



QTS-1710

Combustible Sensor Series

The QTS-1710 Series utilizes catalytic pellistor bead technology for the measurement of combustible gases. The standard sensor is resistant to poisoning substances such as silicones, sulfur compounds, and chlorinated compounds. It is mounted in an explosion-proof housing, which is rated Class 1, Division 1, Groups A, B, C, and D. The transmitter provides a 4-20 mA output linear to the LEL (Lower Explosive Limit) of the calibrated combustible gas. The analog transmitter operates on a power supply of 12-30 VDC in a three wire configuration, and is also mounted in an explosion-proof housing, rated Class 1, Division 1, Groups B, C and D. Test jacks are provided to monitor the transmitter signal without interrupting the output. All transmitters are calibrated using a correlation method with Methane calibration gas and detection constants as shown. Calibration with actual target gas is available upon special request; use "S" for special calibration in the options section of the ordering grid.



SPECIFICATIONS

| | |
|-------------------------------|----------------------------------------------------------------------------------------------------------|
| Supply Voltage | +12-30 VDC 125 mA maximum |
| Outputs | 4-20 mA, into 700Ω at 24 VDC (Three wire) |
| Accuracy/Repeatability | +/- 1% LEL Methane |
| Zero Drift | < 2% of range/month @ 68°F (20°C) |
| Response Time | Less than 10 seconds for a 50% FS step change Less than 30 seconds for a 90% FS step change |
| Temperature Range | -40° to 122°F (-40° to 50°C) |
| Operating Humidity | 0 to 99% RH non-condensing |
| Operating Pressure | Atmospheric +/-10% |
| Sensor Life Span | 3 to 5 years typical (under normal conditions) |
| Sensor Type | Dual element poison resistant catalytic pellistor bead |
| Mounting Height | 4 to 6' above floor (1.5 to 2.0 meters) |
| Enclosure Rating | NEMA type 4X; type 7 & 9 Explosion Proof Class 1 Div 1 Groups B,C,D; 316 series stainless steel sensor |
| Enclosure Material | Cast Aluminum, Epoxy Coated |
| Product Dimensions | (L) 10.25" (W) 4.50" (H) 3.50" |

ORDERING

Select one Gas Type (A), one Guard (B), one Adapter (C), one Duct Mount (D), one Coating Option (E) & Options (F).

| A Gas Type | | B Guard | | C Adapter | | D Duct Mount | | E Coating | | F Options | |
|------------------------------------|---------------------------------|------------------------------------------------------|--------------------------------------|-----------------------------------|----------------------------------------------------|-------------------------------------|------------------------------------|--------------------------------------|------------------------------------|--------------------------------------|-----------------------------------|
| <input type="radio"/> 0 (Methane) | <input type="radio"/> P (Guard) | <input type="radio"/> F (Remote Calibration Adapter) | <input type="radio"/> D (Duct Mount) | <input type="radio"/> W (Coating) | <input type="radio"/> X (Non-Standard Calibration) | <input type="radio"/> 1 (Acetylene) | <input type="radio"/> 0 (No Guard) | <input type="radio"/> 0 (No Adapter) | <input type="radio"/> 0 (No Mount) | <input type="radio"/> 0 (No Coating) | <input type="radio"/> S (Special) |
| <input type="radio"/> 2 (Ethane) | | | | | | <input type="radio"/> 3 (Propane) | | | | | <input type="radio"/> 0 (None) |
| <input type="radio"/> 4 (n-Butane) | | | | | | <input type="radio"/> 5 (n-Pentane) | | | | | |
| <input type="radio"/> 6 (n-Octane) | | | | | | <input type="radio"/> 7 (Hydrogen) | | | | | |
| <input type="radio"/> 8 (Gasoline) | | | | | | <input type="radio"/> 9 (Other) | | | | | |

BUILD PART NUMBER

After completing (A), (B), (C), (D), (E) & (F) from the above table, fill in the Part Number Table below. "Output, Enclosure Type and Revision (X)" are factory defaults. An example part number is offered.

QTS-171 — — — X — S — — — — — — — — 0

| | | | | | | | | | | |
|---------------|---|--------|-----------------|-----------|---|---|---|---|---|------------------|
| SENSOR SERIES | A | OUTPUT | FACTOR PROVIDED | ENCLOSURE | B | C | D | E | F | FACTORY PROVIDED |
|---------------|---|--------|-----------------|-----------|---|---|---|---|---|------------------|

EXAMPLE: QTS-1710-0-1-X-S-P-0-0-0-0-0-0