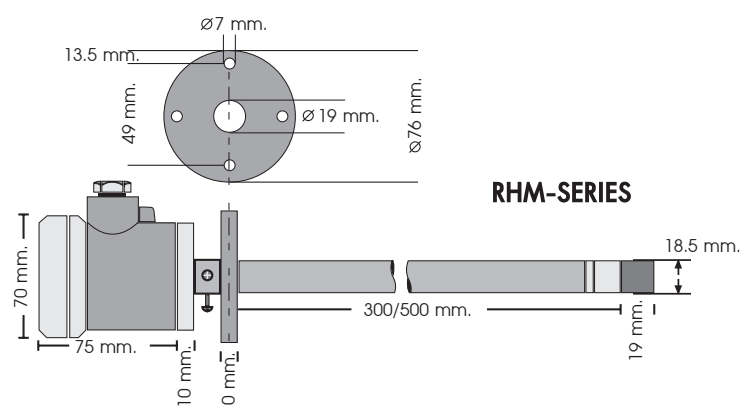




TECHNICAL SPECIFICATION (คุณสมบัติทางด้านเทคนิค)

| | | |
|-------------------|-----------------------------|-------------------------|
| Model | RHM-005-00,01-H | |
| Power Supply | 16-30VDC | |
| Power Consumption | <1 VA | |
| Input | Humidity | 0-100% RH |
| | Temperature | 0-150 °C |
| | Accuracy Humidity | ± 3% RH (20 -90% RH) |
| | Accuracy Temperature | ± 1 °C (0 - 150 °C) |
| | Long-term Drift Humidity | < 0.3% RH/yr |
| | Long-term Drift Temperature | < 0.04 °C/yr |
| Output | DC current | 4-20 mA Maximum 500 Ohm |
| Ambient Operation | Temperature | -10 °C to 150 °C |
| | Humidity | <85% RH Non-Condensing |
| Ambient Storage | Temperature | -20 °C to 150 °C |
| | Humidity | <85% RH Non-Condensing |
| Protection Degree | IP65 | |
| Installation | Screw | |
| Material | Housing | Aluminium and Stanless |
| | Filter Head | Metal Sintered(150 °C) |
| Size | Core 300 x Ø19 mm. | |
| Weight | 770 g. | |

DIMENSION



DESCRIPTION

- Measure temperature and humidity in one device and convert temperature and humidity signal to be standard electrical signal (Output).

- DC Current 4-20 mA. 2 wires.

- Temperature range 0-150 °C
- Humidity range 0-100% RH
- There are probe in 2 size (Probe made from stainless).

- probe tube size 300 mm.

- probe tube size 500 mm.

- Suitable for temperature and humidity measuring inside oven 150 °C, Sterilizing tank, Dehumidification tank etc. Install to embed in oven box and leave head part outside oven which has electronics parts inside and can use with high temperature oven.

- Filter has Silicon Carbonate at the end side of probe to protect dust and flange for installation.

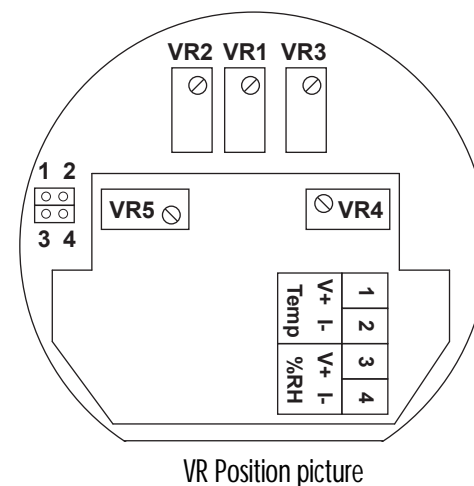
TURNING OUTPUT

RHM-005-XX-X-H will receive Calibrate Output and Sensor from factory but when it turns to calibrate cycle the device can tune signal by signal adjustment.

Output adjustment have to use calibration device that has the accuracy more than RHM-005 at least 3 times to adjust device precisely.

- Signal tuning of the end of probe which is measuring to amplify before convert 4-20mA set. User should not tune without devices and controlling environment.

- Set the humidity of chamber at 30%RH and wait until the humidity controller is stable. Measure signal at by Volt DC Meter positive electrode measure at spot 2 and negative electrode measure at spot 3 set signal by VR1. The voltage will be 0.890 V.
- After operate as step 1.1 then operate follow Output mA adjustment again so it can start to use.



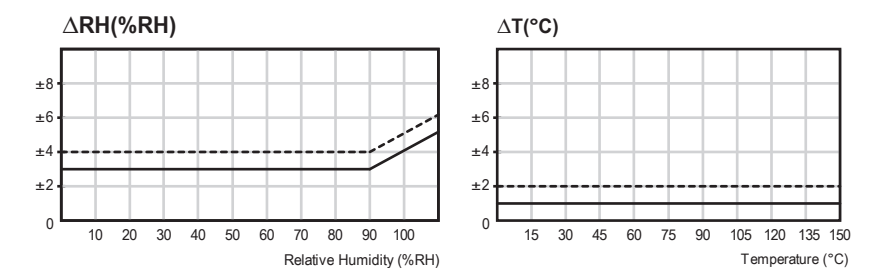
- Output %RH Tuning Signal Output %RH

- Set humidity at Chamber at 30%RH wait until humidity controller is stable the set to then set to VR2(Zero) for output is equal to 8.80 mA.
- Set controlled humidity of Chamber at 80 %RH wait until humidity to be stable then set to VR5(Span) for output is equal to 16.80 mA.
- Repeat step 2.1 and 2.2 until it has accuracy as required.

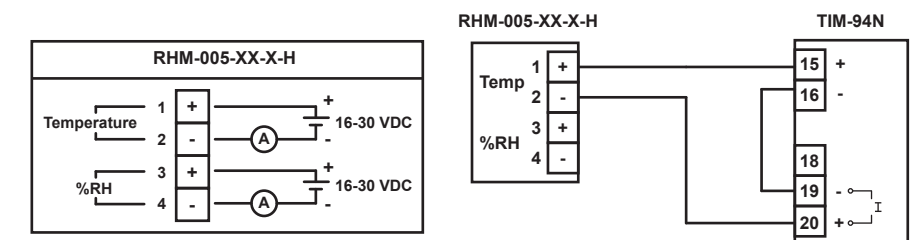
- Output Temperature Tuning.

- Set controlled temperature of Chamber at 0°C wait until temperature controller is stable then set VR3(Zero) for output is equal to 4.00 mA.
- Set controlled temperature of Chamber at 150°C wait until temperature controller is stable then set VR4 (Span) for output is equal to 20.00 mA.
- Repeat step 3.1 and 3.2 until it has accuracy as required.

Accuracy graph



WIRING DIAGRAM



ORDERING CODE

| | | | | | | | | |
|--------|------------------------|--------------|------------------------|--------------|---------|--|---|---|
| RHM | - | | - | | - | | - | H |
| Output | | Signal Input | | Probe Length | | | | |
| 005 | DC Current : 4 - 20 mA | 00 | Humidity & Temperature | 3 | 300 mm. | | | |
| | | 01 | Humidity | 5 | 500 mm. | | | |

** Remark : Probe Length can produce 300 mm. and 500 mm. only.



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