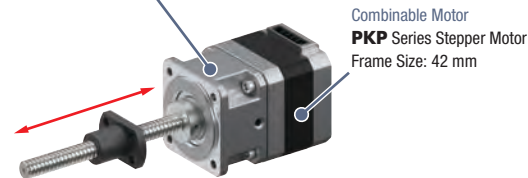


## Mounting Adapter for Linear Actuator

- Linear motion mechanism with a leadscrew and a resin nut
- Easy installation without the need of coupling to an Oriental Motor stepper motor
- For the 42 mm frame size, thrust and self locking force are both a max. 100 N
- Save space and reduce design time compared to a custom-built mechanism.



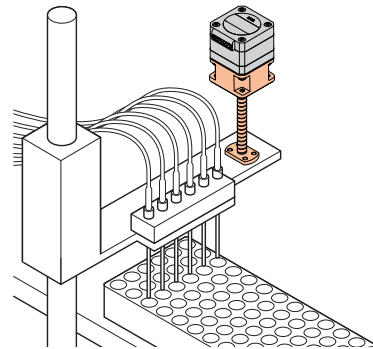
### Thrust Force of 100 N for 42 mm



Assembly Example: Mounting Adapter for Linear Actuator + **PKP243D23A2**

### Self-Locking Force 100 N (Lead 2 mm) Capable of Load Holding

It can be used for load holding applications that require the prevention of movement caused by the load's own weight.



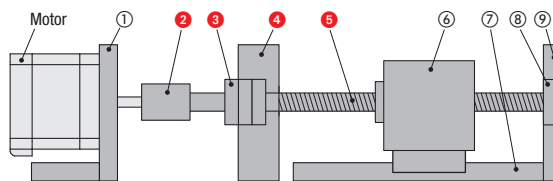
● The phenomenon in which a screw shaft becomes immobile due to friction caused by moving the nut externally is called self-locking.

### Compact Design Allows for Quicker Equipment Development

By using a mounting adapter for linear actuators, space is saved due to the reduced number of parts. The amount of time required for installation and accuracy adjustment can also be reduced.

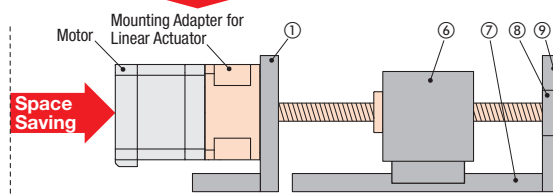
This allows for equipment startup in a shorter time.

- Custom-built  
(Number of components: **9**)



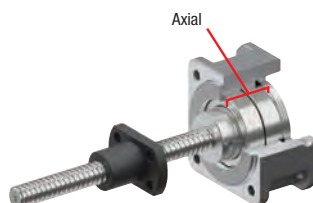
#### Parts Reduction

- When using mounting adapter for linear actuator  
(Number of components: **6**)



- |                        |
|------------------------|
| ① Installation Plate   |
| ② Coupling             |
| ③ Fixed-Side Bearing   |
| ④ Fixed-Side Block     |
| ⑤ Leadscrew            |
| ⑥ Transport Table      |
| ⑦ Linear Guide         |
| ⑧ Support-Side Bearing |
| ⑨ Support-Side Block   |

### Axial Load Can Be Applied Directly



## Wide Variety of Motors and Drivers to Provide More Reliable Motion

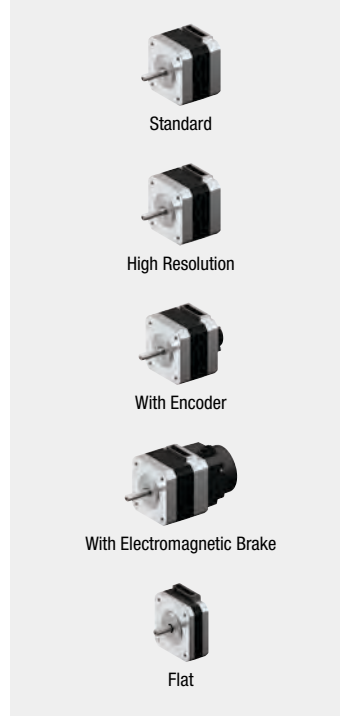
Motors with additional functions, such as with encoders and electromagnetic brakes, can be used in combination with drivers that have low vibration and noise.

The low-vibration drive contributes to a reduction in wear of the nuts on the mounting adapter for linear actuators and extends the period of full lubrication.

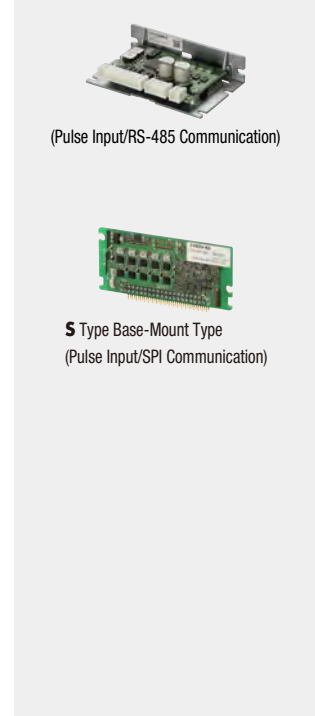
Mounting Adapter for  
Linear Actuator □42 mm



2-Phase/5-Phase Stepper Motors  
PKP Series □42 mm



CVD Series Driver



## Product Code

# LA 42 12 C 20

- ① ② ③ ④ ⑤

①	Name	Mounting Adapter for Linear Actuator
②	Frame Size	<b>42</b> : 42 mm
③	Lead	<b>2</b> : 2 mm <b>12</b> : 12 mm
④	Driving Screw Type	<b>C</b> : Leadscrew
⑤	Stroke	<b>05</b> : 50 mm <b>10</b> : 100 mm <b>20</b> : 200 mm <b>30</b> : 300 mm

## Product Line

Product Name
<b>LA422C05</b>
<b>LA422C10</b>
<b>LA4212C20</b>
<b>LA4212C30</b>

## Specifications

Product Name	Frame Size [mm]	Driving Screw Type	Repetitive Positioning Accuracy [mm]	Screw Diameter [mm]	Lead [mm]	Stroke [mm]	Permissible Thrust [N]	Permissible Speed [mm/s]	Transportable Mass [kg]		Self-Locking Force* [N]
									Horizontal	Vertical	
<b>LA422C05</b>	□42	Leadscrew	±0.05	φ8	2	50	100	30	10	5	100
<b>LA422C10</b>						100					
<b>LA4212C20</b>					200	100 (~80 mm/s)	80				
<b>LA4212C30</b>						50 (~180 mm/s)	180				
					12	300	100 (~80 mm/s)	80			
								50 (~180 mm/s)	180		

- Applicable Motor: 2-Phase/5-Phase Stepper Motors **PKP** Series □42 mm
- Materials Screw Shaft: Stainless Steel Nut: PPS
- Transfer Efficiency (Reference Value) Lead 2 mm: 35% Lead 12 mm: 70%

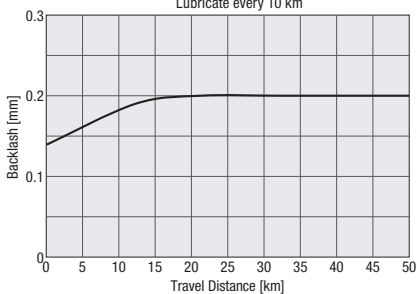
### Note

- \*Shock or vibration may prevent the self-lock from operating correctly.
- Be sure to apply the supplied grease to the sliding screw before use.
- The backlash for the sliding screw's nut increases as the travel distance increases.

## Amount of Backlash Change

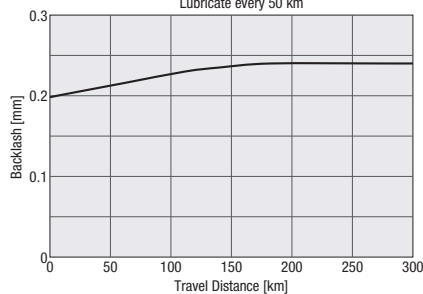
### Lead: 2 mm

Test Conditions Lead: 2 mm Thrust: 100 N Speed: 30 mm/s  
Lubricate every 10 km



### Lead: 12 mm

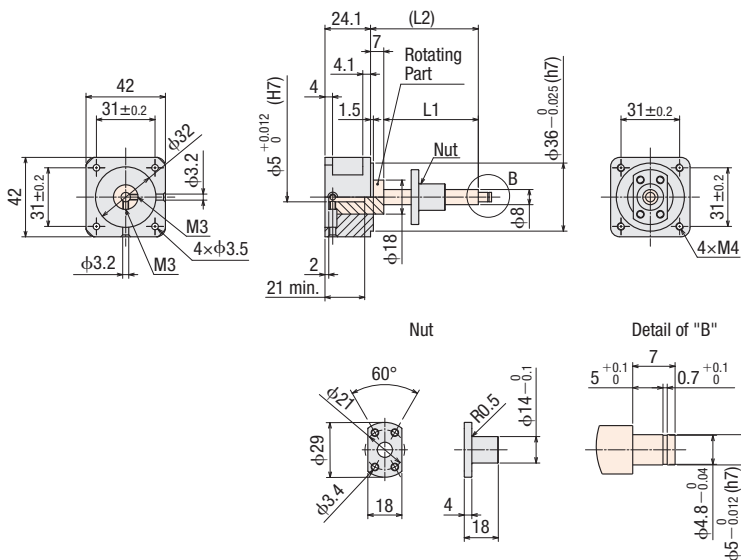
Test Conditions Lead: 12 mm Thrust: 50 N Speed: 180 mm/s  
Lubricate every 50 km



## Dimensions (Unit = mm)

2D & 3D CAD

Product Name	L1	L2	Stroke	Mass		CAD
				Body [kg]	Nut [g]	
<b>LA422C05</b>	80	87	50	0.16	4	B1594
<b>LA422C10</b>	130	137	100	0.18		B1595
<b>LA4212C20</b>	230	237	200	0.21		B1596
<b>LA4212C30</b>	330	337	300	0.25		B1597



- These dimensions show min. stroke 100 mm. For products with a stroke of less than 100 mm, there is no detail of "B".

# ***Orientalmotor***

These products are manufactured at plants certified with the international standards **ISO 9001** (for quality assurance) and **ISO 14001** for systems of environmental management).

Specifications are subject to change without notice. This catalogue was published in June 2024.

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