

Electronic Signal Transmitting Registers

Impulse Contactor

Description

Non-Explosion Proof Type for Sensus SR, Turbo, Compound and Propeller Meters

The Impulse Contactor Register provides contact closures to open or close an electrical circuit at pre-determined intervals proportional to the volume measured by the water meter (Example: One (1) contact closure every ten (10) gallons).

The Impulse Contactor Register is a separate, magnetically coupled, permanently hermetically sealed unit, mounted on an adapter register for use with a Sensus SR, Turbo, propeller or compound type cold water meter. The Impulse Contactor Register is bayonet fitted to the register and is retained with a seal screw.

The electrical connection is made with three terminal screws located under a plastic waterproof cover on top of the Impulse Contactor Register. The waterproof connector has O-ring seals to provide protection from moisture for those applications where it is necessary to install the water meter in high humidity or "wet" environments.



Features

APPLICATIONS

The Impulse Contactor can be used to operate many electronic and electromechanical instruments requiring a low frequency switch closure input. Examples are electronic and electromechanical counters, totalizers, and recording printers; additive injecting equipment and activators to control pumps, valves and alarms.

CONNECTING CABLE: Belden #8760 or equivalent 2-conductor shielded cable is required when used with ACT-PAK instrumentation.

Maximum outside diameter of the cable should be .156 inches (4mm) to effect a watertight seal at the register.

Maximum cable length between the IC Meter and ACT-PAK instrument is 1000 feet (300m) (117 volt AC Power is required at the ACT-PAK instrument location). Longer distances require a Sensus Repeater or tone equipment.

ENVIRONMENTAL OPERATING LIMITS

The Impulse Contactor Register is designed for use in nonexplosive atmospheres. Flooded pits and high humidity atmospheres will not affect the operation of the Impulse Contactor when properly installed.

WATERPROOF CONNECTOR INSTALLATION

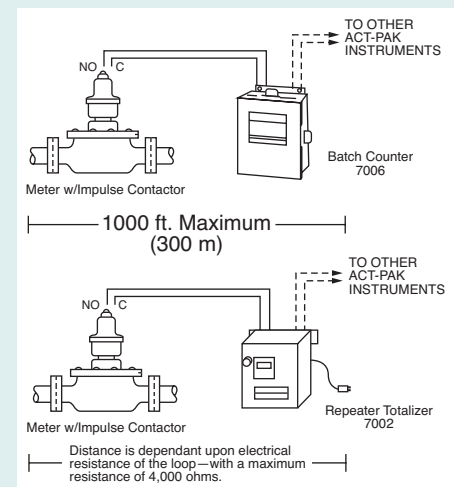
ASSEMBLY: Thread the packing unit, grommet, washer, (Two washers are normally supplied; use only the washer to fit the appropriate connecting cable.) and cover onto the connecting cable. Place the O-ring on the large diameter step of the register housing. Attach the connecting wire ends to the designated screw of the terminal strip. Fill the cover with silicon grease. Install the cover with the two (2) seal screws. Thread and tighten the packing nut (grommet and washer) into the cover securely. To avoid excessive strain on the seal screws, hold the cover at the flats while tightening the packing nut.

DISASSEMBLY: Before removing the seal screws, remove the packing nut. To avoid excessive strain on the seal screws, hold the cover at the flats while loosening the packing nut. To remove the cover, the packing nut must be pulled up the cable several inches. This prevents strain damage at the terminal connections.

SPECIFICATIONS

SWITCH TYPE	Single pole, double throw (Form C) dry contact switch operated by rotating cam.
SWITCH OUTPUT	One contact operation per specified unit quantity.
CONTACT RATING	24 Volts DC: 2 amps resistance 125 Volts AC: 2 amps resistance
CONTACT ACTUATION TIME	100 milliseconds minimum at meters' maximum flow rate (i.e., N.O. Circuit: contacts closed 100 msec. minimum)
CONTACT PROTECTION	On inductive load applications, suitable electrical suppression should be provided for contact protection. When used with ACT-PAK instruments, external contact protection is not required.

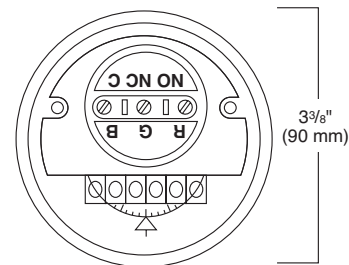
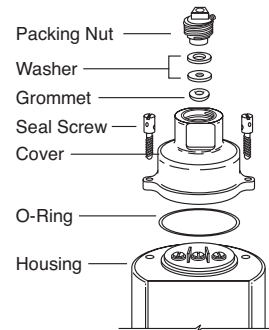
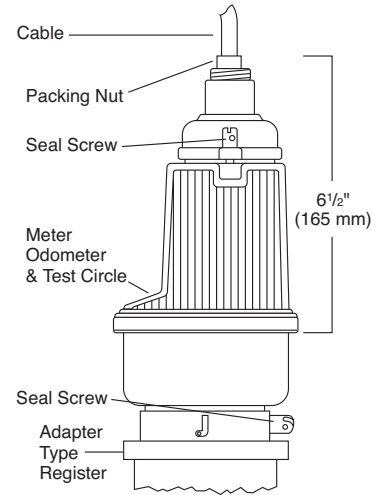
Typical View



Meter Size/Type	Volume Per U.S. Gallons ¹	Contact Closure ² Cubic Feet	Cubic Meters
SR Meters 5/8" (DN 15mm), 3/4" (DN 20mm), 1" (DN 25mm)	1, 2, 5, or 10	.1, .2, .5, or 1.0	0.001 (5/8" only) 0.01, 0.05, or 0.1
1-1/2" (DN 40mm) & 2" (DN 50mm)	10, 20, 50 or 100	1, 2, 5, or 10	0.01, 0.05, 0.1, or 1.0
Magnetic Compound Meters 2" (DN 50mm) & 3" (DN 80mm)	10 & 100	1	1.0
4" (DN 100mm) & 6" (DN 150mm)	100	10	1.0
Turbo Meters W-160 DR 2" (DN 50mm) W-350 DR 3" (DN 80mm)	100	10	1.0
W-1000 DR 4" (DN 100mm) W-2000 DR 6" (DN 150mm)	1,000	100	1.0
W-3500 DR 8" (DN 200mm) W-5500 DR 10" (DR 250mm)	1,000	100	10.0
W-10,000 DR 10" (DN 400mm)	10,000	1,000	10.0
Propeller Meters 3" 4" 6", 8", 10", 12", 14", 16", 18" 20" 24" 30" 36" 42", 48", 54", 60", 66", 72"	100 1,000 1,000 1,000 10,000 10,000 10,000 10,000 10,000	10 100 100 1,000 1,000 1,000 1,000 1,000	1m ³ 1m ³ 10m ³ 10m ³ 10m ³ 10m ³ 10m ³ 10m ³

¹ Gallon registration is applicable to both U.S. and Imperial quantities.

² If volume values other than those obtainable from an Impulse Contactor are required, a Hi-Speed Pickup Register should be used. Refer to Product Bulletin E-1116.



Terminal Connections
 R Normally Open (NO)
 G Normally Closed (NC)
 B Common (C)

WHEN ORDERING SPECIFY

1. Size of the meter and type of pipeline connection, if other than U.S. Standard
2. Units of Registration
3. Connection or companion flanges, if required.

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