

LIQUID LEVEL SWITCH

Model L-40N/SG (PPO) & L-40VCR/SG (PPS)

Customer Specified Specific Gravity at Factory

Side and Top Mount

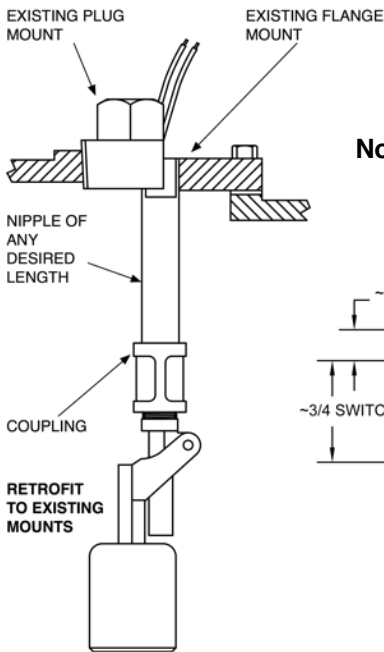
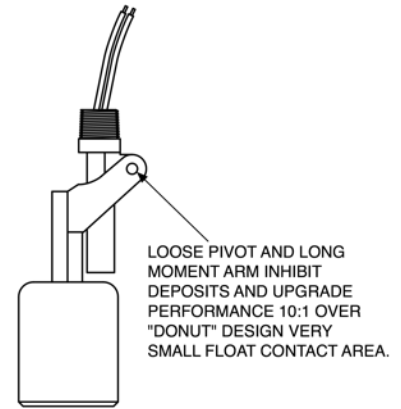
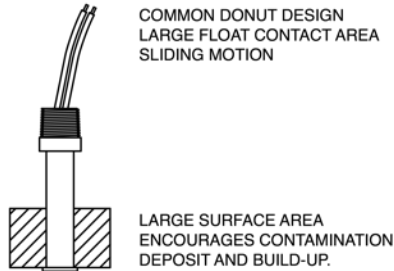
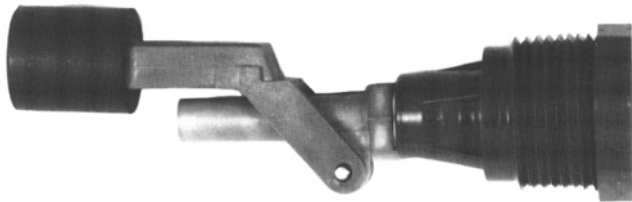
Corrosion Resistant Plastic with Optional Metal Pivot Pin

LOW COST RELIABLE DESIGN

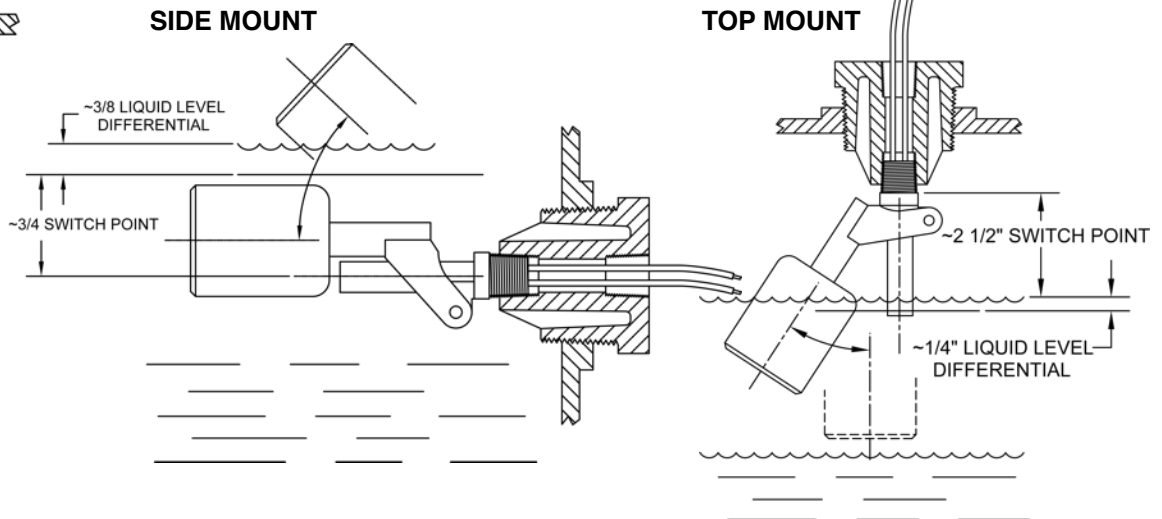
- Unique design enhances specific gravity sensitivity.
- Specific gravity features ignores one liquid and detects another with different specific gravity.
- Typical applications include fuel/water detection, peanut oil/water detection, detection of ground water contamination by underground fuel tanks.
- Noryl® Polyphenylene Oxide (PPO) is suitable for acid and base solutions, pure water, process water, sea water, filtered sewage, contaminated groundwater. Noryl® is not suitable for use in hydrocarbons, petroleum, alcohol and related chemicals.
- The wetted surface of Model L-40N/SG is entirely of Noryl® (PPO) or Fortron® (PPS) except for a small float support Pivot Pin and Nitrophyl float.
- Float support pivot pin is supplied in a variety of materials i.e. 316 Stainless Steel, Hast.® C, Titanium, Tantalum and

Teflon® to meet special chemical and operations environments.

- Tycona Fortron® Polyphenylene Sulfide (PPS) is suitable for strong acid and base solutions. All of the solutions listed above including hydrocarbons, petroleum products, alcohols, etc. Fortron® (PPS) is a member of a select class of chemically resistant plastic resins for use in a very broad spectrum of chemicals.
- Float material closed cell Nitrophyl® Nitrile Solid Foam Float
- 10 times less sensitive from deposit and build-up of contaminants than sliding float models.



Nominal Switch Point Differentials



- Each unit can be supplied with a special made to order 1-1/4" x 1/4" x 1/2" or 1" x 1/4" x 1/2" reducer bushing for through wall mounting.
- Output wire can be twisted pair 22 gauge or two conductor PVC heavy wall instrument cable.
- **STANDARD** - SPST reed switch for 120/240 VAC 50 Watt power or DC dry circuit for computer/PLC interface.

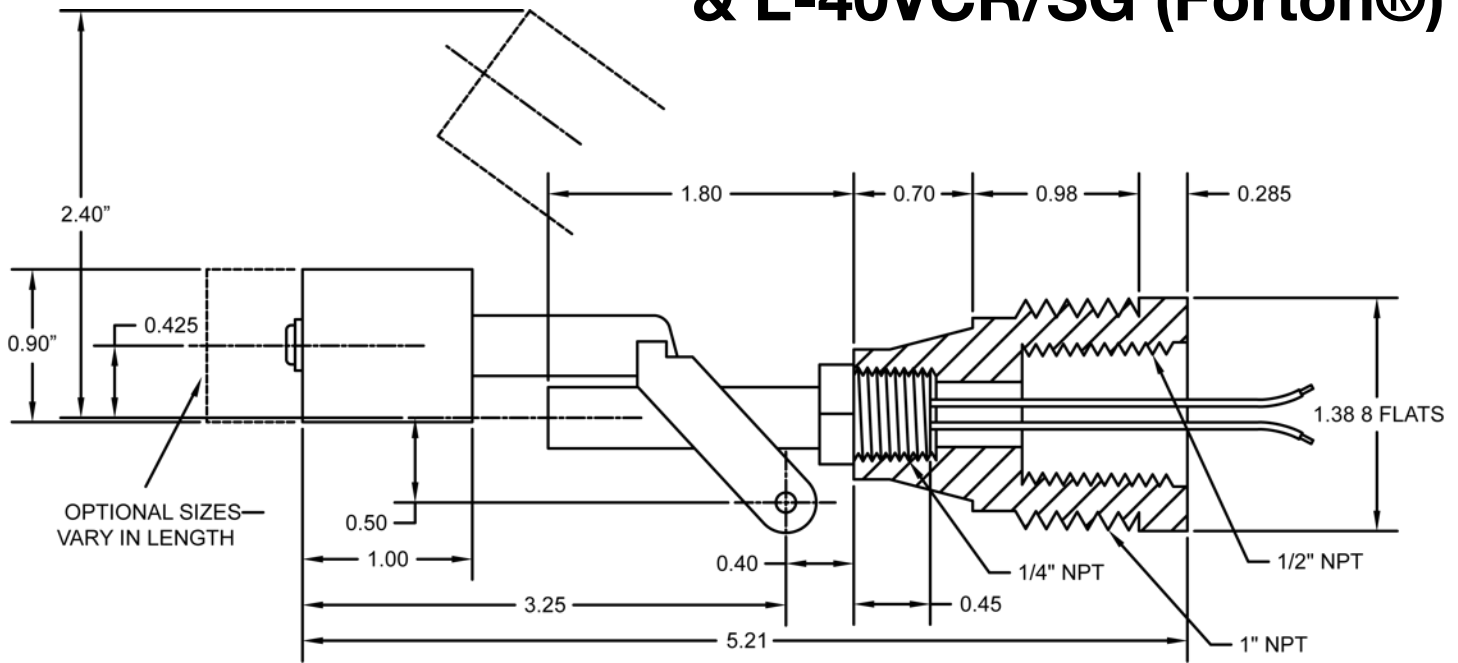
SOLID FOAM BUNA N CLOSE CELL FLOATS CAN BE MACHINED TO PROVIDE SPECIAL FLOAT SIZES AND SHAPES. CONSULT FACTORY.



Limited Warranty Page 7

Installation Dimensions

Model L-40N/SG (NORYL®) & L-40VCR/SG (Forton®)



L-40N/SG

L-40VCR/SG

Wetted Surfaces

10% Glass reinforced Noryl® (PPO) and 316 stainless steel pivot pin. Nitrophyl float.

Nominal Working Pressure/Temp

Tested to Failure at 800 Psig at room temperature

Temp. °F(°C)	0 (-18)	50 (10)	100 (38)	180 (82)
Pressure psig	200	200	175	140

Working Fluid Spec. Gravity

Top Mount	0.8
Side Mount	0.7

Wetted Surfaces

40% Glass reinforced Fortron® (PPS) and Hastelloy® C pivot pin. Nitrophyl float.

Nominal Working Pressure/Temp

Tested to Failure at 800 Psig at room temperature

Temp. °F(°C)	0 (-18)	50 (10)	100 (38)	200 (93)
Pressure psig	250	250	180	150

Working Fluid Spec. Gravity

Top Mount	0.9
Side Mount	0.7

Common Parameters for Both L-40N/SG & L-40VCR/SG

Liquid Level Switch

Nominal ON/OFF Differential
≈ 3/8" (0.375")

Electrical Switch Characteristics - STANDARD

SPNO	
AC voltage (max. switching)	300VAC
DC voltage (max. switching)	350VDC
Current (max. switching)	0.5amp
Current (max. carrying)	2.5amp
Contact Rating (VA, W)	50
Capacitance (typical)	0.3pf
Insulation resistance	10 ¹⁰ ohms
Operation temperature	-40°F to 240°F (-40°C to 115°C)

SPNC or SPDT, 3 Watt, 100VAC/VDC optional.

Float Pivot Pin available in:

316 Stainless, Hastelloy® C. as standard; Titanium, Tantalum, Teflon as special order.

Corrosion Resistance

See compatibility table in back of catalog (page 49)

Dry Circuit Operating

Switch can interface with microprocessor based controllers and related dry circuits.

Inductive Loads

Switch contacts have been tested with inductive relay and 30 amp motor contactor drive coils at 120 VAC and 240 VAC to 500,000 operations without failure. Maximum allowable volt amp (VA) rating of relay operating coil -- 8.0 VA or less.

<u>PART DESCRIPTION</u>	<u>MODEL</u>	<u>SWITCH OPERATION DRY TANK</u>	<u>MOUNTING POSITION</u>	<u>PIVOT PIN MATERIAL</u>
	L-40N/SG	NO-NORMALLY OPEN	HOR. HORIZONTAL	316 SS TANTALUM
	L-40VCR/SG	NC-NORMALLY CLOSED	VER. VERTICAL	HAST.®C. TEFLON TITANIUM
<u>SAMPLE PART #</u>	L-40N / SG / NO / HOR / 316	L-40SG / NC / VER / 316		
	L-40VCR / SG / NC / HOR / HAST. C			

NOTE: Model L-40 employs magnetic coupling between float arm and switch body. Magnetic particles can accumulate on and around magnetic housing which may affect proper operation. Please conduct appropriate fluid magnetic particle evaluation and operational tests prior to and during installation and use.

- Installation drawing and a numbered parts list is supplied with each unit.
- Current Price Information is Listed on Separate Sheet.
- Special One Day Delivery Available.