



ALMAG

Electromagnetic Flowmeter

ALMAG Series

GENERAL

Smartmeasurement ALMAGWP-C is ceramic-lined version of our standard electromagnetic flowmeter. The ALMAGWP-C can be used in situations where there are aggressive acids or highly abrasive slurries, as long as the fluid's conductivity is greater than 5 $\mu\text{S}/\text{cm}$. This meter is compact and lightweight, featuring wafer-type connections, ceramic liner and ceramic electrodes. These features allow for higher flow velocities and wider turn-downs which make it ideal for many types of processes including those involving high pressure, high temperature, or vacuum service. Nominal flow body sizes range from ½" top 8" (15-200mm) and are wet calibrated to verify their specified accuracy with traceability to the U.S. National Institute of Science and Technology (NIST). The electronics can be mounted in a standard IP65 enclosure or an Exd IP67 enclosure with ATEX, CSA and FM approvals. A remote mounted version is also available. Optional communication outputs include RS485 /Modbus, HART, and Profibus. Relay outputs are also available in place of the standard open collector transistor switches. This broad array of options make the ALMAGWP-C an ideal choice in the harsh chemical industries as well as other applications with highly corrosive fluids.

FEATURES

- Variety of liners (see ordering sheet on page 4)
- Wide fluid velocity range of 0.6-40 feet/sec (0.2-12 m/s)
- Modbus, Hart, Profibus-DP communication
- Designed for clean fluids > 5 $\mu\text{S}/\text{cm}$
- IP68 enclosure that can be used for underground applications
- Ceramic Liner suitable for vacuum pressure applications
- High accuracy; $\pm 0.5\%$ of reading
- Display of empty pipe, current excitation, alarms, etc.
- NIST traceable calibration certificate



Standard type



Remote converter



Ceramic liner



Exd (ATEX, CSA & FM) converter

SPECIFICATION

● Size	: ½"-8" (15-200mm)	● Display	: Flow rate, flow velocity, percent full-scale total accumulated flow
● Connection	: Wafer	● Protection	: IP 65 - Std. IP68 flow body - Remote electronics IP67 Exd ATEX, CSA & FM
● Measuring Range	: 0.6-40 ft/sec (0.2-12 m/s) bi-directional	● Conductivity	: to be more than 5 $\mu\text{S}/\text{cm}$
● Temperature	-4~140 °F (-20~60 °C) - Integral -40~482 °F (-40~250 °C) - Remote	● Ambient Temperature	: -13~140 °F (-25~60 °C)
● Pressure	: up to 580 psig (4.0Mpa)	● Accuracy	: $\pm 0.5\%$ of reading - standard $\pm 0.2\%$ of full scale - Option
● Electrode	: Ceramic	● Power requirements	: 19-36 V_{DC} , 12-15W 85-265 V_{AC} , 45-63 Hz, $\leq 20\text{W}$
● Liner	: Ceramic	● Outputs	: 4-20mA, Pulse,
● Measuring Tube	: Ceramic	● Communication	: RS232/485/HART, Modbus
● Coil Housing	: Stainless Steel #304 - Opt Stainless Steel #316 - Opt		
● Earth ring	: Stainless Steel #304 - Opt Stainless Steel #316 - Opt		

SmartMeasurement

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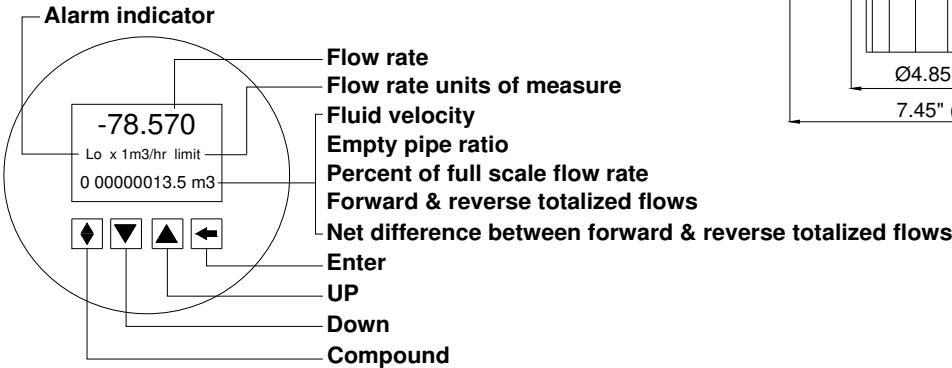
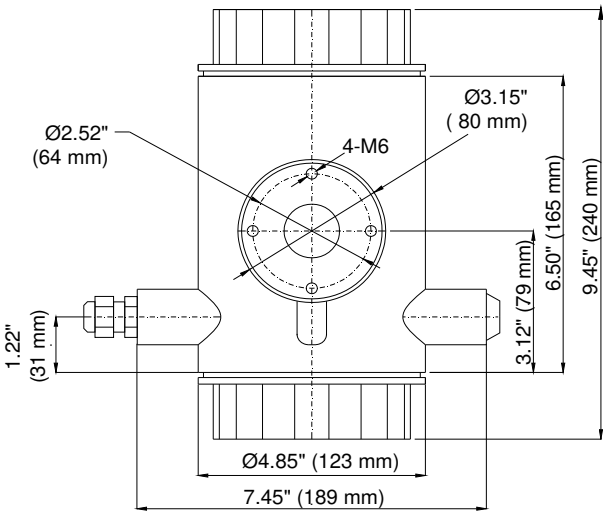
URL : <http://www.smartmeasurement.com>

E-mail: sales@smartmeasurement.com

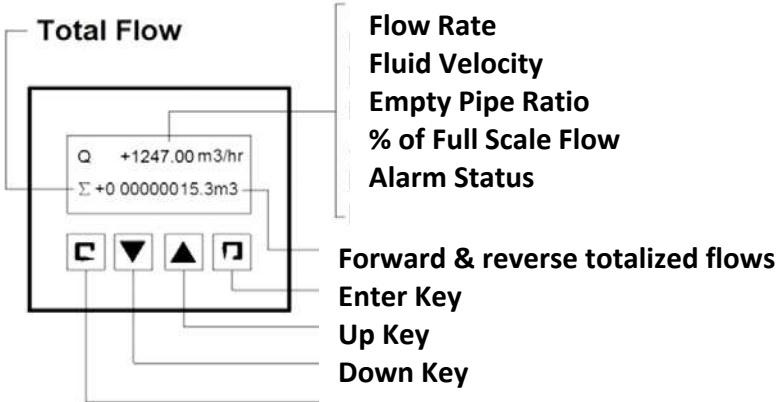
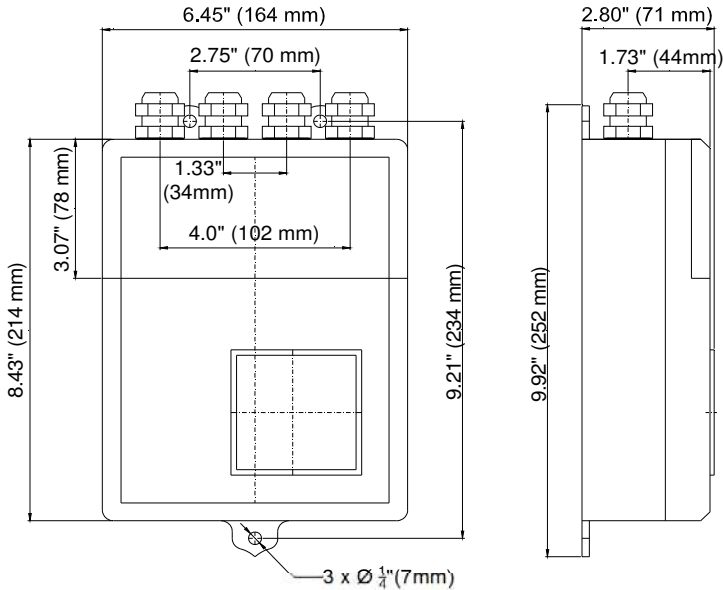
ALMAG **Electromagnetic Flowmeter ALMAGWP**

Mounting

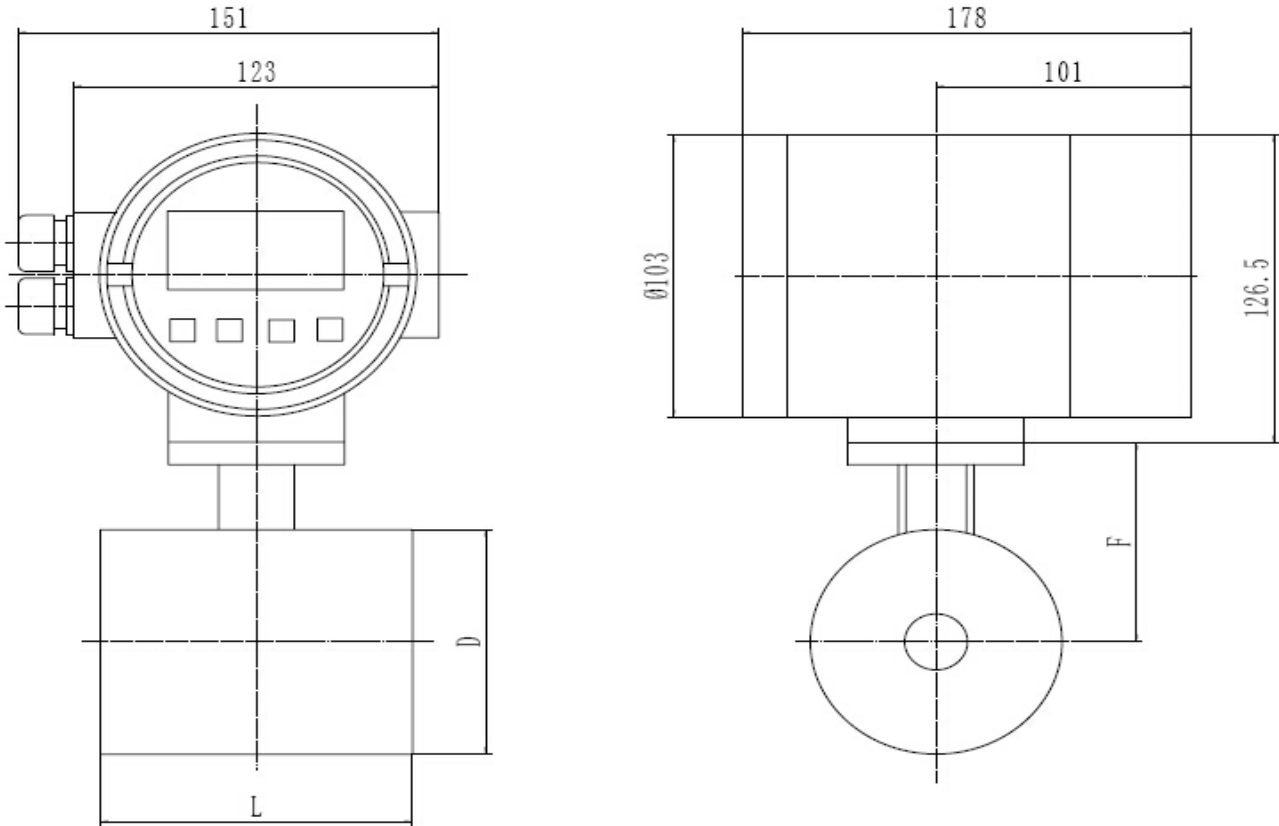
- **Standard Integral type**



- **Standard Remote type**



7 DIMENSIONS



Nominal Diameter Inches (mm)	Max pressure psi (MPa)	Dimension - inches (mm)			Weight - lbs (kg)	
		L	D	F	Integral	Remote
½" (DN15)	580 psi (4.0 MPa)	3.54 (90)	2.36 (60)	3.35 (85)	12.1 (5.5)	7.7 (3.5)
¾" (DN 20)		3.54 (90)	2.36 (60)	3.35 (85)	14.3 (6.5)	9.9 (4.5)
1" (DN 25)		2.52 (64)	2.48 (63)	3.43 (87)	15.4 (7)	11 (5)
1¼" (DN 32)		3.23 (82)	3.00 (76)	3.66 (93)	18.7 (8.5)	14.3 (6.5)
1½" (DN 40)		3.54 (90)	3.50 (89)	3.94 (100)	19.8 (9)	15.4 (7)
2" (DN 50)		4.33 (110)	3.98 (101)	4.17 (106)	24.2 (11)	19.8 (9)
2½" (DN 65)		5.12 (130)	4.50 (114)	4.41 (112)	28.7 (13)	24.2 (11)
3" (DN80)		6.69 (170)	5.00 (127)	4.69 (119)	33.1 (15)	28.7 (13)
4" (DN100)		7.09 (180)	6.25 (159)	5.31 (135)	37.5 (17)	33.1 (15)
5" (DN125)		8.66 (220)	6.25 (159)	5.31 (135)	46.3 (21)	41.9 (19)
6" (DN150)		10.55 (268)	8.62 (219)	6.50 (165)	57.3 (26)	52.9 (24)
8" (DN200)		11.80 (300)	10.75 (273)	7.56 (192)	74.9 (34)	70.5 (32)

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

You also need to provide the following information:

Type of Fluid	Please specify the name of your fluid media, the operating PH, and conductivity.
Full Scale Flow	Maximum and minimum flow rates should be specified in units of MPH, GPM, LPM, etc.
Line Size	Please state nominal pipe size as well process connection type (flange, threaded, etc..)
Pressure & Temperature	We will calibrate your flowmeter as close to your operating conditions as possible

Model Selection Guide

ALMAG Series																	
Example: ALMAGWP-C-50-0-3-IN-2.5-65-0-DC-0-EXI-NN-NN																	
ALMAGWP-	*_	*	*_	*	*_	*	*_	*	*_	*	*_	*	*_	**_	**	Description	
Ceramic - 4Mpa	C																
½"~8" (DN15~DN200)		**														Size	
Ceramic			C													Liner	
Ceramic				C												Electrode	
Integral type					IN											Transmitter	
Remote type - with 5m cable					RE												
Max Pressure 580 psi (4.0Mpa)						4.0										Pressure	
IP65							65									Protection	
IP68 flow body and IP65 transmitter, only for remote type							68										
Not Needed									0							Grounding rings	
304SS grounding ring									2								
316SS grounding ring									3								
11-40 V _{DC}										DC						Power supply	
85~265 V _{AC} , 50/60 Hz										AC							
No communication											0					Communication	
HART											1						
RS485 - Modbus											2						
RS485 - Profibus DP											3						
None												NX				Explosion proof	
Explosion Proof ATEX, CSA and FM - for integral type												EXD					
Explosion Proof ATEX, CSA and FM - for remote type												EXR					
Aluminum Enclosure, 304 coil housing													NN			Materials	
Aluminum Enclosure, 316 coil housing													316				
None														NN			Options