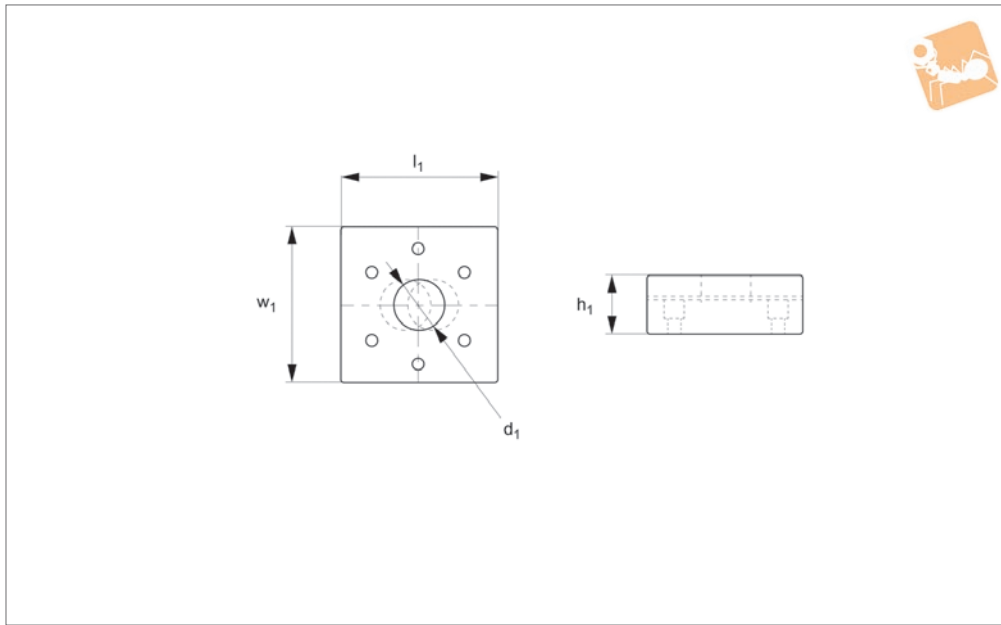
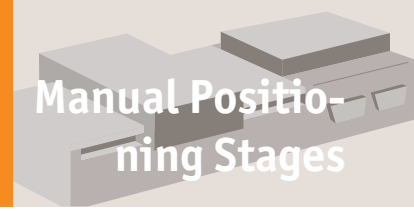




# Positioning Stages - Plain

## X Stage, main dimensions

# Manual Positioning Stages



## L3103

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  $12\mu/25\text{mm}$  travel.  
Repeatability  $3\mu$ .  
These plain units are supplied with no micrometers, no micrometer brackets and no springs.

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

### Tips

-PL after part shows option with posi-lock feature.

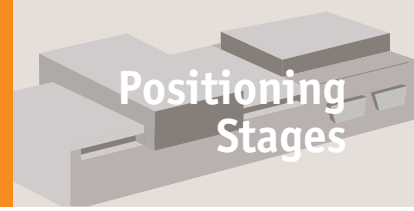
### Important Notes

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

Order No.	Type	Travel	$l_1$	$h_1$	Through hole $d_1$	$w_1$	Load X & Y kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.	Weight kg
L3103.0101-B	Ball	13	31.8	9.7	-	31.8	1.8	-	-	-	1.8
L3103.0201-B	Ball	13	44.5	9.7	-	44.5	1.8	-	-	-	1.8
L3103.0301-B	Ball	13	38.1	15.7	8	38.1	5.4	0.50	0.68	0.71	5.4
L3103.0451-B	Ball	25	44.5	19.1	-	44.5	9.1	0.96	1.13	1.19	9.1
L3103.0452-B	Ball	25	44.5	19.1	13	44.5	9.1	0.96	1.13	1.19	9.1
L3103.0751-B	Ball	25	66.5	25.4	-	66.5	27.2	4.94	5.75	6.04	27.2
L3103.0752-B	Ball	25	66.5	25.4	25	66.5	27.2	4.94	5.75	6.04	27.2
L3103.1202-B	Ball	50	79.2	23.1	-	79.2	13.6	2.89	1.95	2.05	13.6
L3103.1204-B	Ball	50	79.2	23.1	25	79.2	13.6	2.89	1.95	2.05	13.6
L3103.2205-B	Ball	75	104.6	23.1	-	104.6	13.6	4.80	3.04	3.21	13.6
L3103.2206-B	Ball	75	104.6	23.1	38	104.6	13.6	4.80	3.04	3.21	13.6
L3103.3205-B	Ball	100	130.2	23.1	-	130.2	13.6	4.80	3.04	3.21	13.6
L3103.3206-B	Ball	100	130.2	23.1	51	130.2	13.6	7.11	4.05	4.25	13.6
L3103.1202-B-PL	Ball	50	79.2	23.1	-	79.2	13.6	2.89	1.95	2.05	13.6
L3103.1204-B-PL	Ball	50	79.2	23.1	25	79.2	13.6	2.89	1.95	2.05	13.6
L3103.2205-B-PL	Ball	75	104.6	23.1	-	104.6	13.6	4.80	3.04	3.21	13.6
L3103.2206-B-PL	Ball	75	104.6	23.1	38	104.6	13.6	4.80	3.04	3.21	13.6
L3103.3205-B-PL	Ball	100	130.2	23.1	-	130.2	13.6	4.80	3.04	3.21	13.6
L3103.3206-B-PL	Ball	100	130.2	23.1	51	130.2	13.6	7.11	4.05	4.25	13.6
L3103.0101-R	Roller	13	31.8	9.7	-	31.8	10.4	-	-	-	10.4
L3103.0201-R	Roller	13	44.5	9.7	-	44.5	10.4	-	-	-	10.4
L3103.0301-R	Roller	13	38.1	15.7	8	38.1	18.1	1.67	2.26	2.37	18.1
L3103.0451-R	Roller	25	44.5	19.1	-	44.5	18.1	1.92	2.26	2.37	18.1
L3103.0452-R	Roller	25	44.5	19.1	13	44.5	18.1	1.92	2.26	2.37	18.1
L3103.0751-R	Roller	25	66.5	25.4	-	66.5	54.4	9.88	11.50	12.07	54.4
L3103.0752-R	Roller	25	66.5	25.4	25	66.5	54.4	9.88	11.50	12.07	54.4
L3103.1202-R	Roller	50	79.2	23.1	-	79.2	38.5	8.19	5.53	5.81	38.5
L3103.1204-R	Roller	50	79.2	23.1	25	79.2	38.5	8.19	5.53	5.81	38.5



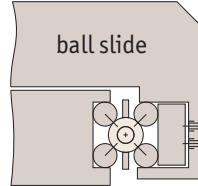
Order No.	Type	Travel	$l_1$	$h_1$	Through hole $d_1$	$w_1$	Load X & XY kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.	Weight kg
L3103.2205-R	Roller	75	104.6	23.1	-	104.6	38.5	13.60	8.60	9.10	38.5
L3103.2206-R	Roller	75	104.6	23.1	38	104.6	38.5	13.60	8.60	9.10	38.5
L3103.3205-R	Roller	100	130.2	23.1	-	130.2	38.5	13.60	8.60	9.10	38.5
L3103.3206-R	Roller	100	130.2	23.1	51	130.2	38.5	20.15	11.47	12.05	38.5
L3103.1202-R-PL	Roller	50	79.2	23.1	-	79.2	38.5	8.19	5.53	5.81	38.5
L3103.1204-R-PL	Roller	50	79.2	23.1	25	79.2	38.5	8.19	5.53	5.81	38.5
L3103.2205-R-PL	Roller	75	104.6	23.1	-	104.6	38.5	13.60	8.60	9.10	38.5
L3103.2206-R-PL	Roller	75	104.6	23.1	38	104.6	38.5	13.60	8.60	9.10	38.5
L3103.3205-R-PL	Roller	100	130.2	23.1	-	130.2	38.5	13.60	8.60	9.10	38.5
L3103.3206-R-PL	Roller	100	130.2	23.1	51	130.2	38.5	20.15	11.47	12.05	38.5



There are two different load ratings for these stages.

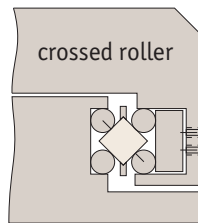
### Ball slides:

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



### Cross roller slides:

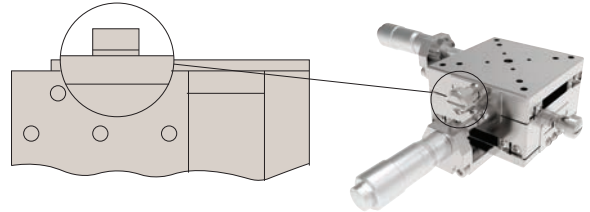
These have the same dimensions but have rollers allowing the slide to carry large loads and absorb greater moment loads up to 54Kg.



### Locking options

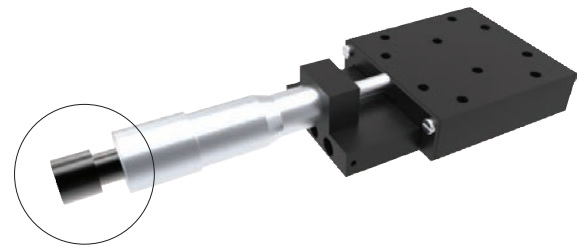
#### Posi-lock:

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

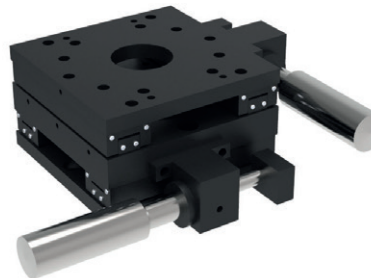


XYZ Stage

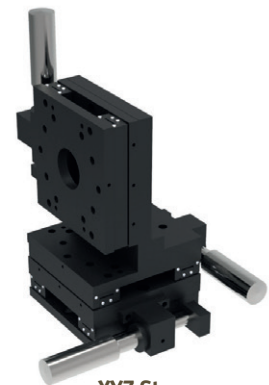
### Side drive micrometer positioning stages



X Stage



XY Stage



XYZ Stage

Also available in stainless steel.