

Specifications of SEC-Z700X Series

Digital / Analog communication model	SEC-Z712MGX	SEC-Z722MGX	SEC-Z732MGX	SEC-Z742MGX
DeviceNet™ communication model	SEC-Z714MGX	SEC-Z724MGX	SEC-Z734MGX	SEC-Z743MGX
Full-scale flow rate (N ₂ conversion flow rate)	MR / MG number #R01: 10 SCCM #R1.5: 17.5 SCCM #01: 30 SCCM #1.5: 55 SCCM #02: 100 SCCM #2.5: 175 SCCM #03: 300 SCCM #3.5: 550 SCCM #04: 1 SLM #4.5: 1.75 SLM #05: 3 SLM #5.5: 5.5 SLM #06: 10 SLM	MR / MG number #6.5: 22 SLM #07: 30 SLM #08: 50 SLM	MR / MG number #09: 100 SLM	MR / MG number #10: 200 SLM
Valve type	Piezo, Normally closed: C Normally opened: O			
Flow rate at fully closed control valve	< 2% F.S.			
Flow rate control range	2-100% F.S.			
Accuracy ※1 ※2	±1.0% S.P. (Flow rate > 25% F.S.) ±0.25% F.S. (Flow rate ≤ 25% F.S.)		±1.0% S.P. (Flow rate > 35% F.S.) ±0.35% F.S. (Flow rate ≤ 35% F.S.)	
Operating temperature	5 to 50°C (recommended temperature range: 15 to 45°C)			
Response	≤ 1 second: Over full flow rate range			
Linearity ※2	≤ ±0.5% F.S.			
Repeatability	≤ ±0.2% F.S.			
Pressure transient sensitivity ※3 (Flow range: 5-100 %F.S.)	#R01-#1.5: ±(5.0% S.P. + 1.5% F.S. max) #02-#10: ±(1.0% S.P. + 1.0% F.S. max)			
Temperature accuracy	±2°C (5-50°C)			
Pressure accuracy	±1% F.S. (0-700kPa(A)F.S.)			
Operating differential pressure ※4	50 to 300 kPa (D) #5.5, #06: 100 to 300 kPa (D)	200 to 300 kPa (D)	100 to 300 kPa (D)	200 to 300 kPa (D)
Max. operating pressure	450 kPa (G)			
Pressure resistance	1000 kPa (G)			
Leak integrity	≤ 5 x 10 ⁻¹² Pa·m ³ / s (He)			
Wetted materials	SUS316L electropolished (EP standard)			
Standard fitting	1/4 inch VCR equivalent 1.125 inch surface mount type		1/2 inch VCR equivalent 1.5 inch surface mount type	
Mounting orientation	Free			

※1 The flow rate precision guaranteed temperatures conform to SEMI E56-0309 standards. The precision is that associated with the full-scale MR and MG number values.

※2 Flow accuracy, response time linearity and repeatability are guaranteed only for calibration gas and full scale in the case of digital controlling.

※3 Conform to SEMI F64-0701

※4 Operating differential pressure varies depending on other operating parameters.

- (G): Gauge pressure; (D): Differential pressure
- SCCM and SLM are notations indicating the gas flow rate (mL / min, L / min, at 0°C and 101.3 kPa).