Alarm & Sensor Options



Inductive Ring Sensor

Inductive ring sensors are designed to be used with a remote intrinsic safety barrier/switch isolator. These sensors are able to detect the metal float by producing an electromagnetic field within the ring. Ring sensors are available in either proximity or latching format for the <u>7400 Series</u>.



Sensor Specifications

Power Supply: 5-25 VDC (from Switch Isolator)

Max Current, Target Present: 1 mA

Max Current, Target Absent: 15 ma

Temperature Limits: -14° F to +158° F

Output: NAMUR

Repeatability: 0.01 mm

Switching Frequency: 2 kHz (.125"), 1.5 kHz (.25")

Sensor Approvals:

UL Listed: General Purpose
FM Approved: Intrinsically Safe
CSA Certified: Intrinsically Safe
Cenelec: Intrinsically Safe

Float/Sensor Compatibility

Туре	Tube Size	Tube Material
Proximity	.12"	SS, CB
Proximity	.25"	SS, CB, TT
Latching	.125"	SS, CB
Latching	.25"	SS, CB, TT

Inductive Slot Sensor

Like inductive ring sensors, slot sensors are 2-wire, DC, low-current devices and are designed to be used with a remote intrinsic safety barrier/switch isolator. Single or dual slot sensors are available for the <u>7710 Series</u> and <u>7720 Series</u>.



Sensor Specifications

Power Supply: 5-25 VDC (from Switch Isolator)

Max Current, Target Present: 1 ma

Max Current, Target Absent: 15 ma

Temperature Limits: -14° F to +212° F

Output: NAMUR

Repeatability: 0.01 mm Switching Frequency: 2 kHz

Sensor Approvals:

UL Listed: General Purpose
FM Approved: Intrinsically Safe
CSA Certified: Intrinsically Safe
Cenelec: Intrinsically Safe

Fiber Optic Sensor

The fiber optic sensor is housed in a junction box attached to the side of a <u>7400 Series</u> flowmeter. The sensor uses a pair of fiber optic cables, an emitter and receiver to transmit the light across the metering tube and back to the sensor. If the light beam is blocked by the float, the sensor output will change. The sensor provides a transistor output that switches the common or negative voltage (NPN) or positive voltage (PNP) to the load. The fiber optic sensor is compatible with all <u>7400 Series</u> float types



Sensor Specifications

Power Supply: 10-30 Vdc Current Consumption: 25 ma

Temperature Limits: -14° F to +212° F

Output:

NPN (Sinking), N.O. or N.C. PNP (Sourcing), N.O. or NC

Offstate Leakage Current = 1 microamp at 30 Vdc

Output Saturation Voltage = 1 V at 10 ma DC < 1.5 V at 150 ma DC

Latching Reed Switch

A latching reed switch is available for all <u>7310</u>, <u>7330</u>, <u>7610</u> and <u>7910 Series</u> flowmeters. The switch is reed type and uses a biasing magnet to create a latching feature. The switch is classified as a simple apparatus by UL, FM, etc. and may be suitable for hazardous use when connected to an intrinsic safety barrier. Check your local electrical code for wiring specifications.



Switch Specifications

Switch Type: SPDT

Max Contact Voltage: 100 Vdc Max Contact Current: 0.2 A Max Contact Power: 4 W Breakdown Voltage: 200 Vdc

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