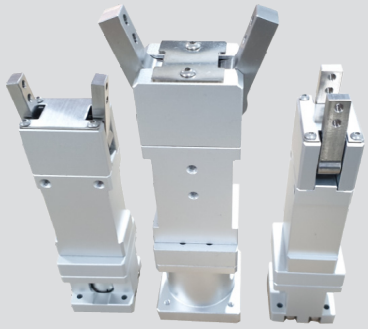
KESG series



Features

- Pneumatic 180 degree opening/closing type can be replaced
- Bearing link structure for improved durability
- Minimized finger play and improved opening/closing speed
- Application of precision ball screw, enhanced grip through drive method
- Applicable to stepping motor and servo motor
- Possible to control workpiece pressure by motor load factor control
- Coupling motor direct connection method

How to Order

KESG 16
① ②

① Series

KESG	180 degree retractable electrical gripper

② Size

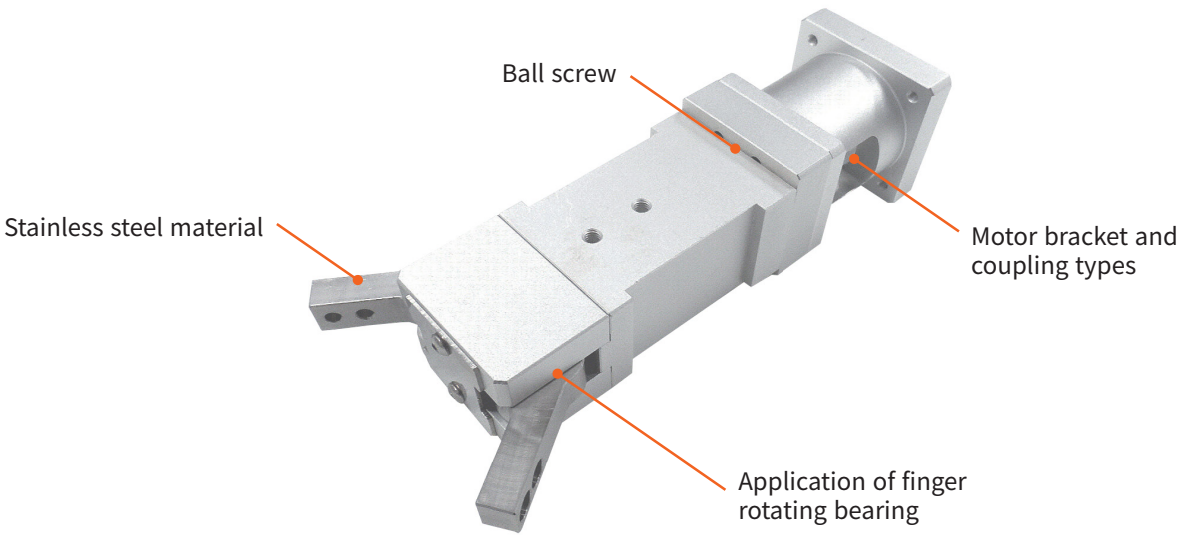
	Body (Tube) Size (Width X Height)
16	22 X 32 mm
25	30 X 38 mm

Specification

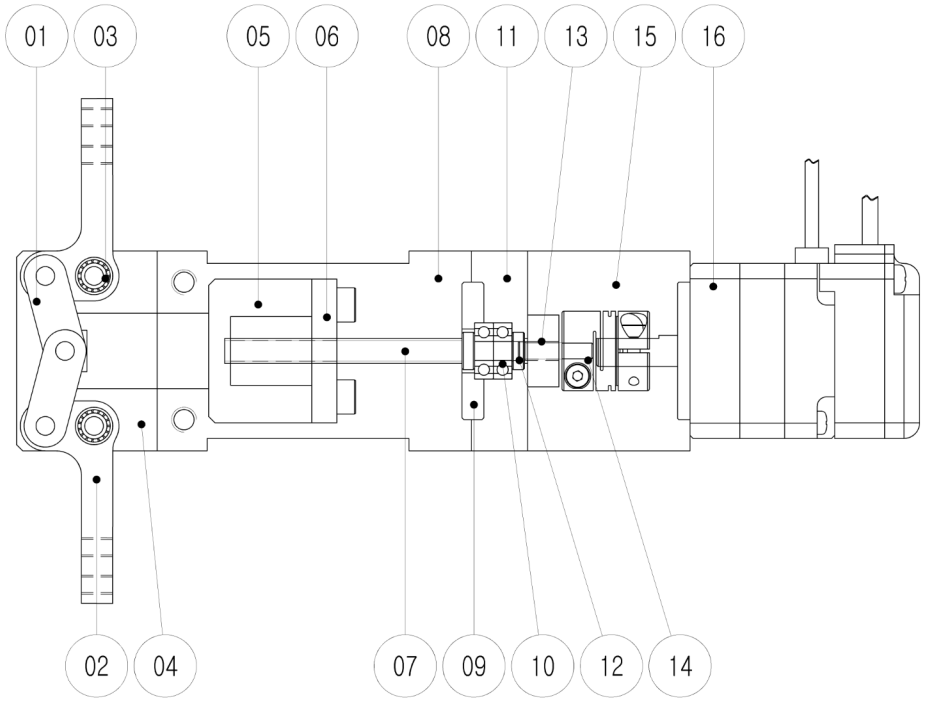
Type		KESG 16	KESG 25
Double-sided opening and closing stroke	(°)	180	
Max. gripping force for opening and closing (at 250 rpm) "Note 1)"	(N)	60	150
Max. workpiece mass	(kg)	0.6	1.5
Operating type		Ball screw (0401) + cam	Ball screw (0602) + cam
Finger guide		Link	
Max. length of jig "Note 2)"	(mm)	45	60
Repetition precision	(mm)	±0.02	
Operating temperature	(°C)	1 ~ 55	
Operating humidity range	(%RH)	90 or less	
Applicable motor size	(mm)	28	42

Note 1) In the case of gripping force, select at least 10 times the mass of the workpiece.
Note 2) Please select a gripping point within the maximum length of the jig.

Features



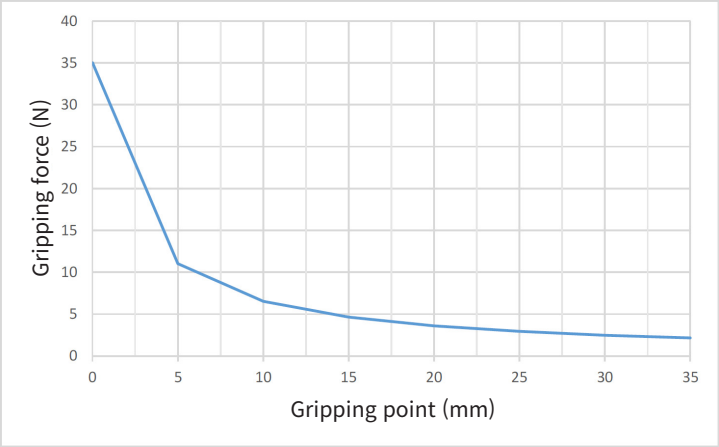
Structure



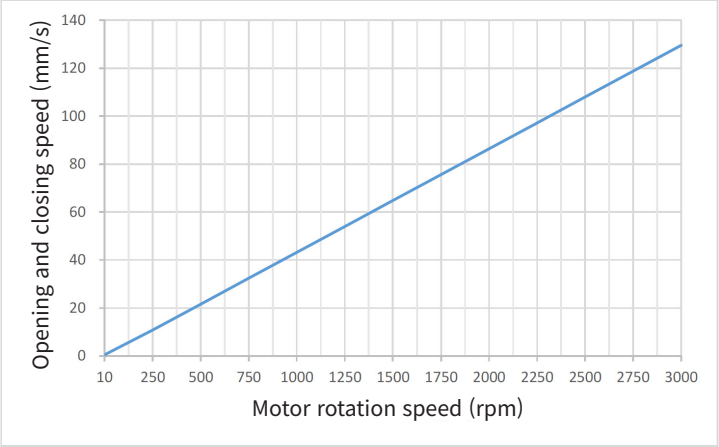
No.	Parts	Material	No.	Parts	Material
1	Link	Carbon steel	9	Bearing cover	Stainless steel
2	Finger	Stainless steel	10	Ball bearing	Bearing steel
3	Finger bearing	Bearing steel	11	Bearing housing	Aluminum alloy
4	Plate	Aluminum alloy	12	Spacer	Carbon steel
5	Joint	Stainless steel	13	Lock nut	Carbon steel
6	Ball nut	Heat treated steel	14	Coupling	Aluminum alloy
7	Ball screw	Heat treated steel	15	Motor bracket	Aluminum alloy
8	Body	Aluminum alloy	16	Motor	-

Product characteristic table

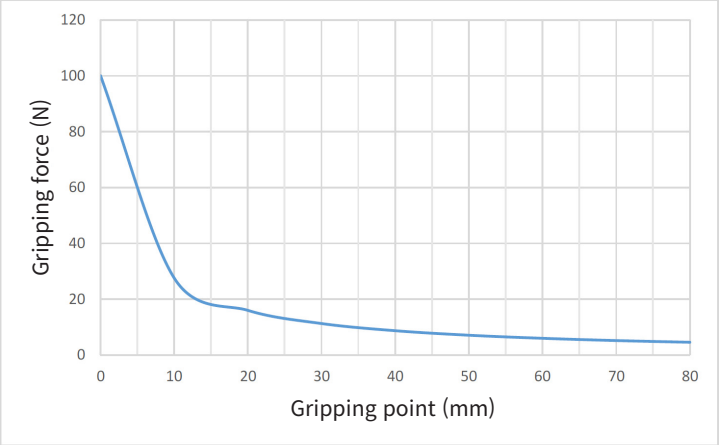
KESG16 gripping force - gripping point graph



KESG16 Open/close speed graph according to motor rotation speed

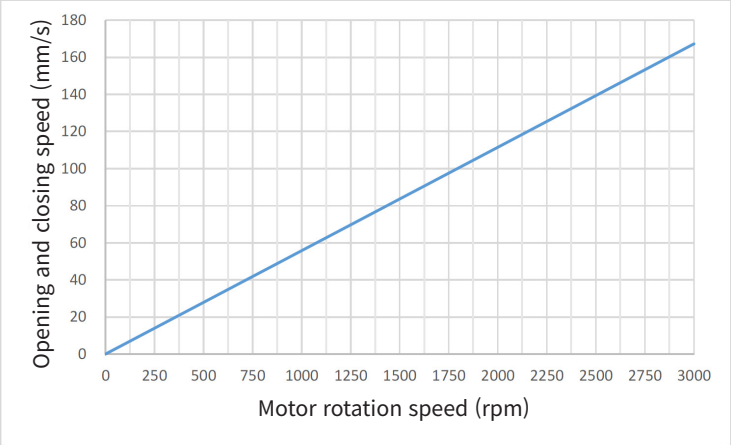


KESG25 gripping force - gripping point graph

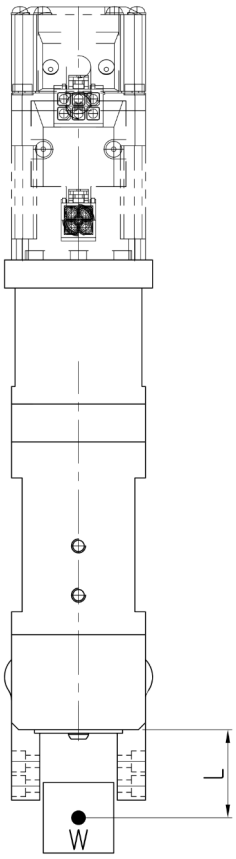


Product characteristic table

KESG25 Open/close speed graph according to motor rotation speed



Application example of gripping force according to gripping point



[example]

What if the gripping force of KESG25 is obtained when the gripping point is 20MM?

■ What is the maximum usable workpiece mass when the gripping point is 20mm?

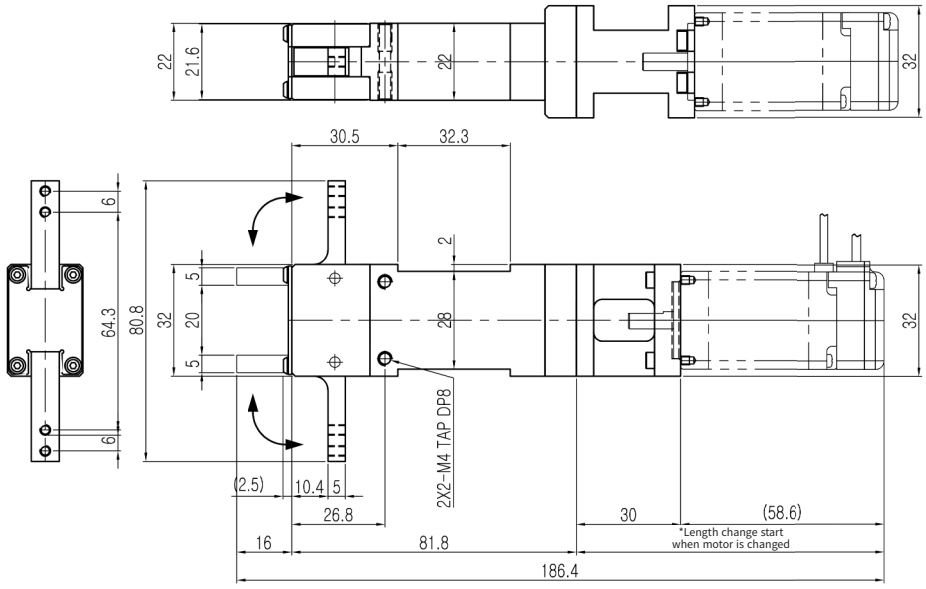
The gripping point of KESG25 - Checking the gripping force graph shows that the gripping force is about 18N when the gripping point is 20mm.

L : Gripping point

W : Work center

Dimensions

KESG 16



KESG 25