

**Operating Instructions
for
Rotating-Vane Flow Indicator**

Model: DIG



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Manufactured and sold by:

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2. Note

Please read these operating instructions before unpacking and putting the unit into operation. Follow the instructions precisely as described herein.

The instruction manuals on our website www.koboldusa.com are always for currently manufactured version of our products. Due to technical changes, the instruction manuals available online may not always correspond to the product version you have purchased. If you need an instruction manual that corresponds to the purchased product version, you can request it from us free of charge by email (info.@koboldusa.com) in PDF format, specifying the relevant invoice number and serial number. If you wish, the operating instructions can also be sent to you by post in paper form against an applicable postage fee.

The devices are only to be used, maintained and serviced by persons familiar with these operating instructions and in accordance with local regulations applying to Health & Safety and prevention of accidents.

When used in machines, the measuring unit should be used only when the machines fulfil the EC-machine guidelines.

as per “Pressure Equipment Directive 2014/68/EU”

In acc. with Article 4 Paragraph (3), "Sound Engineering Practice", of the PED 2014/68/EU no CE mark.

Diagram 8, Piping, Group 1, Dangerous Fluids

3. Regulation Use

Any use of the Rotating-Vane Flow Indicator, model: DIG, which exceeds the manufacturer's specification, may invalidate its warranty. Therefore, any resulting damage is not the responsibility of the manufacturer. The user assumes all risk for such usage.

4. Operating Principles

A plastic-rotating vane wheel rotates on an axle shaft in accordance with the flow. The presence or absence of rotary motion indicates whether or not there is flow.

5. Instrument Inspection

Instruments are inspected before shipping and sent out in perfect condition. Should damage to a device be visible, we recommend a thorough inspection of the delivery packaging. In case of damage, please inform your parcel service / forwarding agent immediately, since they are responsible for damages during transit.

Scope of delivery:

The standard delivery includes:

- Flow Indicator model: DIG

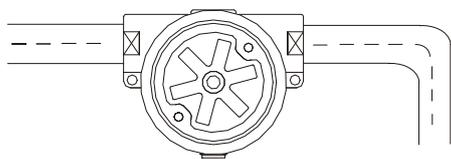
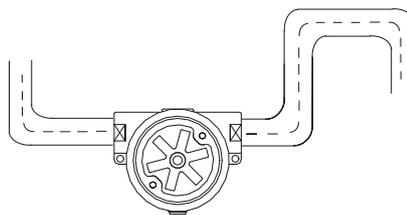
6. Mechanical Connection

Before installation

- Make sure that the actual throughput in the installation matches the scale range of the device. The device capacity is indicated on the nameplate.

Caution! If the capacity of the device is exceeded by more than 20%, its bearings will be damaged.

- Make sure that the maximum operating pressure and temperature of the device are not exceeded.
- Remove all packing materials and transport retainers and ensure that no such materials remain in the device.
- These devices can be installed in any required position. The direction of flow must always be in the direction indicated by the arrow. The front of the device must always be vertical.
- In cases where the flow is running from top to bottom, take particular care to ensure that the device housing is completely filled with fluid. Additional inlet and outlet pipe straight runs are not required.

Wrong!**Right**

- The threaded connections must be sealed with Teflon tape or similar sealant.
- During installation, avoid placing pressure and tension loads on the device. We recommend that the inlet and outlet lines be mechanically secured at a distance of approximately 50 mm from the connections.
- If possible, immediately after completing the mechanical installation, check the threaded connections between the device and piping for leaks.

Caution! Be sure to tighten the fittings at the device only with the correct sized open-end wrench.

7. Technical Information

Material Combination

	DIG-11...	DIG-14...	DIG-18...
Housing	Brass	SS (1.3955)	Polypropylene
Cover	Polysulfone	Polysulfone	Polysulfone
Seal	NBR	FKM	NBR
Vane Wheel	Polypropylene	Polypropylene	Polypropylene
Axle	Ceramic	Ceramic	Ceramic
p_{\max}	230 PSI	230 PSI	100 PSI
t_{\max}	176 °F	176 °F	176 °F

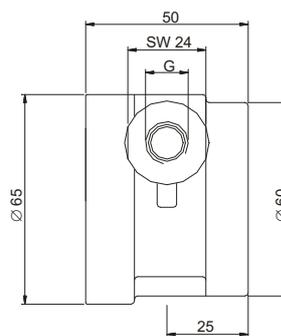
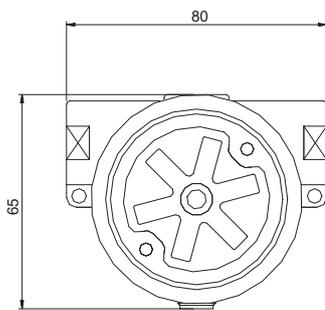
8. Order Codes

Order Details (Example: **DIG-1435G N25**)

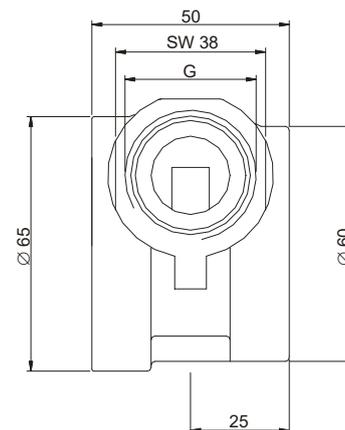
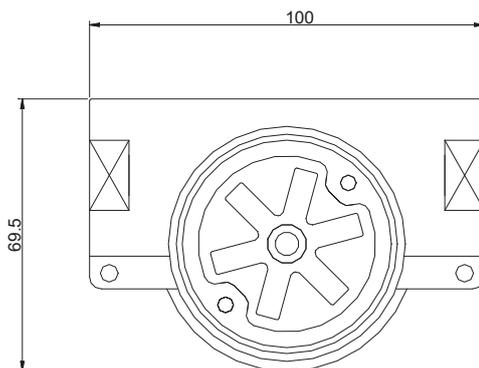
Range (GPM Water)	Model Number			Connection
0.13...3.2	DIG-1105G..	DIG-1405G..	DIG-1805G..	..N06 = 1/8" NPT
0.26...6.6	DIG-1110G..	DIG-1410G..	DIG-1810G..	..N08 = 1/4" NPT
0.53...12	DIG-1120G..	DIG-1420G..	DIG-1820G..	..N15 = 1/2" NPT
0.53...13	DIG-1130G..	DIG-1430G..	DIG-1830G..	..N20 = 3/4" NPT
0.79...21	DIG-1135G..	DIG-1435G..	DIG-1835G..	..N25 = 1" NPT

*At max. flow

9. Dimensions



SW = wrench size in mm



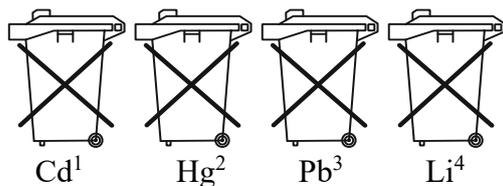
10. Disposal

Note!

- Avoid environmental damage caused by media-contaminated parts
- Dispose of the device and packaging in an environmentally friendly manner
- Comply with applicable national and international disposal regulations and environmental regulations.

Batteries

Batteries containing pollutants are marked with a sign consisting of a crossed-out garbage can and the chemical symbol (Cd, Hg, Li or Pb) of the heavy metal that is decisive for the classification as containing pollutants:



1. „Cd" stands for cadmium
2. „Hg" stands for mercury
3. „Pb" stands for lead
4. „Li" stands for lithium

Electrical and electronic equipment



11. EU Declaration of Conformance

We, KOBOLD Messring GmbH, Hofheim-Ts, Germany, declare under our sole responsibility that the product:

Rotating-Vane Flow Indicator

Model: DIG-...

to which this declaration relates is in conformity with the standards noted below:

EN IEC 63000:2018 Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

Also, the following EC guidelines are fulfilled:

2011/65/EU
2015/863/EU

RoHS (category 9)
Delegated Directive (RoHS III)

Hofheim, 12 April 2022



H. Volz
General Manager



M. Wenzel
Proxy Holder