Product Information - IZMS **FOOD**

"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

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
Minimum Fluid Conductivity: 5 µS / cm
Magnetic Field: DC pulsed with self-adapting adjustment

CONVERTER

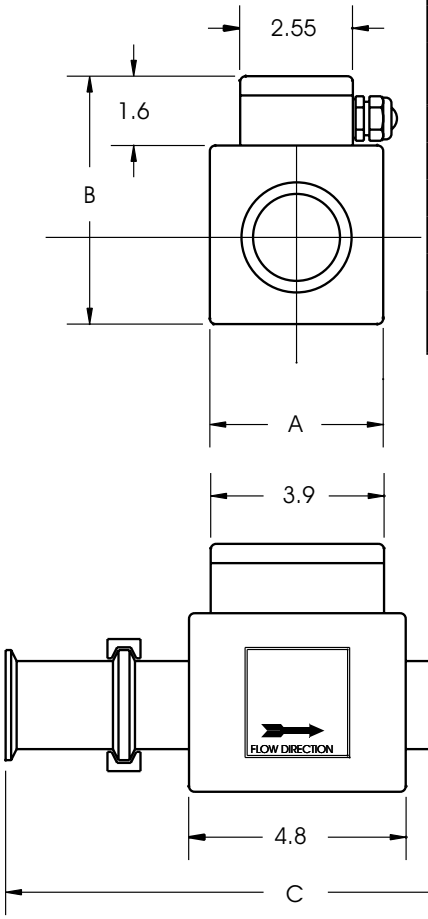
Power Requirements: Field selectable (by jumpers)
115VAC/50-60 Hz/single phase
230VAC/50-60 Hz/single phase
10-30VDC available
15VA (15 Watts)
Fuse Protection: 315mA slow response 5x20mm
Scaled Digital Outputs: Two (2) independent, scalable pulsed outputs Open collector 30V@80mA Opto-isolated
Scaling 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.

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 Contruction: 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

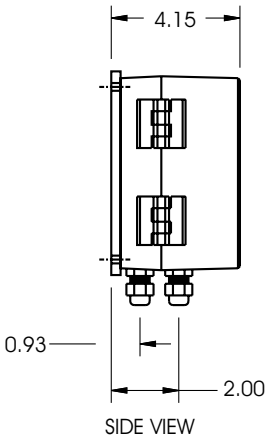
Flow Ranges

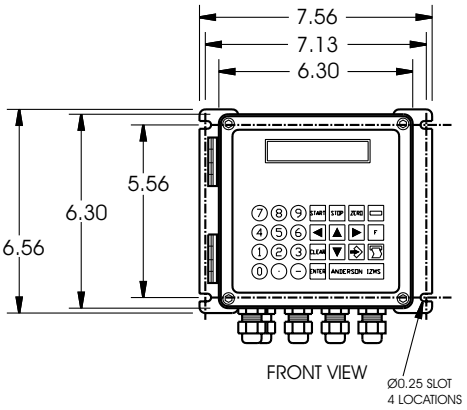
Connection Size	Total operational range	Metering accuracy at rate	
inches	gallons per minutes	< 1%	<.25%
3/4	.11 - 26.4	>.11 gpm	>.26 gpm
1	.26 - 88	>.26 gpm	>1.0 gpm
1 1/2	.44 - 132	>.44 gpm	>1.8 gpm
2	.88 - 286	>.88 gpm	>3.5 gpm
2 1/2	1.8 - 440	>1.8 gpm	>6.2 gpm
3	2.6 - 880	>.11 gpm	>.26 gpm
4	6.6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

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FLOW TUBE

025	1"	Flow Tube
032	1-1/4"	Flow Tube
050	2"	Flow Tube
065	2-1/2"	Flow Tube
080	3"	Flow Tube
100	4"	Flow Tube

DISPLAY OPTION

0	No Display
D	Display Option
2	Additional passive analog output with HART Communication and display

OPERATING POWER

0	24VDC
1	115 VAC 50/60 Hz

CABLE

0	Standard 25' cable
1	50' cable
2	75' cable
3	100' cable

COUNTRY

0	US
C	Canada

METER LENGTH

0	Standard 13.25"
1	Optional 9.88" (Drop-in replacement for PD340 meters)
3	4" Tri-Clamp® connection for IZMS100

OPTIONS

1	Sealing Screws
3	SS Term Enc., Sealing Screws

ACCESSORIES

Part Number	Description
IZM-USB	USB Communication Interface

REPLACEMENT PARTS

Part Number	Description
300-26	Silicone Gasket for IZMS025
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

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