

# **Rotating Vane Flow Indicator**

**Threaded Connections** 





- Indication range: 0.03-0.1...5-150 L/min water
- pmax 16 bar, tmax 110°C
- Connection: G 1/8...G 1 1/2 NPT on request
- Material: Trogamide,
   PSU, nickel plated brass,
   stainless steel





### **Application and Operating Principle**

The KOBOLD Rotating Vane Flow Indicator is applied where visual flow indication without flow measurement is required. A square housing with transparent windows front and back, contains a rotating vane whose rotary motion, caused by the flowing medium, indicates presence of "flow".

Within the same housing dimensions, differing minimum and maximum flow ranges are obtained by changing the inlet port orifice. The instruments can be installed in any position.

Flow, however, must be in the direction indicated by the arrow.

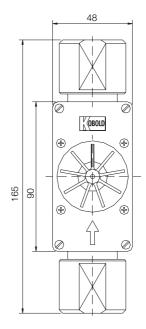
They are pivot-mounted, which enables the sight glass of the indicating unit to be turned to an optimum viewing direction even during operation (not with material combination DAF-14...).

### **Material Combination**

DAF:	11	12	13	14
Housing:	Trogamide	PSU	nickel plated	st. st.
Housing cover:	Trogamide	PSU	PSU	PSU
Threaded connections:	nickel plated brass	st. steel1	nickel plated brass	st. st.1
Locking pins:	brass	brass	brass	-
O rings:	NBR	FPM	NBR	FPM
Rotating vane:	POM	PTFE	POM	PTFE
Axle:	st. st.1	st. st.1	st. st.1	st. st.1
Axle bearing:	PTFE	PTFE	PTFE	PTFE
Max. operating pressure:	10 bar	10 bar	16 bar	16 bar
Max. operating temperature:	60°C	110°C	110°C	110°C

<sup>1)</sup> Material code 1.4571

### **Dimensions**



### Installation hints

- The instruments can be installed in any position. Flow however must be in the direction of arrow.
- PTFE tape to be used for sealing of connections.
- During installation, housing fittings must be held static to avoid transmission of stresses into the housing.
- During operation, observe that the maximum permitted flow is not exceeded, otherwise under certain conditions, this can lead to damage to the rotating vanes.

### Connections

G 1/8	G 1/4	G ½	G 3/4	G 1	G 1 1/4	G 1 ½
R06	R08	R015	R020	R25	R32	R40
1/8 NPT	1/4 NPT	½ NPT	<sup>3</sup> / <sub>4</sub> NPT	1 NPT	1 1/4 NPT	1 ½ NPT
N06	N08	N15	N20	N25	N32	N40

## Order Details (Example: DAF-1101H R08)

Indicatio	n range		Connection						
[L/min] water	ΔP [bar]	DAF-11	DAF-12	DAF-13	DAF-14	G-thread		NPT-thread	
0.030.1	0.25	DAF-1101H	DAF-1201H	DAF-1301H	DAF-1401H	R06	R08	N06	N08
0.030.5	0.8	DAF-1102H	DAF-1202H	DAF-1302H	DAF-1402H	R06	R08	N06	N08
0.23	0.85	DAF-1103H	DAF-1203H	DAF-1303H	DAF-1403H	R06	R08	N06	N08
0.512	0.55	DAF-1104H	DAF-1204H	DAF-1304H	DAF-1404H	R08	R15	N08	N15
125	0.35	DAF-1105H	DAF-1205H	DAF-1305H	DAF-1405H	R15	R20	N15	N20
250	0.35	DAF-1106H	DAF-1206H	DAF-1306H	DAF-1406H	R20	R25	N20	N25
5150	1.25	DAF-1107H	DAF-1207H	DAF-1307H	DAF-1407H	R32	R40	N32	N40



## **Rotating Vane Flow Indicator**

Flanged Connections



measuring

monitoring

analysing



- Indication range: 0.03-0.1...5-150 L/min water
- pmax 16 bar, tmax 110°C
- Connection:
   DN 15...DN 50; ½"...2" ANSI
- Material: housing: stainless steel cover: PSU





### **Application and Operating Principle**

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Within the same housing dimensions, differing minimum and maximum flow ranges are obtained by changing the inlet port orifice. The instruments can be installed in any position.

Flow, however, must be in the direction indicated by the arrow.

Connection is made by means of stainless steel flanges in accordance with DIN/Form C in standard sizes DN 15, 25, 40 or 50.

Materials	
Housing:	stainless steel 1.4571 / 1.3955
Housing cover:	PSU
Connection:	stainless steel 1.4571
O rings:	FPM
Rotating vane:	PTFE
Axle:	stainless steel 1.4571
Axle bearing:	PTFE

## **Technical Details**

Max. operating pressure: 16 bar

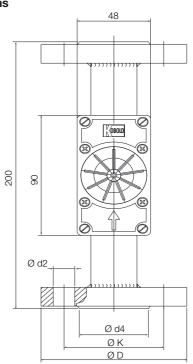
Max. operating

temperature: 110°C

## Installation

- The instruments can be installed in any position. Flow, however, must be in the direction of arrow.
- Flat gaskets must be used for sealing of flanges.
- During operation, observe that the maximum permitted flow throughput is not exceeded, otherwise under certain conditions, this can lead to damage to the rotating vanes.

### **Dimensions**



DN	D [mm]	K [mm]	d 4 [mm]	d 2 [mm]	Number of screws
15	95	65	45	14	4
25	115	85	68	14	4
40	150	110	88	18	4
50	165	125	102	18	4

### Order Details (Example: DAF-2401H F15)

Indication range		Model	Connection DIN-Flange				Connection ANSI-Flange			
[L/min] Water	ΔP [bar]	DAF-24	DN15 PN16	DN25 PN16	DN40 PN16	DN50 PN16	1/2" 150 lbs	1" 150 lbs	1 ½" 150 lbs	2" 150 lbs
0.030.1	0.25	DAF-2401H	F15				A15			
0.030.5	0.8	DAF-2402H	F15				A15			
0.23	0.85	DAF-2403H	F15				A15			
0.512	0.55	DAF-2404H	F15	F25			A15	A25		
125	0.35	DAF-2405H	F15	F25	F40		A15	A25	A40	
250	0.35	DAF-2406H		F25	F40			A25	A40	
5150	1.25	DAF-2407H		F25	F40	F50		A25	A40	A50