



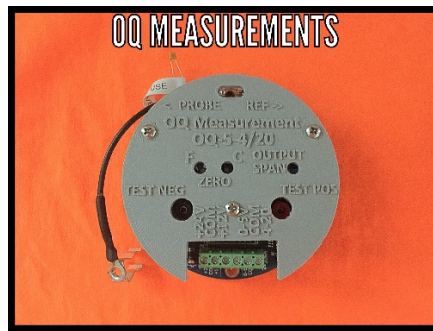
1519 Airport Rd.
Jennings, LA 70546
Office: 337-616-9755 Fax: 337-821-0087

2121 Brittmoore Rd., Suite 1000
Houston, TX 77043
Office: 713-896-8266 Fax: 713-896-8225

www.oqmeasurement.com

DETECTOR CARD

Model OQ-5-4/20



The OQ Detector Card, Model# OQ-5-4/20, comes in 0-5% BS&W with 4-20mA loop. This Detector Card is a precision replacement for the 4528 Detector and it provides superior operation when connected to the 100A Monitor and probes. The 0-5% model operates on 12 VDC only and provides a 0-5 VDC output signal, while the 4-20mA loop model requires 24 VDC. The 4-20mA loop model may be used as a 0-5 VDC output detector when connected to a 12 VDC power source.

The OQ Detector Card provides a voltage output signal in proportion to the water in an oil stream. The standard range is 0-5% water. The 4-20mA loop model includes a loop PCB that is mounted directly onto the Detector PCB. Both the loop PCB and the Detector PCB have design improvements which yield a longer performing and precise BS&W monitor.

4-20mA Loop

The loop is designed to operate when the Detector Card is connected to a 24 VDC power source. This source is usually contained in a remote power supply unit. The loop is self-powered from the Detector Card. The maximum loop resistance is 250 ohms. A shielded twisted pair cable is recommended. The shield should be grounded only at the Detector Card.

Calibration

Install the OQ Detector Card in the housing with probe. Turn on the flow of liquid through the probe. Turn on power to the OQ Detector Card and allow the flow and the Detector Card to stabilize. Make a spinout of water from the flow. For best results the cut should be less than 1%.

- A. Set the Probe/Ref switch to the probe position
- B. Using a DC voltmeter set on the 10 volt scale, insert the test leads into the test jacks on the Detector Card
- C. Rotate the Coarse Adjustment to get the voltmeter reading as close as possible to the cut
- D. Rotate the Fine Adjustment to obtain the best agreement of the voltmeter reading and the cut
- E. Set the Probe/Ref switch to Ref. position
- F. Rotate the Span Adjustment to obtain a voltage reading of 5.00 plus the cut
- G. Set the Probe/Ref switch to Probe positions and remove the voltmeter test leads

Specifications

Power: 12 VDC or 24 VDC

Output: 0-5 VDC or 4-20mA

Alarms: Open/Shorted probe. Over under range

Ambient temp: -20 to +160 F