

Controller compatible with various actuators

## Stepping motor controller overview

CKD offers single-axis and multi-axis controllers. Multi-axis controllers are particularly advantageous when used with 3 or more actuator axes. Please refer to the table below for the actuators compatible with each controller.

Controller	Slider		Rod		Guided				Stopper		Table	Rotary	2-Finger Gripper		3-Finger Gripper						
	EJSG	EBS-G/M	EBR-G/M	GSSD2	DSSD2	GSTG	GSTS	GSTL	DSTG	DSTS	DSTL	DMSDG	GSTK	DSTK	FLCR	FGRC	FLSH	FFLD	DLSH	GCKW	DCKW
<b>Multi-axis Controller</b>		●	●	●	●	●	●	●					●	●	●	●	●			●	
<b>Single axis Controllers</b>		●	●	●	●	●	●	●					●								
		●	●												●	●	●				
					●				●	●	●	●		●						●	●

\* For products compatible with specific applications (for rechargeable battery production processes, food production processes, etc.), please check the "Component Products Digest (No. RJ-001AA)".

## Controller Specifications and Functions List

Item		ECMG	ECG-A	ECG-B	ECR	ESC4
Max. number of operating axes		16 axes	1-axis			
Power supply voltage		24 VDC ±10%			24 VDC ±10% 48 VDC ±10%	24 VDC ±10%
Compatible motor size		□20 to □56	□35 to □56	□20 to □35	□20 to □56	
Configuration Tool	Software	S-Tools				-
	Connection cable	USB cable (mini-B)				-
Compatible encoder types		Battery-less absolute incremental	Incremental	Battery-less absolute incremental	-	
Cooling method		Natural air cooling				
Insulation Resistance		10 MΩ or more at 500 VDC				
Withstanding Voltage		500 VAC for 1 minute				500 VAC for 1 minute
Operating Ambient Temperature		0 to 40°C no freezing				
Operating Ambient Humidity		35 to 80% RH no condensation				
Storage Ambient Temperature		-10 to 50°C no freezing				
Storage ambient humidity		35 to 80% RH no condensation				
Operating atmosphere		No corrosive gas, explosive gas, or dust				
Protection Structure		IP20		IP20		
DIMENSIONS *1 DIN rail mounting	PIO specifications	-	W35×H146×D76	W38×H159×D100.5	W40×H161×D100.5	W35×H120×D76
	Field network specifications	W110.4×H130×D110	W35×H159×D100.5			-
Weight *1 DIN rail mounting	PIO specifications	-	Approx. 210 g	Approx. 340 g	Approx. 430 g	Approx. 180 g
	Field network specifications	Approx. 1120 g	Approx. 340 g	Approx. 340 g	Approx. 430 g	-
Applicable laws and regulations	CE Marking	○	○	○	○	○
	RoHS2	○	○	○	○	○
Interface	PIO	-	○	○	○	○
	IO-Link	-	○	○	○	-
	CC-Link	Ver.1.10, 2.00	ver. 1.10	ver. 1.10	ver. 1.10	-
	EtherCAT	○	○	○	○	-
	EtherNet/IP	○	○	○	-	-
Function	Number of positioning points *2	64 points	64 points	64 points	512 points	-
	High payload mode *3	○	-	-	-	-
	Calendar function	○	-	-	○	-
	Warning function	○	○	○	○	○

\*1. ECG-A, ECG-B, and ECR are values for 1-axis operation. ECMG is the value for 6-axis operation (3 drive units).

\*2. Number of positioning points per axis.

\*3. Only supports actuators EJSG, EBS-G, and EBR-G.