



SM-06N

Variable Area Flowmeter made of Acrylic



Features

- / Local indication without auxiliary power supply
- / Excellent readability
- / Compact design
- / Scales for water and air
- / Process connection of brass or stainless steel
- / Optional with regulating valve
- / Accuracy class 3.0 or 5.0

Description:

SM-06 variable area flowmeters operate according to the variable area principle in which the measuring element such as a stainless steel ball can move in a conical flow tube in vertical direction. When the medium being measured begins to flow from bottom to top, the float, too, moves to top until a dynamic equilibrium of forces freezes it at a certain height. The position that the float reaches in this manner is proportional to the volume flow. The scale value that can be read at the center of the measuring ball, therefore, corresponds to the flow rate. If the excessive volume of flow needs to be regulated, the SM-06 provides optionally a regulating valve to easily allow flow volume control.

Application:

Variable area flowmeters made of acrylic are a cost-effective alternative to glass-made devices. Especially users in the fields of:

- Machine construction
- Medical engineering
- Pharmaceutical industry
- Chemical industry and in
- Research & Development

Where flow indicators are used in large numbers for simple applications and maximum accuracy is not a decisive factor, stand to benefit from this. An important aspect while assembling these devices is that the flow must always be from bottom to top and the medium is free from abrasive solid particles which, otherwise, may cause scratches inside the plastic tube and render it opaque.



Technical Specifications:

Media /	compatible gases and liquids
Process connection /	1/8"-IG NPT. Version 2: W80 and W81 GPM water have 1/4" NPT back-connections or 3/8" NPT end-connections. These versions aren't available with brass valves.
Mounting position /	vertical
Weight /	Version 1: 110. . .140g Version 2: 200. . .250g
max. Pressure /	
without valve:	6.9 bar at 65°C 10 bar at 38°C
with valve:	6.9 bar at 48°C
Accuracy /	Version 1: 5% FS Version 2: 3% FS
Wetted materials /	
Housing:	acrylic
O-ring:	Buna-N (fluororubber on request)
Connections:	depending on the valve, brass or stainless steel
Floating cone:	depending on the range: st. steel, black glass, aluminium, monel K

Meas. Ranges Version 1:

Measuring range SCFH air	Code
0.1 . .1	L10
0.2 . .2	L11
0.6 . .5	L12
1 . .10	L13
2 . .20	L14
4 . .30	L15
5 . .50	L16
10 . .100	L17
20 . .200	L18

Measuring range LPM air	Code
0.06 . .0.5	L20
0.15 . .1	L21
0.6 . .5	L22
1 . .10	L23
3 . .25	L24
6 . .50	L25
10 . .100	L26

Measuring range CC / min water	Code
6 . .50	W30
10 . .100	W31
20 . .200	W32

Measuring range GPH water	Code
0.6 . .5	W40
2 . .10	W41
3 . .20	W42
8 . .40	W43

Meas. Ranges Version 2:

Measuring range SCFH air	Code
0.3 . .3	L50
1 . .10	L51
2 . .20	L52
4 . .40	L53
10 . .100	L54
10 . .150	L55
20 . .200	L56
0.3 . .3	L57

Measuring range LPM air	Code
0.2 . .4	L60
1 . .10	L61
1 . .20	L62
3 . .30	L63
4 . .40	L64

Measuring range GPH water	Code
0.5 . .12	W70
1 . .20	W71
6 . .40	W72
6 . .60	W73

Measuring range GPM water	Code
0.2 . .2	W80*
0.6 . .5	W81*

* not possible with brass valve or 1/4" NPT back-connection!

Measuring range CC / min water	Code
2 . .30	W99

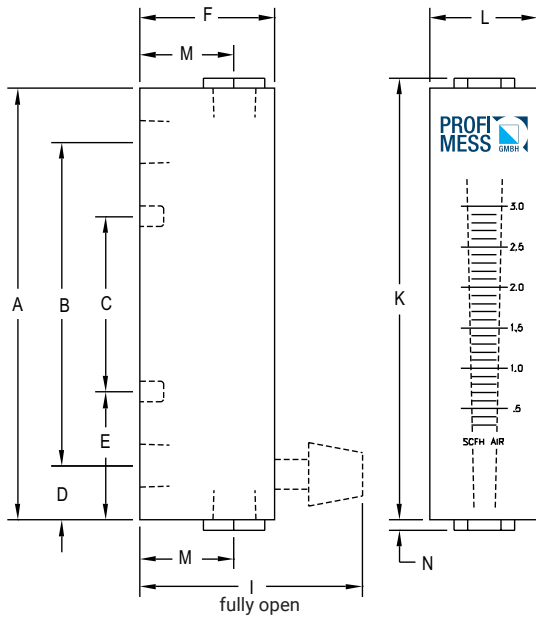
Measuring range CC / min air	Code
2 . .30	L99

Ordering Codes:

Order number	SM-06N.	1.	□□□.	A.	1
SM-06N Acrylic-Flow Meter					
Version /	1 = 101.6 mm 2 = 165.1 mm				
Operating Range /	□□□ = see table, depending on version				
Valve /	0 = no valve (standard) A = brass valve B = stainless steel valve				
Options /	9 = custom scale on request 1 = valve with PTFE seal 2 = wetted parts completely in st. steel 3 = fluororubber with O-rings				



Dimensions in mm:



Length	Version 1	Version 2
A	101.6	165.1
B	76.2	139.7
C	41.28	88.9
D	12.7	12.7
E	30.16	38.1
F	31.75	31.75
I	52.39	52.39
K	104.0	169.9
L	25.40	34.93
M	22.23	22.23
N	2.381	2.381

