

L3569

ROTARY STAGES

Material

Aluminium alloy body (light, stiff and stable).

Technical Notes

Suitable for fast rotation of light payloads, uses a high torque direct drive Nema 23

stepper motor. This eliminates the use of worm gears enabling fast speeds, high reliability and maintenance free operation. Max. speed (no load) up to 2000 rpm (12,000°/sec), max. acceleration (no load) 900°/sec².

Tips

Optionally with an optical rotary encoder (4000 counts.rev). Can be used with our motion controllers L3521 and L3524.

Order No.	Motor	Speed rpm max.	Acceleration °/s ² max.	Load kg max.	Holding torque Nm	Resolution @25k steps/rev	Weight kg
L3569.STA	Stepper	2000	900	2.3	0.71	0,014°	1.38
L3569.STB	Stepper & enc.	2000	900	2.3	0.71	0,014°	1.38



Factors affecting stage selection

- Size and weight of load (including any moment loads)
- Accuracy (positioning, repeatability and resolution)
- Speed of rotation required
- Means of control

Parameters	High precision
Table diameters (mm)	50-200
Maximum loads (Kg) Horizontal Vertical	125 125
Maximum speed °/sec Stepper motor Servo motor	25-50 180-360
Accuracy (arc-secs) Positioning Repeatability Resolution	70" 5" <0,7"
Control options	Stepper, servo or intelligent motor Motion controllers available

*Dependent on stage selected

Factors affecting stage performance

Run-out

The displacement of a measure sensor placed on the surface of the rotary table.

Applied loads

These cause small deformations in the stage bearings and are dependent on the stiffness of the stage, the bearings and the stability and flatness of the mounting surface.

Hysteresis errors

The difference between the control and instructed position.

Backlash errors

Errors caused by the reversal of the direction of travel affected by clearance in the drive chain.

Encoder errors

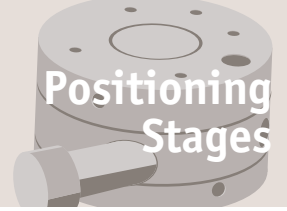
Imperfections in the operations of the encoder (if present).



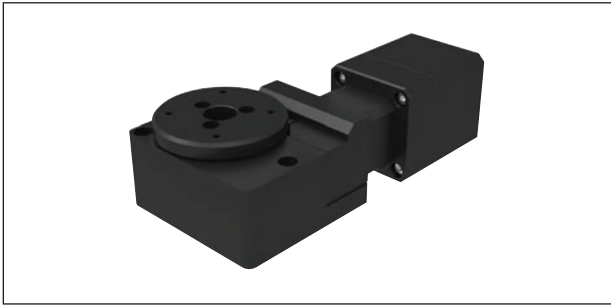
Rotary Stages

High precision overview

Positioning Stages

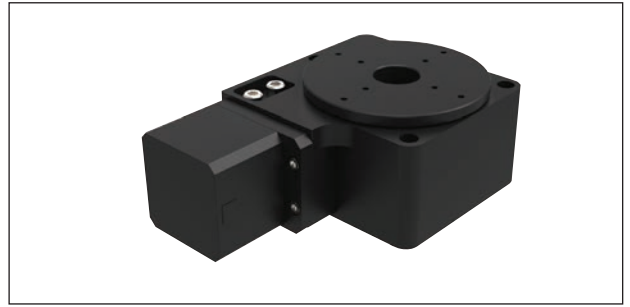


ROTARY STAGES



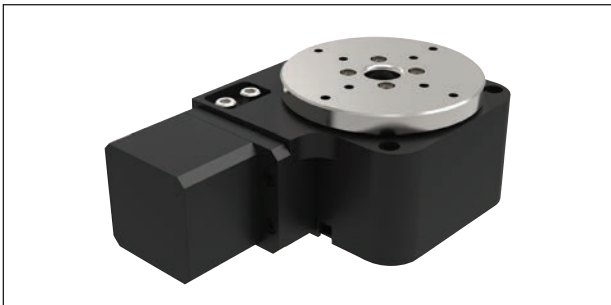
L3550 Ø50 Rotary stage

- Motorised.
- Accurate to 70 arc-secs, repeatedly to 3 arc/sec.
- Loads up to 4.5kg.



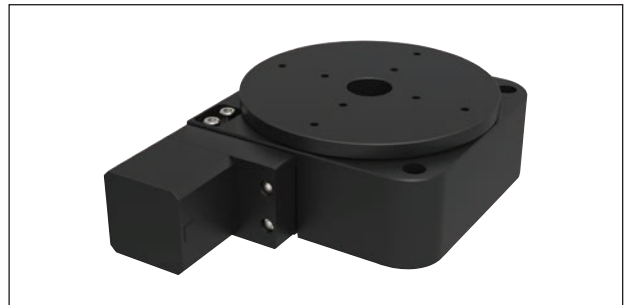
L3552 Ø75 Rotary stage

- Motorised.
- Accurate to 70 arc-secs, repeatedly to 5 arc-secs.
- Loads up to 11kg.



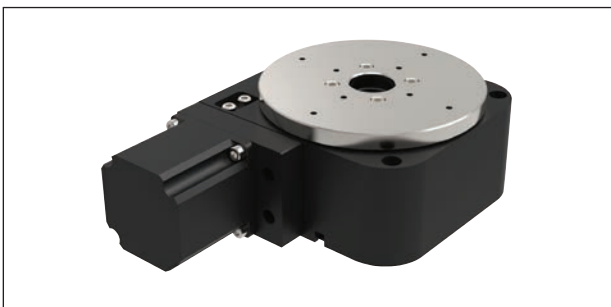
L3554 Ø75 Rotary stage, heavy duty

- Heavy duty.
- Motorised.
- Accurate to 70 arc-secs, repeatedly to 3 arc-secs.
- Loads up to 20kg.



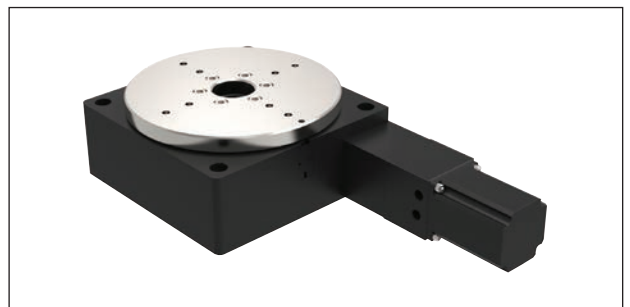
L3556 Ø125 Rotary stage, medium duty

- Motorised.
- Accurate to 70 arc-secs, repeatedly to 5 arc-secs.
- Loads up to 25kg.



L3558 Ø125 Rotary stage, heavy duty

- Heavy duty.
- Motorised.
- Accurate to 70 arc-secs, repeatedly to 3 arc-secs.
- Loads up to 45kg.





L3662 Ø200 Rotary stage

- Motorised.
- Accurate to 70 arc-secs, repeatedly to 5 arc-secs.
- Loads up to 125kg.

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Positioning Stages from Automation Components

Part no.	Stepper	MDrive	Servo
L3550 	✓	✓	✗
L3552 	✓	✓	✗
L3554 	✓	✓	✓
L3556 	✓	✓	✗
L3558 	✓	✓	✗
L3562 	✓	✓	✓