



Model # FS16 Electronic Transmitter

Model # FS16 is integrally mounted to our insertion probe or in-line flow element. It can provide your process flow rate, or process temperature, via a 4-20mA output. Additionally, each transmitter has (2) standard Relay Alarms that can be configured to notify the operator in order to protect your critical process equipment.

Our flow instruments are versatile enough to work across numerous flow applications, pipe sizes, and fluid types. Each unit is factory calibrated to your specific flow application and is ready for use within minutes of receipt.

FS16 Features:

- Mass Flow Meter for Liquids & Gases
- 4-20 mA Outputs for Flow or Temperature
- Insertion probe for large line sizes
- In-line style for line sizes as small as 1/4" OD
- (2) SPDT Alarm Relays (Std.), or (1) DPDT Alarm
- Field Adjustable Relay Alarms
- 10 Bar LED display Flow Indication
- Standard Micro USB Connection
- Included Software for easy field adjustments
- 316 Stainless Steel Material Standard
- No Moving Parts
- Excellent Turndown (100:1 or better)
- Temperature & Pressure Compensated
- Negligible Pressure Drop
- Numerous Process Connections
- Designed & Manufactured in the USA



Applications:

Liquid or Gas Flow Measurement, Pump Protection, Safety Monitoring, Valve & Process Monitoring, Sub-Metering

Fluids:

Gases:

All inert, clean, UHP, and non-condensing gases. Flammable, Hydrogen, Hydrocarbons, and Corrosive

Liquids:

All Types of Water (Distilled, WFI, CIP), Oils, Hydrocarbons, Glycols, and Solvents. Contact factory for others

Standard Design Specifications:

- 316SS Flow Wetted Surfaces
- Redundant Flow & Temperature Sensors on every unit
- Integrally mounted electronics
- 10 Bar LED Flow Indication
- (2) SPDT 10 Amp Relays
- Internally Powered 4-20mA output
- Micro - USB connection for Software updates
- 110 VAC or 24 VDC Powered Device

Process Connections:

Compression, Tube Ends, MNPT, Flange, VCR, VCO, Tri-Clamp, Others available upon request

Material of Construction:

316SS (Std), Hast-C, Tantalum, Titanium, Monel, others available upon request

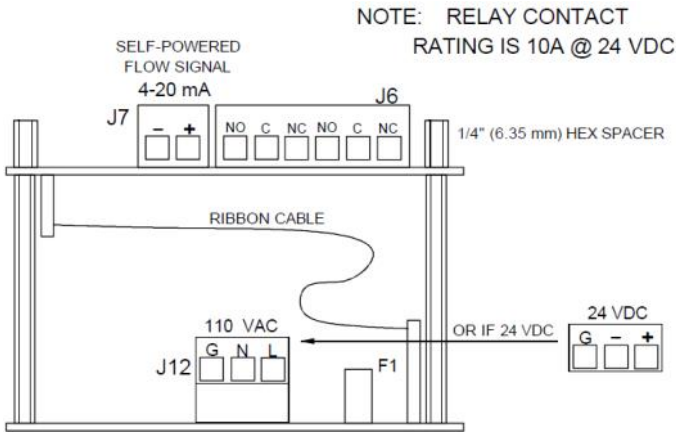
Standard Installation Requirements:

10 pipe diameters before meter and 5 pipe diameters after meter without any piping changes. If you cannot meet these requirements, contact factory as other options may be available.

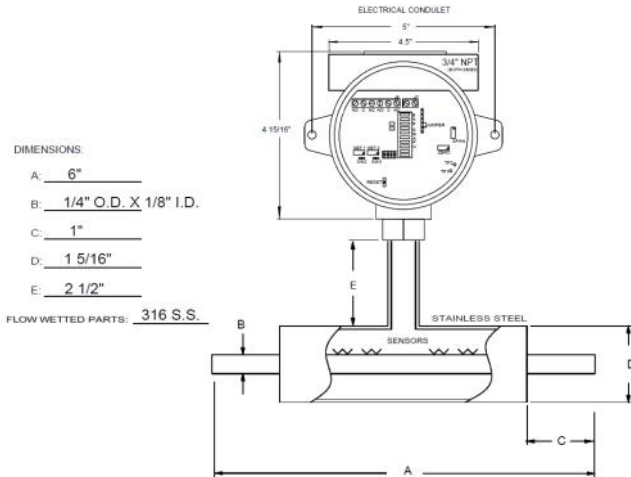
Thermal Instrument Mass Flow Meters

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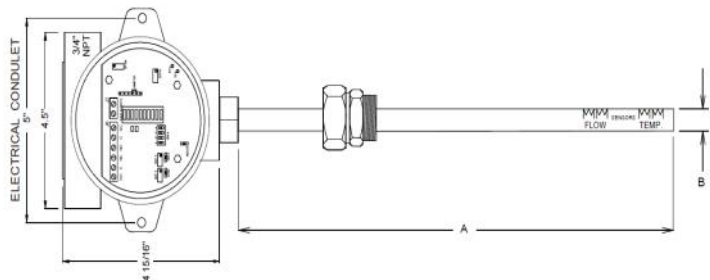
Wiring Guide:



In-line Flow Element w/ FS16 Transmitter Example



Insertion Probe w/ FS16 Transmitter Example



DIMENSIONS:

- A: 9", 14" or 25"
- B: 1/2" or 3/4"

MATERIAL: 316 SS

PACKING GLAND:

- MATERIAL: Stainless Steel
- INSERT: TEFLON
- THREADS: 3/4" NPT

Engineering Specifications:

Accuracy:	±0.50% of Full Scale or 1% of reading under 20% of flow range
	Process Fluid Temperature Span -40—400°F
Repeatability:	± .20% of Rate
Response Time:	Gases—1 to 2 Seconds Liquids— < 500ms.
Mass Flowrates	Gas 40—50,000 SFPM Liquid .02—20 FPS
Temperature Capabilities:	-40—350°F (Std) , -40—175°C (Std.) Optional High Temps to 500°F (260°C)

Electronics Specifications (Integral) :

Display	10 Bar Led Flow Indication Alarm 1 LED, Alarm 2 LED
Power	24 VDC, 1 Amp
Output	4-20 MADC Flow (Optional) 4-20 MADC Temperature (Optional)
Alarm Type	(2) Ea. SPDT 10 Amp Relay or (1) Ea. DPDT Relay when specified
Set Points	(2) Ea. Adjustable Potentiometers & Software Configurable
Hysteresis	Adjustable between 1—5% with PC interface
PC Interface	Via USB Micro Cable
Enclosure Specifications:	
Cast Aluminum, Epoxy painted with window	
Connection	3/8" FNPT Power & Signal
Ratings	FM, CSA, Atex, Nema 4x, Explosion Proof, Class I, Div 1 Groups A, B, C, D. Class II , Group E, F, G

Approvals & Certifications:

Directives: 2014/30/EU, 2011/65/EU + EU 2015/863



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