

Mechanical Scalable Transmitters

Models PM5 and MS-E5XP

DESCRIPTION

The PM5 and MS-E5XP models are pulse transmitters designed to be used with Badger Meter's magnetic drive meters. The pulse transmitter provides a scaled electrical pulse signal (switch closure type) for each discrete unit of liquid volume metered. The signal is used to operate instruments and controls.

These transmitters are identical except for the housing. The PM5 transmitter has a glass filled plastic housing and a NEMA 4X rating. The MS-E5XP housing is bronze with a NEMA 4 rating.

The transmitters are available in a wide range of gear ratios and pulse rates up to 1500 contact closures per minute.

OPERATION

The flow of liquid through the meter is measured by a disc or piston metering element. The motion of the measuring element is transferred to a magnetic coupling. One of these magnets is in the measuring chamber, the other in the transmitter.

The driven magnet (inside the transmitter) then rotates a gear train and pulse magnet. As the pulse magnet turns, it causes the reed switch to open and close. Contact closures from the switch are transmitted to a remote instrument or counter which records the quantity of flow.

APPLICATIONS

These transmitters are used in metering systems that require pulse closures for recording rate of flow, quantity of flow, liquid feeding, blending and batching.

FEATURES

- MS-E5XP transmitter is explosion-proof with CSA listing for Class 1, Group D, Division I (Hazardous Locations)
- Does not require external power
- Rugged, cast bronze housing (MS-E5XP only)
- Corrosion resistant, glass filled plastic enclosure (PM5 only)
- High temperature rating: 250° F
- Watertight – NEMA 4 (bronze) or NEMA 4X (plastic) housing
- Hermetically sealed reed switch output



MS-E5XP (rear) and PM5 Transmitters

SPECIFICATIONS

Switch Rating: 1A, 50V DC and 0.28A, 180V DC general use
0.7A, 35V DC and 0.28A, 125V DC general use

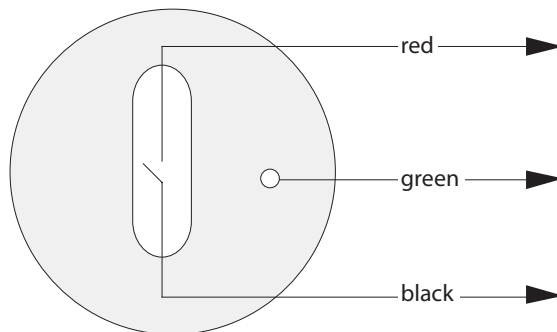
Reed Switch: Single-pole, single-throw

Duty Cycle: Approximately 50%

Operating Temperature: 250° F, maximum.

Weight: Bronze: 5 lb, plastic: 2 lb

WIRING DIAGRAM



NOTE: The green wire is a ground wire and is found only on the MS-E5XP.

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