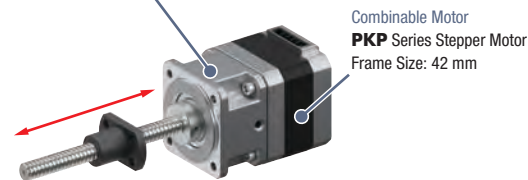


Mounting Adapter for Linear Actuator

- 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.



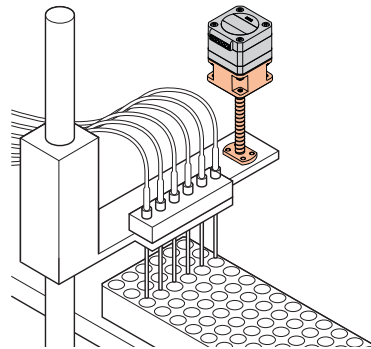
Thrust Force of 100 N for 42 mm



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.

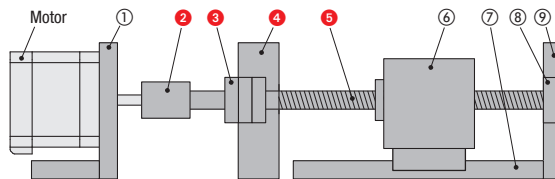


● The phenomenon in which a screw shaft becomes immobile due to friction caused by moving the nut externally is called self-locking.

Compact Design Allows for Quicker Equipment Development

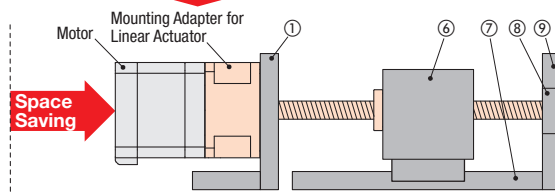
By using a mounting adapter for linear actuators, space is saved due to the reduced number of parts. The amount of time required for installation and accuracy adjustment can also be reduced. This allows for equipment startup in a shorter time.

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



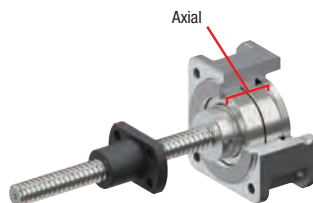
Parts Reduction

- 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.

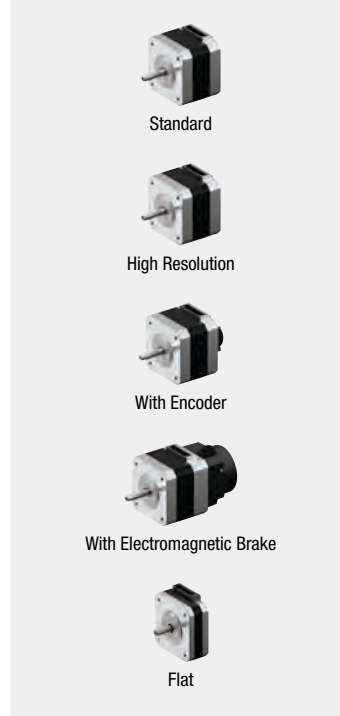
The low-vibration drive contributes to a reduction in wear of the nuts on the mounting adapter for linear actuators and extends the period of full lubrication.

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	42 : 42 mm
③	Lead	2 : 2 mm 12 : 12 mm
④	Driving Screw Type	C : Leadscrew
⑤	Stroke	05 : 50 mm 10 : 100 mm 20 : 200 mm 30 : 300 mm

Product Line

Product Name
LA422C05
LA422C10
LA4212C20
LA4212C30

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	
LA422C05	□42	Leadscrew	±0.05	φ8	2	50	100	30	10	5	100
LA422C10						100					
LA4212C20					200	100 (~80 mm/s)	80				
LA4212C30						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%

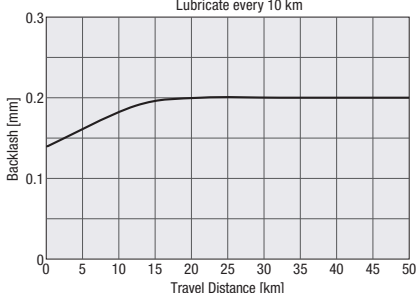
Note

- *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

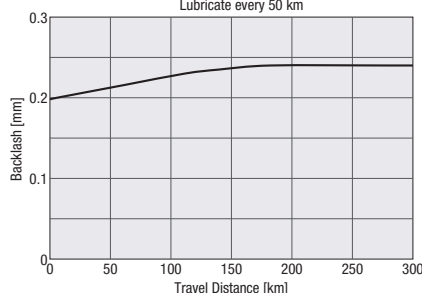
● Lead: 2 mm

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



● Lead: 12 mm

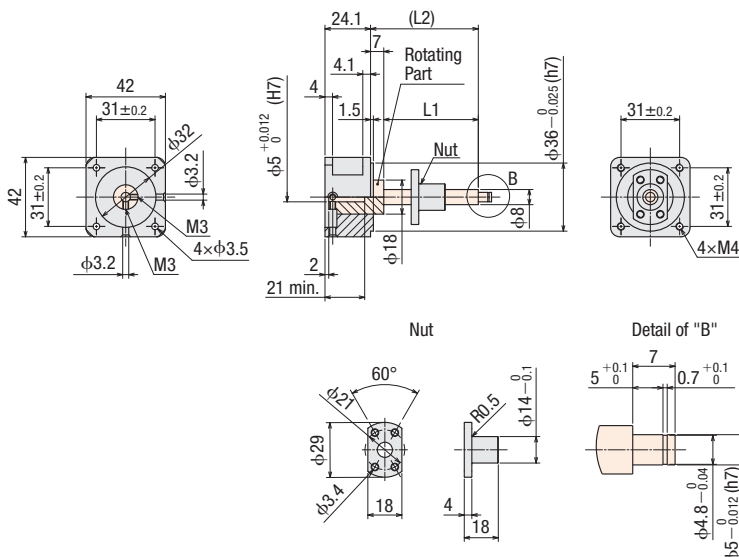
Test Conditions Lead: 12 mm Thrust: 50 N Speed: 180 mm/s
Lubricate every 50 km



Dimensions (Unit = mm)

2D & 3D CAD

Product Name	L1	L2	Stroke	Mass		CAD
				Body [kg]	Nut [g]	
LA422C05	80	87	50	0.16	4	B1594
LA422C10	130	137	100	0.18		B1595
LA4212C20	230	237	200	0.21		B1596
LA4212C30	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 July 2024.

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