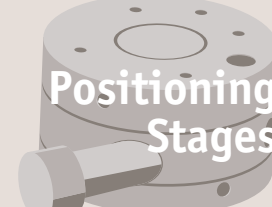




## Rotary Stages Selection



### 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

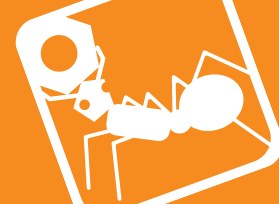
The difference between the control and instructed position.

#### Backlash errors

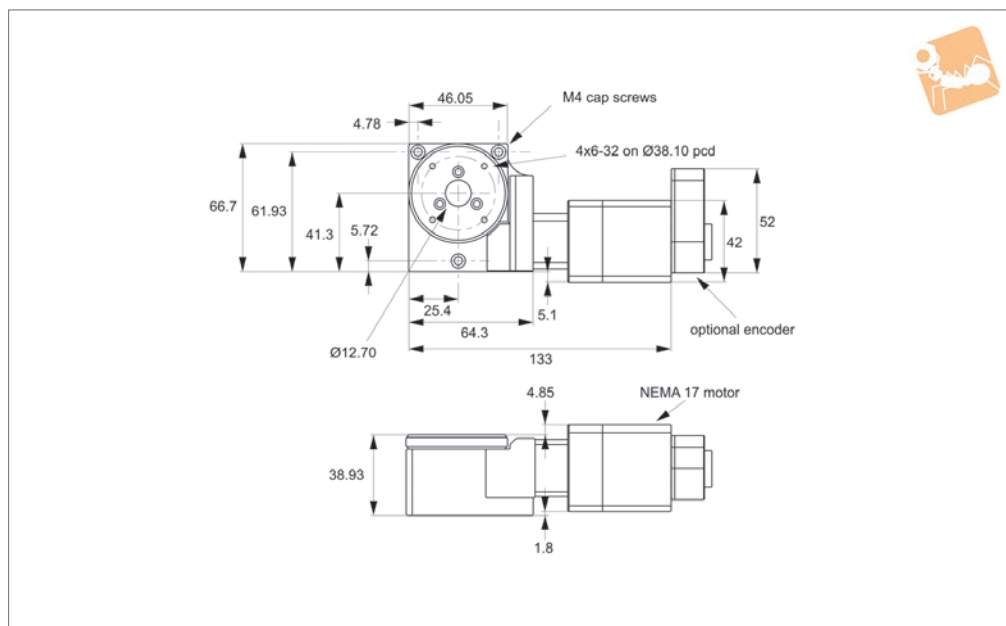
Errors caused by the reversal of the direction of travel affected by clearance in the drive chain.

#### Encoder errors

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



### L3550



#### Material

Aluminium alloy body (light, stiff and stable), black anodised.  
Weight 0,45 Kg.

#### Technical Notes

The design utilises a thrust bearing system for the table movement. This offers excellent stability at low cost, but as a result, is not really suitable for use in a vertical application. For vertical applications see Controllable from PC or PLC when used in conjunction with a motion controller. Controllers come with their own software but you can also use your own pre-existing software with them such as Labview etc.

Integrated stepper motor has a motion controller built into it.  
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.  
Easy to use plug and play system when used with a motion controller. Can be used in conjunction with motorised linear stages for multi-axis applications.

#### Tips

Requires external home switch (if required).

Motor options:

**Stepper** - Nema 17, high torque, brushless.

0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Optionally with 1000 line rotary encoder.

**Intelligent stepper** - Nema 17 with a fully programmable motion controller inbuilt (i.e. no need for an external motion controller). Two +5 to +24VDC I/O lines. One 10 bit analogue input selectable 0 to +10VDC, 0 to +5VDC. RS422/485 communications. Input voltage +24VDC. Optionally with 512 line rotary encoder. Drawings show stepper motor configuration. See special pages for further motor options.

Order No.	Motor	Speed °/s max.	Horizontal load kg max.	Vertical load kg max.	Moment load Nm max.	Weight kg
L3550.050-STA	Stepper	30°	4.5	0.3	1.7	0.45
L3550.050-IMA	Int. stepper & enc.	30°	4.5	0.3	1.7	0.45
L3550.050-STB	Stepper	50°	4.5	0.3	1.7	0.45
L3550.050-STC	Stepper & enc.	30°	4.5	0.3	1.7	0.45
L3550.050-STD	Stepper & enc.	50°	4.5	0.3	1.7	0.45
L3550.050-IMB	Int. stepper & enc.	50°	4.5	0.3	1.7	0.45

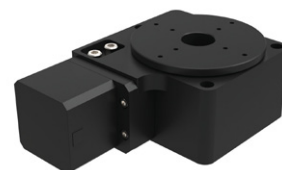
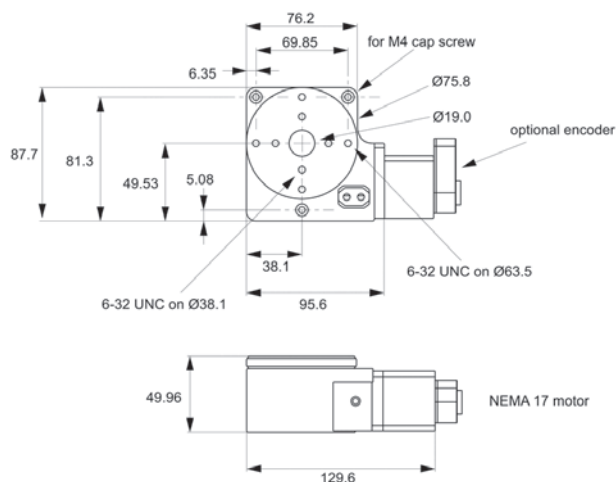
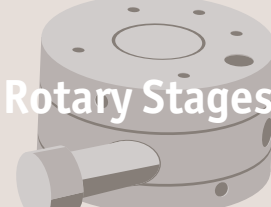
Order No.	Accuracy ± arc-secs	Uni-directional repeatability ± arc-secs	Bi-directional repeatability ± arc-secs	Gear ratio	Resolution ± arc-secs
L3550.050-STA	70"	5"	45"	80:1	0,3"
L3550.050-IMA	70"	5"	45"	80:1	0,3"
L3550.050-STB	70"	5"	45"	40:1	0,6"
L3550.050-STC	70"	5"	45"	80:1	0,3"
L3550.050-STD	70"	5"	45"	40:1	0,6"
L3550.050-IMB	70"	5"	45"	40:1	0,6"



# Motorised Rotary Stages Ø75

high precision, medium duty

## Rotary Stages



L3552

ROTARY STAGES

### Material

Aluminium alloy body (light, stiff and stable), black anodised.  
Weight 1,6 Kg.

### Technical Notes

The design utilises a thrust bearing system for the table movement. This offers excellent stability at low cost, but as a result, is not really suitable for use in a vertical application. For vertical applications see L3254 and L3258 - L3262.

Easy plug and play system. Controllable from PC or PLC when used in conjunction with a motion controller. Controllers come with their own software but you can also use your own pre-existing software with them such as Labview etc.

Integrated stepper motor has a motion controller built into it.

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.

Easy to use plug and play system when used with a motion controller. Can be used in conjunction with motorised linear stages for multi axis applications.

### Tips

Requires external home switch (if required).

Motor options:

**Stepper** - Nema 17, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Optionally with home

switch and/or 1000 line rotary encoder.

**Intelligent stepper** - Nema 17 with a fully programmable motion controller inbuilt (i.e. no need for an external motion controller). Two +5 to +24VDC I/O lines. One 10 bit analogue input selectable 0 to +10VDC, 0 to +5VDC. Optionally with home switch and/or 512 line rotary encoder. RS422/485 communications. Input voltage +24VDC. Drawings show stepper motor configuration. See special pages for further motor options.

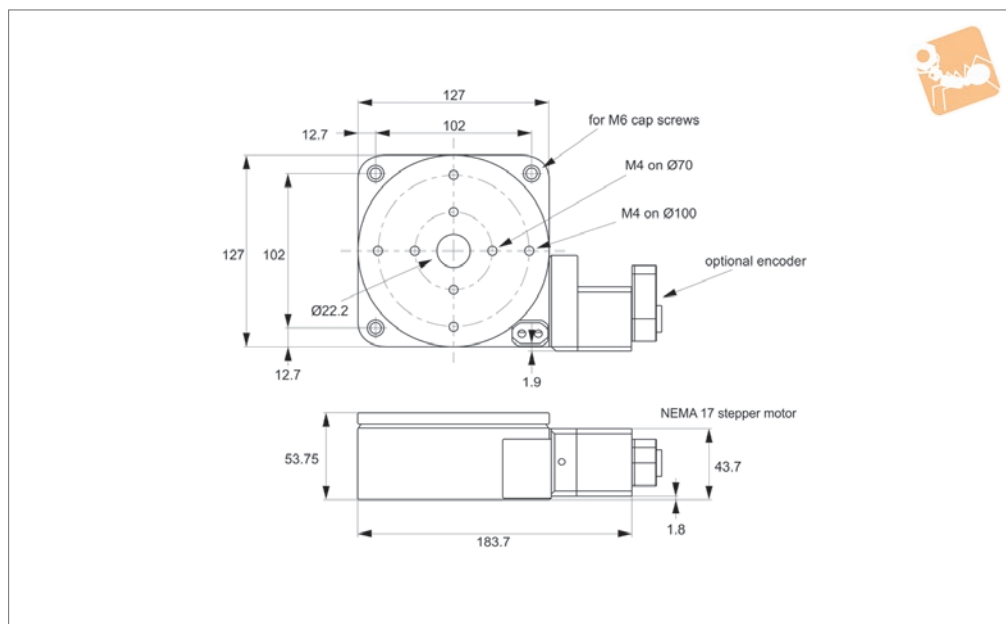
Order No.	Motor	Speed °/s max.	Horizontal load kg max.	Vertical load kg max.	Weight kg
L3552.075-STA	Stepper	30°	11.3	0.75	1.59
L3552.075-IMA	Int. stepper & enc.	30°	11.3	0.75	1.59
L3552.075-STB	Stepper & enc.	30°	11.3	0.75	1.59

Order No.	Moment load Nm max.	Accuracy ± arc-secs	Uni-directional repeatability ±	Bi-directional repeatability ±	Gear ratio	Resolution ± arc-secs
L3552.075-STA	5.1	70"	5"	45"	90:1	0,29"
L3552.075-IMA	5.1	70"	5"	45"	90:1	0,29"
L3552.075-STB	5.1	70"	5"	45"	90:1	0,29"



### L3556



#### Material

Aluminium alloy body (light, stiff and stable), black anodised.  
Weight 2,3 Kg.

#### Technical Notes

The design utilises a thrust bearing system for the table movement. This offers excellent stability at low cost, but as a result, is not really suitable for use in a vertical application. For vertical applications see L3254 and L3258 - L3262.

Easy plug and play system. Controllable from PC or PLC when used in conjunction with a motion controller. Controllers come with their own software but you can also use your own pre-existing software with

them such as Labview etc.

Integrated stepper motor has a motion controller built into it.

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.

Easy to use plug and play system when used with a motion controller. Can be used in conjunction with motorised linear stages for multi axis applications.

#### Tips

Requires external home switch (if required).

Motor options:

**Stepper** - Nema 17, high torque, brushless.

0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Optionally with home switch and 1000 line rotary encoder.

**Intelligent stepper** - Nema 17 with a fully programmable motion controller inbuilt (i.e. no need for an external motion controller). Two +5 to +24VDC I/O lines. One 10 bit analogue input selectable 0 to +10VDC, 0 to +5VDC. RS422/485 communications. Input voltage +24VDC. Optionally with home switch and 512 line rotary encoder.

Drawings show stepper motor configuration. See special pages for further motor options.

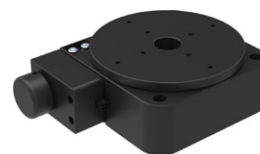
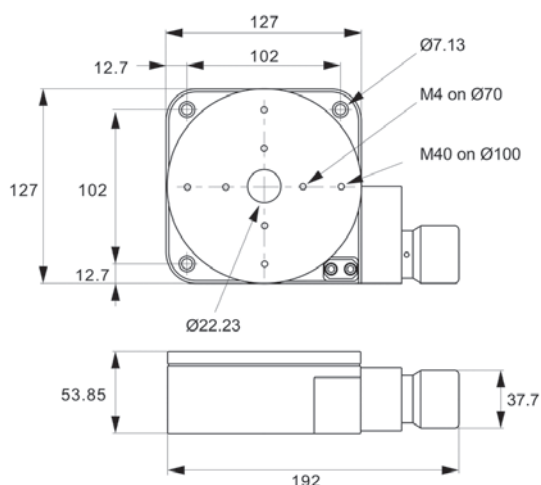
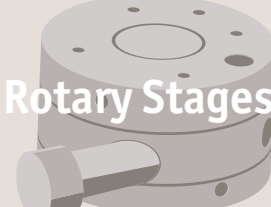
Order No.	Motor	Speed °/s max.	Horizontal load kg max.	Vertical load kg max.	Weight kg
L3556.125-STA	Stepper	25°	25	1.67	2.27
L3556.125-IMA	Int. stepper	25°	25	1.67	2.27
L3556.125-STB	Stepper & home	25°	25	1.67	2.27
L3556.125-STC	Stepper, home, enc.	25°	25	1.67	2.27
L3556.125-IMB	Int. stepper & home	25°	25	1.67	2.27
L3556.125-IMC	Int. stepper, home, enc.	25°	25	1.67	2.27

Order No.	Moment load Nm max.	Accuracy ± arc-secs	Uni-directional repeatability ± arc-secs	Bi-directional repeatability ± arc-secs	Gear ratio	Resolution ± arc-secs
L3556.125-STA	10.8	70"	5"	45"	72:1	0,36"
L3556.125-IMA	10.8	70"	5"	45"	72:1	0,36"
L3556.125-STB	10.8	70"	5"	45"	72:1	0,36"
L3556.125-STC	10.8	70"	5"	45"	72:1	0,36"
L3556.125-IMB	10.8	70"	5"	45"	72:1	0,36"
L3556.125-IMC	10.8	70"	5"	45"	72:1	0,36"



# Manual Rotary Stage Ø125 with digital read out

## Rotary Stages



**L3559**

ROTARY STAGES

### 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

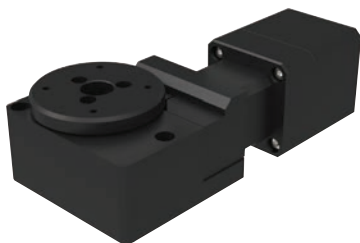
bearing configuration, thus improving axial runout and wobble.  
The stages are offered with different gear ratio options. A proprietary preload system ensures zero backlash in the gear train.  
The travel is 360° continuous.  
Resolution 0.00225°.

### 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

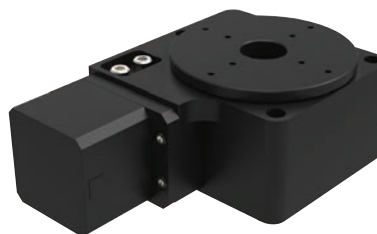
Order No.	Type	Travel	Horizontal load kg max.	Vertical load kg max.	Moment load Nm max.	Repeatability ± arc-secs	Accuracy ± arc-secs	Gear ratio	Resolution ± arc-secs	Weight kg
L3559.125	Manual stage	360°	45.0	45.0	29.3	5"	70"	72:1	0,36"	3.6
L3559.DRO	Digital readout	-	-	-	-	-	-	-	-	-





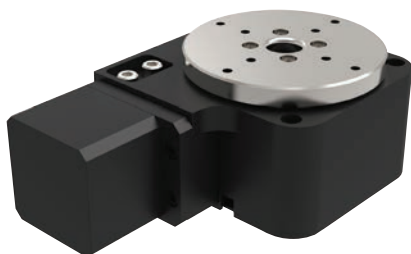
**L3550 Ø50 Rotary stage**

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



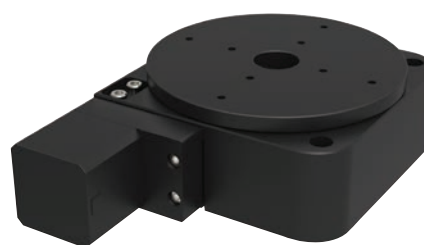
**L3552 Ø75 Rotary stage**

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



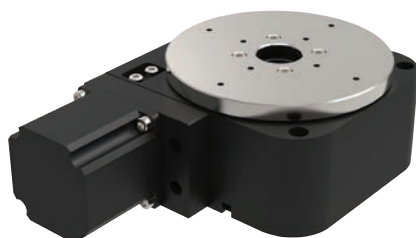
**L3554 Ø75 Rotary stage, heavy duty**

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



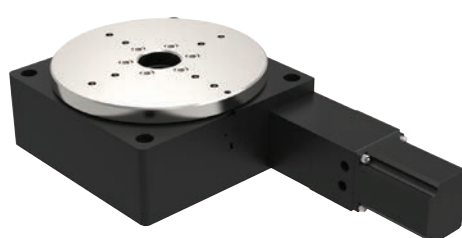
**L3556 Ø125 Rotary stage, medium duty**

- 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.



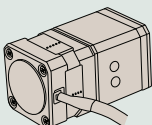
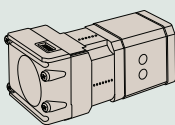
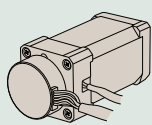
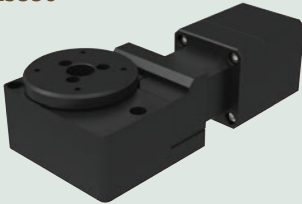
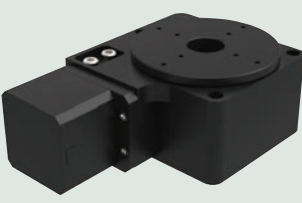

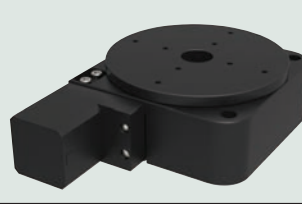
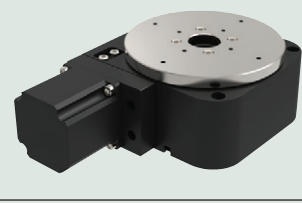
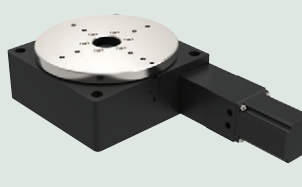
# Rotary Stages

Motor options

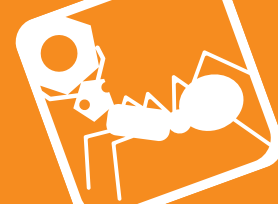
## Positioning Stages

ROTARY STAGES

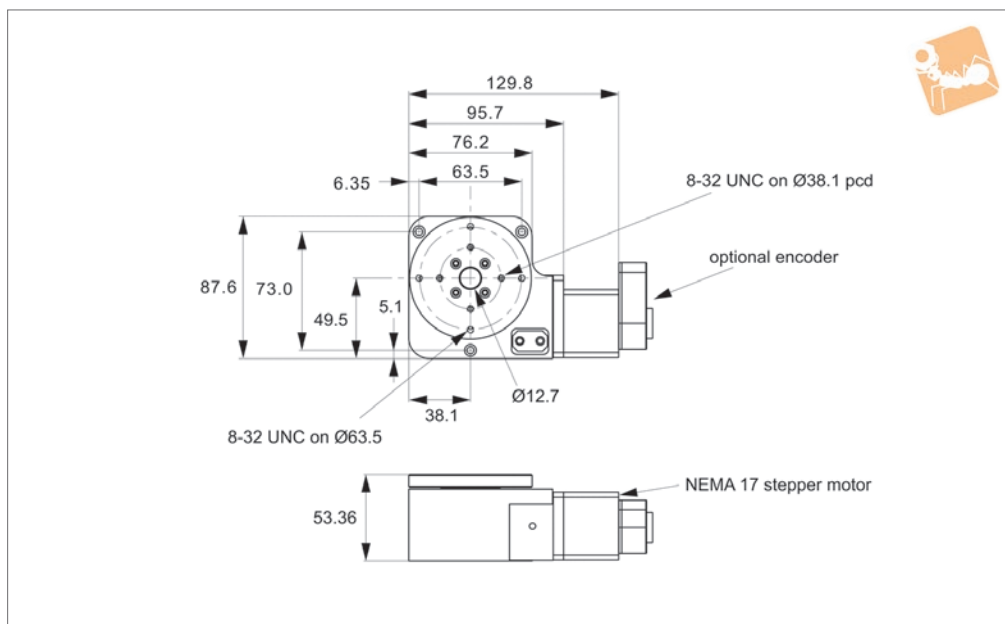
## Positioning Stages from Automation Components

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





## L3554



### Material

Aluminium alloy body (light, stiff and stable), black anodised.  
Weight 1,4 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.  
Easy to use plug and play system when used with a motion controller. Can be used

in conjunction with motorised linear stages for multi axis applications.  
Servo motor stages are only compatible with servo motion controllers. These allow for greater speeds but are more expensive.

### Tips

Requires external home switch (if required).

Motor options:

**Stepper** - Nema 23, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Optionally with home switch and/or 1000 line rotary encoder.

**Servo** - Nema 23 with 1000 line rotary encoder.

**Intelligent stepper** - Nema 23 with a fully

programmable motion controller inbuilt (i.e. no need for an external motion controller). Two +5 to +24VDC I/O lines. One 10 bit analogue input selectable 0 to +10VDC, 0 to +5VDC. Optionally with home switch and/or 512 line rotary encoder. RS422/485 communications. Input voltage +24VDC. Drawings show stepper motor configuration. See special pages for further motor options. Resolution up to 0,29 arcsecs, depending on gear ratio and motor.

Order No.	Motor	Speed °/s max.	Horizontal load kg max.	Vertical load kg max.	Moment load Nm max.	Weight kg
L3554.075-STA	Stepper	30°	20.4	20.4	16.9	1.36
L3554.075-SVA	Servo, home, enc.	180°	20.4	20.4	16.9	1.36
L3554.075-IMA	Int. stepper	30°	20.4	20.4	16.9	1.36
L3554.075-STB	Stepper	50°	68.0	68.0	16.9	1.36
L3554.075-STC	Stepper & home	30°	20.4	20.4	16.9	1.36
L3554.075-STE	Stepper, home, enc.	30°	20.4	20.4	16.9	1.36
L3554.075-STD	Stepper & home	50°	68.0	68.0	16.9	1.36
L3554.075-STF	Stepper, home, enc.	50°	68.0	68.0	16.9	1.36
L3554.075-SVB	Servo, home, enc.	360°	68.0	68.0	16.9	1.36
L3554.075-IMB	Int. stepper	50°	68.0	68.0	16.9	1.36
L3554.075-IMC	Int. stepper & home	30°	20.4	20.4	16.9	1.36
L3554.075-IMD	Int. stepper & home	50°	68.0	68.0	16.9	1.36
L3554.075-IME	Int. stepper, home, enc.	30°	20.4	20.4	16.9	1.36
L3554.075-IMF	Int. stepper, home, enc.	50°	68.0	68.0	16.9	1.36

Order No.	Uni-directional repeatability ± arc-secs	Bi-directional repeatability ± arc-secs	Accuracy ± arc-secs	Gear ratio	Resolution ± arc-secs
L3554.075-STA	5"	45"	70"	90:1	0.3

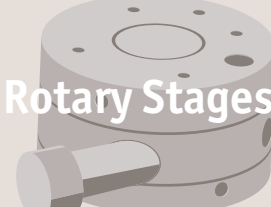




# Motorised Rotary Stages Ø75

high precision, heavy duty

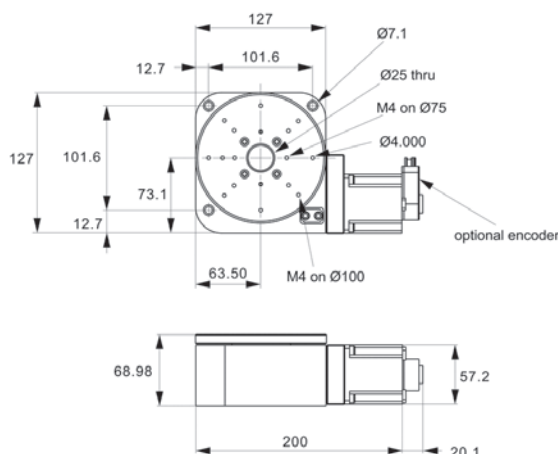
## Rotary Stages



Order No.	Uni-directional repeatability ± arc-secs	Bi-directional repeatability ± arc-secs	Accuracy ± arc-secs	Gear ratio	Resolution ± arc-secs
L3554.075-SVA	5"	45"	70"	90:1	3.6
L3554.075-IMA	5"	45"	70"	90:1	0.3
L3554.075-STB	5"	45"	70"	45:1	0.6
L3554.075-STC	5"	45"	70"	90:1	0.3
L3554.075-STE	5"	45"	70"	90:1	0.3
L3554.075-STD	5"	45"	70"	45:1	0.6
L3554.075-STF	5"	45"	70"	45:1	0.6
L3554.075-SVB	5"	45"	70"	45:1	7.2
L3554.075-IMB	5"	45"	70"	45:1	0.6
L3554.075-IMC	5"	45"	70"	90:1	0.3
L3554.075-IMD	5"	45"	70"	45:1	0.6
L3554.075-IME	5"	45"	70"	90:1	0.3
L3554.075-IMF	5"	45"	70"	45:1	0.6



## L3558



### 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. Maximum

output torques is 10,2 Nm.

Easy to use plug and play system when used with a motion controller. Can be used in conjunction with motorised linear stages for multi axis applications.

Servo motor stages are only compatible with servo motion controllers. These allow for greater speeds but are more expensive.

### Tips

Requires external home switch (if required).

Motor options:

**Stepper** - Nema 17, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/

phase, 1.8°/step. Optionally with 1000 line rotary encoder and home switch.

**Intelligent stepper** - Nema 17 with a fully programmable motion controller inbuilt (i.e. no need for an external motion controller). Two +5 to +24VDC I/O lines. One 10 bit analogue input selectable 0 to +10VDC, 0 to +5VDC. RS422/485 communications. Input voltage +24VDC. Optionally with home switch, and 512 or 1000 line rotary encoder.

Drawings show stepper motor configuration. See special pages for further motor options.

Order No.	Motor	Speed °/s max.	Horizontal load kg max.	Vertical load kg max.	Moment load Nm max.	Weight kg
L3558.125-STA	Stepper	25°	45.4	45.4	29.3	3.6
L3558.125-SVA	Servo & enc.	180°	45.4	45.4	29.3	3.6
L3558.125-STC	Stepper, home & enc.	25°	45.4	45.4	29.3	3.6
L3558.125-IMA	Int. stepper, 512 enc.	25°	45.4	45.4	29.3	3.6
L3558.125-IMC	Int. stepper, 1000 enc.	25°	45.4	45.4	29.3	3.6
L3558.125-STB	Stepper	50°	45.4	45.4	29.3	3.6
L3558.125-SVB	Servo & enc.	360°	45.4	45.4	29.3	3.6
L3558.125-STD	Stepper, home & enc.	50°	45.4	45.4	29.3	3.6
L3558.125-IMB	Int. stepper, 512 enc.	50°	45.4	45.4	29.3	3.6
L3558.125-IMD	Int. stepper, 1000 enc.	50°	45.4	45.4	29.3	3.6

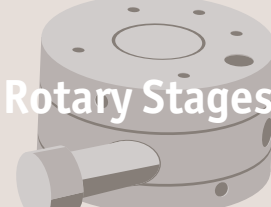
Order No.	Uni-directional repeatability ± arc-secs	Bi-directional repeatability ± arc-secs	Accuracy ± arc-secs	Gear ratio	Resolution ± arc-secs
L3558.125-STA	5"	45"	70"	72:1	0,36"
L3558.125-SVA	5"	45"	70"	72:1	4,5"
L3558.125-STC	5"	45"	70"	72:1	0,36"
L3558.125-IMA	5"	45"	70"	72:1	0,36"
L3558.125-IMC	5"	45"	70"	72:1	0,36"
L3558.125-STB	5"	45"	70"	36:1	0,72"
L3558.125-SVB	5"	45"	70"	36:1	9,0"



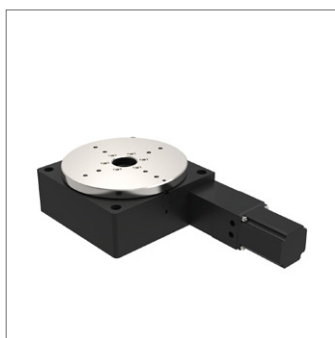
## Motorised Rotary Stage Ø125

high precision, heavy duty

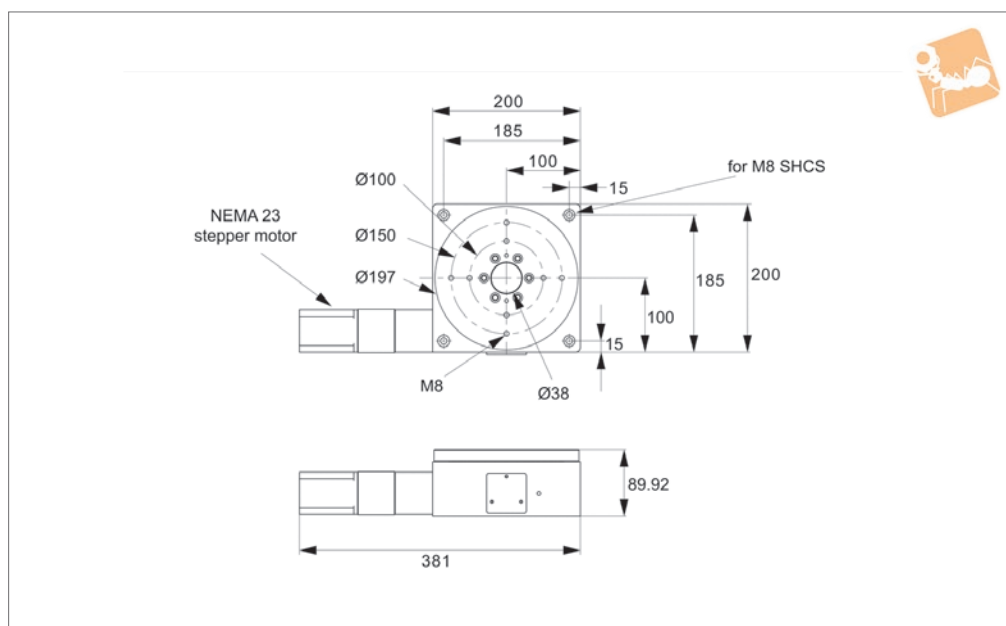
## Rotary Stages



Order No.	Uni-directional repeatability ± arc-secs	Bi-directional repeatability ± arc-secs	Accuracy ± arc-secs	Gear ratio	Resolution ± arc-secs
L3558.125-STD	5"	45"	70"	36:1	0,72"
L3558.125-IMB	5"	45"	70"	36:1	0,72"
L3558.125-IMD	5"	45"	70"	36:1	0,72"



## L3562



### Material

Aluminium alloy body (light, stiff and stable), black anodised. Stainless steel circular plate.

### 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.

Easy to use plug and play system when

used with a motion controller. Can be used in conjunction with motorised linear stages for multi axis applications.

Servo motor stages are only compatible with servo motion controllers. These allow for greater speeds but are more expensive. Can be supplied with an optional pneumatic brake for added stability when stopped.

### Tips

Requires external home switch (if required).

Motor options:

**Stepper** - Nema 23, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/

phase, 1.8°/step. Optionally with home switch and/or 1000 line rotary encoder.

**Servo** - Nema 23, with home switch and 1000 line rotary encoder.

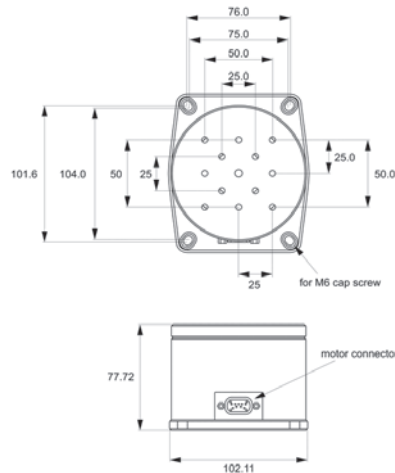
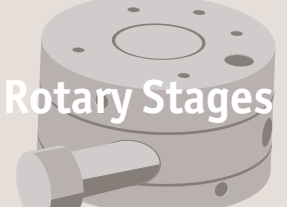
**Intelligent stepper** - Nema 23 with a fully programmable motion controller inbuilt (i.e. no need for an external motion controller). Two +5 to +24VDC I/O lines. One 10 bit analogue input selectable 0 to +10VDC, 0 to +5VDC.

Optionally with home switch or 512 line rotary encoder.

RS422/485 communications. Input voltage +24VDC.

Order No.	Motor	Speed °/s max.	Horizontal load kg max.	Vertical load kg max.	Moment load Nm	Weight kg
L3562.200-STA	Stepper	20°	300	200	82.2	13.6
L3562.200-STB	Stepper & home	20°	300	200	82.2	13.6
L3562.200-STC	Stepper, home, enc.	20°	300	200	82.2	13.6
L3562.200-IMA	Int. stepper	20°	300	200	82.2	13.6
L3562.200-IMB	Int. stepper, home, enc.	20°	300	200	82.2	13.6
L3562.200-SVA	Servo, home, enc.	180°	300	200	82.2	13.6

Order No.	Uni-directional repeatability ± arc-secs	Bi-directional repeatability ± arc-secs	Accuracy ± arc-secs	Gear ratio	Resolution ± arc-secs
L3562.200-STA	5"	45"	70"	80:1	0,32"
L3562.200-STB	5"	45"	70"	80:1	0,32"
L3562.200-STC	5"	45"	70"	80:1	0,32"
L3562.200-IMA	5"	45"	70"	80:1	0,32"
L3562.200-IMB	5"	45"	70"	80:1	0,32"
L3562.200-SVA	5"	45"	70"	80:1	5,0"



## L3569

ROTARY STAGES

### Material

Aluminium alloy body (light, stiff and stable).

### Technical Notes

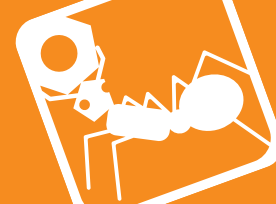
Suitable for fast rotation of light payloads, uses a high torque direct drive Nema 23

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°/sec<sup>2</sup>.

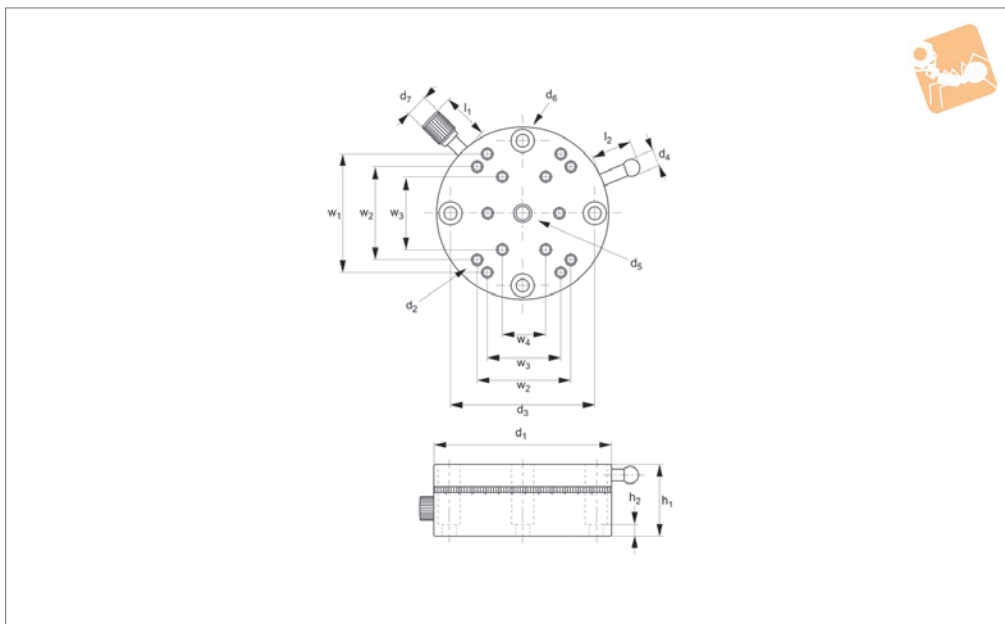
### Tips

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 <sup>2</sup> 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



## L3330



### Material

Aluminium body blackened, steel knob.

### Technical Notes

360° adjustment.  
Runout 50μ.

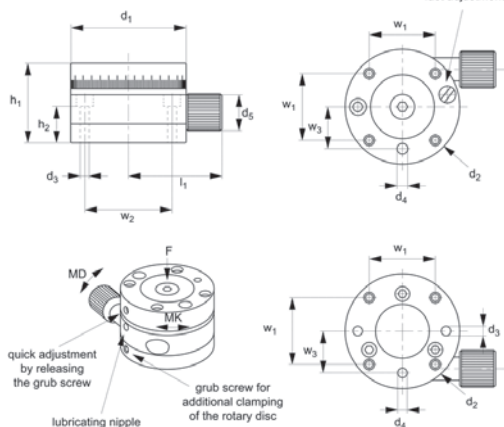
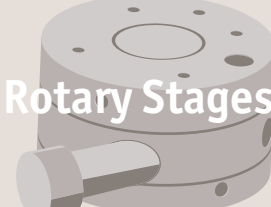
Order No.	Load N max.	d <sub>1</sub>	Vernier reading min.	h <sub>1</sub>	h <sub>2</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	Weight kg
L3330.040	5.0	40	2°	20	4	M2	25	5.5	0.14
L3330.060	7.0	60	1°	25	4	M4	50	5.5	0.20
Order No.	d <sub>5</sub>	d <sub>6</sub>	d <sub>7</sub>	l <sub>1</sub>	l <sub>2</sub>	w <sub>1</sub>	w <sub>2</sub>	w <sub>3</sub>	w <sub>4</sub>
L3330.040	M6x 8	7.5	6	10.3	10	25	-	15	-
L3330.060	M6x14	7.5	8	15.5	13	40	32	25	15



# Manual Rotary Stages

stainless

## Rotary Stages



**L3339**

ROTARY STAGES

### Material

Stainless steel AISI 303 rotary disc, black anodized aluminium control knob. All other part steel or brass.

### Technical Notes

The rotary table can be clamped using a grub screw. it also has a fast adjustment when a grub screw on the side of the disc is

released.

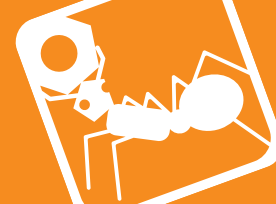
Rotating range 0° to infinity.

Order No.	d <sub>1</sub> tol. h7	h <sub>1</sub>	h <sub>2</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub> tol. H7	d <sub>5</sub>	l <sub>1</sub>	w <sub>1</sub>	w <sub>2</sub>	w <sub>3</sub> ±0.02
L3339.055	55	38	17.5	M5x8	4.3	4x10	17	44	32	42	20
L3339.080	80	45	24.0	M5x8	5.4	4x10	23	59	40	60	30

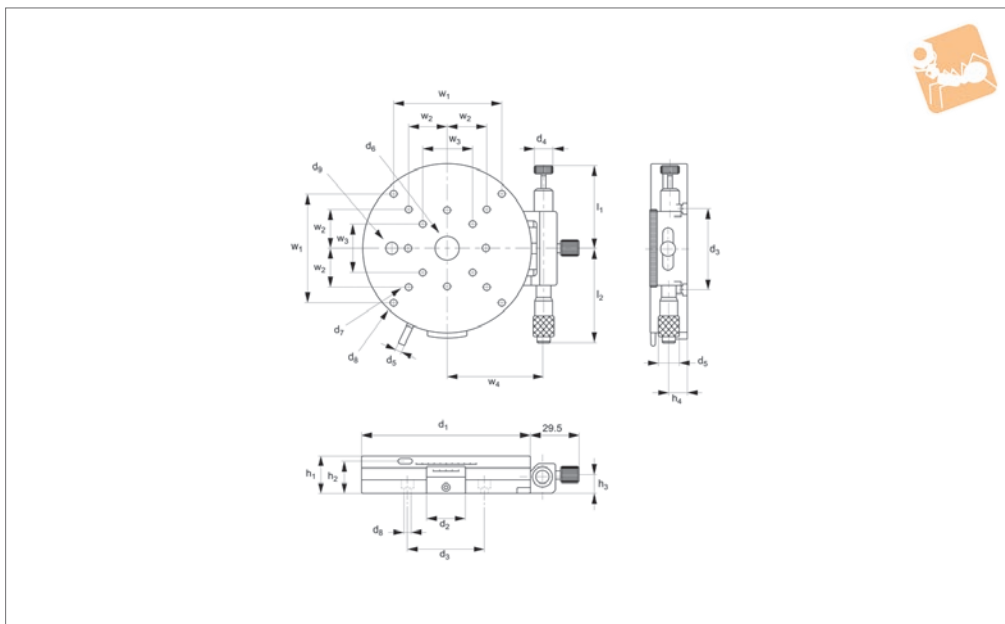
Order No.	Concentricity tolerance	Circular runout tolerance	Knob torque M <sub>d</sub> Nm max.	Torque unclamped Nm max.	Torque clamped Nm max.	Load F N max.
L3339.055	±0,02	±0,02	1.5	5	10	50
L3339.080	±0,03	±0,03	2.5	5	10	100







## L3331



### Material

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

rotary system.

$\pm 5^\circ$ .

### Technical Notes

Coarse  $360^\circ$  adjustment., fine adjustment

Order No.	d <sub>1</sub>	Load N max.	Vernier reading min.	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	d <sub>2</sub>	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

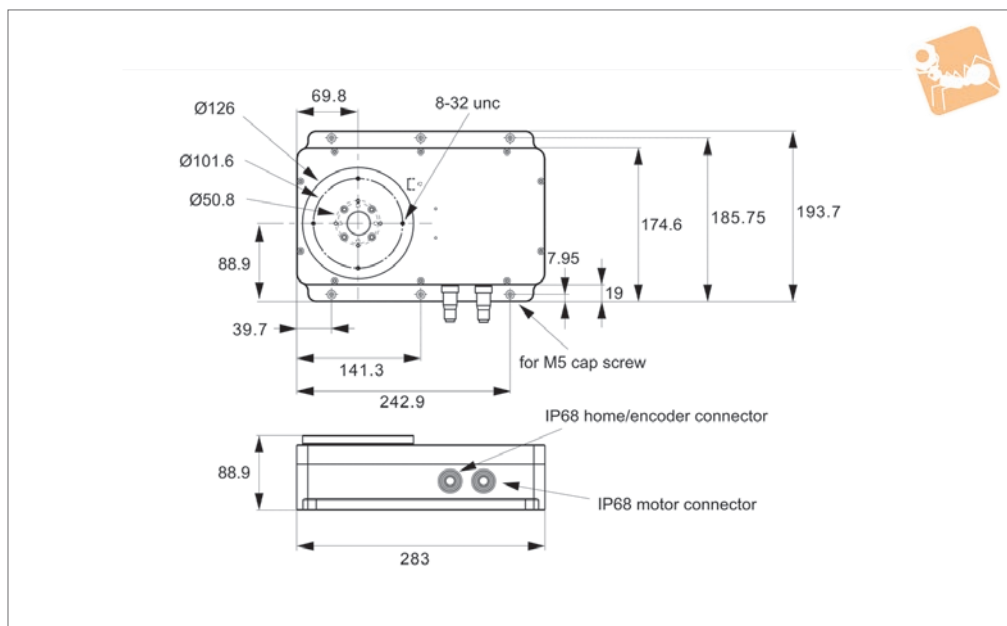
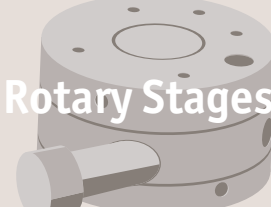
Order No.	d <sub>3</sub>	d <sub>4</sub>	d <sub>5</sub>	d <sub>6</sub>	d <sub>7</sub>	d <sub>8</sub> for	d <sub>9</sub>	w <sub>1</sub>	w <sub>2</sub>	w <sub>3</sub>	w <sub>4</sub>	l <sub>1</sub>	l <sub>2</sub>
L3331.038	32	6	4	M 6x1	M2	M2	-	-	32	14	24.0	37.4	38.5
L3331.060	50	12	4	M16x1	M3	M4	-	-	50	32	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



# Motorised Rotary Stage Ø125

high precision, submersible

## Rotary Stages



**L3560**

ROTARY STAGES

### Material

Aluminium alloy body (light, stiff and stable), black anodised.  
Supplied with optical home switch.  
Weight 5,0 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.

Easy to use plug and play system when used with a motion controller.  
Servo motor stages are only compatible with servo motion controllers. These allow for greater speeds but are more expensive.

### Tips

This rotary table is completely sealed from the outside environment. Perfect for applications such as semi-conductor wafer cutting. It is also suitable for outdoor applications where dust and moisture protection is required.  
Requires external home switch (if

required).

Motor options:

**Stepper** - Nema 23, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Optionally with a 1000 line rotary encoder.

**Servo** - Nema 23 with a 1000 line rotary encoder.

RS422/485 communications. Input voltage +24VDC. Drawings show stepper motor configuration. See special pages for further motor options.

Order No.	Motor	Speed °/s max.	Horizontal load kg max.	Vertical load kg max.	Weight kg
L3560.125-STA	Stepper	25°	36.36	36.36	5.0
L3560.125-SVA	Servo & enc.	180°	36.36	36.36	5.0
L3560.125-STB	Stepper	50°	36.36	36.36	5.0
L3560.125-STC	Stepper & enc.	25°	36.36	36.36	5.0
L3560.125-STD	Stepper & enc.	50°	36.36	36.36	5.0
L3560.125-SVB	Servo & enc.	360°	36.36	36.36	5.0

Order No.	Output torque Nm max.	Uni-directional repeatability ± arc-secs	Bi-directional repeatability ±a	Accuracy ± arc-secs	Gear ratio	Resolution ± arc-secs
L3560.125-STA	10.2	5"	45"	70"	72:1	0,36"
L3560.125-SVA	10.2	5"	45"	70"	72:1	4,50"
L3560.125-STB	10.2	5"	45"	70"	36:1	0,72"
L3560.125-STC	10.2	5"	45"	70"	72:1	0,36"
L3560.125-STD	10.2	5"	45"	70"	36:1	0,72"
L3560.125-SVB	10.2	5"	45"	70"	36:1	9,00"