

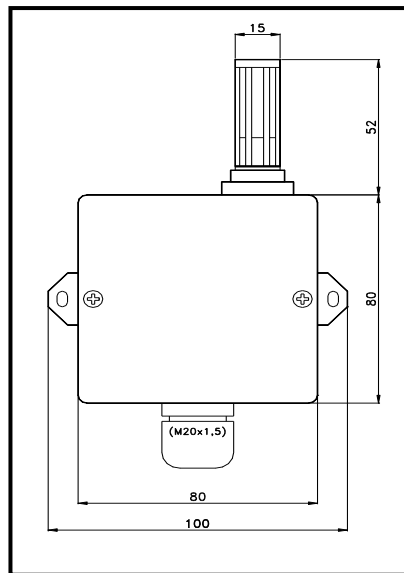
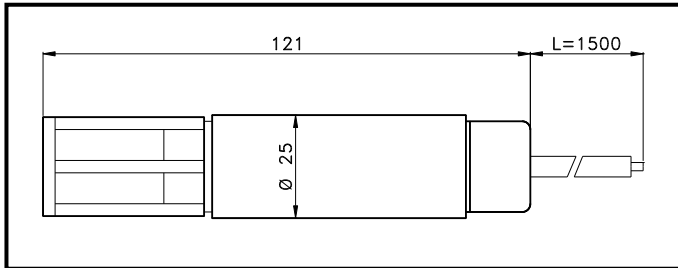
**CONTROLTEC****RELATIVE HUMIDITY  
& TEMPERATURE  
TRANSMITTERS****TRH**

CE

 **SINGLE  
&  
DOUBLE  
SENSOR**
**TRH 10****TRH 11****TRH 12**

| <b>MECHANICAL CHARACTERISTICS</b>        |  |  |  |
|--|--|--|--|
| Housing                                  | Plastic  |  |  |
| Dimensions                               | 121x Ø 25 mm   | 80x80x52 mm  |  |
| Weight                                   | 85 g. approx.  | 125 g. approx.   | 130 g. approx.   |
| Connections                              | PVC cable-2x0,5mm <sup>2</sup> -1500mm   | 2,5 mm <sup>2</sup> screw terminal block   |  |
| Recommended connection cable size        | --   | 2x0,75 or 2x1 mm <sup>2</sup>  | 4x0,5 or 4x0,75 mm <sup>2</sup>  |
| Mounting                                 | Wall mounting  |  |  |
| Protection degree                        | IP54   | IP65   |  |
| Air filter                               | Wire mesh  | Polyethylene   |  |
| <b>ELECTRICAL DATA</b>                   |  |  |  |
| Power supply                             | 9...28 VDC   | 9...30 VDC   |  |
| Power consumption                        | 20 VA Max  |  | 50 VA Max  |
| Humidity sensor type                     | Resistive  | Capacitive   |  |
| Temperature sensor type                  | --   | --   | RTD Pt100 (Class B)  |
| External load                            | 250 Ω max  |  |  |
| Humidity output signal                   | 4..20mA (20...100 % RH)  | 4..20mA (0...100 % RH)   | 0..20mA (0...100 % RH)   |
| Temperature output signal                | --   | --   | 0..20mA (-30...+70°C)  |
| <b>FUNCTIONAL DATA</b>                   |  |  |  |
| Humidity measurement range               | 15...90 RH% (3..18 mA)   | 0...100 RH%  |  |
| Temperature measurement range            | --   | --   | -30...+70°C  |
| Humidity overall accuracy                | +/- 5 % (10...95 RH%) at 23°C without pollutant presence and with air speed of 3 m/sec | +/- 2 % (10...95 RH%)<br>+/- 3 % (0...10/95...100 RH%) at 23°C, without pollutant presence and with air speed of 3 m/sec | +/- 1,5 % (10...95 RH%)<br>+/- 2 % (0...10/95...100 RH%) at 23°C, without pollutant presence and with air speed of 3 m/sec |
| Temperature overall accuracy             | --   | --   | +/- 0,9 %  |
| Additional error with pollutant presence | +/- 2 RH%  |  |  |
| Response time                            | 60 sec. to reach 63% of humidity change at 23°C and with air speed of 3 m/sec          | 30 sec. to reach 63% of humidity change at 23°C and with air speed of 3 m/sec  |  |
| Recovery time after saturation           | 360 sec. approx.   | 90 sec. approx.  |  |
| Temperature compensation                 | --   | By NTC sensor  | By Pt100 sensor  |
| Maximum air speed                        | 20 m/sec.  |  |  |
| Operating temperature                    | -10...+60°C  | -30...+70°C  |  |
| Operating humidity                       | 0...100 RH%  |  |  |

**DIMENSIONS (mm)**



**CODING**

|   |                   |
|---|-------------------|
| <b>TRH 10</b>                               | <b>∅ 25 x 121</b> |
| <b>Description</b>                          |                   |
| Relative Humidity Probe in cylindrical case |                   |

|                                       |                     |
|---------------------------------------|---------------------|
| <b>TRH 11</b>                         | <b>80 x 80 x 52</b> |
| <b>Description</b>                    |                     |
| Relative Humidity Probe in shell case |                     |

|   |                     |
|---|---------------------|
| <b>TRH 12</b>                                       | <b>80 x 80 x 52</b> |
| <b>Description</b>                                  |                     |
| Relative Humidity & Temperature Probe in shell case |                     |

**CONNECTIONS**

