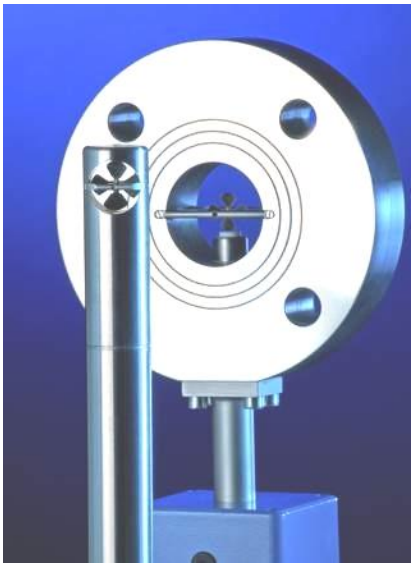
Transducer UFA in LDG16 housing

höntzsch
flow measuring technology

Parameterizable transducer UFA in mounting rail housing LDG16
for use with vane wheel flow sensors FA and FA Di
for measuring flow rate and flow velocity

UFA in LDG16 housing



UFA with probe ZS and measuring tube FA Di

Properties

- for measuring flow velocity and flow rate
- compatible for all Höntzsch probes FA and measuring tubes FA Di with and without ±direction sensing
- flexible use via PC interface for modification of calibration and parameter data
- potential-free quantity pulse, limit value output or '±direction' output
- permanent self-diagnosis
- conversion from actual to standard flow velocity or flow rate
- sensors with isolation/supply unit (e.g. LDX2) may be used in Category 2 hazardous locations
- highly reliable even in extreme industrial application conditions

Model designation (example)

UFA	4-20 mA	230 VAC	LDG16
(1)	(2)	(3)	(4)

Basic types

Type	Article No.
'4-20 mA'	
UFA / 4-20 mA / 230 VAC / LDG16	A018/051
UFA / 4-20 mA / 24 VDC / LDG16	A018/052
UFA / 4-20 mA / 12 VDC / LDG16	A018/053
'0-10 V'	
UFA / 0-10 V / 230 VAC / LDG16	A018/054
UFA / 0-10 V / 24 VDC / LDG16	A018/055
UFA / 0-10 V / 12 VDC / LDG16	A018/056

(1) Transducer type	
UFA	
input flow v/FA or v/FAR	for Höntzsch vane wheel flow sensors FA and FAR without and with ±directional sensing, as probe (ZS, TS ..., ZSR, TSR ...) and as measuring tube (FA Di, FAR Di ...); an isolation/supply unit, such as LDX2, is an additional requirement when using sensors in Ex-zone Category 2

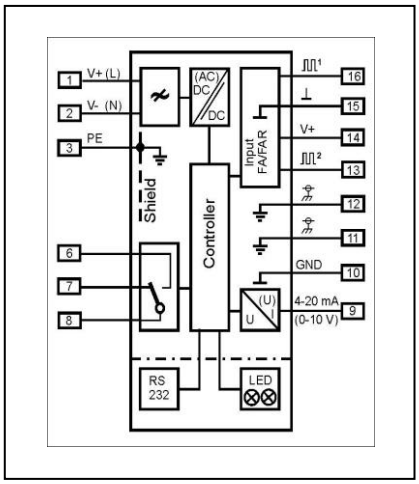
(2) Outputs	
analog output v, flow velocity/flow rate * for FAR sensors when parameterizing the relay (see under): ±direction of flow	for FA / FAR*: **4 ... 20 mA** = 0 ... x m/s (or m³/h), for FAR : **4 ... 12 ... 20 mA** = -x ... 0 ... +x m/s (or m³/h), parameterizable terminal values x / burden max. 400 Ohm, **alternatively**: for FA / FAR*: **0 ... 10 V** = 0 ... x m/s (or m³/h), for FAR : **0 ... 5 ... 10 V** = -x ... 0 ... +x m/s (or m³/h), parameterizable terminal values x / impedance 1 kOhm
output either limit value or quantity pulse or ±direction of flow (with selection '±direction of flow' for FAR sensors: analog output (see above) proportional of sum, unsigned)	**relay** (potential-free two-way contact), max. 300 mA / 27 V DC **limit value** (alternative 1, parameterizable): flow velocity < limit value: relay rest position, flow velocity > limit value: relay working position **quantity pulse** (alternative 2, parameterizable): max. pulse repetition frequency 1 Hz per unit of volume, parameterizable, e.g. 1 pulse per 1, 10 or 100 (norm)-m³, pulse duration 0.5 s (with FAR sensors: parameterizable for '+' or '-' direction of flow) **±direction of flow** (alternative 3, parameterizable): +direction: relay rest position, -direction: relay working position
PC interface RS232	for modifying calibration data and parameter, connection via RJ22 connector, after removing the front cover
	output signals electrically isolated from the mains supply
self-diagnosis NAMUR NE43 compliant	errors: - with output 4-20 mA : < 3.6 mA, - with output 0-10 V : < -0.2 V, - LED shines yellow power supply OK : LED shines green with input signal 'flow' > 0 m/s: LED flashes green

(3) Power supply	
mains supply	230 V AC (215 ... 255 V AC), 50 ... 60 Hz, output < 10 VA 24 V DC (20 ... 27 V DC), output < 5 W 12 V DC (10 ... 17 V DC), output < 5 W

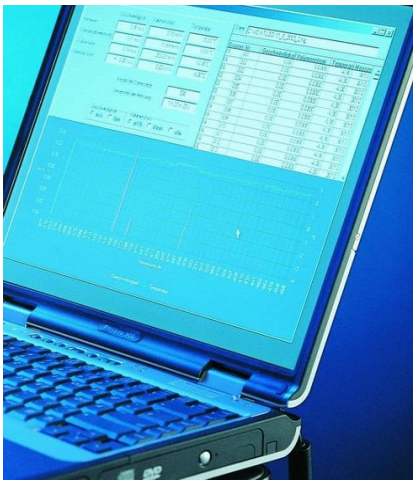
(4) Housing	
Macrolon mounting rail housing LDG16	dimensions B/H/D = 55/75/110 mm, for 35 mm rail (DIN EN 60715 and SN EN 50022) or screwed connection
connection	protected terminal screws according to DIN VDE 0100 and VGB4, for conductors with cross sections from 0.14 ... 4 mm²
protection	IP20, IEC 529 and EN 60 529
EMC	EN 61 000-6-2 / IEC77
working temperature range	0 ... +50 °C

Parameter	
setting parameter	analog output, time constant, profile factor, tube inside diameter, linearization of characteristics (sensor type / medium or pairs of variates), limit value or quantity pulse or ±direction of flow, quality rating quantity pulse, switching actual/standard flow with setting parameters 'actual pressure' and 'actual temperature'
setting parameter with PC software UCOM and PC connecting cable (see Accessories) alterable	

Accessories (optional)		
	Description	**Art. No.**
PC software UCOM	for configuring transducers UFA and UVA via RS232 interface, PC connecting cable RJ22 / Sub-D-9-pin additional requirement	A010/052
PC connecting cable RJ22 / sub-D-9-pin	for configuring transducers UFA and UVA in LDG16 or AS102 housings via RS232 interface with software UCOM; transducer connection: RJ22, PC connection: Sub-D, 9-pin	A010/051
interface converter USB / RS232	for connecting PC with USB interface and Höntzsch programming adapter with RS232 interface; PC connection: USB plug type A programming adapter connection: Sub-D 9-pin	A010/100



wiring diagram UFA in mounting rail housing LDG16



PC with configuration software UCOM

PC connecting cable with CD-ROM UCOM

Höntzsch GmbH & Co. KG
Gottlieb-Daimler-Straße 37
D-71334 Waiblingen (Hegnach)
Telefon +49 7151 / 17 16-0
Telefax +49 7151 / 5 84 02
E-Mail info@hoentzsch.com
Internet www.hoentzsch.com

Subject to alteration