



- Indication range:  
0.03 - 0.1 ... 5 - 150 l/min. water
- $p_{max}$  16 bar,  $t_{max}$  110°C
- Connection:  
G 1/8 ... G 1 1/2  
NPT on request
- Material: Trogamide,  
Polysulfone, 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”.

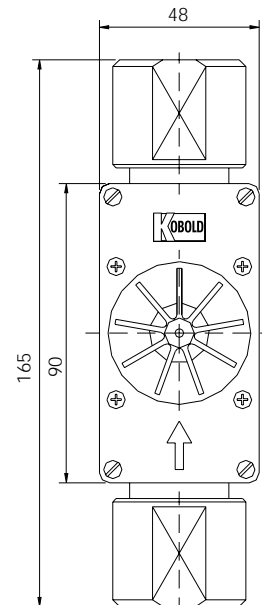
Within the same housing dimensions, differing minimum and maximum flow ranges are obtained by changing the inlet port orifice. The instruments can be installed in any position.

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

**Material Combination**

DAF:	11...	12...	13...	14...
Housing:	Trogamide	Polysulfone	Nickel plated	st. st.
Housing cover:	Trogamide	Polysulfone	Polysulfone	Polysulfone
Threaded connections:	Nickel plated brass	stainless steel <sup>1</sup>	Nickel plated brass	st. st. <sup>1</sup>
Locking pins:	brass	brass	brass	–
O rings:	NBR	FPM	NBR	FPM
Rotating vane:	POM	PTFE	POM	PTFE
Axle:	st.st. <sup>1</sup>	st. st. <sup>1</sup>	st. st. <sup>1</sup>	st. st. <sup>1</sup>
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



**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**

G1/8 R06	G1/4 R08	G1/2 R015	G3/4 R020	G1 R25	G1 1/4 R32	G1 1/2 R40
1/8 NPT N06	1/4 NPT N08	1/2 NPT N15	3/4 NPT N20	1 NPT N25	1 1/4 NPT N32	1 1/2 NPT N40

**Order data** (Example: DAF-1101H R08)

Indication range		Model				Connection			
l/min water	ΔP (bar)	DAF-11..	DAF-12..	DAF-13..	DAF-14..	G-thread		NPT-thread	
0.03...0.1	0.25	DAF-1101H..	DAF-1201H..	DAF-1301H..	DAF-1401H..	R06	R08	N06	N08
0.03...0.5	0.8	DAF-1102H..	DAF-1202H..	DAF-1302H..	DAF-1402H..	R06	R08	N06	N08
0.2...3	0.85	DAF-1103H..	DAF-1203H..	DAF-1303H..	DAF-1403H..	R06	R08	N06	N08
0.5...12	0.55	DAF-1104H..	DAF-1204H..	DAF-1304H..	DAF-1404H..	R08	R15	N08	N15
1...25	0.35	DAF-1105H..	DAF-1205H..	DAF-1305H..	DAF-1405H..	R15	R20	N15	N20
2...50	0.35	DAF-1106H..	DAF-1206H..	DAF-1306H..	DAF-1406H..	R20	R25	N20	N25
5...150	1.25	DAF-1107H..	DAF-1207H..	DAF-1307H..	DAF-1407H..	R32	R40	N32	N40



- Indication range:  
0.03 - 0.1 ... 5 - 150 l/min. water
- $p_{max}$  16 bar,  $t_{max}$  110°C
- Connection:  
DN 15 ... DN 50; 1/2" ... 2" ANSI
- Material:  
Housing: stainless steel  
Cover: Polysulfone





**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. 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:	Polysulfone
Connection:	stainless steel 1.4571
O rings:	FPM
Rotating vane:	PTFE
Axle:	stainless steel 1.4571
Axle bearing:	PTFE

**Technical data**

max. operating pressure: 16 bar  
 max. operating temperature: 110 °C

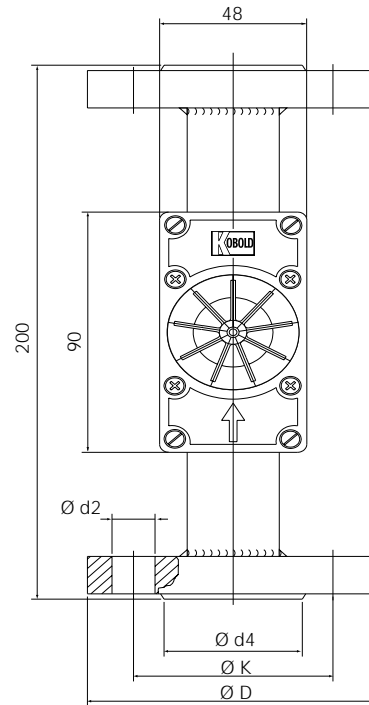
**Installation**

- 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.

**Order data** (Example: DAF-2401H F15)

Indication range		Model	Connection DIN-Flange				Connection ANSI-Flange			
l/min Water	ΔP (bar)		DN15 PN16	DN25 PN16	DN40 PN16	DN50 PN16	1/2" 150lbs	1" 150lbs	1 1/2" 150lbs	2" 150lbs
0.03...0.1	0.25	DAF-2401H..	F15				A15			
0.03...0.5	0.8	DAF-2402H..	F15				A15			
0.2...3	0.85	DAF-2403H..	F15				A15			
0.5...12	0.55	DAF-2404H..	F15	F25			A15	A25		
1...25	0.35	DAF-2405H..	F15	F25	F40		A15	A25	A40	
2...50	0.35	DAF-2406H..		F25	F40			A25	A40	
5...150	1.25	DAF-2407H..		F25	F40	F50		A25	A40	A50

**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