

HD403TS... - HD4V3TS... SERIES



**HD403TS AND HD4V3TS
ACTIVE HOTWIRE AIR SPEED TRANSMITTERS**

HD403TS... and HD4V3TS... series of hotwire air speed transmitters are used for measuring and controlling air speed in ventilation ducts, clean rooms, extractor fans, as well as monitoring air quality (IAQ), etc.

These transmitters are equipped with a hotwire sensor, in the directional or omnidirectional version.

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

Two measuring ranges are available:

- 0.20...40 m/s for ...TS1 and ...TS3 models with **directional probe**;
- 0.1...5.00 m/s for ...TS2 and ...TS4 models with **omnidirectional probe**.

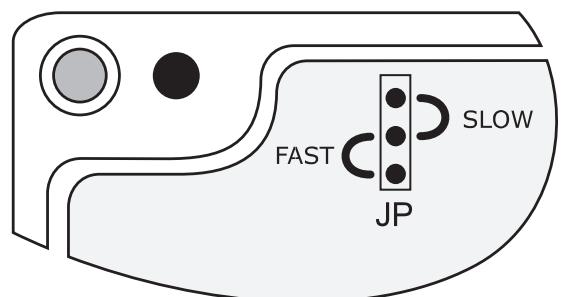


Model	Output	Power supply	Load resistance
HD403TS...	4...20 mA	12...40 Vdc or 24 Vac	$R_L < 500\Omega$
HD4V3TS...	0...10 Vdc	16...40 Vdc or 24 Vac	$R_L > 10k\Omega$

Technical specifications		Notes
Air speed Standard measuring range	0.1...5.00 m/s	...TS2 and ...TS4 models
	0.20...40.0 m/s	...TS1 and ...TS3 models
Measurement accuracy	$\pm(0.2 \text{ m/s} + 3 \% \text{f.s.})$	
Response time (integration) selected by jumper	0.2 s 2.0 s	Fast Slow
Operating temperature electronics probe	0...+60 °C 0...+80 °C	
Compensation temperature	0...+80 °C	
Storage temperature	-10...+80 °C	
Electronics protection class	IP67	
Sensor working conditions	Clean air, RH<80%	
Case dimensions	60 x 66 x 35 mm	Without probe
Standard cable length	2 m	

INSTALLATION NOTES

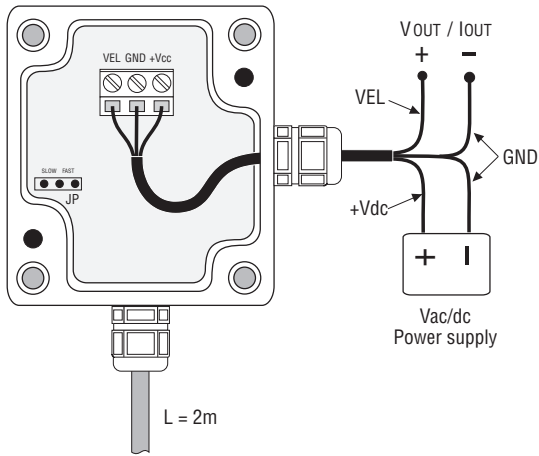
- The probe must be used with clean air only and humidity below 80%.
- In ...TS1 and ...TS3 directional probes, the sensor hole must be oriented in the same direction as the flow: turn the probe so that the displayed speed will be the highest, at constant flow.
- To fix the probe of ...TS1 and ...TS3 models inside a ventilation duct, a pipe, etc. use a metal cable gland.
- 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 0.2 s, in the SLOW position is 2 s. Set the jumper on SLOW in case of turbulence, otherwise please select the FAST position.



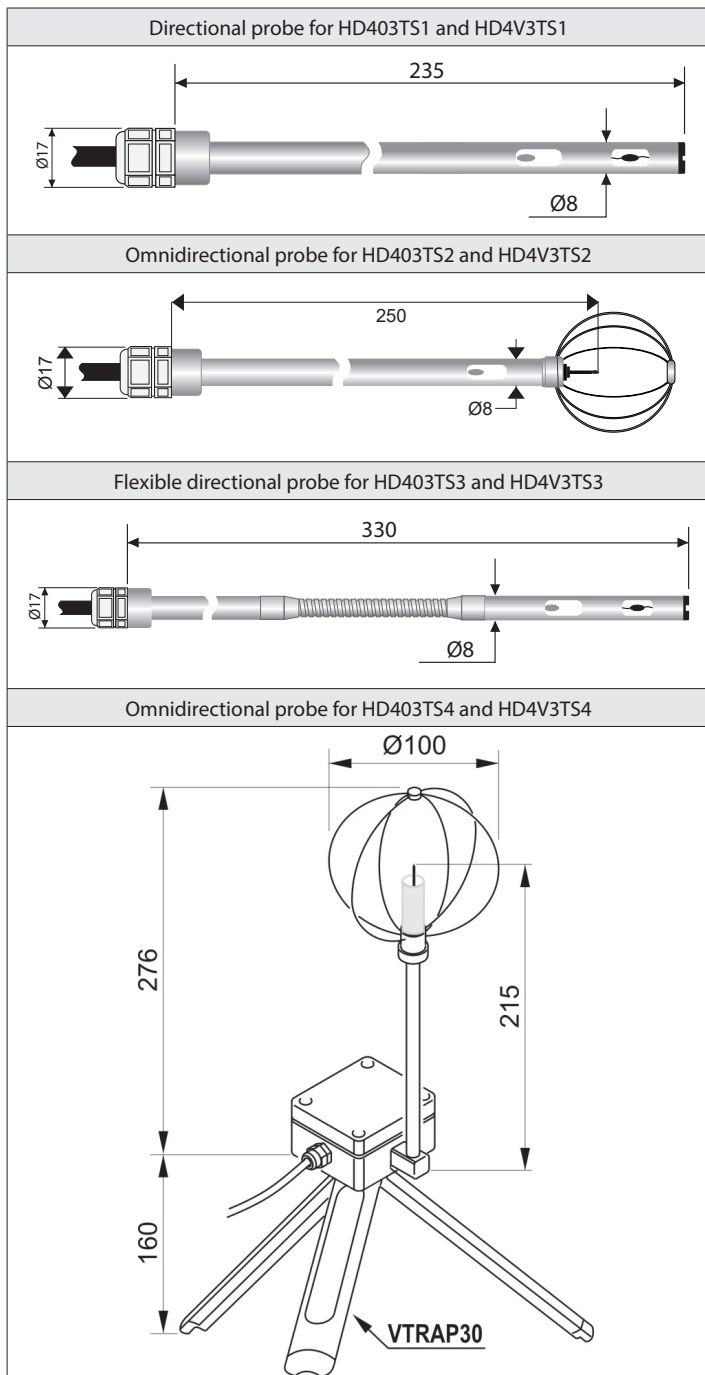
ELECTRICAL CONNECTIONS

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



ORDERING CODES

HD4

3TS

Probe type

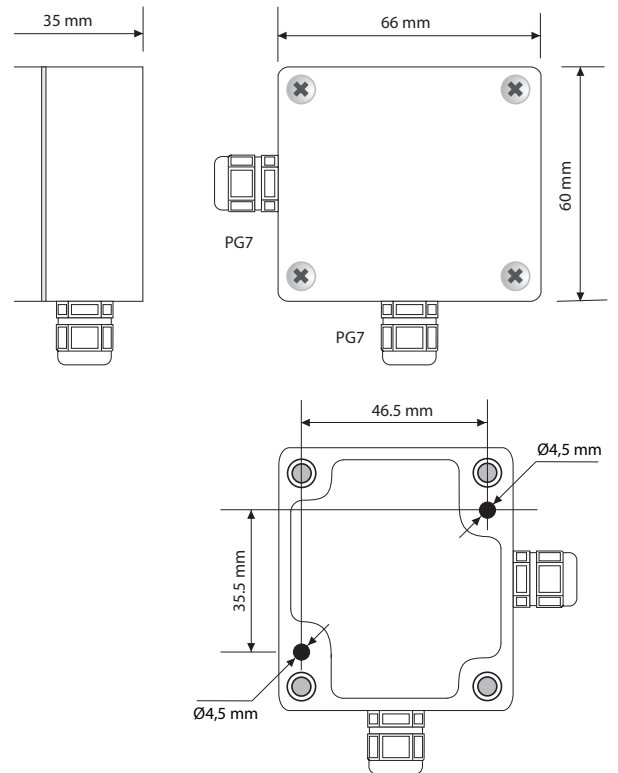
- 1 = directional probe
- 2 = omnidirectional probe
- 3 = flexible directional probe
- 4 = omnidirectional probe with tripod

Output

0 = 4...20 mA

V = 0...10 Vdc

DIMENSIONS





DICHIARAZIONE DI CONFORMITÀ UE EU DECLARATION OF CONFORMITY

Delta Ohm S.r.L. a socio unico – Via Marconi 5 – 35030 Caselle di Selvazzano – Padova – ITALY

Documento Nr. / Mese.Anno: **5038 / 07.2019**
 Document-No. / Month.Year :

Si dichiara con la presente, in qualità di produttore e sotto la propria responsabilità esclusiva, che i seguenti prodotti sono conformi ai requisiti di protezione definiti nelle direttive del Consiglio Europeo:
 We declare as manufacturer herewith under our sole responsibility that the following products are in compliance with the protection requirements defined in the European Council directives:

Codice prodotto:
 Product identifier : **HD403TS... / HD4V3TS...**

Descrizione prodotto:
 Product description : **Serie di trasmettitori di velocità dell'aria a filo caldo
 Series of hotwire air speed transmitters**

I prodotti sono conformi alle seguenti Direttive Europee:
 The products conform to following European Directives:

Direttive / Directives	
2014/30/EU	Direttiva EMC / EMC Directive
2014/35/EU	Direttiva bassa tensione / Low Voltage Directive
2011/65/EU - 2015/863/EU	RoHS / RoHS

Norme armonizzate applicate o riferimento a specifiche tecniche:
 Applied harmonized standards or mentioned technical specifications:


Norme armonizzate / Harmonized standards	
EN 61010-1:2010	Requisiti di sicurezza elettrica / Electrical safety requirements
EN 61326-1:2013	Requisiti EMC / EMC requirements
EN 50581:2012	RoHS / RoHS

Il produttore è responsabile per la dichiarazione rilasciata da:
 The manufacturer is responsible for the declaration released by:

Johannes Overhues

Amministratore delegato
 Chief Executive Officer

Caselle di Selvazzano, 19/07/2019



Questa dichiarazione certifica l'accordo con la legislazione armonizzata menzionata, non costituisce tuttavia garanzia delle caratteristiche.
 This declaration certifies the agreement with the harmonization legislation mentioned, contained however no warranty of characteristics.

WARRANTY

Delta OHM is required to respond to the "factory warranty" only in those cases provided by Legislative Decree 6 September 2005 - n. 206. Each instrument is sold after rigorous inspections; if any manufacturing defect is found, it is necessary to contact the distributor where the instrument was purchased from. During the warranty period (24 months from the date of invoice) any manufacturing defects found will be repaired free of charge. Misuse, wear, neglect, lack or inefficient maintenance as well as theft and damage during transport are excluded. Warranty does not apply if changes, tampering or unauthorized repairs are made on the product. Solutions, probes, electrodes and microphones are not guaranteed as the improper use, even for a few minutes, may cause irreparable damages.

Delta OHM repairs the products that show defects of construction in accordance with the terms and conditions of warranty included in the manual of the product. For any dispute, the competent court is the Court of Padua. The Italian law and the "Convention on Contracts for the International Sales of Goods" apply.

TECHNICAL INFORMATION

The quality level of our instruments is the result of the continuous product development. This may lead to differences between the information reported in the manual and the instrument you have purchased. In case of discrepancies and/or inconsistencies, please write to sales@deltaohm.com. Delta OHM reserves the right to change technical specifications and dimensions to fit the product requirements without prior notice.

DISPOSAL INFORMATION



Electrical and electronic equipment marked with specific symbol in compliance with 2012/19/EU Directive must be disposed of separately from household waste. European users can hand them over to the dealer or to the manufacturer when purchasing a new electrical and electronic equipment, or to a WEEE collection point designated by local authorities. Illegal disposal is punished by law.

Disposing of electrical and electronic equipment separately from normal waste helps to preserve natural resources and allows materials to be recycled in an environmentally friendly way without risks to human health.