



SERIES RHP | HUMIDITY/TEMPERATURE TRANSMITTERS



Duct mount



OSA (outside air)
with radiation shield



OSA (outside air)
with sintered filter



OSA
(outside air)

FEATURES/BENEFITS

- 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 for building systems

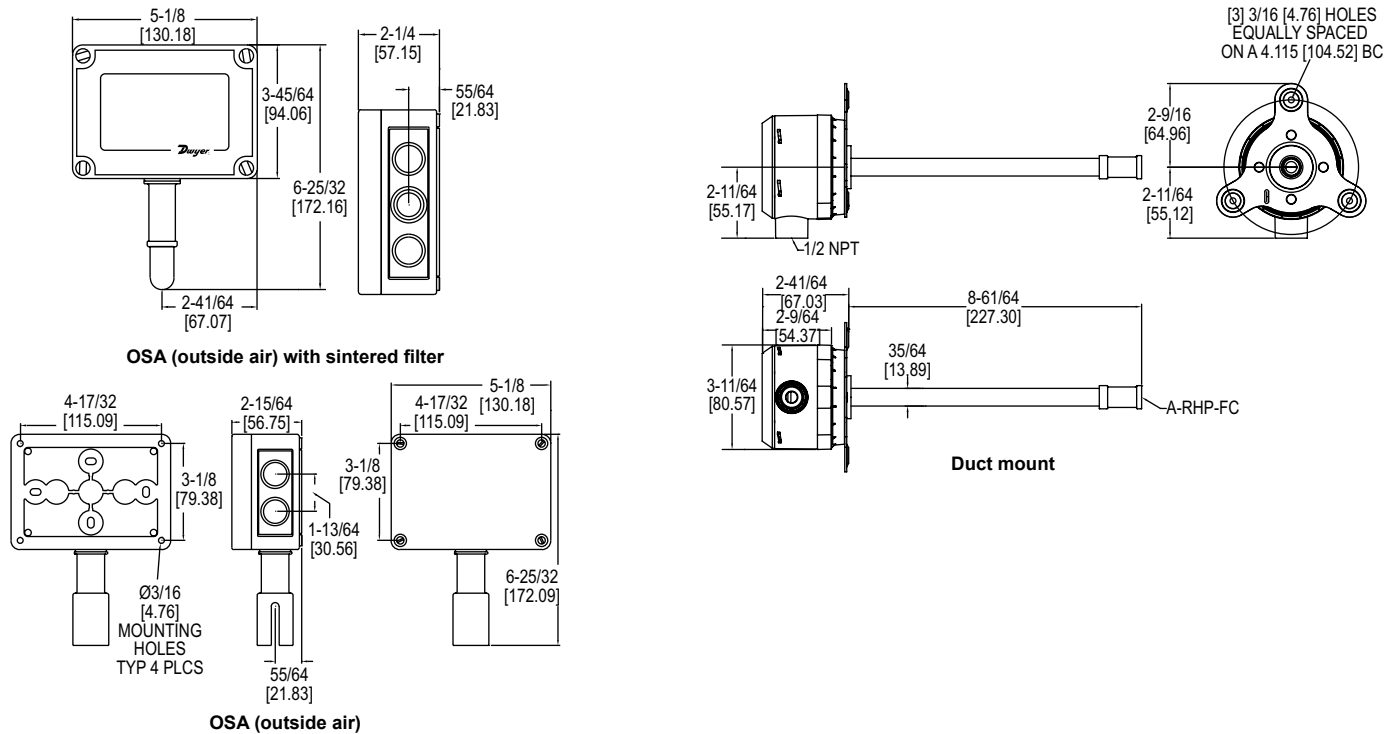
DESCRIPTION

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

SPECIFICATIONS

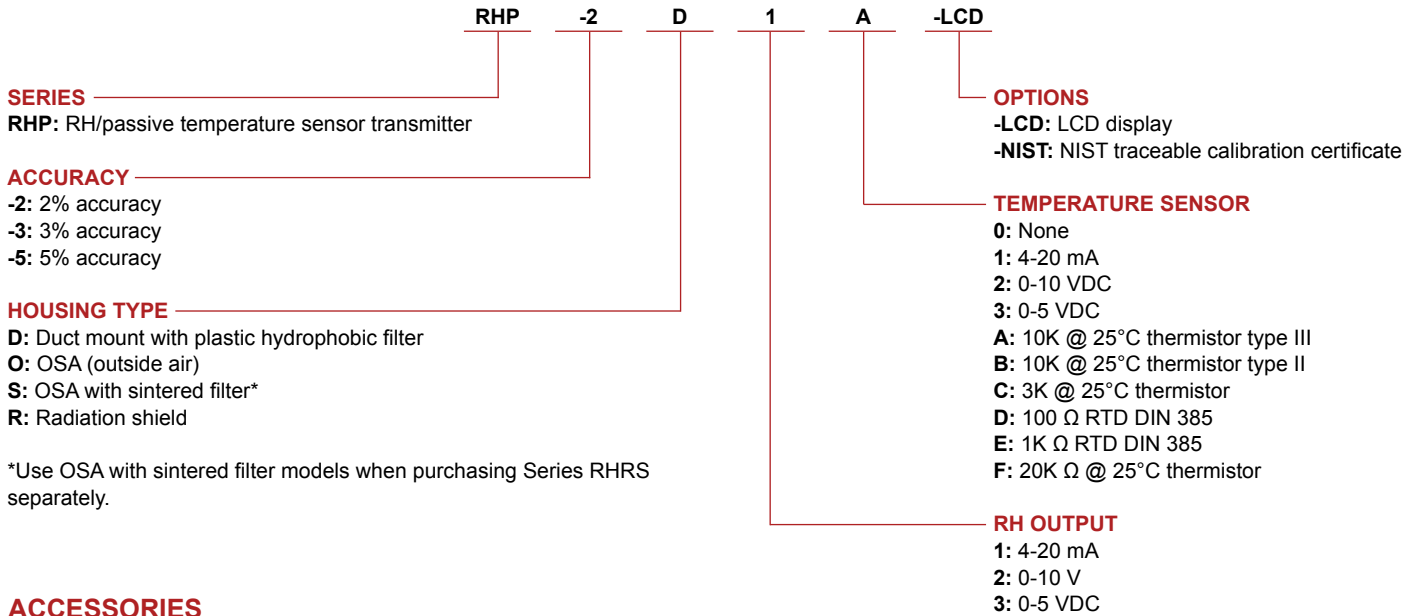
Relative Humidity Range	0 to 100% RH.
Temperature Range	-40 to 140°F (-40 to 60°C).
Accuracy, RH	RHP-2XXX ±2% 10-90% RH @ 25°C; RHP-3XXX ±3% 20-80% RH @ 25°C; RHP-5XXX ±5% 20-80% RH @ 25°C.
Accuracy, Thermistor Temp Sensor	±0.2°C @ 25°C (±0.36°F @ 77°F).
Accuracy, RTD Temp Sensor	DIN Class B; ±0.3°C @ 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: PG11 or PG16 (1/2" conduit) knockouts.
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.

DIMENSIONS



HOW TO ORDER

Use the **bold** characters from the chart below to construct a product code.



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