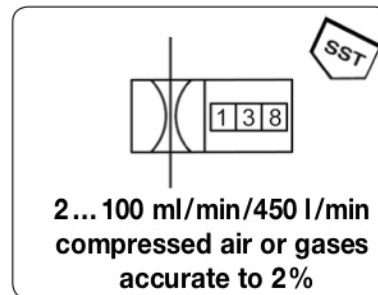


VGM - Régulateur proportionnel de débit, pour air comprimé et gaz neutres

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, backlit 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



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
160	54	17.5	10	2	G½	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
						2 ... 100 l/min	VGM-D1
						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- . .2G
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

