

KE3G series



Features

- 3 Jaw self-aligning electrical gripper
- A wide range of grips available (4 to 80 mm)
- User-specified fingers can be attached
- Built-in micro photo sensor
- Improved grip with built-in gear reducer
- Circular secondary battery arrangement and post-process optimization
- Easy internal/external gripping and automatic centering process
- Motor direct coupling view window standard

How to Order

KE3G 80 - S1
 ① ② ③

① Series

KE3G	3-Jaw Electrical Gripper
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② Size

80	80 X 80 mm
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③ Sensor quantity

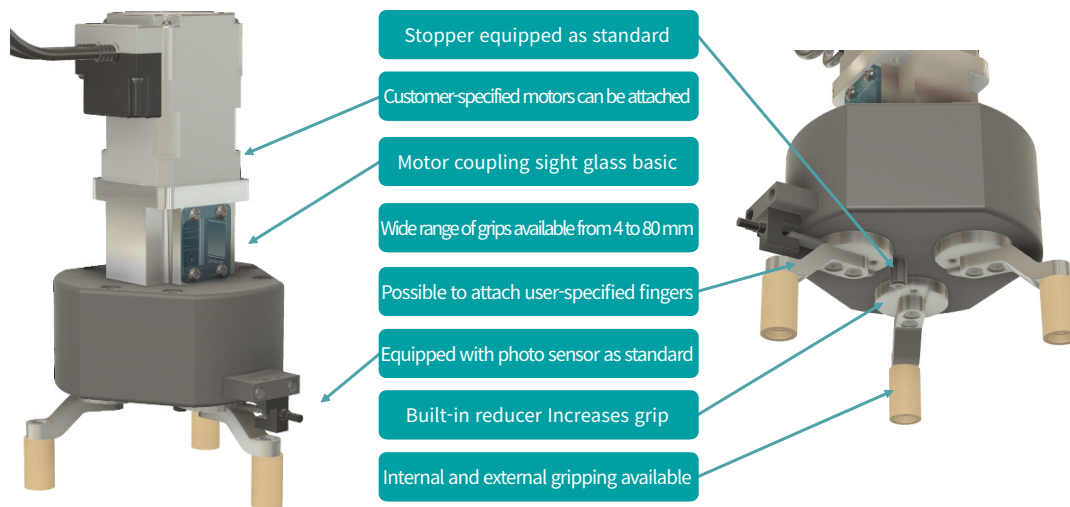
S	Photomicrosensor - 1 pc
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*Default sensor length: 1M / sensor dog included

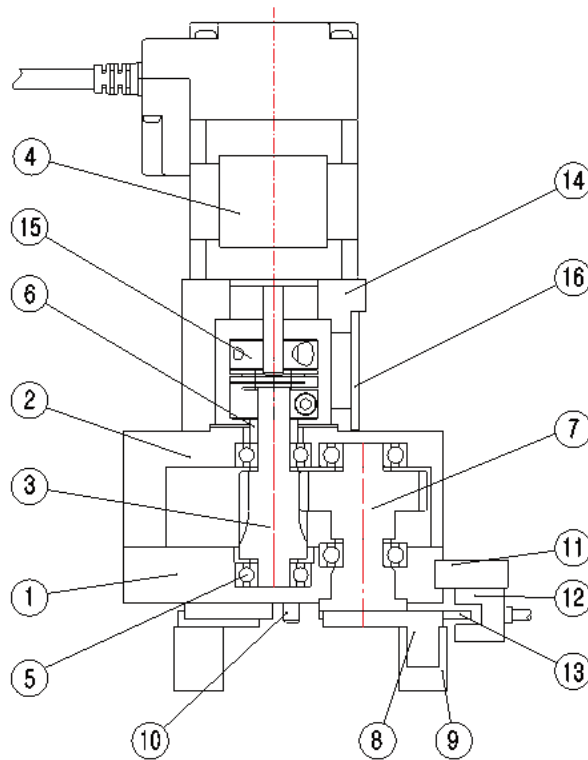
Specifications

Item	KE3G80
Drive method	SPUR GEAR
Gear ratio	3 : 1
Max. workpiece mass (kg)	2 (Urethane fingers)
Grip range (mm)	Outer diameter 4 ~ 80 Bore diameter 36 ~ 106
Repeat positioning accuracy (mm)	±0.05
Backlash amount (mm)	0.5 or less
Max. grip force (N)	70
Max. jig length (mm)	40
Allowable torque for input rotation (Nm)	0.7 or less
Control method	Controlling motor load torque
Applicable motor size (mm)	40~60
Temperature range (°C)	5~60
Humidity range (%RH)	90 or less

Features



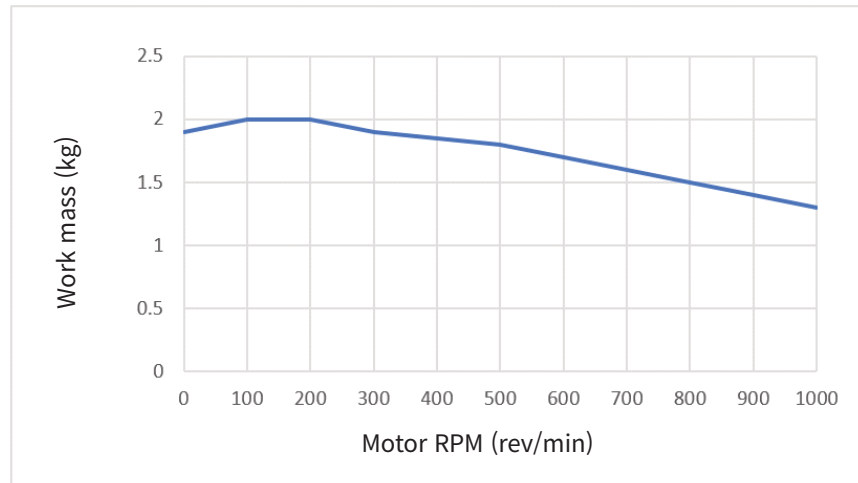
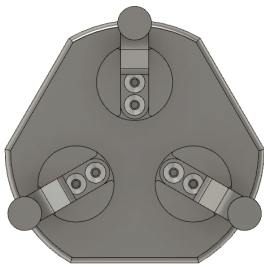
Structure



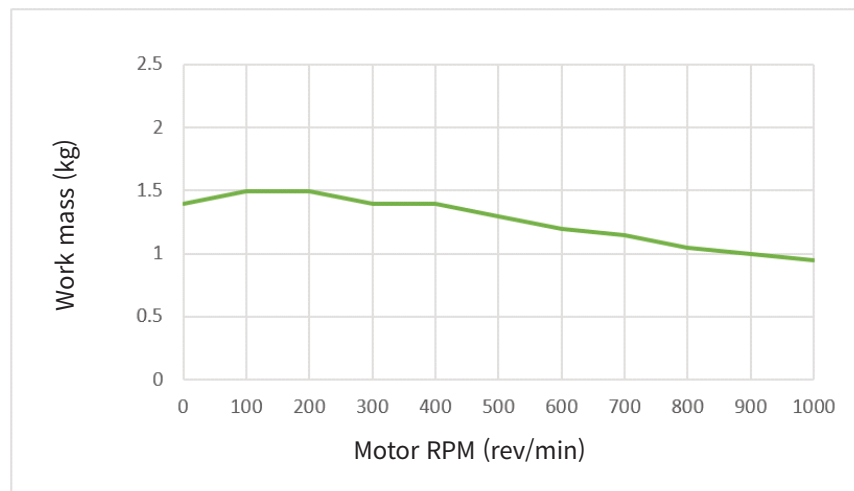
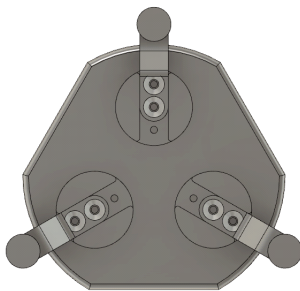
No.	Parts	Material	No.	Parts	Material
1	Base	Aluminum alloy	9	Cap	Urethane
2	Housing	Aluminum alloy	10	Stopper	Stainless
3	Pinion gear	Carbon steel	11	Sensor bracket	Aluminum alloy
4	Motor	-	12	Photo sensor	-
5	Bearing	Bearing steel	13	Sensor dog	Stainless
6	Collar	Aluminum alloy	14	Motor bracket	Aluminum alloy
7	Gear	Aluminum alloy	15	Coupling	Aluminum alloy
8	Ping	Stainless	16	Sight glass	Plastic

Product characteristic table

Standard position work mass



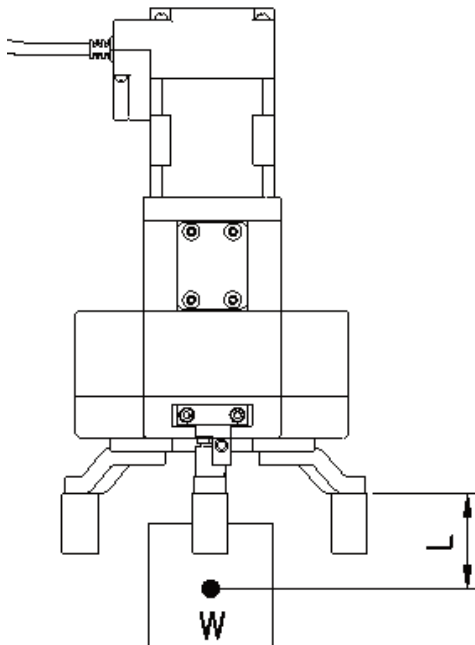
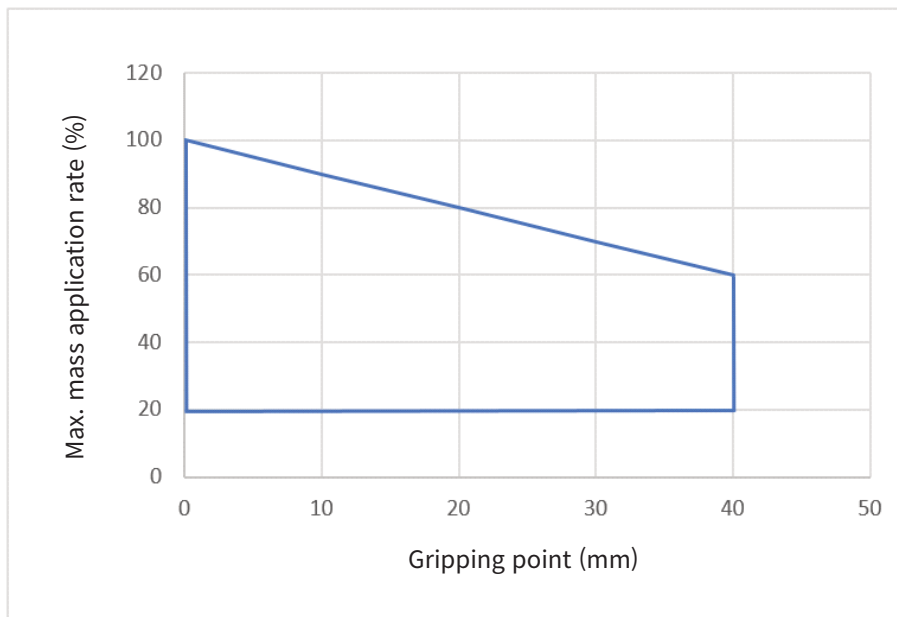
Extend position work mass



※ The above graph is the value of the workpiece mass when applying 56 STEP MOTOR.

Structure

Mass application rate according to gripping point



L : Gripping point
W : Work center

[example]

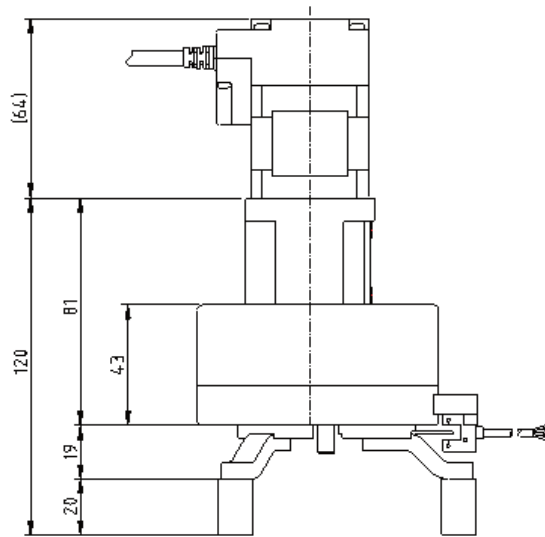
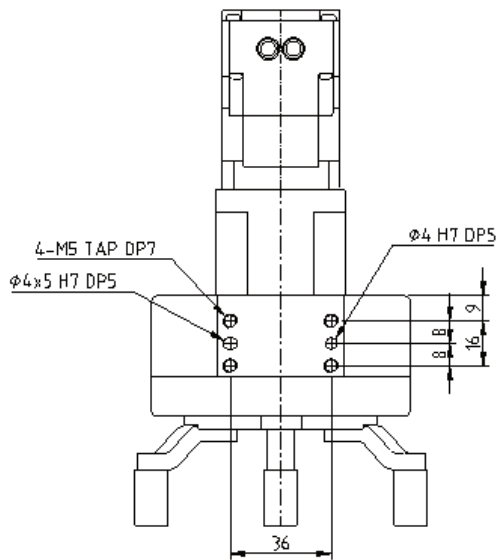
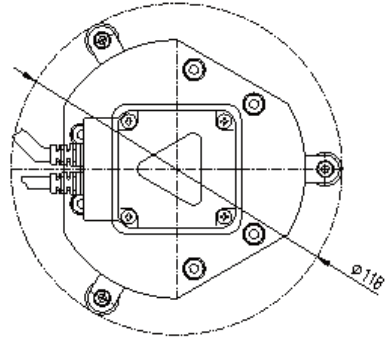
What if you want to find the maximum mass of a workpiece that can be gripped at a gripping point of 20mm when using a stepper motor size 56 and 800RPM?

- When using stepper motor size 56 and 800RPM, work mass is 1.5kg
- Check the mass application rate graph when the gripping point is 20mm: 80%
- What is the maximum usable workpiece mass? $1.5 \times 80/100 = 1.2\text{kg}$

Dimensions

KE3G80

Applied motor: Step 42 each



Standard Position

Extend Position

