

# Variable area flowmeter TYPE SK07



## description:

Robust variable area flowmeter made of stainless steel. This type can be used under rough conditions. Variable-area-flowmeter are ideal to read discharge values in a system and/or to controll flow rates.

## product features:

- suitable for **liquids, lubricants, dissolver, steam & gaseous media**
- simple mounting and handling
- flow from the bottom up
- maintenance-free
- different display-units

### connection

flange connection DN15 – DN150 DIN EN 1092-1

### temperature

up to max. +200°C

### pressure

max. 40 bar – depending on design

### body material:

stainless steel

### measuring float:

stainless steel

### Mounting position:

vertically upwards

### connection:

flange EN1092-1

### Max. pressure

PN40

### connection material:

Stainless steel

### temperature:

-40°C up to +200°C (electronic output up to 150°C, on request)

### Environment temp.:

-40°C up to +80°C

### measuring accuracy:

liquids: G 1,6 qG 50% (acc. to VDE/VDI, paper 2)

gases: G 2,0 qG 50% (acc. to VDE/VDI, paper 2)

### Display:

Aluminium IP65

### output:

Standard with display, electronic output on request

### Float damping:

Standard for gaseous media with damping

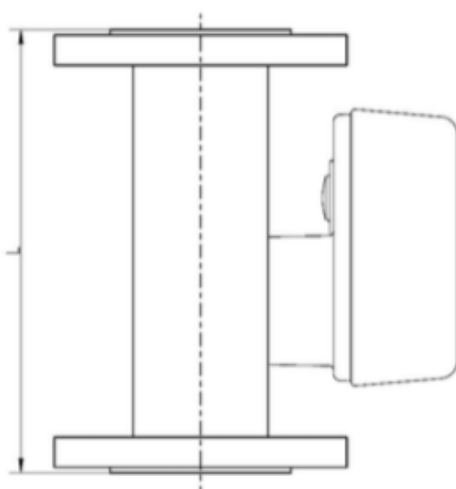
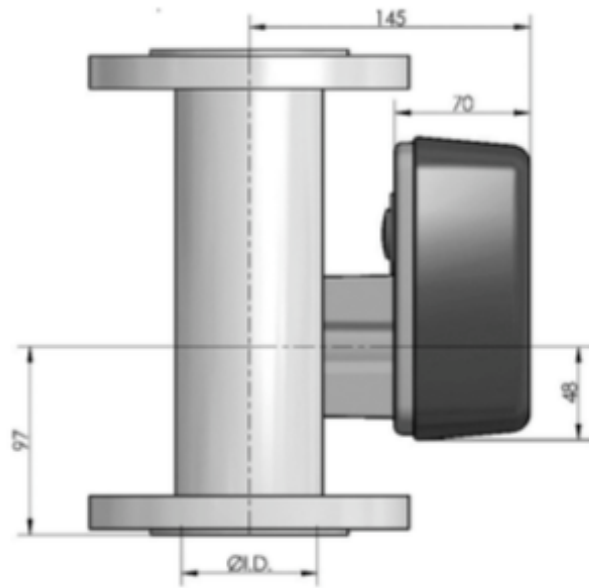
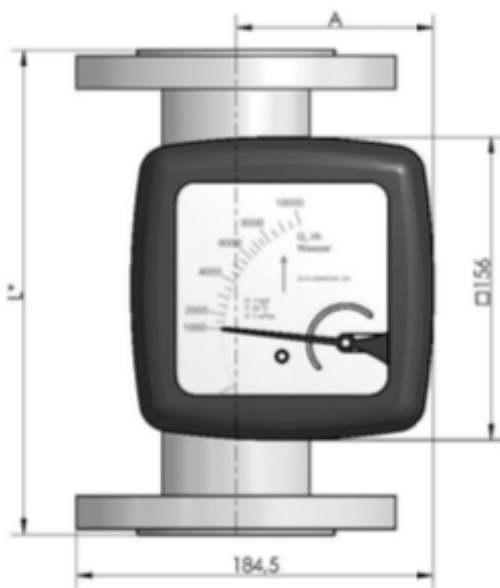
Liquid media without damping

Damping is recommended for applications with air bubbles, vibrations and shock pressure in the pipeline.

dimensions:

type	1						2					3				4				5			6		
pipe-diameter	DN15						DN25					DN40				DN50				DN80			DN100		
Flange connection DN	15	20	25	32	40	50	20	25	32	40	50	32	40	50	65	50	65	80	100	80	100	125	100	125	150
pressure	PN40						PN40					PN40				PN40				PN40			PN40		

diameter DN	15	20	25	32	40	50	65	80	100	125	150
I.D. mm	26	26	32	32	46	70	70	102	125	125	125
A mm	74	74	77	77	88	97	97	113	126	126	126
weight kg	3,0	3,0	4,2	5,2	6,0	7,5	8,5	13,0	18,0	22,0	25,0
length L	250	250	250	250	250	250	250	250	250	250	300

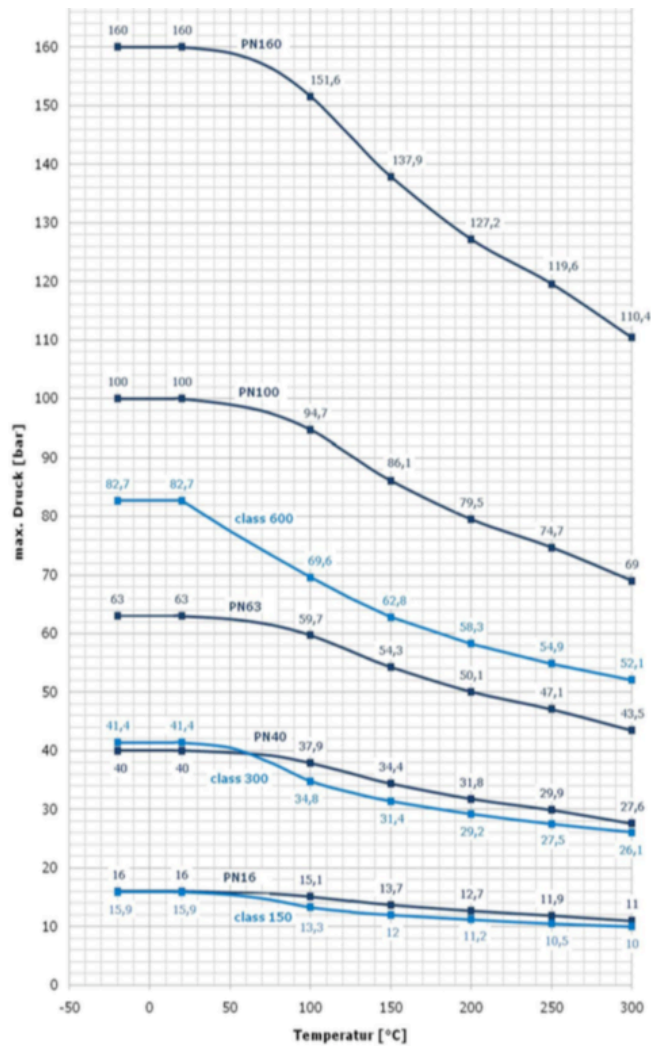


measuring ranges:

Typ	liquids	gas	dynamik	type – pipe-diameter					
	water (p=1 kg/l, viskosity 1mPa s)	air (Pabs=1,013 bar, at T=0C, p=1,239 kg/m3, v= 0,0181 mPa s)		pressure loss (mbar)					
	l/h	m <sup>3</sup> /h	1:10	1 – DN15	2 – DN25	3 – DN40	4 – DN50	5 – DN80	6 – DN100
01	5	0,15	1:10	40	--	--	--	--	--
02	10	0,30	1:10	40	--	--	--	--	--
03	16	0,48	1:10	40	--	--	--	--	--
04	25	0,75	1:10	40	--	--	--	--	--
05	40	1,3	1:10	40	--	--	--	--	--
06	50	1,5	1:10	40	--	--	--	--	--
07	70	2,1	1:10	40	--	--	--	--	--
08	100	3,0	1:10	60	--	--	--	--	--
09	160	4,6	1:10	60	--	--	--	--	--
10	250	7,0	1:10	60	--	--	--	--	--
11	400	11	1:10	70	--	--	--	--	--
12	600	17	1:10	80	--	--	--	--	--
13	1000	30	1:10	--	60	--	--	--	--
14	1600	46	1:10	--	70	--	--	--	--
15	2500	70	1:10	--	100	50	--	--	--
16	4000	110	1:10	--	240	120	80	--	--
17	6000	170	1:10	--	--	180	90	--	--
18	10000	290	1:10	--	--	--	110	--	--
19	16000	460	1:10	--	--	--	230	70	--
20	20000	550	1:10	--	--	--	230	70	--
21	25000	700	1:10	--	--	--	500	100	--
22	40000	1100	1:10	--	--	--	--	350	120
23	50000	1350	1:10	--	--	--	--	350	120
24	60000	1700	1:10	--	--	--	--	--	360
25	80000	2400	1:10	--	--	--	--	--	600
26	100000	3000	1:10	--	--	--	--	--	600

The dynamik shows the range of measurement. A Flowmeter with a dynamik from 1:10 at 2.500l/h has a measuring range from 250 – 2.500l/h.

Pressure-temperature-limits (material 1.4404)



certification:

Flowmeter of the type SK07 with CE-marking meets all statutory requirements of the following EU directives:

The most dangerous authorized media are gases and liquids of group 1.

- Pressure equipment directive 2014/68/EU
- Low voltage directive 2014/35/EU \*
- EMC-directive 2014/30/EU
- NAMUR recommendation NE21 \* (\* devices with electrical installations)
- ATEX directive 2014/34/EU \*\* (\*\* devices for use in hazardous areas)

**installation:**

Since variable area flow meters are very sensitive to changes in flow, control elements should always be adjusted slowly. The calibration is carried out for defined conditions. It is essential to ensure compliance with the calibration conditions. Deviations of the density, pressure or temperature of gases, as well as density and viscosity of liquids, result in errors. Therefore, it is essential to specify the following data of the medium in the order: **the medium, the density and the viscosity at operating temperature and pressure**. For gases, the exact reference point for the pressure (gauge or absolute pressure) is also required.

**We automatically assume water/air with the above-mentioned parameters if no further information about substances, thickness, viscosity, etc. are given to us.**

**article number:**

type	Diameter*	media	measuring range	Connection-size
<b>SK07 – flange DIN1092-1 PN40</b>	1 – DN15	<b>0 – liquids</b> 1 – air	01 – type 01	03 – DN15
	<b>2 – DN25</b>		02 – type 02	<b>04 – DN20</b>
	3 – DN40		...	05 – DN25
	4 – DN50		...	06 – DN32
	5 – DN80		...	07 – DN40
	6 – DN100		25 – type 25 26 – type 26 as seen in the table	08 – DN50 09 – DN65 10 – DN80 11 – DN100 12 – DN125 13 – DN150

**example no. SK07200404:**

<b>SK07</b>	<b>2</b>	<b>0</b>	<b>04</b>	<b>04</b>
-------------	----------	----------	-----------	-----------

Variable area flowmeter full metall  
 connection: flange acc. To DIN1092-1 PN40 DN20  
 pipe-diameter: DN25  
 media: liquids  
 measuring range: type 04 | 2,5 – 25 l/h  
 size: Flange DN20 PN40

Note:

\*) Combinations of pipe-diameter and connection-size can be seen from the table on page 2 "dimasions".

Image similar, subject change without notice.