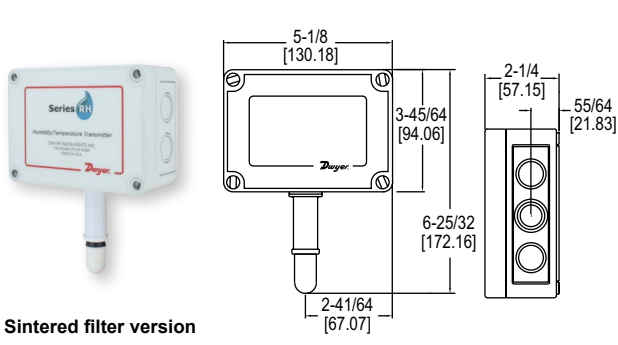


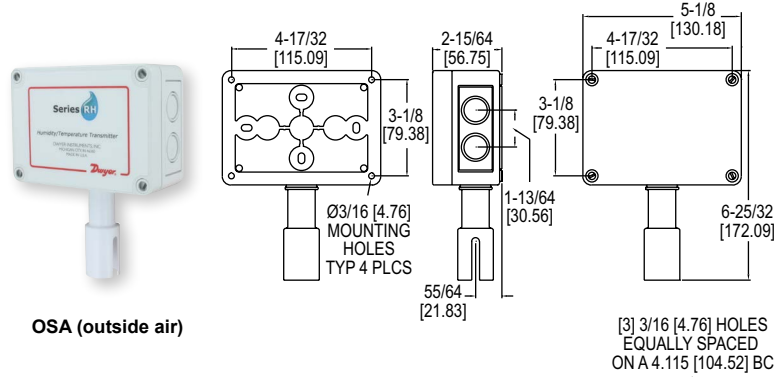
HUMIDITY/TEMPERATURE TRANSMITTERS

Passive Temperature Outputs, Sintered Filter Options

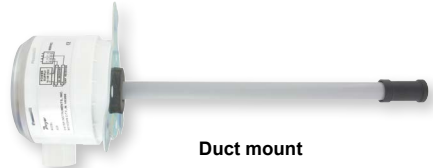
CALIBRATION SERVICES AVAILABLE



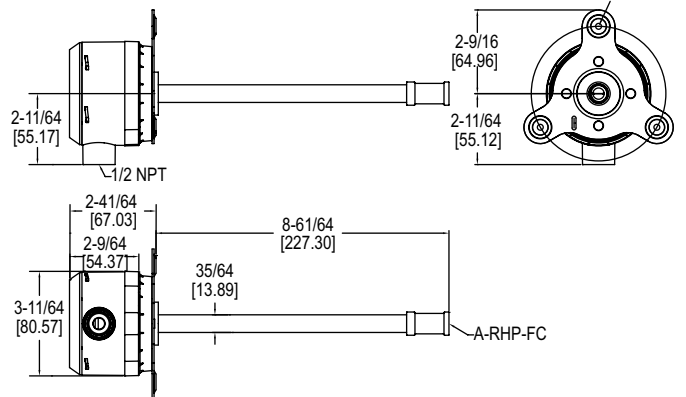
Sintered filter version



OSA (outside air)



Duct mount



The **Series RHP Humidity/Temperature Transmitters** combine the voltage or current humidity transmitter output with a passive temperature thermistor or RTD output. Featuring polymer capacitance humidity sensors, models are available with 2%, 3% or 5% accuracies. Duct mounted transmitters are available with an optional two-line alpha numeric LCD display.

BENEFITS/FEATURES

- Reduced installation cost with combined humidity and temperature
- Wide application environment from a large selection of temperature sensors and 2%, 3% and 5% accuracies
- Reduced system operating costs with radiation shield protecting the sensor from radiant heat

APPLICATIONS

- Air economizers
- Outdoor temperature and relative humidity reference
- Pool room humidity monitoring

| MODEL CHART | | | | | | |
|--------------------|-----|-------------|------------------|-------------|--|---|
| Example | RHP | -2 | D | 1 | A | -LCD RHP-2D1A-LCD |
| Series | RHP | | | | | RH/passive temperature sensor transmitter |
| Accuracy | | 2 3 5 | | | | 2% accuracy 3% accuracy 5% accuracy |
| Housing Type | | | D O S R | | | Duct mount with plastic hydrophobic filter OSA (outside air) OSA with sintered filter* Radiation shield |
| RH Output | | | | 1 2 3 | | 4-20 mA 0-10 V 0-5 VDC |
| Temperature Sensor | | | | | 0 1 2 3 A B C D E F | None 4-20 mA 0-10 VDC 0-5 VDC 10 kΩ @ 25°C thermistor type III 10 kΩ @ 25°C thermistor type II 3 kΩ @ 25°C thermistor 100 Ω RTD DIN 385 1K Ω RTD DIN 385 20K Ω @ 25°C thermistor |
| Options | | | | | | LCD display NIST traceable calibration certificate |

*Use OSA with sintered filter models when purchasing Series RHRS radiation shield separately.

SPECIFICATIONS

Relative Humidity Range: 0 to 100% RH.
Temperature Range: -40 to 140°F (-40 to 60°C).
Accuracy, RH: RHP-2XXX ±2% 10-90% RH @ 25°C; RHP-3XXX ±3% 20-80% RH @ 25°C; RHP-5XXX ±5% 20-80% RH @ 25°C.
Accuracy, Thermistor Temp Sensor: ±0.2°C @ 25°C (±0.36°F @ 77°F).
Accuracy, RTD Temp Sensor: DIN Class B; ±0.3°C @ 0°C (±0.54°F @ 32°F).
Accuracy, Solid State Band Gap: ±0.9°F @ 77°F (±0.5°C @ 25°C).
Hysteresis: ±1%.
Repeatability: ±0.1% typical.
Temperature Limits: -40 to 140°F (-40 to 60°C).
Storage Temperature: -40 to 176°F (-40 to 80°C).
Compensated Temperature Range: -4 to 140°F (-20 to 60°C).
Power Requirements: 4-20 mA loop powered models: 10-35 VDC; 0-5/10 V output models: 15-35 VDC or 15-29 VAC.
Output Signal (Model Dependent): 4-20 mA; 0-5/10V @ 5 mA max.
Response Time: 15 s.
Electrical Connections: Removable screw terminal block.
Conduit Connection: Duct mount: 1/2" NPS; OSA: 1/2" (22.3 mm).
Drift: <1% RH/year.
RH Sensor: Capacitance polymer.
Temperature Sensor: Types 1, 2, 3: Solid state band gap; Curves A, B, C: Thermistor; Curves D, E: Platinum RTD DIN 385.
Enclosure Material: Duct mount sensor tube: PVC-UL 94 V-0; Duct mount sensor cap: Polycarbonate ABS blend-greater than UL 94 V-0; Duct mount electronics housing and cover: Makrolon® polycarbonate-UL 94V-HB; OSA: Polycarbonate.
Enclosure Rating: Duct mount: NEMA 4X (IP66) for housing only; OSA: NEMA 4X (IP66).
Display: Duct mount only, optional 2-line alpha numeric, 8 characters/line.
Display Resolution: RH: 0.1%; 0.1°F (0.1°C).
Weight: Duct mount: .616 lb (.3 kg); OSA: 1 lb (.45 kg).
Compliance: CE.

ACCESSORIES

| Model | Description |
|----------|---|
| A-RHP-FC | Replacement plastic hydrophobic filter |
| A-RHP-RT | Retrofit tool for fitting O-ring on RHP-D/M models for new filter |
| A-RHP-FC | |

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