

Stedham Electronics Corporation

Application Bulletin – Sight Glass Brackets



How they work

A sight glass bracket and sensor combo may be used on existing visual tank level indicators (sight glass) or any **non-metallic** tubes and pipes. The tube can be clear, opaque, painted, or coated. It can be any diameter up to 1" (25mm).

The bracket is clamped over tube at the desired sensing location. A standard Stedham Electronics 18mm diameter Capacitive Prox sensor (sold separately) slides into the bracket and is secured with a worm clamp. Selection of the proper sensor (discussed below) depends on the fluid characteristics, and the desired voltage and output type.

The bracket and sensor combo can be used to detect liquid level at a given point. More than one can be used on the same tube to allow complete control of the liquid level. When used with a latching circuit, one combo can begin a pumping process and the other can be used to end it, for example.

The bracket and sensor combo can even be used as a flow/no flow detector when the application is a gravity system which empties when no flow occurs.

The bracket is machined to yield a very strong and rugged assembly. The material is DuPont Delrin(TM), which is resistant to a wide variety of chemicals and temperature stable within the useful range of the sensor in use or in storage conditions. The fasteners and worm clamp are stainless.

Sensor Selection

The customary decisions regarding whether AC or DC sensors, and which output combination is to be used, apply to this product family. Should you have questions concerning this, please contact us and a friendly engineer will help you select the right sensor.

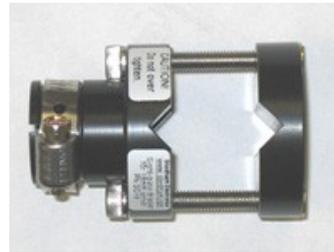
For detecting water based fluids, unshielded (L-Type) sensors are recommended. For detecting non-water based fluids, shielded (D-Type) sensors are recommended.

Installation

Attach the clamp to the desired sensing location. The tube/pipe may be clear, opaque, painted, or coated. The tube may not be metallic. Do not over-torque the clamp and damage the tube.

Slide the selected 18mm sensor into the bracket until it contacts the tube, and secure it with a worm clamp.

Trained personnel should connect the sensor wiring adhering to the appropriate local codes and regulations.



Adjustment

Apply power and verify that the green "power-on" LED is illuminated. If not, remove the power and investigate.

Place the target fluid at the desired level. If the sensor is already detecting the fluid, turn the potentiometer counter-clockwise until the sensor no longer detects.

Turn the potentiometer slowly clockwise, until the sensor switches. To add a safety factor, turn the potentiometer further clockwise (the amount of safety factor depends on the application).

Remove the liquid and verify that the sensor no longer detects.

Contact us if you have any difficulties. A friendly engineer is standing by to assist you! Thanks for buying our products!