



Scully Bio-Sense™ Two-Wire Optic Retain Sensor

Retain Sensors for Bottom of Tank Truck - Residual Product Monitoring

Featuring Dynacheck® – Automatic and Continuous Self-Checking Circuitry



Scully Bio-Sense™ 2-Wire Optic Retain Sensor

The Scully Bio-Sense™ design withstands temperature-related stresses, dramatically improving reliability across a wide operating range.

DESCRIPTION

Clean fuels have been utilized in many applications worldwide, and Scully Bio-Sense™ Retain Sensor has been built to comply with most biofuels and special blends produced from a variety of sustainable processes.

The Scully Bio-Sense™ Retained Product Sensor is designed to sense residual (retained) product in the bottom of a tank trailer compartment. It is intended for use as part of the Scully IntelliCheck® Overfill & Retained Product Monitoring System for the ultimate safety in loading/unloading clean fuels.

When properly installed at the lowest point in the compartment, using the Scully supplied weld coupling, the sensor will detect approximately 9.5mm - 12.7mm (3/8 - 1/2") of residual product in the compartment.

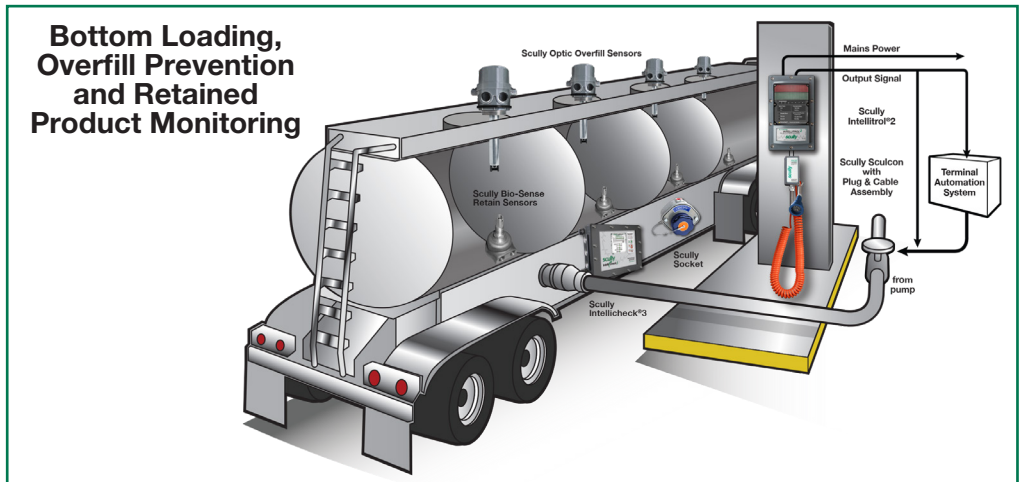
The two-wire optic retain sensor is a critical component in Scully's unique and patented Dynacheck® circuit design.

Our retain protection sensor will provide consistent failsafe monitoring when used in conjunction with Scully electronic monitoring equipment.

By constantly checking a "closed-loop" pulsing signal across the entire system, Scully ensures a safe and reliable loading operation.

When used together with the Scully IntelliCheck® Overfill & Retained Product Monitoring System, the Scully Bio-Sense™ Retained Product Sensor helps prevent product mixing and provides safety features such as 'lock-out' and a retained product acknowledge button for loading to occur.

Scully offers an industry leading warranty on these models of retain sensors. Scully sensors have the longest-running safety record in the industry and are manufactured in Scully's U.S. factory, which prides itself on its strict quality and safety standards.

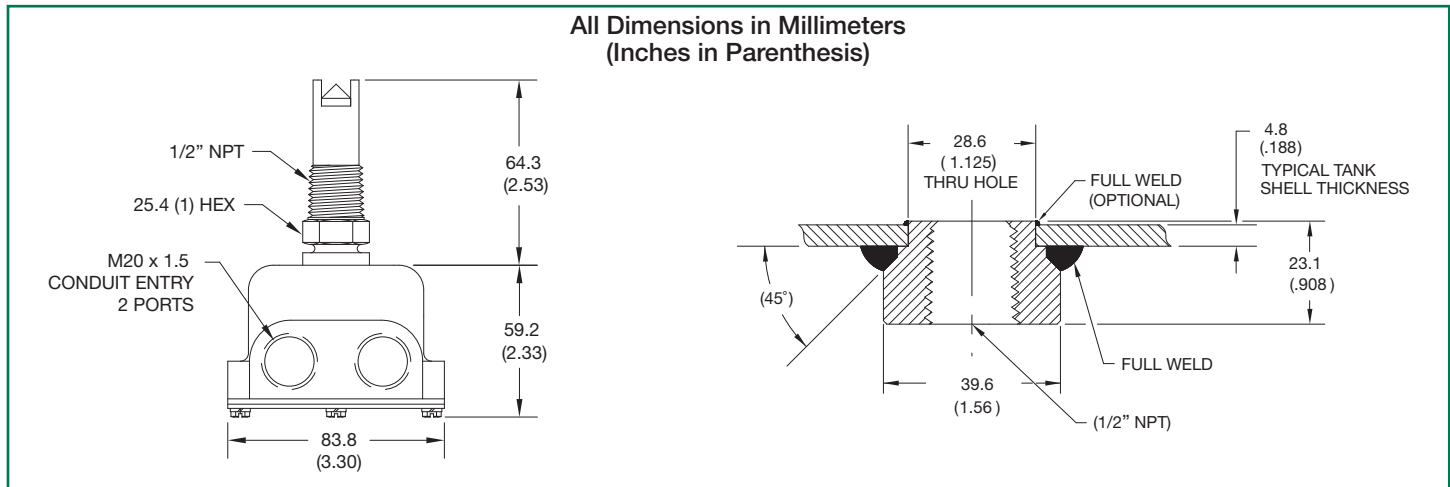


FEATURES AND BENEFITS

- Maximum safety with Dynacheck® – Automatic and continuous self-checking circuitry when used with Scully electronic rack and vehicle onboard monitoring systems.
- Scully's field-proven electro-optics latest technology using special seals for particular biofuels - First in the industry to create technology for sustainable and greener fuels!
- Detection of approximately 9.5mm - 12.7mm (3/8 - 1/2") of residual product in the compartment.
- Weld coupling material in Carbon-Steel or Aluminum.
- Instant-On™ – Instant permissive signal. No warmup time is required.
- The sensor is intrinsically safe for mounting in Zone 0 according to ATEX directive 2014/34/EU.
- Meets technical requirements according to international standards and practices/codes.



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TECHNICAL SPECIFICATIONS

Operating Temp. Range: -40°C to +60°C.
(-40°F to +140°F).

Product Range: Biofuels & Special Blends (Consult factory for specific applications). Gasoline blends and light fuel oils.

Exposed Materials: Aluminum, Borosilicate (Pyrex®) glass, Stainless Steel, Kalrez® seal (or equivalent).

Level Repeatability: ±1 mm (±1/16").

Electrical Leads: 152cm (60") long.
0.33 mm² (#22 AWG).

Cable Entry: Two M20 x 1.5 entry ports.

Detection Level: When properly installed at the lowest point in the compartment, using the Scully supplied weld coupling (or equivalent mounting), the sensor will detect approximately 9.5mm - 12.7mm (3/8 - 1/2") of residual product in the compartment.

Approvals: The sensor is Intrinsically Safe for mounting in Zone 0 according to ATEX directive 2014/34/EU.

IECEX UL 21.0114X
UL 21 ATEX 2636X
Ex ia IIB T5 (-40°C ≤ Ta ≤ +60°C)



ORDERING INFORMATION

| Model | Description | Part Number |
|-----------|--|-------------|
| SP-IR-BIO | Standard length BIO Seal Retain Sensor w/ 6061-T651 Aluminum Weld Coupling | 092000296 |
| SP-IR-BIO | Standard length BIO Seal Retain Sensor w/ Carbon Steel Weld Coupling | 092000297 |

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 **Scully Signal Company**
800 272 8559
sales@scully.com
Wilmington, MA, USA

Scully Systems Europe NV
+32 (0) 15 56 00 70
sales@scully.be
Mechelen, Belgium

Scully UK Ltd
+44 (0) 1606 553805
sales@scullyuk.com
Winsford Cheshire, UK

Scully Systems India
+91 9821799566
salesindia@scully.com
Maharashtra, India

Dynamic Self-Testing® Overfill Prevention Systems

