

Z-θ UNIT

LINEAR ROTARY ACTUATOR High precision pick & place



Linear rotary actuator

LRT15-25

It is a linear actuator integrating Z axis (linear axis) and θ axis (rotation axis). Vacuum line is provided on the shaft, and parts can be picked up and transported. Z axis (linear axis) Voice coil motor is θ axis (rotation axis) Using a coreless type AC servo motor, our optical encoder is mounted on each axis, achieving high speed and high accuracy.



- Features -

Z axis

- Equipped with glass scale, fine adjustment of Gain etc. with resolution 0.1 μ m.
- The linear guide uses high precision products with a ball cage incorporated.

θ axis

- Precision & small optical encoder and glass scale are mounted, more precision driving is realized.
- The use of a rectangular coil increases the accuracy and rigidity and the current control is stable.

- Specification -

Dimension: 160 (H) x 75.3 (D) x 15 (H) mm

Z axis stroke: 25 mm

θ axis rotation angle: 360 °

Maximum thrust: 10N

Linear encoder resolution: 0.1 μ m

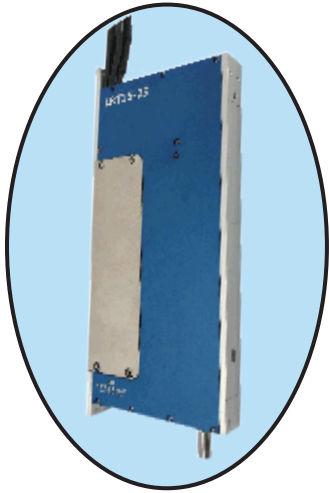
Rotary encoder resolution: 0.015 °

Weight: Approximately 570 g

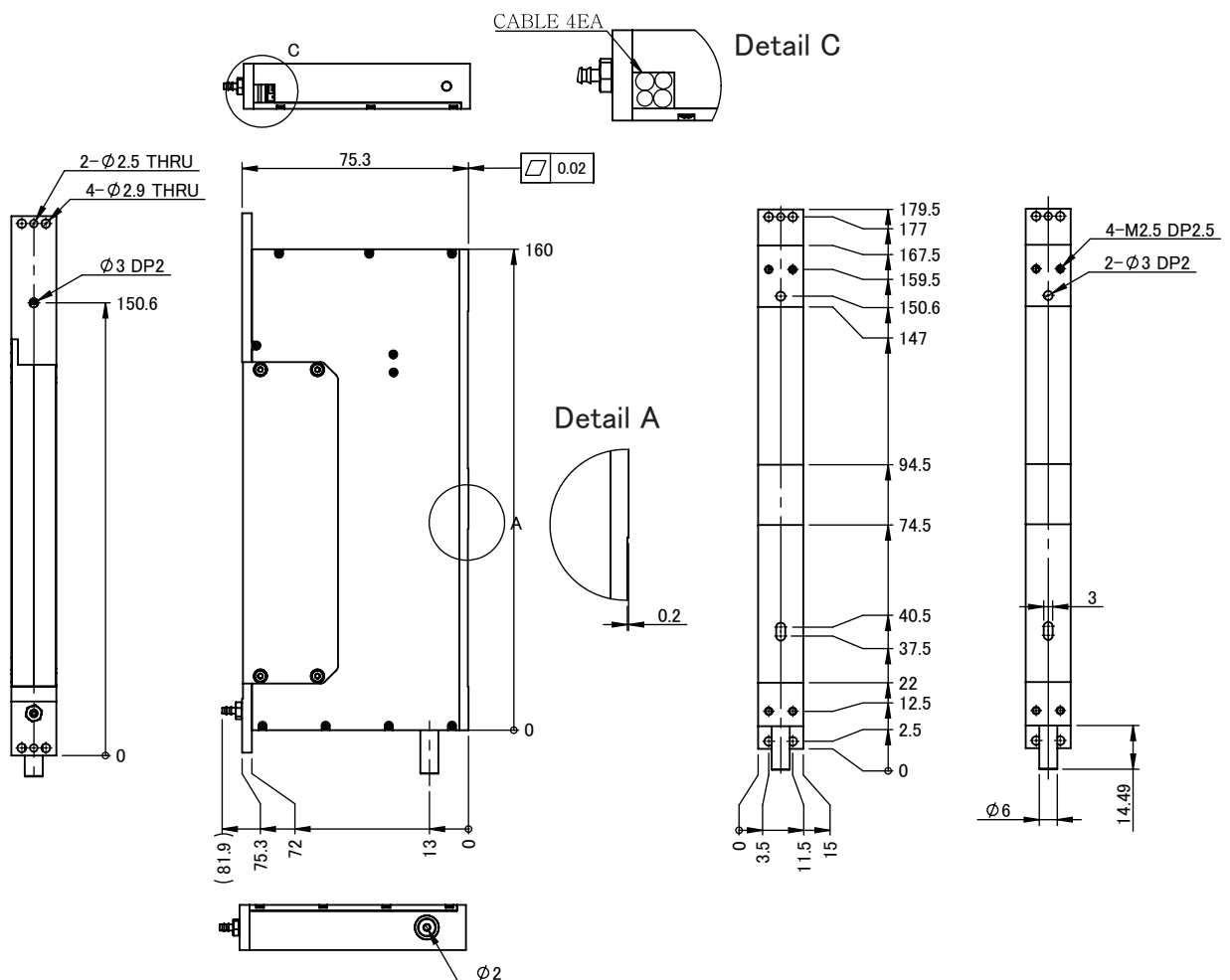
● Linear rotary actuator High precision pick & place unit **LRT15-25**

- Specification -

- Dimensions: 160 (H) × 75.3 (D) × 15 (W) mm
- Weight: Approximately 570 g
- Vacuum port: M3 × 0.5
- Operating Temp : +10~+50°C
- Storage Temp : -10~+60°C
- Humidity : 0~80% (without dew condensation)



Z axis	θ axis
Voice coil motor	Coreless type AC servomotor
Stroke : 25 mm	Rotation speed : 0 to 1,000 rpm
Minimum resolution : 0.1 μm	Minimum resolution : 0.015° (24,000 cpr)
Positioning accuracy : ± 0.3 μm	Positioning accuracy : ± 0.045°
Rated thrust : 5N	Rated torque : 15mN · m
Maximum thrust : 10N	Maximum torque : 30 mN · m



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