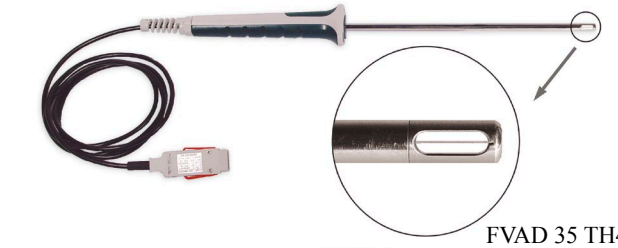
10/2013 • We reserve the right to make technical changes.

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 / TH5Kx

- *new:* 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 page 01.08

DAkkS / DKD or factory calibration KV90xx air flow for digital sensor (see chapter „Calibration certificates“)

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 1100mbar

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 0 to +65 °C)
ALMEMO® D6 plug	
Refresh rate	0.5 seconds for all 3 channels
Supply voltage	6 to 13 VDC
Current consumption	40 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	

Accessories (for FVAD 35 THxK1 / K2 only)



	Order no.
Clamped screw connection with thread adapter for telescopic extension / extension set (maximum 80 °C)	ZV9915KV
Telescope extension Ø 15 to 24 mm 330 / 1010 mm	ZV9915TV
Extension set Ø 15 mm 4 x 255 mm	ZV9915VR3

Variants (including works certificate)

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

	Order no.
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

