



A handy and easy-to-use anemometer for measuring flow velocity, volume flow and temperature of air/gases and water/liquids.

Measurable variables are the flow velocity v in m/s, the volume flow V/t in m³/h or l/min and the temperature t in °C.

All associated Höntzsch vane wheel flow sensors with appropriate plug can be connected to the HFA display unit:

- sensors designed as probes or measuring tubes, also for \pm directional sensing of flow
- sensors with integrated temperature probe PT100
- temperature probes PT100

Examples of Application

- measurements in outgoing air, exhaust gases, flue gases, process gases ... also in aggressive mediums up to 550 °C
- regulating and adjusting air conditioning and ventilating systems
- measuring on filtering devices and ventilating fans
- measurements in clarified waste water, streams, rivers and lakes monitoring/measuring backflow when using \pm directional sensing sensors
- using velocity area method to determine the flow rate or the average flow velocity by approval tests and inspections for proof of guarantee according to VDI/VDE 2640
- laminar flow measurements in pharmaceutical application
- flow measurement in all industrial spheres, in communal commerce, in ministries, research and development

Corresponding Documents

- U117 Data Sheet Vane Wheel Flow Sensors FA
- U116 Overview FA
- U205 User's Information FA Probes
- U278 Operating Instructions HFA



Hardware

Input (8-pin flange socket)
for connection of designated
sensor type:

v/FA

for non-directional sensing vane
wheel flow sensors
FA (v-transmitters).

v/FAR

for \pm directional sensing vane
wheel flow sensors
FA (v-transmitters).

vt/FA

for non-directional sensing vane
wheel flow sensors
FA (v-transmitters) with integrated
temperature probe PT100.

t/PT100

temperature probe PT100.
Connection cable with overall
shielding: twin, 3 or 4-wire.

Keypad

8 multifunctional keys

Interface RS232

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

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.

Analog output

FA:

$0 \dots 4 \text{ V} = 0 \dots x \text{ m/s}$

FAR:

$0 \dots 2 \dots 4 \text{ V} = -x \dots 0 \dots +x \text{ m/s}$,
 $x = \text{variable}$, impedance 2 kOhm
(6-pin flange socket)

Power supply

by 9 V battery (operating time
30 hours) or by using the
appropriate plug-in power supply
in the 6-pin flange socket.

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

$0 \text{ }^{\circ}\text{C} \dots +50 \text{ }^{\circ}\text{C}$

Weight

approx. 265 g

Software

Measured value display

Instantaneous values every
second. Display of actual velocity
 v , actual volume flow V/t or
temperature (resolution $0.1 \text{ }^{\circ}\text{C}$),
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, $^{\circ}\text{C}$.

Operator information

Status messages. Display of time
lapse during long-term measure-
ment.

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, types of sensor and
medium, 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 adjustment of the profile
factor effect the instantaneous
values of the analog output.

Datalogger

Data and measured value storage
for 1000 data records. When being
stored the data records are
automatically marked with a group
number (up to 99 maximum) and
serial.

The data can be read out on the
display panel or on a PC using
the HFA RS232 interface and the
Höntzsch software HLOG for
WIN9X.



Display unit, sensors and accessories	
	Article-no.
HFA display unit for measuring flow and temperature, display unit incl. 9 V	a000/550
Connection cable for analog output v approx. 1.5 m long, one end fitted with connector 680-6, the other with exposed	a000/503
Plug-in power supply HFA for 230 VAC, 50/60 Hz, with connector 680-6	a000/552
Replacement batterie 9 V , 450 mAh, IEC/DIN6LR61	a000/005
Software Set HLOG II V1.1 / HFA, HFA-Ex, HTA-Ex for transfer and evaluation of the measurement values stored in the data logger of the hand-held unit HFA, HFA-Ex, HTA-Ex Connection cable fitted with connector 680-6 / D-Sub 9-pin, approx. 1.5 m long. CD ROM and connection cable in carrying case type E.	a000/520
Interface converter USB / RS232 connects PC with USB interface and Höntzsch programming adapter with RS232 interface PC connection : USB plug type A programming adapter : sub-D 9-pin	a010/100
Vane wheel flow sensors FA also for combined measuring of flow and temperature, probes, probe extensions, probe guides, see leaflet and Price List FA Vane Wheel Flow Sensors	
Temperature probe TF500 , immersion probe for measuring range -100 °C ... +500 °C, probe length w/o handle 300 mm, Ø 4,2 mm	a000/022
Temperature probe TF350 , surface probe for -60 °C ... +350 °C	a000/012
Extension cables suitable for above mentioned sensors, 8-wire, resistant up to +60 °C, connector plug 680-8 on both sides 3 m long 5 m long connector plug 423-8 on both sides, waterproof 3 m long 5 m long extension cable longer than 5 m standard price extension cable longer than 5 m per meter	a000/013 a000/014 a000/015 a000/016 a000/025 a000/026
Y-Cable for simultaneous connection of a flow sensor and a temperature probe PT100 at the input of the hand-held units HFA and HFA-Ex, resistant up to +60 °C, connector plug 680-8	a000/511
Carrying case type G Dimensions 497x411x140 mm Capacity suggestion: 1 HFA 1 plug-in power supply 1 extension cable 1 temperature probe 1 flow sensor 1 extension rod	a000/515
Light metal carrying case type A	a000/019

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Subject to alteration