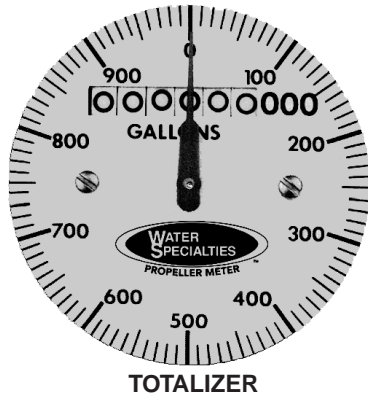




**MODEL TR01-1**  
TOTALIZER - TRANSMITTER  
SOLID STATE CONSTRUCTION  
PULSE RATE OUTPUT  
3 - WIRE CIRCUIT



**PULSE OUTPUT**

\_\_\_\_\_ PPM @ \_\_\_\_\_

Red (+) Power Supply  
White P1 (+)  
Black P2 (-)  
Shield P2 (-) or ground



**DESCRIPTION**

**MODEL TR01-1 TOTALIZER-TRANSMITTERS** provide a totalization of flow volume and a pulse rate output signal proportional to the rate of flow when mounted on our meters. The unit features a magnetically driven totalizer, and solid state construction.

**INSTALLATION** is normally made at the factory when the meter is assembled, but installation may be made in the field by removing the standard totalizer assembly, and attaching the totalizer-transmitter to the meter head. The unit is furnished complete with all screws and o-rings necessary for installation.

**CONSTRUCTION** of the totalizer-transmitter features an o-ring sealed housing conforming to NEMA 4X standards.

**TOTALIZER** is o-ring sealed and magnetically coupled with the driving mechanism, and features a six digit totalizer with a full 3" diameter, 100 division, center sweep dial that permits extremely accurate readings for timing purposes in determining flow rates. The totalizer dial can be furnished in gallons, cubic feet, acre feet, or any standard liquid measuring units. The bonnet, with padlock hasp, can be positioned in four different directions for the easiest possible reading when the meters are mounted in unusual positions.

**TRANSMITTER** utilizes an optic switch actuated by a slotted cam. The standard pulse rate output (open collector transistor output) is 10 pulses per second at the maximum flow range of the instrument that the transmitter is controlling. Other pulse rates available upon request. (1200 PPM max.) A three-lead shielded cable, 4 feet long, is furnished with each transmitter.

**O-RING SEALS** are used at all points where seals are required, making the totalizer-transmitter mechanism completely immune to any of the corrosive effects of atmospheric moisture or the liquids measured by the meter assembly.

**SPECIFICATIONS**

**ACCURACY** Pulse output: plus or minus 2.0% of actual flow within the range specified for each meter size.

**TEMPERATURE RANGE** 140° F Maximum. Consult factory for special construction for higher temperatures.

**POWER SUPPLY** Range: 10-30 VDC; nominal voltage is 24 VDC as supplied by our power supply Model IN-36-1, available separately. Max. consumption of transmitter is 30 mA.

**FLOW RANGE** Acceptable for each transmitter unit is the same as that for the meter to which the unit mounts.

**MATERIALS** Used in construction are chosen for their durability and immunity to the corrosive effects of atmospheric moisture and the liquids measured by the meter assembly.

**OUTPUT SIGNAL** The TR01-1 has four output configurations:

- 1.) npn, "open collector" type
- 2.) O-8VDC powered square wave
- 3.) npn, "open collector" type with total input/output isolation.
- 4.) O-8VDC powered square wave with total input/output isolation.

Open collector ratings:

Maximums are for signals between P2 and P1  
Voltage: 18VDC  
Current: 60 mA DC  
Power dissipation: 100 mW

Powered pulse ratings:

Output voltage amplitude = 8VDC (min.)  
Output load = 1500W (min.)  
For other voltage or load requirements, consult factory.

The maximum recommended distance for transmission of an unamplified pulse signal is 5000 feet.

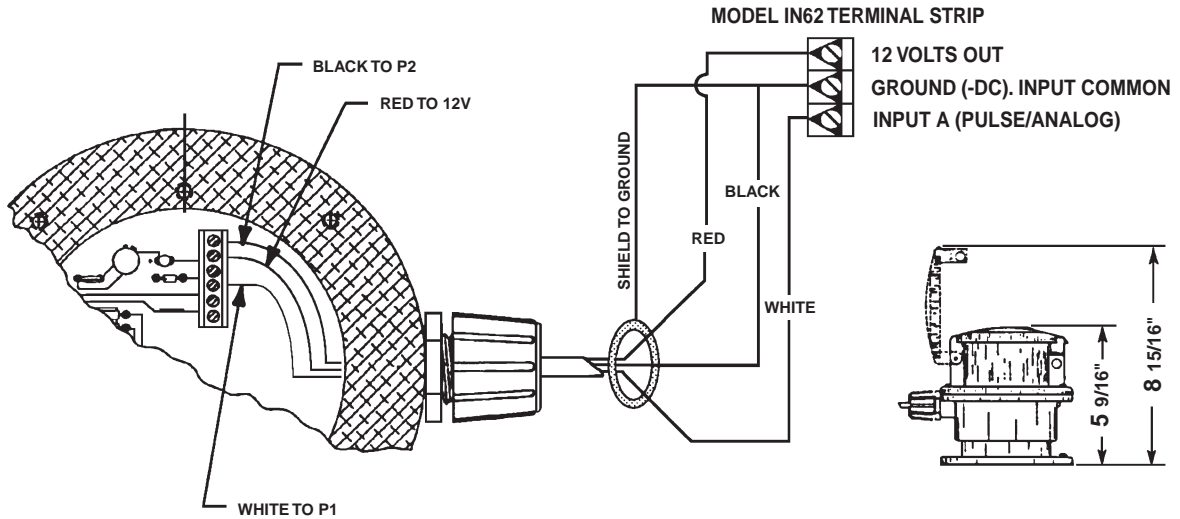
**SHIPPING WEIGHT** 4 pounds

**OPTIONAL EQUIPMENT** A non-reversing ratchet, special outputs and dual output (consult factory for special application).

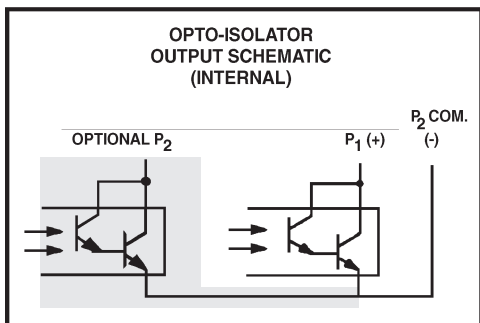
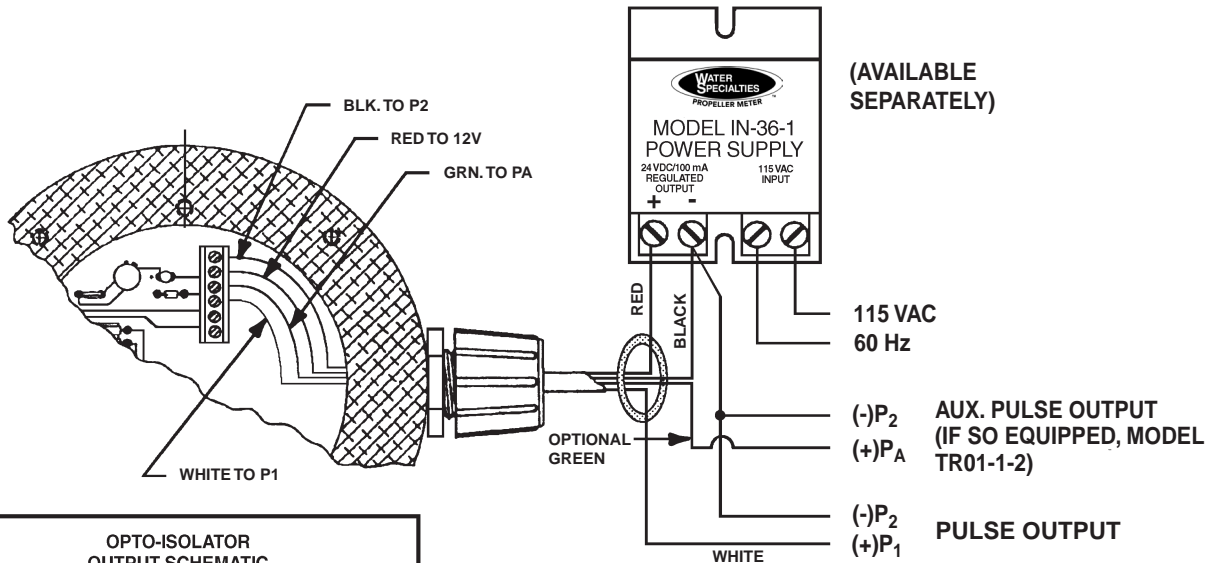
**ORDERING INFO** Must be specified by the customer and includes:  
Serial number of meter unit is to be mounted  
Maximum scale range required for pulse output  
Change gears and type of dial on totalizer that is going to be replaced

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**WIRING WHEN CONNECTED TO WATER SPECIALTIES INSTRUMENTS**



**OPTIONAL WIRING (USING SEPARATE POWER SUPPLY)**



**NOTE: MAX. CURRENT CONSUMPTION OF TRANSMITTER IS 60 mA.**