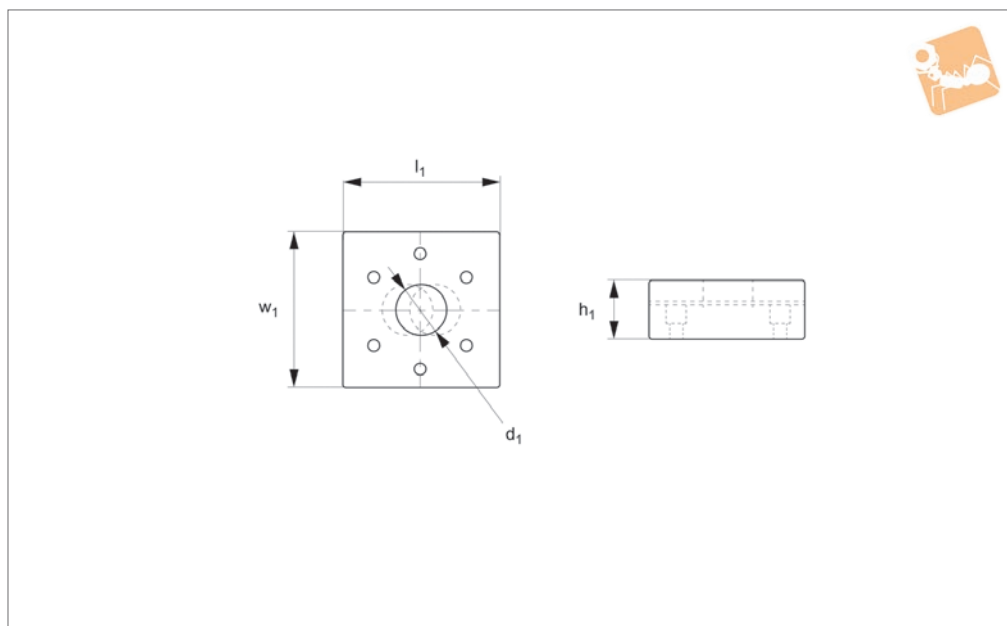




Positioning Stages - Plain

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 3μ .

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

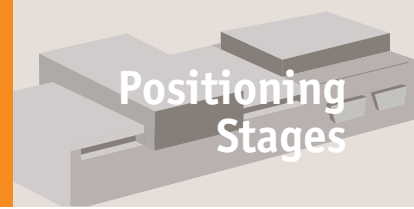
Stroke is centred on the mid-point of the slides (ie 50% of total stroke each way).

3D CAD available.

Order No.	Type	Travel	l_1	h_1	Through hole d_1	w_1	Load X & XY 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



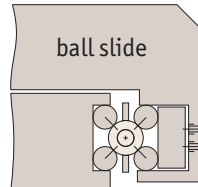
Order No.	Type	Travel	l_1	h_1	Through hole d_1	w_1	Load X & XY kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.	Weight kg
L3103.2205-R	Roller	75	104.6	23.1	-	104.6	38.5	13.60	8.60	9.10	38.5
L3103.2206-R	Roller	75	104.6	23.1	38	104.6	38.5	13.60	8.60	9.10	38.5
L3103.3205-R	Roller	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.

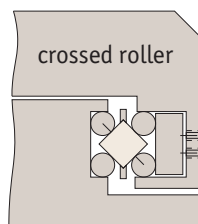
Ball slides:

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



Cross roller slides:

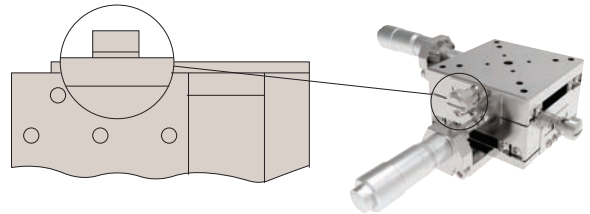
These have the same dimensions but have rollers allowing the slide to carry large loads and absorb greater moment loads up to 54Kg.



Locking options

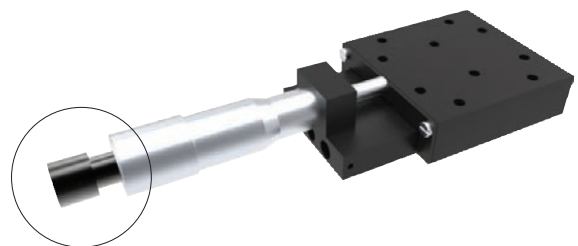
Posi-lock:

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

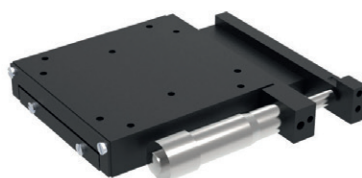


XY Stage

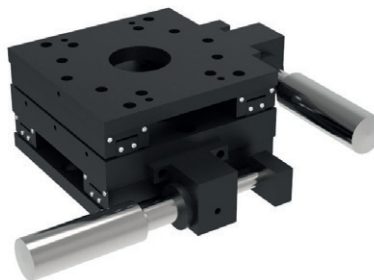


XYZ Stage

Side drive micrometer positioning stages



X Stage



XY Stage



XYZ Stage

Also available in stainless steel.