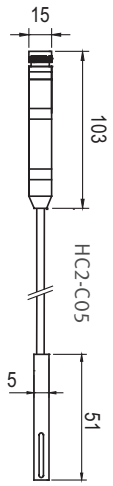
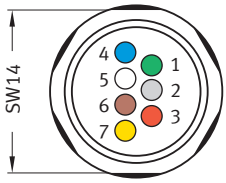
PROBES for measurements in confined spaces

Being the second smallest combined humidity and temperature probe available the SC05 probe is well suited to applications where space is at a premium, or when the minimum intrusion is important.
Mounted on a 2m cable, the nickel plated brass 5mm probe is robust and has a fast response. In applications where dust may be present, a slip over filter is available (SP-T05).





Electrical connections:
(all HygroClip2 probes with connector)

1 V+ (3.2 VDC to max. 5 VDC, ±0%; recommended: 3.3 VDC)
2 GND (ground, digital and power)
3 RXD (UART)
4 TXD (UART)
5 Analog signal %rh (0...100 %rh=0...1 V)
6 Analog signal °C (-40...60 °C = 0...1 V)
7 AGND (analog ground)

SPECIFICATIONS:

Applications	Probe for measurements in tight spaces
Main features	Humidity range: 0… 100%rh Temperature limits: -40… 85 °C (-40 to 185 ° F) Diameter: 5 mm (0.20 "), cable length (electronics to probe tip: approx 2m (6.5ft) Electronics case: polycarbonate, black Probe Material: nickel-plated brass
Probe type	HygroClip® 2
Humidity sensor	ROTRONIC Hygromer® IN-1
Temperature sensor	Pt100, 1/3 Class B
Long term stability	better than 1%rh / year
Measuring range with interchangeable probe	0…100 %rh and -40…100 °C
Accuracy w. adjustment profile "standard"	at 23 °C and 10, 35, 80 %rh ± 0.8%rh / ± 0.1 K
Accuracy w. adjustment profile "High Precision"	at 23 °C and 10, 20, 30, 40, 50, 60, 70, 80, 90 % rh ± 0.5%rh / 0.1 K
Accuracy w. adjustment profile "Custom"	at 3 selectable temperatures from -10 to 70 °C and 20 selectable humidity values ± 0.5%rh / K 0.1
Reproducibility Airchip	< 0.02 %rh / 0.01 K
Response time t 63	< 15 seconds
Measurement interval	typically 1 second (without calculations)
Operating range electronics	-40…100 °C and 0…100 %rh
Alerting	Yes, programmable
Exploitation software	ROTRONIC HW4
Statistical functions	Min./ Max., Average
Probe adjustment by software	1 point & multipoint %rh & °C
Psychrometric calculations	Dewpoint / frost point
Event logging	System related events (FDA, GAMP)
Analogue outputs scaleable by the user	Yes
User information	From HW4 Devicemanager
Data processing via HW4	Via Interfacecabel
Device Protection by password	Yes
Sensor diagnostics (drift, state)	programmable, factory settings: Off
Audit Trail/ electronic records	FDA CFR21 Part 11/GAMP Comp.
External datalogging	2000 records
Power supply / Power consumption	3.2…5 VDC ±0 % / < 4.5 mA
Type of output signals	2 x 0…1 VDC
Analog output signal (standard)	0…1 V = 0...100 %rh 0…1 V = -40...60 °C
Digital output signal (standard)	UART = Universal Asynchronous Receiver Transmitter (ASCII)
Service Interface	UART
Reverse voltage protection	Mechanically in the plug
Probe material	Nickel-plated brass
Probe cable material	PTFE
Enclosure material	Nickel-plated brass
Weight	approximately 90 g
FDA/GAMP compatibility	FDA CFR21 part 11 & GAMP

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