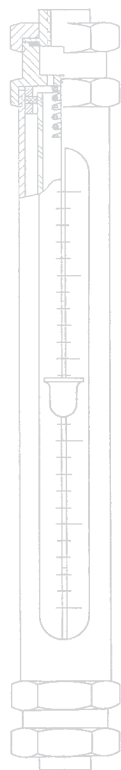


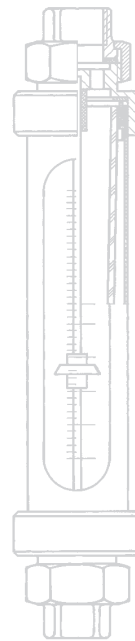
VA 10 / I VA 10 / S Variable-area flowmeters for gas flow measurement



VA 10 / S



VA 10 / I



VA 10/I and VA 10/S variable-area flowmeters are used particularly for flow measurement of gases at low operating pressures.

Typical fields of application are, for example, on industrial furnaces, annealing furnaces and calcining kilns, protective atmosphere and heating systems, etc.

Both flowmeters are suitable for operating pressures up to a maximum of 1 bar. The VA 10/I has a measuring error of $\pm 3\%$, the VA 10/S one of $\pm 4\%$ auf.

Variable area flowmeters

Vortex flowmeters

Flow controllers

Electromagnetic flowmeters

Ultrasonic flowmeters

Mass flowmeters

Level measuring instruments

Communications technology

Engineering systems & solutions

Technical Data

Instrument type	VA 10/I	VA 10/S
Ranges (100 % values) Gas 1.013 bar abs. (14.7 psia), 20 °C (68 °F)	6 to 240 m ³ /h (3.72 to 148.9 SCFM)	1 to 60 m ³ /h (0.62 to 37.2 SCFM)
Rangeability	10 : 1	10 : 1
Accuracy class	3.0	4.0
Glass measuring cone: Typ Length	FG 10 300 to 500 mm (11.81" to 19.69")	NG 50 150 mm (5.91")
Scale	Flow units	Flow units
Float	Form B guided	Form C guided
Operating data: max. pressure max. temperature	1 bar (14.5 psig) 110 °C (230 °F)	1 bar (14.5 psig) 110 °C (230 °F)
Overall height	410 to 670 mm (16.14" to 26.38")	240 to 275 mm (9.45" to 10.83")
Connection		
Screw connection	G 1 to G 3	G 1/2 to G 1 1/2
Flanges (other standards on request)	DN 25 to DN 125 holes drilled to DIN 2501 / PN 10	-
Materials		
Flanges	St. 37.2 steel (ASTM 570 Gr. 33, 36)	-
Screw connection	Malleable cast iron	Malleable cast iron
Instrument heads	Aluminium	Aluminium
Floats	Hard rubber	Aluminium
Gaskets		
Standard	Buna-N	Buna-N
Special	Viton	Viton
Housing	St. 37.2 steel (ASTM 570 Gr. 33, 36)	St. 37.2 steel (ASTM 570 Gr. 33, 36)

Flow table, dimensions and weights

100 % flow values, Rangeability 10 : 1, Calibration data: air at 20 °C (68 °F), 1.013 bar abs. (14.7 psia)

VA 10/I

Meter size	Connection		Flow values		max. pressure loss		Dimensions				Weight of instruments with screw connection	
	Thread	Flange	Air		mbar	psig	Overall length		Glass length		kg	lbs
inches	G	DN in mm	m ³ /h	SCFM			mm	inches	mm	inches		
1	1	25/32/40	6 - 8	3.72 - 4.96	5	0.073	410	16.14	300	11.81	2.0	4.4
1 1/4	1 1/4	40	18 - 21	11.17 - 13.03	6	0.087	430	16.93	300	11.81	2.5	5.5
1 1/2	1 1/2	40/50	20 - 44	12.41 - 27.30	7	0.102	475	18.70	340	13.39	2.5	5.5
	1 1/2	40/50	40 - 60	24.81 - 37.22	7	0.102	535	21.06	400	15.75	3.0	6.6
2	2	50	65 - 110	40.32 - 68.24	10	0.145	590	23.23	440	17.32	5.0	11.0
2 1/2	2 1/2	80	65 - 160	40.32 - 99.26	14	0.203	600	23.62	440	17.32	6.0	13.2
3	3	80/100/125	100 - 160	62.03 - 99.26	13	0.189	610	24.02	440	17.32	13.0	28.7
	3	80/100/125	200 - 240	124.1 - 148.9	28	0.406	670	26.38	500	19.69	13.5	29.8

VA 10/S

Meter size	Connection		Flow values		max. pressure lost		Dimensions				Weight of instruments with screw connection	
	Thread		Air		mbar	psig	Overall length		Glass length		kg	lbs
inches	G	m ³ /h	SCFM	mm			inches	mm	inches			
1/2	1/2	1 - 8	0.62 - 4.96	3	0.044	240	9.45	150	5.91	0.6	1.3	
3/4	3/4	9 - 15	5.58 - 9.31	3	0.044	250	9.84	150	5.91	0.8	1.8	
1	1	9 - 15	5.58 - 9.31	4	0.058	250	9.84	150	5.91	1.1	2.4	
1 1/4	1 1/4	20 - 60	12.41 - 37.22	4	0.058	270	10.63	150	5.91	1.5	3.3	
1 1/2	1 1/2	20 - 60	12.41 - 37.22	4	0.058	275	10.63	150	5.91	2	4.4	

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