

EM2 Series Electric Rotary Gripper

CHELIC®



Automation



Testing



Electronics



Packing



Machine Tools

Integrated Motor and Drive

· The gripper and rotary mechanism are tightly integrated with a built-in driver, saving wiring and space.

Multiple Jaw Options

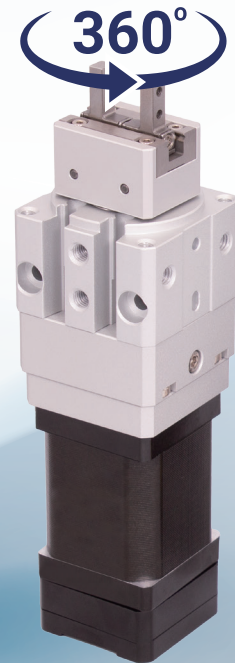
· Various jaw angles can be freely adjusted to handle different shapes, meeting diverse operational requirements.

Free Angle Positioning

360° infinite jaw rotation function, enabling precise all-angle gripping.

Multiple Communication Interfaces

· I/O, RS485



Max.
Gripping Force

157N

Gripping Stroke

4~14mm

Repeatability

±0.05mm

Max.
Rotary Torque

0.42N.m

Controllability



Angle Control
Adjust gripper rotation angle



Torque Control
Adjust gripper rotation torque



Speed Control
Adjust gripper rotation speed

Modular Design

EMW2
Two-Jaw
High-Force Type



EMZ2
Two-Jaw
Slide Type



EMQ2
Three-Jaw
High-Force Type



Models

EM2 10 / 16 / 20 / 25

Max clamping force(N)

EMZ2	142
EMQ2	260
EMW2	260

Opening/Closing stroke(mm)

EMZ2	14
EMQ2	12
EMW2	4(Single-side)

EMW2 series Electric Rotary Gripper



Product features/ Code of order

Feature

- Gripping and rotary functions integrated into a single unit
- Wedge-type jaw mechanism ensuring high rigidity and secure clamping
- Adjustable rotation angle, speed, and torque



Specification

Item	Model	EMW2-10	EMW2-16	EMW2-20	EMW2-25	
Gripper section	Opening/Closing stroke	mm	4	5	8	12
	Operation type		Double Acting			
	Working fluid		Air			
	Gripper operating pressure	Kgf/cm ² (kPa)	2 ~ 7 (200 ~ 700)			
	Operating temperature range	°C	5~60			
Rotary Section	Motor type		Stepper motor			
	Motor size		<input type="checkbox"/> 35			<input type="checkbox"/> 57
	Rotational torque	N.m	0.15		0.42	
	Rotational speed	RPM	5 ~ 100			
	Weight	Kg	0.6	0.75	1.6	2
	Motor resolution per revolution		4000			
	Operating temperature range	°C	5~60			
	Operating humidity range	%	35~85			
	Repeatability	°	±0.3			
	Communication protocol		RS485			
	Operating voltage	V	24			
	Current	A	1.8		4	
	Protection rating		IP40			

Note: 1. The speed and torque may vary depending on cable length, load weight, and installation conditions. When the cable length exceeds 5 m, the speed and torque may decrease by up to 10% for every additional 5 m.

Code of order **EMW2 - 10 - 03 - 8B - 2**



1	Mark	Motor size	Bore size (mm)	Opening/Closing Stroke(mm)
	10	<input type="checkbox"/> 35	Ø10	4
	16	<input type="checkbox"/> 35	Ø16	5
	20	<input type="checkbox"/> 57	Ø20	8
	25	<input type="checkbox"/> 57	Ø25	12

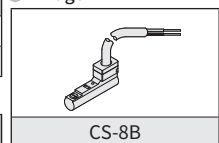
2	Mark	Cable length(m)
	03	3
	05	5

● Standard: 3m

3	Mark	Sensor switch
	None	Without sensor switch
	8B	CS-8B

4	Mark	Sensor quantity
	1	1 pc
	2	2 pcs

● Image

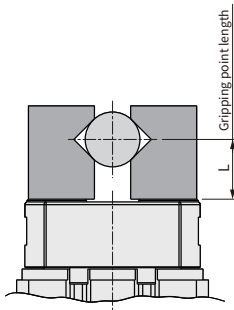


EMW2 series Electric Rotary Gripper

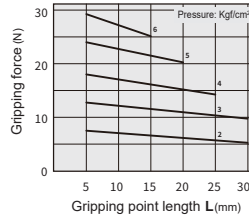
CHELIC

Characteristics graph

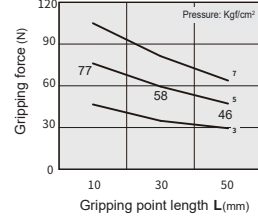
External grip



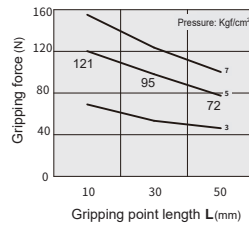
● EMW2 10



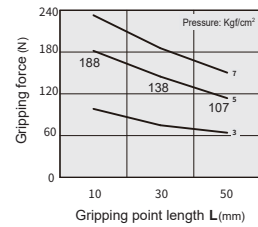
● EMW2 16



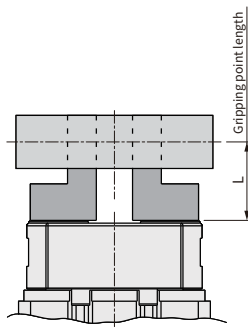
● EMW2 20



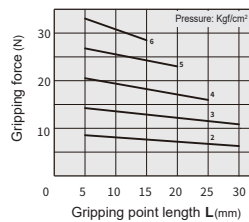
● EMW2 25



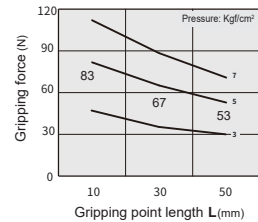
Internal grip



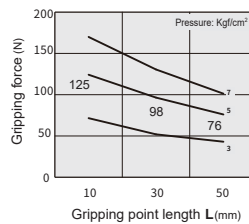
● EMW2 10



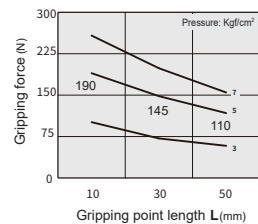
● EMW2 16



● EMW2 20



● EMW2 25

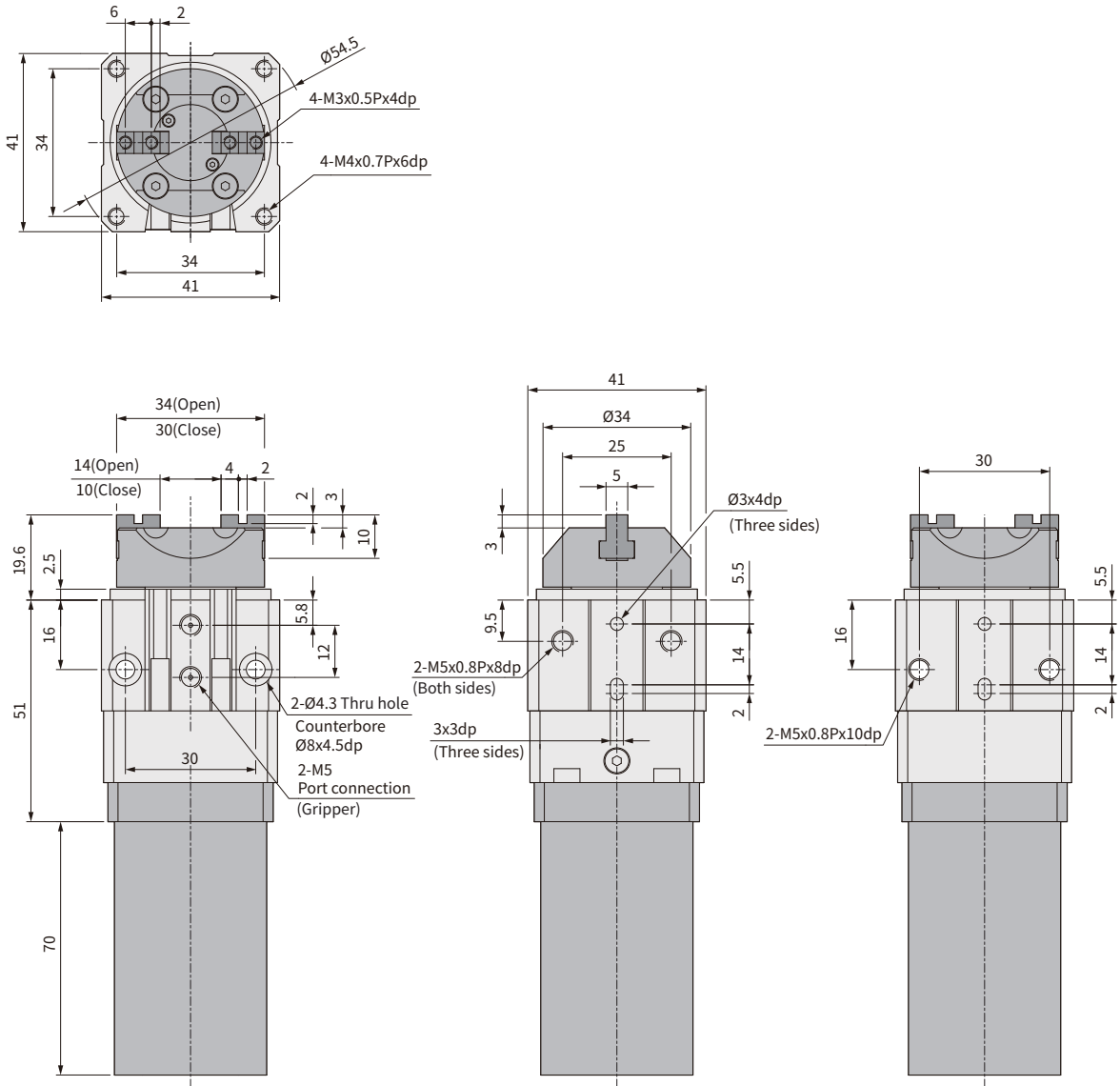


EMW2 series Electric Rotary Gripper

CHELIC

Dimensions

EMW2-10

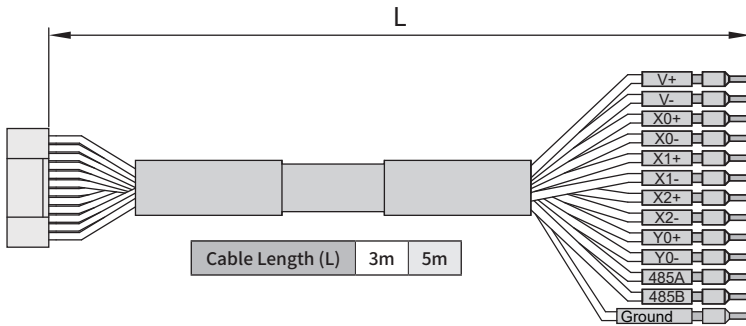


EM2 series Electric Rotary Gripper

Motor wiring diagram

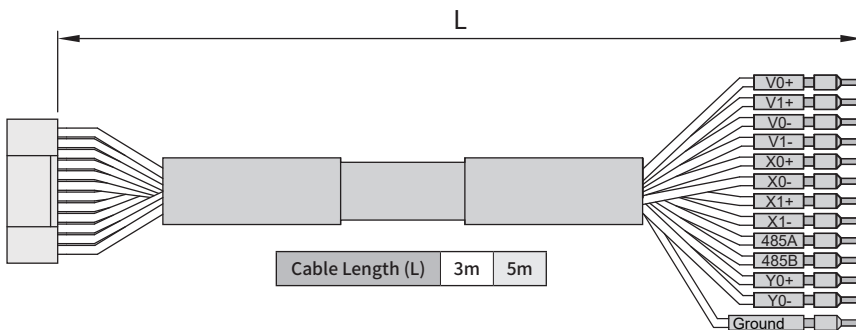


EM2-10 / EM2-16 Motor wiring diagram



Description	
V+	Power Supply (+)
V-	Power Supply (-)
X0+	Input 0 Positive
X0-	Input 0 Negative
X1+	Input 1 Positive
X1-	Input 1 Negative
X2+	Input 2 Positive
X2-	Input 2 Negative
Y0+	Output 0 Positive
Y0-	Output 0 Negative
485A	RS-485 A Terminal
485B	RS-485 B Terminal
Ground	Ground

EM2-20 / EM2-25 Motor wiring diagram



Description	
V0+	Power Supply 0 (+)
V1+	Power Supply 1 (+)
V0-	Power Supply 0 (-)
V1-	Power Supply 1 (-)
X0+	Input 0 Positive
X0-	Input 0 Negative
X1+	Input 1 Positive
X1-	Input 1 Negative
485A	RS-485 A Terminal
485B	RS-485 B Terminal
Y0+	Output 0 Positive
Y0-	Output 0 Negative
Ground	Ground

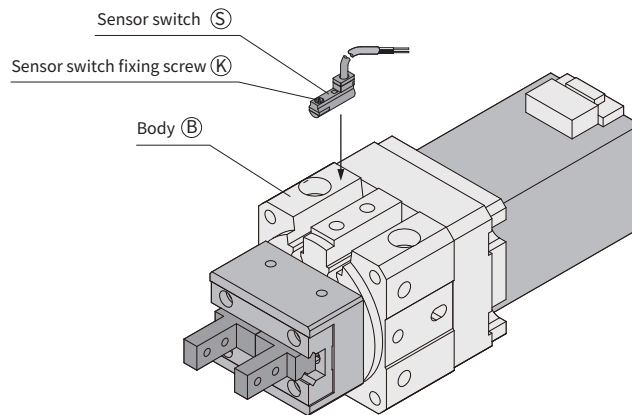
EM2 series Electric Rotary Gripper

CHELIC

Sensor switch installation

Sensor switch adjustment on gripper unit

- Adjustment: **1.** Put sensor switch (S) on the body (B) in front of slot and insert sensor switch to the slot.
2. Insert sensor switch (S) to the slot at the appropriate position and screw (K) in.



▶ Sensor switch introduction

CS-8B

Voltage: DC 5 ~ 30V

