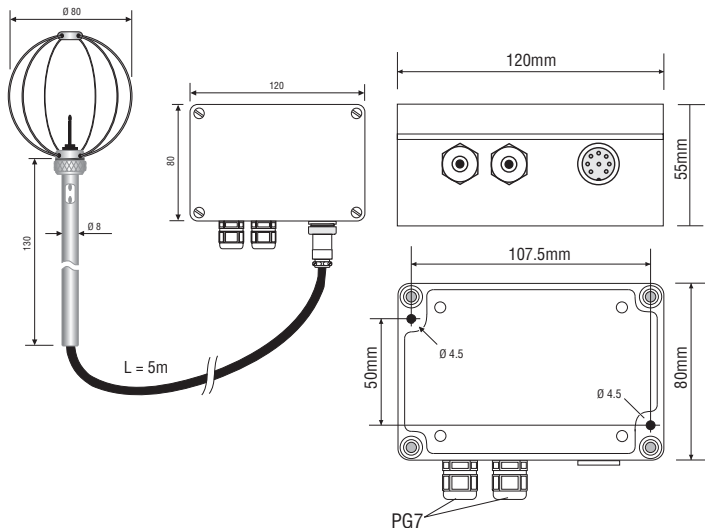




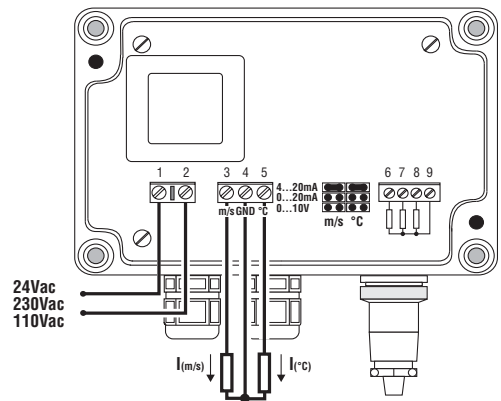
## HD 103T.0 ACTIVE AIR SPEED TRANSMITTER

The HD103T.0 measures air speed by using an omnidirectional hotwire probe. It has three configurable analogue outputs: 4...20mA and 0...20mA current outputs and 0...10Vdc voltage output (0...1Vdc or 0...5Vdc outputs can be supplied on request). The output can be chosen by using the jumpers inside the instrument.

The sensor set at the top of the probe is very delicate and must be protected with the special protection provided with the instrument. During transport, the sensor is enclosed in a cylinder screwed on the top of the probe; during installation, remove the protection and apply the protective cover in its place.



| Technical specifications                                    |   | Notes                                       |
|---|---|---|
| Air speed Measuring range                                   | 0.1...5m/s                              |   |
| Air speed Accuracy<br>range 0.1...0.99m/s<br>range 1...5m/s | $\pm 0.1$ m/s<br>$\pm 0.4$ m/s          | at 50%RH and 1013hPa                        |
| Temperature measuring range                                 | -10...+80°C                             |   |
| Temperature Accuracy<br>range 0...70°C<br>remaining range   | $\pm 0.3$ °C<br>$\pm 0.4$ °C            |   |
| Output<br>(for both temperature and air speed)              | 4...20mA<br>0...20mA<br>0...10Vdc       | 0...5Vdc and 0...1Vdc<br>outputs on request |
| Load resistance   | $R_L < 500\Omega$<br>$R_L > 100k\Omega$ | for current outputs<br>for voltage outputs  |
| Power supply  | 24Vac $\pm 10\%$ ,<br>50...60Hz         | 110Vac or 230Vac<br>on request              |
| Operating temperature<br>electronics<br>probe               | -5...+50°C<br>-10...+80°C               | 5...75%RH                                   |
| Compensation temperature                                    | 0...+80°C                               |   |
| Storage temperature   | -10...+80°C                             |   |
| Electronics protection class                                | IP67                                    |   |
| Sensor working conditions                                   | Clean air, RH<80%                       |   |
| Case dimensions   | 120 x 80 x 55                           | Without probe                               |
| Probe cable length  | L=5m                                    |   |



### Installation notes

- Select the type of air speed and temperature **output** by using the jumpers placed on the board.
- The probe must be used with clean air only and humidity below 80%.
- The transmitters are factory calibrated and no further adjustments are required.
- Each instrument is calibrated with its own probe. Don't mix up probes and instruments: the calibration will have to be repeated.

### Electrical connections

#### Power supply

Power the instrument at the voltage shown in the electrical specifications.

#### Analogue output

The output signal comes from m/s and GND terminals for air speed, from °C and GND for temperature.

### ORDERING CODES

**HD103T.0:** Active air speed and temperature transmitter. Analogue outputs: 4...20mA, 0...20mA and 0...10Vdc selected by jumper. Omnidirectional probe with wired protective cover  $\varnothing=80$ mm connected to the electronics through a 5-metre cable. Air speed range 0.1...5m/s. Temperature output range -20...+80°C. Power supply 24Vac (115 and 230Vac on request). Probe operating temperature -10...+80°C, electronics operating temperature -5...+50°C.