



# Micrometer Positioning XY, XYZ

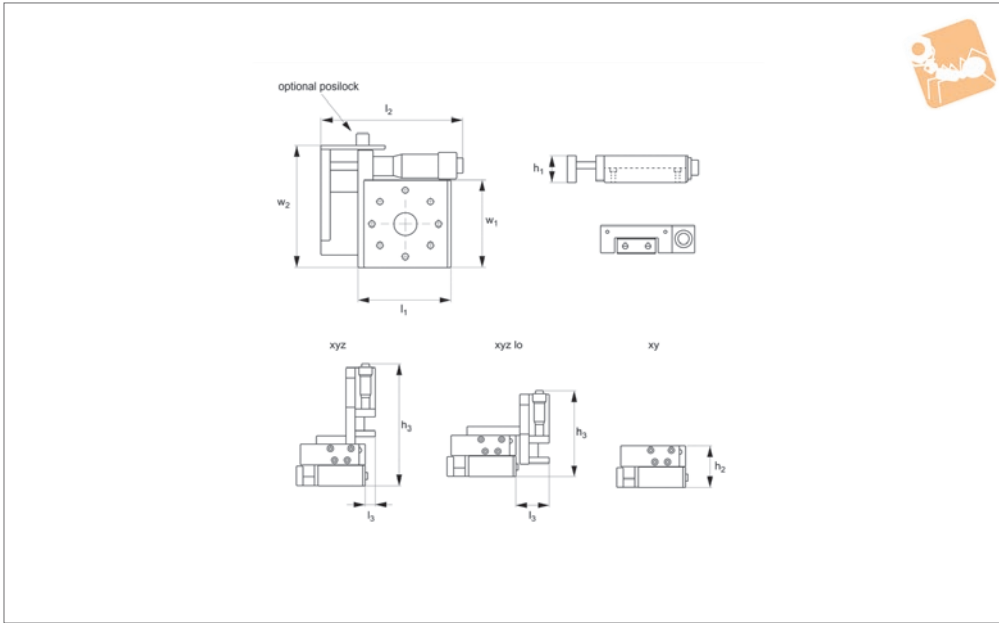
side drive, medium sizes

# Manual Positioning Stages



**L3111**

MANUAL POSITIONING STAGES



**Material**

Aluminium carriage and base, black anodised steel fixing, hardened steel shafts and balls and roller elements

**Technical Notes**

Ball roller versions recommended for light loads. Cross roller versions for heavier loads and moment loads.  
Straight line accuracy 12µ/25mm travel.

Repeatability 3µ.

Spring loaded micrometer allows precise repeatable adjustments with low friction and zero backlash.

Micrometer increments 0,01mm.

**For further fixing and mounting hole dimensions please see part number L3100.FH.**

**Tips**

Other options:  
- LM (locking micrometer).  
- PL (posi-lock carriage lock).

**Important Notes**

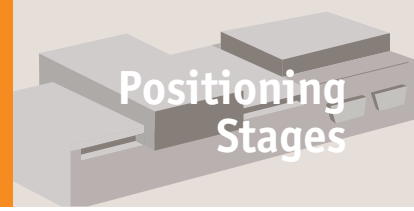
Stroke is centred on the mid-point of the slides (ie 50% of total stroke each way).  
**3D CAD available.**

Order No.	Type	Travel	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	w <sub>1</sub>	Weight kg
L3111.0301-XYB	XY Ball	13	15.7	31.8	-	38.1	55.4	-	38.1	5.4
L3111.0450-XYB	XY Ball	13	19.1	38.1	-	44.5	74.9	-	44.5	9.1
L3111.0451-XYB	XY Ball	25	19.1	38.1	-	44.5	114.5	-	44.5	9.1
L3111.0453-XYB	XY Ball	13	19.1	38.1	-	44.5	74.9	-	44.5	9.1
L3111.0750-XYB	XY Ball	13	25.4	50.8	-	66.5	89.4	-	66.5	27.2
L3111.0751-XYB	XY Ball	25	25.4	50.8	-	66.5	113.8	-	66.5	27.2
L3111.0753-XYB	XY Ball	13	25.4	50.8	-	66.5	89.4	-	66.5	27.2
L3111.0301-XYR	XY Roller	13	15.7	31.8	-	38.1	55.4	-	38.1	18.1
L3111.0450-XYR	XY Roller	13	19.1	38.1	-	44.5	74.9	-	44.5	18.1
L3111.0451-XYR	XY Roller	25	19.1	38.1	-	44.5	114.5	-	44.5	18.1
L3111.0453-XYR	XY Roller	13	19.1	38.1	-	44.5	74.9	-	44.5	18.1
L3111.0750-XYR	XY Roller	13	25.4	50.8	-	66.5	89.4	-	66.5	54.4
L3111.0751-XYR	XY Roller	25	25.4	50.8	-	66.5	113.8	-	66.5	54.4
L3111.0753-XYR	XY Roller	13	25.4	50.8	-	66.5	89.4	-	66.5	54.4
L3111.0301-XYZB	XYZ Ball	13	15.7	31.8	93.5	38.1	55.4	8.0	38.1	5.4
L3111.0450-XYZB	XYZ Ball	13	19.1	38.1	93.5	44.5	74.9	0	44.5	9.1
L3111.0451-XYZB	XYZ Ball	25	19.1	38.1	93.5	44.5	114.5	0	44.5	9.1
L3111.0453-XYZB	XYZ Ball	13	19.1	38.1	93.5	44.5	74.9	0	44.5	9.1
L3111.0750-XYZB	XYZ Ball	13	25.4	50.8	113.3	66.5	89.4	7.6	66.5	27.2
L3111.0751-XYZB	XYZ Ball	25	25.4	50.8	137.7	66.5	113.8	7.6	66.5	27.2
L3111.0753-XYZB	XYZ Ball	13	25.4	50.8	113.3	66.5	89.4	7.6	66.5	27.2
L3111.0301-XYZR	XYZ Roller	13	15.7	31.8	66.6	38.1	55.4	8.0	38.1	18.1
L3111.0450-XYZR	XYZ Roller	13	19.1	38.1	92.4	44.5	74.9	0	44.5	18.1
L3111.0451-XYZR	XYZ Roller	25	19.1	38.1	132.0	44.5	114.5	0	44.5	18.1
L3111.0453-XYZR	XYZ Roller	13	19.1	38.1	92.4	44.5	74.9	0	44.5	18.1
L3111.0750-XYZR	XYZ Roller	13	25.4	50.8	113.3	66.5	89.4	7.6	66.5	54.4
L3111.0751-XYZR	XYZ Roller	25	25.4	50.8	137.7	66.5	113.8	7.6	66.5	54.4
L3111.0753-XYZR	XYZ Roller	13	25.4	50.8	113.3	66.5	89.4	7.6	66.5	54.4



Order No.	Type	Travel	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	w <sub>1</sub>	Weight kg
L3111.0301-XYZLB	XYZ Ball Lo	13	15.7	31.8	66.6	38.1	55.4	25.4	38.1	5.4
L3111.0450-XYZLB	XYZ Ball Lo	13	19.1	38.1	92.4	44.5	74.9	28.5	44.5	9.1
L3111.0451-XYZLB	XYZ Ball Lo	25	19.1	38.1	132.0	44.5	114.5	28.5	44.5	9.1
L3111.0453-XYZLB	XYZ Ball Lo	13	19.1	38.1	92.4	44.5	74.9	28.5	44.5	9.1
L3111.0750-XYZLB	XYZ Ball Lo	13	25.4	50.8	113.3	66.5	89.4	38.1	66.5	27.2
L3111.0751-XYZLB	XYZ Ball Lo	25	25.4	50.8	137.7	66.5	113.8	38.1	66.5	27.2
L3111.0753-XYZLB	XYZ Ball Lo	13	25.4	50.8	113.3	66.5	89.4	38.1	66.5	27.2
L3111.0301-XYZLR	XYZ Roller Lo	13	15.7	31.8	66.6	38.1	55.4	25.4	38.1	18.1
L3111.0450-XYZLR	XYZ Roller Lo	13	19.1	38.1	92.4	44.5	74.9	28.5	44.5	18.1
L3111.0451-XYZLR	XYZ Roller Lo	25	19.1	38.1	132.0	44.5	114.5	28.5	44.5	18.1
L3111.0453-XYZLR	XYZ Roller Lo	13	19.1	38.1	92.4	44.5	74.9	28.5	44.5	18.1
L3111.0750-XYZLR	XYZ Roller Lo	13	25.4	50.8	113.3	66.5	89.4	38.1	66.5	54.4
L3111.0751-XYZLR	XYZ Roller Lo	25	25.4	50.8	137.7	66.5	113.8	38.1	66.5	54.4
L3111.0753-XYZLR	XYZ Roller Lo	13	25.4	50.8	113.3	66.5	89.4	38.1	66.5	54.4

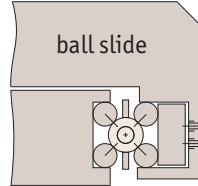
Order No.	w <sub>2</sub>	Through hole dia. d <sub>1</sub>	Load Z kg max.	Load X & Y kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.
L3111.0301-XYB	51.1	8	0.9	5.4	0.50	0.50	0.50
L3111.0450-XYB	61.0	-	0.9	9.1	0.96	0.96	0.96
L3111.0451-XYB	64.8	-	0.9	9.1	0.96	0.96	0.96
L3111.0453-XYB	61.0	13	0.9	9.1	0.96	0.96	0.96
L3111.0750-XYB	83.1	-	0.9	27.2	4.94	4.94	4.94
L3111.0751-XYB	87.1	-	0.9	27.2	4.94	4.94	4.94
L3111.0753-XYB	83.1	25	0.9	27.2	4.94	4.94	4.94
L3111.0301-XYR	51.1	8	0.9	18.1	2.88	2.88	2.88
L3111.0450-XYR	61.0	-	0.9	18.1	1.92	1.92	1.92
L3111.0451-XYR	64.8	-	0.9	18.1	1.92	1.92	1.92
L3111.0453-XYR	61.0	13	0.9	18.1	1.92	1.92	1.92
L3111.0750-XYR	83.1	-	0.9	54.4	9.88	9.88	9.88
L3111.0751-XYR	87.1	-	0.9	54.4	9.88	9.88	9.88
L3111.0753-XYR	83.1	25	0.9	54.4	9.88	9.88	9.88
L3111.0301-XYZB	51.1	8	0.9	5.4	0.50	0.50	0.50
L3111.0450-XYZB	61.0	-	0.9	9.1	0.96	0.96	0.96
L3111.0451-XYZB	64.8	-	0.9	9.1	0.96	0.96	0.96
L3111.0453-XYZB	61.0	13	0.9	9.1	0.96	0.96	0.96
L3111.0750-XYZB	83.1	-	0.9	27.2	4.94	4.94	4.94
L3111.0751-XYZB	87.1	-	0.9	27.2	4.94	4.94	4.94
L3111.0753-XYZB	83.1	25	0.9	27.2	4.94	4.94	4.94
L3111.0301-XYZR	51.1	8	0.9	18.1	2.88	2.88	2.88
L3111.0450-XYZR	61.0	-	0.9	18.1	1.92	1.92	1.92
L3111.0451-XYZR	64.8	-	0.9	18.1	1.92	1.92	1.92
L3111.0453-XYZR	61.0	13	0.9	18.1	1.92	1.92	1.92
L3111.0750-XYZR	83.1	-	0.9	54.4	9.88	9.88	9.88
L3111.0751-XYZR	87.1	-	0.9	54.4	9.88	9.88	9.88
L3111.0753-XYZR	83.1	25	0.9	54.4	9.88	9.88	9.88
L3111.0301-XYZLB	51.1	8	0.9	5.4	0.50	0.50	0.50
L3111.0450-XYZLB	61.0	-	0.9	9.1	0.96	0.96	0.96
L3111.0451-XYZLB	64.8	-	0.9	9.1	0.96	0.96	0.96
L3111.0453-XYZLB	61.0	13	0.9	9.1	0.96	0.96	0.96
L3111.0750-XYZLB	83.1	-	0.9	27.2	4.94	4.94	4.94
L3111.0751-XYZLB	87.1	-	0.9	27.2	4.94	4.94	4.94
L3111.0753-XYZLB	83.1	25	0.9	27.2	4.94	4.94	4.94
L3111.0301-XYZLR	51.1	8	0.9	18.1	2.88	2.88	2.88
L3111.0450-XYZLR	61.0	-	0.9	18.1	1.92	1.92	1.92
L3111.0451-XYZLR	64.8	-	0.9	18.1	1.92	1.92	1.92
L3111.0453-XYZLR	61.0	13	0.9	18.1	1.92	1.92	1.92
L3111.0750-XYZLR	83.1	-	0.9	54.4	9.88	9.88	9.88
L3111.0751-XYZLR	87.1	-	0.9	54.4	9.88	9.88	9.88
L3111.0753-XYZLR	83.1	25	0.9	54.4	9.88	9.88	9.88



There are two different load ratings for these stages.

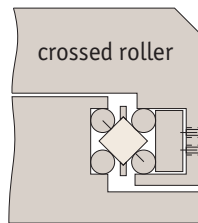
### Ball slides:

These have precision steel balls rolling in the tracks. They are the least expensive, loads up to 28Kg.



### Cross roller slides:

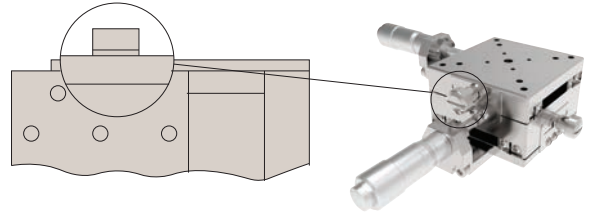
These have the same dimensions but have rollers allowing the slide to carry large loads and absorb greater moment loads up to 54Kg.



### Locking options

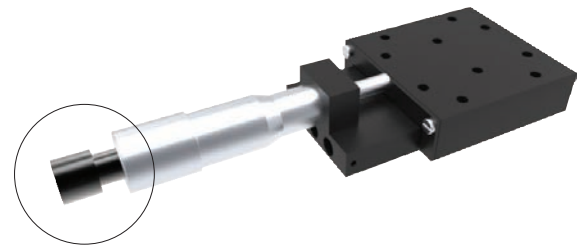
#### Posi-lock:

Allows locking of the carriage in place with a friction locking mechanism.



#### Locking micrometer:

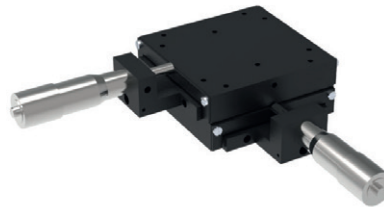
Locking of the micrometer to fix the micrometer setting.



### Front drive micrometer positioning stages



X Stage

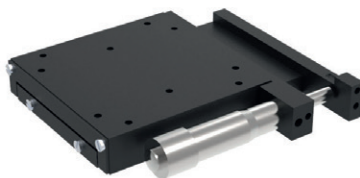


XY Stage

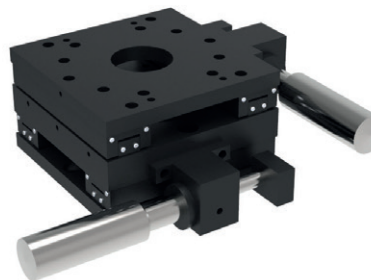


XYZ Stage

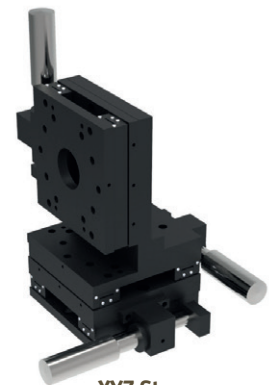
### Side drive micrometer positioning stages



X Stage



XY Stage



XYZ Stage

Also available in stainless steel.