



GENERAL

Smartmeasurement ALMAGWP is an electromagnetic flowmeter for any fluid with electrical conductivity of greater than 5 uS/cm. ALMAGWP's electronics (converter) comes with several styles in both integral or remote configuration. Remote communication can be obtained by a base-station type radio communication network system, with the use of a base station built in the central area, coverage radius can be as long as 1000m. Base stations within a closer distance (SRD mode), can be used by an opened frequency range of 928 MHz. Base stations, Modbus or Profibus-DP communication network, can transmit data to any central office. ALMAGWP is designed with an IP68, die-cast aluminum enclosure which is particularly applicable for damp environment or underground mines.

FEATURES

- Variety of liners (see ordering sheet on page 4)
- Flow Velocity range: 0.2-12 m/s
- Modbus, Hart communication, Profibus-DP communication
- Designed for clean water > 5 uS/cm
- IP68 enclosure that can be used for underground applications
- FEP Liner suitable in vacuum tube.
- High accuracy of $\pm 0.5\%$ of reading
- Empty pipe, current excitation and battery capacity alarms
- NIST traceable calibration certificate

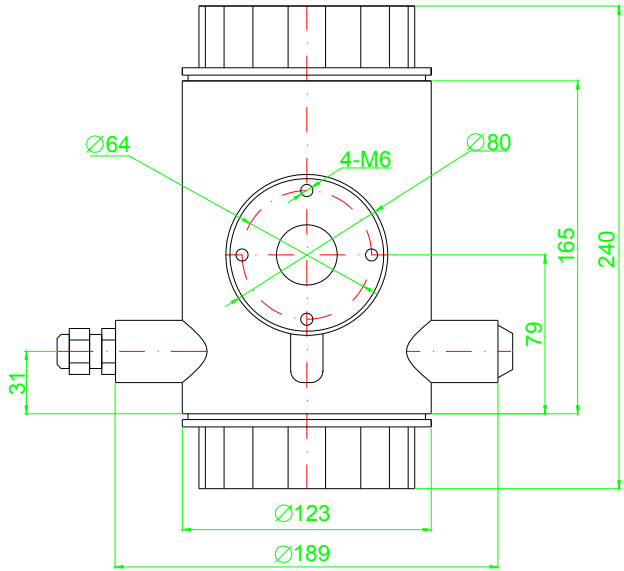


SPECIFICATION

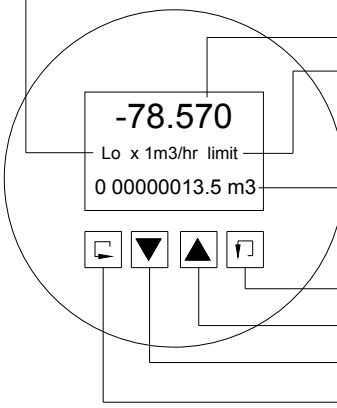
- | | | | |
|-------------------|---|-------------------------|--|
| ● Size | : 10-2800mm | ● Electrode & Grounding | : Stainless Steel 316 - standard
Hastelloy B
Hastelloy C
Titanium
Tantalum
Platinum |
| ● Measuring Range | : 0.2 - 12 m/s -bi-direction | ● Ambient Temperature | : -25 to +60 Deg. C |
| ● Temperature | -20 ~ +60 Deg. C - Integral
-40 ~ +180 Deg. C - Remote | ● Connection | : ANSI, DIN and JIS flanges |
| ● Measuring Tube | : Stainless Steel 304 | ● Accuracy | : +/-0.5% of full scale - standard
+/-0.2% of full scale - Option |
| ● Flange material | : Carbon Steel - Std
304SS or 316 SS - Opt | ● Power requirements | : 19-36 VDC, 12-15W
85-265 VAC, 45-63 Hz, $\leq 20W$ |
| ● Coil Housing | : Carbon Steel - Std
Stainless Steel 304 - Opt
Stainless steel 316 - Opt | ● Outputs | : 4-20mA, Pulse, RS232/485/HART, Modbus |
| ● Liner | : Polyurethane - up to 60 deg C
Neoprene - up to 80 deg C
PFA - up to 160 deg C
PTFE - up to 160 deg C | | |
| ● Protection | : IP 65 - Std.
IP68 flowbody - Remote electronics | | |
| ● Conductivity | : to be more than 5 uS/cm | | |

➤ Mounting drawing

● Standard Integral type

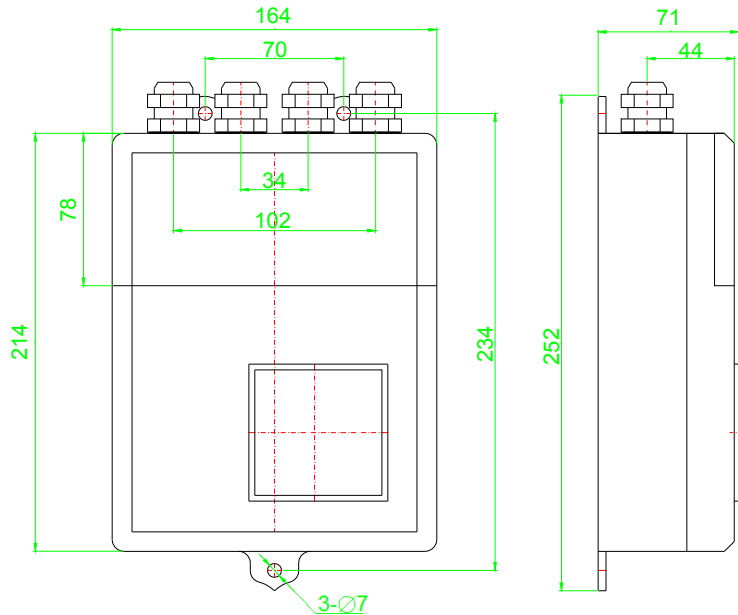


Alarm indicator

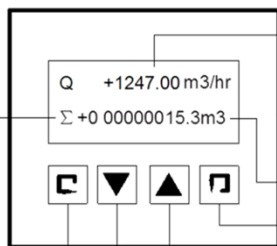


- Flow rate
- Flow unit
- Flow velocity
- Ratio of emptiness
- Percentage
- Forward & Reverse integrated volumes
- Deference of Forward and Reverse integrated volumes
- Enter
- UP
- Down
- Compound

● Standard Remote type

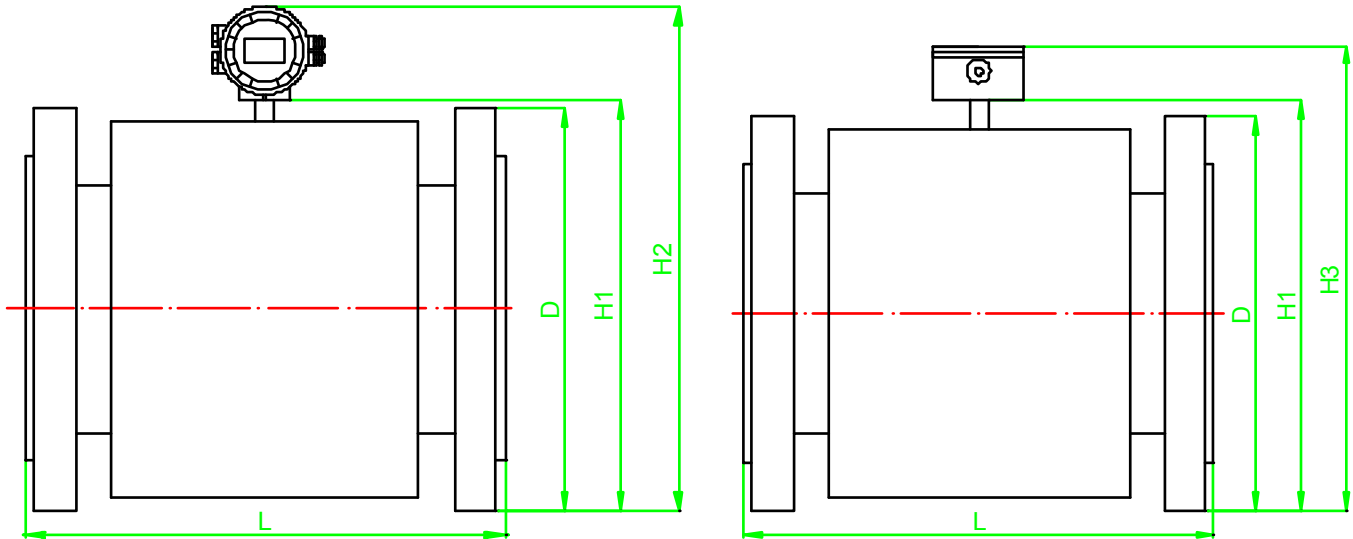


Total Flow



- Flow rate
- Flow velocity
- Ratio of emptiness
- Percentage
- Alarm show
- Forward & Reverse integrated volumes
- Deference of Forward & Reverse integrated volumes
- Flow unit
- Enter
- UP or Right
- Down or Left
- Compound

➤ DIMENSIONS - Inline(DIN flange)



DN	Normal pressure (MPa)	Dimension (mm)					Weight(kg)	
		L	D	H1	H2	H3	Integral	Remote
15	2.5	200	95	155	285	215	5.5	3.5
20		200	105	160	290	220	6.5	4.5
25		200	115	165	295	225	7	5
32		200	140	180	310	240	8.5	6.5
40		200	150	190	320	250	9	7
50		200	165	200	330	260	11	9
65		250	185	220	350	280	13	11
80	250	200	240	370	300	15	13	
100	1.6	250	220	250	380	310	17	15
125		250	250	280	410	340	21	19
150		300	285	320	450	380	26	24
200	1.0	350	340	380	510	440	34	32
250		450	395	430	560	490	49	47
300		500	445	490	620	550	59	57
350		500	505	550	680	610	70	68
400		500	565	600	730	660	87	85
450		550	615	640	770	700	102	100
500		550	670	700	830	760	122	120
600		600	780	800	930	860	162	160
700	0.6	700	860	860	990	920	307	305
800		800	975	975	1105	1035	417	415
900		900	1075	1075	1205	1135	527	525
1000		1000	1175	1175	1305	1235	682	680
1200		1200	1405	1405	1535	1465	747	745
1400		1400	1630	1630	1760	1690	1107	1105
1600		1600	1830	1830	1960	1890	1427	1425
1800		1800	2045	2045	2175	2105	1957	1955
2000		2000	2265	2265	2395	2325	2482	2480
2200		2200	2475	2475	2605	2535	3082	3080
2400		2400	2685	2685	2815	2745	3782	3780
2600	2600	2905	2905	3035	2965	4152	4150	
2800	2800	3115	3115	3245	3175	4872	4870	
3000	3000	3315	3315	3445	3375	5472	5470	

**** Please contact your local Smart Measurement application engineer**

You also need to provide the following information:

Type of Fluid	We need the name of your fluid, including operating PH, corrosive and conductivity.
Full Scale Flow	Maximum and minimum flow rates, units must be Lb./hr., LPM or gpm, etc..
Line Size	we need to know your pipe size as well connection type (flange, threaded, etc..)
Pressure & Temperature	We calibration your Flowmeter as close to your application as possible

Model Selection Guide

ALMAGWP Series														
Example: ALMAGWP-F-50-0-3-IN-2.5-65-0-DC-0-EXI-NN-NN														
ALMAGWP-	*_	*	*_	*	*_	*	*_	*	*_	*	*_	**_	**	Description
Flange type	F												Connection	
Wafer type	W													
Ceremic - 4Mpa	C													
Sanitary type	S													
¾"-80" (DN10~DN2000)	**												Size	
316 stainless steel	0												Electrode	
Nickel	1													
Hastalloy C	2													
Tan	3													
Ti	4													
Ceramic	C													
Chloroprene Rubber(Neoprene)	3												Liner material	
PO	4													
PTFE	5													
PFA	6													
F46	7													
Ceramic	C													
Integral type	IN												Transmitter	
Remote type - with 5m cable	RE													
Max Pressure 2.5Mpa with flanges up to DN80	2.5												Pressure	
Max Pressure 1.6Mpa with flanges up to DN150	1.6													
Max Pressure 1.0Mpa with flanges up to DN900	1.0													
Max Pressure 0.6Mpa with flanges up to DN2000	0.6													
IP65	65												Protection	
IP68 flowbody and IP65 transmitter, only for remote type	68													
Not Needed	0												Grounding rings	
Grounding electrode	1													
304SS grounding ring	2													
11-40VDC	DC												Power supply	
85~265VAC, 50 Hz	AC													
Non communication	0												Communication	
HART	1													
RS485 - Modbus	2													
RS485 - Profibus DP	3													
None	NX												Explosion proof	
Explosion Proof - for integral type	EXD													
Explosion Proof - for remote type	EXR													
Aluminium enclosure, 304SS pipe, CS coil housing and flange	NN												Materials	
Aluminium enclosure. 304SS pipe, CS coil housing and 304SS flange	C304													
Aluminium enclosure. 304SS pipe, coil housing and flange	304													
None	NN												Options	
With CS mating flange	IF													