



A handy and easy-to-use anemometer for measuring standard flow velocity, standard volume flow and temperature of air/gases in hazardous locations. Units of display: **m/s, m³/h, l/min, °C**

All associated Höntzsch thermal flow sensors TA-Ex with thin-film sensor element can be connected to the HTA-Ex display unit: Probes TA10 and measuring tubes TA-Di... with direct cable outlet and appropriate plug.

The HTA-Ex with its associated sensors is a piece of equipment in **ATEX EEx ia IIC T4** type of protection, intended for use in potentially hazardous locations: Category 2 / zone 1

Thermal flow sensors TA with thin-film sensor element are capable of measuring not only the lowest but also high velocities and satisfy a wide spectrum of requirements for industrial application:

- chemical corrosion resistance
- small dimensions
- wide range of measurement



Examples of Application

- Determination of compressed air consumption
- Controlling measurement of deposit gas
- Controlling measurement of air admission in clean-room conditions
- Checking incoming and outgoing air in production plants
- Flow measurement in cleanroom technology installations
- Air and water tightness tests on windows and doors
- Filter resistive testing on safety benches
- Tracking down leakage in compressed-air ductwork systems
- Regulating and adjusting air conditioning and ventilating systems
- Measuring at inlet nozzles of aerators
- Controlling and stationary measurement with the opportunity of logging by line recorder
- Instantaneous value and long-term measurement
- Using velocity area method to determine the standard flow rate or the average standard flow velocity by approval tests and inspections for proof of guarantee according to VDI/VDE 2640
- Automatic conversion of a standard flow velocity to the standard volume flow using measuring tube diameter and profile factor

Corresponding Documents

- U265 Directions for Use HTA-Ex
- U268 Operating Instructions HTA-Ex
- U232 Thermal Flow Sensors TA
- U233 Price List TA10 ... and Accessories
- U234 User's Information



Hardware

Input Ex (8-pin flange socket) for thermal flow sensors TA-Ex with thin-film sensor element

Display panel

high-contrast LCD liquid crystal display, measured value display 13 mm high four-digit with decimal point as well as affiliated display unit, display of duration of measurement in seconds 6 mm high, adjustment and configuration instructions, operator's information, status displays 3 mm high.

Keypad

8 multifunctional keys

Interface RS232

for direct transfer of the stored measured values to a PC (6-pin flange socket)

Analog output

0 ... 4 V = 0 ... x m/s
x = variable.
(6-pin flange socket)

Power supply

by Li-ion accumulator. Charge by using the appropriate charger HL5 in the 6-pin flange socket. Charging time approx. 4 hours, running time approx. 20 hours.

Housing

ABS plastic
W/H/L = 66/30 ... 40/175 mm

Protective system

IP64 for the housing. Splash-proof protection can only be guaranteed if both the flange sockets in the housing are connected to a water-tight connection plug or a screw cap according to regulations.

Working temperature range

-20 °C ... +50 °C

Weight

approx. 335 g

Software

Linearizing of characteristics

Thermal flow sensors TA with thin-film sensor element are interchangeable by depositing the valid calibration number KKZ for each individual sensor in the HTA by keyboard entry.

Measured value display

Instantaneous values every second. Display of standard velocity N_v , standard volume flow NV/t or temperature (dissipation 1 °C), selectable. Display of instantaneous value in the START and also START/STOP mode also with long-term measurement. Display units: **m/s, m³/h, l/min, °C.**

Operator information

Status messages. Display of time lapse during longterm measurement.

Data logger

500 data records. When being stored the data records are automatically marked with a group number (up to 99 maximum) and serial number.

Inputs, parameters and measurement data

non-volatile storage, retrieval possible even after switching OFF/ON or after power failure.

Instrument settings

Terminal value analog output, measuring tube diameter or rectangle area, profile factor, display unit, calibration number KKZ, absolute pressure of the medium (for zero offset compensation), instantaneous value/long-term measurement SM/LM, long-term duration of measurement, long-term commencement of measurement automatic or after START, end of measurement follows automatically or after STOP. Short-term time constant between 1 ... 60 s variable. LM duration of measurement variable up to 9999 s.

Time constant

The time constant set for the measured value display as well as the set coefficient effect the instantaneous values at analog output.

The data can be read out on the display panel or on a PC using the HTA RS232 interface and the Höntzsch PC-Software HLOG for MS-Windows.



Order data / accessories	
	Article no.
HTA-Ex Display unit for measuring flow and temperature, incl. Li-Ion accumulator and charger type HL5	a000/601
Connection cable for analog output Nv approx. 1.5 m long, with connector 680-6 at one end, other end exposed strands	a000/603
Software Set HLOG on CD-ROM for transfer and evaluation of the measurement values stored in the data logger of the hand-held units HFA / HFA-Ex / HTA-Ex / HAA / HAA-Ex. System requirements: PC with MS Windows 95/98/NT/XP. RS-232 connection cable plug 680-6 /D-sub 9-pin, length approx. 1.5 m. Carrying case type E for CD-ROM and connection cable	a000/504
Plug charging set type HL5 for 100 ... 240 VAC, 50/60 Hz power supply	a000/502
Carrying case type D for 1·probe TA10 ... ZG1b-Ex max. 300 mm long, max. 5 m connection cable 1·display unit HTA-Ex 1·plug charging set type HL5 1·handle HG10/18A-130 4·extension rods VS18-350	a000/510
Light metal carrying case type A	a000/019
Thermal Flow Sensors TA wit thin-film sensor element,	see data sheet U232

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