

EWHS 284 - 304 - 314

Humidity probes

EWHS284



EWHS304



EWHS314



Applications

Humidity probes of the EWHS284-304-314 series are intended for connection to humidity and humidity/temperature measuring instruments of superior dependability.

Common features

Ambient humidity:	0...100% RH
Maximum air speed:	20m/s
Polarity inversion protection:	diode

Technical data	EWHS284	EWHS304	EWHS314
Enclosure rating	IP54	IP65	IP65
Installation	Use the clip supplied with the probe	via 2 external slots	via 2 external slots
Electrical connections	PVC two core cable	Screw terminals	Screw terminals
Dimensions	103X25mm	80X80X52mm	80X80X52mm
Power supply	9...28V _m	9...30V _m	15...40V _m or 12...28V ₋
Current draw	20mA max	20mA max	<50mA max
Ambient temperature	-10...60°C	-40...60°C	-40...60°C (-40...140°F)
Humidity sensor	resistive	HygroMer* IN-1	HygroMer* IN-1
Humidity measurement range	15...90% RH	0...100% RH	0...100% RH
Output current of humidity measurement	4 (0%)...20mA (100%)	4 (0%)...20mA (100%)	4 (0%)...20mA (100%)
Response time in steady state (63%) at 23 °C	60 secs	typically 10 secs	typically 10 secs
Recovery time from saturation	360 secs	depending on air flow rate	depending on air flow rate
Storage temperature	-20...70°C	-50...70°C	-50...70°C
Accuracy of humidity measurement (at 23°C):	±5% RH (in the range 15...90% RH)	±2% RH (in the range 10...95% RH) ±3% RH (for values <10% or >95% RH)	±2% RH
Number of wires per connection	2 (blue: power; brown: output)	2	4
Air filter	metal wire mesh	polyethylene	polyethylene
Temperature sensor	-	-	Pt100B
Temperature range	-	-	-40...60°C (-40...140°F)
Temperature measurement output current	-	-	4 (-30°C)...20mA (70°C)
Accuracy of temperature measurement (at 0 °C and 23 °C)	-	-	±0,3K
Temperature compensation	-	with NTC	with Pt100B
Connection cable	1m or 3m	-	-
Maximum load	250 Ohm	0 Ohm at 6V _m and 5V _~ 500Ohm at 15V _m and 12V _~	0 Ohm at 6V _m and 5V _~ 500Ohm at 15V _m and 12V _~
Part Number	EWHS284 1m cable: SN5PPN11613M0 EWHS284-3 3m cable: SN5PPN13113M0	EWHS304: SN5NPM1A614M0	EWHS314: SN0NPM1A614M0