



ALMAG-WP

Electromagnetic Flowmeter

Model ALMAGWP Series

GENERAL

SMARTMEASUREMENT's ALMAGWP is an inline-type electromagnetic flowmeter with flanged connections. This versatile flow sensor is available for nominal pipe sizes ranging from 3/8" through 80" and can detect fluid velocities ranging from less than 0.1 mps to 10 mps. The ALMAGWP comes with an easy to read OLED display and is available with a wide variety of options including AC or DC power, local or remote display, RS485, HART, and Profibus communications or relay outputs. This broad array of options makes the ALMAGWP an excellent choice for measuring conductive fluid flow rates in many applications and industries including food & beverage, pulp & paper and industrial process control.



FEATURES

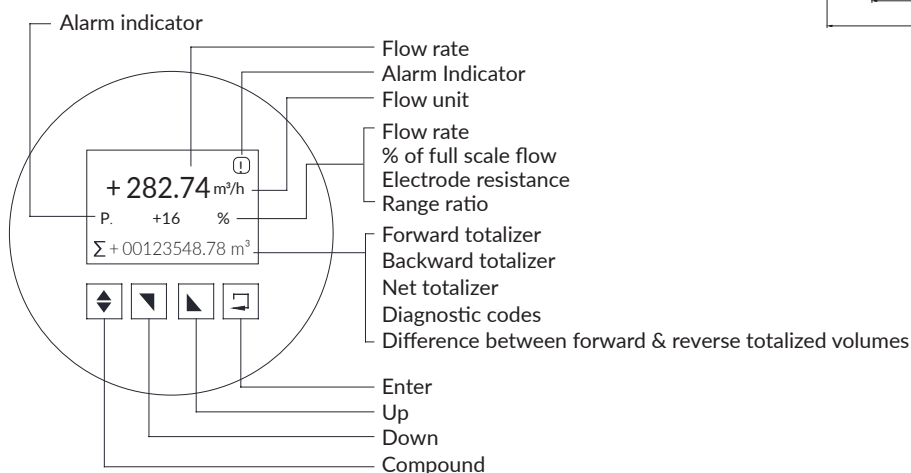
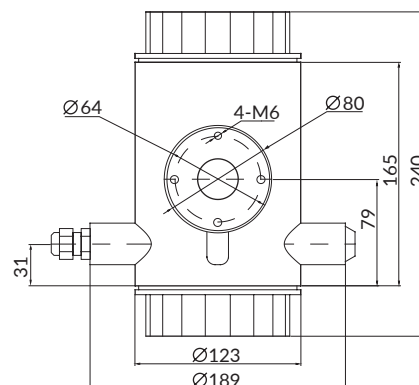
- Various liner materials are available to satisfy nearly all industrial applications.
- Wide fluid velocity range of 0-39 ft/sec (0-12 m/s) with excellent low-flow accuracy.
- Flange-type process connections available in ANSI, DIN, and JIS style
- Optional 5 Amp, form C reley contacts allow high power loads to be controlled directly from the meter.
- Optional IP68 environmental protection class (submersible).
- Easy-to-read OLED display; visible in low light environments and in direct sunlight, no backlighting necessary.
- Excellent accuracy; $\pm 0.5\%$ of reading standard, $\pm 0.2\%$ of reading optional
- Upright/reverse flowrate test function standard with every unit.

SPECIFICATIONS

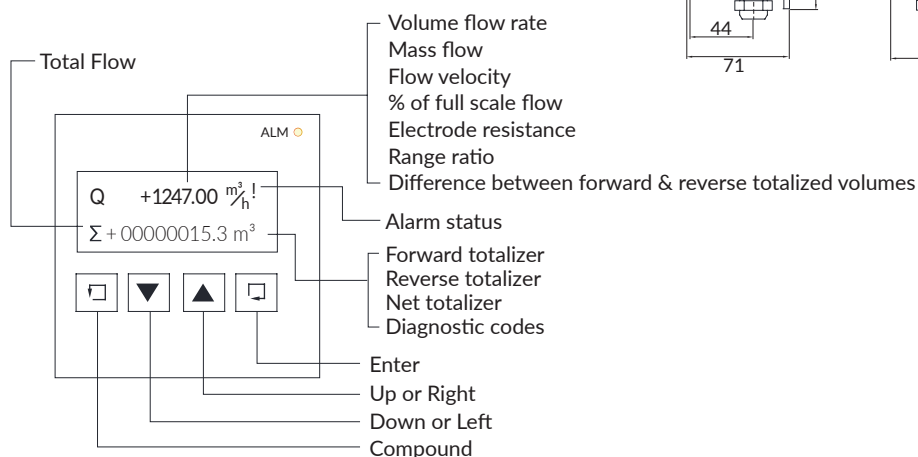
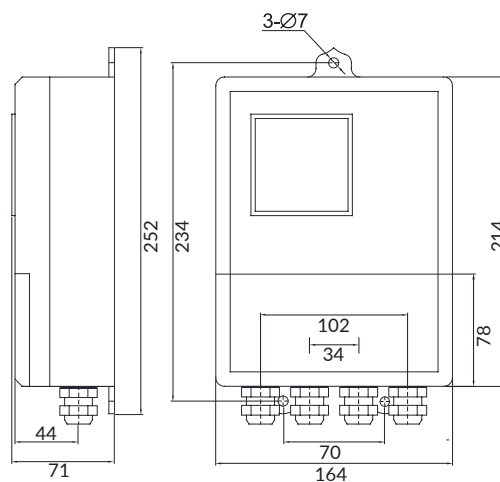
• Size:	3/8"~80" (DN10~DN2000)	• Communication:	HART RS485/Modbus Profibus-DP
• Measuring Range:	0.32ft/s (0.1m/s) min. fluid velocity 39 ft/s (12 m/s) max.	• Electrode & Grounding:	Stainless Steel 316L Nickel Hastelloy C Titanium Tantalum
• Material:		• Ambient Temperature:	-5 ~ +130 °F (-20 ~ 55 °C)
Measuring Tube:	Stainless Steel #304	• Process Connection:	Flanged
Flange material:	Carbon Steel (standard) Stainless Steel #304 (optional) Stainless Steel #316 (optional)	Flange types:	Standard ANSI 150# JIS 10K / JIS 20K / JIS 40K ANSI 300# / ANSI 600# DIN PN10 / PN16 / PN25 / PN40
Coil Housing:	Carbon Steel (standard) Stainless Steel #304 (optional) Stainless steel #316 (optional)	Options:	
• Liner:	Chloroprene Rubber (Neoprene) Polyurethane, Hard Rubber (Ebonite) PTFE, F46, PFA	• Grounding Resistance:	< 10 Ω
• Protection:	IP65 IP68 (remote type only)	• Accuracy:	$\pm 0.5\%$ of reading (Velocity ≥ 0.5 m/s) ± 0.005 m/s (Velocity < 0.5 m/s)
• Conductivity:	$\geq 5 \mu S/cm$	• Temperature:	14~140 °F (-10~60 °C) - Polyurethane -5~160 °F (-20~71 °C) - Neoprene -40~356 °F (-40~180 °C) - PFA -40~356 °F (-40~180 °C) - PTFE
• Power Requirements:	110-240V _{AC} or 16-36 V _{DC}		
• Outputs:	4-20mA, pulse, (2) open collector switches or (2) Form C, (2) Form C, 5 Amp relay contacts (optional)		

MOUNTING DRAWING

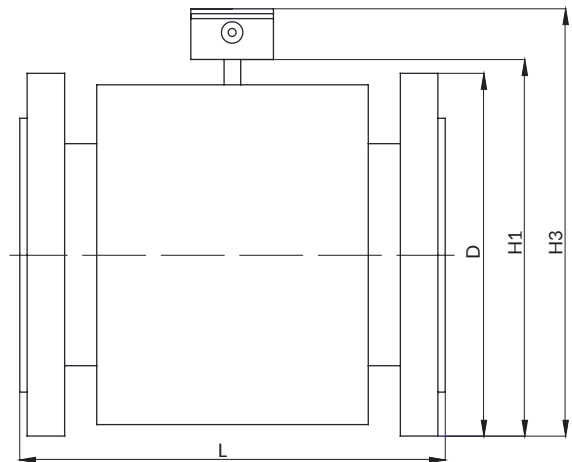
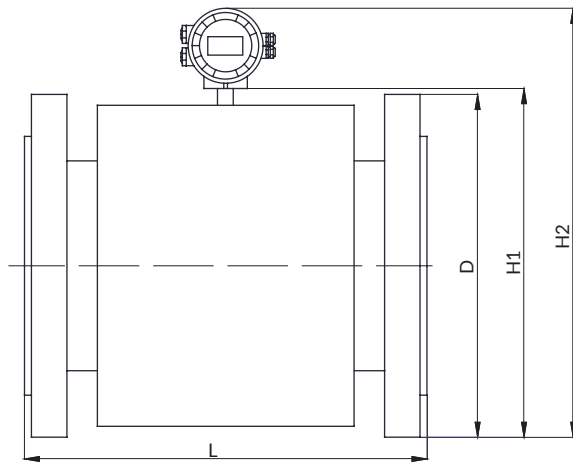
STANDARD INTEGRAL TYPE



STANDARD REMOTE TYPE



DIMENSIONS - Inline (ANSI flange)



NOM. PIPE DIAMETER - IN. (mm)	RATED PRESSURE PSIG (bar)	INSTRUMENT OUTLINE DIMENSION INCHES (mm)				FLANGE CONNECTION DIMENSION INCHES (mm)	WEIGHT LBS. (Kg)	
		L	H1	H2	H3		Integral	Remote
½" (15)	363 (25)	7.87 (200)	6.10 (155)	11.22(285)	8.46 (215)	3.74 (95)	12.12(5.5)	7.71(3.5)
¾" (20)		7.87 (200)	6.29 (160)	11.41(290)	8.66 (220)	4.13 (105)	14.33(6.5)	9.92(4.5)
1" (25)		7.87 (200)	6.49 (165)	11.61(295)	8.85 (225)	4.52 (115)	15.43(7)	11.02(5)
1¼" (32)		7.87 (200)	7.08 (180)	12.20(310)	9.44 (240)	5.51 (140)	18.73(8.5)	14.33(6.5)
1½" (40)		7.87 (200)	7.48 (190)	12.59(320)	9.84 (250)	5.90 (150)	19.84(9)	15.43(7)
2" (50)		7.87 (200)	7.87 (200)	12.99(330)	10.23 (260)	6.49 (165)	24.25(11)	19.84(9)
2½" (65)		9.85 (250)	8.66 (220)	13.77(350)	11.02 (280)	7.28 (185)	28.66(13)	24.25(11)
3" (80)		9.85 (250)	9.44 (240)	14.56(370)	11.81 (300)	7.87 (200)	33.06(15)	28.66(13)
4" (100)	230 (16)	9.85 (250)	9.84 (250)	14.96(380)	12.20 (310)	8.66 (220)	37.47(17)	33.06(15)
5" (125)		9.85 (250)	11.02 (280)	16.14(410)	13.38 (340)	9.84 (250)	37.47(21)	41.88(19)
6" (150)		11.81 (300)	12.59 (320)	17.71(450)	14.96 (380)	11.22 (285)	57.32(26)	52.91(24)
8" (200)	145 (10)	13.78 (350)	14.96 (380)	20.07(510)	17.32 (440)	13.38 (340)	74.95(34)	70.54(32)
10" (250)		17.71 (450)	16.92 (430)	22.04(560)	19.29 (490)	15.35 (390)	108.02(49)	103.61(47)
12" (300)		19.68 (500)	19.29 (490)	24.40(620)	21.65 (550)	17.51 (445)	130.07(59)	125.66(57)
14" (350)		19.68 (500)	21.65 (550)	26.77(680)	24.01 (610)	19.88 (505)	154.32(70)	149.91(68)
16" (400)		19.68 (500)	23.62 (600)	28.74(730)	25.98 (660)	22.24 (565)	191.80(87)	187.39(85)
18" (450)		21.65 (550)	25.19 (640)	30.31(770)	27.55 (700)	24.21 (615)	224.87(102)	220.46(100)
20" (500)		21.65(550)	27.55 (700)	32.67(830)	29.92 (760)	26.37 (670)	268.96(122)	264.55(120)
24" (600)		23.62 (600)	31.49 (800)	36.61(930)	33.85 (860)	30.70 (780)	357.14(162)	352.73(160)
28" (700)	87 (6)	27.56 (700)	33.85 (860)	38.97(990)	36.22 (920)	33.85 (860)	676.82(307)	672.40(305)
32" (800)		31.50 (800)	38.38 (975)	43.50(1105)	40.74 (1035)	38.38 (975)	919.33(417)	914.91(415)
36" (900)		35.43 (900)	42.32 (1075)	47.44(1205)	44.68 (1135)	42.32 (1075)	1161(527)	1157(525)
40" (1000)		39.37 (1000)	46.25 (1175)	51.37(1305)	48.62 (1235)	46.25 (1175)	1503(682)	1499(680)
48" (1200)		47.25 (1200)	55.31 (1405)	60.43(1535)	57.67 (1465)	55.31 (1405)	1647(747)	1642(745)
56" (1400)		55.12 (1400)	64.17 (1630)	69.29(1760)	66.53 (1690)	64.17 (1630)	2441(1107)	2436(1105)
64" (1600)		63.00 (1600)	72.04 (1830)	77.16(1960)	74.40 (1890)	72.04 (1830)	3146(1427)	3141(1425)
72" (1800)		70.87 (1800)	80.51 (2045)	85.62(2175)	82.87 (2105)	80.51 (2045)	4314(1957)	4310(1955)
80" (2000)		78.75 (2000)	89.17 (2265)	94.29(2395)	91.53 (2325)	89.17 (2265)	5472(2482)	5467(2480)

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TYPE OF FLUID

Please provide the name of your fluid media, the operating PH, and conductivity

FULL SCALE FLOW

Please provide the max and min flow rate, in units of Lb/hr, GPM or LPM

LINE SIZE

Please provide the nominal pipe size and process connection type (flange, threaded, etc.)

PRESSURE & TEMPERATURE

We will calibrate your flow meter as close to your operating conditions as possible

ALMAGWP SERIES

EXAMPLE: ALMAGWP-F-50-0-3-IN-2.5-65-0-DC-0-EXI-NN-NN

ALMAGWP-	*_	*	*_	*	*_	*	*_	*	*_	*	*_	*	*_	**_	**	DESCRIPTION
ANSI 150# Flange	F															Connection
Ceramic - 4Mpa ½"~8" (DN15~DN200)	C															
Sanitary type - ½"~8" (DN15~DN200)	S															
Threaded type - ½"~8" (DN15~DN200)	T															
Wafer type - ½"~8" (DN15~DN200)	W															
DN10-DN 2000 (¾"~80")		**														Size
316 stainless steel			0													Electrode
Nickel			1													
Hastelloy C			2													
Tan			3													
Ti			4													
Ceramic			C													
Chloroprene Rubber (Neoprene)				3												Liner material
PU (Polyurethane)				4												
PTFE				5												
PFA				6												
F46				7												
Hard Rubber (Ebonite)				8												
Ceramic				C												
Integral type					IN											Transmitter
Remote type - with 5m cable					RE											
Max Pressure (362 psi) 2.5Mpa with flanges up to 3"/DN80						2.5										Pressure
Max Pressure (232 psi) 1.6Mpa with flanges up to 6"/DN150						1.6										
Max Pressure (145 psi) 1.0 Mpa with flanges up to 36"/DN900						1.0										
Max Pressure (87 psi) 0.6Mpa with flanges up to 80"/DN2000						0.6										
Standard - IP65							65									Protection
IP68 flow body and IP65 transmitter, only for remote type							68									
Not Needed								0								Grounding rings
Grounding electrode								1								
SS# 304 grounding ring								2								
16~30 V _{DC}									DC							Power supply
85~265 V _{AC} @ 45-63 Hz									AC							
No Digital Communication										0						Communication
HART										1						
RS485 - Modbus										2						
RS485 - Profibus DP										3						
None											NX					Explosion proof
Explosion Proof - for integral type											EXI					
Explosion Proof - for remote type											EXR					
Aluminum Enclosure, SS # 304 flow tube, CS coil housing and process connection												NN				Materials
Aluminum Enclosure, SS # 304 flow tube, CS coil housing and SS # 304 process connection												C304				
Aluminum Enclosure, SS # 304 flow tube, coil housing and SS # 304 process connection												304				
None													NN			Options
With CS install flange													IF			

