



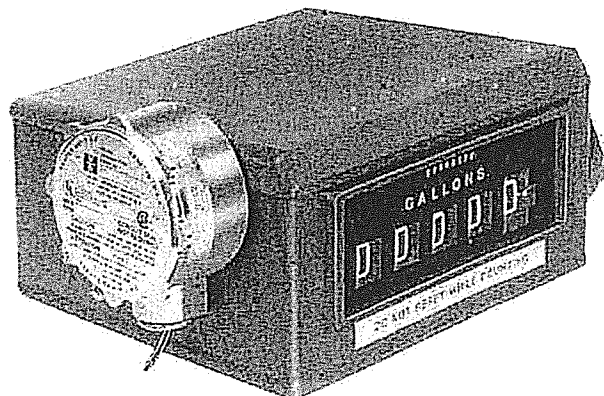
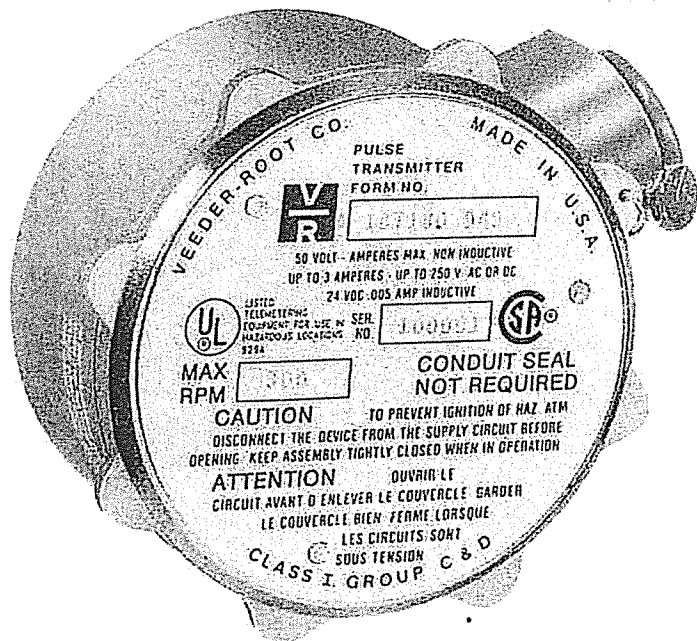
VEEDER-ROOT

PETROLEUM PRODUCTS

1871, 7697 & 7671 PULSE TRANSMITTER KITS (2 BOLT MOUNTING)

For Veeder-Root Meter Registers With Serial Number 362024 and Below

Pulsers are
UL Listed and
CSA Certified



FIELD INSTALLATION KITS WITH LONG LIFE 1871, 7697 OR 7671 PULSE TRANSMITTERS

- Designed for direct mounting on Veeder-Root Meter Registers.
- 1 pulse per revolution (1871).
- 10 pulses per revolution (7697).
- 100 pulses per revolution (7671).
- All hardware and accessories supplied. Easy-to-follow installation and adjustment instructions.

DESCRIPTION

Available in kit form for field installation, the Series 1871, 7697 or 7671 Pulse Transmitters accurately pulses electronic signals from a Veeder-Root Meter Register to a remote display or data system. The kit contains all appropriate mounting hardware and accessories needed to install the pulser on a V-R Series 7887 Meter Register with Serial No. 362024 and below.

The 1871 and 7697 pulse transmitter switches a fixed level input voltage to form a square wave pulse with minimum contact bounce for use with transistorized circuits. The transmitter utilizes a dry-reed switch, magnet and gear train, synchronized to provide 1 pulse per revolution or 10 pulses per revolution.

The 7671 Pulse Transmitter directly controls an electric current with a magnetic field, eliminating moving contacts. Two magnetically sensitive digital integrated circuits and two revolving magnetic disks with supporting hardware generate a pulse train. This pulser provides a single channel with 100 pulses per revolution.

The 1871, 7697 & 7671 Pulse Transmitters are UL listed and CSA certified for use in hazardous locations, Class 1, Groups C and D. The 1871 & 7671 Pulse Transmitters are also available as BASEEFA approved.

SPECIFICATIONS FOR 1871 AND 7697 PULSERS

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

Pulse Frequency: One Pulse per revolution of input shaft (1871) or 10 Pulses per revolution of input shaft (7697).

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 max. (1871).
0 to 6000 pulses per minute, 600 rpm max. (7697).

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

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

Torque: 3.0 oz-in. (216 g-cm) maximum.

Life Expectancy: 20 million pulses at rated load or 2 million revolutions of input shaft. 100 million at 1/2 rating with 10:1 rotation. Up to 200 million at reduced load.

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.

Sealing: Housing cover provided with holes for wire seal.

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

Electrical Leads: For use with rigid conduit 48 inches long standard, #18 AWG stranded 90° C petroleum resistant wire, Neoprene coated, are soldered to the terminals of the dry-reed switch and extend through a side opening in the housing which is pipe tapped for 1/2" rigid conduit. There is also one green ground wire.

SPECIFICATIONS FOR 7671 PULSERS

Specifications listed are standard unless otherwise noted. Optional features are available at no additional cost.

Recommended Operating Conditions:

Supply Voltage (VCC): 10 to 15 V dc, 75 mA max at 15 V dc.

Output: Dependent on load.

Switching Times: Rise Time: 2 microseconds maximum with 10 mA resistive load to ground. Fall time: 4 microseconds maximum.

Recommended Termination: See termination schematic.

Rotation: Standard is bidirectional. Optional models available with no-back feature (counterclockwise only).

Torque: 2 oz-in. maximum (144 gm-cm).

Output Pulse: Single channel at 100 ppr.

Duty Cycle: 50% ± 10% high/low ratio.

Circuit Class: For National Electrical Code Class 2 circuits only.

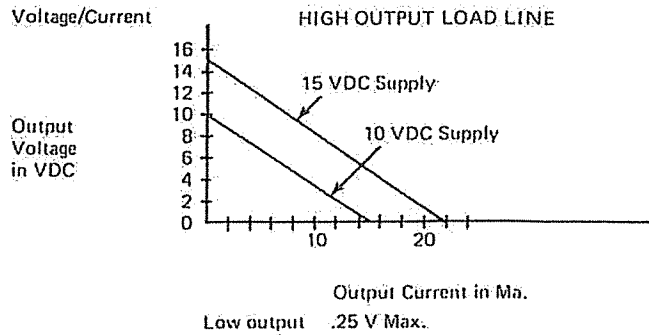
Operating Environment: -40° to +160° F (-40° to +71° C).

Housing: Explosion-proof For use in hazardous locations Class 1, Groups C and D.

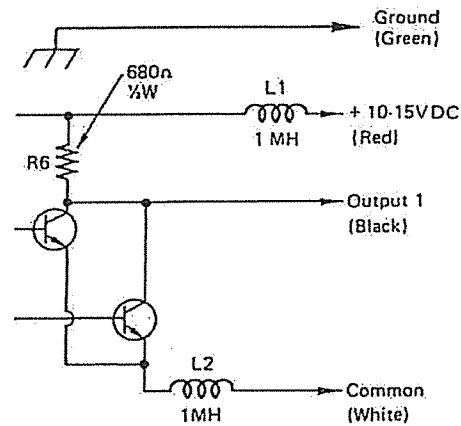
Mounting: Three 1/4-20 NC-2 blind tapped holes, spaced 120° apart on a 2.5 in. (63.5 mm) diameter bolt circle are provided on the shaft end of the housing for mounting.

Electrical Leads: For use with rigid conduit, 48 inches long, standard, #18 AWG stranded 90° C petroleum resistant wire, neoprene coated, 4 conductors.

OUTPUT CURRENT

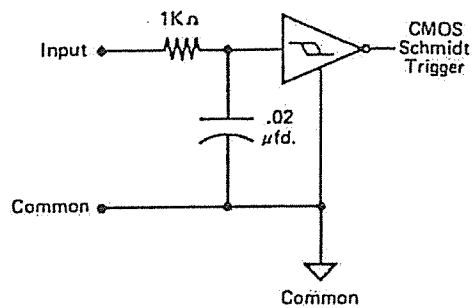
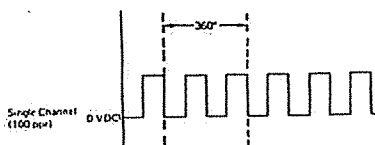


SCHEMATIC



Wiring Connections for Single Output Models.

LOGIC OUTPUT SIGNALS



Typical Termination Schematic. Network may vary depending on application.