



- 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



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**Model:**  
DAF-1



**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”.

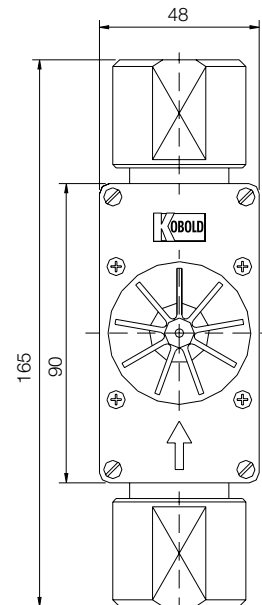
Within the same housing dimensions, differing minimum and maximum flow ranges are obtained by changing the inlet port orifice. The instruments can be installed in any position.

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. <sup>2/1</sup> |
| 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:                   | Buna                | Viton                        | Perbunane            | Viton                  |
| Rotating vane:             | POM                 | Teflon                       | POM                  | Teflon                 |
| Axle:                      | st.st. <sup>1</sup> | st. st. <sup>1</sup>         | st. st. <sup>1</sup> | st. st. <sup>1</sup>   |
| Axle bearing:              | Teflon              | Teflon                       | Teflon               | Teflon                 |
| 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    <sup>2)</sup> Material code 1.3955



**Installation hints:**

- The instruments can be installed in any position. Flow however must be in the direction of arrow.
- Teflon 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<br>R06     | G1/4<br>R08     | G1/2<br>R015    | G3/4<br>R020    | G1<br>R25     | G1 1/4<br>R32     | G1 1/2<br>R40     |
| 1/8" NPT<br>N06 | 1/4" NPT<br>N08 | 1/2" NPT<br>N15 | 3/8" NPT<br>N20 | 1" NPT<br>N25 | 1 1/4" NPT<br>N32 | 1 1/2" NPT<br>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



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**Model:**  
DAF-2



**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:       | Viton                           |
| Rotating vane: | Teflon                          |
| Axle:          | stainless steel 1.4571          |
| Axle bearing:  | Teflon                          |

**Technical data**

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

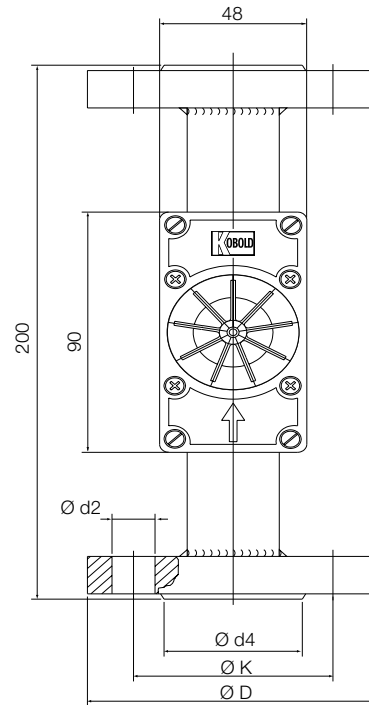
**Installation**

- 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            | 3/4" 150lbs | 1 1/4" 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                |