

HOT WIRE AIR SPEED TRANSMITTERS



**HD403TS... and
HD4V3TS...**



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ISO 9001:2015 CERTIFIED
Certificate No. IQSC202010014

HD403TS... HD4V3TS...

HD403TS... and HD4V3TS... Active Hot wire Air Speed Transmitters

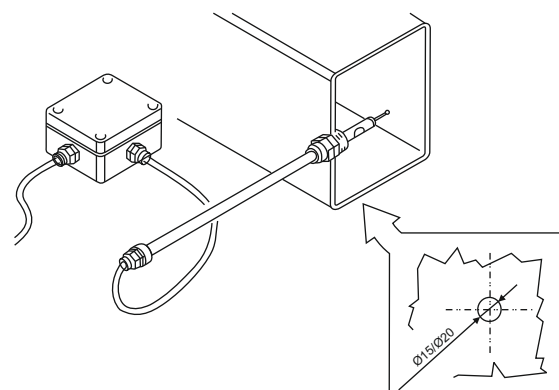
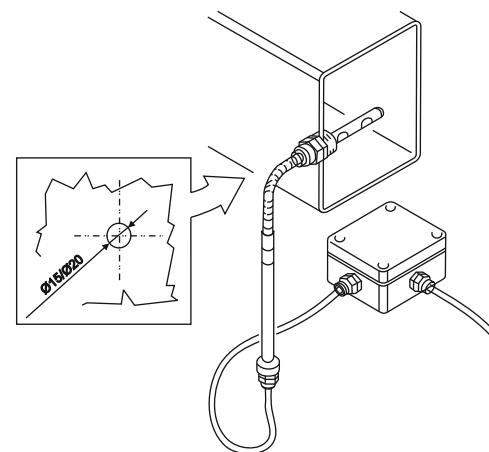
The **HD403TS...** series of Hotwire Air Speed Transmitters are used for measuring and controlling air speed in Ventilation Ducts, Clean Rooms, Extractor Fans, etc. These transmitters are equipped with a hot wire sensor, in the directional or omnidirectional version.

The **HD403TS...** series of transmitters have a 4...20mA output, while the HD4V3TS... series have a 0...10Vdc output.

Two measuring ranges are available: 0.05...40m/s for ...S1 and ...S3 models with directional probe and 0.05...5.00m/s for ...S2 and...S4 models with omnidirectional probe.

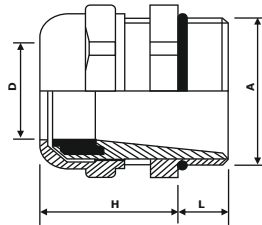
Technical Specification	Notes	
Air Speed	0.05...5.00m/s ...	S2 and ...S4 models
Standard Measuring Range	0.05...40.0m/s ...	S1 and ...S3 models
Measurement Accuracy	± (0.03m/s + 2%f.s.)	
Response time (integration) selected by jumper	0.2s 2.0s	Fast Slow
Operating Temperature	Electronics Probe	
	0...+60°C 0...+80°C	
Compensation Temperature	0...+80°C	
Storage temperature	-10...+70°C	
Electronics Protection Class	IP67	
Sensor working conditions	Clear air, RH<90%	
Case Dimensions	58 x 65 x 35	Without probe
Standard cable length	2m	

Model	Output	Power supply	Load Resistance
HD403TS...	4...20mA	12...40Vdc or 24Vac	R _L < 500Ω
HD4V3TS...	0...10Vdc	16...40Vdc or 24Vac	R _L > 10kΩ



Installation Notes

- The probe must be used with clean air only and humidity below 90%.
- In ...S1 and ...S3 directional probes, the sensor hole must be oriented in the same direction as the flow: turn the probe so that the displayed speed will be the highest, at constant flow.
- To fix the probe of ...S1, ...S2 and ...S3 models inside a ventilation duct, a pipe ,etc. use a PG9 or PG11 metal cable gland according to the shape or a connection equipped with a ¼" rubber ring.

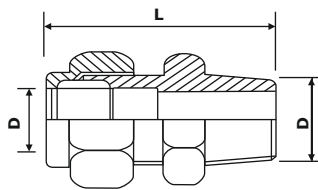


PG9

D = 4...8mm
L = 6mm
H = 20mm
A = PG9

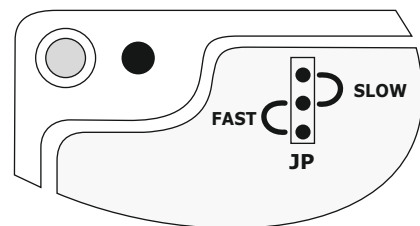
PG11

D = 5...10mm
L = 6mm
H = 21mm
A = PG11



L = 30.5mm
D = 8mm
A = ¼"

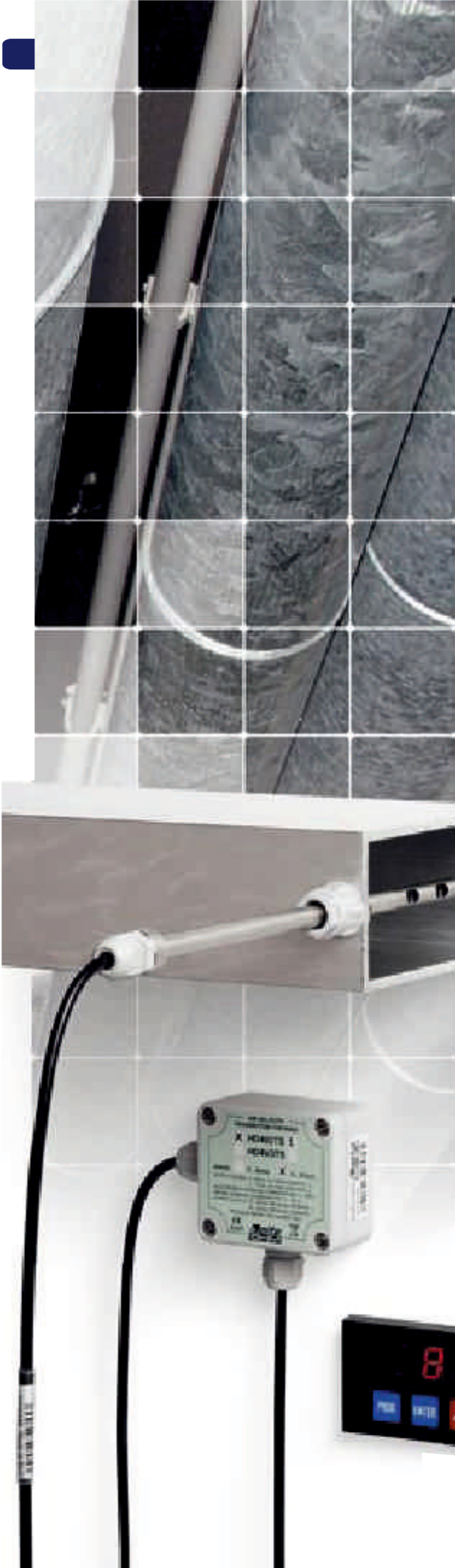
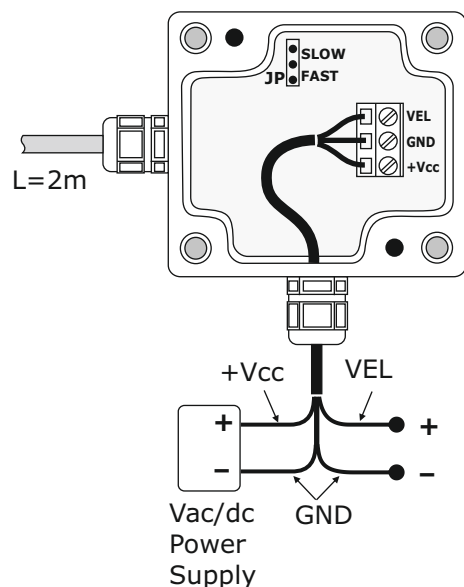
- The transmitters are factory calibrated and no further adjustments are required.
- Select the response time by using the JP jumper: in the FAST position, the response time is 0.2s, in the SLOW position is 2s. Set the jumper at SLOW in case of turbulence, otherwise please select the FAST position.



Electrical connections

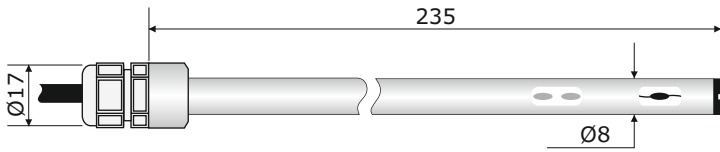
Power supply and output

Power the instrument at the voltage shown in the electrical specifications: power supply terminals are marked as +Vcc and GND. The output signal comes from VEL and GND terminals. To make the connection, please use a three-wire cable as shown in the drawing below.

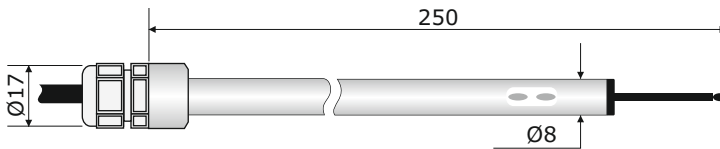


▶ Probe dimensions

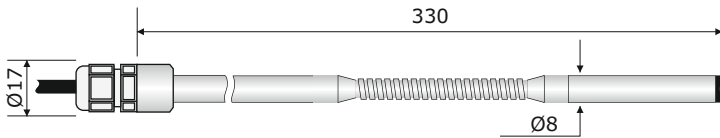
AP403S1 Directional probe for HD4...3TS1



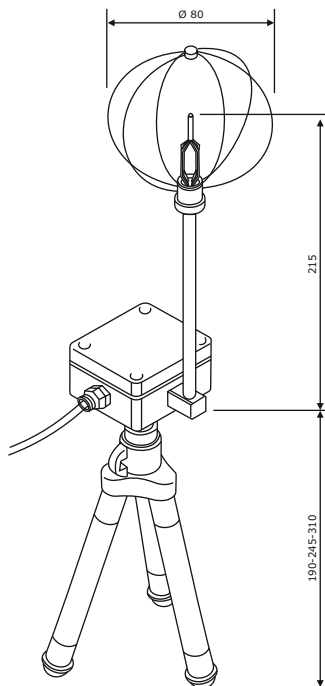
AP403S2 Omnidirectional probe for HD4...3TS2



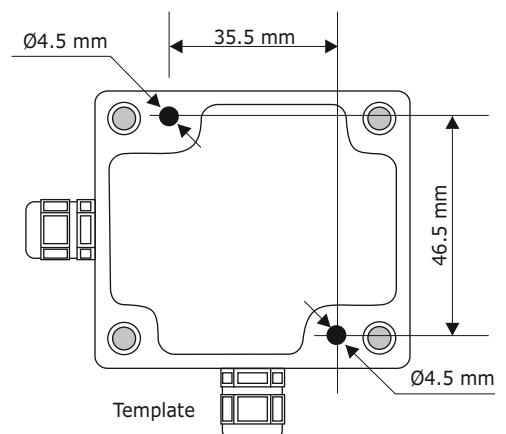
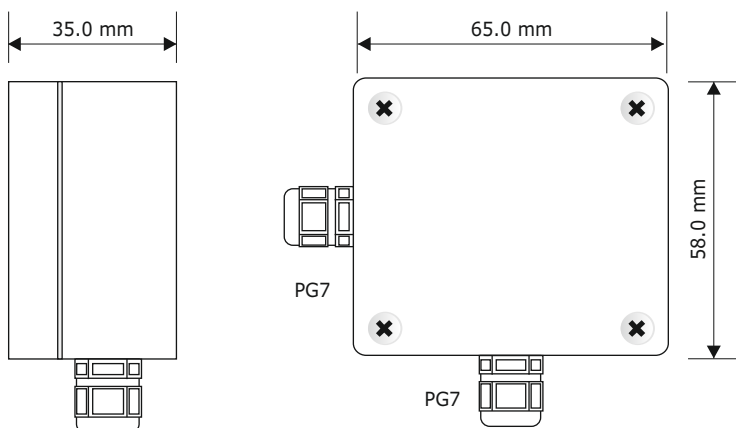
AP403S3 Flexible directional probe for HD4...3TS3



AP403S4 Omnidirectional probe for HD4...3TS4



▶ Dimension



▶ ORDERING CODES

HD403TS1: Active hotwire air speed transmitter with 4...20mA output. Measuring range:0.05...40m/s. Directional probe $\varnothing=8\text{mm}$, cable L=2m.

HD4V3TS1: Active hotwire air speed transmitter with 0...10Vdc output. Measuring range:0.05...40m/s. Directional probe $\varnothing=8\text{mm}$, cable L=2m.

HD403TS2: Active hotwire air speed transmitter with 4...20mA output. Measuring range:0.05...5.00m/s. Omnidirectional probe $\varnothing=8\text{mm}$, cable L=2m.

HD4V3TS2: Active hotwire air speed transmitter with 0...10Vdc output. Measuring range:0.05...5.00m/s. Omnidirectional probe $\varnothing=8\text{mm}$, cable L=2m.

HD403TS3: Active hotwire air speed transmitter with 4...20mA output. Measuring range:0.05...40m/s. Flexible directional probe, $\varnothing=8\text{mm}$, cable L=2m.

HD4V3TS3: Active hotwire air speed transmitter with 0...10Vdc output. Measuring range:0.05...40m/s. Flexible directional probe, $\varnothing=8\text{mm}$, cable L=2m.

HD403TS4: Active hotwire air speed transmitter with 4...20mA output. Measuring range:0.05...5.00m/s. Omnidirectional probe with wired protective cover $\varnothing=80\text{mm}$. Equipped with tripod.

HD4V3TS4: Active hotwire air speed transmitter with 0...10Vdc output. Measuring range:0.05...5.00m/s. Omnidirectional probe with wired protective cover $\varnothing=80\text{mm}$. Equipped with tripod.

HD4...3TS...

- 1 = Directional probe
 - 2 = Omnidirectional probe
 - 3 = Flexible directional probe
 - 4 = Omnidirectional probe with tripod
- 0 = 4...20mA signal output
 - V = 0...10Vdc signal output

