























RH RESISTIVE

RH with Resistive Temperature Output

The A/RH Series relative humidity transmitters (with resistive temperature output) utilize a capacitive sensing element to deliver a proportional analog output. This series features on board DIP switches which allow the user to select the desired output signal. In addition, field calibration can be performed by using the on board increment and decrement DIP switches. These enhancements provide increased flexibility and outstanding long-term performance. Duct and Outside Air configurations feature conformally coated circuit boards for moisture resistance. Several RTD and thermistor temperature sensing elements are available in this series.



SPECIFICATIONS RH Supply Voltage (4 to 20 mA) (250 Ohm Load): 15 to 40 VDC/18 to 28 VAC RH Supply Voltage (4 to 20 mA) (500 Ohm Load): 18 to 40 VDC/18 to 28 VAC RH Supply Voltage (0-5 VDC) 12 to 40 VDC/18 to 28 VAC (4K Load minimum) RH Supply Voltage (0-10 VDC) 0-10 VDC: 18 to 40 VDC/18 to 28 VAC (4K Load minimum) **Supply Current** Voltage Output: 8 mA maximum | Current Output: 24 mA maximum **RH Measurement Range** 0-100% **RH Output** 2-wire: 4 to 20 mA (standard) | 3-wire: 0-5 VDC, 0-10 VDC or 4 to 20 mA RH Accuracy @ 77°F (25°C) +/- 1% over 20% span (between 20 to 90%) | +/- 2%, 3%, or 5% from 10 to 95% Less than 2% drift/5 years Long Term Stability Repeatablity 0.5% RH Sensitivity 0.1% RH 0 to 100% RH | -40 to 140°F (-40 to 60°C) Operating Environment, Duct/Outside Operating Environment, Room 0 to 95% RH (non-condensing) | 32 to 122°F (0 to 50°C) **RH Sensor Type** Capacitive **Temperature Specifications** See corresponding Temp data sheets Product Dimensions (Duct/Euro) Enclosure: (W) 3.60" (D) 2.25" | Probe: (L) 7.15" Cover: (H) 3.61" (W) 4.00" (D) 2.25" | Stem: (H) 3.00" (W) 1.13" Product Dimensions (Outside Air) (H) 4.50" (W) 2.75" (D) 1.12" Product Dimensions (Room 2) Product Dimensions (Room) (H) 4.51" (W) 2.75" (D) 2.90" Product Dimensions (Stainless Plate) Plate: (H) 4.51" (W) 2.76" (D) 0.19" | Filter: (L) 1.06"

ORDERING

Select one Series (A). If A/RH1 is selected, you must specify a 20% range. Choose a Temperature Sensor (B), one Configuration (C), & one RH Output (D). When selecting your Configuration (A), if "R2S", "RS", "RSO" or "R2SO," please choose a Pot Value (E), a Sticker (F) & a Pot Action (G). If "R2S", "RS", "RSO" or "R2SO" is not selected, your Part Number is finished after completing RH Output (D). **NOTE:** 4 to 20 mA output is not available for the SP configuration.

A Accuracy		В	Temp S	ensor		C Cont	figuration	
○ A/RH1 (+/-1%) (Specify	20% Ran	ge) 1	.00-2W	○1K-2W	1K-NI	○ D (Duc	t/Euro)	R2SO (Room, Setpoint, Override
○ A/RH2 (+/-2%)		O 1	.00-3W	1K-3W	375	O (Out	side Air/Euro)	R (Room)
○ A/RH3 (+/-3%)		()3	BK (◯ 10KS	○100KS	O-4X (Outside Air/NEM	1A 4X) RS (Room, Setpoint)
○ A/RH5 (+/-5%)		O #	N (Type III)	CP (Typ	e II) CSI	O SP (Sta	ainless Plate)	RO (Room, Override)
		2	20K	○1.8K		R2 (Ro	om)	RSO (Room, Setpoint, Override)
			OAN-BC	○ 10KE1	R2S (R	oom, Setpoint)		
						R20 (R	loom, Override)	
D RH Output	E Se	etpoint	Pot Value	9			F Sticker	G Pot Action
O (4 to 20 mA)	400	○ 2K	◯ 100K	○ 8.5	○ 20K		○ Blue/Red	ODA (Direct)
○ 5 (0-5 VDC)	○ 1K	○ 3K	○ 5K	○ 10K	O Specify Po	ot Value		○ RA (Reverse)
O 10 (0-10 VDC)								
BUILD PART NUMBER								

After completing (A), (B), (C), (D), (E), (F) & (G) from the above table, fill in the Part Number Table below. An example part number is offered.



EXAMPLE: A/RH3 - CP - D





The Euro enclosure has a UL94-V0 flammability rating.