

9840 Family Push-in RSP Sensor

Rugged plastic push-in RSP sensor for rotomolded tanks

The 9840 family of push-in RSP sensors offers a fast installation option for rotomolded tanks. The level sensor snaps into a rotomolded tank without requiring the SAE mounting adapter and bolts. This simplifies installation and reduces the cost of tanks.

Nylon construction provides a lightweight, durable sensor. A grommet provides a seal at the tank interface. The sensor has an industry standard output of 240 to 30 ohms and can be customized to meet specific application needs. The device is press-fit into a tank opening and features ribs to ensure a snug fit around the sealing area.



General Information and Features

- Nylon housing offers excellent mechanical properties and chemical resistance.
- Ingress Protection: IP67 rated.

Key Benefits

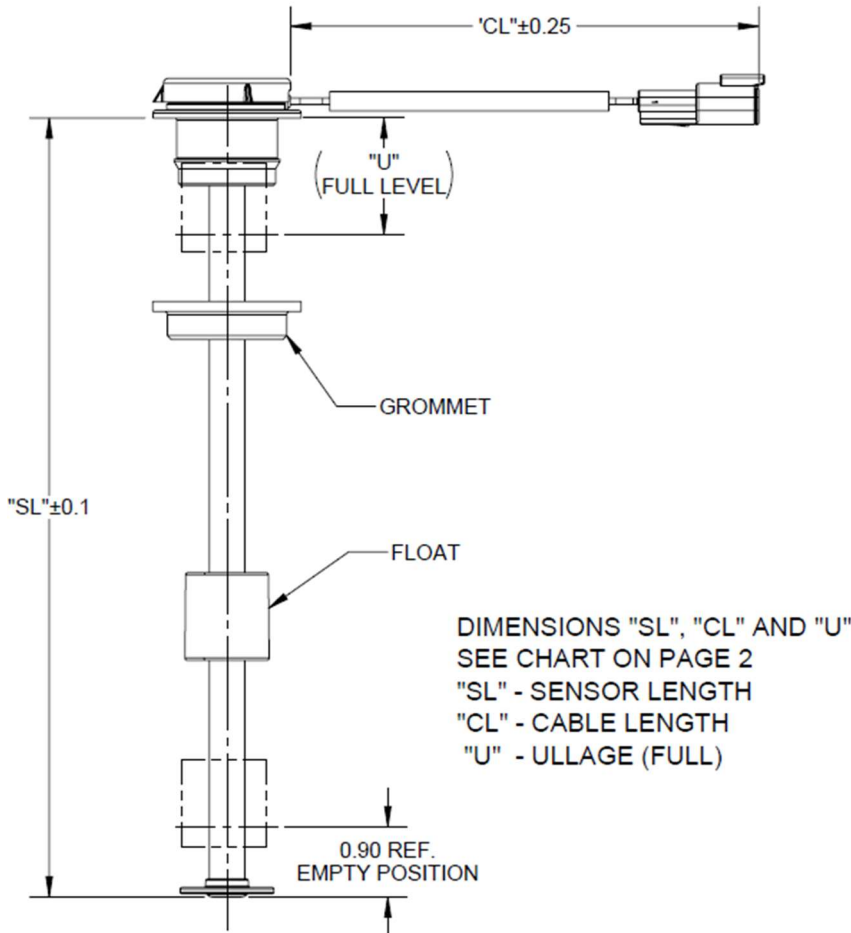
- Snap fit into tank – works with plastic rotomolded tanks.
- Compatible with existing RSP technology to simplify integration into ECU and sensors.

Tank Opening

- Recommended tank hole size 1.486" +/- .020" [37.75]
- The hole size may need to be increased or decreased depending on the tank wall thickness and manufacturing process.

Dimensions

An optional connector is shown in the illustration below. The default configuration is 12" flying leads.



Ordering Information

9840-UULLLG-CC

UU represents ullage in 0.1" increments from 1.5" to 9.9." Standard ullage is 1.5."

LLL represents overall length in 0.1" increments from 4.0" to 20.0."

G is the gasket selection, N Nitrile (standard) or V Viton

CC is an optional connector.

Blank - flying leads with 12" cable length

X1 - Deutsch DTM04-2P connector with 6" cable length

Other connector options available on request

Example part number: 9840-15095N-X1 (for 9.5" length with nitrile gasket and connector)

Electrical Interface

Parameter	Condition	Min	Typical	Max	Units
Max input voltage	V _{max}	-		15	V
Max current	I _{max}	-	-	25	mA
Signal Output Empty	R _{out}	28		33	ohms
Signal Output Full	R _{out}	237		250	Ohms
Power	P _{max}			0.5	W

Cable Pinout

- Pin 1. Signal - White
- Pin 2. Ground - Black

Environmental Ratings

Parameter	Condition	Min	Typical	Max	Unit
Operating Temperature Range	Temperature Range	-40	-	85	°C
Module Accuracy	Typical: 30 ohms +/- 2% full 240 ohms +/- 2% empty	-	<2%	-	Level
UV withstand	600 hrs., UVA-340 @.76W/m ² , 70°C	-	Pass		
Leak Test	Each unit individually tested			16 [1,1 Bar]	PSIG

Durability

Parameter	Condition
Thermal Shock / Hot Dunk	10 cycles in air, +85C to room temperature Saline
Vibration Test	6 hours per plane, 9.9 Grms, 24-2000 Hz
Salt Spray	96 hours
Drop Test	0.5 m onto concrete each orientation
Lead Pull Test	20 lbs harness, 10 lbs each wire

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