Model		SEC-Z717SMG			SEC-Z727SMG
Full-scale flow rate (N_2 conversion flow rate)		MR.MG number #01:30 SCCM	MR.MG number #02:100 SCCM #03:300 SCCM #04:1 SLM #05:3 SLM	MR.MG number #06:10 SLM	MR.MG number #07:30 SLM #08:50 SLM
Flow rate accuracy ※1 ※2		≤±1.0%S.P.(Flow rate≥5%) ≤±0.05%F.S.(Flow rate<5%)			
Linearity ※1		≤±0.5%F.S.			
Repeatability ※1 ※3		≤±0.15%S.P.(Flow rate≥5%) ≤±0.0075%F.S.(Flow rate<5%)			
Zero point temperature effect		≤±0.01%F.S./℃			
Span temperature effect		≤±0.05%F.S./℃			
Zero point output stability ※4		≤±0.3%F.S./year			
Flow rate control range		0.5-100%F.S. Auto close function:≤0.25%F.S.			
Step-up flow response time ※5		450±30ms (0%F.S.→5%F.S.<T≤100%F.S.) ≤600ms (0%F.S.→2%F.S.<T≤5%F.S.) ≤1s (0%F.S.→0.5%F.S.<T<2%F.S.)			
Step down flow response time ※5		450±30ms (100%F.S.→10%F.S.<T≤80%F.S.) ≤2s (100%F.S.→0.5%F.S.<T≤10%F.S.) ≤200ms (100%F.S.→0%F.S.(Valve closed))			
Flow response time adjustment (Tunable Response) ※5 ※6		Tunable range 300ms≤T≤1000ms (0.3s≤T≤1s) Adjustment accuracy User specified time±50ms (±0.05s)			
Supply pressure condition		≤450kPa(G)			
Operating differential pressure	max	400kPa(D)			
	min	100kPa(D) (Supply pressure< 150kPa(A)) 50kPa(D) (Supply pressure≥ 150kPa(A))		100kPa(D)	200kPa(D)
Proof pressure		1MPa(G)			
Flow rate at fully closed control valve ※7		≤0.1 %F.S.			(N.C.valve) ≤0.2 %F.S. (N.O.valve) ≤0.5 %F.S.
Pressure transient sensitivity ※8		≤±(1.5 %F.S.+1.5%S.P.)	≤±1.0 %F.S.		
Pressure measurement accuracy		≤±3.5kPa (Measurement range:0-700kPa(A))			
Operating temperature ※9		15-60℃			
Temperature measurement accuracy		≤±2℃ (Measurement range:15-60℃)			
Leak integrity		≤5×10^{-12}Pa・m^3/s(He)			
Valve type		Normally closed: N.C. Normally opend: N.O.			
Wetted materials		SUS316L, Ni-alloy, PFA(Bin#01-#04)			
Fitting		1.125 inch C-Seal Port-to-port dimension 92mm 1.125 inch W-Seal Port-to-port dimension 92mm			
Communication interface		RJ45 connector×2 EtherCAT®protocol			
Service communication port		ϕ2.5 port Dedicated RS-485 communication			
Power supply		M8(5 pin)male connector 24VDC±4V,7.5VA			
Weight		1.1kg			
Mounting orientation		Free			
Warm-up operation time		≥60minutes			
Storage temperature		0-80℃(Non condensing)			

※1 It is a numerical value for the gas type measured by calibration gas (N_2) and our standard equipment.

※2 Flow rate accuracy at ambient temperature 23±2℃ (according to SEMI E56-0309).

※3 It conforms to "repeatability" defined in SEMI E56-0309.

※4 Zero point output stability according to SEMI E69-0298.

※5 The time when the flow rate output reaches 98% of the flow rate setting change amount is defined as the response time. However, when flow control (valve closed) to 0% F. S., The time when flow rate output reaches 0.5% FS is defined as response time.

※6 It is a numerical value under our company's condition using calibration gas (N_2).

※7 It is the flow rate when the control valve is fully closed when the supply pressure of the calibration gas (N_2) is 450 kPa (G).

※8 This is the amount of fluctuation in flow when pressure fluctuation of 2 psi (conforming to SEMI F64 - 0701) occurs in 1 second during flow control of 5% F.S. to 100% F. S. under our company condition using calibrati

※9 The temperature output of this product is the standard. The temperature of this product may rise above the ambient temperature when there is a heat source around this product, or when installing multiple products

・In notation of pressure unit, (D) shows differential pressure, (G) shows gauge pressure, (A) shows absolute pressure.

・SCCM, SLM are symbols representing the gas flow rate (ml / min, l / min, at 0℃ 101.3kPa).

・% F.S.is the percentage of the set full scale flow rate. % S.P. is a percentage of the set flow rate setting.

ɔn gas (N_2).
in close contact with each other.