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technology.



Datasheet EE576

Probe for Very Low Air Velocity



EE576

Probe for Very Low Air Velocity

The compact EE576 probe is optimized for low air velocity measurement in applications like laminar flow control or filter monitoring. It operates on the hot-film anemometer principle which stands for high accuracy and fast response time.

Reliability

The the flow sensing element manufactured in state-of-the-art E+E thin-film technology is highly insensitive to contamination and offers excellent long-term stability.

Easy installation

The alignment strip on the probe facilitates the correct positioning in the air flow. The mounting flange within the scope of supply enables accurate setting of the immersion depth.

Output

The measured data up to 1 m/s (200 ft/min) or 2 m/s (400 ft/min) is available on the 0 - 5 V or 0 - 10 V output.



EE576 air velocity probe with flange

Features

Accredited Traceable Calibration Certificate



Internationally recognised certificates for the calibration of measuring instruments from accredited laboratories document the traceability of the measurements to the International System of Units (SI). The E+E Elektronik calibration laboratory offers two levels of traceable calibrations.

- As a Designated Institute (DI) of the Republic of Austria, the E+E calibration laboratory maintains Austria's national measurement standards for humidity, dew point temperature, air velocity and CO₂. This authorises the E+E calibration laboratory to issue calibration certificates at the level of a National Metrological Institute (NMI).
- The E+E calibration laboratory is accredited by Akkreditierung Austria in accordance with DIN EN ISO/IEC 17025 with the identification number 0608. This allows the laboratory to issue ISO 17025 certificates for the measurands humidity, temperature, dew point temperature, air velocity, flow, pressure and CO₂.

Visit www.eplusecal.com for detailed information on calibration and to enquire a certificate of accredited traceable calibration for the EE576 from the Designated Institute.

Features

Sensing head

- Protection rating IP20
- Polycarbonate (PC)
- Operates on the hot-film anemometer principle
- E+E thin-film technology
- Excellent long-term stability

Measurement performance

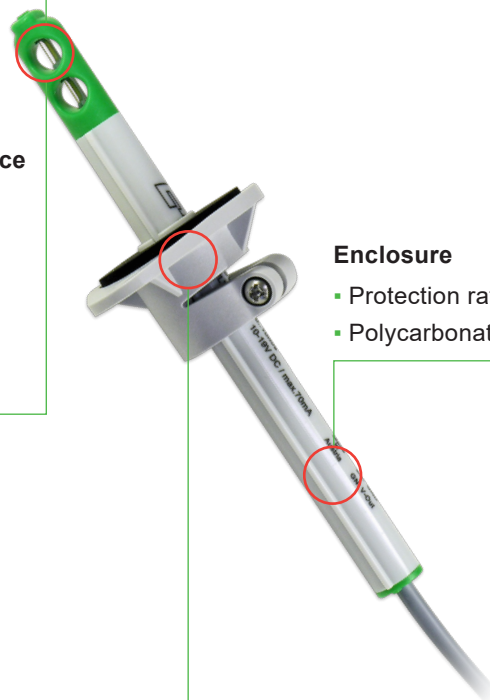
- High accuracy
- Measuring range:
 - 0...1 m/s
 - 0...2 m/s
- Fast response time:
 - 4 s @ 1 m/s

Enclosure

- Protection rating IP40
- Polycarbonate (PC)

Mounting flange

- Easy and quick mounting
- Accurate setting of the immersion depth

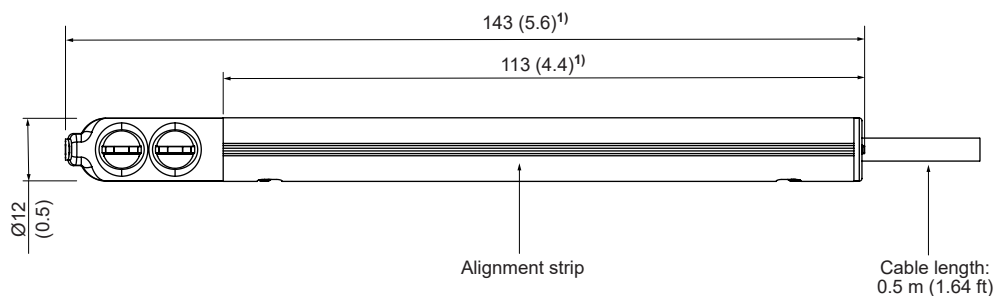


Dimensions

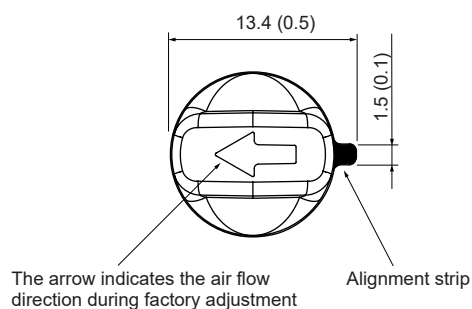
Values in mm (inch)

Probe

Polycarbonate (PC)

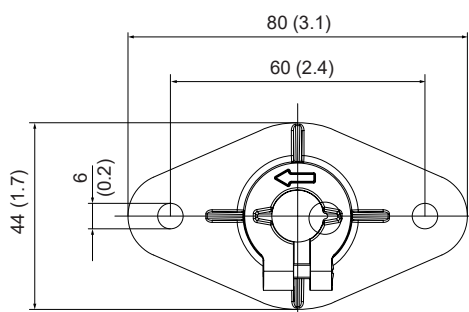


Front sensing head



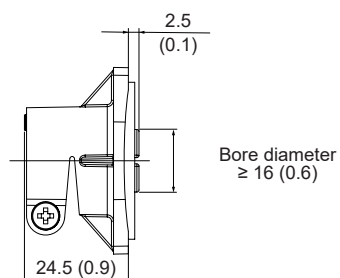
Mounting flange

Included in the scope of supply



Mounting flange

Side view



1) Orders for probes produced before 06/2025 have a length of 7 mm (0.3") more.

Technical Data

Measurands

Air Velocity (v)

Measuring range	0...1 m/s (0...200 ft/min) 0...2 m/s (0...400 ft/min)
Accuracy ¹⁾ @ 20 °C (68 °F), 45 %rF und 1013 hPa (14.7 psi) 0.2...1 m/s (40...200 ft/min) 0.2...2 m/s (40...400 ft/min)	±(0.05 m/s +2 % of mv) ±(0.08 m/s +4 % of mv) mv = measured value
Response time t ₉₀ , typ.	4 s bei 1 m/s (200 ft/min)

1) The accuracy statement includes the uncertainty of the factory calibration with an enhancement factor k=2 (2-times standard deviation).
The accuracy was calculated in accordance with EA-4/02 and with regard to GUM (Guide to the Expression of Uncertainty in Measurement).

Output

Analogue

Air velocity (v)	0 - 5 V 0 - 10 V	0 < I _L < 1 mA	I _L = load current
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General

Power supply class III  USA & Canada: Class 2 supply necessary	19 - 29 V DC		
Current consumption, max. @ 2 m/s (400 ft/min)	70 mA		
Humidity range Operation and Storage	10...95 %RH, non-condensing		
Temperature range Operation Storage	-20...+60 °C (-4...+140 °F) -30...+60 °C (-22...+140 °F)		
Probe cable	Polyvinylchloride (PVC), 3 x 0.25 mm ² with wire ferrules		
Probe material	Polycarbonate (PC)		
Protection rating Probe head Probe	IP20 IP40		
Electromagnetic compatibility	EN 61326-1 FCC Part15 Class B	EN 61326-2-3 ICES-003 Class B	Basic environment
Conformity	 		

Ordering Guide

Feature	Description	Code
Hardware Configuration		EE576-
	Output	A2
	0 - 5 V	A3
	0 - 10 V	A3
	Measuring range	HV21
	0...1 m/s (0...200 ft/min)	HV23
	0...2 m/s (0...400 ft/min)	HV23
	Power supply	V6
Connection cable length	19 - 29 V DC	V6
	0.5 m (1.64 ft)	KL50
	2 m (6.56 ft)	KL200

Order Example

EE576-A2HV23V6KL200

Feature	Code	Description
Output	A2	0 - 5 V
Measuring range	HV23	0...2 m/s (0...400 ft/min)
Power supply	V6	19 - 29 V DC
Connection cable length	KL200	2 m (6.56 ft)