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Operating Instructions

DG06

Flow Indicator with flap

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1 Introduction

Series DG06 flow indicators are noted for their reliable function and easy operation. To obtain the greatest benefit from this device, please observe the following cautionary statement:

Persons who are responsible for setting up or operating this device must be sure to read the and understand the operating instructions and the safety information pertaining to it.

2 Safety Information

2.1 General Instructions

To ensure safe operation, the device must only be operated according to the information in the operating instructions. When the device is in use, the regulations and safety standards applicable to the specific application must also be observed. This statement also applies to the use of accessories.

2.2 Proper Usage

Series DG06 flow indicators are designed for optical checking of gaseous media.

Any application extending beyond this specific intended use does not constitute proper usage. Series DG06 must not be employed as the sole means of avoiding hazardous conditions in machinery and installations.

The machinery and installations must be designed in such a manner that faulty conditions and malfunctions will not present hazardous situations for operating personnel.

2.3 Qualified Personnel

Series DG06 must only be used by qualified, knowledgeable personnel trained in correct use of these devices. Qualified personnel are those persons familiar with setting up and assembling these devices, placing them in service and operating them. In addition, such personnel must also be qualified to perform the work associated with the application for which the device is being used.

3 Functional Description

The flowing medium deflects a stainless steel flap in the housing. The position of the flap may be read off a graduated scale, thus being able to determine an approximate flow value.

Attention: The DG06 is not a flowmeter. The figures on the scale only roughly represent a corresponding flow rate.

4 Maintenance

The device is almost maintenance free. How often you carry out this maintenance (i. e. cleaning of the glass windows) depends on how often the device is used and the conditions of use.

DG06

Sight Flow Indicator with Flap and Scale

- **robust design**
- **red bronze, cast steel or stainless steel materials**
- **for 1/4" to 2" pipe, with threaded fitting or flange**
- **available with PN 16 or PN 40 pressure ratings**
- **externally attached numerical scale indicates approximate flow volume**



Description:

The DG06 flow indicator allows visual and quantitative monitoring of liquid flows. The device has two large glass panes – one on each side – and each with a scale attached. A stainless steel flap mounted in the flow chamber is lifted when there is flow and the current flow rate is displayed on the scale. The flap is mounted on a stainless steel shaft; it is raised by flow and lowered by gravity. The DG06 can be installed both horizontally and vertically (with flow from bottom to top) and deployed in a wide variety of applications – not least because it is not adversely affected by high temperatures.

Typical Applications:

This flow indicator provides visual and quantitative monitoring of liquids. There is potential for a myriad of applications in the fields of industrial machinery and process control, as well as basic monitoring of cooling units etc.

Models:

All devices have a flap made of AISI 316 stainless steel and PTFE seals.

- DG06.R:** enclosure made of red bronze
CuSn5Zn5Pb5-C-GS
- DG06.S:** enclosure made of cast steel
ASTM-A-216-2000-GR-WCB
- DG06.E:** enclosure made of stainless steel AISI 316

Borosilicate (PN16) or soda-lime (PN40) sight glass panes are available. We supply type G or NPT threaded fittings or DIN or ANSI flanges as process couplings.

Flow rates:

Pipe size	Approx. flow rates (l/min)*					
	2	4	6	8	10	Max.
DN08 / 1/4"	2.5	3.5	4.5	7	22	100
DN10 / 3/8"	2.5	4	4.5	7	24	150
DN15 / 1/2"	3	4.5	6	8,5	20	250
DN20 / 3/4"	3	5	6	9	20	250
DN25 / 1"	3.5	6	8	10	25	250
DN32 / 1 1/4"	7	11	14	24	40	550
DN40 / 1 1/2"	8	12	15	25	50	600
DN50 / 2"	9	15	28	50	75	1,000

* The quoted flow rates for flap positions 2–10 are approximate values only; they may vary considerably, depending on installation position and process conditions. The "Max." value is the maximum flow volume at which the flow indicators can operate (regardless of head loss) without being damaged.

Dimensions:

Pipe size	Length (mm)		Width (mm)	Height (mm)	Weight (kg)	
	G	F			G	F
DN08 / 1/4"	95	140	89	66	1.9	3.7
DN10 / 3/8"	95	140	89	66	1.9	3.8
DN15 / 1/2"	95	140	89	66	1.85	3.9
DN20 / 3/4"	95	140	89	66	1.85	3.9
DN25 / 1"	95	140	89	66	1.8	3.9
DN32 / 1 1/4"	120	180	120	89	4	7.1
DN40 / 1 1/2"	120	180	120	89	3.9	7
DN50 / 2"	150	220	170	110	9	14.5

*) G = threaded, F = flanged

Order Code:

Bestellnummer: **DG06. S. B. G. 15. 0**

Flow indicator with flap and scale

Materials:

R = red bronze
S = cast steel
E = stainless steel

Glass / pressure rating:

B = borosilicate / PN16
N = soda-lime glass / PN40

Process connection

G = female thread G
N = female thread NPT
F1 = DIN flange PN16
F4 = DIN flange PN40 (with soda-lime glass only)
A1 = ANSI flange, 150 lbs., RF
A3 = ANSI flange, 300 lbs., RF (with soda-lime glass only)

Pipe size:

08 = 1/4" / DN08
10 = 3/8" / DN10
15 = 1/2" / DN15
20 = 3/4" / DN20
25 = 1" / DN25
32 = 1 1/4" / DN32
40 = 1 1/2" / DN40
50 = 2" / DN50

Options:

0 = none
9 = please specify in writing

Specifications:

Max. pressure: 16/40 bar, depending on type of glass and process connection

Max. temperature: 150 °C

Materials

Enclosure: bronze, steel casting or stainless steel
Glass: borosilicate or lime-soda
Flap: stainless steel
Gasket: PTFE
Scale: polycarbonate

Installation

position: horizontal or vertical (only with upward flow)