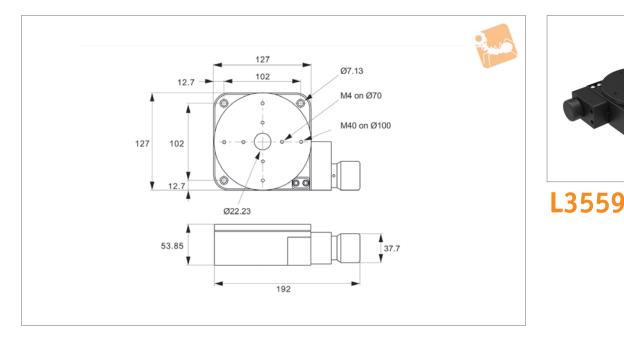


Manual Rotary Stage Ø125 with digital read out





Material

Aluminium alloy body (light, stiff and stable), black anodised. Weight 3,6 Kg.

Technical Notes

The design utilises a single preloaded crossed roller bearing system for the table movement. This eliminates the use of dual bearing configuration, thus improving axial runout and wobble. The stages are offered with different gear ratio options. A proprietary preload system ensures zero backlash in the gear train. The travel is 360° continuous. Resolution 0.00225°.

Tips

A precision rotary encoder provide positional information to a small digital readout (DRO) unit. Positive and negative measurements. Includes 12V power adapter.

Seven 12mm high numeric digits with blue

Order No.	Туре	Travel	Horizontal load kg	Vertical load kg	Moment load Nm		Accuracy ± arc-secs		Resolution ± arc-secs	Weight kg
			max.	max.	max.					
L3559.125	Manual stage	360°	45.0	45.0	29.3	5"	70"	72:1	0,36"	3.6
L3559.DRO	Digital readout	-	-	-	-	-	-	-	-	









Selection



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).

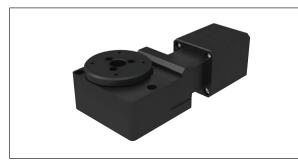




Rotary Stages

High precision overview





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.



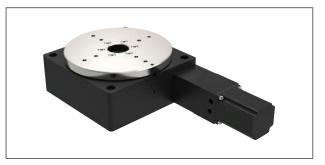
L3556 Ø125 Rotary stage, medium duty

- 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.





Rotary Stages





ROTARY STAGES

Positioning Stages from Automotion Components

Part no.	Stepper	MDrive	Servo
L3550	✓	✓	×
L3552	\checkmark	~	×
L3554	\checkmark	\checkmark	\checkmark
L3556	\checkmark	~	×
L3558	\checkmark	~	×
L3562	\checkmark	\checkmark	\checkmark



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