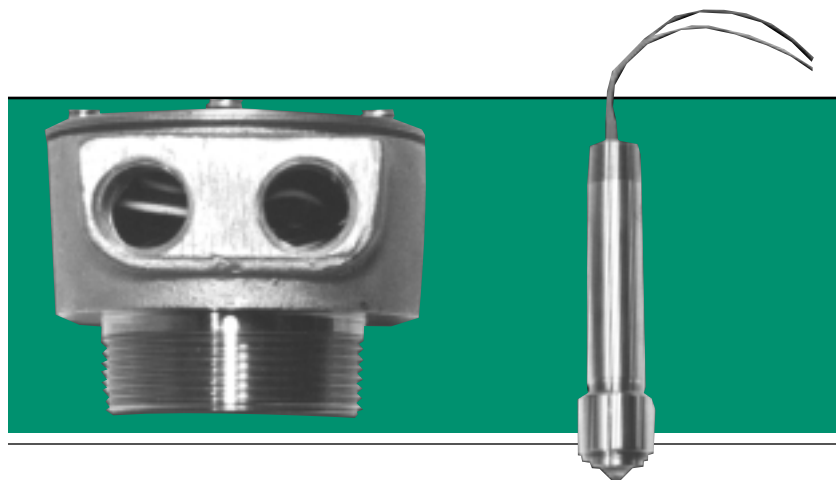# Stainless Steel Instant-On® Sensor
Liquid Level Detection and Overfill Protection for the Chemical Industry

SP-MHC (SS) Holder

SP-TO (SS) Sensor

Scully Stainless Steel Instant-On® Sensors are part of an automatic and continuous self-checking system you can count on. Scully Optic Sensors offer these advantages:

- Maximum safety with Dynacheck® - automatic and continuous self-checking circuitry - when used with Scully Rack Controls.
- Versatile point liquid level sensing in storage tanks, tank trucks and other applications.
- AISI 316 stainless steel construction used to resist corrosion.
- Functions within a wide range of ambient temperatures in a variety of liquid chemicals.
- Unequalled resistance to fogging.
- Dependable solid state construction.
- Replaceable Prism

Description

The Stainless Steel Instant-On Sensor is designed for liquid chemical overfill prevention and point level detection. It is used in storage tanks, tank trucks and other vessels during loading operations. The Instant-On Sensor uses optic sensing technology and is compatible with thermistor style control monitors.

This sensor is compatible with the ST-15 and Biclops® Rack Control Monitors, offering the safest systems available for overfill prevention.

In tank farms, multiple storage tanks are protected by using a Scully ST-15-WX, ST-12 control monitors to provide individual alarm and relay outputs for each sensing point. Compatible control monitor data sheets are listed on back.

Safety

The stainless steel Instant-On sensor incorporates Scully's unique and exclusive Dynacheck® circuitry when connected to Scully monitoring equipment. Using pulsed signals which simulate a wet or "unsafe" condition, the monitor automatically and continuously checks the entire system operation; controller, wiring, connectors and sensors, for faults 30 times per second. If liquid comes in contact with the sensor, or in the event a fault occurs, the pulsed signals cease and the monitor signals for immediate shutdown of the loading operation. No operator involvement is needed!
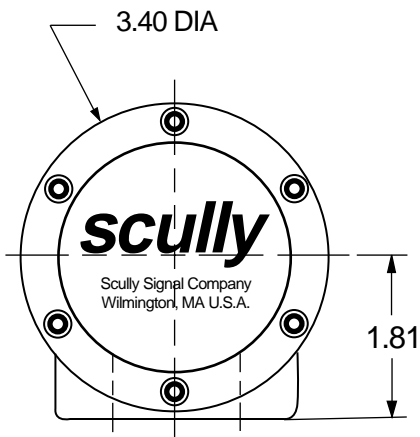
Sensor Holder

The Scully SP-MHC(SS) sensor holder is designed for mounting in a 2" NPT tapping. This allows for convenient mounting in both storage tanks and tank truck vehicles.
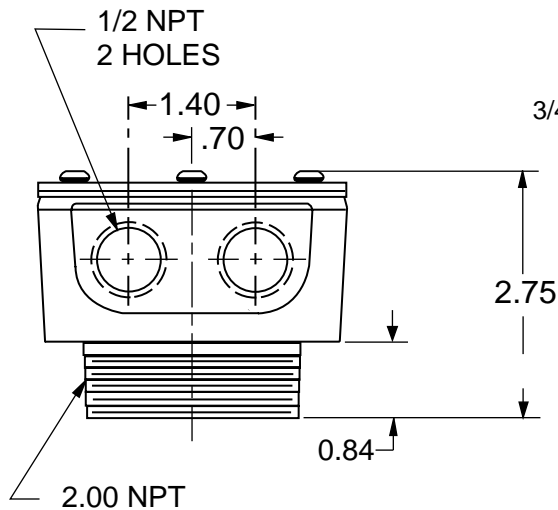The fixed-length stainless steel sensor threads into the holder. It may be extended using the appropriate length of 3/4" stainless steel pipe and a coupling. Consult Scully for assistance.
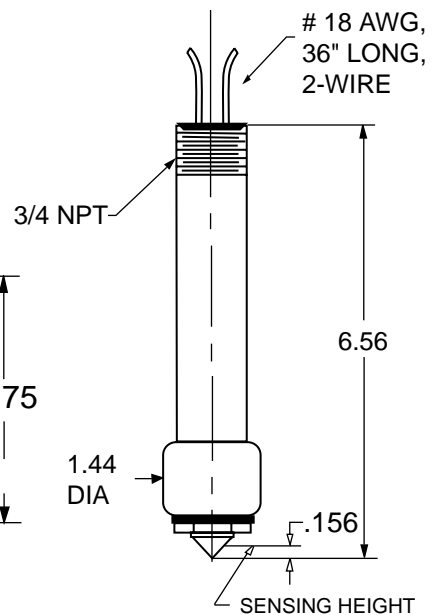
Setting New Standards In Safety

All Dimensions In Inches

18 AWG,
36" LONG,
2-WIRE

3.40 DIA

1/2 NPT
2 HOLES

1.40
.70

3/4 NPT

scully

Scully Signal Company
Wilmington, MA U.S.A.

1.81

2.75

6.56

1.44
DIA

.156

0.84

2.00 NPT

SENSING HEIGHT

SP-MHC(SS) Holder
Top View

SP-MHC(SS) Holder
Side View

SP-TO(SS) Sensor
Side View & Sensing Level

Technical Specifications

Temperature Range:	-40º to +140º F (-40º to +60º C).		Exposed Materials:	316 Stainless steel, Pyrex glass, teflon seal.
Product Range:	Group D hazardous materials and non-hazardous materials which are compatible with optic sensing technology. Consult the factory with specific questions.		Level Repeatability:	+/- 1/16"
			Electrical Leads:	Five color coded, 36" Teflon covered long leads.
			Size:	Refer to diagram.
Detection Level:	Fixed, refer to diagram. The sensor may be adjusted to any length using 3/4" stainless steel pipe and a coupling. Detection level should be set slightly above each compartment's maximum capacity level weights and measures marker.		Weight:	Sensor; 15.5 oz. (.45 kg.)
				Holder; 2.8 lbs. (1.27 kg.)
			Compatible Control Monitors:	ST-15, ST-15 WX, ST-12 Biclops, Thermistor/Optic, Intellitrol

Scully Stainless Steel Optic Sensors are approved for use in Class I, Division 1, Group D hazardous locations by factory Mutual research and the Canadian Standards Association as part of an intrinsically safe system.

Ordering Information

Description	Part #
SP-TO(SS) Stainless steel Instant-On® sensor only	08583
SP-MHC(SS) holder assembly with 3/4" NPT thread, no sensor	08585
Replacement sensor holder cap	31605
Replacement sensor holder gasket	31606

Biclops, Dynacheck, Dynamic Self-Checking, Dynamic Self-Test, Faylsafe, Intellicheck, Intellitrol, Intelliview, Load Anywhere, Maxsafety, MulteCept, Scully, Scultrol, Scul-Lock, Scul-Tel, Scul-Tite, TABS and V.I.P. are registered trademarks of the Scully Signal Company. Specifications are subject to change without notice.

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