

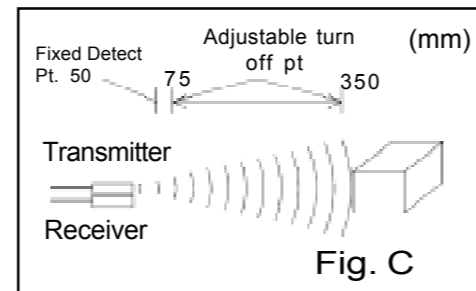
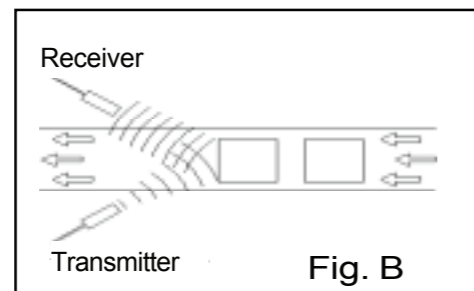
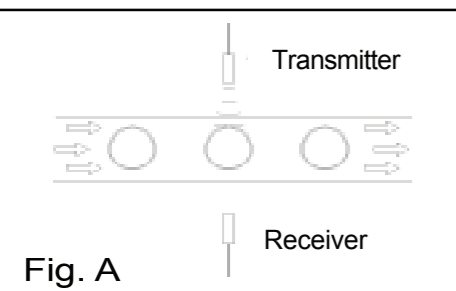
WTS/WTR-600 (Through Beam)

Features

- Self Contained
- Sensing Range 0 - 1000mm
- Operating Voltage 20 - 30VDC
- 200 counts per Second Maximum
- N.O. & N.C. Solid State Outputs
- Signal Strength LED Indicator
- Used as Thru-Beam or Reflective
- Adjustable Delay
- Adjustable Count Rate
- Adjustable Sensitivity
- PVC Housing
- Short Circuit Protected



solid red in color. When P1 is fully counterclockwise (ccw), the LED will be solid green in color. After positioning the sensors at the required distance, a typical adjustment is performed by turning P1 ccw, causing the LED to change from a solid red to a mostly red condition. The unit is now properly adjusted. To achieve greater sensitivity for smaller targets, turn P1 ccw so that the LED will be more green in color. To make the sensors less susceptible to heavy dirt build up, turn P1 cw so that the LED will be brighter red in color.



Sensitivity

Adjustable sensitivity is provided to accurately detect the distance of the target, by use of the P1 control potentiometer. To adjust, position the sensors in the desired locations. P1 should be fully counter clockwise, for the minimum sensitivity. In this position the LED will be in the green, or no detect state. Turn P1 slowly clockwise until the LED changes in color to a red yellow combination, and remains stable. In this state the sensors will provide the best detection of the desired target, and will not be affected by an adjacent target.

Delay

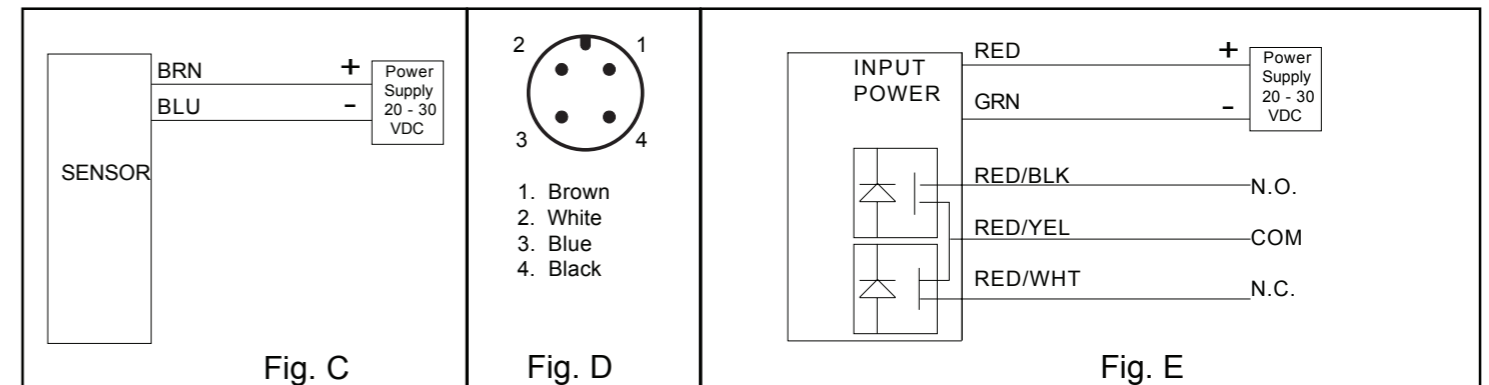
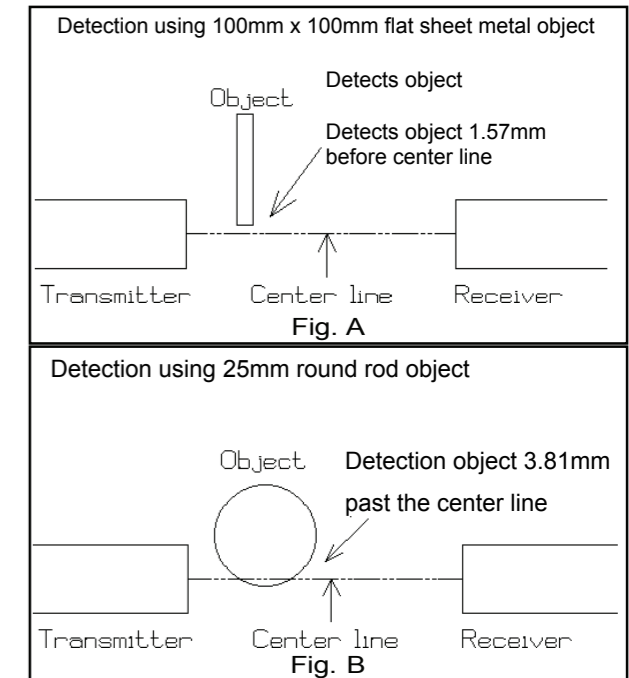
Adjustable delay is provided to vary the response of the solid state relay outputs, in relationship to time or the count rate of a moving target, by use of the P2 control potentiometer. P2 fully counter clockwise provides the fastest response time, and P2 fully clockwise provides the slowest response time. See the specification page under Response Time and/or Count Rate for more detail. The adjustment is performed simply by turning P2, counter clockwise (faster) or clockwise (slower), to respond appropriately to the speed of the targets moving past the sensors detection point.

Thru-Beam/Reflective

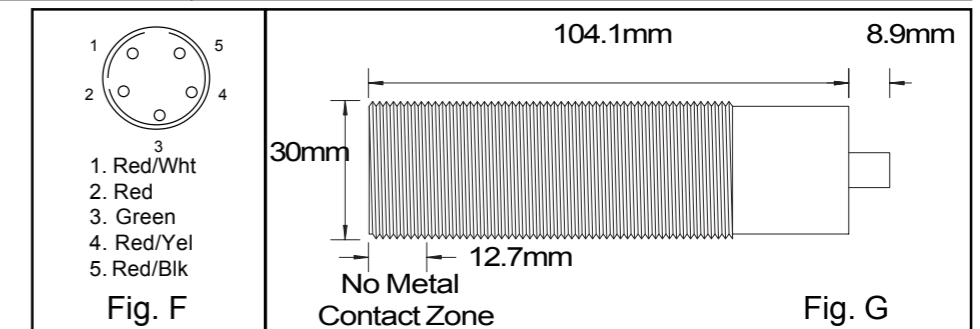
Figure A shows the transmit and receive sensors mounted for a Thru-Beam application. Figures B and C show the transmit and receive sensors mounted for a Reflective application. The WTS/WTR-600-1000QD sensors can be used effectively for both sensing applications. The adjustment procedures for sensitivity, delay, and count rate, pertain to both the Thru-Beam and Reflective type of mounting or sensing applications.

Specifications:

- Operational Range: Adjustable 0 - 1000mm
- Input Power: 20 - 30VDC
- Input Current: WTS-600 is 45mA, WTR-600 is 20mA
- Ambient Temperature: 0 - 60°C or 32 - 140°F
- Humidity: 0 - 95% Non-Condensing
- Transducer Frequency: 150kHz
- Minimum Target Size: Adjustable Sensitivity (use control P1)
Maximum Sensitivity (P1 full cw)
Reflective - 1/200mm dia. Rod Minimum
Thru-Beam - 1/400mm dia. Rod Minimum
- Response Time: Adjustable Delay (use control P2)
ON: 2ms min(P2 full ccw) to 200ms max(P2 full cw)
OFF: 3ms min(P2 full ccw) to 200ms max(P2 full cw)
- Count Rate: Adjustable (use control P2)
Minimum: 3 per second (P2 full cw)
Maximum: 200 per second (P2 full ccw)
- Output: 2 Solid State Relays, 1 N.O. - 1 N.C., 2 to 130 Volts AC or DC, 100mA DC Continuous or 50mA AC Continuous, Short Circuit Protected
- Housing Material: PVC with PVC sensing face
- Enclosure: NEMA 1, 4, 6P, 12, and 13
- Weight: 226g total per pair (113g each)



- Figure:
 A - Beam Spread
 B - Beam Spread
 C - Wiring Diag. for WTS
 D - QD Connector WTS
 E - Wiring Diag. for WTR
 F - QD Connector WTR
 G - Mounting Dimensions



PART NUMBER	RANGE	DESCRIPTION
WTS-600-1000QD	0-1000mm	Transmitter with Quick Disconnect
WTR-600-1000QD	0-1000mm	Receiver with Quick Disconnect
5000118-3		4 Pin, 6 Foot Cable for WTS-600-1000QD - Sold Separately
5000118-6		4 Pin, 16 Foot Cable for WTS-600-1000QD - Sold Separately
5000116-2		5 Pin, 6 Foot Cable for WTR-600-1000QD - Sold Separately
5000116-4		5 Pin, 20 Foot Cable for WTR-600-1000QD - Sold Separately