 4 stainless steel electrodes
- Accuracy: ±1% from 10 % to 100 % of full scale range
- Power supply range is 9-35VDC



## **Agrimag**

#### **Applications**

The battery powered flowmeter suitable for agricultural applications, usage monitoring, irrigation, well monitoring, industrial wastewater discharge, grey water, pulp plants, paper plants, turf and landscape applications.

 $\bigoplus$ 

- Industrial wastewater discharge
- Water Recycling Systems
- Irrigation
- Water Well Pump Stations

#### **Advantages**

Agrimag is a user friendly low cost flowmeter. It is one piece built in polypropylene, powered by 6 AA batteries.

Connections offered: Manifold clamping flanges compatible with fitting kits for DIN, BSP, NPT and other common connections.

Available in DN 25, 50, 80mm (1, 2 and 3 inches) sizes.

Accuracy of 1% and a battery life of 1-3 years

- User friendly low cost flowmeter
- 6x AA Battery powered
- No moving parts
- Fast and easy pipe connection

#### **Features**

- Polypropylene body material
- Flange clamps connection
- Sizes available: 25, 50, 80 mm
- 4 stainless steel electrodes
- Battery life: 1 year with meter in use, 3 years on stock
- Empty pipe detection and battery saving mode











## Agrimag Series technical specifications \_\_\_\_\_ Agrimag

Measurable media	Conductive fluids			
Min. Media electrical conductivity	≥20µS/cm			
Flow range	0.1 to 10 m/s			
Displayed values	LCD display 128x64 PX graphical, Flow range (m Total, Batch volume	13/h, l/s, l/m,	. US gal/min, UK gal/min), Volume	e (m3, l, US Gal, UK Gal),
Accuracy	±1% of reading from 100% to 10% of full scale ±3% of reading from 10% of full scale to cut-off			
Full scale	1": 0.5 – 4.8 l/s	': 1.9 – 18.9	l/s	3": 5.0 – 49.0 l/s
Power supply	Agrimag: 6 AA alkaline batteries, expected lifetime 1 year		<b>AgrimagP:</b> 9-35VDC Power supply availible in	n special connector
Flow direction	Bi-directional measurement			
Ambient temperature	-12 to 50°C (10 to 130°F)			
Media temperature	0 to 60°C (32 to 140°F)			
Working pressure	150psi or 10.3 bars			
Body material	Glass filled polypropylene			
Connections	Flange clamps			
Electrodes	4x stainless steel electrodes			
Display	LCD 128 x 64 PX graphical, sleep mode			
Control	3 touch buttons			
Low flow cut-off	2% of full scale			
Electronics protection	Nema 4X standard			
Other features	Test of excitation coils, Earthing through 3rd and	d 4th electro	des, Empty pipe detection - batte	ry conservation
Excitation frequency	1/1.67s			
Samples per Average	4 excitations			
Coils resistance Frequency output	$100\Omega$ Open collector proportional to flow 0-1000Hz fo Max switching voltage 24VDC, max. current 50m.			

### Installation with fitting kit

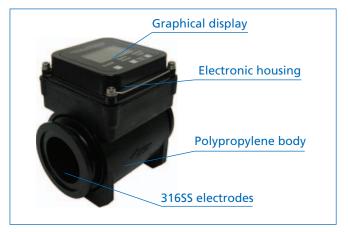
# **6xAA Batteries** Gasket Clamp **Fitting**

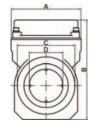
#### **Dimensions (in mm)**

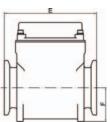
	А	В	С	D	Е	F
25 mm	100	130	80	25.4	139.7	41.402
50 mm	100	150	82.55	50.8	139.7	51.562
80 mm	100	180	111	76.2	185	64.8

### Fitting kits available for Manifold

	25 mm	50 mm	80 mm
Male BSP	1" Male BSP	2" Male BSP	3" Male BSP
Female NPT	1/2", 3/4" and 1" Female NPT	2" Female NPT	3" Female NPT
Male NPT	3/4", 1" and 1.1/4" Male NPT	2" Male NPT	3" Male NPT
Male NPT in SS	1" Male NPT	1.1/2" and 2" Male NPT	1.1/2" and 2" Male NPT













## Agrimag connections and accessories\_\_\_\_\_

## **Agrimag**

MANIFOLD x MALE BSP			
Avalliable for sizes:	Description	Part number	
25mm MAN	1" Manifold x 1" Male BSP	M100BSP	
50mm MAN	2" Manifold x 2" Male BSP	M220BSP	
80mm MAN	3" Manifold x 3" Male BSP	M300BSP	



MANIFOLD x FEMALE NPT THREAD			
Avalliable for sizes:	Description	Part number	
25mm MAN	1" Manifold x 1/2" Female NPT	M100050FPT	
25mm MAN	1" Manifold x 3/4" Female NPT	M100075FPT	
25mm MAN	1" Manifold x 1" Female NPT	M100FPT	
50mm MAN	2" Manifold x 2" Female NPT	M220FPT	
80mm MAN	3" Manifold x 3" Female NPT	M300FPT	



	MANIFOLD x NPT THREAD			
Avalliable for sizes:	Description	Part number		
25mm MAN	1" Manifold x 3/4" Male NPT	M100075MPT		
25mm MAN	1" Manifold x 1.1/4" Male NPT	M100125MPT		
25mm MAN	1" Manifold x 1" Male NPT	M100MPT		
50mm MAN	2" Manifold x 2" Male NPT	M220MPT		
80mm MAN	3" Manifold x 3" Male NPT	M300MPT		



MANIFOLD x MALE NPT THREAD – 316SS			
Availiable for sizes:	Description	Part number	
25mm MAN	1" Manifold x 3/4" Male NPT	M100MPTSS	
25mm MAN	1" Manifold x 1.1/4" Male NPT	M220150MPTSS	
25mm MAN	1" Manifold x 1" Male NPT	M220MPTSS	
50mm MAN	2" Manifold x 2" Male NPT	M300220MPTSS	
80mm MAN	3" Manifold x 3" Male NPT	M300MPTSS	



MANIFOLD x MANIFOLD			
Avalliable for sizes:	Description	Part number	
25mm MAN	1" Manifold x 1 " Manifold	M100CPG	
50mm MAN	2" Manifold x 2 " Manifold	M220CPG	
50mm MAN	2" Manifold x 2" Manifold x 6" long	M220CPG6	
80mm MAN	3" Manifold x 3" Manifold x 4" long	M300CPG	
80mm MAN	3" Manifold x 3" Manifold x 7" long	M300CPG7	



MANIFOLD x FEMALE COUPIER QDC		
Avalliable for sizes:	Description	Part number
50mm MAN	2" Manifold x 2" Female coupler QDC	M220D









## **Agrimag**

MANIFOLD X FEMALE QDC			
Avalliable for sizes:	Description	Part number	
25mm MAN	1" Manifold x 1" Male QDC	M100A	
50mm MAN	2" Manifold x 2" Male QDC	M220A	
80mm MAN	3" Manifold x 3" Male QDC	M300A	



MANIFOLD X HOSE BARB									
Avalliable for sizes:	Description	Part number							
25mm MAN	1" Manifold x 3/4" Hose Barb	M100075BRB							
25mm MAN	1" Manifold x 1" Hose Barb	M100BRB							
25mm MAN	1" Manifold x 1.1/4" Hose Barb	M100125BRB							
50mm MAN	2" Manifold x 1.1/4" Hose Barb	M220125BRB							
50mm MAN	2" Manifold x 1.1/2" Hose Barb	M220150BRB							
50mm MAN	2" Manifold x 2" Hose Barb	M220BRB							
80mm MAN	3" Manifold x 2" Hose Barb	M300220BRB							
80mm MAN	3" Manifold x 3" Hose Barb	M300BRB							



	CLAMP	
Avalliable for sizes:	Description	Part number
25mm MAN	1" Manifold x 1" Socket weld fitting	M100SWFSS
50mm MAN	2" Manifold x 2" Socket weld fitting	M220SWFSS
50mm MAN	2" Manifold x 2" Socket weld fitting 3.3/4"	M220375SWFSS
80mm MAN	3" Manifold x 3" Socket weld fitting	M300SWFSS
80mm MAN	3" Manifold x 3" Socket weld fitting 3.3/4"	M300375SWFSS



	GASKET	
Avalliable for sizes:	Description	Part number
25mm MAN	1" Gasket EPDM	M101G
50mm MAN	2" Gasket EPDM	M221G
80mm MAN	3" Gasket EPDM	M301G



GASKET VITON TYPE								
Avalliable for sizes:	Description	Part number						
25mm MAN	1" Gasket Viton type	M100GV						
50mm MAN	2" Gasket Viton type	200GV						
80mm MAN	3" Gasket Viton type	300GV						









•

## **APPLICATION** Maintaining demineralised water

rinsing essential to electronics components manufacture. Showing the presence of condensate

in steam return lines. Indicating chemical dosing on water

treatment plant. Ensuring that flow of cooling water

is maintained to specialised medical equipment.

Detecting changes in colour and condition of liquids during processing.

protection.

is maintained to specialised welding equipment.

Detecting changes in colour and condition of liquids during processina.

Early warning of overheating, bearing or seal failure.

The bright yellow spinner can be seen

The ball flow indicator is a single sided

indicator. The white PTFE ball rises

when there is flow of liquids or gasses

Suitable for applications where

a constant flow is required, such as cooling lines or for showing

the presence of condensate in steam

and is clearly visible from a distance.

**DESCRIPTION** 

return lines.

**PARAMETERS** 

Pressure: up to 16 bar. Temperature: up to 200°C Sizes: 15 to 40 mm Material: Stainless steel Connections: BSP and NPT

#### **IMAGE**



Pump, compressor and diesel engine Ensuring that flow of cooling water

Indication of air entrainment.

in the glass dome when there is flow.

The Spinner flow indicator is a single sided indicator. The spinner starts to rotate when flow starts. The design offers low pressure losses and is suitable for installation in both horizontal and vertical pipework.

Pressure: up to 10 bar. Temperature: up to 100°C Sizes: 15 to 40 mm Material: Gunmetal Connections: BSP and NPT

Pressure: up to 60 bar.

Sizes: 15 to 200 mm

Temperature: up to 250°C

Materials: Carbon Steel, St. steel and Gunmetal

Connections: BSP, NPT and



Paddle Whee

**Spinner Flow** 

Check the flow of a liquid in a pipeline.

Check for the presence of a liquid

where there is intermittent flow, partially filled lines or entrained air.

Flow monitoring in full pipes.

Leak detection.

Flow indicators with a highly visible PTFE paddle wheel to indicate the flow of liquids in the line. Suitable for clear and cloudy liquids.

It can be used in vertical or horizontal lines and is ideal for flow monitoring in full pipes.

viewing flow conditions in applications with intermittent flow, entrained air and partially filled pipes. A special version for use with steam and condensate uses borosilicate glass to ensure good long-term visibility.

It can be used in vertical or horizontal lines.

Pressure: up to 60 bar. Temperature: up to 250°C Sizes: 15 to 200 mm Materials: Carbon Steel St. steel and Gunmetal Connections: BSP, NPT and **ANSI150** 

ANSI150





Plaint Sight Flow

Check for the presence of a liquid where there is intermittent flow, partially filled lines or entrained air.

The tube indicator allows a 360° visual indication of the flow and contents in the pipes.

It has a plain straight through borosilicate glass tube with stainless steel flanged ends and is used to check for the presence of a liquid where there is intermittent flow, partially filled lines or entrained air.

Pressure: up to 10 bar. Temperature: up to 150°C Sizes: 15 to 200 mm Material: Stainless steel Connection: ANSI150



Flap Flow

Check the flow rate of a liquid in a

Plant safety device where you need to maintain a constant flow.

The flap indicates flow on an easy to read scale. It is for use with liquids or steam. It is particularly suited for applications with low flow as the flow must move the flap to pass through the meter.

It is ideal as a plant safety device where you need to maintain a constant flow. for example in lubricating or cooling systems.

Pressure: up to 60 bar. Temperature: up to 250°C Sizes: 15 to 200 mm Materials: Carbon Steel, St. steel and Gunmetal Connections: BSP, NPT and **ANSI150** 



Provide for viewing the contents of a vessel or tank.

Circular sight glass for bolting or welding to tanks, vessels or pipes to allow viewing of the contents.

This model is designed to provide a window for viewing the contents of a vessel or tank. Normally these are welded to the tank, but can be supplied suitable for bolting to a vessel or a pipe flange if required.

Pressure: up to 40 bar Temperature: up to 250°C Sizes: 40 to 200mm Materials: Carbon and Stainless steel

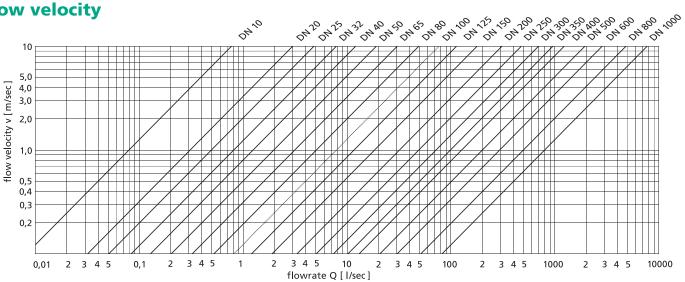






#### Flow velocity, Flow rate, Certification

#### Flow velocity



#### Flow rate

Flow rates [l/s]

Flow rates [m³/h]

	_
DN	
10	
15	
20	
25	
32	
40	
50	
65	
80	
100	
125	
150	
200	
250	
300	
350	
400	
500	
600	
700	
800	
900	
1000	

Q 5%	QN	QN 50%	QN 100%	Q MAX
0.04	0.2	0.39	0.79	0.98
0.09	0.5	0.88	1.77	2.21
0.16	0.9	1.57	3.14	3.93
0.25	1.4	2.45	4.91	6.14
0.4	2.2	4.02	8.04	10.05
0.6	4	6.3	12.6	15.7
1	6	9.8	19.6	24.5
1.7	9	16.6	33.2	41.5
2.5	14	25.1	50.3	62.8
3.9	20	39.3	78.5	98.2
6	30	61	123	153
9	50	88	177	221
16	100	157	314	393
25	150	245	491	614
35	200	353	707	884
48	300	481	962	1203
63	400	628	1257	1571
98	600	982	1963	2454
141	800	1414	2827	3534
192	1000	1924	3848	4811
251	1200	2513	5027	6283
318	1500	3181	6362	7952
393	2000	3927	7854	9817

QN 5%	QN	QN 50%	QN 100%	Q MAX
0.14	0.8	1.41	2.83	3.53
0.32	2	3.18	6.36	7.95
0.57	3.2	5.65	11.31	14.14
0.88	5	8.84	17.67	22.09
1.5	8	14.5	29	36.2
2.3	13	22.6	45.2	56.6
3.5	20	35.3	70.7	88.4
6	35	59.7	119.5	149.3
9	50	90.5	181	226.2
14	80	141	283	353
22	150	221	442	552
32	200	318	636	795
57	300	565	1131	1414
88	500	884	1767	2209
127	800	1272	2545	3181
173	1000	1732	3464	4330
226	1300	2262	4524	5655
353	2000	3534	7069	8836
509	3000	5089	10179	12723
693	4000	6927	13854	17318
905	5000	9048	18096	22620
1145	6000	11451	22902	28630
1414	8000	14137	28274	35340

Q5% recommended minimum flowrate / QN recommended nominal flowrate (expected working flowrate)
Q50% recommended maximum flowrate (maximum flowrate for industrial use) / Q100% maximum applicable flowrate (maximum flowrate with guaranteed accuracy)
QMAX maximum applicable overload (Q125%) (flowmeter is still measuring)

#### Certification

**EMC** and **ES** certified MAGB1 PED 92/23 EC MAGS1 **Agrimag** CE certified **AgrimagP** 

GOST certification WRAS certification for MAGX2 DN25, DN50 and DN80 Company is ISO 9001: 2008 certified





#### Quality management system & Traceability

Arkon quality management system is certified according to standard ISO 9001:2008. All main processes manufacturing, development, sale and services are certified and every year audited by Bureau Veritas Certification.

All manufactured flowmeters are carefully tested according to internal standards and calibrated in independent laboratories specialized to flow rate and flow volume calibration of liquids.

Arkon main standards are traceable directly to Czech national standards in the Czech Metrology Institute (CMI). CMI is the Czech national metrology body and is traceable to international standards. CMI laboratories are accredited by Czech institute for accreditation, a member of European co-operation for accreditation.





### **Recommended position for sensor installation**

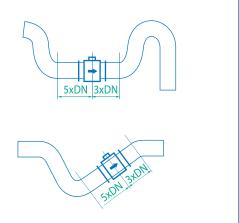
#### **Sensor installation requirements**

Proper installation is extremely important in order for your flowmeter to work correctly. There are minimum sensor installation requirements that need to be respected at all times. Please note that Arkon cannot warranty any installation which does not comply with these requirements:

#### **Horizontal standard mounting**

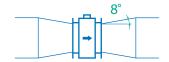
The sensor tube must always remain full. The best way to achieve this is to locate the sensor in a low section of pipe, see the following picture.

It is mandatory to install the sensor in a section of straight pipe with at least 5 times the pipe diameter before sensor and 3 times after sensor.



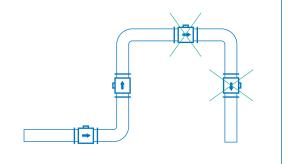
#### **Pipe reducers**

If the pipe diameter is not the same as the diameter of sensor, then pipe reducers can be used. So as not to lose accuracy of the measurement, the slope of reducers should not exceed 8°.



#### **Vertical mounting**

When the sensor is mounted on a vertical section of pipe, the flow direction must be upwards. In the case of a downward flow direction, air bubbles can collect in the sensor and the measurement could be unstable and inaccurate.



#### **Pumps**

Never install the sensor on the suction side of a pump or on a section of pipe where a vacuum is possible.





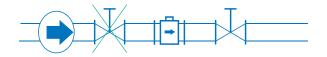






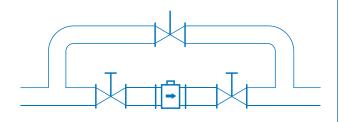
#### **Valves**

Suitable location of a shut off valve is downstream of a sensor.



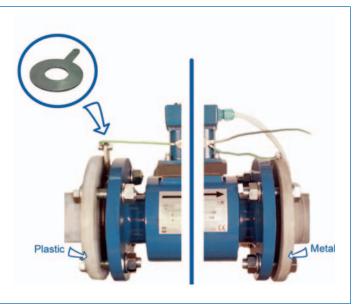
#### **Removal during maintenance**

If the application requires removal of the sensor for periodic maintenance, it is recommended to install a bypass section as the drawing below.



#### **Earthing**

All flowmeters must be earthed. Maximum resistance of the sensor to earth is <1 ohm. All the components in the loop, including flowmeter, pumps (especially submersible) valves, pipework, tanks and medium, should all be at the same earth potential. Problems can occur when different potentials are present which can happen, especially with submersible pumps. On applications with metal pipes and tanks it is enough to earth the flowmeter to the pipe's flanges. On applications where pipes and tanks are manufactured from plastic it is necessary that earthing rings are also installed to ensure the flowmeter works correctly.



#### **Remote mounting system**

Wall

**DIN Rail** 

**Panel** 











#### "Meeting your specific requirements"

UNITRONIC LIYCY (TP) 0035 830, 2x2x0.5 mm for MAGX2
UNITRONIC Li2YCY (TP) 0031 325, 2x2x0.34 mm for MAGB1
Max. Panel thickness 5 mm
30x40x40 mm









## ordering specification codes

Model			Ord	lering c	ode			Paradiation
MAGX2 Trans.	1	2	3	4	5	6	7	Description
	T							MAGX2 main board, display, touch buttons control unit, Version V.7
								Power supply module
		230						Power supply module 90-250VAC - Version 4.
		24						Power supply module 24VDC - Version 4.
		12						Power supply module 12VDC - Version 4.
			CM					Sensor to transmitter communication module - Version 8
								Remote monting kit
				N				None
				W				WALL mounting kit (including 6 m cable)
				Р				PANEL mounting kit (including 6 m cable)
				D				DIN-Rail mounting kit (including 6 m cable)
								Output 1
					N			None
					С			4-20 mA current output signal module
								Output 2
						Ν		None
						Р		Pulse output module
						P2		Pulse 230
								Communication
							N	None
							232	RS232 communication module, including 1.8 m cable
							USB	USB communication module, including 1.8 m cable
							BTO	Bluetooth communication module
							GPR	GPRS*
							485	RS485 communication module, distance up to 1 km
							TCP	TCP/IP communication module, amplifiers might be necessary
							SMS	GSM-SMS
Example								* Please note you need another communication module for setup the GPRS module
MAGX2 Trans.	Т	230	CM	N	С	N	USB	

Model		Or	dering cod	e			Description			
MAGX2 Sensor	1	2		3	4	5	Description			
							Constitut			
							Connection			
	D						DIN			
	A						ANSI			
	DS						DIN Flange St. St.			
	DSS						DIN St. St. body			
	AS						ANSI Flange St. St.			
	ASS						ANSI St. St. body			
	SSS						DIN 11851			
	222						DIN 11851 St. St. body  JIS			
	E						Table E			
	TD						Table D			
	T									
	W						Tri-clamp Wafer			
	VV									
		10 / 3/8	200/8				Size 200 m	nm / 8"		
		15 / 1/2	250 / 10					m / 10"		
		20 / 3/4	300 / 12				20 mm / 3/4" 300 mm			
		25 / 1	350 / 14					m / 14"		
							25 mm / 1.1/4" 350 mr 32 mm / 1.1/4" 400 mr			
		32 / 1.1/4 40 / 1.1/2	400 / 16 450 / 18				40 mm / 1.1/2" 450 mr			
			500 / 20				40 mm / 1.1/2" 450 mr 50 mm /2" 500 mr			
		50 / 2 65 / 2.1/2						m / 24"		
		80 / 3	600 / 24				80 mm / 2.1/2" 600 mr			
		100 / 4	700 / 28 800 / 32				100 mm / 4" 800 mm			
		125 / 5	900 / 36				125 mm / 5" 900 mr			
		150 / 6	1000 / 40					m / 40"		
		15076	1000740				Liner	1117 40		
				HR			HARD RUBBER			
				PT			PTFE			
				SR			SOFT RUBBER			
				NR			HYGIENIC RUBBER			
				CT			E-CTFE			
				CI			Pressure			
					150		150 psi			
					300		300 psi			
					10		PN10			
					16		PN16			
					25		PN25			
					40		PN40			
					-10		Electrodes			
						SS	Stainless Steel			
						HA	Hastelloy C			
						TA	Tantalum			
						TI	Titanium			
						PL	Platinum			
Example							- I deliani			

Please note that on official orders and quotes each item is listed separately with individual price.









## MAGB1

#### ordering specification codes

Model			Order	ing cod	е			<u> </u>
MAGB1	1	2	3	4	5	6	7	Description
								Version
	С							Compact
	W P							Remote: WALL mounting kit (including 6m cable)
								Remote: PANEL mounting kit (including 6m cable)
	R							Remote: DIN-Rail mounting kit (including 6m cable)
		D						Connection type  DIN
		A						ANSI
		A						Connection type
			20 / 3/4					20 mm / 3/4"
			25/1					25 mm / 1"
			32 / 1.1/4					32 mm / 1.1/4"
			40 / 1.1/2					40 mm / 1.1/2"
			50 / 2					50 mm / 2"
			65 / 2.1/2					65 mm / 2.1/2"
			80/3					80 mm / 3"
			100 / 4					100 mm / 4"
			125 / 5					125 mm / 5"
			150 / 6					150 mm / 6"
			200 / 8					200 mm / 8"
			250 / 10					250 mm / 10"
								Liner material
				HR				HARD RUBBER
				SR				SOFT RUBBER
				PT				PTFE
				NR				HYGIENIC RUBBER
								Pressure
					150			150 psi
					300			300 psi
					10			PN 10
					16			PN 16
					25			PN 25
					40			PN 40
								Electrodes
						SS		Stainless Steel
						HA		Hastelloy C
						TA		Tantalum
						TI		Titanium
						PL		Platinum
								Communication
							SMS	GSM-SMS
Example							RS485	RS485 module
MAGB1	С	D	100	HR	16	SS		



## ordering specification codes

Model		Order	ing co	de		
MAGS1	1	2	3	4	5	Description
						Connection
	D					DIN
	Α					ANSI
						Size
		25-250				25-250 mm
		1-10				1"-10"
						Liner
			HR			HARD RUBBER
			PT			PTFE
			SR			SOFT RUBBER
			NR			HYGIENIC RUBBER
						Pressure
				150		150 psi
				300		300 psi
				10		PN10
				16		PN16
				25		PN25
				40		PN40
						Electrodes
					SS	Stainless Steel
					HA	Hastelloy C
					TA	Tantalum
					TI	Titanium
Example					PL	Platinum
·	_					1
MAGS1	D	100	HR	16	SS	

## **Agrimag**

#### ordering specification codes

Model	Ordering code		December 1
Agrimag/AgrimagP	1	2	Description
			Size
	25		25 mm
	50		50 mm
	80		80 mm
			Connections
		NPT	NPT female
		MAN	Manifold
Example			
Agrimag	25	NPT	

Please note that any order placed without details regarding flow-range (for example:  $0-50~\text{m}^3/\text{hr}$  or 0-100~l/s) and Pulse Output (for example 1 pulse/litre) will be processed with standard settings.

Please note for applications where all pipes and tanks are manufactured from plastic, earthing rings are recommended to ensure the accuracy of the measurements.

When placing orders for applications, such as aggressive and corrosive liquids, please advise us about the specifics of the application and installation on your enquiry form or order. This will enable us to recommend or help you in choosing the best product for your application.



**Arkon Flow Systems, s.r.o.** is a Czech based company involved in the design, production, distribution of electromagnetic flowmeters & our range of products are complimented with ultrasonic flowmeters, level meters, Parshall flumes and flow indicators.

We offer a flexible approach to customers needs, by offering customized solutions for each application.

Arkon offers its products via a worldwide distributor network. Our products are used in over 20 countries with applications such as Water Treatment & Distribution, Waste Water Management, Irrigation, Mining & Chemical Industry as well as projects where efficiency and accuracy coupled with smart technology matters the most.

#### **OUR NETWORK**

We offer our products to customer via worldwide distributors, some of the countries where we have official distributors are:

#### **EUROPE**

Finland, France, Greece, Latvia, Portugal, Russia, Ukraine, United Kingdom

#### **NORTH AND SOUTH AMERICA**

Colombia, Chile, Mexico, Peru

#### ASIA

Australia, China, New Zealand, South Korea, Sri Lanka, Taiwan, Thailand, Vietnam

#### **MIDDLE EAST**

Bahrain, Egypt, Iran, Iraq, Oman, Pakistan, Qatar, Saudi Arabia, Turkey, United Arab Emirates

#### AFRICA

South Africa









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