Inductive Ring Sensor alarm available for 7430, 7440 Series



7440 with Inductive Ring Sensor

INDUCTIVE RING SENSOR

7440 Series flowmeters with metallic floats can be ordered with an inductive ring sensor that is able to detect a predetermined rate of flow and is compatible with stainless steel or Carboloy floats only.

Inductive ring sensors are 2-wire, DC, low current devices and are designed to be used with a remote intrinsic safety barrier /switch isolator. Sensors are available as either proximity or latching devices. The sensor can be positioned to trigger at any point on the scale. It is able to detect the metal float by producing an electromagnetic field that senses the float within its sensing zone.

The inductive sensor connects to a barrier/switch isolator which powers the sensor and provides the desired switching option. Barrier/switch isolators are available with 220VAC, 110VAC or 24VDC supply voltage requirements, contain single pole double throw (SPDT) relays, and are DIN rail mountable. See barrier/switch isolator specifications for electrical connections and further details.

Maximum operating temperature 40° C for 1/8" float; 70° C for 1/4" float.

Note: We can supply the safety barriers/switch isolators upon request. User must provide the power supply voltage.

INDUCTIVE RING SENSOR ELECTRICAL SPECIFICATIONS		
Туре	Inductive Proximity or Latching	
Supply Voltage	5-25V DC (Switch Isolator)	
Output	NAMUR	
Output Load Current	<=1 mA – Float Present >= 3 mA (15 mA max) – Float Absent	
Switching Frequency	2 kHZ	
Housing Rating	IP67	
Wiring	PVC Covered, 2 Conductor, 26 AWG, 6.5 Feet Long. Brown (+), Blue (–)	
Pepperl & Fuchs Ring Sensor Approvals	UL: General Purpose FM: Intrinsically Safe CSA: Intrinsically Safe CENELEC: Intrinsically Safe	
Electrical Connections	See barrier/switch isolator specifications for details.	

FIBER OPTIC SENSOR

The fiber optic alarm sensor is an available option for all 7440 Series flowmeters and is compatible with all float materials except sapphire. The sensor is used to detect a predetermined rate of flow. The sensor can interface directly to a Programmable Logic Controller (PLC) or when connected to a separate relay can trigger a local or remote alarm.

The fiber optic sensor is mounted in a junction box attached to the side of the flowmeter. The sensor uses a pair of fiber optic cables, an emitter and receiver, to transmit the light generated by the sensor. Note: Maximum operating temperature 131° F.

FIBER OPTIC SENSOR ELECTRICAL SPECIFICATIONS

Supply Voltage	10-30 VDC
Supply Current	25 mA
Output	NPN Sinking, N.O. & N.C. PNP Sourcing, N.O. & N.C.
Output Rating	150 mA Max Total Load
Output Response Time	1ms
Off State Leakage Current	1 MICOAMP @ 30 VDC
Output Saturation Voltage	< 1 V at 10 mA DC < 1.5 V at 150 mA DC
Repeatability	0.25 ms
Housing Rating	IP67; NEMA 6
Operating Temperature	-5° to +131° F