

**Operating Instructions
for
Rotating Vane Flow Indicators**

Model: DIH



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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.kobold.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.de@kobold.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 PED 2014/68/EU

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

Diagram 8, Pipe, Group 1 dangerous fluids

3. 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:

- Rotating Vane Flow Indicators, model: DIH
- Operating Instructions

4. Regulation Use

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

5. Operating Principle

The Rotating Vane Flow Indicator rotates on an axle shaft independently from the flow. The presence or absence of rotary motion indicates whether there is flow or not.

6. Mechanical Connection

Before installation

- Remove all packing materials and transport retainers and ensure that no such materials remain in the device.
- Make sure that the maximum operating pressure and temperature of the device are not exceeded. (see 7. Technical Information)
- Mount the flow indication tension-free into the pipe.
- After the installation the rotating vane axle should be vertical.
- Avoid water hammer in the measuring tube e.g. caused through a very quick shut off of the flow.
- If possible, check directly after mechanical installation that the connection thread to pipe is fully sealed.

7. Technical Information

DIH-11

Housing:	Nickel plated brass (CuZn39Pb3 nickel plated)
Cover:	PMMA (Plexi)
Seals:	NBR
Rotor:	Polypropylene
Axle:	ceramic
p _{max} :	16 bar
t _{max} :	80°C

DIH-12

Housing:	stainless steel (1.4404)
Cover:	PMMA (Plexi)
Seals:	FPM
Rotor:	Polypropylene
Axle:	ceramic
p _{max} :	16 bar
t _{max} :	80°C

DIH-13

Housing:	POM
Cover:	PMMA (Plexi)
Seals:	NBR
Rotor:	Polypropylene
Axle:	ceramic
p _{max} :	16 bar
t _{max} :	80°C

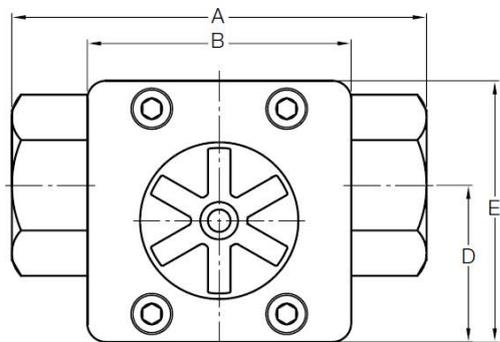
8. Order Codes

Order Details (Example: DIH-1101 R10)

Indication range		Model			Connection	
Water [l/min]	ΔP [bar]*	DIH-11...	DIH-12...	DIH-13...	G $\frac{3}{8}$	G1
0.2...0.5	1	DIH-1101...	DIH-1201...	DIH-1301...	R10	-
0.3...2		DIH-1102...	DIH-1202...	DIH-1302...	R10	-
0.5...5		DIH-1103...	DIH-1203...	DIH-1303...	R10	-
1...12		DIH-1104...	DIH-1204...	DIH-1304...	R10	-
1...18		DIH-1105...	DIH-1205...	DIH-1305...	R10	-
1...22		DIH-1106...	DIH-1206...	DIH-1306...	-	R25
1...35		DIH-1107...	DIH-1207...	DIH-1307...	-	R25
1...50		DIH-1108...	DIH-1208...	DIH-1308...	-	R25

* At max. flow

9. Dimensions



	up to DIH-..05HR10	from DIH-..06HR25
A	84	110
B	60	70
C	G $\frac{3}{8}$	G1
D	40	42
E	60	70
F	19.5	22.5
G	51.5	53

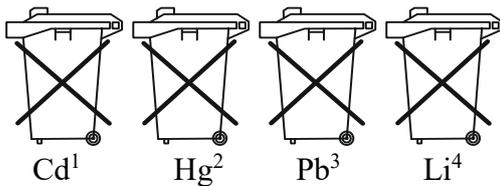
10. Disposal

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

