



## Flow Meter SM-6, SM-6-V

Flow meters perform different tasks in conditioning systems for gas analysis. The typically quite complex applications require the use of particularly corrosion-resistant materials and high operating reliability.

In addition to visual flow measurements, they are also suitable for determining the depletion of the filtration capacity of the filter installed in the conditioning line.

Electric limit switches can be mounted to the measuring tube for this purpose. These connect to the control system via suitable switch amplifiers.

Types with built-in needle valve further allow for setting a specific flow rate.

Corrosion-resistant materials

Easy installation

Easy measuring tube replacement

Limit switch optional

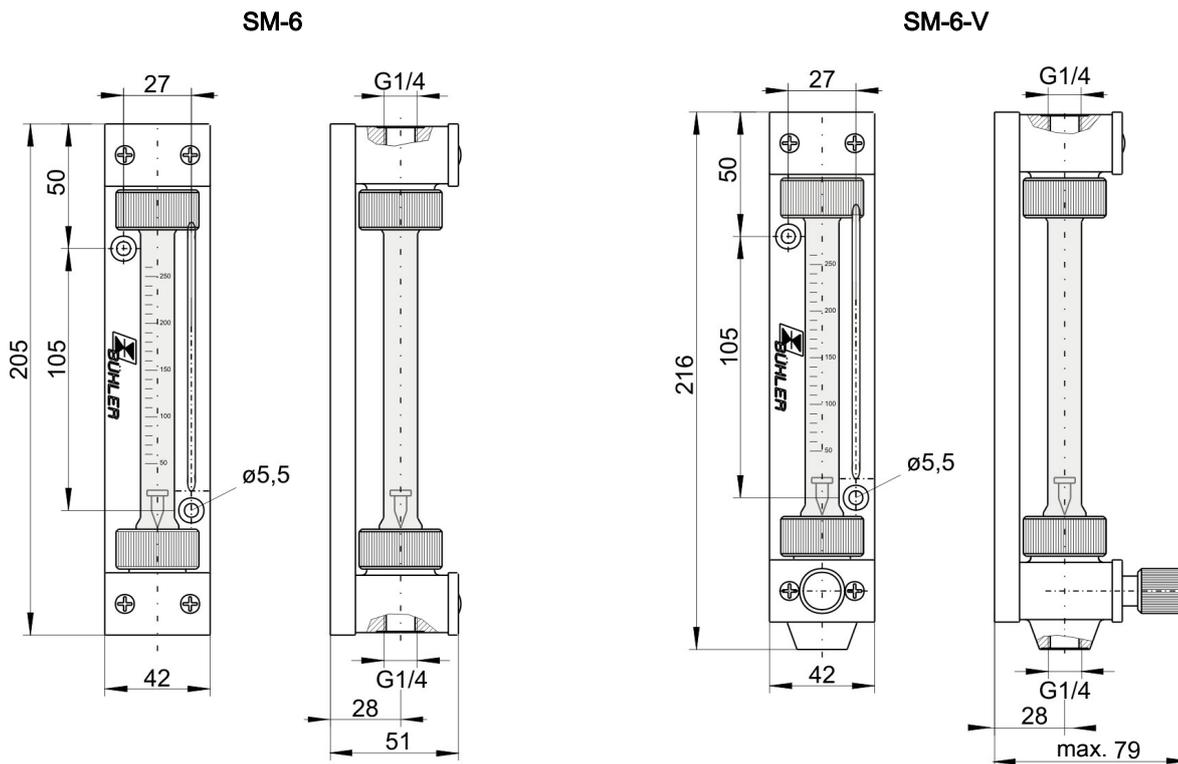
Used in **DNV-GL and LR type-tested** conditioning unit

Can be used in a system to maintain **the IMO MARPOL MEPC.259(68)**

Special design for use in high vibration environments



Flow meter dimensions



**Use in explosive areas (additional notices):**

The flow meter meets the fundamental safety requirements of Directive 2014/34/EU and is suitable for use in zone 1, explosion group IIB. The flow meter is not marked, as it does not have an innate ignition source and Directive 2014/34/EU therefore does not apply.

**Be sure to observe the instructions in the respective operating instructions!**

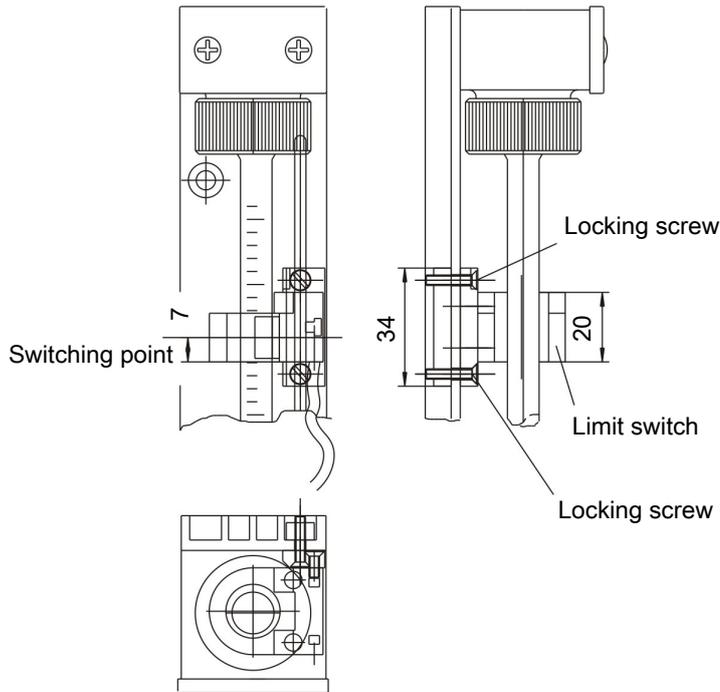
**Technical Data**

Flow meter	SM-6	SM-6-V
Ambient temperature:	-20 °C to +80 °C *	-20 °C to +80 °C *
Medium temperature:	≤ 150 °C, for special ranges max. 80 °C	≤ 130 °C, for special ranges max. 80 °C
Max. operating pressure	4 bar	4 bar
Mechanical load	Tested based on DNV-GL CG0339 vibration class A (0.7g) 2 Hz-13.2 Hz Amplitude ± 1.0 mm 13.2 Hz -100 Hz 0.7g acceleration	Tested based on DNV-GL CG0339 vibration class A (0.7g) 2 Hz-13.2 Hz Amplitude ± 1.0 mm 13.2 Hz -100 Hz 0.7g acceleration
<b>Material</b>		
Heads:	PTFE	PTFE
Seal:	PTFE	PTFE
Adjusting spindle:	-	PVDF / Viton or PCTFE / perfluoroelastomer
Measuring tube:	Borosilicate glass	Borosilicate glass
Float:	Hastelloy C 4	Hastelloy C 4
Swivel nut:	PPS fibreglass reinforced	PPS fibreglass reinforced
Base plate:	PA	PA

\* Please note the ambient temperature for the configuration with limit switch!

Limit switch	Ø10	Ø15
Protection class:	IP 67	IP 67
Ambient temperature:	-20 °C to +100 °C	-20 °C to +70 °C
Housing material:	PBT	PBT
Operation:	bi-stable	bi-stable
Cord length:	2 m	2 m
Approval:	PTB 99 ATEX 2128X  II 2 G Ex ia II C T6...T1 Gb	PTB 99 ATEX 2128X  II 2 G Ex ia II C T6...T1 Gb

**Limit switch dimensions**



**Ordering instructions**

The item number is a code for the configuration of your unit. Please use the following model key:

4056	XX	X	99	X	Measuring range*
	00				Air 6 - 60 NI/h
	01				Air 10 - 100 NI/h
	02				Air 25 - 250 NI/h
	03				Air 50 - 500 NI/h
	04				Air 80 - 800 NI/h
	05				Water 0.5 - 5 L/h
	06				Water 1.2 - 12 L/h
	07				Water 2.5 - 25 L/h
	08				Water 4 - 40 L/h
	09				Water 6 - 60 L/h
	10				Special range
		0			without needle valve
		1			Valve PVDF / Viton
		2			Valve PCTFE / perfluorelastomer
				S	Limit switch with mounting bracket
				-	without limit switch

\* Standard measuring tubes; air 20 °C 1.2 bar abs; water 20 °C

**Ordering information for limit switch:** A limit switch is factory installed if the last character of the item number is "S". Without the "S" marking the flow meter has no limit switch. We offer various switch amplifiers for controlling the limit switch (see data sheet no. 400003).