

Variable area flowmeter TYPE SK01/SK02/SK03



description:

Variable area flowmeter are ideal to read discharge values in a system and/or to controll flow rates.

product features:

- suitable for **water, air & gases** **depending on type**
- simple mounting and handling
- flow from the bottom up
- maintenance-free

connection

female thread 1/4" – 2"
adhesive connection d20, d32, d63

temperature

up to max. +60°C

pressure

max. 10 bar

body material:

Trogamid

measuring cone:

liquids: stainless steel 1.4571

air: aluminium

seal:

Perbunan (NBR), EPDM or FPM

flow direction:

vertically upwars

connection:

female thread DIN ISO 228, adhesive connection

connection material:

PVC

temperature:

max. + 60°C (water max. 50°C)

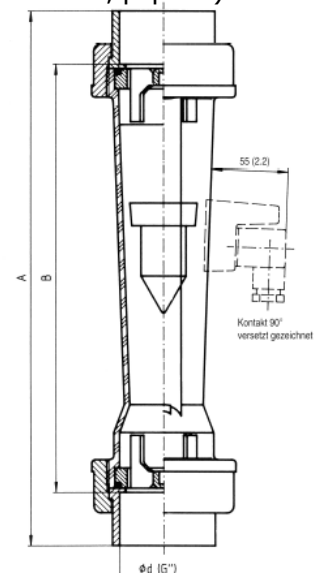
measuring accuracy:

liquids: G 2,5 qG 50% (acc. to VDE/VDI 3513, paper 2)

gases: G 2,5 qG 50% (acc. to VDE/VDI 3513, paper 2)

dimensions:

female thread	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
adhesive conn.	d20 mm			d32 mm		d63 mm		
dimension A thread SK01 /SK02	366 +/-4 mm			358 +/- 4 mm		366 +/-4 mm		
dimension A adhesive connection SK03	346 +/-4 mm			356 +/- 4 mm		389 +/-4 mm		
length B	306	306	306	306	306	306	306	306
weight in kg	0,4			0,7		2,2		



measuring ranges:

liquids (p=1 kg/l, viscosity 1mPa s)										pressure loss float
female thread	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
adhesive connect.	d20 mm			d32 mm		d63 mm				
type	dynamic	l/h	l/h	l/h	l/h	l/h	l/h	l/h	l/h	mbar
01	1:10	125	125	125	--	--	--	--	--	11
02	1:10	315	315	315	--	--	--	--	--	13
03	1:10	--	--	--	650	650	--	--	--	17
04	1:10	--	--	--	1000	1000	--	--	--	17
05	1:10	--	--	--	1600	1600	--	--	--	20
06	1:10	--	--	--	2500	2500	--	--	--	24
07	1:10	--	--	--	--	--	4000*	4000*	4000*	25
08	1:10	--	--	--	--	--	6500*	6500*	6500*	27
09	1:10	--	--	--	--	--	10000*	10000*	10000*	32
10	1:4	--	--	--	--	--	16000*	16000*	16000*	51
11	1:3	--	--	--	--	--	20000*	20000*	20000*	65
12	1:3	--	--	--	--	--	25000*	25000*	25000*	91

air (Pabs=1,013 bar, at T=0C, p=1,239 kg/m3, v= 0,0181 mPa s)										pressure loss float
female thread	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"		
adhesive connect.	d20 mm			d32 mm		d63 mm				
type	dynamic	l/h	l/h	l/h	l/h	l/h	l/h	l/h	l/h	mbar
01	1:10	2000	2000	2000	--	--	--	--	--	4
02	1:10	5000	5000	5000	--	--	--	--	--	5
03	1:10	--	--	--	10000	10000	--	--	--	7
04	1:10	--	--	--	16000	16000	--	--	--	7
05	1:10	--	--	--	28000	28000	--	--	--	7
06	1:10	--	--	--	40000	40000	--	--	--	8
07	1:10	--	--	--	--	--	64000*	64000*	64000*	9
08	1:10	--	--	--	--	--	100000*	100000*	100000*	10
09	1:10	--	--	--	--	--	160000*	160000*	160000*	13
10	1:4	--	--	--	--	--	280000*	280000*	280000*	23
11	1:3	--	--	--	--	--	350000*	350000*	350000*	31
12	1:3	--	--	--	--	--	430000*	430000*	430000*	43

- float guided

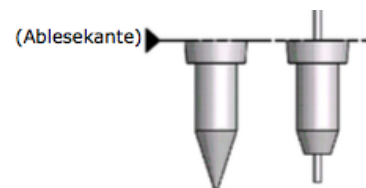
unit measuring ranges: 1/4" up to 1" l/h from 1 1/4" m3/h

note: Different measuring ranges for types with solenoid.

design float:

design 0 – float unguided

design 1 – float guided



design 0 1

installation:

For specific device sizes the float is inserted with a plastic net for transport lock. This must be removed through the top of the meter before installation. After that the free movement of the float inside the flow tube should be checked again.

The device must be mounted vertically and stress-free. Reductions, extensions, and control elements upstream and downstream of the meter have no influence on the measurement accuracy with liquids. For gases, however, the installation of the meter is recommended before valves to prevent compression oscillations.

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.

Retrofitting of switching contacts is only possible when the floats are equipped with magnets. When commissioning the contact we recommend to ensure the correct position of the bistable contact by moving the float along the contact in flow direction.

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	seal	media	measuring range	size
SK01 – DIN ISO 228	0 – NBR	0 – liquids	01 – type 01	01 – 1/4"
SK02 – NPT	1 – EPDM	1 – air	02 – type 02	02 – 3/8"
SK03 – adhesive connection	2 – FKM		03 – type 03	03 – 1/2"
			04 – type 04	04 – 3/4" d20 mm
			05 – type 05	05 – 1"
			06 – type 06	06 – 1 1/4" d32 mm
			07 – type 07	07 – 1 1/2"
			08 – type 08	08 – 2"
			09 – type 09	09 – d63 mm
			10 – type 10	
			11 – type 11	
			12 – type 12	
			Auswahl siehe Messbereiche	

example no. SK01000404:

SK01 | 0 | 0 | 04 | 04

Variable area flowmeter

connection: female thread DIN ISO 228

seal: EPDM

media: liquids

measuring range: type 04 | 1000 l/h

size: 3/4"

Image similar, subject change without notice.