



VEEDER-ROOT

PETROLEUM PRODUCTS

1871 PULSE TRANSMITTER



 Certified



APPLICATIONS

The Series 1871 pulse transmitter has been designed for use with gasoline pump computers and miscellaneous electrical counters in remote indicating and data systems. It provides fast, accurate pulsing for counters, printers, and stepping motors used with remote indicating, totalizing, and data systems. UL listed, CSA certified.

DESCRIPTION

The pulse transmitter chops a fixed level input voltage to form a square wave pulse with minimum contact bounce for use with transistorized circuits.

The Series 1871 pulser consists of a rugged die cast explosion-proof housing with a screw type cover for easy access to the pulsing mechanism. The transmitter utilizes a dry-reed switch, magnet, and gear train, synchronized to provide 10 pulses per revolution. Long life is a feature of this unit.

MODELS

Series 1871 — Bidirectional. Specify input shaft length from table on reverse side of this page.

SPECIFICATIONS

Specifications listed are standard unless otherwise noted. Optional features listed are available at additional cost.

Pulse Frequency: 10 cycles per revolution of input shaft.

Contact Rating: Maximum 50 VA resistive, not to exceed 250 V or 3 amperes.

Type Switch: Single pole, single throw.

Contact Resistance: 500 milliohms.

Actuating Time: 1 millisecond average.

Contact Bounce: 1 millisecond average.

Speed: 0 to 3000 pulses per minute. 300 rpm maximum input shaft speed.

RELIABLE . . . LONG LIFE

- UL listed, CSA certified.
- Square wave pulse. Minimum contact bounce.
- Choice of 1 or 10 pulses per revolution.
- Bidirectional operation.
- Mount in any position.
- Explosion proof construction.

Pulse Timing: 50% \pm 10% on, the balance off.

Mounting Position: Operable in any position, clockwise or counterclockwise rotation.

Temperature: Compensated -40° to $+160^{\circ}$ F (-40° to $+71^{\circ}$ C).

Torque: 3.0 oz-in. (216.2 g-cm) maximum.

Life Expectancy: Up to 200 million pulses, depending on electrical loads and input shaft speed.

Contact Protection: Arc suppression is required when used in inductive circuits. Type and value of suppression will vary with coil and coil voltages under consideration. Veeder-Root will be glad to specify suppression if you send your data to us.

Housing: UL/CSA, explosion-proof Class 1, Groups C and D. Cover holes provided for wire seal.

Mounting: Three $\frac{1}{4}$ - 20 NC-2 blind tapped holes spaced 120° apart on a $2\frac{1}{2}$ -inch (63.5 mm) diameter bolt circle are provided on the shaft end of the housing for mounting.

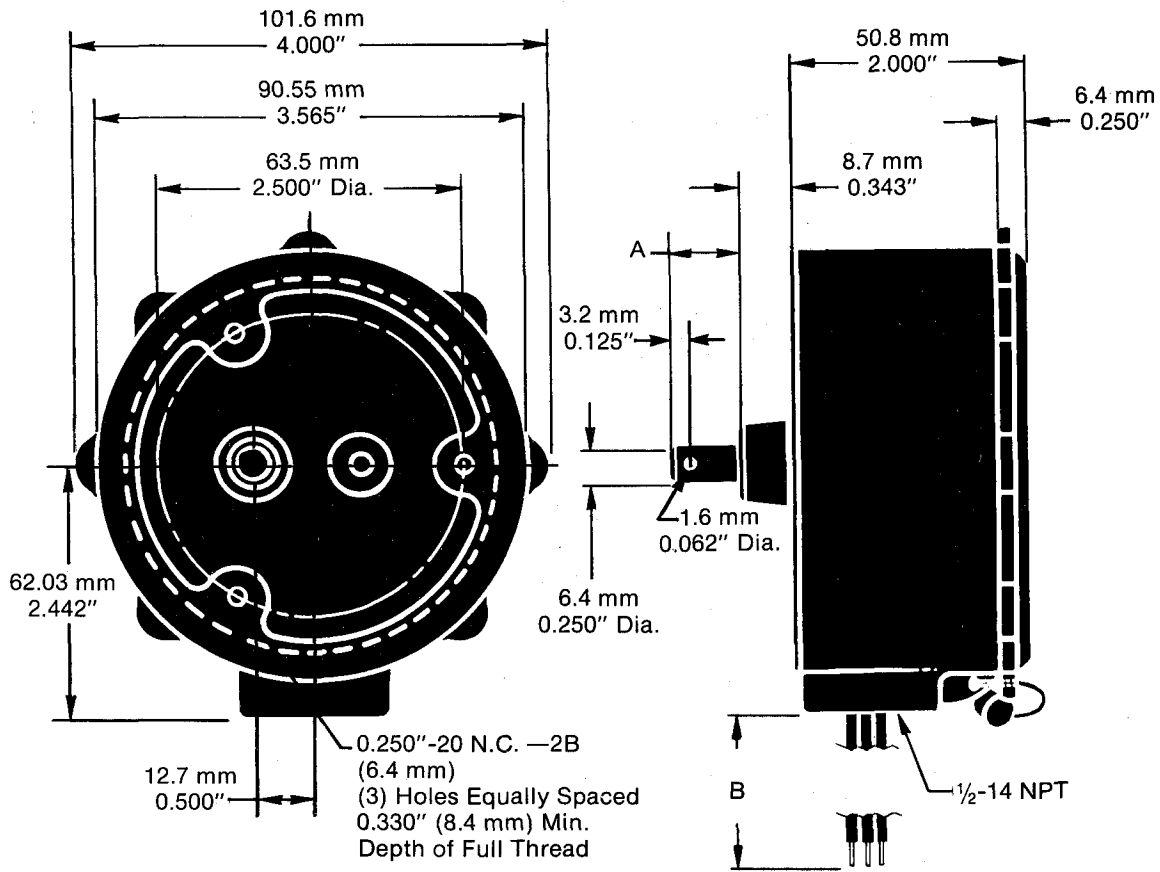
Leads: #18 AWG stranded 90° C petroleum resistant wire is soldered to the terminals of the dry-reed switch and extends through a side opening in the housing which is pipe tapped for $\frac{1}{2}$ -inch rigid conduit. A #18 AWG green ground wire is fastened to the inside of the case. Available lengths are 18, 48, and 60 inches.

OPTIONS

Standard models of the 1871 have an output of 10 pulses per revolution of the input shaft and should be so specified when ordering. Other ratios may be most economically obtained via customer supplied external gearing. The simplest method to use two spur gears — one mounted on the pulse transmitter input shaft, the mating gear mounted on the customer drive. Ratios of 1, 2, 4, 5 or 8 pulses per revolution can be obtained by special order from the factory. Also available are non-standard input shafts, lead length variations.

(See reverse side for Dimensions)

DIMENSIONS



10 Pulse Models	A	B	Shaft Cross Hole
187180-002	0.613" (15.6 mm)	18" (457.2 mm)	Yes
187180-007	1.329" (33.8 mm)	48" (1219.2 mm)	No
187180-008	2.454" (62.3 mm)	48" (1219.2 mm)	No
187180-009	0.865" (22.0 mm)	18" (457.2 mm)	No

Information for guidance only. For current specifications and dimensions, or possible modifications, let our engineers assist you.

VEEDER-ROOT 
Petroleum Products

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