Digital thermoanemometer FVAD 35 THx with ALMEMO® D6 plug with integrated atmospheric pressure sensor, for automatic pressure compensation



FVAD 35 TH4 / TH5



FVAD 35 TH4Kx
FVAD 35 TH5Kx

- Automatic atmospheric pressure compensation is provided for pressure-dependent flow velocity by means of a digital atmospheric pressure sensor integrated in the ALMEMO® D6 plug itself.
- Digital thermoanemometer with A/D converter in the grip or integrated in the cable
- The probe tube has a small diameter, only 6 mm.
- All relevant measurable variables can be measured using just one sensor.
- Three measuring channels are programmed (at our factory): Temperature (°C, t), Flow velocity (m/s, v), Atmospheric pressure (mbar, AP, p)

General features and accessories, ALMEMO® D6 sensors:
see chapter ALMEMO® Measuring instruments

DAkkS accredited calibration or factory calibration KV90xx air flow for digital sensor, see chapter „Calibration certificates“. DAkkS accredited calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.

Technical data

Digital thermoanemometer (Sensor including A/D converter)

Flow	
Measuring range	
FVAD 35 TH4 / TH4Kx	0.08 to 2 m/s
FVAD 35 TH5 / TH5Kx	0.2 to 20 m/s
Resolution	
FVAD 35 TH4 / TH4Kx	0.001 m/s
FVAD 35 TH5 / TH5Kx	0.01 m/s
Response time	<1.5 seconds
Accuracy	
FVAD 35 TH4 / TH4Kx	± (0.04 m/s +1 % of meas. val.)
FVAD 35 TH5 / TH5Kx	± (0.2 m/s +2 % of meas. val.)
Nominal conditions	22 °C ±2 K, 45 % RH ±10 % RH 1013 mbar
Temperature compensation	0 to +50 °C
Influence of temperature	
FVAD 35 TH4 / TH4Kx	±0.5 % of measured value /°C at 0.3 to 2 m/s
FVAD 35 TH5 / TH5Kx	±0.3 % of measured value /°C at 0.3 to 20 m/s
Incidental flow	bidirectional
Angle dependence	<3 % of measured value with deviation <15 °
Pressure range	Ambient pressure
Pressure compensation	automatic in range 700 to 1100 mbar

Temperature	
Measuring range	-20 to +70 °C
Resolution	0.1 °C
Accuracy	±0.7 °C at 0 to 50 °C and >0.5 m/s
Response time T_{90}	typical 10 seconds
Digital atmospheric pressure sensor (integrated in ALMEMO® D6 plug)	
Measuring range	700 to 1100 mbar
Accuracy	±2.5 mbar (at 23 °C ±5 K)
ALMEMO® D6 plug	
Refresh rate	0.5 seconds for all 3 channels
Supply voltage	6 to 13 VDC
Current consumption	50 mA
Dimensions	
Probe diameter	6 mm
Flow aperture	approx. 10 x 3 mm
FVAD 35 TH4 / TH5	
Probe with grip, probe lengths 210 mm (plus grip), ALMEMO® cable 1.5 meters	
FVAD 35 TH4Kx / TH5Kx	
Probe with detached electronics unit integrated in the cable, Probe lengths THxK1, 80 mm / THxK2, 300 mm Probe cable 5 meters to the electronics, ALMEMO® cable 1.5 m	

Variants (including works certificate) — Order no.

Digital thermoanemometer, fitted cable with ALMEMO® D6 plug and integrated digital atmospheric pressure sensor

Sensor 2 m/s, length = 210 mm, (with grip)	**FVAD35TH4**
Sensor 2 m/s, length = 80 mm, (detached electronics unit)	**FVAD35TH4K1**
Sensor 2 m/s, length = 300 mm, (detached electronics unit)	**FVAD35TH4K2**
Sensor 20 m/s, length = 210 mm, (with grip)	**FVAD35TH5**
Sensor 20 m/s, length = 80 mm, (detached electronics unit)	**FVAD35TH5K1**
Sensor 20 m/s, length = 300 mm, (detached electronics unit)	**FVAD35TH5K2**

Other designs are available on request

High-temperature thermoanemometer MT8635THx
Operative range -40 to +120 °C, up to 40 m/s
Probe with detached electronics unit integrated in the cable

