

PORTABLE MASS FLOW METER, W/O MANUAL CONTROL VALVE

VGM

Prop.-V.



11

Description	Thermal mass flow meter based on high precision MEMS technology (CMOS sensor). Pressure and temperature-insensitive according to the CTA constant temperature principle. Also insensitive to pressure surges.		
Media	compressed air or non-corrosive gases	Operating pressure	max. 10 bar
Supply voltage	Standard AA battery or Micro-USB power supply (DIN62684), optionally external power +12 ...+30 V DC (max. 200 mA)		
Display	Touch-display 128 x 64 px, backlighted only with external power supply (Micro-USB or 24 V DC)		
Electrical connector	optionally length 2.0 m, with free ends at 24 V DC	Function	totalisator included, physical units can be changed
Alarm functions	3 configurable alarms, programmable as : low alarm, high alarm, window alarm and totalizer alarm. The alarms can be configured with different parameters: delay and alarm duration. Relais: switching current up to 1A, switching voltage 30 V DC		
Accuracy	± 2% FS, from 200 l/min ± 3% FS	Response time	500 ms at 99% accuracy
Turndown ratio	1:50 (Eco) or 1:1000 (Special)	Protection class	IP 50
Flow regulation	manual fine adjustment by 15 turns	Mounting position	any, horizontal from 5 bar on
Temperature range	0 °C to 50 °C / 32 °F to 122 °F	Warm-up time	< 1 sec. for full accuracy
Material	Body: aluminium, optionally electropolished stainless steel 316 Elastomer: FKM, optionally EPDM		

**2... 100 ml/min/450 l/min
compressed air or gases
accurate to 2%**

Dimensions			Operating pressure	Accuracy	Connection thread	Flow rate	Order number
A	B	C					
mm	mm	mm	max. bar	%	G	ml/min / l/min	

Mass flow meter							w/o manual control valve, LCD-Display, battery mode, portable, aluminium, FKM	VGM*1
114	44	12.5	10	2	G¼	2 ... 100 ml/min	VGM-A1	
						4 ... 200 ml/min	VGM-A2	
						10 ... 500 ml/min	VGM-A5	
						0.02 ... 1 l/min	VGM-B1	
						0.04 ... 2 l/min	VGM-B2	
						0.1 ... 5 l/min	VGM-B5	
						0.2 ... 10 l/min	VGM-C1	
						0.4 ... 20 l/min	VGM-C2	
						1 ... 50 l/min	VGM-C5	
						160	54	17.5
4 ... 200 l/min	VGM-D2							
4 ... 300 l/min	VGM-D3							
9 ... 450 l/min	VGM-D4							



VGM-G¼ mass flow meter

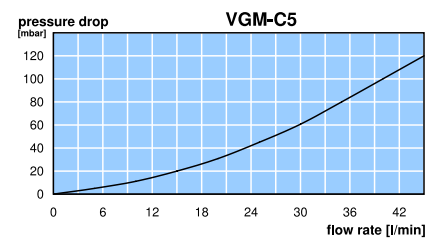
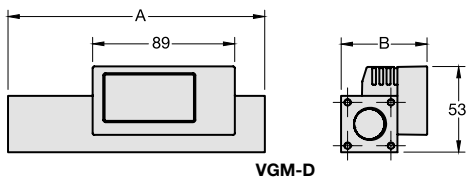
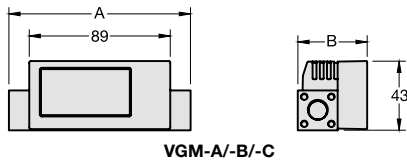


VGM-G½ mass flow meter

Special options, add the appropriate letter oder number

deviant volume flow	indicate on order	VGM-XX
stainless steel body	electropolished throughout	VGM- . . S
EPDM elastomer	for VGM-A1 to -C5	VGM- . . E
24 V DC supply	cable attached on the device, length 2 m, with free ends	VGM- . . 2
limit switch	min. / max.-alarm, 1 A SPDT switch, incl. 24 V DC supply	VGM- . . 2 G
panel mounting	cut-out 48 x 96 mm, protection class IP50 in the front	VGM- . . T
0.1% accuracy		VGM- . . H
carbon dioxide	CO ₂	VGM- . . 03
argon	Ar	VGM- . . 05
nitrogen	N ₂	VGM- . . 07
helium	He	VGM- . . 09
hydrogen	H ₂	VGM- . . 11
methane	CH ₄	VGM- . . 13
oxygen	O ₂	VGM- . . 15
propane	C ₃ H ₈	VGM- . . 16
nitrous oxide	N ₂ O	VGM- . . 17
gases	see above	VGM- D . . .

Specific gas calibration			
gas species			max. l/min
nitrogen	07	N ₂	450
oxygen	15	O ₂	450
argon	05	Ar	300
helium	09	He	450
hydrogen	11	H ₂	300
carbon dioxide	03	CO ₂	150
propane	16	C ₃ H ₈	80
methane	13	CH ₄	100



Calibration or test chart: see chapter for technical informations
*1 Note: indicate media, supply and outlet pressure on order

PDF CAD
www.aircom.net

Order example:
VGM-A1