

Relative Humidity/Temperature Transmitters

For Duct or Wall Mounting

HX94ACW



Optional

HX94AC shown much smaller than actual size.

- ✓ Accurate to $\pm 2.5\%$ Relative Humidity and $\pm 0.6^\circ\text{C}$ ($\pm 1^\circ\text{F}$) Temperature
- ✓ Provides Independent Analog Outputs for Both Humidity and Temperature Measurement
- ✓ Stainless Steel NEMA 4 (IP66) Housing
- ✓ 3 Different Output Connection Styles Available
- ✓ Models with 4 to 20 mA or 0 to 1 Vdc Outputs
- ✓ Removable Stainless Steel Sensor Filter
- ✓ Includes Hardware for Wall and Duct Mounting
- ✓ Standard Models Include Cable and Connector Pair



Connector pair included with models HX94AC and HX94AV only.

All models include mounting kit, shown above.

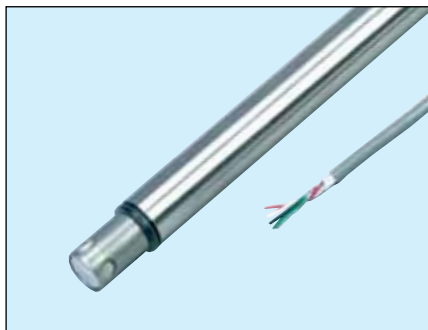
The HX94A relative humidity/temperature transmitter provides a reliable and low cost method for duct or wall mount monitoring applications. Solid state sensors provide excellent sensitivity, fast response, and stability.

Simple hookup and linearized output permit interfacing with most display and control devices like meters, controllers, recorders, and data loggers. The design features a rugged stainless steel NEMA 4 (IP66) housing.

MODELS AVAILABLE WITH THREE DIFFERENT CONNECTION STYLES SHOWN BELOW!



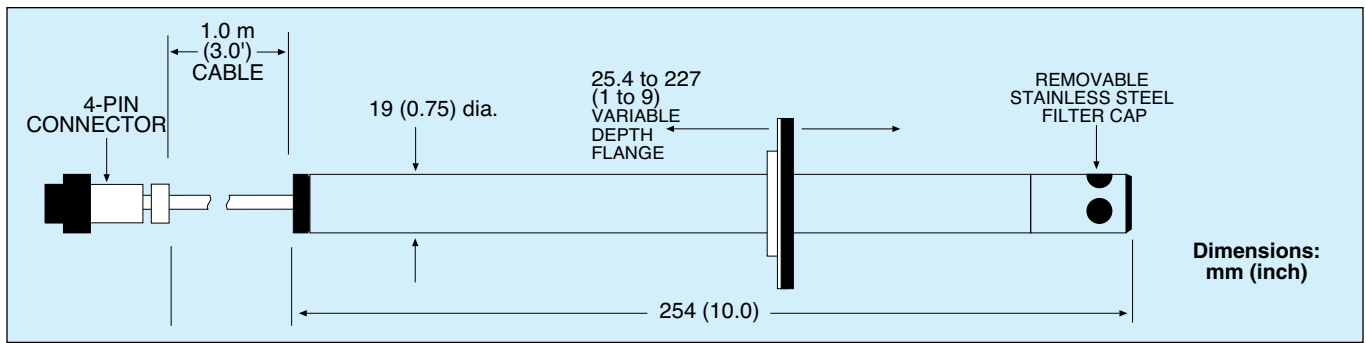
Standard connector model.



"W" and "NPT" models come with stripped leads.



NPT fitting model with stripped leads.



Specifications

Relative Humidity

Thin-film polymer capacitor

Power: 6 to 24 Vdc (polarity protected)

Measurement Range: 3 to 95% RH

Accuracy: $\pm 2.5\%$ @ 22°C (72°F) from 20 to 80% RH; $\pm 3.1\%$ @ 22°C (72°F) below 20 and above 80% RH; with an added temperature coefficient error of $\pm 0.1\%$ RH/°F (both increasing and decreasing in temperature)

Repeatability: $\pm 1\%$ RH

Temperature Compensation:

-20 to 85°C (-4 to 185°F)

Current Output:

HX94AC: 4 to 20 mA (0 to 100% RH)

Voltage Output:

HX94AV: 0 to 1.0 V (0 to 100% RH)

Time Constant: (for 90% response at 25°C; in moving air, 1m/sec)

Less than 20 Seconds: 10 to 90% RH

Less than 30 Seconds: 90 to 10% RH

Temperature

Thin-film 100 Ω Platinum RTD (DIN 43760)

Input Voltage Range:

6 to 24 Vdc (polarity protected)

Range: 0 to 100°C (32 to 212°F)

Accuracy: $\pm 0.6^\circ\text{C}$ ($\pm 1^\circ\text{F}$)

Repeatability: $\pm 0.3^\circ\text{C}$ ($\pm 0.5^\circ\text{F}$)

Current Output:

HX94AC: 4 to 20 mA for 0 to 100°C

Voltage Output:

HX94AV: 0 to 1.0 V for 0 to 100°C

Time Constant: (for 60% response)

Less than 2 seconds in moving air (1m/sec), less than 10 seconds in still air

Mechanical

Housing: 316 SS NEMA 4 (IP66) enclosure

Probe: 254 x 19 mm diameter

(10 x 0.75"), 305 mm (12") cable

Duct Flange: Removable, variable 25.4 to 227 mm (1 to 9") depth; 70 mm (2.75") diameter, duct hole 21 mm (0.812") diameter 4 mtg holes 4 mm (0.156") diameter (for #6 sheet metal screws) on 51 mm (2.00") diameter circle; wall mounting bracket included

Connections:

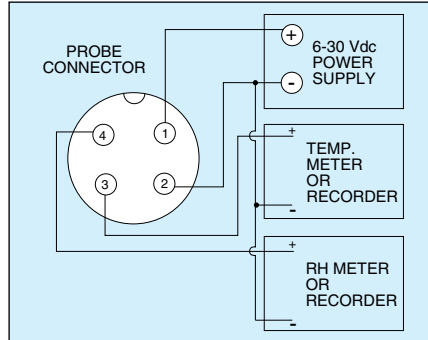
HX94AC/94AV: 4 pin mating connector accepts 26 to 18 AWG wires

HX94ACW/94AVW: 1 m (3') braided and shielded cable, PVC sheathing

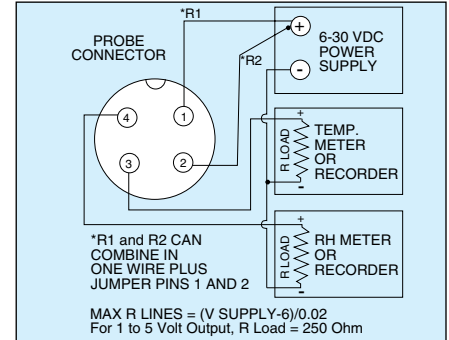
HX94ACNPT/94AVNPT: ½" male NPT conductor with 1 m (3') braided and shielded cable

Weight: 198 g (7 oz) with duct flange

Voltage Connector Models



Current Connector Models



Lead Wire Models

Models: HX94ACW, HX94ACNPT
(2-Wire Current Output with stripped leads)

Relative Humidity:

White Wire: + Power supply

Green Wire: 4 to 20 mA output

Bare Wire: Shield, earth ground

Temperature:

Black Wire: + Power supply

Red Wire: 4 to 20 mA output

Models: HX94AVW, HX94AVNPT
(3-Wire Voltage Output with stripped leads)

Relative Humidity:

Black Wire: + Power supply

Green Wire: 0 to 1 Vdc output

White Wire: - Power supply

Bare Wire: Shield, earth ground

Temperature:

Black Wire: + Power supply

Red Wire: 0 to 1 Vdc output

White Wire: - Power supply

To Order

Model No.	Description
HX94AC	RH/temp transmitter with 4 to 20 mA outputs with 4-pin connector
HX94AV	RH/temp transmitter with 0 to 1 Vdc outputs with 4-pin connector
HX94ACW	RH/temp transmitter with 4 to 20 mA outputs with 1 m (3') lead wires
HX94AVW	RH/temp transmitter with 0 to 1 Vdc outputs with 1 m (3') lead wires
HX94ACNPT	RH/temp transmitter with 4 to 20 mA outputs with ½" male NPT fitting and 1 m (3') leads
HX94AVNPT	RH/temp transmitter with 0 to 1 Vdc outputs with ½" male NPT fitting and 1 m (3') leads
HX94-MC	Spare 4-pin mating connector
PSR-24S	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400 mA, screw terminals, UL
PSR-24L	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400 mA, stripped leads, UL
PSR-24L-230	Regulated power supply, European plug, 230 Vac input, 24 Vdc output, 400 mA, stripped leads, CE
TX4-100	4 conductor shielded transmitter cable, 30 m (100')
CAL-3-HU	NIST-traceable calibration

Comes complete with mating connector (models HX94AC and HX94AV only), removable protective sensor filter, removable duct flange, wall mounting bracket, and operator's manual.

Ordering Example: HX94AC, duct mount RH/temperature transmitter with 4 to 20 mA output.