µP-Vortex in LDG30 Housing

Evaluation unit with display and keypad for connection of vortex flow sensors VA which do not sense the direction of flow

for measuring actual flow velocity

for determining actual volume flow, optionally also standard volume flow and mass flow …

Once you have received your delivery please consult the accompanying Technical Data Sheet that contains information specific to your order and also refer to the documents listed in the manual. The data in these documents supplements the following information.

Hardware

The hardware of the evaluation units is available in a number of different variations, adapted to suit all types of user requirements. Each variation is distinguished by a specific combination of hardware elements. Below are the hardware elements for the
µP-Vortex in LDG housing. Other hard-ware elements are also available: see data sheet Hardware.

Analog Output
The software determines the allocation of an analog signal to a specific measurable variable, outcome value or measuring range.

20 mA – 500 Ω
0/4…20 mA
Load resistor max. 500 Ω

0…10 V optional
Output signal 0…10 V
Impedance 1 kΩ

Vortex measuring probes VA

Input v/VA for v-transmitters VA:
Höntzsch vortex flow sensors VA which do not sense the direction of flow. Connection cable: 3 conductors with overall shielding. Measurable variable: actual flow velocity.

Housing Miniature housing LDG30
W/H/D = 100/75/110 mm for
35 mm standard assembly rails.
See also data sheet Housings.

Connection Terminals
Terminal connections

Keypad 12 multifunctional keys

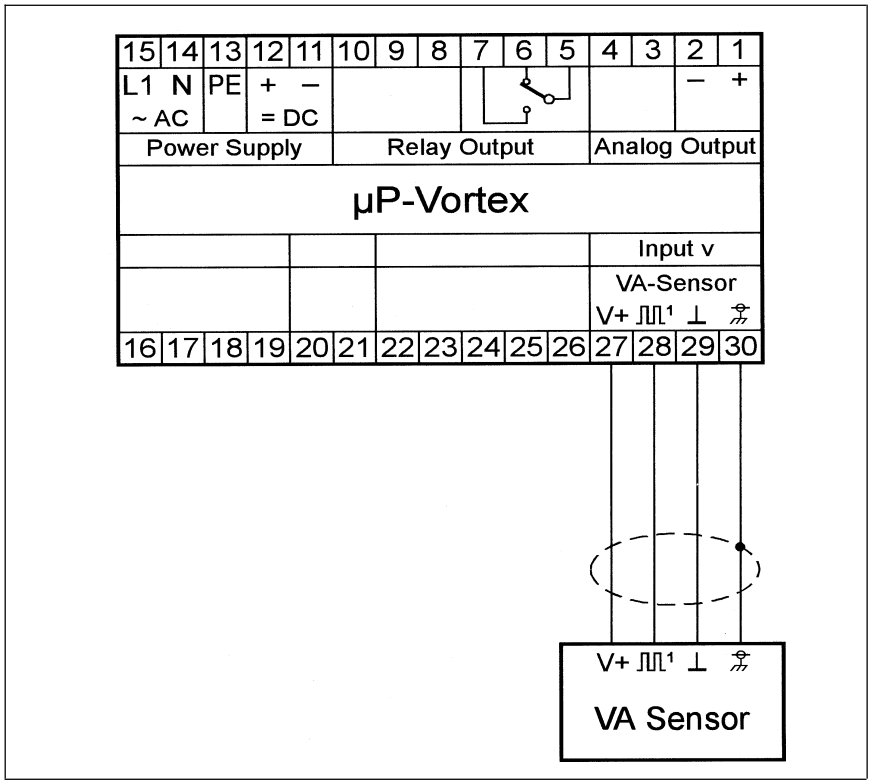
Display LCD 16x2x5.5
Liquid crystal display module. Dot matrix, double-spaced alphanumeric, 16 characters/line, character height 5.5 mm

Power supply 24 VDC
20…30 V DC with DC/DC converter
Current consumption less than 500 mA

Output relay optional
The software determines the allocation of a relay function to a specific event or status. Relay output with 1x operation/mean/non-operation, max. 3 W, current-carrying capacity 28 V

Working temperature range
of all hardware elements 0…+50 °C

höntzsch
flow measuring technology



Terminal plan µP-Vortex in LDG 30 housing

Software VA

Summary

Standard

Measured value display
Instantaneous measurements every 2 s. Display of the actual flow velocity and/or actual volume flow. Display units: m/s, m³/h selectable.

Operator assistance
conversationally orientated. Menu of functions. Operating instructions, status display and error warnings.

Inputs, parameters and measurement data are non-volatile memorized, i.e. they are available after switching OFF/ON or after power supply interruption. Parameter settings on request also available with security code control.

Instrument settings
Measuring tube diameter, profile factor, display unit, calibration number, measurement cross-section. Conversational language German, English, French selectable.

Analog output
configurable, scalable

Time constant
The time constant which is set for the measured value display (setting range 1…99 s) as well as the set coefficient also effect the instantaneous values at analog output.

Linearizing of characteristic VA
Corresponding to calibration code KKZ for the actual flow velocity. The KKZ allows for interchangeability of the vortex sensors and guarantees optimal measurement accuracy.

Supplementary software

Quantity measurement/quantity meter

Long-term measurement, duration of measurement

Digital limit control. Hardware requirement: relay output

Analog output expandable

Coefficient 3-point adjustment for 1-point measurement

Calculation of actual flow rate to standard volume flow, selective, with temperature and pressure as input variables, not measurable variables

More detailed information, including Notes for the User, can be found in the data sheet Software VA

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