



FLOW  
LEVEL  
PRESSURE  
ANALYTICAL  
TEMPERATURE  
INSTRUMENTATION  
PASTEURIZATION CONTROLS

## "IZMS" Electromagnetic Flowmeter

- *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; Third party verified in accordance with standard 28-03*

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 Accurate flow products, visit [www.andinst.com](http://www.andinst.com) or call our Customer Service Department directly at 1-800-833-0081.

### APPLICATIONS

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



# IZMS 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

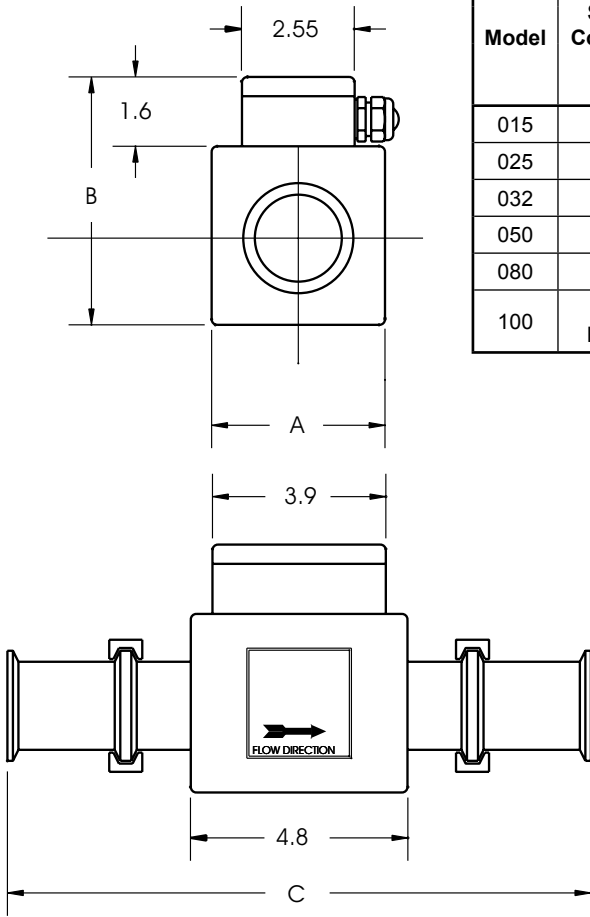
Power Requirements:	Field selectable (by jumpers) 115VAC/50-60 Hz/single phase 230VAC/50-60 Hz/single phase 10-30VDC available 15VA (15 Watts)
Fuse Protection:	315mA slow response 5x20mm
Scaled Digital Outputs:	Two (2) independent, scalable pulsed outputs Open collector 30V@80mA Opto-isolated
Scaling 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 Adjustable averaging 0.1 to 10 sec Adjustable damping 0 to 60 sec Max. resistive load 500 ohms
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
Internal 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

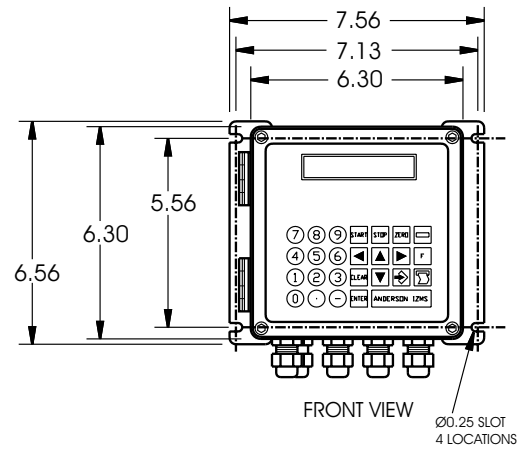
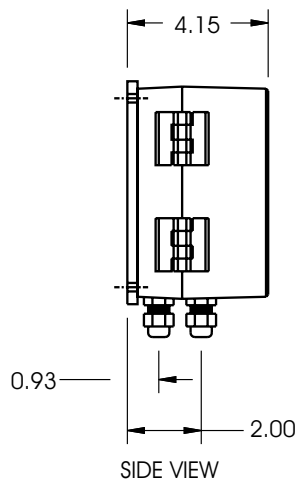
## FLOW RANGES

Connection Size	Total operational range	Metering accuracy at rate	
		gallons per minute	
inches		<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	> 2.6 gpm	> 10.6 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**

## HOW TO ORDER

**I Z M S** [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

- FLOW TUBE**
- 015 5/8" 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
  - 1 Additional passive analog output with HART Communication, no display
  - 2 Additional passive analog output with HART Communication and display

- OPERATING POWER**
- 0 24VDC
  - 1 115 VAC 50/60 Hz
  - 2 230 VAC 50/60 Hz

- CABLE**
- 0 Standard 25' cable
  - 1 50' cable
  - 2 75' cable
  - 3 100' cable
  - C Integral Electronics (no cable)

- COUNTRY**
- 0 US
  - C Canada

- METER LENGTH**
- 0 Standard 13.25"
  - 1 Optional 9.88" (Drop-in replacement for PD340 meters)
  - 2 Optional 3/4" T.C. on IZMS 015 length 10.5"
  - 3 4" Tri-Clamp® connection for IZMS100

- OPTIONS**
- 0 No sealing device
  - 1 Sealing Screws
  - 2 SS Term Enc., No Sealing Device
  - 3 SS Term Enc., Sealing Screws

### ACCESSORIES

Part Number	Description
MSD	Service Terminal Unit/ Hand-held Programmer
IZM-USB	USB Communication Interface

### REPLACEMENT PARTS

Part Number	Description
300-16	Silicone Gasket for IZMS015
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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