



Anti-overflow Optical Sensor

Installation and Operation Instruction



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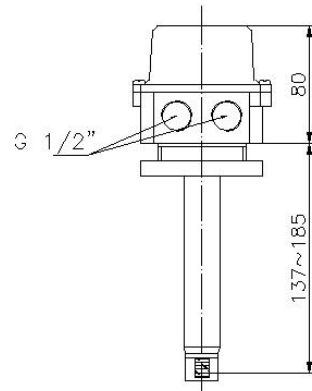
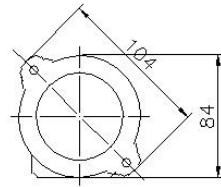
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Product Introduction

The anti-overflow optical sensor is designed for the bottom filling tank truck, which can effectively prevent liquid overflow and ensure that the electrostatic grounding resistance conforms to the safety standard, which the anti-overflow and anti-static sensor system is composed. Standard optic socket and plug are used to connect the tank truck with the oil defueling system of the oil depot, and the anti-overflow and anti-static control system of the oil depot are used to ensure the safety and environmental protection in the bottom filling process.

The anti-overflow optical sensor consists of three parts: overflow sensor, Optic socket and grounding bolt.

The overflow sensor according the optical principle to detect the liquid level in the tank compartment. It is installed on the tank truck and connected with the optic socket to provide the liquid level status signal to the oil depot anti-overflow control system and achieve the linkage control with the oil defueling system.



Product Feature

Adopt optical principle, integral design;
Easy installation and adjustment, height adjustment through locking positioning device;
Wide input voltage range, all digital circuit design, strong anti-interference ability.

Specifications

Rated Voltage: 24VDC Rated Current: <30mA
Rated Power: <1W Response Time: <1s
Operating Temperature: -40°C~60°C Relative Humidity: 5~95%
Explosion-proof grade: ExialIBT4Ga
Maximum Input and Output Parameters:
Ui:28V Ii:93mA Ci:0uf
Li:0mH Pi:0.65 W
Guard Grating Parameter:
Um:250V Uo:28V Io:93mA
Co:0.083uf Lo:4mH Po:0.65W

Installation Wiring Instructions

The anti-overflow optic sensor can be installed in two ways:

Install directly on the fitting of 2 inch NPT. 2、Tighten and install with lock washer and nut through 60mm diameter mounting hole.Gaskets shall be installed between the manhole cover plate and the sensor housing.

The position of the sensing point is adjusted by releasing the fixing screw on the side of the shell. Please adjust the position of the sensing point according to the actual use requirements, If the sensor shaft is too long, it can be removed and cut shortly by the pipe

cutter. (Pay attention to protect the circuit in the sensor shaft, the shortest shall not be less than 14cm).

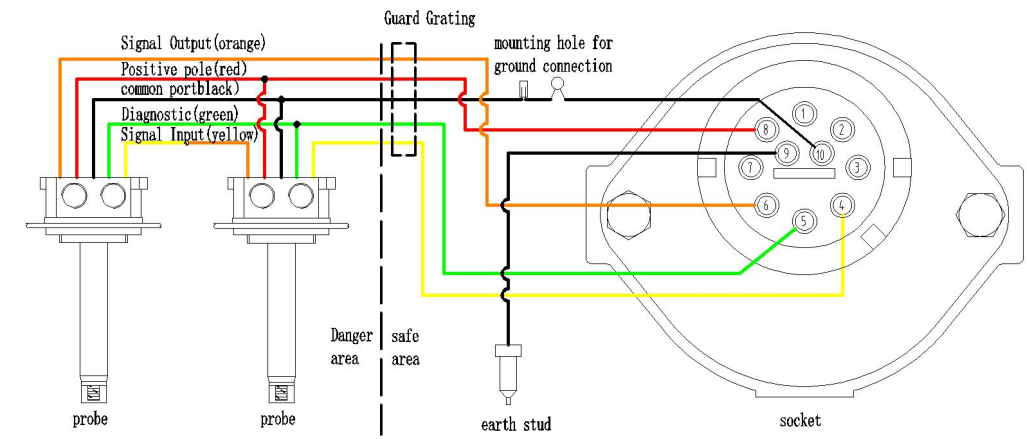
The socket of the anti-overflow optical sensor shall be installed on the same side of the tank truck, as close as possible to the position of loading and unloading equipment under the tank. Remove the socket panel during installation and fix it on the tank truck through two mounting holes of 10mm in diameter. Bolts must be fitted with anti-loose gaskets.

Wiring instructions: neoprene rubber coated multiwire cable is used for all electrical wiring. All sensor connections must be connected to two 1/2 "threaded terminals to get in or out of the sensor. If only one connection is used, use the supplied choke plug or any 1/2 " choke plug, preferably use thread sealant.

Wire the inductor according to the electrical wiring diagram. Note that the new inductor provides about 40cm of mounting wire. If the length is exceeded, the installation line can be cut to meet the installation requirements.When wiring, we should use the wiring diagram device provided by our factory.Please check all the wiring again and again to avoid any inconvenience caused by loose wiring.

After wiring is completed, install the o-ring and cover. Please operate carefully so as not to damage any lines on the o-ring and sensor.

Electrical Connection Diagram



Remark: If two sensors are installed, the same color of five wires shall be connected in the wiring socket.

Warning: the shell of the product is cast aluminum. It must be protected from ignition hazard caused by impact or friction. The product must be equipped with guard grating .