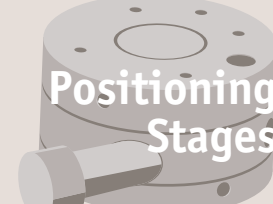




Rotary Stages Selection



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

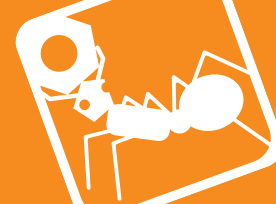
The difference between the control and instructed position.

Backlash errors

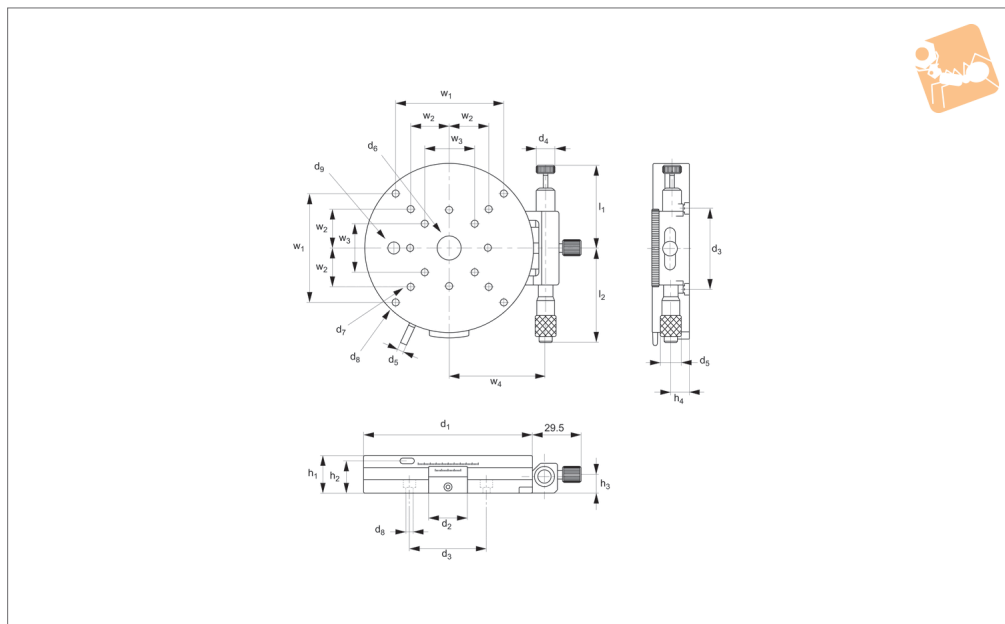
Errors caused by the reversal of the direction of travel affected by clearance in the drive chain.

Encoder errors

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



L3331



Material

Aluminium body blackened, steel knob.
Transmission mechanism - brass bush

rotary system.

$\pm 5^\circ$.

Technical Notes

Coarse 360° adjustment., fine adjustment

Order No.	d ₁	Load N max.	Vernier reading min.	h ₁	h ₂	h ₃	h ₄	d ₂	Weight kg
L3331.038	38	1.0	1' 26"	17.5	11	10.5	4.5	16	0.09
L3331.060	60	3.0	0' 55"	22.5	13	12.5	11.5	15	0.28
L3331.085	85	4.0	0' 43"	25	22	13.0	11.5	20	0.48
L3331.110	110	5.0	0' 34"	25	22	13.0	11.5	25	0.75

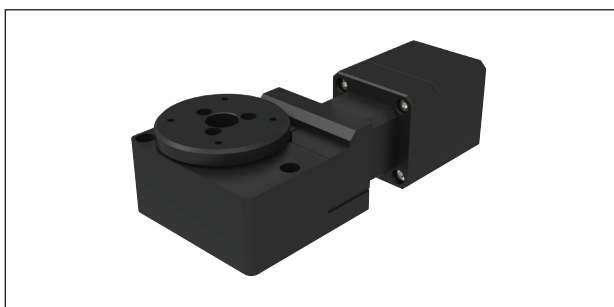
Order No.	d ₃	d ₄	d ₅	d ₆	d ₇	d ₈ for	d ₉	w ₁	w ₂	w ₃	w ₄	l ₁	l ₂
L3331.038	32	6	4	M 6x1	M2	M2	-	-	32	14	24.0	37.4	38.5
L3331.060	50	12	4	M16x1	M3	M4	-	-	50	32	37.5	47.8	45.0
L3331.085	50	12	4	M16x1	M3	M4	8	-	50	32	48.0	53.3	62.0
L3331.110	50	12	4	M16x1	M3	M4	8	70	50	32	61.5	53.3	62.0



Rotary Stages

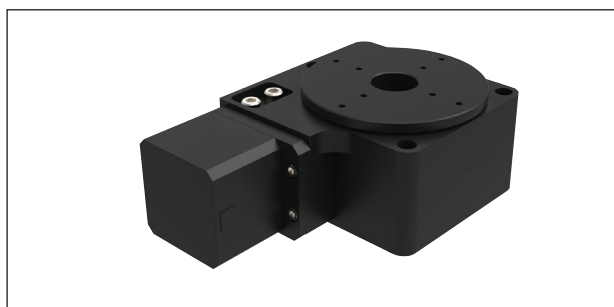
High precision overview

Positioning Stages



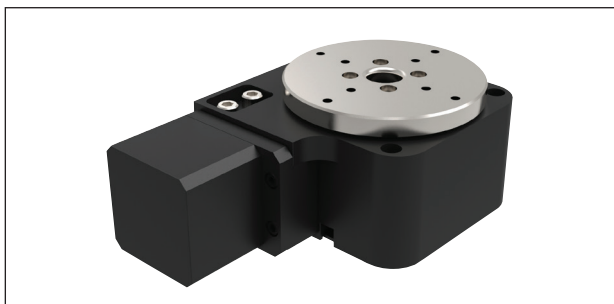
L3550 Ø50 Rotary stage

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



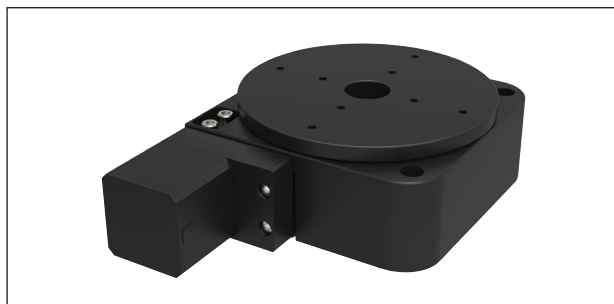
L3552 Ø75 Rotary stage

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



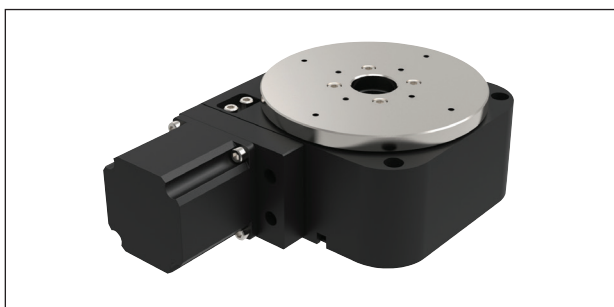
L3554 Ø75 Rotary stage, heavy duty

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



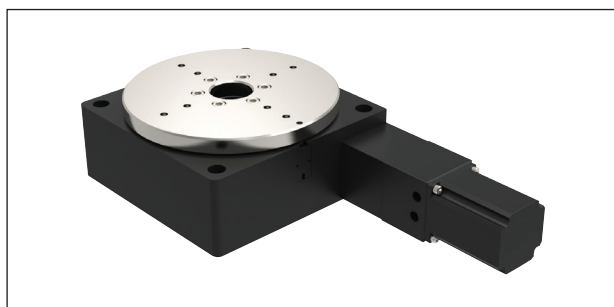
L3556 Ø125 Rotary stage, medium duty

- 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.



Positioning Stages from Automation Components

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