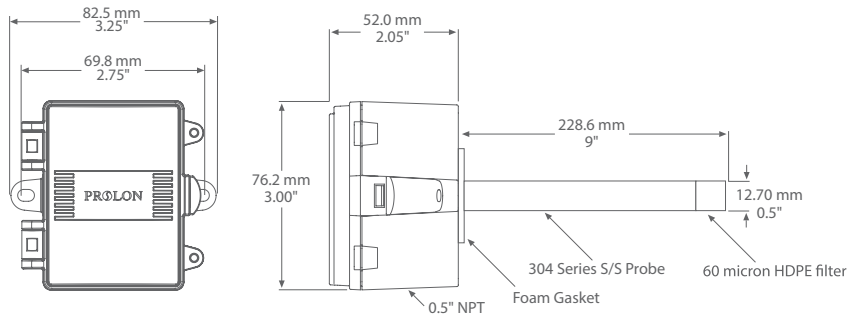


PL-DT-TRH – Duct Humidity Transmitter and Temperature Sensor



Product Description

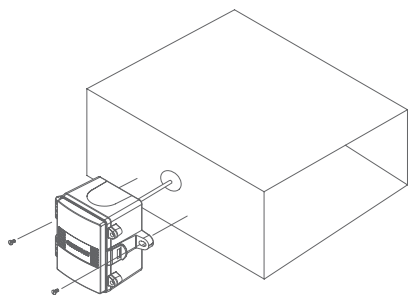
The PL-DT-TRH features a temperature sensor and relative humidity transmitter for duct temperature and humidity readings. The humidity transmitter uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and state-of-the-art digital linearization and temperature compensated circuitry to monitor humidity levels. The sensor is encapsulated in a 9" (230 mm) long by 0.5" (12.7 mm) diameter 304 S/S probe and is field replaceable. A 60 micron HDPE filter protects the sensor for contaminants.

Typical Installation

The duct type probes are installed through a hole in the side of the duct to monitor a single point humidity within the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

Mounting tabs on the outside of the enclosure for ease of installation.

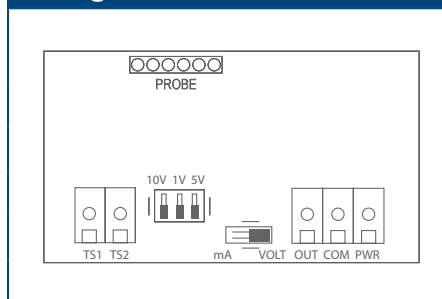
A terminal block connection is provided for connection to the Prolon Building Automation System.



Technical Specifications

SENSOR TYPE	Thermoset polymer based capacitive
SENSOR ACCURACY	±5 %RH (5 to 95 %RH)
MEASUREMENT RANGE	0 to 100 %RH
RESOLUTION	±0.01 %RH
HYSTERESIS	±0.8 %RH @ 77°F (25°C)
REPNSE TIME	8 seconds
STABILITY	<0.25% RH/year
AMBIENT OPERATING RANGE	-40 to 122°F (-40 to 50°C)
POWER SUPPLY	24 Vac/dc ~ ±10% typical
CONSUMPTION	22 mA maximum
OUTPUT SIGNAL	4-20 mA current loop, 0-5 Vdc, 0-10 Vdc, or 0-1 Vdc (field selectable)
OUTPUT DRIVE @ 24 VDC	Current: 550Ω max Voltage: 10,000Ω min
TEMPERATURE SENSOR	10,000 Ω Type 3, NTC Thermistor
ENCLOSURE	ABS, UL94-V0, IP65 (NEMA 4X), with thread adapter (1/2" NPT to M16) and cable gland fitting
PROBE	9" (230mm) length x 1/2" (12.7mm) diameter s/s with porous filter
TERMINATION	Screw terminal block (14 to 22 AWG)
COUNTRY OF ORIGIN	Canada

Wiring Information



Terminal

Function

PWR	+ 24 Vdc/ac of controller or power supply
COM	COM GND or COMMON
OUT	Analog Output
TS1	Temperature Sensor
TS2	Temperature Sensor

