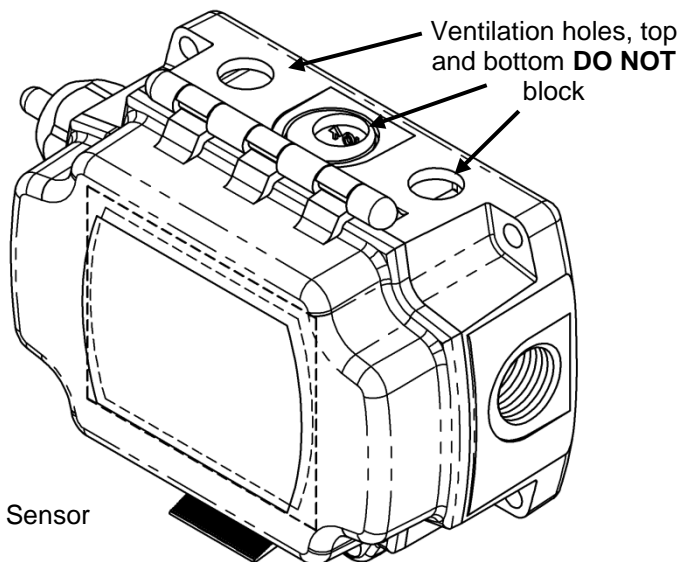


### Overview

The Refrigerant Leak Detector Sensor measures the amount of R404a, R410A, R134A, and/or R22 present. This sensor measures leaks and spills; it is not intended for critical ppm measurements. Voltage trip levels for R22, R134A, R404A, and R410A leaks and spills are shown in the table on the next page. The sensor is temperature compensated for an accurate and reliable measurement.



**Figure 1:** Refrigerant Leak Detector Sensor  
Part # NSB-RLD

### Specifications

**Power** 9 to 40 VDC at 120 mA max  
19 to 32 VAC at 5 VA

**Output Impedance** 680 Ohms

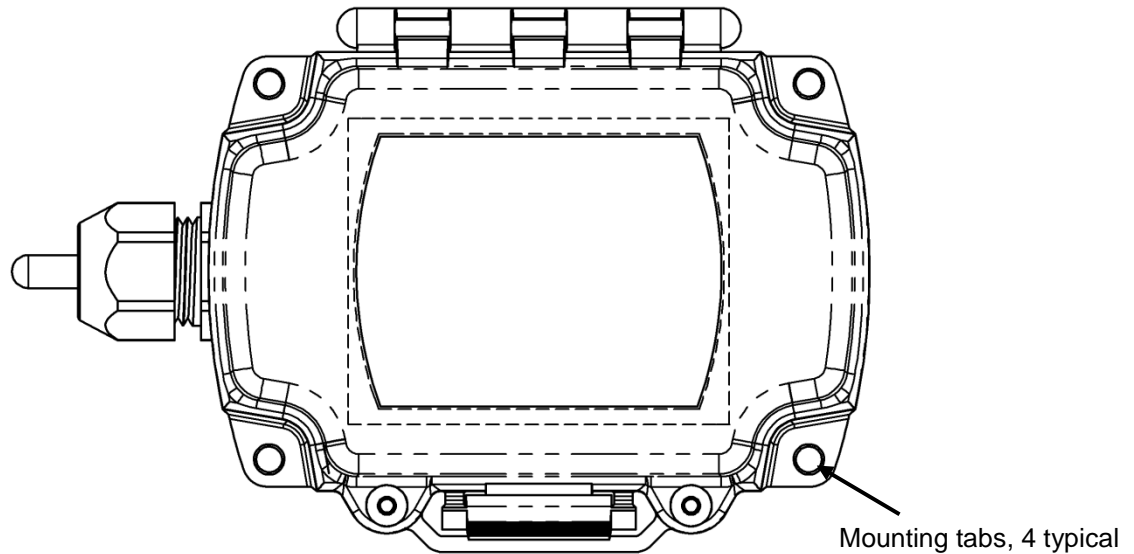
**Output Voltage**

Refrigerant	Voltage Trip Level
R22	2.5 VDC @ 500 ppm
R134A	1.8 VDC @ 500 ppm
R404A	4.5 VDC @ 500 ppm
R410A	2.5 VDC @ 500 ppm

Specifications subject to change without notice.

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### Mounting



**Figure 2:** Refrigerant Sensor Mounting

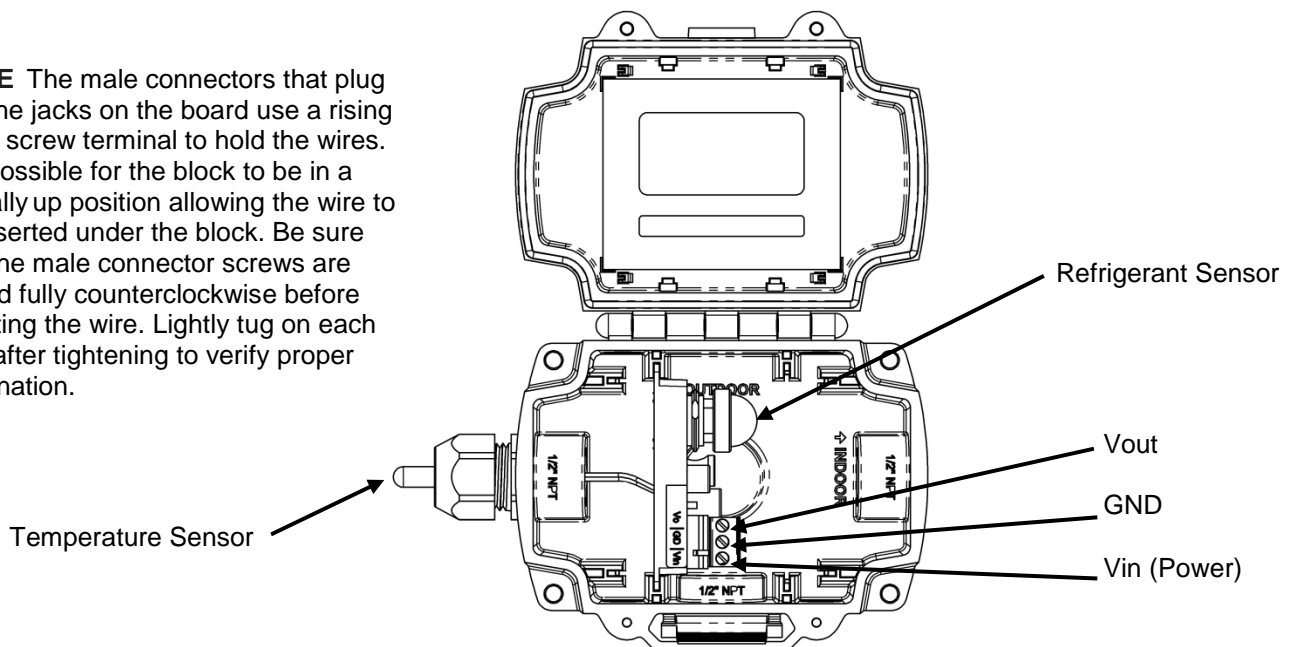
Mount the refrigerant sensor horizontally as shown in Figure 2. Make sure there is an unobstructed path for a minimum of 12 inches above and below the sensor.

Hold the Refrigerant Sensor against the mounting surface. Mark the mounting tabs and drill for #10 screws.

### Termination

Open the lid by pushing the latch away from the box and pulling the lid open. Close the lid by pushing the lid closed, pushing the latch away from the box and releasing the latch so it snaps into place.

**NOTE** The male connectors that plug into the jacks on the board use a rising block screw terminal to hold the wires. It is possible for the block to be in a partially up position allowing the wire to be inserted under the block. Be sure that the male connector screws are turned fully counterclockwise before inserting the wire. Lightly tug on each wire after tightening to verify proper termination.



**Figure 3:** Refrigerant Sensor Electrical Connections

Specifications subject to change without notice.



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### Operation

The Refrigerant Sensor has an element that changes its electrical resistance with changes in refrigerant concentrations. The change in resistance determines the output voltage.

### Diagnostics

#### Possible Problem

Green LED is not on

Output incorrect

#### Possible Solutions

Check for correct power and wiring connections.

Check for correct wiring connections.

Specifications subject to change without notice.