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Installation- and operating manual

Vision 2008



1 Specification

Rotor-position scanning: Hall-Sensor **Measuring range:** 1,5 - 25 l/min

Resolution: approx. 1000 pulses/l

Measuring agent: clean liquids, we recommend filtering with approx. 20 to 40 micron

Viscosity: up to approx. 15 cSt.

Accuracy: ±3% ranging from 10 - 100% with Qmax

Repeatability: < 0.5%

Working temperature: -20 to +100°C

Operating pressure: 25 bar **Bursting pressure:** 100 bar

Electric connection: elbow-type plug acc. DIN43650, type C industrial

Auxiliary energy: 5 - 24 V DC, approx. 8 mA

Multiplier (R): 1 - 2,2 kOhm

Output signal: frequency 5 - 416 Hz, open collector NPN

Output current: max. 20 mA

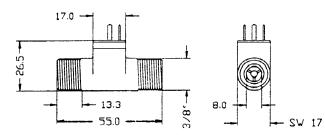
Dimensions: approx. $55 \times 17 \times 30 \text{ mm} (H \times W \times D)$

Material:

Housing:Grilamid TR55 (PA12)Rotor:Grilamid (PA12 Ferrit)Bearings:PTFE 15% Graphit

Delivery connection: G 3/8" thread

DN: 8 mm **Weight:** ca. 15 g





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2 Operating and installation instructions

- 1. Check compatibility of media with sensor material Grilamid TR55 (PA12)
- 2. Solid ingredients in medium require filter in front of sensor!
- 3. Install sensor into properly cleaned pipeline only.
- 4. Check electrical connection according to electrical wiring plan
- Do not exceed specified limits
- 6. Vision 2008 is a volumetric measuring device i.e. air/gas in liquid will be included in measuring volume.
- 7. Correctly installed the sensor works entirely maintenance free
- 8. Vision 2008 is not for general public use and is to be installed and applied by trained personnel only.

We recommend to test the sensor for the intended purpose, and to ascertain – independent of specifications – feasibility of application.

3 Safety regulations

This device was designed and tested considering the safety regulations for electronic measuring devices. Faultless operation and reliability in operation of the measuring device can only be assured if the General Safety Measures and the devices specific safety regulation mentioned in this users manual are considered.

- 1. Faultless operation and reliability in operation of the measuring device can only be assured if the device is used within the climatic conditions specified in the chapter "Specifications".
- 2. Standard regulations for operation and safety for electrical, light and heavy current equipment have to be observed, with particular attention paid to the national safety regulations (e.g. VDE 0100).
- 3. When connecting the device to other devices (e.g. the PC) the interconnection has to be designed most thoroughly, as internal connections in third-party devices (e.g. connection of ground with protective earth) may lead to undesired voltage potentials.
- 4. The device must be switched off and must be marked against using again, in case of obvious malfunctions of the device which are e.g.:
 - visible damage
 - no prescripted working of the device
 - storing the device under inappropriate conditions for longer time

When not sure, the device should be sent to the manufacturer for repairing or servicing.

5. Attention: Do NOT use this product as safety or emergency stopping device, or in any other application where failure of the product could result in personal injury or material damage. Failure to comply with these instructions could result in serious injury and material damage.

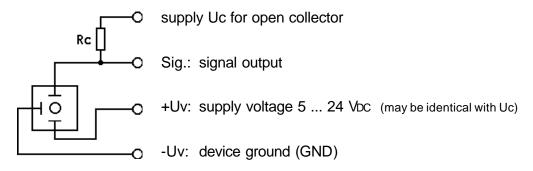
4 Disposal instructions

The device must not be disposed in the regular domestic waste.

Send the device directly to us (sufficiently stamped), if it should be disposed. We will dispose the device appropriate and environmentally sound.

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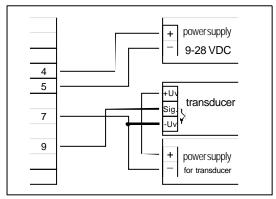
5 Terminal assignment



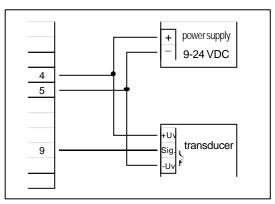
Note:

- the output signal is a pulsating square wave signal.
- Rc: 1 2.2 kOhm

5.1 Connecting on a GIA20EB

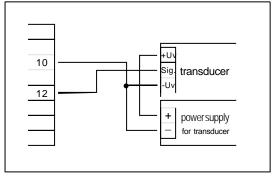


Connection of a transducer (with NPN-output) with separate transducer supply

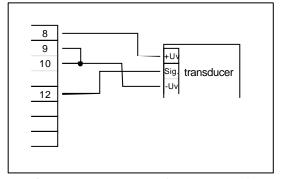


Connection of a transducer (with NPN-output) without separate transducer supply

5.2 Connecting on a GIR2000, GIR2002



Connection of a transducer (with NPN-output) with separate transducer supply



Connection of a transducer (with NPN-output) without separate transducer supply

5.3 Configuration notes for GIR2000, GIR2002 and GIA20EB

- select input signal type frequency ("InP" = FrEq)
- choose NPN as input signal ("SEnS" = nPn)
- adjust values for Fr.Lo and di.Lo to 0
- for values of Fr.Hi, dP, di.Hi look at the following table

meas. range	resolution	=> max. pulse counts	display in I/min.			display in I/h		
			dΡ	Fr.Hi	di.Hi	dΡ	Fr.Hi	di.Hi
1.5 - 25.0 l/min.	~ 1000 lmp./l	25000 Imp./min.		417	25,02		417	1501

⁻ the values for limit and filter must be selected according to your application