

## MINI-TEK LIQUID LEVEL DETECTORS





The Robertshaw<sup>®</sup> Mini-Tek Liquid Level Detector is used to detect the levels of liquids in major diesel engines. The Robertshaw Mini-Tek operates on the electrostatic or "capacitance" sensing principle. The probe portion of the unit, extending into the liquid, produces a change in electrical "capacitance" when liquid displaces the air immediately surrounding the probe. The Robertshaw Mini-Tek detector will provide warning when liquid levels reach approximately 50% of capacity. This provides time to take action before damage is done to the engine.

The Robertshaw Mini-Tek comes in three different models; Model 613 Coolant Level Detector, 614 Hydraulic Oil or Fuel Detector, and Model 624 Motor or Gear Fuel or Oil Detector.

### **Features and Benefits**

- Voltage protected
- Rugged construction
- All solid state with no moving parts
- Reverse polarity protection
- Self-test capability





## MINI-TEK LIQUID LEVEL DETECTORS

### **Specifications**

Part Numbers	Description	Alarm Mode	Load Configuration	Time Delay	Terminal Configuration
613-NHG-0000-C	Coolant Level Detector	High Liquid Level	Grounded	None	С
613-NHU-0000-B	Coolant Level Detector	High Liquid Level	Ungrounded	None	В
613-NLG-0000-0	Coolant Level Detector	Low Liquid Level	Grounded	None	0
613-NLG-0000-C	Coolant Level Detector	Low Liquid Level	Grounded	None	С
613-NLG-TD12-0	Coolant Level Detector	Low Liquid Level	Grounded	12 seconds	0
613-NLG-TD12-C	Coolant Level Detector	Low Liquid Level	Grounded	12 seconds	С
613-NLG-TD12-CXC	Coolant Level Detector	Low Liquid Level	Grounded	12 seconds	С
613-NLU-0000-0	Coolant Level Detector	Low Liquid Level	Ungrounded	None	0
613-NLU-0000-B	Coolant Level Detector	Low Liquid Level	Ungrounded	None	В
613-NLU-TD07-B	Coolant Level Detector	Low Liquid Level	Ungrounded	7 seconds	В
613-NLU-TD12-0	Coolant Level Detector	Low Liquid Level	Ungrounded	12 seconds	0
613-NLU-TD12-C	Coolant Level Detector	Low Liquid Level	Ungrounded	12 seconds	С
614-NHG-0000-C	Hydraulic Oil or Fuel Level Detector	High Liquid Level	Grounded	None	С
614-NHU-0000-C	Hydraulic Oil or Fuel Level Detector	High Liquid Level	Ungrounded	None	С
614-NLG-0000-0	Hydraulic Oil or Fuel Level Detector	Low Liquid Level	Grounded	None	0
614-NLG-0000-C	Hydraulic Oil or Fuel Level Detector	Low Liquid Level	Grounded	None	С
614-NLG-TD07-B	Hydraulic Oil or Fuel Level Detector	Low Liquid Level	Grounded	7 seconds	В
614-NLG-TD12-0	Hydraulic Oil or Fuel Level Detector	Low Liquid Level	Grounded	12 seconds	0
624-NHG-0000-C	Motor or Gear Oil Level Detector	High Liquid Level	Grounded	None	С
624-NHU-0000-B	Motor or Gear Oil Level Detector	High Liquid Level	Ungrounded	None	В
624-NHU-0000-C	Motor or Gear Oil Level Detector	High Liquid Level	Ungrounded	None	С
624-NLG-0000-0	Motor or Gear Oil Level Detector	Low Liquid Level	Grounded	None	0
624-NLG-0000-B	Motor or Gear Oil Level Detector	Low Liquid Level	Grounded	None	В
624-NLG-0000-C	Motor or Gear Oil Level Detector	Low Liquid Level	Grounded	None	С
624-NLG-TD12-0	Motor or Gear Oil Level Detector	Low Liquid Level	Grounded	12 seconds	0
624-NLU-0000-0	Motor or Gear Oil Level Detector	Low Liquid Level	Ungrounded	None	0
624-NLU-0000-B	Motor or Gear Oil Level Detector	Low Liquid Level	Ungrounded	None	В
624-NLU-0000-C	Motor or Gear Oil Level Detector	Low Liquid Level	Ungrounded	None	С
624-NLU-TD12-B	Motor or Gear Oil Level Detector	Low Liquid Level	Ungrounded	12 seconds	В
624-NLU-TD12-C	Motor or Gear Oil Level Detector	Low Liquid Level	Ungrounded	12 seconds	С

### Part Number Legend 6XX-NXX-XXXX-X

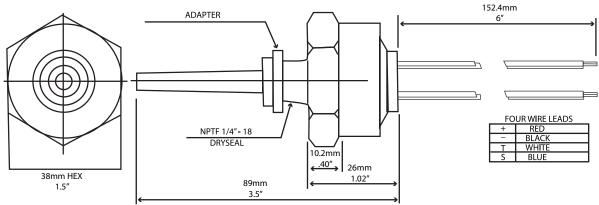
6XX Model Number	N Polarity	X Alarm Mode	X Load Configuration	XXXX Time Delays	X Terminal Configurations
613 = Coolant Level Detector	Negative	L = Low Liquid Level	U = Ungrounded	0000 = No Time Delay	0 = Three Spade Terminals
614 = Hydraulic Oil or Fuel Detector		H = High Liquid Level	$\mathbf{G} = \mathbf{G}\mathbf{rounded}$	TD12 = 12 Seconds	B = Four Spade Terminals
624 = Motor or Gear Oil Detector				TD07 = 7 Seconds	C = Four Wire Leads
				TD10 = 10 Seconds	



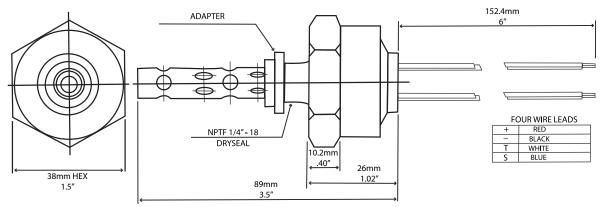
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#### **Product Drawings**

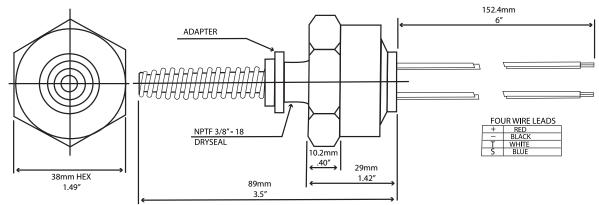




#### 614 Series: NPTF 1/4" - 18



#### 624 Series: NPTF 3/8" - 18

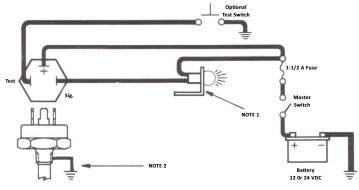




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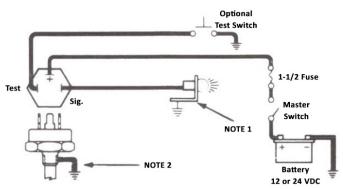
### Wiring Diagrams

#### Wiring Details for Standard Models 613-N ( ) U or 624-N ( )U



Wiring connections for standard models 613/624-N ( )U negative ground vehicles ungrounded loads.

Wiring Connections for Alternate Models



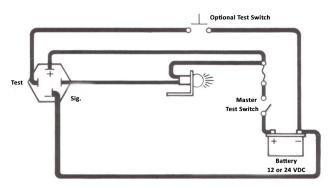
613/624-N ()G negative ground vehicles grounded loads.

Note 1 - LOADS may be lights, solenoids, relays, buzzers, etc. Current limit 1 Amp.

**Note 2** - IMPORTANT. Threads MUST be grounded to chassis. DO NOT use Teflon tape or other insulating materials on threads. If threads lube is desired, use electrically conductive material.

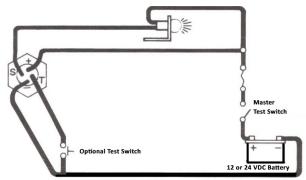
Note 2 NOT applicable for units with 4 terminals or 4 wire leads.

Wiring for 4 Spade Terminals



Models 613/624-N( ) U-( ) ( ) ( ) ( ) -B

Wiring for 4 Wire Leads



Models 613/624-N( ) U-( ) ( ) ( ) ( ) -C



Customer Service Telephone +1.800.304.6563 Customer Service (Sternberk) +420.587.805.197 HVACCustomerService@robertshaw.com

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