ALMAG

Electromagnetic Flowmeter

ALMAGIS Series

GENERAL

The SMC ALMAGIS is an insertion electromagnetic flowmeter designed to measure the fluid velocity of conductive liquids in applications where hot-tap or insertion installations are preferred. This insertion mag meter is available in four standard lengths and may be installed in any pipeline with internal diameters ranging from 300 mm (12") to3000 mm (120")and in permanent locations where cost or space limitations preclude the use of conventional in-line style meters. Pipe connections come in hot-tapped, DIN and NPT threads. The ALMAGIS is designed for use conductive fluids including water, raw sewage, and wastewater, clarified water, RAS, and WAS, primary sludge and cooling tower water, as long as adequate lengths of straight pipe are available where the sensor is installed.

FEATURES

- Applicable sizes: 6"~120" (150~3000mm)
- Operating pressure: ≤ 230 psig (1.6MPa)
- Velocity range of 3-33 fps (1~10m/s)
- Accuracy: ±2.5%
- Hot-tap sensor can be installed and retracted from process piping
- Conductivity of measured medium: ≥50μs/cm
- Electrode materials: 316L, hastelloy, Ti, etc
- The max. distance between sensor and converter: ≤50m (165 feet)
- NIST traceable calibration certificate

SPECIFICATIONS

- Size : 6"~120" (150-3000mm)
- Measuring Range : 3-33 fps (1 - 10 m/s); bi-directional
- Temperature 160 °F (70 °C) max.
- Pressure 230 psig (1.6Mpa) max.
- Wetted part : Stainless Steel #304
- Protection : IP 67
- Materials (std)

Transmitter housing : Aluminium
Probe : SS #304
Detector housing : PVC
Electorde : SS #316L

- Conductivity : must be ≥ 50 μS/cm
- Cable Entry : 2 X PG11
- Ambient Temperature : -13 to 140 °F (-25 to 60 °C)
- Connection : Weld, Flange, thread and ball vavle
- Coil Resistance : 50~70 Ω (std)
- Accuracy : ±2.5% of reading
- Power requirements : 24 V_{DC}, 110-220 V_{AC}
- Outputs

Analog : 4-20mA, Pulse
Digital : RS232/485, HART, Modbus-RTU, Profibus-DP

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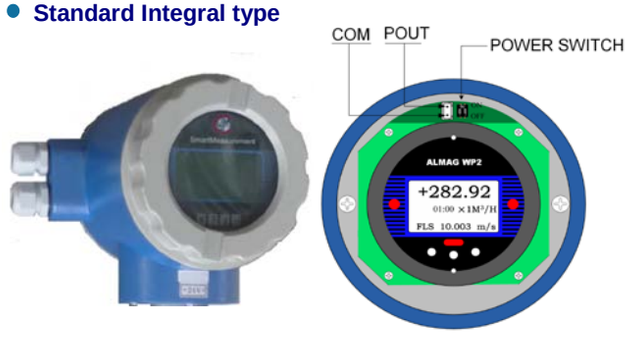
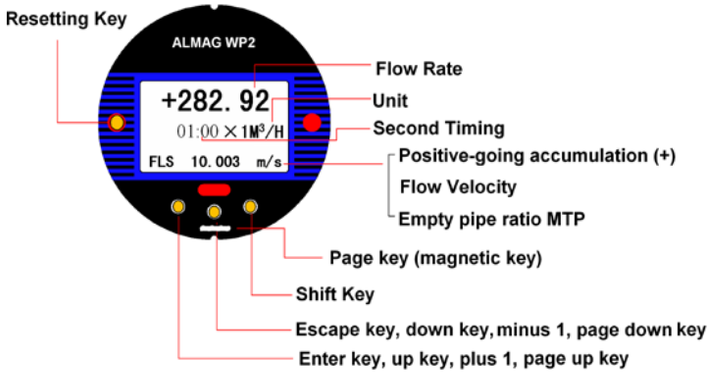
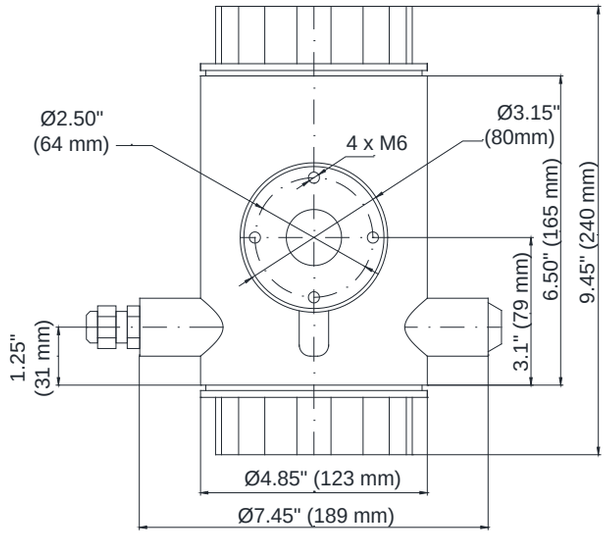
E-mail : sales@smartmeasurement.com

Mounting drawing

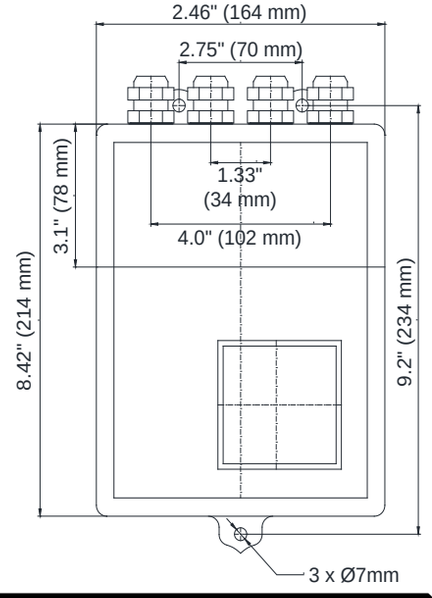
- **Standard Integral type**

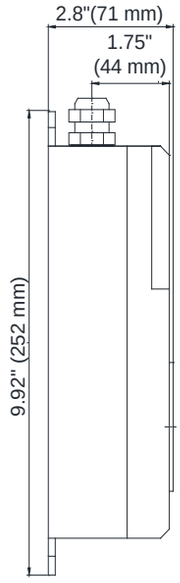


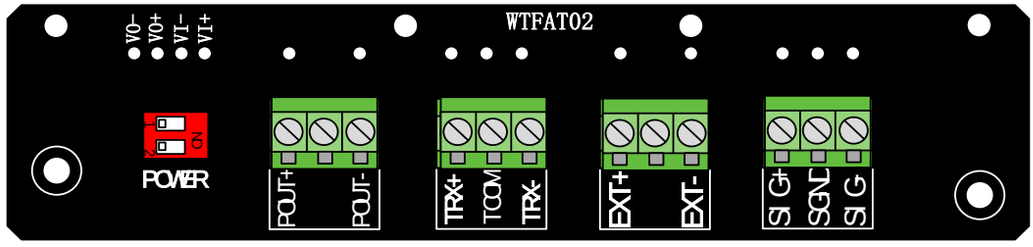




- **Standard Remote type**

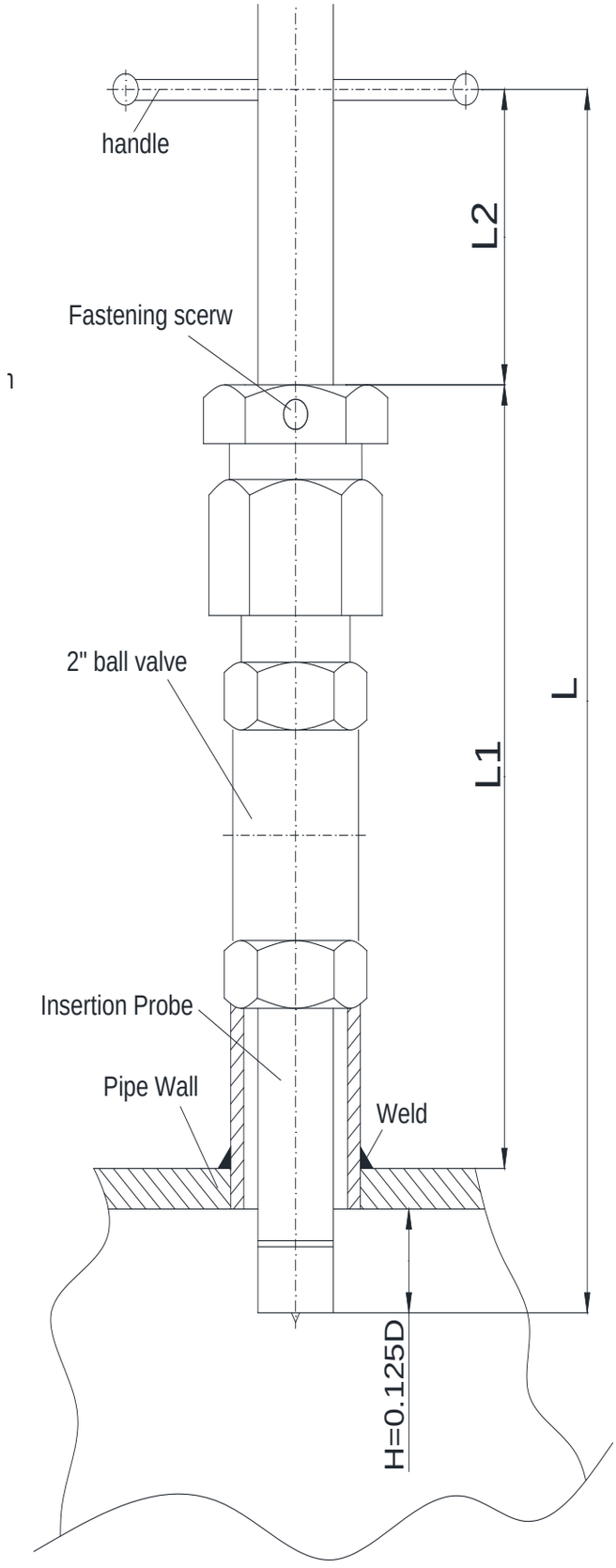






SIG1	Signal 1		POUT+	Impulse current Impulse output
SGND	Signal ground		POUT-	Impulse output ground
SIG2	Signal 2	For separate sensor use		
EXT+	Excitation current+			
EXT-	Excitation current-			

DIMENSIONS - Insertion



**** Please contact your local SMC application engineer**

You also need to provide the following information:

Type of Fluid	**Please providee the name of the fluid, including operating PH, viscosity, and conductivity.**
Full Scale Flow	**Please indicate maximum and minimum flow rates in units of GPM, LPM, m^3/hr, etc.**
Line Size	**Please specify pipe size and material**
Pressure & Temperature	**we will calibrate your meter as close to your operating conditions as possible**

Model Selection Guide

ALMAGFK Series														
Example: ALMAGFK-F100-03-IN-4.0-67-0-DC-0-NX-NN-NN														
ALMAGIS-	*	*-	**	**-	*	*	*-	*	*	*-	*	*		Description
150 ~ 3000 mm	**													Line Size
SS 316L		0												Electrode
Nickel		1												
Hastelloy B		2												
Hastelloy C		3												
Tantalum		4												
Titanium		5												
Other 1		6												
Other 2		7												
304SS			0											Proble
Other material			**											
Integral type				IN										Transmitter
Remote type - with 15m cable				RE										
NPT thread					N									Connection
Flanged					F									
Welded					W									
Ball valve					B									
IP67						67								Protection
IP68 flowbody and IP65 trasmitter, only for remote type						68								
11~40V_{DC}							DC							Power supply
85~265V_{AC}, 50/60 Hz							AC							
Standard - with RS485								0						Communication
RS232								1						
HART								2						
Modbus								3						
Profibus-DP								4						
None									NX					Explosion proof
Explosion Proof									Ex					
Aluminium enclosure, SS #304 probe, and PVC detector housing										NN				Materials
Other materials										SP				
None											NN			Options
With CS install flange											IF			