

"IZMS" Electromagnetic Flowmeter

Introduction

The IZMS series electromagnetic flowmeter is the ideal choice for conductive fluids and slurries. Measurement accuracy is unaffected by product viscosity, density, temperature, and the presence of suspended particulates and solids. Unique signal processing methods developed from years of experience in the food and dairy industry allows this flowmeter to provide exceptional accuracy and immunity against process and environmental variables.

Designed for simple installation and start up, the IZMS features automatic flow ranging and user friendly parameterization. Offered in a 2-piece design as standard gives the meter optimal performance and longevity in hot, humid process environments typically found in the food and dairy processing industry.

For more information on this flowmeter, or any of our Anderson-Negele products, visit www.anderson-negele.com or call our Customer Service Department directly at 1-800-833-0081.

Authorizations



Features

- Designed specifically for the food/ beverage and dairy industries yielding proven, unsurpassed accuracy and reliability
- Standard two-piece design provides:
 - practical, easily accessible locations for operator display
 - protection for electronics from harsh operating environments
- Meets all USDA standards
- 3-A compliant

Applications

- Beer
- Beverage Concentrates
- Brine
- Catsup
- CIP Solution
- Milk
- Cream
- Juices
- Molasses
- Yogurt
- Peanut Butter
- Sauces



RODEM[®]

PROCESS EQUIPMENT

www.rodem.com 800-543-7312

Specifications

FLOW TUBE

Connections: Sanitary Tri-Clamp®
 Construction:
 Housing: 304 SS
 Lining: PTFE (Non-filled Teflon®)
 Electrodes: 316L SS
 Connection Box: cast aluminum with corrosion resistant coating
 Wiring Connections: water tight cord grip and 1/2" NPT NPT SS conduit adapter sets supplied with each flow tube
 Maximum Product Temp: 300°F/149°C
 Maximum Inlet Pressure: 115 psi / 8 bar
 Minimum Inlet Pressure: 7 psi absolute / 0.5 bar
 Fluid Conductivity: 5 µS / cm
 Magnetic Field: DC pulsed with self-adapting adjustment

Output Pulse Config: Selectable from following:
 2 independent
 2 channel by 90° shift
 2 channel by 180° shift
 3 channel by 120° shift
 1 forward flow, 1 reverse flow
 Output Control Signal: Open collector 30V@80mA
 Selectable from following:
 forward flow - error signal
 Analog Output: 4-20mA or 0-20mA selectable
 Adjustable averaging 0.1 to 10 sec
 Adjustable damping 0 to 60 sec
 Max. resistive load 500 ohms
 Display(option 1 & 2): Second passive analog output with HART Communication ver. 6
 Discrete Inputs: Suspended Operation - coil power supply off
 Remote reset internal totalizer with error reset
 Opto-isolated
 10-30V input from 3k Ohm internal resistor
 1msec min. pulse width with adjustable debounce
 LED Indicators: Pulse Output 1; Pulse Output 2;
 Forward Flow; Error Condition
 Rezero Feature: Pushbutton for automatic hydraulic re-zero of flow tube during field installation
 Serial Comm: RS485 serial interface
 Control System Bus protocol, 57,600 Baud
 Integral Display (D option) and Keypad: 2-line, 20 digit alphanumeric backlit LCD display. 25 key membrane keypad
 Interconnecting Cable: 25ft. supplied as standard with factory prepared ends.
 Operating Temp: -4°F to 140°F (-20°C to 60°C)
 Converter Construction: Cast aluminum with SGBL corrosion-resistant coating
 Entry Wiring Connections: Water tight cord grip and 1/2" female SS NPT conduit adapter sets supplied with each converter

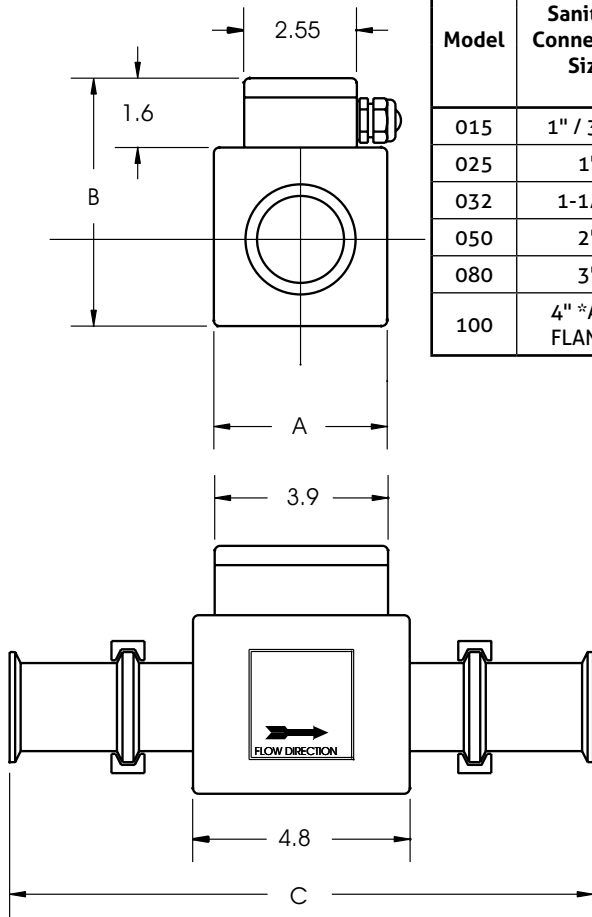
CONVERTER

Power Requirements: Field selectable (by jumpers)
 115VAC/50-60 Hz/single phase
 230VAC/50-60 Hz/single phase
 10-30VDC available
 15VA (15 Watts)
 Fuse Protection: 315mA slow response 5x20mm
 Scaled Digital Outputs: Two (2) independent, scalable pulsed outputs Open collector 30V@80mA Opto-isolated
 Scaling Factors: From 0.00001 to 10,000 pulses per volumetric unit
 Output Pulse (Frequency & Width): Standard Configuration:
 1:1 pulse to pause ratio, 1000 Hz Max.
 Adjustable: 1-60,000msec, 1000 Hz Max.
 Fixed: 50 micro sec pulse width, 1000 Hz Max.

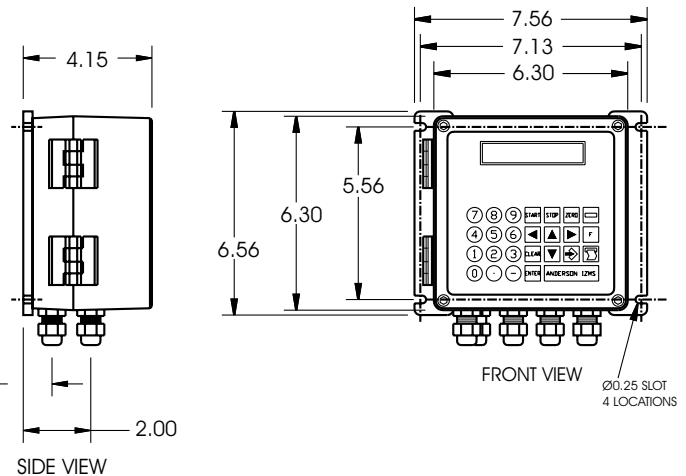
Flow Ranges

Connection Size	Total operational range	Metering accuracy at rate	
inches	gallons per minutes	< 1%	<.25%
3/4	.11 - 26.4	>.11 gpm	>.26 gpm
1	.26 - 88	>.26 gpm	>1.0 gpm
1 1/2	.44 - 132	>.44 gpm	>1.8 gpm
2	.88 - 286	>.88 gpm	>3.5 gpm
2 1/2	1.8 - 440	>1.8 gpm	>6.2 gpm
3	2.6 - 880	>.11 gpm	>.26 gpm
4	6.6 - 1761	> 6.6 gpm	>26.4 gpm

Dimensions



Model	Sanitary Connection Size	Dimensions						Approx. Wt.
		A	B	C				
				Standard	Option 1	Option 2	Option 3	
015	1" / 3/4"	3.9"	7.9"	13.25"	9.88"	10.50"	—	11 lbs.
025	1"	3.9"	7.9"	13.25"	9.88"	—	—	11 lbs.
032	1-1/2"	3.9"	7.9"	13.25"	9.88"	—	—	11 lbs.
050	2"	5.1"	9.1"	13.25"	9.88"	—	—	17 lbs.
080	3"	6.5"	10.4"	13.25"	9.88"	—	—	26 lbs.
100	4" *APV FLANGE	7.5"	9.1"	11.67"	—	—	13.67"	34 lbs.



NOTE: All dimensions in inches

Order Information

IZMS

025	FLOW TUBE	1" Flow Tube	0	COUNTRY	US
032		1-1/4" Flow Tube	C		Canada
050		2" Flow Tube	0	METER LENGTH	Standard 13.25"
065		2-1/2" Flow Tube	1		Optional 9.88" (Drop-in replacement for PD340 meters)
080		3" Flow Tube	3		4" Tri-Clamp® connection for IZMS100
100		4" Flow Tube	1	OPTIONS	Sealing Screws
0	DISPLAY OPTION	No Display	3		SS Term Enc., Sealing Screws
D		Display Option		ACCESSORIES	
2		Additional passive analog output with HART Communication and display		Part Number	Description
0	OPERATING POWER	24VDC		IZM-USB	USB Communication Interface
1		115 VAC 50/60 Hz			
0	CABLE	Standard 25' cable		REPLACEMENT PARTS	
1		50' cable		Part Number	Description
2		75' cable		300-26	Silicone Gasket for IZMS025
3		100' cable		300-33	Silicone Gasket for IZMS032
				300-51	Silicone Gasket for IZMS050
				300-66	Silicone Gasket for IZMS065
				300-85	Silicone Gasket for IZMS080
				300-101F	Flange Gasket for IZMS100

