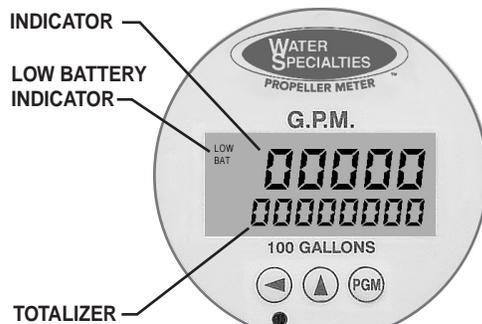




MODEL TR29-2
 INDICATOR - TOTALIZER - TRANSMITTER
 SOLID STATE CONSTRUCTION
 ONE PULSE PER TOTALIZER COUNT
 DIGITAL DISPLAYS



TYPICAL
 DIGITAL INDICATOR-TOTALIZER

PULSE OUTPUT
 One Pulse Per Count
 White (+)
 Black (-)
 Shield to ground



DESCRIPTION

MODEL TR29-2 INDICATOR-TOTALIZER-TRANSMITTERS provide a digital flow rate indication, a totalization of flow volume and one pulse output for each count of the totalizer when mounted on our electronic propeller meters. The unit features a digital indicator-totalizer and solid state construction transmitter.

INSTALLATION is normally made at the factory when the meter is assembled, but installation may be made in the field on to the electronic meter by removing the CN08-2 (or CN08) and attaching the indicator-totalizer-transmitter and adaptor to the meter head. Model TR29-2 is for installation on propeller meters. The unit is furnished completely ready for installation. An optional kit of adapters, with up to 100 feet of cable, is available to locate a TR29-2 at a remote location.

CONSTRUCTION of the digital indicator-totalizer-transmitter features a sealed housing conforming to NEMA 4X standards which has a padlock hasp. The unit uses the latest solid state components, and is completely encapsulated to protect it from moisture. The TR29-2 is driven by a solid state sensor producing 8 pulses per revolution of the propeller.

DIGITAL INDICATOR-TOTALIZER has a non-volatile EEPROM memory to store totalizer count (updated every 60 minutes while running). The indicator-totalizer will continue to function during battery changing. The indicator dial can be furnished in GPM, CFS, MGD or any standard liquid measuring units with a choice of totalizer measuring units. The display is programmable to update from 0.5 to 5 seconds, and timeout from 1 to 9999 seconds.

INDICATOR (rate) FUNCTION is a five digit indicator with .35" tall numbers, programmable with 0 to 4 decimal point places with 0.0001 to 9999 rate scaling factor. The calculation method is $1/\text{Tau}$; programmable smoothing of 0 to 99%; rate zero time of 8 seconds.

TOTALIZER FUNCTION is an eight digit indicator with .20" tall numbers, programmable with 0 to 4 decimal places, and a total scaling factor of 0.0001 to 9999. The totalizer can be reset from the front panel or disabled permanently.

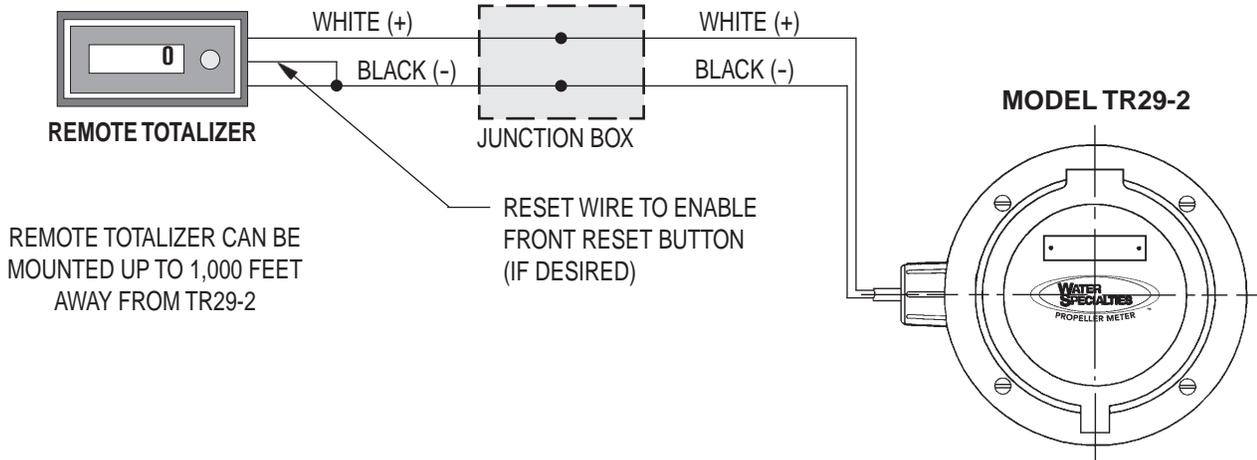
TRANSMITTER is driven by the same sensor output as the digital indicator-totalizer. The standard pulse output is an open collector type. A two lead shielded cable, four feet long is furnished with each transmitter. Transmitter will operate a Water Specialties Model IN16 up to 1,000 feet away.

SPECIFICATIONS

ACCURACY	Rate	$\pm 0.25\%$ of reading.
TEMPERATURE RANGE	Operation:	32° to 160° F.
	Storage:	-40° to 160° F.
	Consult factory for special construction for other temperatures.	
INPUT SIGNAL	Type	Voltage pulse.
	Voltage Range	1 to 10V.
	Minimum Frequency	0.125Hz.
	Maximum Frequency	3KHz.
	Minimum Pulse Width	2 μ s.
OUTPUT SIGNALS	Scaled Pulse Output:	
	Open collector MOS transistor.	
	Pulse width	32 milliseconds.
	Maximum Rating	1 to 32 V.
EMI/EMC	Electrostatic Discharge (IEC 1000-4-2 Level 3).	8KV
	Electrical Fast Transient (IEC 1000-4-4 Level 3).	1KV
	RF Susceptibility (IEC 1000-4-4 Level 3).	150 KHz to 230 MHz @ 10V
POWER SUPPLY	Battery Type - 3VDC Lithium, Replaceable.	
	Operating Life - 4 years (when used with the display timeout into sleep mode feature).	
	Low Battery Indication - 6 months before expiration.	
OPTIONAL EQUIPMENT	Remote mounting kit, with up to 100 feet of cable for remote installations.	
SHIPPING WEIGHT	4 pounds.	
ORDERING INFO	Must be specified by the customer and includes:	
	Serial number of meter unit is to be mounted on.	
	Indicator scale and units.	
	Totalizer dial units.	
	Consult factory for special applications.	

MODEL TR29-2
INDICATOR - TOTALIZER - TRANSMITTER
SOLID STATE CONSTRUCTION
ONE PULSE PER TOTALIZER COUNT
DIGITAL DISPLAYS

WIRING WHEN USED WITH REMOTE TOTALIZER



WIRING WHEN USED WITH AUXILIARY EQUIPMENT

