

Overview

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

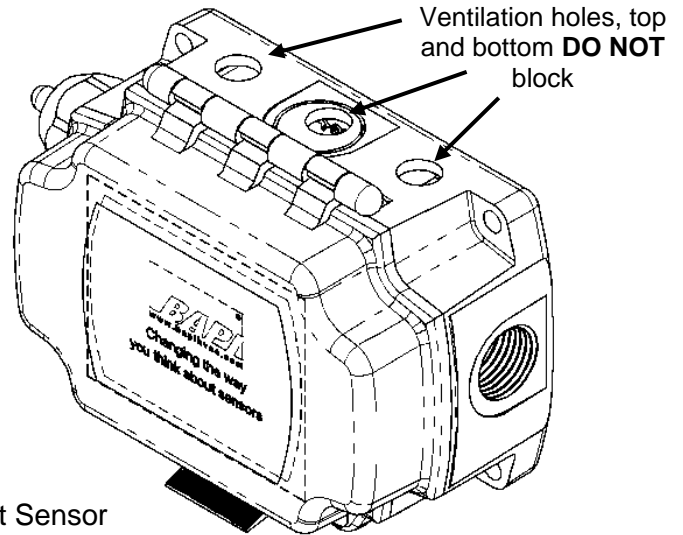


Figure 1: BAPI Refrigerant Sensor

Mounting

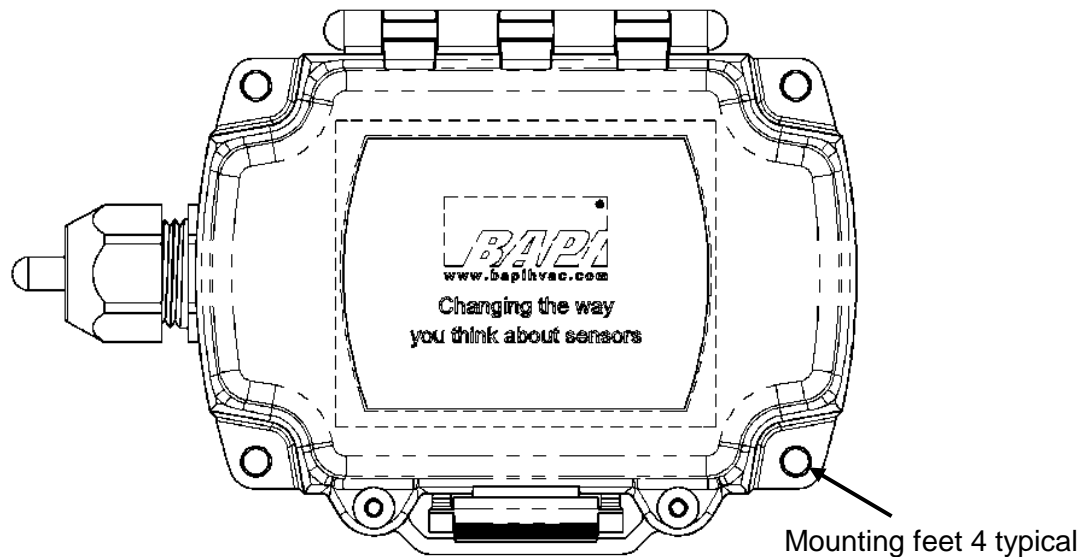


Figure 2: BAPI-Refrigerant Sensor Mounting

Mount the refrigerant sensor horizontally as shown in Figure 2. Make sure that 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 feet and drill for #10 screws (1/8" drill). Screw the Refrigerant Sensor to the mounting surface.

Specifications subject to change without notice.

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.

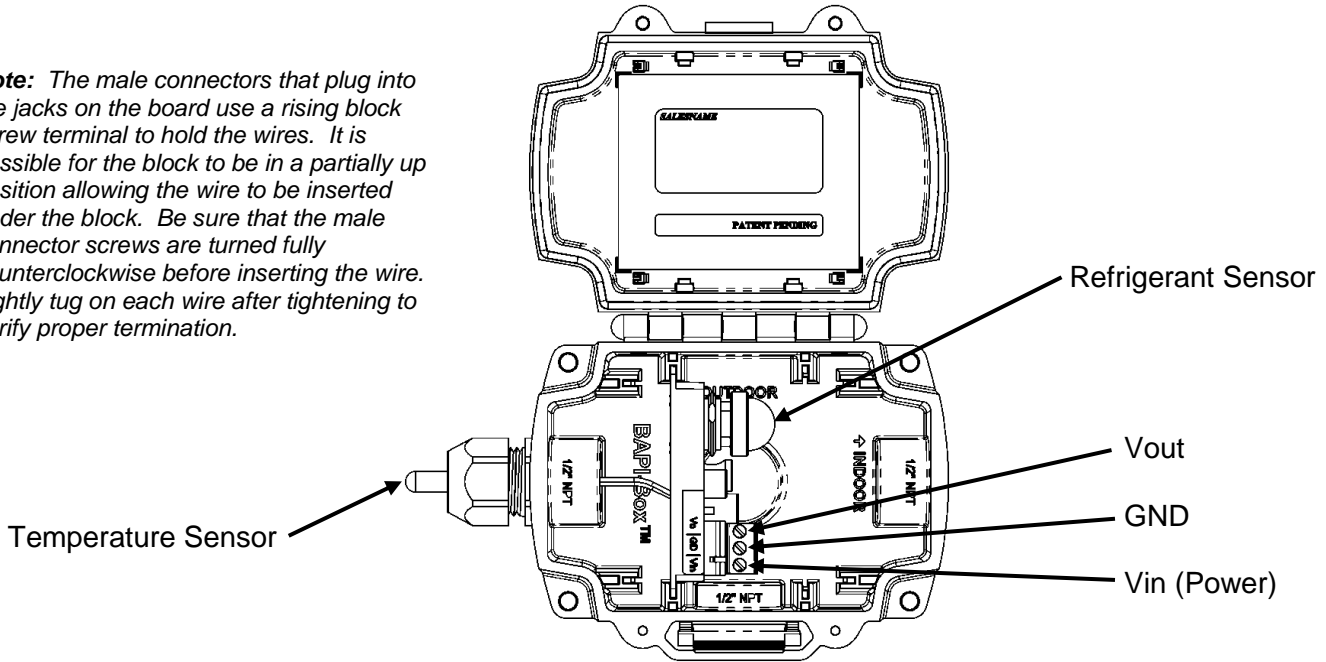


Figure 3: BAPI Refrigerant Sensor Electrical Connections

Operation

The BAPI 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

Possible Solutions

Green LED is not on

Check for correct power and wiring connections.

Output Incorrect

Check for correct wiring connections.

Specifications

Power: 12VDC at 250mA

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

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