

! Contact our sales office for delivery dates and prices as this is a special model.

Motorless Type

Electric Actuator/Rod Type

LEY63-X765

- Features**
- Supports 750 W motors

Max. horizontal work load

240 kg Increased by **3 times**

Model	Max. work load [kg]	
	80	240
LEY63-X765	240 kg	
LEY63D	80 kg	

Max. vertical work load

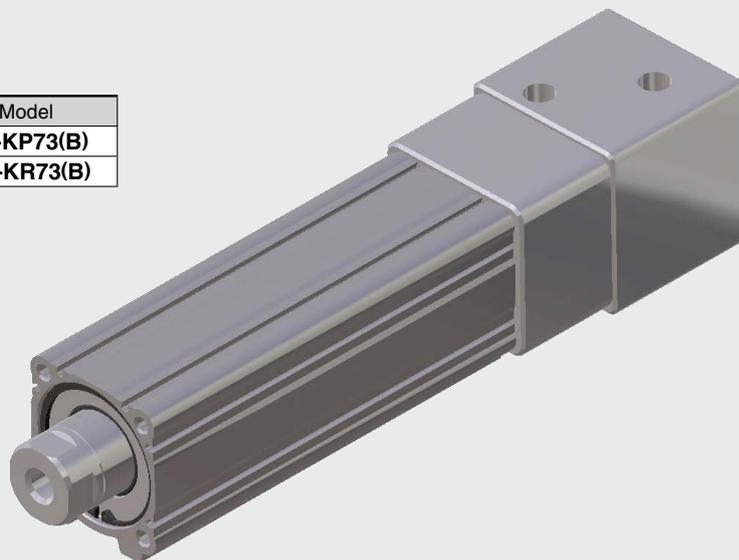
115 kg Increased by approx. **1.6 times**

Model	Max. work load [kg]	
	72	115
LEY63-X765	115 kg	
LEY63D	72 kg	

Lead: 5 mm, Speed: 250 mm/s, Motor mounting position: In-line

• **Compatible Motors**

Manufacturer	Series	Model
Mitsubishi Electric Corporation	MELSERVO-J3	HF-KP73(B)
	MELSERVO-J4	HG-KR73(B)



Caution To ensure the safest possible operation of this product, please be sure to thoroughly read the "Safety Instructions" in our "Best Pneumatics" catalog before use.

How to Order

LEY 63DNZ A - 100 - X765

①
②
③
④
⑤

① Accuracy

Nil	Basic type
H	High-precision type

② Lead [mm]

A	20
B	10
C	5

③ Stroke [mm]

100	100
to	to
800	800

④ Rod end thread

Nil	Rod end female thread
M	Rod end male thread (1 rod end nut is included.)

⑤ Mounting

Nil	Ends tapped/ Body bottom tapped
F	Rod flange

Specifications

Values in this specifications table are the allowable values of the actuator body with the standard motor mounted. Do not use the actuator so that it exceeds these values.

Model		LEY63DN-X765				
Actuator specifications	Stroke [mm] ^{*1}	100, 200, 300, 400, 500, 600, 700, 800				
	Work load [kg]	Horizontal ^{*2}	80	150	240	
		Vertical	37	72	115	
	Force [N] ^{*3} (Set value: Rated torque 45 to 135%)		293 to 879	569 to 1708	1074 to 3223	
	Max. speed ^{*4} [mm/s]	Stroke range	Up to 500	1000	500	250
			505 to 600	800	400	200
			605 to 700	600	300	150
			705 to 800	500	250	125
	Pushing speed [mm/s] ^{*5}		30 or less			
	Max. acceleration/deceleration [mm/s ²]		5000			
	Positioning repeatability [mm]	Basic type	±0.02			
		High-precision type	±0.01			
	Lost motion [mm] ^{*6}	Basic type	0.1 or less			
		High-precision type	0.05 or less			
Ball screw specifications	Thread size [mm]	ø20				
	Lead [mm]	20	10	5		
	Shaft length [mm]	Stroke + 204				
Impact/Vibration resistance [m/s ²] ^{*7}		50/20				
Actuation type		Ball screw				
Guide type		Sliding bushing (Piston rod)				
Operating temperature range [°C]		5 to 40				
Operating humidity range [%RH]		90 or less (No condensation)				
Other specifications ^{*8}	Actuation unit weight [kg] (* [ST]: Stroke)	0.84 + (2.77 × 10 ⁻³) × [ST]: 200 st or less 0.94 + (2.77 × 10 ⁻³) × [ST]: Over 200 st, 500 st or less 1.03 + (2.77 × 10 ⁻³) × [ST]: Over 500 st				
	Other inertia [kg·cm ²]	0.176				
	Friction coefficient	0.05				
	Mechanical efficiency [-]	0.8				
Applicable motor spec.	Motor shape	□60				
	Motor type	AC servo motor				
	Rated output capacity [W]	750 W				
	Rated torque [N·m]	2.4				
	Rated rotation [rpm]	3000				

*1 Please contact SMC for information on the manufacturing of strokes other than those shown above.

*2 This is the maximum value of the horizontal work load. An external guide is necessary to support the load. The actual work load changes according to the condition of the external guide. Confirm the load using the actual device.

*3 The force setting range for the force control (Speed control mode, Torque control mode)

The force changes according to the set value. Set it with reference to the "Force Conversion Graph (Guide)."

*4 The allowable speed changes according to the stroke.

*5 The allowable collision speed for collision with the workpiece

*6 A reference value for correcting an error in reciprocal operation

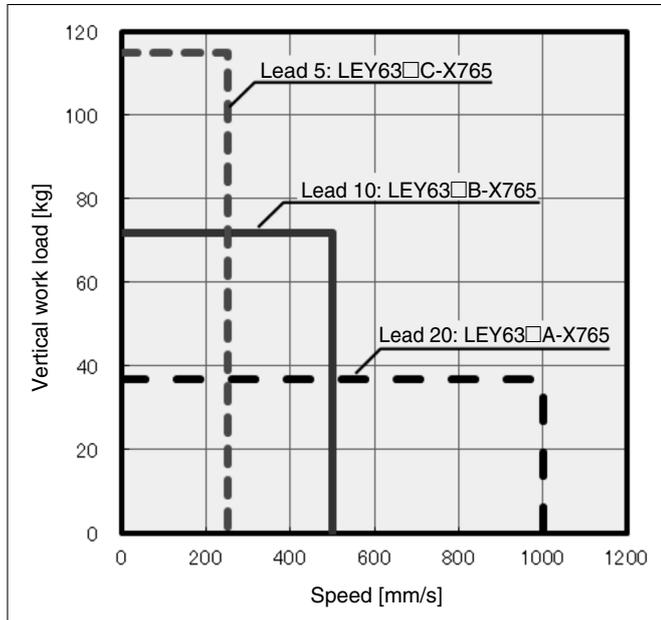
*7 Impact resistance: No malfunction occurred when the actuator was tested with a drop tester in both an axial direction and a perpendicular direction to the lead screw. (The test was performed with the actuator in the initial state.)

Vibration resistance: No malfunction occurred in a test ranging between 45 to 2000 Hz. The test was performed in both an axial direction and a perpendicular direction to the lead screw. (The test was performed with the actuator in the initial state.)

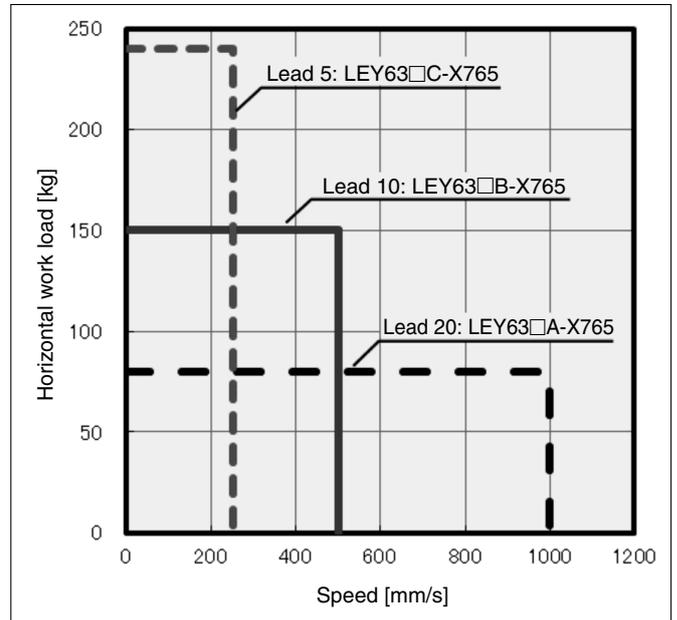
*8 Each value is only to be used as a guide to select a motor of the appropriate capacity.

Speed-Work Load Graph

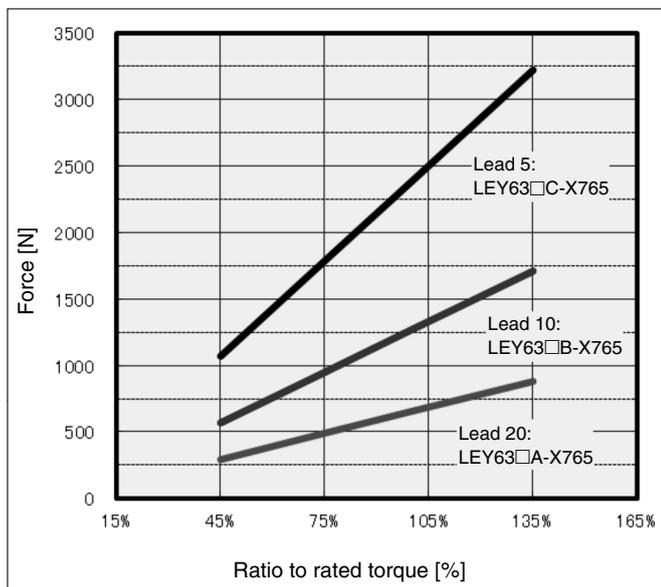
Vertical



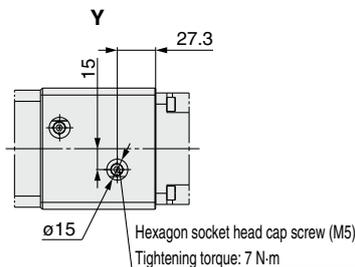
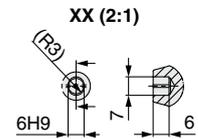
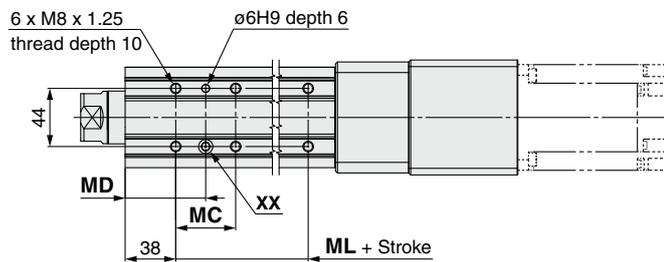
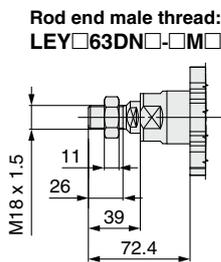
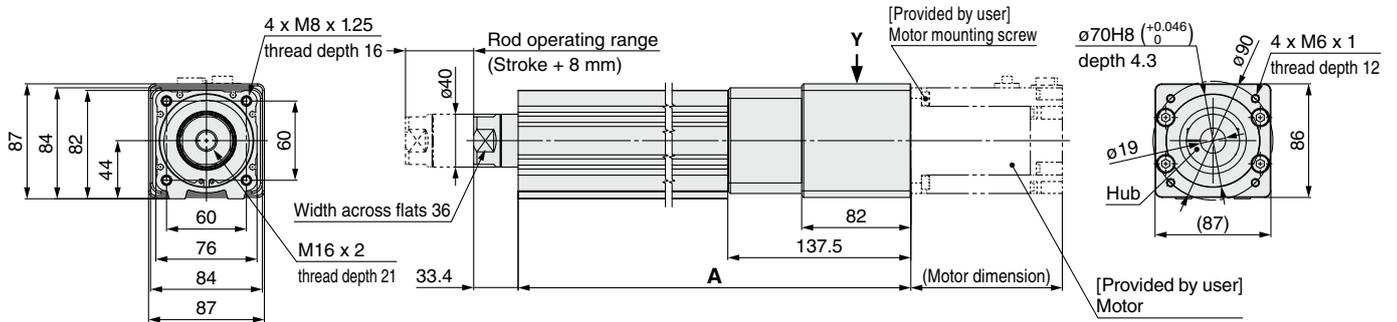
Horizontal



Force Conversion Graph (Guide)



Dimensions



Dimensions

Stroke [mm]	A	MC	MD	ML
100	360.5	45	60.5	65
200	460.5	58	67	
300	595.5	86	81	100
400	695.5			
500	795.5			
600	930.5			
700	1030.5	135		
800	1130.5			

⚠ Caution

- The regenerative resistor should be selected by the user based on the load conditions.
- The motor and motor mounting screws should be provided by the user.
- Prepare a motor with a round shaft end.
- When mounting a hub, remove all oil content, dust, and dirt adhered to the shaft.
- Take measures to prevent the loosening of the motor mounting screws.
- Tighten the hub screw after mounting the motor. (Hexagon socket head cap screw (M5), Tightening torque: 7 N·m)
- Refer to the figures below for the applicable motor dimensions.

