

Date Sheet: 0699 5100

Measuring Transducer for Air Velocity

Flexible and customer-specific



Vane probe and thermal probes connectable





only available in case of thermal probes

Description/ Features

The flexible velocity measuring transducer

The velocity meausuring transducer 0699 5100 can be used with the air velocity probes of the Testo Reference Class (vane probes, hot ball probes and hot wire probes).

Furthermore this instrument offers a very high flexibility, especially in choosing the measuring ranges and the application range. Therefore is is optimally suitable e. g. for test and measuring stands.

The air velocity as well as the air volume velocity in German and Americal parameters is available, therefore a consumption measurement can be carried out.

Variable norm signals 0(4) to 20mA or 0 to 1(10)V offer the ideal interface for a connection to superior control systems. Two display versions, among others also with switching outputs and a RS485 interface are available as an option. Furthermore, output channels¹¹ for velocity and temperature with a common reference ground are completing the spectrum.

Therefore, the measuring transducer represents the ideal solution for your velocity- (HVAC) applications.

Technical data measuring transducer

resp. vane probes with thermocouple. Supply voltage: 24VDC (15 to 30VDC) Current consumption: 50 to 15mA (depending on connected probe) Two outputs (temperature optional) Analogue outputs: With common ground The instruments are configurated customer-specificly. Defined according to NAMUR NE43 Analogue interface: 0(4) to 20mA; 0 to 1V; 0 to 10V (probe type, analogue output, scaling) pre-conficurated customer-specificly Yes (supply to analogue output) Galvanic separation: ~5µA (12 Bit PWM) Resolution: Accuracy: 0,02mA / 1,5mV resp. 15mV 0,3µA/K Drift analogue outputs: Ē ABS, grey RAL 7035 Housing: 130 x 105 (140) x 52mm Measuring transducer with plugged-in probe: (0699 5100/1). Protection type: IP65 (with firmly connected probe) IP54 (with plugged-in probe) Measuring transducer with firmly According to guideline 89/336 EWG EMV: connected probe: (0699 5100/5) Only possible with vane probe -0 to 60°C Ambient temperature: 0628 0036.

All data are related to an ambient temperature of approx. 22 °C

The probes which can be connected

Testo supplies the suitable velocity probes for each measuring task.

Description	Picture	Meas. range/Meas. uncertainty	Part no.
12mm vane probe, pluggable to telescope or handle ²²		 +0,6 to +20m/s; +/-(0,2m/s +/- 1%0.av.) Operating temperature: -30 to 40 ℃ 	0635 9443
16mm vane probe, with TC type "K", pluggable to telescope or handle ²		 +0,4 to +60m/s; +/-(0,2m/s +/- 1%0. av.) -30 to 40 °C; Class 2 	<mark>0635 9540</mark>
60mm vane probe, pluggable to telescope or handle ^{*2}		 +0,25 to +20m/s; +/-(0,1m/s +/- 1,5%o. av.) Operating temperature: 0 to 60°C 	0635 9440
100mm vane probe, pluggable to telescope or handle ²		 +0,1 to +15m/s; +/-(0,1m/s +/- 1,5%o.av.) Operating temperature: 0 to 60 °C 	0635 9340
16mm mounting vane probe with lead of 3m		 +0,6 to +20m/s; +/-(0,2m/s +/- 1%0.av.) Operating temperature: -30 to 140 °C 	0628 0036
Mounting hot ball probe with lead of 2m	-an(¥¥)	0 to +10m/s; +/-(0,03m/s +/- 5%0.av.) -20 to 70℃; NTC +/- 0,6℃	0628 0035
Hot ball probe with telescope and lead with 2m		 0 to +10m/s; +/-(0,03m/s +/- 5%0.av.) -20 to 70 °C; NTC +/- 0,6 °C 	0635 1049
Hot wire probe with telescope and lead with 2m		 0 to +20m/s; +/-(0,03m/s +/- 4%o.av.) -20 to 70 °C; NTC +/- 0,6 °C 	0635 1041

² in connection with handle 0430 3545, telescope 0430 0941 or plug-in head lead 0430 0044