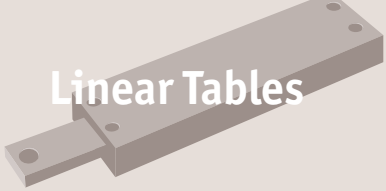


Size + Weight

For light/medium loads

L1020-L1037

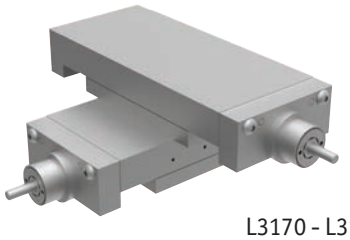
For heavy duty loads and motorised

L3000-L3500

Ball roller versions

L1024 - L1038

Needle roller & dovetail stage

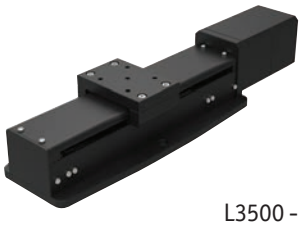


L3170 - L3194

Cross roller versions

L1020 - L1026

Motorised stages



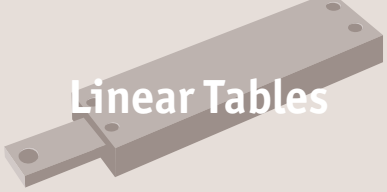
L3500 - L3510

Stainless steel versions

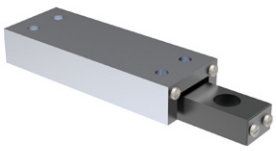
L1022 - L1023

Micrometer driven stages

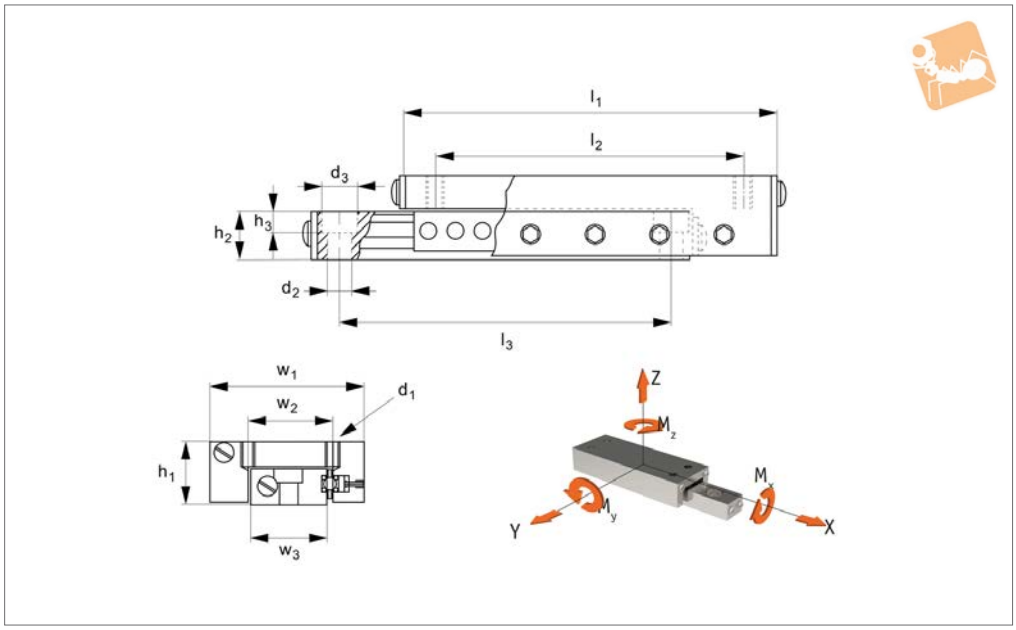
L3100 - L3123



Ball Slide Assemblies
standard precision



L1024



Material
Aluminium carriage clear anodized, base black anodized.
Hardened steel shafts and balls, mild steel end caps.

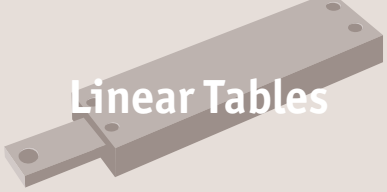
Technical Notes
Straight line accuracy: 13µ/25mm travel.
Positional repeatability: 5µ.
Coefficient of friction 0,003 typical.

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

Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	w_2	h_2	w_3	l_3	Weight g
L1024.010-008	8	0.34	9.5	13.3	5.8	6.0	4.0	3.4	4.0	6.0	2
L1024.010-013	13	0.68	9.5	19.0	5.8	13.0	4.0	3.4	4.0	10.0	3
L1024.010-025	25	0.68	9.5	32.0	5.8	26.0	4.0	3.4	4.0	20.0	4
L1024.010-038	38	0.68	9.5	44.0	5.8	37.0	4.0	3.4	4.0	30.0	7
L1024.014-013	13	2	14.2	27.0	8.0	15.0	6.0	4.7	6.4	19.0	9
L1024.014-025	25	4	14.2	52.0	8.0	41.0	6.0	4.7	6.4	35.0	14
L1024.014-050	50	5	14.2	78.0	8.0	66.0	6.0	4.7	6.4	60.0	23
L1024.014-075	75	6	14.2	103.0	8.0	92.0	6.0	4.7	6.4	86.0	31
L1024.014-100	100	8	14.2	128.0	8.0	117.0	6.0	4.7	6.4	89.0	34
L1024.014-127	127	8	14.2	154.0	8.0	142.0	6.0	4.7	6.4	114.0	43
L1024.019-013	13	4	19.0	27.0	10.4	15.0	9.0	6.3	9.5	19.0	11
L1024.019-025	25	5	19.0	52.0	10.4	41.0	9.0	6.3	9.5	35.0	26
L1024.019-050	50	5	19.0	78.0	10.4	66.0	9.0	6.3	9.5	60.0	37
L1024.019-075	75	6	19.0	103.0	10.4	92.0	9.0	6.3	9.5	86.0	48
L1024.019-100	100	7	19.0	128.0	10.4	117.0	9.0	6.3	9.5	89.0	60
L1024.019-127	127	8	19.0	154.0	10.4	142.0	9.0	6.3	9.5	114.0	71
L1024.025-013	13	5	25.4	40.0	12.7	32.0	10.0	6.3	12.7	32.0	34
L1024.025-025	25	5	25.4	65.0	12.7	57.0	10.0	6.3	12.7	57.0	48
L1024.025-038	38	6	25.4	78.0	12.7	65.0	10.0	6.3	12.7	65.0	54
L1024.025-050	50	7	25.4	90.0	12.7	82.0	10.0	6.3	12.7	82.0	62
L1024.025-075	75	8	25.4	116.0	12.7	108.0	10.0	6.3	12.7	108.0	142
L1024.027-019	19	7	26.9	40.0	13.4	32.0	10.0	7.9	12.7	28.0	37
L1024.027-038	38	8	26.9	65.0	13.4	57.0	10.0	7.9	12.7	54.0	65
L1024.027-050	50	9	26.9	90.0	13.4	82.0	10.0	7.9	12.7	79.0	85
L1024.027-075	75	11	26.9	116.0	13.4	102.0	10.0	7.9	12.7	82.0	147
L1024.027-100	100	14	26.9	152.0	13.4	140.0	10.0	7.9	12.7	102.0	170
L1024.027-150	150	16	26.9	203.0	13.4	190.0	10.0	7.9	12.7	127.0	198
L1024.027-200	200	18	26.9	254.0	13.4	240.0	10.0	7.9	12.7	178.0	227
L1024.038-025	25	7	38.0	51.0	15.8	35.0	16.0	8.6	19.0	37.0	82
L1024.038-050	50	9	38.0	76.0	15.8	60.0	16.0	8.6	19.0	60.0	122
L1024.038-075	75	11	38.0	102.0	15.8	85.0	16.0	8.6	19.0	85.0	170
L1024.038-088	88	14	38.0	127.0	15.8	110.0	16.0	8.6	19.0	85.0	190

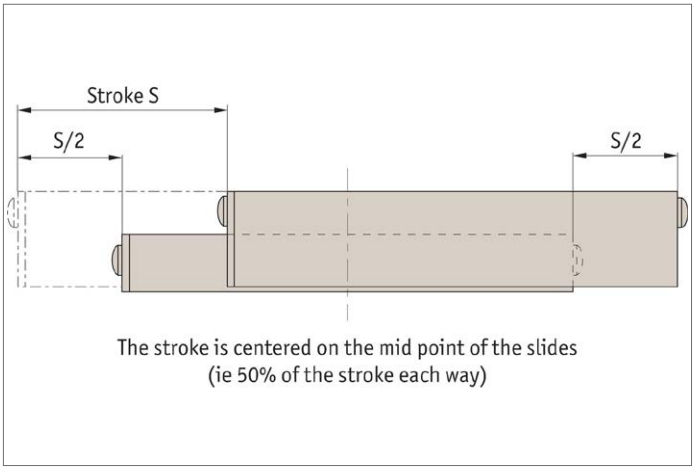
Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	w_2	h_2	w_3	l_3	Weight g
L1024.038-100	100	16	38.0	152.0	15.8	136.0	16.0	8.6	19.0	100.0	232
L1024.038-150	150	20	38.0	203.0	15.8	186.0	16.0	8.6	19.0	128.0	261
L1024.038-200	200	25	38.0	254.0	15.8	238.0	16.0	8.6	19.0	178.0	326
L1024.044-025	25	9	44.0	51.0	19.0	35.0	20.0	10.2	22.2	38.0	113
L1024.044-038	38	14	44.0	70.0	19.0	55.0	20.0	10.2	22.2	55.0	170
L1024.044-050	50	19	44.0	83.0	19.0	65.0	20.0	10.2	22.2	65.0	184
L1024.044-075	75	24	44.0	102.0	19.0	85.0	20.0	10.2	22.2	85.0	227
L1024.044-100	100	27	44.0	152.0	19.0	140.0	20.0	10.2	22.2	100.0	335
L1024.044-150	150	34	44.0	203.0	19.0	190.0	20.0	10.2	22.2	126.0	445
L1024.044-200	200	41	44.0	254.0	19.0	240.0	20.0	10.2	22.2	178.0	553
L1024.067-025	25	14	66.5	67.0	25.4	54.0	35.0	15.9	38.1	54.0	283
L1024.067-038	38	16	66.5	67.0	25.4	42.0	35.0	15.9	38.1	42.0	283
L1024.067-050	50	28	66.5	102.0	25.4	75.0	35.0	15.9	38.1	75.0	425
L1024.067-075	75	40	66.5	127.0	25.4	100.0	35.0	15.9	38.1	100.0	590
L1024.067-100	100	54	66.5	152.0	25.4	125.0	35.0	15.9	38.1	125.0	771
L1024.067-127	127	61	66.5	203.0	25.4	175.0	35.0	15.9	38.1	187.0	879
L1024.067-150	150	68	66.5	229.0	25.4	75,0 (x2)	35.0	15.9	38.1	178.0	498
L1024.067-228	228	84	66.5	305.0	25.4	75,0 (x3)	35.0	15.9	38.1	254.0	1318
L1024.067-304	304	93	66.5	381.0	25.4	75,0 (x4)	35.0	15.9	38.1	330.0	1644

Order No.	d_1	d_2	d_3	h_3	Counterbore screw size	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1024.010-008	M2	M2	-	-	n/a	0.02	0.01	0.01
L1024.010-013	M2	M2	-	-	n/a	0.03	0.01	0.02
L1024.010-025	M2	M2	-	-	n/a	0.04	0.01	0.04
L1024.010-038	M2	M2	-	-	n/a	0.06	0.01	0.05
L1024.014-013	M2	2.2	4.0	2.2	M2	0.1	0.1	0.1
L1024.014-025	M2	2.2	4.0	2.2	M2	0.5	0.1	0.5
L1024.014-050	M2	2.2	4.0	2.2	M2	1.0	0.2	1.0
L1024.014-075	M2	2.2	4.0	2.2	M2	1.6	0.2	1.5
L1024.014-100	M2	2.2	4.0	2.2	M2	2.1	0.2	2.
L1024.014-127	M2	2.2	4.0	2.2	M2	2.7	0.3	2.6
L1024.019-013	M3	3.5	6.1	3.4	M3	0.2	0.2	0.2
L1024.019-025	M3	3.5	6.1	3.4	M3	0.6	0.2	0.5
L1024.019-050	M3	3.5	6.1	3.4	M3	1.0	0.3	1.0
L1024.019-075	M3	3.5	6.1	3.4	M3	1.6	0.3	1.5
L1024.019-100	M3	3.5	6.1	3.4	M3	2.1	0.3	2.0
L1024.019-127	M3	3.5	6.1	3.4	M3	2.7	0.4	2.6
L1024.025-013	M4	3.5	6.1	3.4	M3	2.4	0.3	0.4
L1024.025-025	M4	3.5	6.1	3.4	M3	1.0	0.3	1.0
L1024.025-038	M4	3.5	6.1	3.4	M3	1.2	0.4	1.2
L1024.025-050	M4	3.5	6.1	3.4	M3	1.6	0.4	1.5
L1024.025-075	M4	3.5	6.1	3.4	M3	2.4	0.5	2.3
L1024.027-019	M4	4.6	8.1	4.4	M4	0.5	0.4	0.5
L1024.027-038	M4	4.6	8.1	4.4	M4	1.3	0.5	1.2
L1024.027-050	M4	4.6	8.1	4.4	M4	2.1	0.6	2.0
L1024.027-075	M4	4.6	8.1	4.4	M4	3.3	0.7	3.1
L1024.027-100	M4	4.6	8.1	4.4	M4	5.3	0.4	5.1
L1024.027-150	M4	4.6	8.1	4.4	M4	7.9	1.0	7.5
L1024.027-200	M4	4.6	8.1	4.4	M4	10.9	1.2	10.3
L1024.038-025	M4	4.6	8.1	4.4	M4	0.7	0.6	0.7
L1024.038-050	M4	4.6	8.1	4.4	M4	1.4	0.8	1.4
L1024.038-075	M4	4.6	8.1	4.4	M4	2.4	1.0	2.3
L1024.038-088	M4	4.6	8.1	4.4	M4	3.9	1.2	3.7
L1024.038-100	M4	4.6	8.1	4.4	M4	5.8	1.5	5.5
L1024.038-150	M4	4.6	8.1	4.4	M4	9.6	1.9	9.1
L1024.038-200	M4	4.6	8.1	4.4	M4	14.3	2.3	13.6
L1024.044-025	M4	4.6	8.1	4.4	M4	0.9	1.0	0.9
L1024.044-038	M4	4.6	8.1	4.4	M4	2.1	1.4	2.0
L1024.044-050	M4	4.6	8.1	4.4	M4	3.5	2.0	3.3
L1024.044-075	M4	4.6	8.1	4.4	M4	4.9	2.5	4.7
L1024.044-100	M4	4.6	8.1	4.4	M4	10.0	2.9	10.0
L1024.044-150	M4	4.6	8.1	4.4	M4	16.0	3.6	15.2
L1024.044-200	M4	4.6	8.1	4.4	M4	23.4	4.3	22.3
L1024.067-025	M5	5.8	10.0	5.3	M5	2.0	2.5	1.9
L1024.067-038	M5	5.8	10.0	5.3	M5	2.0	2.9	1.9

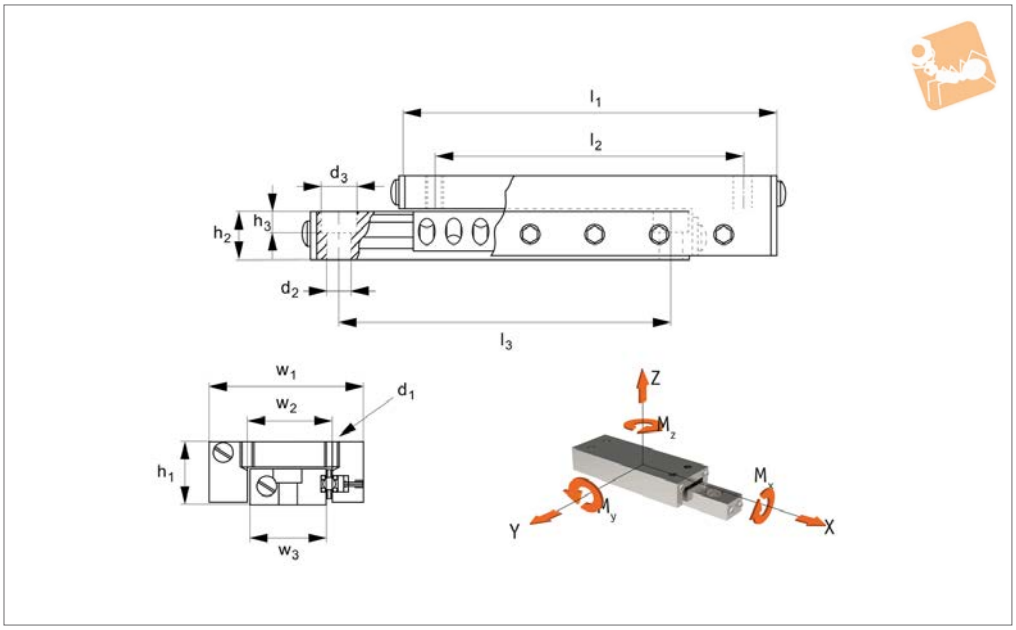


Ball Slide Assemblies
standard precision

Order No.	d_1	d_2	d_3	h_3	Counterbore screw size	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1024.067-050	M5	5.8	10.0	5.3	M5	7.2	5.11	6.9
L1024.067-075	M5	5.8	10.0	5.3	M5	13.1	7.2	12.5
L1024.067-100	M5	5.8	10.0	5.3	M5	21.5	9.7	20.5
L1024.067-127	M5	5.8	10.0	5.3	M5	33.6	11.1	32.0
L1024.067-150	M5	5.8	10.0	5.3	M5	42.3	12.3	40.3
L1024.067-228	M5	5.8	10.0	5.3	M5	64.5	15.2	61.4
L1024.067-304	M5	5.8	10.0	5.3	M5	85.1	16.8	81.0



The stroke is centered on the mid point of the slides
(ie 50% of the stroke each way)



L1026

Material

Aluminium carriage and base (black anodized).
Hardened steel rods and rollers, stainless steel end caps.

Technical Notes

Straight line accuracy: 3µ/25mm of travel.
Positional repeatability: 3µ.
Coefficient of friction: 0,003 typical.

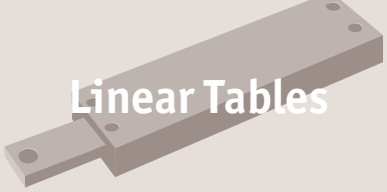
The slides are lightly lubricated during assembly.
Additional lubrication is required for speeds above 30m/min and is advisable at lower speeds where high loads are applied in continuous duty applications.
The slides should be mounted on flat surfaces to provide full support to the base.

At rated load capacity and moderate speeds, expected life is 250km of travel. At half the rated load the expected life is 2,500km.

Tips

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

Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	w_2	h_2	w_3	l_3	Weight g
L1026.014-013	13	14	14.2	27.0	8.0	15.0	6.0	4.7	6.4	19.0	11
L1026.014-025	25	25	14.2	52.0	8.0	41.0	6.0	4.7	6.4	35.0	17
L1026.014-050	50	30	14.2	78.0	8.0	66.0	6.0	4.7	6.4	60.0	26
L1026.014-075	75	32	14.2	103.0	8.0	92.0	6.0	4.7	6.4	86.0	34
L1026.014-100	100	36	14.2	129.0	8.0	117.0	6.0	4.7	6.4	89.0	37
L1026.014-127	127	41	14.2	154.0	8.0	143.0	6.0	4.7	6.4	114.0	45
L1026.019-013	13	22	19.0	27.0	10.4	15.0	9.0	6.3	9.5	19.0	14
L1026.019-025	25	35	19.0	52.0	10.4	41.0	9.0	6.3	9.5	35.0	28
L1026.019-050	50	42	19.0	78.0	10.4	66.0	9.0	6.3	9.5	60.0	40
L1026.019-075	75	44	19.0	103.0	10.4	92.0	9.0	6.3	9.5	86.0	51
L1026.019-100	100	47	19.0	129.0	10.4	117.0	9.0	6.3	9.5	89.0	62
L1026.019-127	127	49	19.0	154.0	10.4	142.0	9.0	6.3	9.5	114.0	74
L1026.025-013	13	32	25.4	40.0	12.7	32.0	10.0	6.3	12.7	32.0	37
L1026.025-025	25	35	25.4	65.0	12.7	57.0	10.0	6.3	12.7	57.0	51
L1026.025-038	38	35	25.4	78.0	12.7	65.0	10.0	6.3	12.7	65.0	57
L1026.025-050	50	38	25.4	90.0	12.7	82.0	10.0	6.3	12.7	82.0	65
L1026.025-075	75	41	25.4	116.0	12.7	108.0	10.0	6.3	12.7	108.0	79
L1026.027-019	19	50	26.9	40.0	13.4	32.0	10.0	7.9	12.7	28.0	40
L1026.027-038	38	60	26.9	65.0	13.4	57.0	10.0	7.9	12.7	54.0	68
L1026.027-050	50	100	26.9	90.0	13.4	82.0	10.0	7.9	12.7	79.0	88
L1026.027-075	75	120	26.9	116.0	13.4	102.0	10.0	7.9	12.7	82.0	150
L1026.027-100	100	129	26.9	152.0	13.4	140.0	10.0	7.9	12.7	102.0	173
L1026.027-150	150	135	26.9	203.0	13.4	190.0	10.0	7.9	12.7	127.0	204
L1026.027-200	200	145	26.9	254.0	13.4	240.0	10.0	7.9	12.7	178.0	232
L1026.038-025	25	59	38.0	51.0	15.8	35.0	16.0	8.6	19.0	37.0	85
L1026.038-050	50	79	38.0	76.0	15.8	60.0	16.0	8.6	19.0	60.0	128
L1026.038-075	75	79	38.0	102.0	15.8	85.0	16.0	8.6	19.0	85.0	176

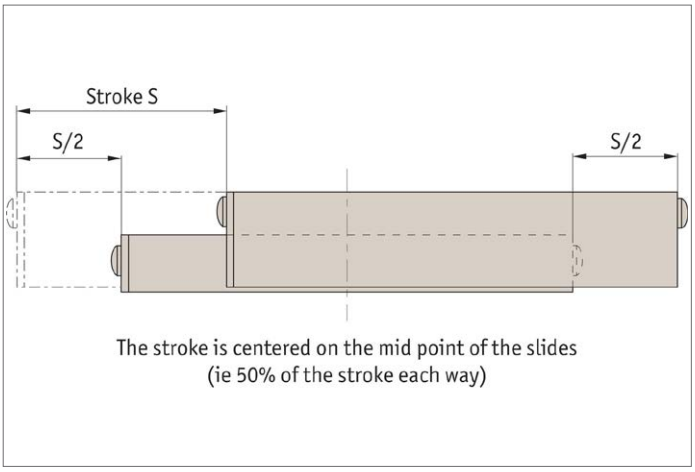


Crossed Roller Slides
standard precision

Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	w_2	h_2	w_3	l_3	Weight g
L1026.038-089	89	95	38.0	127.0	15.8	111.0	16.0	8.6	19.0	85.0	196
L1026.038-100	100	139	38.0	152.0	15.8	136.0	16.0	8.6	19.0	100.0	238
L1026.038-150	150	163	38.0	203.0	15.8	186.0	16.0	8.6	19.0	127.0	266
L1026.038-200	200	187	38.0	254.0	15.8	238.0	16.0	8.6	19.0	178.0	332
L1026.044-025	25	59	44.0	51.0	19.0	35.0	20.0	10.2	22.2	38.0	116
L1026.044-038	38	68	44.0	70.0	19.0	55.0	20.0	10.2	22.2	55.0	173
L1026.044-050	50	79	44.0	83.0	19.0	65.0	20.0	10.2	22.2	65.0	187
L1026.044-075	75	79	44.0	102.0	19.0	85.0	20.0	10.2	22.2	85.0	232
L1026.044-100	100	139	44.0	152.0	19.0	140.0	20.0	10.2	22.2	100.0	343
L1026.044-150	150	170	44.0	203.0	19.0	190.0	20.0	10.2	22.2	127.0	454
L1026.044-200	200	204	44.0	254.0	19.0	240.0	20.0	10.2	22.2	178.0	561
L1026.067-025	25	102	66.6	67.0	25.4	54.0	35.0	15.9	38.1	54.0	292
L1026.067-038	38	119	66.6	67.0	25.4	42.0	35.0	15.9	38.1	42.0	292
L1026.067-050	50	158	66.6	102.0	25.4	75.0	35.0	15.9	38.1	75.0	454
L1026.067-075	75	198	66.6	127.0	25.4	100.0	35.0	15.9	38.1	100.0	635
L1026.067-100	100	198	66.6	152.0	25.4	125.0	35.0	15.9	38.1	125.0	816
L1026.067-127	127	215	66.6	203.0	25.4	175.0	35.0	15.9	38.1	187.0	936
L1026.067-150	150	317	66.6	229.0	25.4	75.0	35.0	15.9	38.1	178.0	1089
L1026.067-228	228	336	66.6	305.0	25.4	75.0	35.0	15.9	38.1	254.0	1366
L1026.067-304	304	354	66.6	381.0	25.4	75.0	35.0	15.9	38.1	330.0	1729

Order No.	d_1	d_2	d_3	h_3	Counterbore screw size	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1026.014-013	M2	2.2	4.0	2.2	M2	0.4	0.8	0.8
L1026.014-025	M2	2.2	4.0	2.2	M2	0.7	2.7	2.8
L1026.014-050	M2	2.2	4.0	2.2	M2	0.9	4.9	5.2
L1026.014-075	M2	2.2	4.0	2.2	M2	1.0	7.6	8.0
L1026.014-100	M2	2.2	4.0	2.2	M2	1.1	10.1	10.6
L1026.014-127	M2	2.2	4.0	2.2	M2	1.3	13.0	13.6
L1026.019-013	M3	3.5	6.1	3.4	M3	1.0	1.3	1.4
L1026.019-025	M3	3.5	6.1	3.4	M3	1.5	3.8	4.0
L1026.019-050	M3	3.5	6.1	3.4	M3	2.1	7.0	7.4
L1026.019-075	M3	3.5	6.1	3.4	M3	2.1	10.6	11.1
L1026.019-100	M3	3.5	6.1	3.4	M3	2.3	13.1	13.8
L1026.019-127	M3	3.5	6.1	3.4	M3	2.37	15.6	16.4
L1026.025-013	M4	3.5	6.1	3.4	M3	2.0	2.6	2.8
L1026.025-025	M4	3.5	6.1	3.4	M3	2.2	6.3	6.7
L1026.025-038	M4	3.5	6.1	3.4	M3	2.2	7.0	7.4
L1026.025-050	M4	3.5	6.1	3.4	M3	2.3	8.2	8.6
L1026.025-075	M4	3.5	6.1	3.4	M3	2.5	11.3	11.9
L1026.027-019	M4	4.6	8.1	4.4	M4	3.2	3.7	3.5
L1026.027-038	M4	4.6	8.1	4.4	M4	3.8	8.3	8.8
L1026.027-050	M4	4.6	8.1	4.4	M4	5.7	17.3	18.2
L1026.027-075	M4	4.6	8.1	4.4	M4	7.0	27.3	28.7
L1026.027-100	M4	4.6	8.1	4.4	M4	8.3	48.3	50.7
L1026.027-150	M4	4.6	8.1	4.4	M4	8.6	63.8	67.0
L1026.027-200	M4	4.6	8.1	4.6	M4	9.3	83.1	87.3
L1026.038-025	M4	4.6	8.1	4.4	7.0	M4	5.5	6.7
L1026.038-050	M4	4.6	8.1	4.4	10.0	M4	6.3	9.5
L1026.038-075	M4	4.6	8.1	4.4	16.4	M4	7.3	15.6
L1026.038-089	M4	4.6	8.1	4.4	27.4	M4	8.8	26.1
L1026.038-100	M4	4.6	8.1	4.4	49.1	M4	12.8	46.8
L1026.038-150	M4	4.6	8.1	4.4	76.9	M4	15.0	73.2
L1026.038-200	M4	4.6	8.1	4.4	107	M4	17.2	102
L1026.044-025	M4	4.6	8.1	4.4	7.0	M4	6.3	6.7
L1026.044-038	M4	4.6	8.1	4.4	10.7	M4	7.2	10.2
L1026.044-050	M4	4.6	8.1	4.4	14.0	M4	8.5	13.4
L1026.044-075	M4	4.6	8.1	4.4	16.3	M4	8.5	15.6
L1026.044-100	M4	4.6	8.1	4.4	49.1	M4	14.8	46.8
L1026.044-150	M4	4.6	8.1	4.4	80.0	M4	18.0	76.3
L1026.044-200	M4	4.6	8.1	4.4	117	M4	21.6	111
L1026.067-025	M5	5.8	10.0	5.3	14.9	M5	18.5	14.2
L1026.067-038	M5	5.8	10.0	5.3	18.8	M5	21.5	17.9
L1026.067-050	M5	5.8	10.0	5.3	37.6	M5	28.7	35.8
L1026.067-075	M5	5.8	10.0	5.3	62.6	M5	35.9	59.7
L1026.067-100	M5	5.8	10.0	5.3	78.3	M5	35.9	74.6

Order No.	d_1	d_2	d_3	h_3	Counterbore screw size	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1026.067-127	M5	5.8	10.0	5.3	117	M5	38.9	112
L1026.067-150	M5	5.8	10.0	5.3	175	M5	57.4	167
L1026.067-228	M5	5.8	10.0	5.3	258	M5	60.9	245
L1026.067-304	M5	5.8	10.0	5.3	323	M5	64.2	308



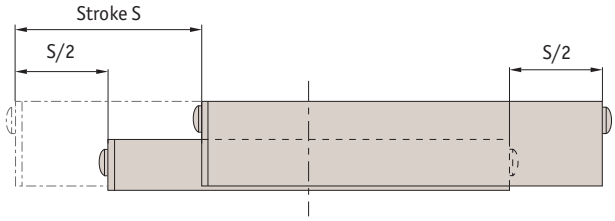
The stroke is centered on the mid point of the slides
(ie 50% of the stroke each way)

Linear Tables

Overview

Factors affecting stage selections...

- Size and weight of load
- Moment loads
- Stroke required
- Accuracy required
- Usage conditions of water, chemicals, shock loads etc.



The stroke is centred on the mid point of the slides (i.e. 50% of the stroke each way).

Generally ball slides are less expensive but cross roller slides can carry 8 to 10 times the load of ball slides.

A selection...

L1020 Crossed roller tables	L1022/23 Cross roller table	L1024 Ball slide tables
 Steel and aluminium, accuracy typically 5µ.	 Stainless Steel, accuracy typically 3µ.	 Aluminium, accuracy typically 12µ.
L1026 **Crossed roller slide tables**	**L1028** **Precision ball slide tables**	**L1029** **Precision crossed roller tables**
 Aluminium, accuracy typically 5µ.	 Aluminium, accuracy typically 3µ.	 Aluminium, accuracy typically 3µ.
L1034 **Flanged ball slide tables - precision**	**L1038** **Anti-creep ball slide tables**	**L1039** **Non-magnetic ball slide**
 With flange accuracy to 1µ.	 Special anti-creep function prevents cage misalignment.	 Non-magnetic accuracy typically 3µ.

Steel - L1020

- Standard steel / cast iron

Aluminium - L1021

- Lower weight, lower profile
- Good for high accelerations

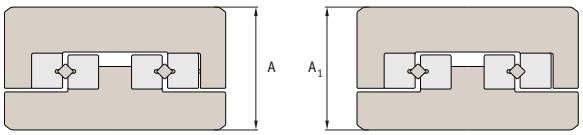
Stainless steel - L1022 + L1023

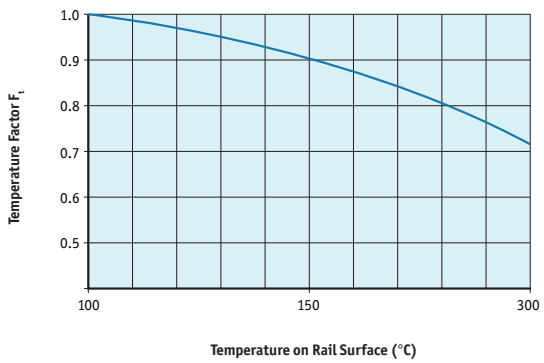
- Stainless steel (440C+Ni) corrosion resistant

Rated life

$$L\,(Km) = \left(\frac{F_t}{F_w} \cdot \frac{C}{P_c}\right)^{3.33} \times 100$$

F_t = temperature factor
F_w = load factor
C = basic dynamic load (kN) see tables
P_c = radial load (kN)





Height tolerance:

- Height ±100µ
- Motorised parts ±10µ
- Strokes from 10 to 950mm
- Loads to 48kN

Load factor F_w

Shock	Speed	F_w
None	Very slow	1.0 - 1.2
Small	Slow	1.2 - 1.5

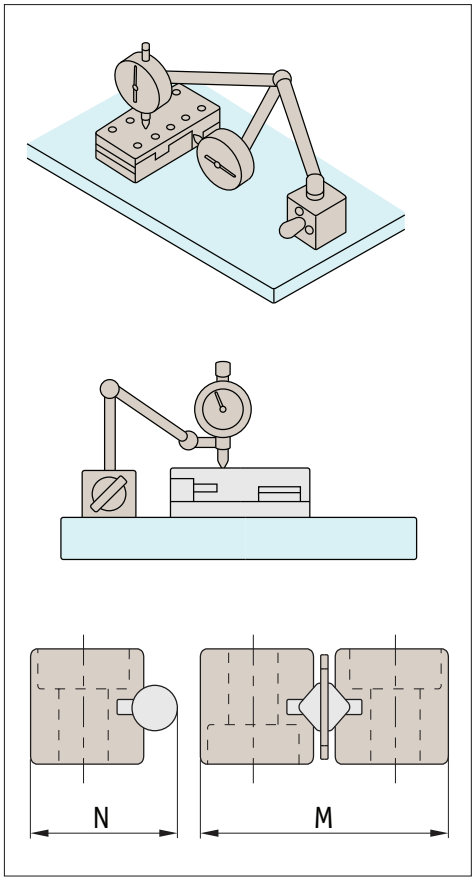
Cross Roller Linear Tables

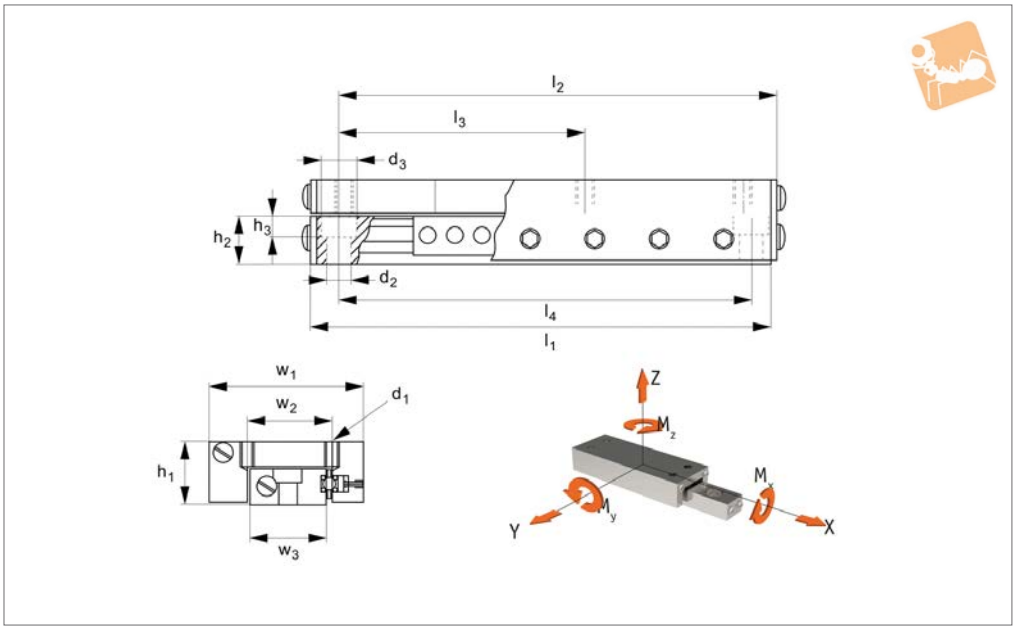
Technical

Technical accuracy measurments

- High accuracy.
- Low friction: virtually frictionless. Providing stable performance at lower high speeds.
- Rigid: incorporating cross roller linear rails to provide high load capacity as well as high moment load capacity.
- Installation: easy to install with pre-drilled holes in carriage and base. Ensure mounting surface faces are accurately machined.

Table accuracy (µ)			Rail accuracy (µ)		
Table length	Carriage top parallelism	Carriage side parallelism	N tolerance	M tolerance	Straightness
0-50	2	4			2
50-100	2	5			2
100-150	3	6			3
150-200	3	7			3
200-250	3	7			3
250-300	3	7	-15	-30	3
300-350	4	8	-35	-70	4
350-400	4	8			4
400-450	4	8			4
450-500	4	8			4
500-550	4	9			4
550-600	4	9			4





L1028

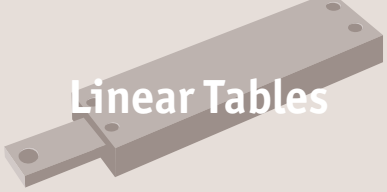
Material
Aluminium carriage and base.
Hardened stainless steel balls, shafts and preload gibs.

Technical Notes
Straight line accuracy: 3µ/25mm of travel.
Positional repeatability: 1µ.
Coefficient of friction: 0,002.

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

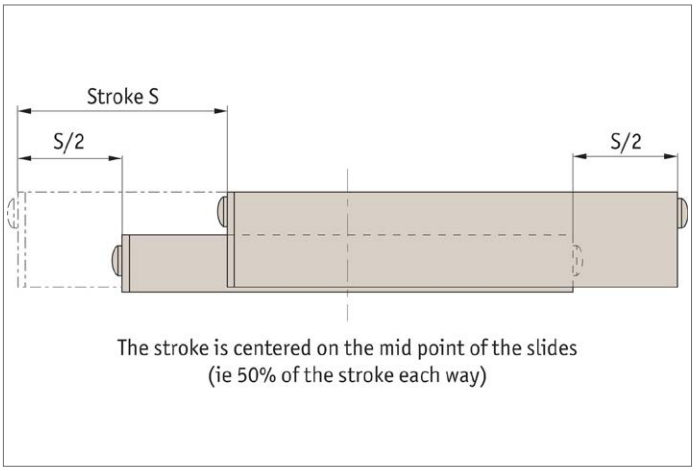
Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	l_3	l_4	w_2	h_2	w_3	Weight g
L1028.025-025	25	5.4	25.4	65.0	12.7	57	-	57	10	6.4	10.2	57
L1028.025-050	50	9.1	25.4	90.4	12.7	83	-	83	10	6.4	10.2	79
L1028.025-075	75	10.0	25.4	115.8	12.7	108	-	108	10	6.4	10.2	102
L1028.045-025	25	9.1	44.5	50.8	19.0	35	-	38	20	10.2	22.1	113
L1028.045-038	38	15.0	44.5	69.9	19.0	54	-	54	20	10.2	22.1	154
L1028.045-050	50	20.0	44.5	82.6	19.0	65	-	65	20	10.2	22.1	186
L1028.045-075	75	25.0	44.5	101.6	19.0	85	-	85	20	10.2	22.1	227
L1028.045-100	100	28.0	44.5	127.0	19.0	115	-	115	20	10.2	22.1	286
L1028.067-025	25	16.0	66.5	66.5	25.4	54	-	54	35	15.5	38.1	295
L1028.067-050	50	29.0	66.5	101.6	25.4	75	-	75	35	15.5	38.1	453
L1028.067-075	75	42.0	66.5	127.0	25.4	100	-	100	35	15.5	38.1	567
L1028.067-100	100	55.0	66.5	152.4	25.4	125	-	125	35	15.5	38.1	680
L1028.067-125	125	63.0	66.5	203.2	25.4	175	-	187	35	15.5	38.1	794
L1028.067-150	150	70.0	66.5	228.6	25.4	150	75	178	35	15.5	38.1	1021
L1028.127-075	75	42.0	127.0	127.0	25.4	100	50	100	100	15.5	98.3	1021
L1028.127-125	125	64.0	127.0	177.8	25.4	150	75	150	100	15.5	98.3	1474
L1028.127-175	175	77.0	127.0	228.6	25.4	200	100	200	100	15.5	98.3	1928

Order No.	h_3	d_1	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1028.025-025	3.4	3.5	6.1	M4	0.3	1.0	1.0
L1028.025-050	3.4	3.5	6.1	M4	0.6	2.0	2.7
L1028.025-075	3.4	3.5	6.1	M4	0.8	3.2	3.7
L1028.045-025	4.4	4.6	8.1	M4	1.0	0.9	0.9
L1028.045-038	4.4	4.6	8.1	M4	1.4	2.0	2.1
L1028.045-050	4.4	4.6	8.1	M4	2.0	3.3	3.5
L1028.045-075	4.4	4.6	8.1	M4	2.5	4.7	4.9
L1028.045-100	4.4	4.6	8.1	M4	2.9	9.5	10.0
L1028.067-025	5.3	5.8	10	M5	2.5	1.9	2.0

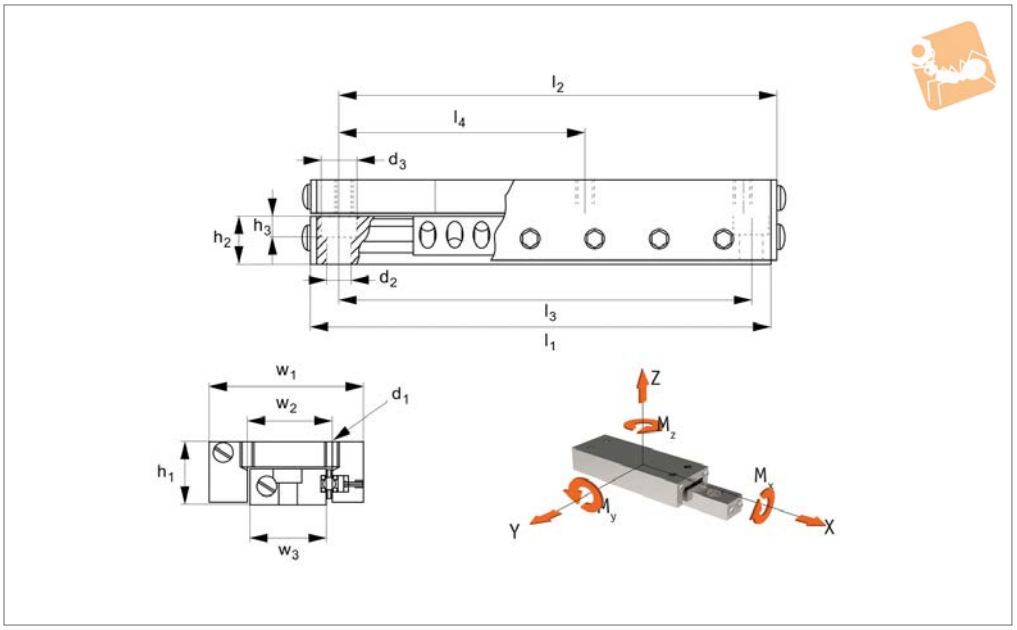


Ball Slide Assemblies
precision

Order No.	h_3	d_1	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1028.067-050	5.3	5.8	10	M5	5.1	6.9	7.2
L1028.067-075	5.3	5.8	10	M5	7.2	12.5	13.1
L1028.067-100	5.3	5.8	10	M5	9.7	20.5	21.5
L1028.067-125	5.3	5.8	10	M5	11.1	32.0	33.6
L1028.067-150	5.3	5.8	10	M5	12.3	40.3	42.3
L1028.127-075	6.2	7.1	11	M6	8.3	14.4	15.1
L1028.127-125	6.2	7.1	11	M6	16.4	61.0	61.8
L1028.127-175	6.2	7.1	11	M6	17.8	71.0	74.5



The stroke is centered on the mid point of the slides
(ie 50% of the stroke each way)



L1029

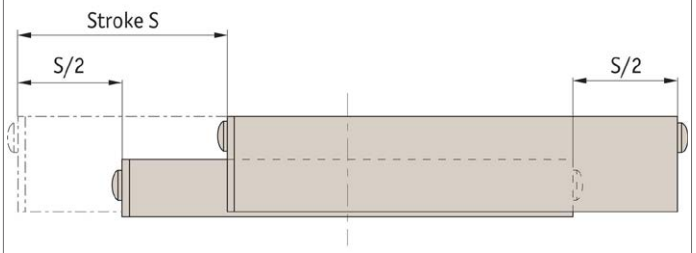
Material
Aluminium carriage and base.
Hardened stainless steel rollers, shafts and preload gibs.

Technical Notes
Straight line accuracy: 3µ/25mm of travel.
Positional repeatability: 1µ.
Coefficient of friction: 0,002.

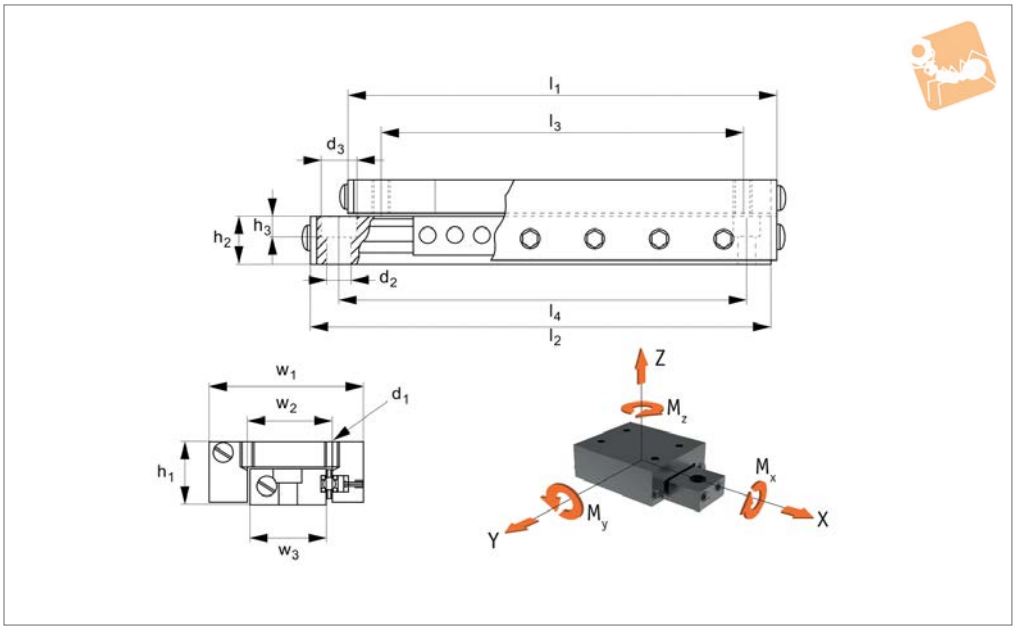
Tips
Stroke is centred on the mid-point of the slides (ie 50% of total stroke each way).

Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	l_3	l_4	w_2	h_2	w_3	Weight g
L1029.045-025	25	36	44.5	50.8	19.0	35	38	-	20	10.2	22.1	127
L1029.045-050	50	54	44.5	82.6	19.0	65	65	-	20	10.2	22.1	209
L1029.045-075	75	59	44.5	101.6	19.0	85	85	-	20	10.2	22.1	254
L1029.045-100	100	64	44.5	127.0	19.0	115	115	-	20	10.2	22.1	286
L1029.067-025	25	95	67	66.5	25.4	54	54	-	35	15.5	38.1	299
L1029.067-050	50	109	67	101.6	25.4	75	75	-	35	15.5	38.1	454
L1029.067-075	75	154	67	127.0	25.4	100	100	-	35	15.5	38.1	567
L1029.067-100	100	173	67	152.4	25.4	125	125	-	35	15.5	38.1	680
L1029.067-125	125	186	67	203.2	25.4	175	187	-	35	15.5	38.1	907
L1029.127-075	75	100	127	127.0	25.4	100	100	50	100	15.5	6.2	1021
L1029.127-125	125	109	127	177.8	25.4	150	150	75	100	15.5	6.2	1474
L1029.127-175	175	118	127	228.6	25.4	200	200	100	100	15.5	6.2	1928

Order No.	h_3	d_1	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1029.045-025	4.6	M4	4.6	8.1	4.4	4.7	4.9
L1029.045-050	4.6	M4	4.6	8.1	5.9	9.4	9.8
L1029.045-075	4.6	M4	4.6	8.1	6.9	10.9	11.4
L1029.045-100	4.6	M4	4.6	8.1	7.7	12.1	12.7
L1029.067-025	5.3	M5	5.8	10	18.1	15.0	15.8
L1029.067-050	5.3	M5	5.8	10	24.1	30.1	31.6
L1029.067-075	5.3	M5	5.8	10	30.2	50.1	52.6
L1029.067-100	5.3	M5	5.8	10	45.9	62.6	65.8
L1029.067-125	5.3	M5	5.8	10	41.3	72.0	75.6
L1029.127-075	6.2	M6	7.1	11	19.3	72.2	73.8
L1029.127-125	6.2	M6	7.1	11	21.2	79.4	81.1
L1029.127-175	6.2	M6	7.1	11	23.0	92.8	97.4



The stroke is centered on the mid point of the slides
(ie 50% of the stroke each way)



L1030

Material
Aluminium carriage and base.
Hardened stainless steel balls, shafts and preload gibs.

Technical Notes
Straight line accuracy: 1µ/25mm of travel.
Positional repeatability: 0.5µ.
Coefficient of friction: 0,002.
Carriage surface flat to 3µ/25mm. Carriage and base ground to optical flatness.

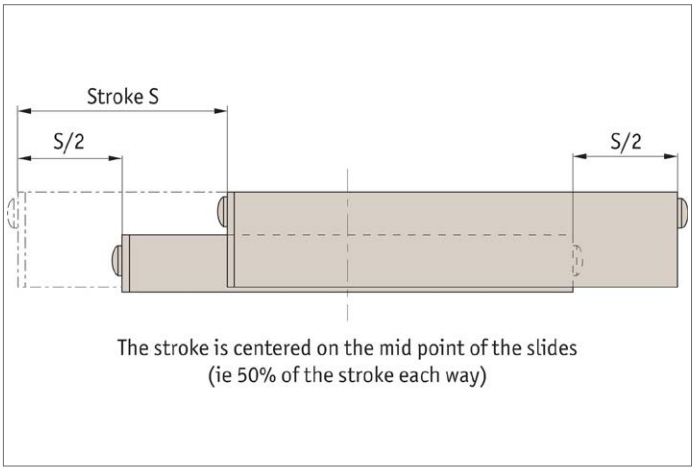
Tips
Stroke is centred on the mid-point of the slides (ie 50% of total stroke each way).

Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	l_3	l_4	w_2	h_2	w_3	Weight g
L1030.025-013	13	3.6	25.4	25.4	12.7	31.8	15	20	CL	6.1	10.2	27
L1030.025-025	25	6.8	25.4	44.5	12.7	50.8	35	40	CL	6.1	10.2	50
L1030.025-038	38	11	25.4	63.5	12.7	69.9	54	57	CL	6.1	10.2	73
L1030.025-050	50	14	25.4	82.6	12.7	88.8	70	75	CL	6.1	10.2	91
L1030.045-025	25	11	44.5	50.8	19.0	57.2	35	40	20	10.2	22.1	127
L1030.045-038	38	14	44.5	69.9	19.0	76.2	54	57	20	10.2	22.1	172
L1030.045-050	50	19	44.5	82.6	19.0	88.9	65	70	20	10.2	22.1	209
L1030.045-075	75	23	44.5	101.6	19.0	108.0	85	90	20	10.2	22.1	254
L1030.067-025	25	33	66.5	66.5	25.4	66.5	54	54	35	15.7	38.1	299
L1030.067-050	50	38	66.5	101.6	25.4	111.0	75	85	35	15.7	38.1	454
L1030.067-075	75	46	66.5	127.0	25.4	136.4	100	110	35	15.7	38.1	567
L1030.067-100	100	60	66.5	152.4	25.4	161.8	125	135	35	15.7	38.1	680
L1030.067-125	125	66	66.5	203.2	25.4	212.6	178	190	35	15.7	38.1	907
L1030.089-050	50	59	88.9	101.6	34.9	114.3	50	65	50	15.7	50.3	907
L1030.089-075	75	64	88.9	146.1	34.9	158.8	95	110	50	15.7	50.3	1306
L1030.089-125	125	73	88.9	203.2	34.9	215.9	150	175	50	15.7	50.3	1814
L1030.089-165	165	79	88.9	260.4	34.9	273.1	210	225	50	15.7	50.3	2327
L1030.089-225	225	91	88.9	355.6	34.9	368.3	305	320	50	15.7	50.3	3175
L1030.146-125	125	68	146.1	209.6	50.8	222.3	150	175	100	24.9	94.0	4536
L1030.146-175	175	82	146.1	304.8	50.8	317.5	250	275	100	24.9	94.0	6586
L1030.146-250	250	102	146.1	381.0	50.8	393.7	330	350	100	24.9	94.0	8233

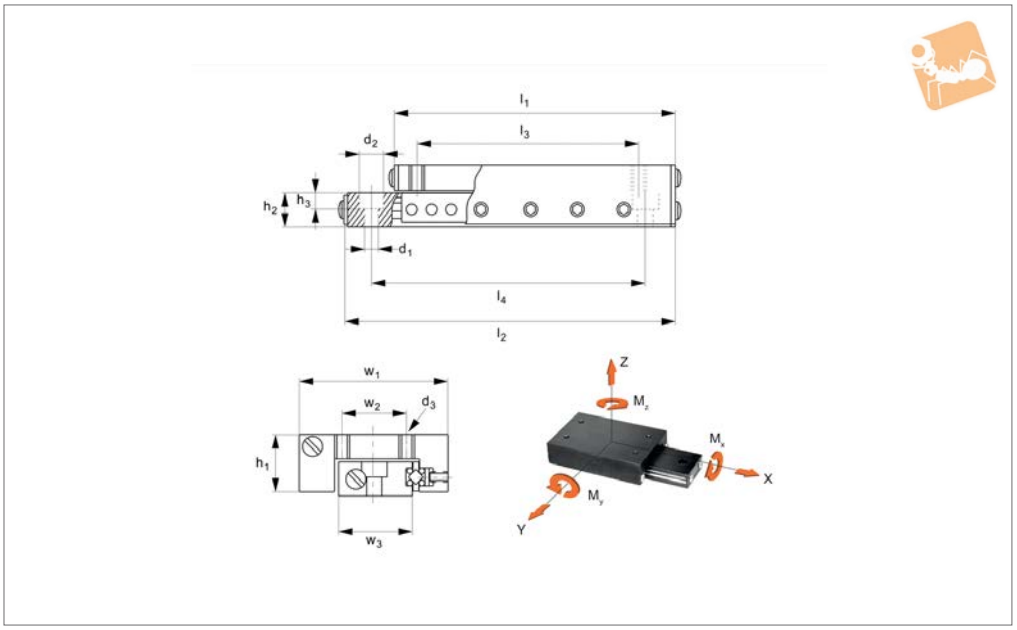
Order No.	h_3	d_1	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1030.025-013	3.4	M3	3.5	6.1	0.3	0.4	0.40
L1030.025-025	3.4	M3	3.5	6.1	0.4	1.0	1.1
L1030.025-038	3.4	M3	3.5	6.1	0.5	1.8	1.8
L1030.025-050	3.4	M3	3.5	6.1	0.7	2.6	3.7
L1030.045-025	4.6	M4	4.6	8.1	1.0	0.9	0.9

Low Profile Ball Slide Assemblies
high precision

Order No.	h_3	d_1	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1030.045-038	4.6	M4	4.6	8.1	1.4	2.0	2.1
L1030.045-050	4.6	M4	4.6	8.1	2.0	3.3	3.5
L1030.045-075	4.6	M4	4.6	8.1	2.5	4.7	4.9
L1030.067-025	5.3	M5	5.8	10.0	4.6	3.8	4.0
L1030.067-050	5.3	M5	5.8	10.0	6.9	9.3	9.8
L1030.067-075	5.3	M5	5.8	10.0	8.4	14.5	15.3
L1030.067-100	5.3	M5	5.8	10.0	10.9	23.0	24.1
L1030.067-125	5.3	M5	5.8	10.0	11.9	34.4	36.1
L1030.089-050	5.3	M5	5.8	10.0	11.1	32.0	33.6
L1030.089-075	5.3	M5	5.8	10.0	12.4	40.3	42.4
L1030.089-125	5.3	M5	5.8	10.0	14.1	52.6	53.7
L1030.089-165	5.3	M5	5.8	10.0	15.2	61.5	64.5
L1030.089-225	5.3	M5	5.8	10.0	16.9	81.1	85.1
L1030.146-125	6.2	M6	7.1	11.0	16.2	60.5	61.8
L1030.146-175	6.2	M6	7.1	11.0	17.5	70.7	74.2
L1030.146-250	6.2	M6	7.1	11.0	19.4	93.2	97.9



The stroke is centered on the mid point of the slides
(ie 50% of the stroke each way)



L1032

Material
Aluminium carriage and base.
Hardened stainless steel rollers, shafts and preload gibs.

Technical Notes
Crossed roller design greatly increases load capacity.
Straight line accuracy: 1µ/25mm of travel.
Positional repeatability: 0,5µ.
Coefficient of friction: 0,002.
Carriage surface flat to 3µ/25mm.
Carriage and base ground to optical flatness.

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

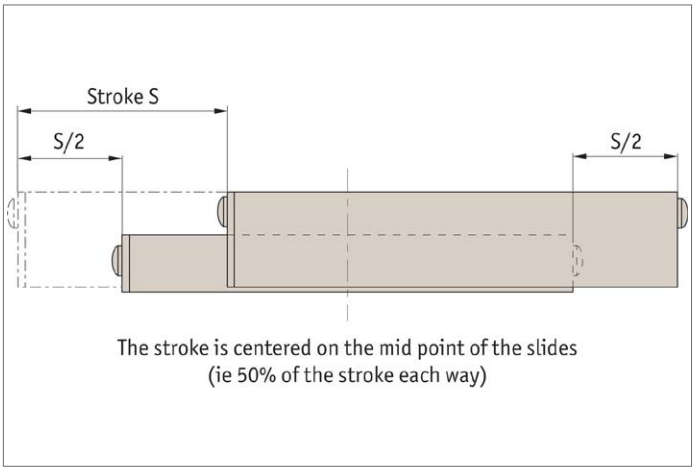
Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	l_3	l_4	w_2	h_2	Weight g
L1032.045-025	25	41	44.5	50.8	19.1	57.2	35	40	20	10.2	127
L1032.045-038	38	52	44.5	69.9	19.1	76.2	54	57	20	10.2	172
L1032.045-050	50	59	44.5	82.6	19.1	88.9	65	70	20	10.2	209
L1032.045-075	75	64	44.5	101.6	19.1	108.0	85	90	20	10.2	254
L1032.067-025	25	100	66.5	66.5	25.4	66.5	54	54	35	15.7	299
L1032.067-050	50	114	66.5	101.6	25.4	111.0	75	85	35	15.7	454
L1032.067-075	75	159	66.5	127.0	25.4	136.4	100	110	35	15.7	567
L1032.067-100	100	177	66.5	152.4	25.4	161.8	125	135	35	15.7	680
L1032.067-125	125	191	66.5	203.2	25.4	212.6	178	190	35	15.7	907
L1032.089-050	50	118	88.9	101.6	44.5	114.3	50	65	50	15.7	907
L1032.089-075	75	127	88.9	146.1	44.5	158.8	95	110	50	15.7	1306
L1032.089-125	125	145	88.9	203.2	44.5	215.9	150	175	50	15.7	1814
L1032.089-165	165	159	88.9	260.4	44.5	273.1	210	225	50	15.7	2327
L1032.089-225	225	182	88.9	355.6	44.5	368.3	305	320	50	15.7	3175
L1032.146-125	125	136	146.1	209.6	60.03	222.3	150	175	100	24.9	4536
L1032.146-175	175	163	146.1	304.8	60.03	317.5	250	275	100	24.9	6586
L1032.146-250	250	204	146.1	381.0	60.03	393.7	330	350	100	24.9	8232

Order No.	w_3	h_3	d_1	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1032.045-025	22.1	4.6	M4	4.6	8.1	5.0	5.3	5.6
L1032.045-038	22.1	4.6	M4	4.6	8.1	5.6	8.3	8.6
L1032.045-050	22.1	4.6	M4	4.6	8.1	6.7	10.6	11.1
L1032.045-075	22.1	4.6	M4	4.6	8.1	7.8	12.4	12.9
L1032.067-025	38.1	5.3	M5	5.8	10.0	17.8	14.8	15.6
L1032.067-050	38.1	5.3	M5	5.8	10.0	20.3	25.4	26.4
L1032.067-075	38.1	5.3	M5	5.8	10.0	28.3	47.1	49.4
L1032.067-100	38.1	5.3	M5	5.8	10.0	37.6	65.6	68.9
L1032.067-125	38.1	5.3	M5	5.8	10.0	43.2	75.4	79.2

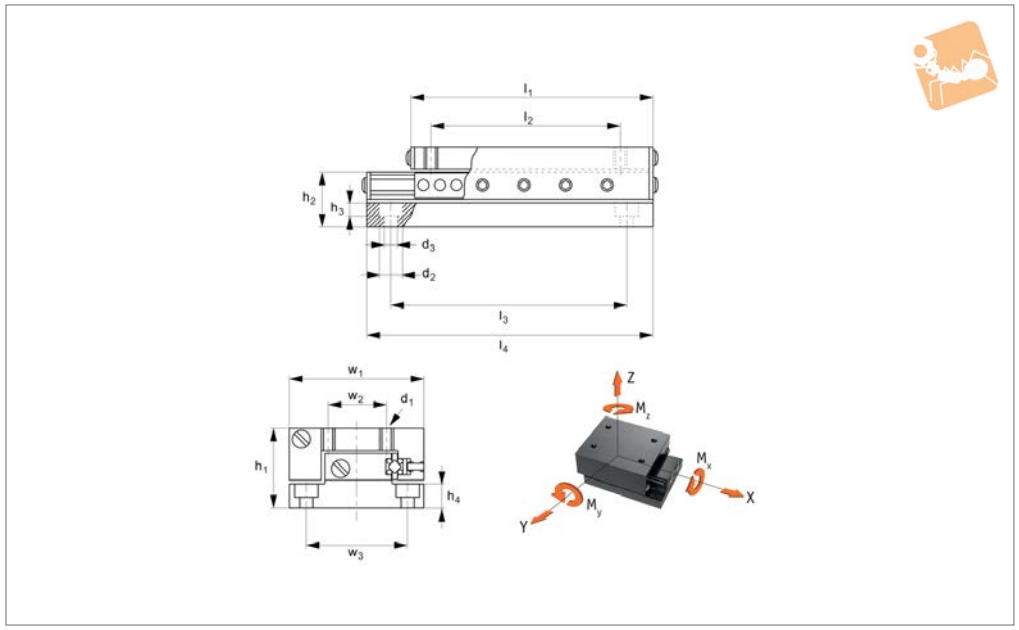
Low Profile Crossed Roller Table

high precision

Order No.	w_3	h_3	d_1	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1032.089-050	50.3	5.3	M5	5.8	10.0	19.4	56.0	5.86
L1032.089-075	50.3	5.3	M5	5.8	10.0	21.6	70.5	74.1
L1032.089-125	50.3	5.3	M5	5.8	10.0	24.5	92.0	93.9
L1032.089-165	50.3	5.3	M5	5.8	10.0	26.6	108	113
L1032.089-225	50.3	5.3	M5	5.8	10.0	29.5	142	149
L1032.146-125	94.0	6.2	M6	7.1	11.0	28.2	106	108
L1032.146-175	94.0	6.2	M6	7.1	11.0	30.6	124	130
L1032.146-250	94.0	6.2	M6	7.1	11.0	33.9	163	171



The stroke is centered on the mid point of the slides
(ie 50% of the stroke each way)



L1034

Material
Aluminium carriage and base.
Hardened stainless steel balls, shafts and preload gibs.

Technical Notes
Flange base allows easy mounting and extra stability.
Straight line accuracy: 1µ/25mm of travel.
Positional repeatability: 0,5µ.
Coefficient of friction: 0,002.
Carriage surface flat to 3µ/25mm.
Carriage and base ground to optical flatness.

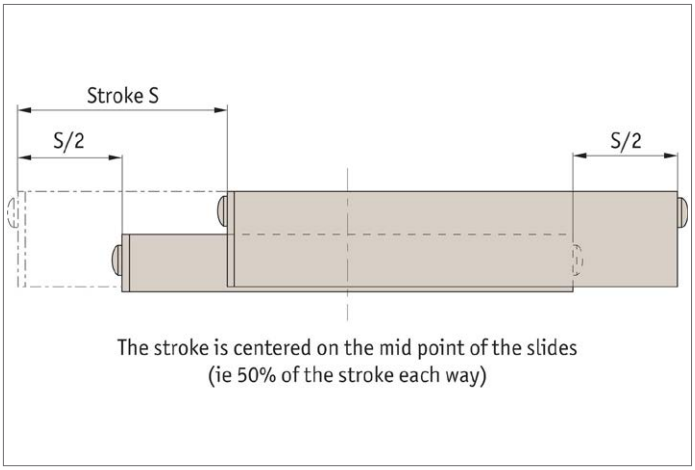
Tips
Stroke is centred on the mid-point of the slides (ie 50% of total stroke each way).

Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	l_3	l_4	w_2	h_2	Weight g
L1034.025-013	13	3.6	25.4	25.4	19.1	15	20	31.8	Centre	12.7	36
L1034.025-025	25	6.8	25.4	44.5	19.1	35	40	50.8	Centre	12.7	64
L1034.025-038	38	11.0	25.4	63.5	19.1	54	57	69.9	Centre	12.7	91
L1034.025-050	50	14.0	25.4	82.6	19.1	70	75	88.9	Centre	12.7	118
L1034.045-025	25	11.0	44.5	50.8	26.2	35	40	57.2	20	17.3	172
L1034.045-038	38	14.0	44.5	69.9	26.2	54	57	76.2	20	17.3	236
L1034.045-050	50	19.0	44.5	82.6	26.2	65	70	88.9	20	17.3	277
L1034.045-075	75	23.0	44.5	101.6	26.2	85	90	108.0	20	17.3	340
L1034.067-025	25	33.0	66.5	66.5	34.9	54	54	66.5	35	25.4	413
L1034.067-050	50	38.0	66.5	101.6	34.9	75	85	111.0	35	25.4	635
L1034.067-075	75	46.0	66.5	127.0	34.9	100	110	136.4	35	25.4	794
L1034.067-100	100	60.0	66.5	152.4	34.9	125	135	161.8	35	25.4	953
L1034.067-125	125	66.0	66.5	203.2	34.9	178	190	212.6	35	25.4	1270
L1034.089-050	50	59.0	88.9	101.6	44.5	50	65	114.3	50	25.0	1134
L1034.089-075	75	64.0	88.9	146.1	44.5	95	110	158.8	50	25.0	1628
L1034.089-125	125	73.0	88.9	203.2	44.5	150	175	215.9	50	25.0	2268
L1034.089-165	165	79.0	88.9	260.4	44.5	210	225	273.1	50	25.0	2908
L1034.089-225	225	91.0	88.9	355.6	44.5	305	320	368.3	50	25.0	3969

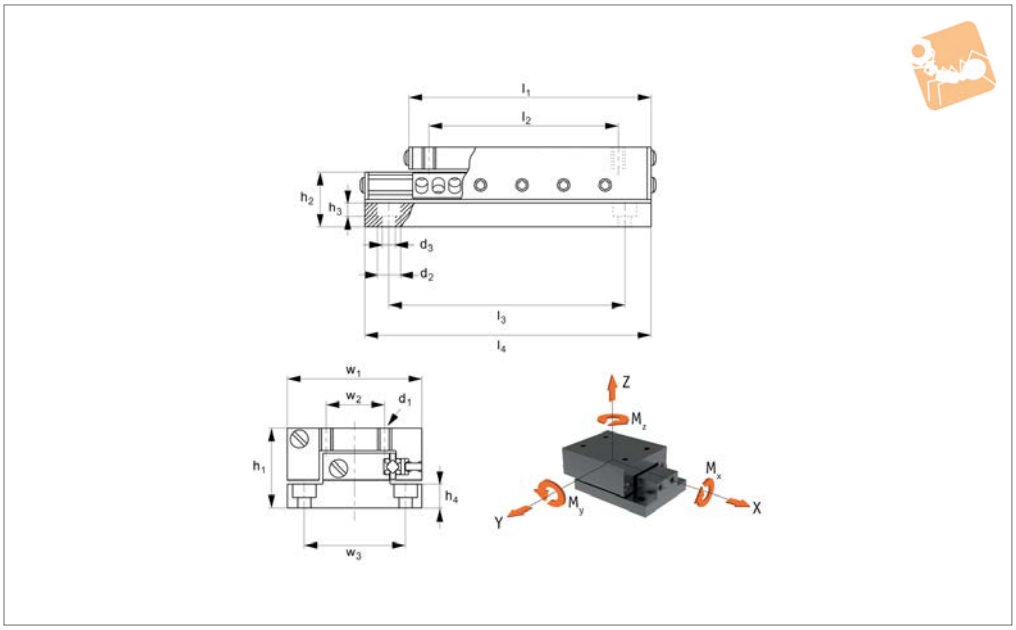
Order No.	w_3	h_3	d_1	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1034.025-013	19	3.4	M3	6.1	3.5	0.3	0.4	0.4
L1034.025-025	19	3.4	M3	6.1	3.5	0.4	1.0	1.1
L1034.025-038	19	3.4	M3	6.1	3.5	0.5	1.8	1.8
L1034.025-050	19	3.4	M3	6.1	3.5	0.7	2.6	3.7
L1034.045-025	33	4.6	M4	8.1	4.6	1.0	0.9	0.9
L1034.045-038	33	4.6	M4	8.1	4.6	1.4	2.0	2.1
L1034.045-050	33	4.6	M4	8.1	4.6	2.0	3.3	3.5
L1034.045-075	33	4.6	M4	8.1	4.6	2.5	4.7	4.9

Flanged Ball Slide Assemblies
high precision

Order No.	w_3	h_3	d_1	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1034.067-025	52	5.3	M5	10.0	5.8	4.6	3.8	4.0
L1034.067-050	52	5.3	M5	10.0	5.8	6.9	9.3	9.8
L1034.067-075	52	5.3	M5	10.0	5.8	8.4	14.5	15.2
L1034.067-100	52	5.3	M5	10.0	5.8	10.8	22.9	24.1
L1034.067-125	52	5.3	M5	10.0	5.8	11.9	34.4	36.1
L1034.089-050	70	5.3	M5	10.0	5.8	11.1	32.0	33.6
L1034.089-075	70	5.3	M5	10.0	5.8	12.3	40.3	42.3
L1034.089-125	70	5.3	M5	10.0	5.8	14.0	52.5	53.7
L1034.089-165	70	5.3	M5	10.0	5.8	15.2	61.4	64.5
L1034.089-225	70	5.3	M5	10.0	5.8	16.8	81.0	85.1



The stroke is centered on the mid point of the slides
(ie 50% of the stroke each way)



L1036

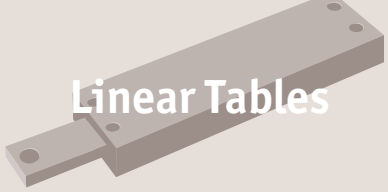
Material
Aluminium carriage and base.
Hardened stainless steel rollers, shafts and preload gibs.

Technical Notes
Flanged base with cross rollers offers the ultimate in accuracy, capacity and stability.
Straight line accuracy: 1µ/25mm of travel.
Positional repeatability: 0,5µ.
Coefficient of friction: 0,002.
Carriage surface flat to 3µ/25mm.
Carriage and base ground to optical flatness.

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

Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	l_3	l_4	w_2	h_2	Weight g
L1036.045-025	25	41	44.5	50.8	26.2	57.2	35	40	20	17.3	172
L1036.045-038	38	52	44.5	69.9	26.2	76.2	54	57	20	17.3	236
L1036.045-050	50	59	44.5	82.6	26.2	88.9	65	70	50	17.3	277
L1036.045-075	75	64	44.5	101.6	26.2	108.0	85	90	20	17.3	340
L1036.067-025	25	100	66.5	66.9	34.9	66.5	54	54	35	25.4	413
L1036.067-050	50	114	66.5	101.6	34.9	111.0	75	85	35	25.4	635
L1036.067-075	75	159	66.5	127.0	34.9	136.4	100	110	35	25.4	794
L1036.067-100	100	177	66.5	152.4	34.9	161.8	125	135	35	25.4	953
L1036.067-125	125	191	66.5	203.2	34.9	212.6	178	190	35	25.4	1270
L1036.089-050	50	118	88.9	101.6	44.5	114.3	50	65	50	25.0	1134
L1036.089-075	75	127	88.9	146.1	44.5	158.8	95	110	50	25.0	1628
L1036.089-125	125	145	88.9	203.2	44.5	215.9	150	175	50	25.0	2268
L1036.089-165	165	159	88.9	260.4	44.5	273.1	210	225	50	25.0	2908
L1036.089-225	225	182	88.9	355.6	44.5	368.3	305	320	50	25.0	3969
L1036.146-125	125	136	146.1	209.6	60.3	222.3	150	175	100	34.3	5443
L1036.146-175	175	163	146.1	304.8	60.3	317.5	250	275	100	34.3	7893
L1036.146-250	250	204	146.1	381.0	60.3	393.7	330	350	100	34.3	9870

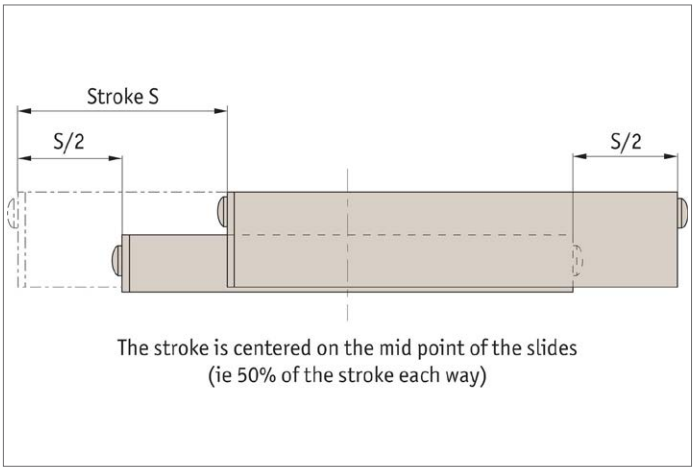
Order No.	w_3	h_3	d_1	d_2	d_3	Moment M_x Nm max.	h_4	Moment M_y Nm max.	Moment M_z Nm max.
L1036.045-025	33	7.1	M4	4.6	8.1	5.04	4.6	5.31	5.58
L1036.045-038	33	7.1	M4	4.6	8.1	5.61	4.6	8.29	8.58
L1036.045-050	33	7.1	M4	4.6	8.1	6.73	4.6	10.6	11.1
L1036.045-075	33	7.1	M4	4.6	8.1	7.85	4.6	12.4	13.0
L1036.067-025	52	9.4	M5	5.8	10.0	17.9	5.3	14.9	15.6
L1036.067-050	52	9.4	M5	5.8	10.0	20.4	5.3	25.4	26.7
L1036.067-075	52	9.4	M5	5.8	10.0	28.4	5.3	47.1	49.5
L1036.067-100	52	9.4	M5	5.8	10.0	37.7	5.3	65.6	68.9
L1036.067-125	52	9.4	M5	5.8	10.0	43.3	5.3	75.5	79.2



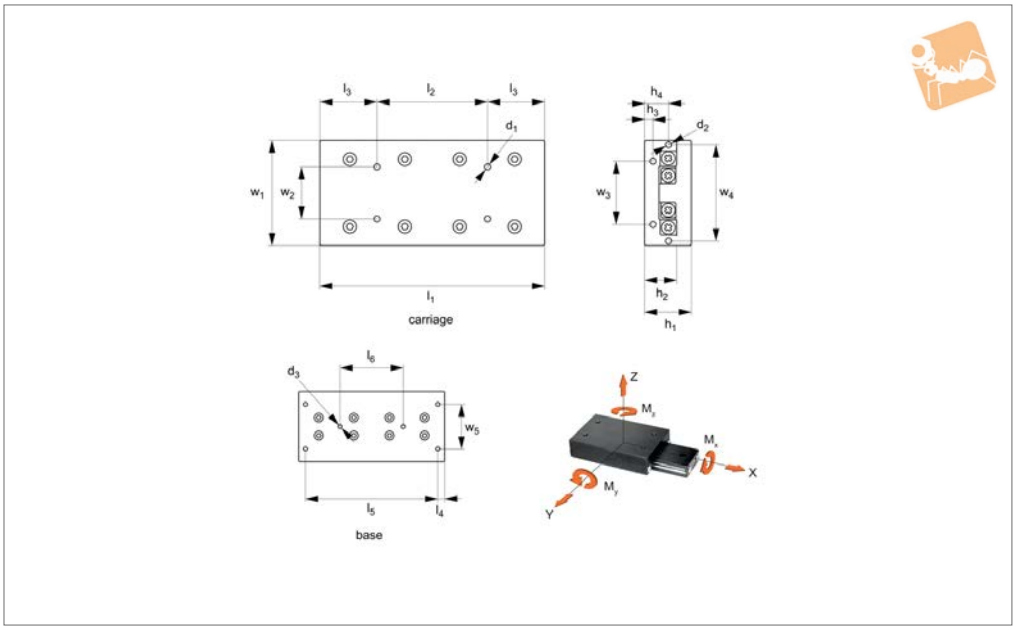
Flanged Crossed Roller Slides

wide base, high precision

Order No.	w_3	h_3	d_1	d_2	d_3	Moment M_x Nm max.	h_4	Moment M_y Nm max.	Moment M_z Nm max.
L1036.089-050	70	9.4	M5	5.8	10.0	19.5	5.3	56.1	58.9
L1036.089-075	70	9.4	M5	5.8	10.0	21.6	5.3	70.6	74.1
L1036.089-125	70	9.4	M5	5.8	10.0	24.6	5.3	92.0	94.0
L1036.089-165	70	9.4	M5	5.8	10.0	26.7	5.3	108	112
L1036.089-225	70	9.4	M5	5.8	10.0	29.6	5.3	142	158
L1036.146-125	127	9.4	M6	7.1	11.0	28.3	6.2	106	108
L1036.146-175	127	9.4	M6	7.1	11.0	30.7	6.2	124	130
L1036.146-250	127	9.4	M6	7.1	11.0	34.0	6.2	163	171



The stroke is centered on the mid point of the slides
(ie 50% of the stroke each way)



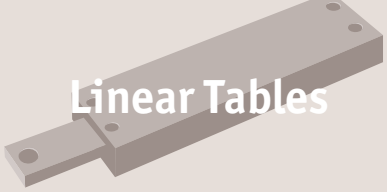
L1020

Material
Body carbon steel (S50C) nickel plated. Rail and rollers carbon steel (100Cr6), retainer stainless steel (AISI 304).

Technical Notes
Base and carriage with standard hole pattern. The top can be machined as required, taking care to disassemble first and ensure no dirt ingress. Alternatively we can machine any extra holes required (additional cost). Recommended allowable load is 1/3 of max. static load giving a safety factor of over 3.

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

Order No.	Static load C_0 kN max.	Stroke	Roller	w_1 ±0.1	l_2	h_1 ±0.1	h_2	l_1	w_2	d_1	l_3	l_4	w_3	Weight kg
L1020.030-025	0.57	12	1.5	30	-	17	11	25	10	M2x4	12.5	3.5	12	0.04
L1020.030-035	0.86	18	1.5	30	10	17	11	35	10	M2x4	12.5	3.5	12	0.05
L1020.030-045	1.1	25	1.5	30	10	17	11	45	10	M2x4	12.5	3.5	12	0.07
L1020.030-055	1.4	32	1.5	30	10	17	11	55	10	M2x4	12.5	3.5	12	0.08
L1020.030-065	1.7	40	1.5	30	10	17	11	65	10	M2x4	12.5	3.5	12	0.10
L1020.030-075	2.3	45	1.5	30	10	17	11	75	10	M2x4	12.5	3.5	12	0.12
L1020.030-085	2.6	50	1.5	30	10	17	11	85	10	M2x4	12.5	3.5	12	0.13
L1020.040-035	1.1	18	2.0	40	-	21	14	35	15	M3x6	17.5	5.0	16	0.09
L1020.040-050	2.3	30	2.0	40	15	21	14	50	15	M3x6	17.5	5.0	16	0.13
L1020.040-065	2.9	40	2.0	40	15	21	14	65	15	M3x6	17.5	5.0	16	0.17
L1020.040-080	3.5	50	2.0	40	15	21	14	80	15	M3x6	17.5	5.0	16	0.21
L1020.040-095	4.0	60	2.0	40	15	21	14	95	15	M3x6	17.5	5.0	16	0.25
L1020.040-110	5.2	70	2.0	40	15	21	14	110	15	M3x6	17.5	5.0	16	0.30
L1020.040-125	5.8	80	2.0	40	15	21	14	125	15	M3x6	17.5	5.0	16	0.34
L1020.040-140	6.4	90	2.0	40	15	21	14	140	15	M3x6	17.5	5.0	16	0.38
L1020.040-155	7.0	100	2.0	40	15	21	14	155	15	M3x6	17.5	5.0	16	0.42
L1020.040-170	8.1	110	2.0	40	15	21	14	170	15	M3x6	17.5	5.0	16	0.46
L1020.040-185	8.8	120	2.0	40	15	21	14	185	15	M3x6	17.5	5.0	16	0.50
L1020.060-055	4.5	30	3.0	60	-	28	18.5	55	25	M4x8	27.5	10.0	40	0.29
L1020.060-080	7.6	45	3.0	60	25	28	18.5	80	25	M4x8	27.5	10.0	40	0.43
L1020.060-105	10.6	60	3.0	60	25	28	18.5	105	25	M4x8	27.5	10.0	40	0.57
L1020.060-130	12.1	75	3.0	60	25	28	18.5	130	25	M4x8	27.5	10.0	40	0.71
L1020.060-155	15.2	90	3.0	60	25	28	18.5	155	25	M4x8	27.5	10.0	40	0.84
L1020.060-180	18.2	105	3.0	60	25	28	18.5	180	25	M4x8	27.5	10.0	40	0.98
L1020.060-205	19.7	130	3.0	60	25	28	18.5	205	25	M4x8	27.5	10.0	40	1.12
L1020.060-230	21.3	155	3.0	60	25	28	18.5	230	25	M4x8	27.5	10.0	40	1.25
L1020.060-255	24.3	180	3.0	60	25	28	18.5	255	25	M4x8	27.5	10.0	40	1.39
L1020.060-280	25.8	205	3.0	60	25	28	18.5	280	25	M4x8	27.5	10.0	40	1.53
L1020.060-305	27.4	230	3.0	60	25	28	18.5	305	25	M4x8	27.5	10.0	40	1.66
L1020.080-085	9.3	50	4.0	80	-	35	24.0	85	40	M5x10	42.5	10.5	55	0.76



Crossed Roller Tables

steel

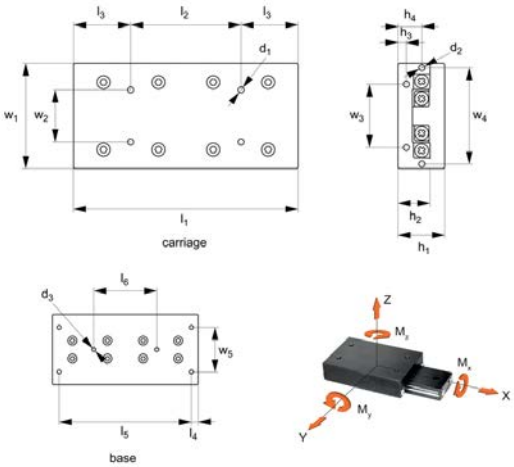
Order No.	Static load C_0 kN max.	Stroke	Roller	w_1 ±0.1	l_2	h_1 ±0.1	h_2	l_1	w_2	d_1	l_3	l_4	w_3	Weight kg
L1020.080-125	14.0	75	4.0	80	40	35	24.0	125	40	M5x10	42.5	10.5	55	1.12
L1020.080-165	16.3	105	4.0	80	40	35	24.0	165	40	M5x10	42.5	10.5	55	1.48
L1020.080-205	21.0	130	4.0	80	40	35	24.0	205	40	M5x10	42.5	10.5	55	1.84
L1020.080-245	25.7	155	4.0	80	40	35	24.0	245	40	M5x10	42.5	10.5	55	2.20
L1020.080-285	30.4	185	4.0	80	40	35	24.0	285	40	M5x10	42.5	10.5	55	2.56
L1020.080-325	35.0	210	4.0	80	40	35	24.0	325	40	M5x10	42.5	10.5	55	2.92
L1020.080-365	39.7	235	4.0	80	40	35	24.0	365	40	M5x10	42.5	10.5	55	3.28
L1020.080-405	44.4	265	4.0	80	40	35	24.0	405	40	M5x10	42.5	10.5	55	3.65
L1020.100-110	21.0	60	6.0	100	50	45	31.0	110	50	M6x12	55.0	10.0	60	1.60
L1020.100-160	26.3	95	6.0	100	50	45	31.0	160	50	M6x12	55.0	10.0	60	2.36
L1020.100-210	36.8	130	6.0	100	50	45	31.0	210	50	M6x12	55.0	10.0	60	3.11
L1020.100-260	47.3	165	6.0	100	50	45	31.0	260	50	M6x12	55.0	10.0	60	3.86
L1020.100-310	57.8	200	6.0	100	50	45	31.0	310	50	M6x12	55.0	10.0	60	4.62
L1020.100-360	68.4	235	6.0	100	50	45	31.0	360	50	M6x12	55.0	10.0	60	5.36
L1020.100-410	78.9	265	6.0	100	50	45	31.0	410	50	M6x12	55.0	10.0	60	6.12
L1020.100-460	84.2	300	6.0	100	50	45	31.0	460	50	M6x12	55.0	10.0	60	6.87
L1020.100-510	94.7	335	6.0	100	50	45	31.0	510	50	M6x12	55.0	10.0	60	7.62

Order No.	w_4	l_5	h_3	l_6	h_4	d_2	w_7	d_3	Dyn. load C kN max.	Allowable load kN	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1020.030-025	-	18	2.5	-	-	M2x6	22	4.5	0.38	0.19	2.6	1.2	1.4
L1020.030-035	-	28	2.5	-	-	M2x6	22	4.5	0.52	0.28	3.9	2.6	3.0
L1020.030-045	-	38	2.5	-	-	M2x6	22	4.5	0.65	0.38	5.2	4.6	5.2
L1020.030-055	-	48	2.5	-	-	M2x6	22	4.5	0.78	0.48	6.5	7.2	7.9
L1020.030-065	-	58	2.5	-	-	M2x6	22	4.5	0.90	0.57	7.8	10.4	11.2
L1020.030-075	-	68	2.5	-	-	M2x6	22	4.5	1.1	0.77	10.4	18.4	17.3
L1020.030-085	-	78	2.5	-	-	M2x6	22	4.5	1.2	0.86	11.7	23.3	22.0
L1020.040-035	-	25	3.4	-	-	M2x6	30	6.5	0.89	0.39	7.0	3.1	3.9
L1020.040-050	-	40	3.4	-	-	M2x6	30	6.5	1.5	0.78	14.0	12.5	10.9
L1020.040-065	-	55	3.4	-	-	M2x6	30	6.5	1.8	0.98	17.5	19.5	17.5
L1020.040-080	-	70	3.4	-	-	M2x6	30	6.5	2.1	1.1	21.1	28.1	30.4
L1020.040-095	-	85	3.4	-	-	M2x6	30	6.5	2.4	1.3	24.6	38.2	40.9
L1020.040-110	-	100	3.4	-	-	M2x6	30	6.5	2.9	1.7	31.6	63.2	59.6
L1020.040-125	-	115	3.4	-	-	M2x6	30	6.5	3.1	1.9	35.1	78.0	74.1
L1020.040-140	-	130	3.4	-	-	M2x6	30	6.5	3.4	2.1	38.6	94.3	98.6
L1020.040-155	-	145	3.4	-	-	M2x6	30	6.5	3.6	2.3	42.1	112	111
L1020.040-170	-	160	3.4	-	-	M2x6	30	6.5	4.1	2.7	49.1	152	147
L1020.040-185	-	175	3.4	-	-	M2x6	30	6.5	4.3	2.9	52.6	175	169
L1020.060-055	-	35	5.5	-	-	M3x6	40	8.0	2.9	1.5	42.6	22.8	26.6
L1020.060-080	-	60	5.5	-	-	M3x6	40	8.0	4.3	2.5	71.0	63.4	57.1
L1020.060-105	-	85	5.5	-	-	M3x6	40	8.0	5.6	3.5	99.5	124	115
L1020.060-130	-	110	5.5	-	-	M3x6	40	8.0	6.2	4.0	113	162	172
L1020.060-155	-	135	5.5	85	-	M3x6	40	8.0	7.4	5.0	142	253	266
L1020.060-180	-	160	5.5	110	-	M3x6	40	8.0	8.6	6.0	170	365	350
L1020.060-205	-	185	5.5	135	-	M3x6	40	8.0	9.1	6.6	184	428	445
L1020.060-230	-	210	5.5	160	-	M3x6	40	8.0	9.7	7.1	198	497	515
L1020.060-255	-	235	5.5	185	-	M3x6	40	8.0	10.7	8.1	227	649	629
L1020.060-280	-	260	5.5	210	-	M3x6	40	8.0	11.2	8.6	241	733	711
L1020.060-305	-	285	5.5	235	-	M3x6	40	8.0	11.8	9.1	255	822	844
L1020.080-085	-	65	6.5	-	-	M3x6	55	10.0	6.6	3.1	124	87.3	76.4
L1020.080-125	-	105	6.5	-	-	M3x6	55	10.0	9.0	4.6	187	196	180
L1020.080-165	-	145	6.5	-	-	M3x6	55	10.0	10.2	5.4	218	267	286
L1020.080-205	-	185	6.5	105	-	M3x6	55	10.0	12.5	7.0	280	442	466
L1020.080-245	-	225	6.5	145	-	M3x6	55	10.0	14.6	8.6	343	660	690
L1020.080-285	-	265	6.5	185	-	M3x6	55	10.0	16.6	10.1	405	922	957
L1020.080-325	-	305	6.5	225	-	M3x6	55	10.0	18.6	11.7	467	1128	1269
L1020.080-365	-	345	6.5	265	-	M3x6	55	10.0	20.5	13.2	530	1577	1623
L1020.080-405	-	385	6.5	305	-	M3x6	55	10.0	22.3	14.8	592	1970	1918
L1020.100-110	92	90	8.0	-	15	M4x8	60	11.5	13.9	7.0	315	252	221
L1020.100-160	92	140	8.0	-	15	M4x8	60	11.5	16.5	8.7	394	394	434
L1020.100-210	92	190	8.0	90	15	M4x8	60	11.5	21.6	12.2	552	773	828
L1020.100-260	92	240	8.0	140	15	M4x8	60	11.5	26.2	15.7	710	1279	1207
L1020.100-310	92	290	8.0	190	15	M4x8	60	11.5	30.7	19.3	868	1910	1823
L1020.100-360	92	340	8.0	240	15	M4x8	60	11.5	35.0	22.8	1026	2688	2565
L1020.100-410	92	390	8.0	290	15	M4x8	60	11.5	39.1	26.3	1184	3552	3434
L1020.100-460	92	440	8.0	340	15	M4x8	60	11.5	41.1	28.0	1263	4042	4168

Order No.	w_4	l_5	h_3	l_6	h_4	d_2	w_7	d_3	Dyn. load C kN max.	Allowable load kN	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1020.100-510	92	490	8.0	390	15	M4x8	60	11.5	45.1	31.5	1421	5115	5257

Crossed Roller Tables
aluminium

L1021



Material
Body aluminium alloy, black anodised. Rail and rollers carbon steel (100Cr6), retainer stainless steel (AISI 304).

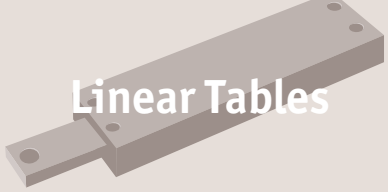
Technical Notes
Base and carriage with standard hole pattern. The top can be machined as required, taking care to disassemble first and ensure no dirt ingress. Alternatively we can machine any extra holes required (additional cost). Recommended allowable load is 1/3 of max. static load giving a safety factor of over 3.

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

Order No.	Static load C_0 kN max.	Stroke	Roller dia.	w_1 ±0.1	l_2	h_1 ±0.1	h_2	l_1	w_2	d_1	l_3	l_4	w_3	Weight kg
L1021.030-025	0.57	12	1.5	30	-	17	11	25	10	M2x4	12.5	3.5	12	0.09
L1021.030-035	0.86	18	1.5	30	10	17	11	35	10	M2x4	12.5	3.5	12	0.12
L1021.030-045	1.1	25	1.5	30	10	17	11	45	10	M2x4	12.5	3.5	12	0.16
L1021.030-055	1.4	32	1.5	30	10	17	11	55	10	M2x4	12.5	3.5	12	0.19
L1021.030-065	1.7	40	1.5	30	10	17	11	65	10	M2x4	12.5	3.5	12	0.23
L1021.030-075	2.3	45	1.5	30	10	17	11	75	10	M2x4	12.5	3.5	12	0.27
L1021.030-085	2.6	50	1.5	30	10	17	11	85	10	M2x4	12.5	3.5	12	0.30
L1021.040-035	1.1	18	2.0	40	-	21	14	35	15	M3x6	17.5	5.0	16	0.20
L1021.040-050	2.3	30	2.0	40	15	21	14	50	15	M3x6	17.5	5.0	16	0.29
L1021.040-065	2.9	40	2.0	40	15	21	14	65	15	M3x6	17.5	5.0	16	0.38
L1021.040-080	3.5	50	2.0	40	15	21	14	80	15	M3x6	17.5	5.0	16	0.46
L1021.040-095	4.0	60	2.0	40	15	21	14	95	15	M3x6	17.5	5.0	16	0.55
L1021.040-110	5.2	70	2.0	40	15	21	14	110	15	M3x6	17.5	5.0	16	0.64
L1021.040-125	5.8	80	2.0	40	15	21	14	125	15	M3x6	17.5	5.0	16	0.73
L1021.040-140	6.4	90	2.0	40	15	21	14	140	15	M3x6	17.5	5.0	16	0.82
L1021.040-155	7.0	100	2.0	40	15	21	14	155	15	M3x6	17.5	5.0	16	0.91
L1021.040-170	8.1	110	2.0	40	15	21	14	170	15	M3x6	17.5	5.0	16	1.00
L1021.040-185	8.7	120	2.0	40	15	21	14	185	15	M3x6	17.5	5.0	16	1.08
L1021.060-055	4.5	30	3.0	60	-	28	18.5	55	25	M4x8	27.5	10.0	40	0.66
L1021.060-080	7.6	45	3.0	60	25	28	18.5	80	25	M4x8	27.5	10.0	40	0.96
L1021.060-105	10.6	60	3.0	60	25	28	18.5	105	25	M4x8	27.5	10.0	40	1.26
L1021.060-130	12.1	75	3.0	60	25	28	18.5	130	25	M4x8	27.5	10.0	40	1.57
L1021.060-155	15.2	90	3.0	60	25	28	18.5	155	25	M4x8	27.5	10.0	40	1.87
L1021.060-180	18.2	105	3.0	60	25	28	18.5	180	25	M4x8	27.5	10.0	40	2.17
L1021.060-205	19.7	130	3.0	60	25	28	18.5	205	25	M4x8	27.5	10.0	40	2.47
L1021.060-230	21.3	155	3.0	60	25	28	18.5	230	25	M4x8	27.5	10.0	40	2.77
L1021.060-255	24.3	180	3.0	60	25	28	18.5	255	25	M4x8	27.5	10.0	40	3.07
L1021.060-280	25.8	205	3.0	60	25	28	18.5	280	25	M4x8	27.5	10.0	40	3.37
L1021.060-305	27.4	230	3.0	60	25	28	18.5	305	25	M4x8	27.5	10.0	40	3.68
L1021.080-085	9.3	50	4.0	80	-	35	24.0	85	40	M5x10	42.5	10.5	55	1.69

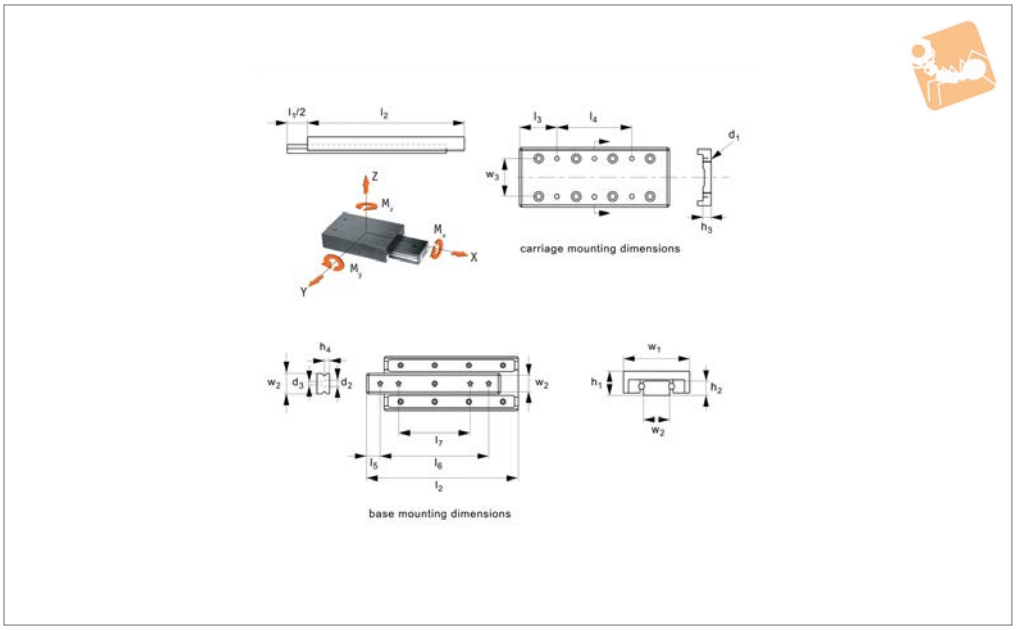
Order No.	Static load C_0 kN max.	Stroke	Roller dia.	w_1 ±0.1	l_2	h_1 ±0.1	h_2	l_1	w_2	d_1	l_3	l_4	w_3	Weight kg
L1021.080-125	14.0	75	4.0	80	40	35	24.0	125	40	M5x10	42.5	10.5	55	2.50
L1021.080-165	16.3	105	4.0	80	40	35	24.0	165	40	M5x10	42.5	10.5	55	3.31
L1021.080-205	21.0	130	4.0	80	40	35	24.0	205	40	M5x10	42.5	10.5	55	4.11
L1021.080-245	25.7	55	4.0	80	40	35	24.0	245	40	M5x10	42.5	10.5	55	4.91
L1021.080-285	30.4	185	4.0	80	40	35	24.0	285	40	M5x10	42.5	10.5	55	5.72
L1021.080-325	35.0	210	4.0	80	40	35	24.0	325	40	M5x10	42.5	10.5	55	6.51
L1021.080-365	39.7	235	4.0	80	40	35	24.0	365	40	M5x10	42.5	10.5	55	7.32
L1021.080-405	44.4	265	4.0	80	40	35	24.0	405	40	M5x10	42.5	10.5	55	8.13
L1021.100-110	21.0	60	6.0	100	50	45	31.0	110	50	M6x12	55.0	10.0	60	3.48
L1021.100-160	26.3	95	6.0	100	50	45	31.0	160	50	M6x12	55.0	10.0	60	5.10
L1021.100-210	36.8	130	6.0	100	50	45	31.0	210	50	M6x12	55.0	10.0	60	6.70
L1021.100-260	47.3	165	6.0	100	50	45	31.0	260	50	M6x12	55.0	10.0	60	8.32
L1021.100-310	57.9	200	6.0	100	50	45	31.0	310	50	M6x12	55.0	10.0	60	9.94
L1021.100-360	68.4	235	6.0	100	50	45	31.0	360	50	M6x12	55.0	10.0	60	11.53
L1021.100-410	78.9	265	6.0	100	50	45	31.0	410	50	M6x12	55.0	10.0	60	13.15
L1021.100-460	84.2	300	6.0	100	50	45	31.0	460	50	M6x12	55.0	10.0	60	14.76
L1021.100-510	94.7	335	6.0	100	50	45	31.0	510	50	M6x12	55.0	10.0	60	16.36

Order No.	w_4	l_5	h_3	l_6	h_4	d_2	w_7	d_3	Dyn. load C kN max.	Allowable load kN	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1021.030-025	-	18	2.5	-	-	M2x6	22	4.5	0.38	0.19	2.6	1.2	1.4
L1021.030-035	-	28	2.5	-	-	M2x6	22	4.5	0.52	0.28	3.9	2.6	3.0
L1021.030-045	-	38	2.5	-	-	M2x6	22	4.5	0.65	0.38	5.2	4.6	5.2
L1021.030-055	-	48	2.5	-	-	M2x6	22	4.5	0.78	0.48	6.5	7.2	7.9
L1021.030-065	-	58	2.5	-	-	M2x6	22	4.5	0.90	0.57	7.8	10.4	11.2
L1021.030-075	-	68	2.5	-	-	M2x6	22	4.5	1.1	0.77	10.4	18.4	17.3
L1021.030-085	-	78	2.5	-	-	M2x6	22	4.5	1.2	0.86	11.7	23.3	22.0
L1021.040-035	-	25	3.4	-	-	M2x6	30	6.5	0.89	0.39	7.0	3.1	3.9
L1021.040-050	-	40	3.4	-	-	M2x6	30	6.5	1.5	0.78	14.0	12.5	10.9
L1021.040-065	-	55	3.4	-	-	M2x6	30	6.5	1.8	0.97	17.5	19.5	17.5
L1021.040-080	-	70	3.4	-	-	M2x6	30	6.5	2.1	1.1	21.1	28.1	30.4
L1021.040-095	-	85	3.4	-	-	M2x6	30	6.5	2.4	1.3	24.6	38.2	40.9
L1021.040-110	-	100	3.4	-	-	M2x6	30	6.5	2.9	1.7	31.6	63.2	59.6
L1021.040-125	-	115	3.4	-	-	M2x6	30	6.5	3.1	1.9	35.1	78.0	74.1
L1021.040-140	-	130	3.4	-	-	M2x6	30	6.5	3.4	2.1	38.6	94.3	98.6
L1021.040-155	-	145	3.4	-	-	M2x6	30	6.5	3.6	2.3	42.1	112	111
L1021.040-170	-	160	3.4	-	-	M2x6	30	6.5	4.1	2.7	49.1	152	147
L1021.040-185	-	175	3.4	-	-	M2x6	30	6.5	4.3	2.9	52.6	175	169
L1021.060-055	-	35	5.5	-	-	M3x6	40	8.0	2.9	1.5	42.6	22.8	26.6
L1021.060-080	-	60	5.5	-	-	M3x6	40	8.0	4.3	2.5	71.0	63.4	57.1
L1021.060-105	-	85	5.5	-	-	M3x6	40	8.0	5.6	3.5	99.5	124	115
L1021.060-130	-	110	5.5	-	-	M3x6	40	8.0	6.2	4.0	113	162	172
L1021.060-155	-	135	5.5	85	-	M3x6	40	8.0	7.4	5.0	142	253	266
L1021.060-180	-	160	5.5	110	-	M3x6	40	8.0	8.6	6.0	170	365	350
L1021.060-205	-	185	5.5	135	-	M3x6	40	8.0	9.1	6.6	184	428	445
L1021.060-230	-	210	5.5	160	-	M3x6	40	8.0	9.7	7.1	198	497	515
L1021.060-255	-	235	5.5	185	-	M3x6	40	8.0	10.7	8.1	227	649	629
L1021.060-280	-	260	5.5	210	-	M3x6	40	8.0	11.2	8.6	241	733	711
L1021.060-305	-	285	5.5	235	-	M3x6	40	8.0	11.8	9.1	255	822	844
L1021.080-085	-	65	6.5	-	-	M3x6	55	10.0	6.6	3.1	124	87.3	76.4
L1021.080-125	-	105	6.5	-	-	M3x6	55	10.0	9.0	4.1	187	196	180
L1021.080-165	-	145	6.5	-	-	M3x6	55	10.0	10.2	5.4	218	267	286
L1021.080-205	-	185	6.5	105	-	M3x6	55	10.0	12.4	7.0	280	442	466
L1021.080-245	-	225	6.5	145	-	M3x6	55	10.0	14.6	8.5	343	660	690
L1021.080-285	-	265	6.5	185	-	M3x6	55	10.0	16.6	10.1	405	922	957
L1021.080-325	-	305	6.5	225	-	M3x6	55	10.0	18.6	11.7	467	1128	1269
L1021.080-365	-	345	6.5	265	-	M3x6	55	10.0	20.5	13.2	530	1577	1623
L1021.080-405	-	385	6.5	305	-	M3x6	55	10.0	22.3	14.8	592	1970	1918
L1021.100-110	92	90	8.0	-	15	M4x8	60	11.5	13.9	7.0	315	252	221
L1021.100-160	92	140	8.0	-	15	M4x8	60	11.5	16.6	8.7	394	394	434
L1021.100-210	92	190	8.0	90	15	M4x8	60	11.5	21.6	12.2	552	773	828
L1021.100-260	92	240	8.0	140	15	M4x8	60	11.5	26.2	15.7	710	1279	1207
L1021.100-310	92	290	8.0	190	15	M4x8	60	11.5	30.7	19.3	868	1910	1823
L1021.100-360	92	340	8.0	240	15	M4x8	60	11.5	35.0	22.8	1026	2688	2565
L1021.100-410	92	390	8.0	290	15	M4x8	60	11.5	39.1	26.3	1184	3552	3434
L1021.100-460	92	440	8.0	340	15	M4x8	60	11.5	41.1	28.0	1263	4042	4168



Crossed Roller Tables
aluminium

Order No.	w_4	l_5	h_3	l_6	h_4	d_2	w_7	d_3	Dyn. load C kN max.	Allowable load kN	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1021.100-510	92	490	8.0	390	15	M4x8	60	11.5	45.1	31.5	1421	5115	5257



L1027.AL

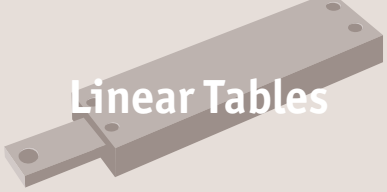
Material
Aluminium body, black anodised carriage. Hardened chrome steel crossed roller rail set.

Technical Notes
Straight line accuracy: 3µ/25mm of travel.
Positional repeatability: 3µ.
Coefficient of friction: 0,003 typical.

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

Order No.	Stroke l_1	Load kg max.	w_1 ±0.1	l_2	h_1 ±0.1	h_2	w_2	d_1	No. of carr holes	l_3	l_4	w_3
L1027.020-012-AL	12	23	20	25	8	4	6.6	M2	4	3.5	1x18	14
L1027.020-018-AL	18	32	20	35	8	4	6.6	M2	4	3.5	1x28	14
L1027.020-025-AL	25	47	20	45	8	4	6.6	M2	4	12.5	1x20	14
L1027.020-032-AL	32	54	20	55	8	4	6.6	M2	4	12.5	1x30	14
L1027.020-040-AL	40	60	20	65	8	4	6.6	M2	6	12.5	2x20	14
L1027.020-045-AL	45	73	20	75	8	4	6.6	M2	4	22.5	1x30	14
L1027.020-050-AL	50	79	20	85	8	4	6.6	M2	6	12.5	2x30	14
L1027.030-018-AL	18	40	30	35	12	6	12.0	M4	4	3.5	1x28	22
L1027.030-030-AL	30	63	30	50	12	6	12.0	M4	4	3.5	1x43	22
L1027.030-040-AL	40	75	30	65	12	6	12.0	M4	4	17.5	1x30	22
L1027.030-050-AL	50	95	30	80	12	6	12.0	M4	4	17.5	1x45	22
L1027.030-060-AL	60	105	30	95	12	6	12.0	M4	6	17.5	2x30	22
L1027.030-070-AL	70	120	30	110	12	6	12.0	M4	4	32.5	1x45	22
L1027.030-080-AL	80	130	30	125	12	6	12.0	M4	6	17.5	2x45	22
L1027.040-030-AL	30	126	40	55	16	8	16.0	M5	4	7.5	1x40	30
L1027.040-045-AL	45	183	40	80	16	8	16.0	M5	4	7.5	1x65	30
L1027.040-060-AL	60	220	40	105	16	8	16.0	M5	4	27.5	1x50	30
L1027.040-075-AL	75	275	40	130	16	8	16.0	M5	4	27.5	1x75	30
L1027.040-090-AL	90	310	40	155	16	8	16.0	M5	6	27.5	2x50	30
L1027.040-105-AL	105	355	40	180	16	8	16.0	M5	4	52.5	1x75	30
L1027.040-130-AL	130	375	40	205	16	8	16.0	M5	6	27.5	2x75	30

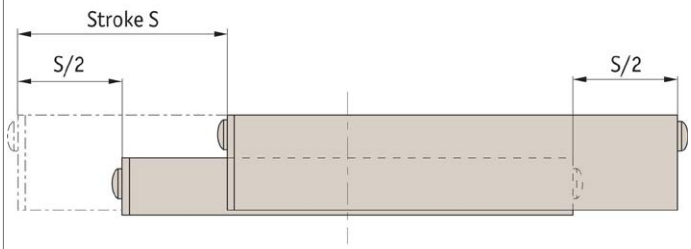
Order No.	l_5	No. of base holes	h_3	l_6	h_4	l_7	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1027.020-012-AL	3.5	2	3.5	18	2.5	-	3.9	2.6	0.80	1.29	1.33
L1027.020-018-AL	5.0	2	3.5	25	2.5	-	3.9	2.6	1.04	2.59	2.71
L1027.020-025-AL	3.5	4	3.5	38	2.5	25	3.9	2.6	1.51	4.55	4.79
L1027.020-032-AL	3.5	4	3.5	48	2.5	29	3.9	2.6	1.74	5.36	5.63
L1027.020-040-AL	5.0	4	3.5	55	2.5	31	3.9	2.6	1.94	8.16	8.33



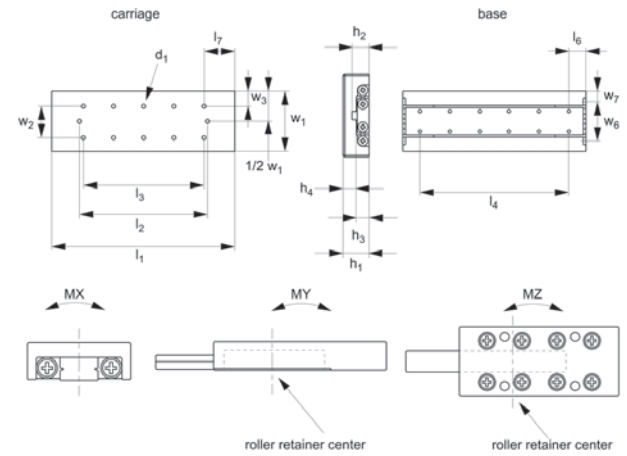
Low Profile Crossed Roller Table

aluminium/steel

Order No.	l_5	No. of base holes	h_3	l_6	h_4	l_7	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1027.020-045-AL	5.0	4	3.5	65	2.5	35	3.9	2.6	2.27	11.5	12.1
L1027.020-050-AL	5.0	4	3.5	75	2.5	40	3.9	2.6	2.55	13.9	14.6
L1027.030-018-AL	5.0	2	5.5	25	3.8	-	6.1	4	2.35	3.06	3.21
L1027.030-030-AL	7.5	2	5.5	35	3.8	-	6.1	4	3.71	6.49	6.80
L1027.030-040-AL	5.0	4	5.5	55	3.8	33	6.1	4	4.41	9.92	10.4
L1027.030-050-AL	5.0	4	5.5	70	3.8	40	6.1	4	5.58	15.3	16.1
L1027.030-060-AL	5.0	4	5.5	85	3.8	45	6.1	4	6.17	20.0	21.0
L1027.030-070-AL	7.5	4	5.5	95	3.8	50	6.1	4	7.05	26.4	27.7
L1027.030-080-AL	7.5	4	5.5	110	3.8	55	6.1	4	7.64	32.4	34.1
L1027.040-030-AL	7.5	2	7.5	40	5.2	-	8.3	5.2	9.87	14.8	15.5
L1027.040-045-AL	6.0	4	7.5	68	5.2	43	8.3	5.2	14.4	31.0	32.6
L1027.040-060-AL	7.5	4	7.5	90	5.2	55	8.3	5.2	17.2	48.5	50.9
L1027.040-075-AL	7.5	4	7.5	115	5.2	65	8.3	5.2	21.5	74.7	78.4
L1027.040-090-AL	7.5	4	7.5	140	5.2	95	8.3	5.2	24.2	100	105
L1027.040-105-AL	7.5	4	7.5	165	5.2	85	8.3	5.2	27.8	136	142
L1027.040-130-AL	7.5	4	7.5	190	5.2	90	8.3	5.2	29.4	158	166



The stroke is centered on the mid point of the slides
(ie 50% of the stroke each way)

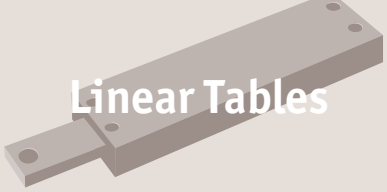


L1022.web

Material
Body stainless steel (440C), nickel plated apart from rail V groove. Retainer stainless (304), rollers stainless (440C).

Technical Notes
Carriage top parallelism 3µ.
Carriage side parallelism 5µ.

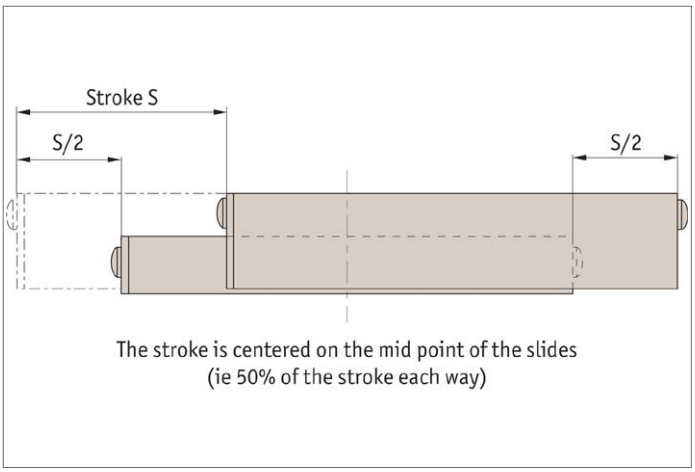
Order No.	l_1	Stroke	Static load C_0 kN max.	w_1	l_2	h_1	Roller	l_3	l_4	l_5	l_6	w_2	w_3	Weight kg
L1022.030-012	25	12	0.57	30	2.5	8	1.5	-	10	20	7.5	10	10	0.09
L1022.030-018	35	18	0.86	30	4.5	8	1.5	10	10	26	7.5	10	10	0.12
L1022.030-025	45	25	1.1	30	6.0	8	1.5	10	10	33	7.5	10	10	0.16
L1022.030-032	55	32	1.4	30	7.5	8	1.5	10	10	40	7.5	10	10	0.19
L1022.030-040	65	40	1.7	30	8.5	8	1.5	10	10	48	7.5	10	10	0.23
L1022.030-045	75	45	2.3	30	11.0	8	1.5	10	10	53	7.5	10	10	0.26
L1022.030-050	85	50	2.6	30	13.5	8	1.5	10	10	58	7.5	10	10	0.30
L1022.040-018	35	18	1.1	40	3.0	15	3.0	-	15	29	10	15	12.5	0.20
L1022.040-030	50	30	4.5	40	4.5	15	3.0	15	15	41	10	15	12.5	0.29
L1022.040-040	65	40	4.5	40	7.0	15	3.0	15	15	51	17.5	15	12.5	0.36
L1022.040-050	80	50	7.6	40	9.5	15	3.0	15	15	61	10	15	12.5	0.46
L1022.040-060	95	60	6.0	40	12.0	15	3.0	15	15	71	17.5	15	12.5	0.52
L1022.040-070	110	70	9.1	40	14.5	15	3.0	15	15	81	17.5	15	12.5	0.63
L1022.040-080	125	80	9.1	40	17.0	15	3.0	15	15	91	25	15	12.5	0.69
L1022.060-030	55	30	4.5	60	5.5	18.5	3.0	-	25	44	15	25	17.5	0.65
L1022.060-045	80	45	7.6	60	10.8	18.5	3.0	25	25	59	15	25	17.5	0.95
L1022.060-060	105	60	10.6	60	15.5	18.5	3.0	25	25	74	15	25	17.5	1.25
L1022.060-075	130	75	12.1	60	20.8	18.5	3.0	25	25	89	15	25	17.5	1.55
L1022.060-090	155	90	15.2	60	25.5	18.5	3.0	25	25	104	15	25	17.5	1.85
L1022.060-105	180	105	18.2	60	30.5	18.5	3.0	25	25	119	15	25	17.5	2.15
L1022.060-130	205	130	19.7	60	30.5	18.5	3.0	25	25	144	15	25	17.5	2.45
L1022.080-050	85	50	9.3	80	10.5	24	4.0	-	40	64	22.5	40	20	1.14
L1022.080-075	125	75	14.0	80	18	24	4.0	40	40	89	22.5	40	20	1.68
L1022.080-105	165	105	16.3	80	23	24	4.0	40	40	119	22.5	40	20	2.22
L1022.080-135	205	135	21.0	80	28	24	4.0	40	40	149	22.5	40	20	2.76
L1022.080-155	245	155	25.7	80	38	24	4.0	40	40	169	22.5	40	20	3.30
L1022.080-185	285	185	30.4	80	43	24	4.0	40	40	199	22.5	40	20	3.84
L1022.080-215	325	215	35.0	80	48	24	4.0	40	40	229	22.5	40	20	4.38
L1022.100-060	110	60	21.0	100	16.5	31	6.0	-	50	77	30	50	25	2.33
L1022.100-095	160	95	26.3	100	23.5	31	6.0	50	50	113	30	50	25	3.42
L1022.100-130	210	130	36.8	100	31	31	6.0	50	50	148	30	50	25	4.51
L1022.100-165	260	165	47.3	100	38.5	31	6.0	50	50	183	30	50	25	5.57
L1022.100-200	310	200	57.9	100	46	31	6.0	50	50	218	30	50	25	6.66
L1022.100-235	360	235	68.4	100	53.5	31	6.0	50	50	253	30	50	25	7.75



Stainless Cross Roller Slides
smaller sizes

Order No.	l_1	Stroke	Static load C_0 kN max.	w_1	l_2	h_1	Roller	l_3	l_4	l_5	l_6	w_2	w_3	Weight kg
L1022.100-265	410	265	78.9	100	63.5	31	6.0	50	50	283	30	50	25	8.84
L1022.100-340	510	340	100.0	100	81	31	6.0	50	50	348	30	50	25	11.02
L1022.145-130	210	130	72741	145	27	42.5	9.0	-	100	156	55	85	30	9.08
L1022.145-180	310	180	101838	145	52	42.5	9.0	100	100	206	55	85	30	13.46
L1022.145-350	410	350	116386	145	12	42.5	9.0	100	100	376	55	85	30	17.74
L1022.145-450	510	450	145482	145	17	42.5	9.0	100	100	476	55	85	30	22.11
L1022.145-550	610	550	160031	145	17	42.5	9.0	100	100	576	5527	85	30	26.47

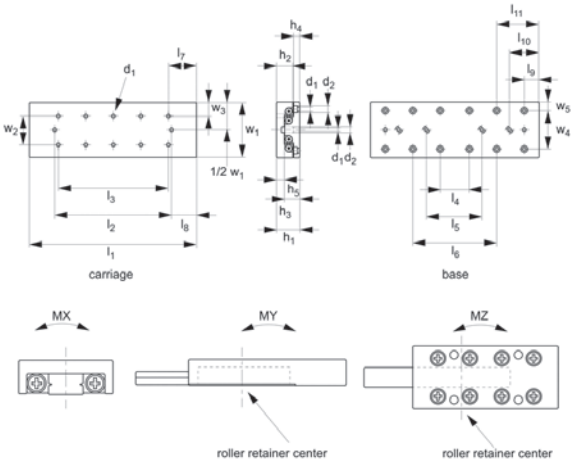
Order No.	w_4	w_5	w_6	w_7	h_2	h_3	h_4	d_1	Allowable load kN max.	Dyn. load C kN max.	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1022.030-012	12.8	8.6	-	15	11	7	4	M2	0.19	0.38	2.6	1.2	1.4
L1022.030-018	12.8	8.6	-	15	11	7	4	M2	0.28	0.52	3.9	2.6	3.0
L1022.030-025	12.8	8.6	-	15	11	7	4	M2	0.38	0.65	5.2	4.6	5.2
L1022.030-032	12.8	8.6	-	15	11	7	4	M2	0.48	0.78	6.5	7.2	7.9
L1022.030-040	12.8	8.6	-	15	11	7	4	M2	0.57	0.90	7.8	10.4	11.2
L1022.030-045	12.8	8.6	-	15	11	7	4	M2	0.77	1.1	10.4	18.4	17.3
L1022.030-050	12.8	8.6	-	15	11	7	4	M2	0.86	1.2	11.7	23.3	22.0
L1022.040-018	17	11.5	-	20	14	8	6	M3	0.39	0.89	7.0	3.1	3.9
L1022.040-030	13.1	13.5	-	20	15	7	8	M3	1.5	2.9	42.6	22.8	26.6
L1022.040-040	13.1	13.5	-	20	15	7	8	M3	1.5	2.9	42.6	22.8	19.0
L1022.040-050	13.1	13.5	-	20	15	7	8	M3	2.5	4.3	71.0	63.4	57.1
L1022.040-060	13.1	13.5	-	20	15	7	8	M3	2.0	3.6	56.8	40.6	45.7
L1022.040-070	13.1	13.5	-	20	15	7	8	M3	3.0	5.0	85.2	91.3	98.9
L1022.040-080	13.1	13.5	-	20	15	7	8	M3	3.0	5.0	85.2	91.3	83.7
L1022.060-030	26.6	16.7	17	21.5	18.5	10.5	8	M4	1.5	2.9	42.6	22.8	26.6
L1022.060-045	26.6	16.7	17	21.5	18.5	10.5	8	M4	2.5	4.3	71.0	63.4	57.1
L1022.060-060	26.6	16.7	17	21.5	18.5	10.5	8	M4	3.5	5.6	99.5	124	115
L1022.060-075	26.6	16.7	17	21.5	18.5	10.5	8	M4	4.0	6.2	113	162	172
L1022.060-090	26.6	16.7	17	21.5	18.5	10.5	8	M4	5.0	7.4	142	253	266
L1022.060-105	26.6	16.7	17	21.5	18.5	10.5	8	M4	6.0	8.6	170	365	350
L1022.060-130	26.6	16.7	17	21.5	18.5	10.5	8	M4	6.5	9.1	184	428	445
L1022.080-050	38	21	27	26.5	24	13	11	M5	3.1	6.6	124	87.3	76.4
L1022.080-075	38	21	27	26.5	24	13	11	M5	4.6	9.0	187	196	180
L1022.080-105	38	21	27	26.5	24	13	11	M5	5.4	10.2	218	267	286
L1022.080-135	38	21	27	26.5	24	13	11	M5	7.0	12.5	280	442	466
L1022.080-155	38	21	27	26.5	24	13	11	M5	8.5	14.6	343	660	690
L1022.080-185	38	21	27	26.5	24	13	11	M5	10.1	16.6	405	922	957
L1022.080-215	38	21	27	26.5	24	13	11	M5	11.6	18.6	467	1228	1187
L1022.100-060	42	29	26	37	31	16	15	M6	7.0	13.9	315	252	221
L1022.100-095	42	29	26	37	31	16	15	M6	8.7	16.6	394	394	434
L1022.100-130	42	29	26	37	31	16	15	M6	12.2	21.6	552	773	828
L1022.100-165	42	29	26	37	31	16	15	M6	15.7	26.2	710	1279	1207
L1022.100-200	42	29	26	37	31	16	15	M6	19.2	30.7	868	1910	1823
L1022.100-235	42	29	26	37	31	16	15	M6	22.8	35.0	1026	2668	2565
L1022.100-265	42	29	26	37	31	16	15	M6	26.3	39.1	1184	3552	3434
L1022.100-340	42	29	26	37	31	16	15	M6	33.3	47.5	1500	5194	5044
L1022.145-130	68.4	38.3	46	49.5	43	21	21	M8	24.2	46.9	1745	1697	1527
L1022.145-180	68.4	38.3	46	49.5	43	21	21	M8	33.9	61.1	2444	3326	3564
L1022.145-350	68.4	38.3	46	49.5	43	21	21	M8	38.7	67.9	2793	4345	4073
L1022.145-450	68.4	38.3	46	49.5	43	21	21	M8	48.4	80.8	3491	6789	6449
L1022.145-550	68.4	38.3	46	49.5	43	21	21	M8	53.3	87.0	3840	8214	8588



The stroke is centered on the mid point of the slides
(ie 50% of the stroke each way)

Stainless Cross Roller Slides
flanged, smaller sizes

L1023.web



Material
Body stainless steel (440C), nickel plated apart from rail V groove. Retainer stainless (304), rollers stainless (440C).

Technical Notes
Carriage top parallelism 3µ.
Carriage side parallelism 5µ.

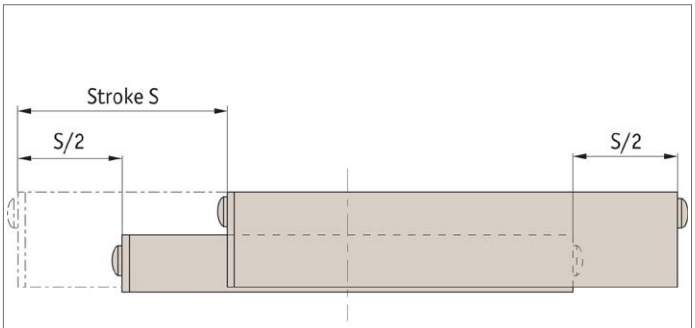
Order No.	l_1	Stroke	Static load C_0 kN max.	w_1	l_2	h_1	Roller	l_{10}	l_{11}	l_3	l_4	l_5	l_6	Weight kg
L1023.030-012	25	12	0.57	30	20	17	1.5	-	-	-	18	-	-	0.09
L1023.030-018	35	18	0.86	30	26	17	1.5	-	-	10	28	-	-	0.12
L1023.030-025	45	25	1.1	30	33	17	1.5	-	-	10	38	-	-	0.16
L1023.030.032	55	32	1.4	30	40	17	1.5	-	13.5	10	48	-	28	0.19
L1023.030.040	65	40	1.7	30	48	17	1.5	-	13.5	10	58	-	38	0.23
L1023.030-045	75	45	2.3	30	53	17	1.5	-	13.5	10	68	-	45	0.26
L1023.030-050	85	50	2.6	30	58	17	1.5	-	13.5	10	78	-	58	0.30
L1023.040-018	35	18	1.1	40	29	21	2.0	-	-	-	25	-	-	0.20
L1023.040-030	50	30	4.5	40	41	21	3.0	-	-	15	40	-	-	0.29
L1023.040-040	65	40	4.5	40	51	21	3.0	-	-	15	55	-	-	0.36
L1023.040-050	80	50	7.6	40	61	21	3.0	-	20	15	70	-	40	0.46
L1023.040-060	95	60	6.0	40	71	21	3.0	-	20	15	85	-	55	0.52
L1023.040-070	110	70	9.1	40	81	21	3.0	-	20	15	100	-	70	0.63
L1023.040-080	125	80	9.1	40	91	21	3.0	-	20	15	115	-	85	0.69
L1023.060-030	55	30	4.5	60	44	28	3.0	-	-	-	35	-	-	0.65
L1023.060-045	80	45	7.6	60	59	28	3.0	-	-	25	60	-	-	0.95
L1023.060-060	105	60	10.6	60	74	28	3.0	-	-	25	85	-	-	1.25
L1023.060-075	130	75	12.1	60	89	28	3.0	-	-	25	110	-	-	1.55
L1023.060-090	155	90	15.2	60	104	28	3.0	35	-	25	135	85	-	1.85
L1023.060-105	180	105	18.2	60	119	28	3.0	35	-	25	160	110	-	2.15
L1023.060-130	205	130	19.7	60	144	28	3.0	35	60	25	185	135	85	2.45
L1023.080-050	85	50	9.3	80	64	35	4.0	-	-	-	40	-	-	1.70
L1023.080-075	125	75	14.0	80	89	35	4.0	-	-	40	80	-	-	2.52
L1023.080-105	165	105	16.3	80	119	35	4.0	-	-	40	120	-	-	3.34
L1023.080-135	205	135	21.0	80	149	35	4.0	-	62.5	40	160	-	80	4.14
L1023.080-155	245	155	25.7	80	169	35	4.0	-	62.5	40	200	-	120	4.95
L1023.080-185	285	185	30.4	80	199	35	4.0	-	62.5	40	240	-	160	5.77
L1023.080-215	325	215	35.0	80	229	35	4.0	-	62.5	40	280	-	200	6.57
L1023.100-060	110	60	21.0	100	77	45	6.0	-	-	-	90	-	-	3.48
L1023.100-095	160	95	26.3	100	113	45	6.0	-	-	50	140	-	-	5.10
L1023.100-130	210	130	36.8	100	148	45	6.0	-	60	50	190	-	90	6.72
L1023.100-165	260	165	47.3	100	183	45	6.0	-	60	50	240	-	140	8.31
L1023.100-200	310	200	57.8	100	218	45	6.0	-	60	50	290	-	190	9.95
L1023.100-235	360	235	68.4	100	253	45	6.0	-	60	50	340	-	240	11.53

Order No.	l_1	Stroke	Static load C_0 kN max.	w_1	l_2	h_1	Roller	l_{10}	l_{11}	l_3	l_4	l_5	l_6	Weight kg
L1023.100-265	410	263	78.9	100	283	45	6.0	-	60	50	390	-	290	13.16
L1023.100-365	510	365	84.6	100	390	45	6.0	-	60	50	490	-	390	16.52
L1023.145-130	210	130	72.7	145	156	60	9.0	-	-	-	100	-	-	13.11
L1023.145-180	310	180	101.8	145	206	60	9.0	-	-	100	200	-	-	19.44
L1023.145-350	410	350	116.3	145	376	60	9.0	155	-	100	300	100	-	25.65
L1023.145-450	510	450	145.4	145	476	60	9.0	155	-	100	400	200	-	31.97
L1023.145-550	610	610	160.0	145	576	60	9.0	155	-	100	500	300	-	38.22

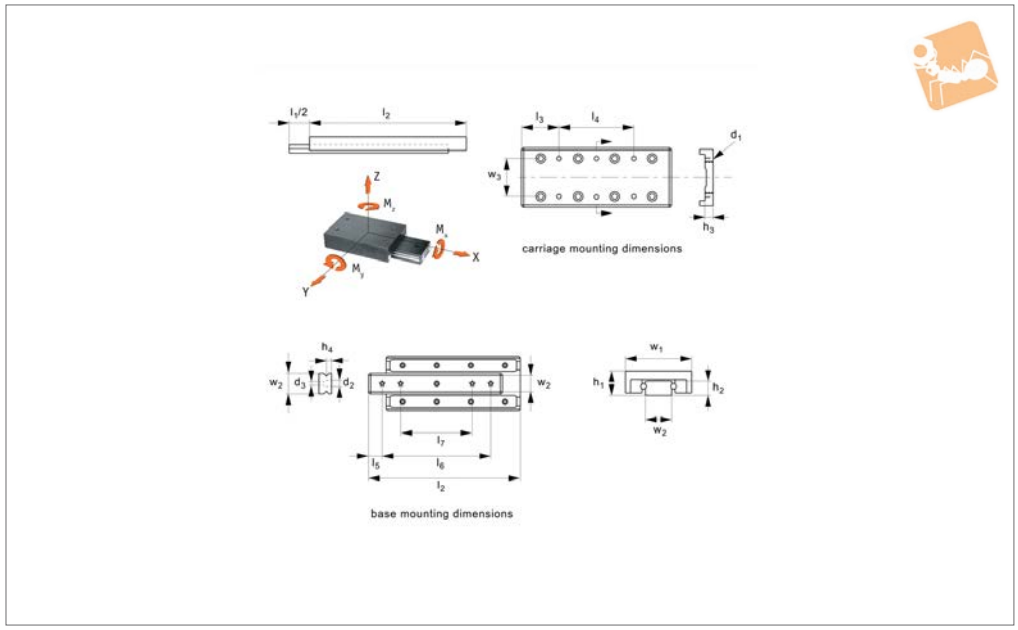
Order No.	l_7	l_8	l_9	w_2	w_3	w_4	w_5	h_2	h_3	h_4	d_1	Allowable load kN max.	Dyn. load C kN max.	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1023.030-012	12.5	2.5	3.5	10	10	22	4	11	10	5.5	2.55	0.19	0.38	2.6	1.2	1.4
L1023.030-018	12.5	4.5	3.5	10	10	22	4	11	10	5.5	2.55	0.28	0.52	3.9	2.6	3.0
L1023.030-025	12.5	6	3.5	10	10	22	4	11	10	5.5	2.55	0.38	0.65	5.2	4.6	5.2
L1023.030.032	12.5	7.5	3.5	10	10	22	4	11	10	5.5	2.55	0.48	0.78	6.5	7.2	7.9
L1023.030.040	12.5	8.5	3.5	10	10	22	4	11	10	5.5	2.55	0.57	0.90	7.8	10.4	11.2
L1023.030-045	12.5	11	3.5	10	10	22	4	11	10	5.5	2.55	0.77	1.1	10.4	18.4	17.3
L1023.030-050	12.5	13.5	3.5	10	10	22	4	11	10	5.5	2.55	0.86	1.2	11.7	23.3	22.0
L1023.040-018	17.5	3	5	15	12.5	30	5	8	13	6.5	3.5	0.39	0.89	7.0	3.1	3.9
L1023.040-030	17.5	4.5	5	15	12.5	30	5	14	14	5.5	3.5	1.5	2.9	42.6	22.8	26.6
L1023.040-040	17.5	7	5	15	12.5	30	5	14	14	5.5	3.5	1.5	2.9	42.6	22.8	19.0
L1023.040-050	17.5	9.5	5	15	12.5	30	5	14	14	5.5	3.5	2.5	4.3	71.0	63.4	57.1
L1023.040-060	17.5	12	5	15	12.5	30	5	14	14	5.5	3.5	2.0	3.6	56.8	40.6	45.7
L1023.040-070	17.5	14.5	5	15	12.5	30	5	14	14	5.5	3.5	3.0	5.0	85.2	91.3	98.9
L1023.040-080	17.5	17	5	15	12.5	30	5	14	14	5.5	3.5	3.0	5.0	85.2	91.3	83.7
L1023.060-030	27.5	5.5	10	25	17.5	40	10	18.5	17.5	9	4.5	1.5	2.9	46.6	22.8	26.6
L1023.060-045	27.5	10.8	10	25	17.5	40	10	18.5	17.5	9	4.5	2.5	4.3	71.0	63.4	57.1
L1023.060-060	27.5	15.5	10	25	17.5	40	10	18.5	17.5	9	4.5	3.5	5.6	99.5	124	115
L1023.060-075	27.5	20.8	10	25	17.5	40	10	18.5	17.5	9	4.5	4.0	6.2	113	162	172
L1023.060-090	27.5	25.5	10	25	17.5	40	10	18.5	17.5	9	4.5	5.0	7.4	142	253	266
L1023.060-105	27.5	30.5	10	25	17.5	40	10	18.5	17.5	9	4.5	6.0	8.6	170	365	350
L1023.060-130	27.5	30.5	10	25	17.5	40	10	18.5	17.5	9	4.5	6.6	9.1	184	428	445
L1023.080-050	42.5	10.5	22.5	40	20	60	10	24	22	10.5	5.5	3.1	6.6	124	87	76
L1023.080-075	42.5	18	22.5	40	20	60	10	24	22	10.5	5.5	4.6	9.0	187	196	180
L1023.080-105	42.5	23	22.5	40	20	60	10	24	22	10.5	5.5	5.4	10.2	218	267	286
L1023.080-135	42.5	28	22.5	40	20	60	10	24	22	10.5	5.5	7.0	12.4	280	442	466
L1023.080-155	42.5	38	22.5	40	20	60	10	24	22	10.5	5.5	8.5	14.6	343	660	690
L1023.080-185	42.5	43	22.5	40	20	60	10	24	22	10.5	5.5	10.1	16.6646	405	922	957
L1023.080-215	42.5	48	22.5	40	20	60	10	24	22	10.5	5.5	11.6	18.6	467	1228	1187
L1023.100-060	55	16.5	10	50	25	60	20	31	29	13	7	7.0	13.9	315	252	221
L1023.100-095	55	23.5	10	50	25	60	20	31	29	13	7	8.7	16.5	394	394	434
L1023.100-130	55	31	10	50	25	60	20	31	29	13	7	12.2	21.5	552	773	828
L1023.100-165	55	38.5	10	50	25	60	20	31	29	13	7	15.7	26.2	710	1279	1207
L1023.100-200	55	46	10	50	25	60	20	31	29	13	7	19.2	30.7	868	1910	1823
L1023.100-235	55	53.5	10	50	25	60	20	31	29	13	7	22.8	25.0	1026	2668	2565
L1023.100-265	55	63.5	10	50	25	60	20	31	29	13	7	26.3	39.1	1184	3552	3434
L1023.100-365	55	60	10	50	25	60	20	31	29	13	7	28.2	45.1	1269	4568	4441.
L1023.145-130	105	27	55	85	30	90	27.5	43	38.5	16	9	24.2	72.7	1745	1697	1527
L1023.145-180	105	52	55	85	30	90	27.5	43	38.5	16	9	33.9	101.8	2444	3326	3564
L1023.145-350	105	12	55	85	30	90	27.5	43	38.5	16	9	38.7	116.3	2793	4345	4073
L1023.145-450	105	17	55	85	30	90	27.5	43	38.5	16	9	48.4	145.4	3491	6789	6449
L1023.145-550	105	17	55	85	30	90	27.5	43	38.5	16	9	53.3	160.0	3840	8214	8588

Stainless Cross Roller Slides

flanged, smaller sizes



The stroke is centered on the mid point of the slides
(ie 50% of the stroke each way)



L1027.SS

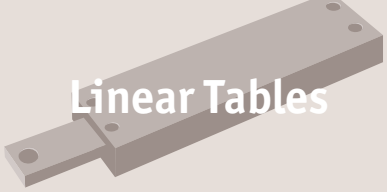
Material
Steel body (S50C), nickel plated.
Nickel plated cross roller rails and fasteners, steel rollers, stainless steel roller cages.

Technical Notes
Straight line accuracy: 3µ/25mm of travel.
Positional repeatability: 3µ.
Coefficient of friction: 0,003.

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

Order No.	Stroke l_1	Load kg max.	w_1 ±0.1	l_2	h_1 ±0.1	l_3	l_4	l_5	l_6	l_7	w_2	w_3
L1027.020-012-SS	12	23	20	25	8	3.5	1x18	3.5	18	-	6.6	14
L1027.020-018-SS	18	32	20	35	8	3.5	1x28	5.0	25	-	6.6	14
L1027.020-025-SS	25	47	20	45	8	12.5	1x20	3.5	38	25	6.6	14
L1027.020-032-SS	32	54	20	55	8	12.5	1x30	3.5	48	29	6.6	14
L1027.020-040-SS	40	60	20	65	8	12.5	2x20	5.0	55	31	6.6	14
L1027.020-045-SS	45	73	20	75	8	22.5	1x30	5.0	65	35	6.6	14
L1027.020-050-SS	50	79	20	85	8	12.5	2x30	5.0	75	40	6.6	14
L1027.030-018-SS	18	40	30	35	12	3.5	1x28	5.0	25	-	12.0	22
L1027.030-030-SS	30	63	30	50	12	3.5	1x43	7.5	35	-	12.0	22
L1027.030-040-SS	40	75	30	65	12	17.5	1x30	5.0	55	33	12.0	22
L1027.030-050-SS	50	95	30	80	12	17.5	1x45	5.0	70	40	12.0	22
L1027.030-060-SS	60	105	30	95	12	17.5	2x30	5.0	85	45	12.0	22
L1027.030-070-SS	70	120	30	110	12	32.5	1x45	7.5	95	50	12.0	22
L1027.030-080-SS	80	130	30	125	12	17.5	2x45	7.5	110	55	12.0	22
L1027.040-030-SS	30	126	40	55	16	7.5	1x40	7.5	40	-	16.0	30
L1027.040-045-SS	45	183	40	80	16	7.5	1x65	6.0	68	43	16.0	30
L1027.040-060-SS	60	220	40	105	16	27.5	1x50	7.5	90	55	16.0	30
L1027.040-075-SS	75	275	40	130	16	27.5	1x75	7.5	115	65	16.0	30
L1027.040-090-SS	90	310	40	155	16	27.5	2x50	7.5	140	95	16.0	30
L1027.040-105-SS	105	355	40	180	16	52.5	1x75	7.5	165	85	16.0	30
L1027.040-130-SS	130	375	40	205	16	27.5	2x75	7.5	190	90	16.0	30

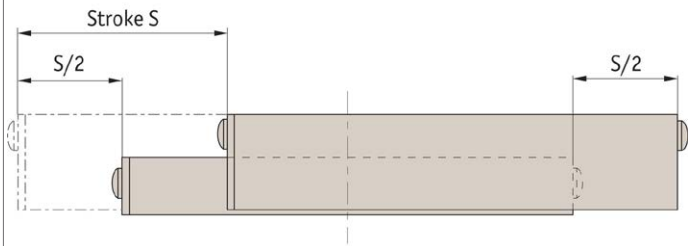
Order No.	h_2	h_3	h_4	d_1	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	No. of base holes	No. of carr holes
L1027.020-012-SS	4	3.5	2.5	M2	3.9	2.6	0.80	1.29	1.33	2	4
L1027.020-018-SS	4	3.5	2.5	M2	3.9	2.6	1.04	2.59	2.71	2	4
L1027.020-025-SS	4	3.5	2.5	M2	3.9	2.6	1.51	4.55	4.79	4	4
L1027.020-032-SS	4	3.5	2.5	M2	3.9	2.6	1.74	5.36	5.63	4	4
L1027.020-040-SS	4	3.5	2.5	M2	3.9	2.6	1.94	8.16	8.33	4	6
L1027.020-045-SS	4	3.5	2.5	M2	3.9	2.6	2.27	11.5	12.1	4	4
L1027.020-050-SS	4	3.5	2.5	M2	3.9	2.6	2.55	13.9	14.6	4	6



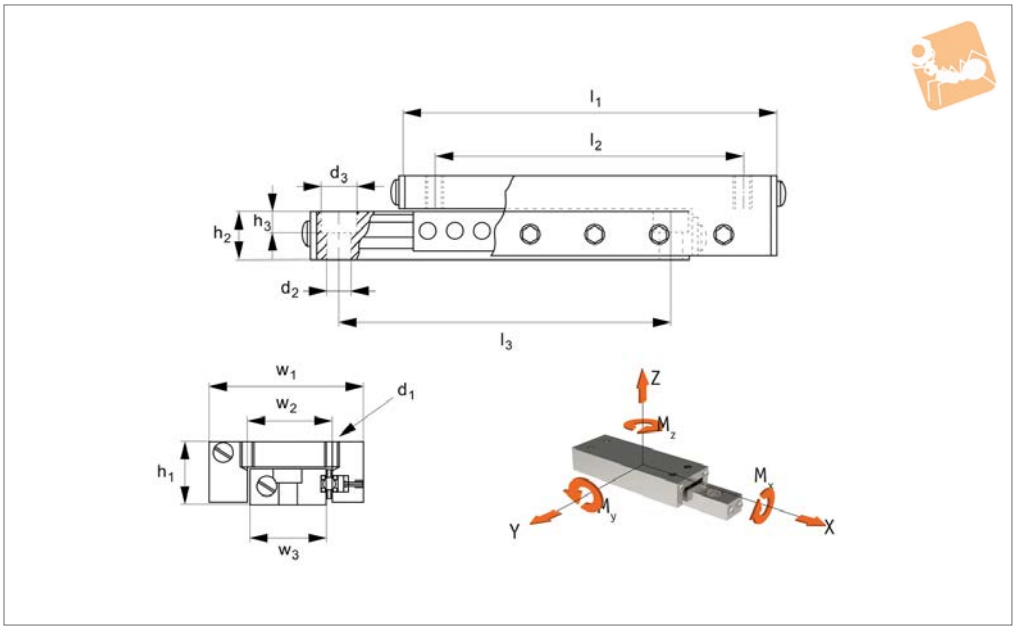
Low Profile Crossed Roller Table

anti-corrosion, nickel plated

Order No.	h_2	h_3	h_4	d_1	d_2	d_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	No. of base holes	No. of carr holes
L1027.030-018-SS	6	5.5	3.8	M4	6.1	4	2.35	3.06	3.21	2	4
L1027.030-030-SS	6	5.5	3.8	M4	6.1	4	3.71	6.49	6.80	2	4
L1027.030-040-SS	6	5.5	3.8	M4	6.1	4	4.41	9.92	10.4	4	4
L1027.030-050-SS	6	5.5	3.8	M4	6.1	4	5.58	15.3	16.1	4	4
L1027.030-060-SS	6	5.5	3.8	M4	6.1	4	6.17	20.0	21.0	4	6
L1027.030-070-SS	6	5.5	3.8	M4	6.1	4	7.05	26.4	27.7	4	4
L1027.030-080-SS	6	5.5	3.8	M4	6.1	4	7.64	32.4	34.1	4	6
L1027.040-030-SS	8	7.5	5.2	M5	8.3	5.2	9.87	14.8	15.5	2	4
L1027.040-045-SS	8	7.5	5.2	M5	8.3	5.2	14.4	31.0	32.6	4	4
L1027.040-060-SS	8	7.5	5.2	M5	8.3	5.2	17.2	48.5	50.9	4	4
L1027.040-075-SS	8	7.5	5.2	M5	8.3	5.2	21.5	74.7	78.4	4	4
L1027.040-090-SS	8	7.5	5.2	M5	8.3	5.2	24.2	100	105	4	6
L1027.040-105-SS	8	7.5	5.2	M5	8.3	5.2	27.8	136	142	4	4
L1027.040-130-SS	8	7.5	5.2	M5	8.3	5.2	29.4	158	166	4	6



The stroke is centered on the mid point of the slides
(ie 50% of the stroke each way)



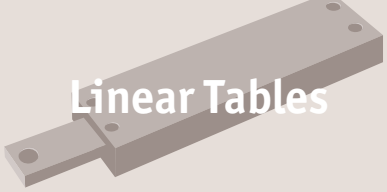
L1038

Material
Aluminium carriage (clear anodized) and base (black anodized).
Hardened stainless steel balls, shafts and preload gibs.

Technical Notes
Straight line accuracy: 13µ/25mm of travel.
Positional repeatability: 5µ.
Coefficient of friction: 0,003.
Increased life with overhanging loads.
Low friction, straight line design.
Factory preload controls side play and backlash.
Particularly useful for vertical applications.

Tips
In certain applications - uneven loads, vertical mounting or offset forces can cause standard ball retainers to become misaligned - leading eventually to a reduction in travel, the need for higher forces for full travel and ultimately failure of the assembly.
The anti-creep retainer used in these units prevents ball retainer misalignment and helps keep the rolling elements centred in the assembly - increasing assembly life and performance.
Stroke is centred on the mid-point of the slides (ie 50% of total stroke each way).

Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	w_2	h_2	w_3	l_3	Weight g
L1038.010-013	13	0.7	9.7	19.0	5.8	13.0	4.0	3.4	4.0	10.0	3
L1038.010-025	25	0.7	9.7	32.0	5.8	26.0	4.0	3.4	4.0	20.0	4
L1038.010-038	38	0.7	9.7	44.0	5.8	37.0	4.0	3.4	4.0	30.0	7
L1038.014-013	13	2	14.2	27.0	8.0	15.0	6.0	4.7	6.4	19.0	9
L1038.014-025	25	4	14.2	52.0	8.0	41.0	6.0	4.7	6.4	35.0	14
L1038.014-050	50	5	14.2	78.0	8.0	66.0	6.0	4.7	6.4	60.0	23
L1038.014-075	75	6	14.2	103.0	8.0	92.0	6.0	4.7	6.4	86.0	31
L1038.014-100	100	8	14.2	128.0	8.0	117.0	6.0	4.7	6.4	89.0	34
L1038.014-127	127	8	14.2	154.0	8.0	142.0	6.0	4.7	6.4	114.0	43
L1038.019-013	13	4	19.0	27.0	10.4	15.0	9.0	6.3	9.5	19.0	11
L1038.019-025	25	5	19.0	52.0	10.4	41.0	9.0	6.3	9.5	35.0	26
L1038.019-050	50	5	19.0	78.0	10.4	660	9.0	6.3	9.5	60.0	37
L1038.019-075	75	6	19.0	103.0	10.4	92.0	9.0	6.3	9.5	86.0	48
L1038.019-100	100	7	19.0	128.0	10.4	117.0	9.0	6.3	9.5	89.0	60
L1038.019-127	127	8	19.0	154.0	10.4	142.0	9.0	6.3	9.5	114.0	71
L1038.025-013	13	5	25.4	40.0	12.7	32.0	10.0	6.3	12.7	32.0	34
L1038.025-025	25	5	25.4	65.0	12.7	57.0	10.0	6.3	12.7	57.0	48
L1038.025-038	38	6	25.4	78.0	12.7	65.0	10.0	6.3	12.7	65.0	54
L1038.025-050	50	7	25.4	90.0	12.7	82.0	10.0	6.3	12.7	82.0	62
L1038.025-075	75	8	25.4	116.0	12.7	108.0	10.0	6.3	12.7	108.0	142
L1038.027-019	19	7	26.9	40.0	13.4	32.0	10.0	7.9	12.7	28.0	37
L1038.027-038	38	8	26.9	65.0	13.4	57.0	10.0	7.9	12.7	54.0	65
L1038.027-050	50	9	26.9	90.0	13.4	82.0	10.0	7.9	12.7	79.0	85
L1038.027-075	75	11	26.9	116.0	13.4	102.0	10.0	7.9	12.7	82.0	147
L1038.027-100	100	14	26.9	152.0	13.4	140.0	10.0	7.9	12.7	102.0	170



Anti-Creep Ball Slide Assemblies

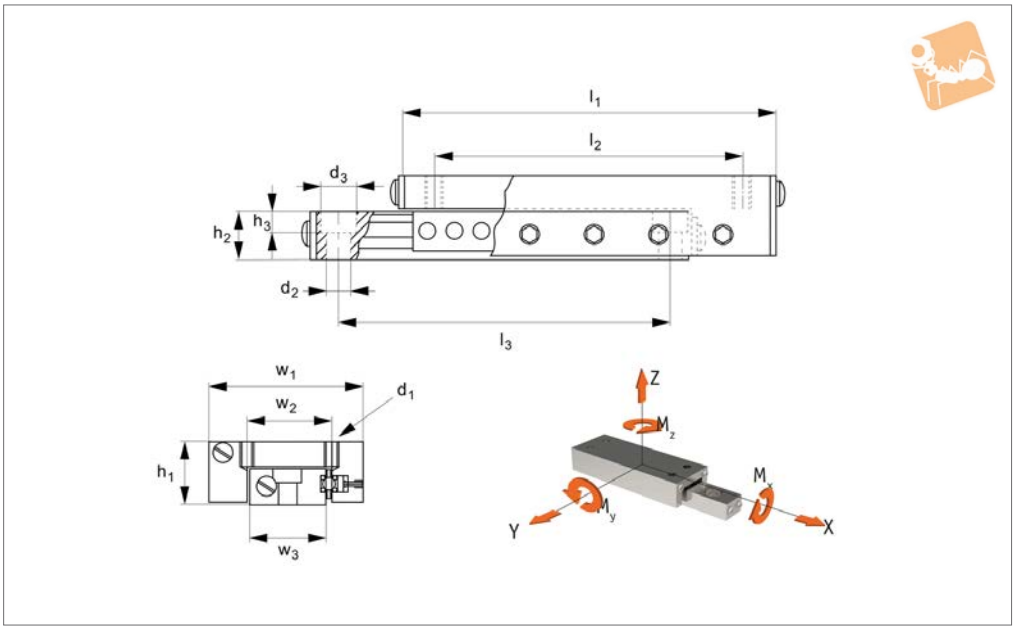
Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	w_2	h_2	w_3	l_3	Weight g
L1038.027-150	150	16	26.9	203.0	13.4	190.0	10.0	7.9	12.7	127.0	198
L1038.027-200	200	18	26.9	254.0	13.4	240.0	10.0	7.9	12.7	178.0	227
L1038.038-025	25	7	38.0	51.0	15.8	35.0	16.0	8.6	19.0	37.0	82
L1038.038-050	50	9	38.0	76.0	15.8	60.0	16.0	8.6	19.0	60.0	122
L1038.038-075	75	11	38.0	102.0	15.8	85.0	16.0	8.6	19.0	85.0	170
L1038.038-088	88	14	38.0	127.0	15.8	110.0	16.0	8.6	19.0	85.0	190
L1038.038-100	100	16	38.0	152.0	15.8	136.0	16.0	8.6	19.0	100.0	232
L1038.038-150	150	20	38.0	203.0	15.8	186.0	16.0	8.6	19.0	128.0	261
L1038.038-200	200	25	38.0	254.0	15.8	238.0	16.0	8.6	19.0	178.0	326
L1038.045-025	25	9	44.0	51.0	19.0	35.0	20.0	10.2	22.2	38.0	113
L1038.045-038	38	14	44.0	70.0	19.0	55.0	20.0	10.2	22.2	55.0	170
L1038.045-050	50	19	44.0	83.0	19.0	65.0	20.0	10.2	22.2	65.0	184
L1038.045-075	75	24	44.0	102.0	19.0	85.0	20.0	10.2	22.2	85.0	227
L1038.045-100	100	27	44.0	152.0	19.0	140.0	20.0	10.2	22.2	100.0	335
L1038.045-150	150	34	44.0	203.0	19.0	190.0	20.0	10.2	22.2	126.0	445
L1038.045-200	200	41	44.0	254.0	19.0	240.0	20.0	10.2	22.2	178.0	553
L1038.067-025	25	14	66.5	67.0	25.4	54.0	35.0	15.9	38.1	54.0	283
L1038.067-038	38	16	66.5	67.0	25.4	42.0	35.0	15.9	38.1	42.0	283
L1038.067-050	50	28	66.5	102.0	25.4	75.0	35.0	15.9	38.1	75.0	425
L1038.067-075	75	40	66.5	127.0	25.4	100.0	35.0	15.9	38.1	100.0	590
L1038.067-100	100	54	66.5	152.0	25.4	125.0	35.0	15.9	38.1	125.0	771
L1038.067-127	127	61	66.5	203.0	25.4	175.0	35.0	15.9	38.1	187.0	879
L1038.067-150	150	68	66.5	229.0	25.4	75.0	35.0	15.9	38.1	178.0	498
L1038.067-228	228	84	66.5	305.0	25.4	75.0	35.0	15.9	38.1	254.0	1318
L1038.067-304	304	93	66.5	381.0	25.4	75.0	35.0	15.9	38.1	330.0	1644

Order No.	d_1	d_2	d_3	h_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Counterbore screw size
L1038.010-013	M2	M2	-	-	0.1	0.2	0.2	-
L1038.010-025	M2	M2	-	-	0.1	0.3	0.3	-
L1038.010-038	M2	M2	-	-	0.1	0.5	0.5	-
L1038.014-013	M2	2.2	4.0	2.2	0.5	1.0	1.0	M2
L1038.014-025	M2	2.2	4.0	2.2	1.2	4.5	4.7	M2
L1038.014-050	M2	2.2	4.0	2.2	1.5	8.64	9.1	M2
L1038.014-075	M2	2.2	4.0	2.2	1.8	13.4	14.1	M2
L1038.014-100	M2	2.2	4.0	2.2	2.0	17.9	18.8	M2
L1038.014-127	M2	2.2	4.0	2.2	2.3	23.0	24.2	M2
L1038.019-013	M3	3.5	6.1	3.4	1.5	1.9	2.0	M3
L1038.019-025	M3	3.5	6.1	3.4	1.9	4.8	5.0	M3
L1038.019-050	M3	3.5	6.1	3.4	2.3	8.6	9.1	M3
L1038.019-075	M3	3.5	6.1	3.4	2.7	13.4	14.1	M3
L1038.019-100	M3	3.5	6.1	3.4	3.1	17.9	18.8	M3
L1038.019-127	M3	3.5	6.1	3.4	3.5	23.0	24.1	M3
L1038.025-013	M4	3.5	6.1	3.4	2.5	3.3	3.5	M3
L1038.025-025	M4	3.5	6.1	3.4	3.0	8.6	9.1	M3
L1038.025-038	M4	3.5	6.1	3.4	3.2	10.4	10.9	M3
L1038.025-050	M4	3.5	6.1	3.4	3.7	13.2	13.9	M3
L1038.025-075	M4	3.5	6.1	3.4	4.5	20.2	21.2	M3
L1038.027-019	M4	4.6	6.1	4.4	3.8	4.5	4.7	M4
L1038.027-038	M4	4.6	6.1	4.4	4.6	10.8	11.3	M4
L1038.027-050	M4	4.6	6.1	4.4	5.3	18.0	18.9	M4
L1038.027-075	M4	4.6	6.1	4.4	6.4	27.5	28.9	M4
L1038.027-100	M4	4.6	6.1	4.4	7.7	45.0	47.3	M4
L1038.027-150	M4	4.6	6.1	4.4	9.0	66.5	69.8	M4
L1038.027-200	M4	4.6	6.1	4.4	10.2	92.0	96.6	M4
L1038.038-025	M4	4.6	8.1	4.4	M4	5.6	6.0	6.3
L1038.038-050	M4	4.6	8.1	4.4	M4	7.4	12.0	12.6
L1038.038-075	M4	4.6	8.1	4.4	M4	9.2	20.0	21.0
L1038.038-088	M4	4.6	8.1	4.4	M4	11.1	33.0	34.6
L1038.038-100	M4	4.6	8.1	4.4	M4	12.9	49.0	51.4
L1038.038-150	M4	4.6	8.1	4.4	M4	16.6	81.0	85.0
L1038.038-200	M4	4.6	8.1	4.4	M4	20.3	121	127
L1038.045-025	M4	4.6	8.1	4.4	M4	8.5	8.0	8.4
L1038.045-038	M4	4.6	8.1	4.4	M4	12.8	18.0	18.9
L1038.045-050	M4	4.6	8.1	4.4	M4	17.9	29.4	30.9
L1038.045-075	M4	4.6	8.1	4.4	M4	22.1	41.6	43.7

Order No.	d_1	d_2	d_3	h_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Counterbore screw size
L1038.045-100	M4	4.6	8.1	4.4	M4	25.5	84.0	88.2
L1038.045-150	M4	4.6	8.1	4.4	M4	31.9	135	141
L1038.045-200	M4	4.6	8.1	4.4	M4	38.3	198	207
L1038.067-025	M5	5.8	10.0	5.3	M5	21.9	16.8	17.6
L1038.067-038	M5	5.8	10.0	5.3	M5	25.5	16.8	17.6
L1038.067-050	M5	5.8	10.0	5.3	M5	45.2	60.8	63.8
L1038.067-075	M5	5.8	10.0	5.3	M5	64.1	110.9	116.4
L1038.067-100	M5	5.8	10.0	5.3	M5	86.0	181	190
L1038.067-127	M5	5.8	10.0	5.3	M5	98.4	283	297
L1038.067-150	M5	5.8	10.0	5.3	M5	109.3	357	374
L1038.067-228	M5	5.8	10.0	5.3	M5	134.9	543	571
L1038.067-304	M5	5.8	10.0	5.3	M5	149.4	717	753

Non-Magnetic Ball Slide Assemblies

L1039



Material
Base and carriage aluminium. Titanium shafting gib strips, silicone nitride ceramic balls, brass fasteners.

Technical Notes
Straight line accuracy: 13µ/25mm travel.

Positional repeatability: 5µ.
Coefficient of friction 0,003 typical.

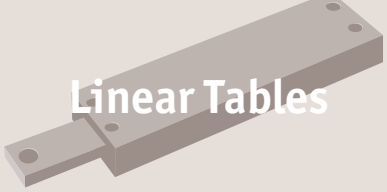
Tips
Non-magnetic and no lubrication required due to the self-cleaning ball bearing design.

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

Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	w_2	h_2	w_3	l_3	Weight g
L1039.014-013	13	0.5	14.2	27.0	8.0	15.0	6.0	4.7	6.4	19.0	9
L1039.014-025	25	1.1	14.2	52.0	8.0	41.0	6.0	4.7	6.4	35.0	14
L1039.014-050	50	1.6	14.2	78.0	8.0	66.0	6.0	4.7	6.4	60.0	23
L1039.014-075	75	1.9	14.2	103.0	8.0	92.0	6.0	4.7	6.4	86.0	31
L1039.014-100	100	2.2	14.2	128.0	8.0	117.0	6.0	4.7	6.4	89.0	34
L1039.014-127	127	2.5	14.2	154.0	8.0	142.0	6.0	4.7	6.4	114.0	43
L1039.019-013	13	1.1	19.0	27.0	10.4	15.0	9.0	6.3	9.5	19.0	11
L1039.019-025	25	1.4	19.0	52.0	10.4	41.0	9.0	6.3	9.5	35.0	26
L1039.019-050	50	1.6	19.0	78.0	10.4	66.0	9.0	6.3	9.5	60.0	37
L1039.019-075	75	1.9	19.0	103.0	10.4	92.0	9.0	6.3	9.5	86.0	48
L1039.019-100	100	2.2	19.0	128.0	10.4	117.0	9.0	6.3	9.5	89.0	60
L1039.019-127	127	2.5	19.0	154.0	10.4	142.0	9.0	6.3	9.5	114.0	71
L1039.025-013	13	1.4	25.4	40.0	12.7	32.0	10.0	6.3	12.7	32.0	34
L1039.025-025	25	1.6	25.4	65.0	12.7	57.0	10.0	6.3	12.7	57.0	48
L1039.025-038	38	1.8	25.4	78.0	12.7	65.0	10.0	6.3	12.7	65.0	54
L1039.025-050	50	2.1	25.4	90.0	12.7	82.0	10.0	6.3	12.7	82.0	62
L1039.025-075	75	2.5	25.4	116.0	12.7	108.0	10.0	6.3	12.7	108.0	142
L1039.027-019	19	2.1	26.9	40.0	13.4	32.0	10.0	7.9	12.7	28.0	37
L1039.027-038	38	2.5	26.9	65.0	13.4	57.0	10.0	7.9	12.7	54.0	65
L1039.027-050	50	2.7	26.9	90.0	13.4	82.0	10.0	7.9	12.7	79.0	85
L1039.027-075	75	3.4	26.9	116.0	13.4	102.0	10.0	7.9	12.7	82.0	147
L1039.027-100	100	4.1	26.9	152.0	13.4	140.0	10.0	7.9	12.7	102.0	170
L1039.027-150	150	4.8	26.9	203.0	13.4	190.0	10.0	7.9	12.7	127.0	198
L1039.027-200	200	5.4	26.9	254.0	13.4	240.0	10.0	7.9	12.7	178.0	227
L1039.038-025	25	2.1	38.0	51.0	15.8	35.0	16.0	8.6	19.0	37.0	82
L1039.038-050	50	2.7	38.0	76.0	15.8	60.0	16.0	8.6	19.0	60.0	122
L1039.038-075	75	3.4	38.0	102.0	15.8	85.0	16.0	8.6	19.0	85.0	170
L1039.038-088	88	4.1	38.0	127.0	15.8	110.0	16.0	8.6	19.0	85.0	190
L1039.038-100	100	4.8	38.0	152.0	15.8	136.0	16.0	8.6	19.0	100.0	232
L1039.038-150	150	6.1	38.0	203.0	15.8	186.0	16.0	8.6	19.0	128.0	261

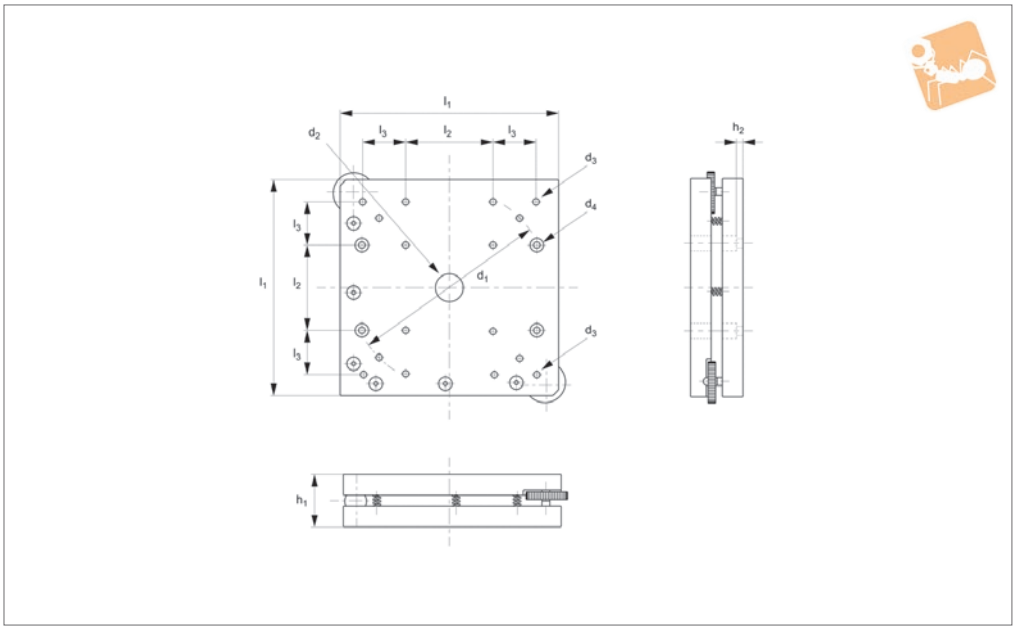
Order No.	Stroke	Load kg max.	w_1	l_1	h_1	l_2	w_2	h_2	w_3	l_3	Weight g
L1039.038-200	200	7.5	38.0	254.0	15.8	238.0	16.0	8.6	19.0	178.0	326
L1039.044-025	25	2.7	44.0	51.0	19.0	35.0	20.0	10.2	22.2	38.0	113
L1039.044-038	38	4.1	44.0	70.0	19.0	55.0	20.0	10.2	22.2	55.0	170
L1039.044-050	50	5.7	44.0	83.0	19.0	65.0	20.0	10.2	22.2	65.0	184
L1039.044-075	75	7.0	44.0	102.0	19.0	85.0	20.0	10.2	22.2	85.0	227
L1039.044-100	100	8.2	44.0	152.0	19.0	140.0	20.0	10.2	22.2	100.0	335
L1039.044-150	150	10.2	44.0	203.0	19.0	190.0	20.0	10.2	22.2	126.0	445
L1039.044-200	200	12.3	44.0	254.0	19.0	240.0	20.0	10.2	22.2	178.0	553
L1039.067-025	25	4.1	66.5	67.0	25.4	54.0	35.0	15.9	38.1	54.0	283
L1039.067-038	38	4.8	66.5	67.0	25.4	42.0	35.0	15.9	38.1	42.0	283
L1039.067-050	50	8.5	66.5	102.0	25.4	75.0	35.0	15.9	38.1	75.0	425
L1039.067-075	75	12.0	66.5	127.0	25.4	100.0	35.0	15.9	38.1	100.0	590
L1039.067-100	100	16.1	66.5	152.0	25.4	125.0	35.0	15.9	38.1	125.0	771
L1039.067-127	127	18.4	66.5	203.0	25.4	175.0	35.0	15.9	38.1	187.0	879
L1039.067-150	150	20.5	66.5	229.0	25.4	75.0	35.0	15.9	38.1	178.0	498
L1039.067-228	228	25.2	66.5	305.0	25.4	75.0	35.0	15.9	38.1	254.0	1318
L1039.067-304	304	28.0	66.5	381.0	25.4	75.0	35.0	15.9	38.1	330.0	1644

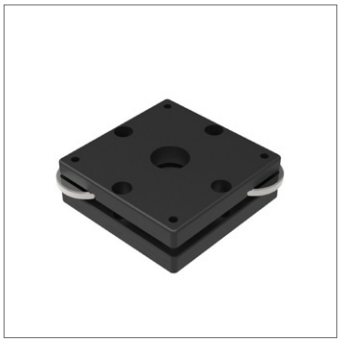
Order No.	d_1	d_2	d_3	h_3	Counterbore screw size	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1039.014-013	M2	2.2	4.0	2.2	M2	0.02	0.03	0.03
L1039.014-025	M2	2.2	4.0	2.2	M2	0.03	0.15	0.15
L1039.014-050	M2	2.2	4.0	2.2	M2	0.06	0.30	0.30
L1039.014-075	M2	2.2	4.0	2.2	M2	0.06	0.45	0.48
L1039.014-100	M2	2.2	4.0	2.2	M2	0.06	0.18	0.63
L1039.014-127	M2	2.2	4.0	2.2	M2	0.09	0.78	0.81
L1039.019-013	M3	3.5	6.1	3.4	M3	0.06	0.06	0.06
L1039.019-025	M3	3.5	6.1	3.4	M3	0.06	0.15	0.18
L1039.019-050	M3	3.5	6.1	3.4	M3	0.09	0.09	0.30
L1039.019-075	M3	3.5	6.1	3.4	M3	0.09	0.45	0.48
L1039.019-100	M3	3.5	6.1	3.4	M3	0.09	0.18	0.63
L1039.019-127	M3	3.5	6.1	3.4	M3	0.12	0.78	0.81
L1039.025-013	M4	3.5	6.1	3.4	M3	0.09	0.12	0.72
L1039.025-025	M4	3.5	6.1	3.4	M3	0.09	0.09	0.09
L1039.025-038	M4	3.5	6.1	3.4	M3	0.12	0.36	0.36
L1039.025-050	M4	3.5	6.1	3.4	M3	0.12	0.45	0.48
L1039.025-075	M4	3.5	6.1	3.4	M3	0.15	0.69	0.72
L1039.027-019	M4	4.6	8.1	4.4	M4	0.12	0.15	0.15
L1039.027-038	M4	4.6	8.1	4.4	M4	0.15	0.36	0.39
L1039.027-050	M4	4.6	8.1	4.4	M4	0.18	0.18	0.63
L1039.027-075	M4	4.6	8.1	4.4	M4	0.21	0.93	0.99
L1039.027-100	M4	4.6	8.1	4.4	M4	0.04	1.53	1.59
L1039.027-150	M4	4.6	8.1	4.4	M4	0.09	2.25	2.37
L1039.027-200	M4	4.6	8.1	4.4	M4	0.36	3.09	3.27
L1039.038-025	M4	4.6	8.1	4.4	M4	0.18	0.21	0.21
L1039.038-050	M4	4.6	8.1	4.4	M4	0.24	0.42	0.42
L1039.038-075	M4	4.6	8.1	4.4	M4	0.09	0.69	0.72
L1039.038-088	M4	4.6	8.1	4.4	M4	0.36	1.11	1.17
L1039.038-100	M4	4.6	8.1	4.4	M4	0.45	1.65	1.74
L1039.038-150	M4	4.6	8.1	4.4	M4	0.57	2.73	2.88
L1039.038-200	M4	4.6	8.1	4.4	M4	0.69	4.08	4.29
L1039.044-025	M4	4.6	8.1	4.4	M4	0.30	0.27	0.27
L1039.044-038	M4	4.6	8.1	4.4	M4	1.1	0.60	0.63
L1039.044-050	M4	4.6	8.1	4.4	M4	0.60	0.99	1.05
L1039.044-075	M4	4.6	8.1	4.4	M4	0.75	1.41	1.47
L1039.044-100	M4	4.6	8.1	4.4	M4	0.87	3.00	3.00
L1039.044-150	M4	4.6	8.1	4.4	M4	1.08	4.56	4.8
L1039.044-200	M4	4.6	8.1	4.4	M4	1.29	6.69	7.02
L1039.067-025	M5	5.8	10.0	5.3	M5	0.75	0.57	0.6
L1039.067-038	M5	5.8	10.0	5.3	M5	0.87	0.57	0.6
L1039.067-050	M5	5.8	10.0	5.3	M5	1.53	2.07	2.16
L1039.067-075	M5	5.8	10.0	5.3	M5	2.16	3.75	3.93
L1039.067-100	M5	5.8	10.0	5.3	M5	2.91	6.15	6.45
L1039.067-127	M5	5.8	10.0	5.3	M5	3.33	9.60	10.08
L1039.067-150	M5	5.8	10.0	5.3	M5	3.69	12.09	12.69
L1039.067-228	M5	5.8	10.0	5.3	M5	4.56	18.42	19.35



Non-Magnetic Ball Slide Assemblies

Order No.	d_1	d_2	d_3	h_3	Counterbore screw size	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L1039.067-304	M5	5.8	10.0	5.3	M5	5.04	24.3	25.53

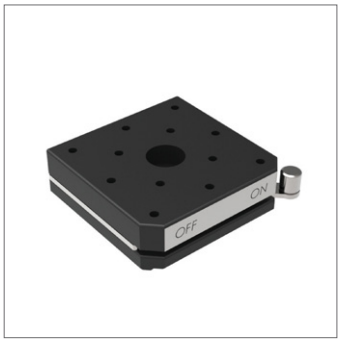




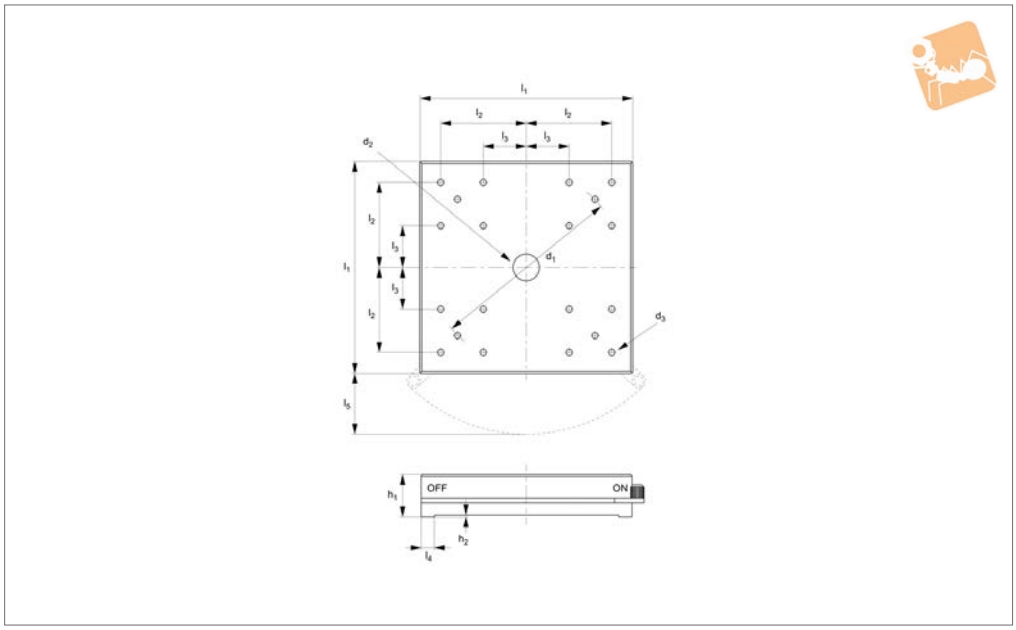
L3310

Material
Aluminium body blackened, steel knob.

Order No.	h_1	Load kg max.	Travel/rev	Travel distance	d_1	d_2	d_3	d_4	h_2	l_1	l_2	l_3
L3310.030	15	2.0	1° 25‘	±2°	-	M 6x1	M2	2.5	2	30	24	-
L3310.060	20	4.0	0° 40‘	±2°	-	M16x1	M4	4.5	4	60	50	-
L3310.090	23	5.0	0° 24‘	±2°	114	M16x1	M4	4.5	4	90	50	-
L3310.125	30	5.0	0° 15‘	±2°	114	M16x1	M4	4.5	4	125	50	25

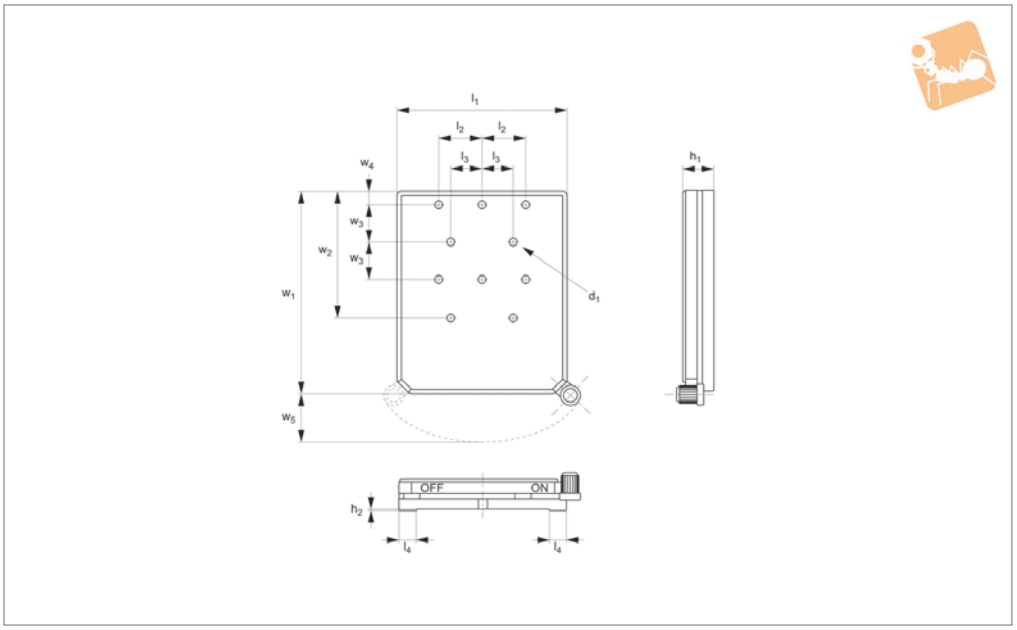


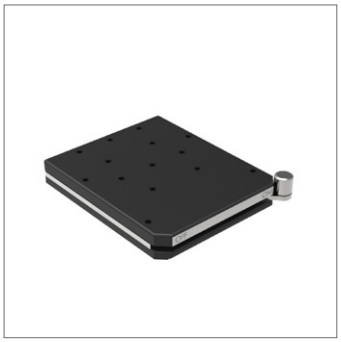
L3314



Material
Aluminium body blackened, steel knob.

Order No.	l_1	h_1	Holding force kgf	Parallelism	l_2	l_3	l_4	l_5	d_1	d_2	d_3	h_2
L3314.045	45	20	17.0	0.015	12	-	3	14.5	-	M 6x1	M2	1
L3314.065	65	20	20.0	0.020	25	-	4	18.5	-	M16x1	M4	1
L3314.090	90	20	25.0	0.020	25	-	6	28.0	114	M16x1	M4	1
L3314.125	125	25	100.0	0.020	50	25	8	35.5	114	M16x1	M4	1





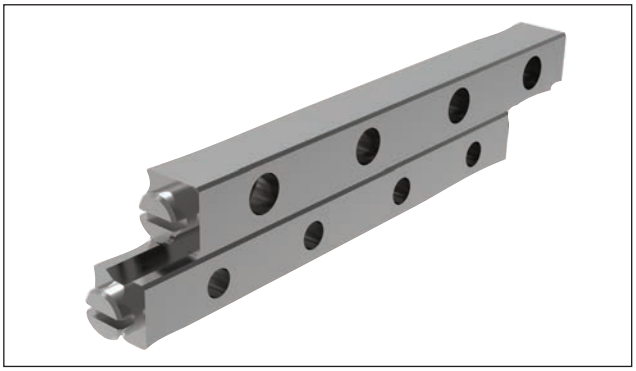
L3315

Material
Aluminium body blackened, steel knob.

Order No.	l_1	h_1	w_1	Holding force kgf	Parallelism	l_2	l_3	l_4	d_1	w_2	w_3	w_4	h_2	w_5
L3315.038	38	12	51	1.0	0.015	12.5	8.5	12.5	M3	35	15	5	0.5	16
L3315.052	52	12	63	3.3	0.020	17.0	12.5	12.0	M3	50	15	5	0.5	18
L3315.066	66	12	80	3.8	0.020	17.0	12.5	10.0	M3	50	15	5	0.5	19

Linear Rail Sets

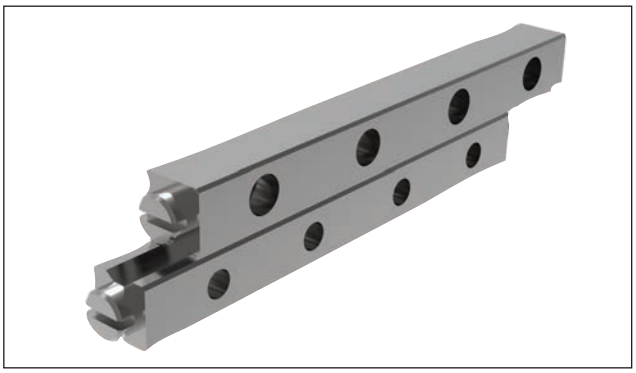
Overview



Standard cross roller rail sets

L1000 & L1001

- Seven rail profiles (Sizes 1-12)
- Lengths: 20mm to 1 metre
- L1000 standard rail set
- L1001 corrosion resistant rail sets



Deep groove and anti-creep rail sets

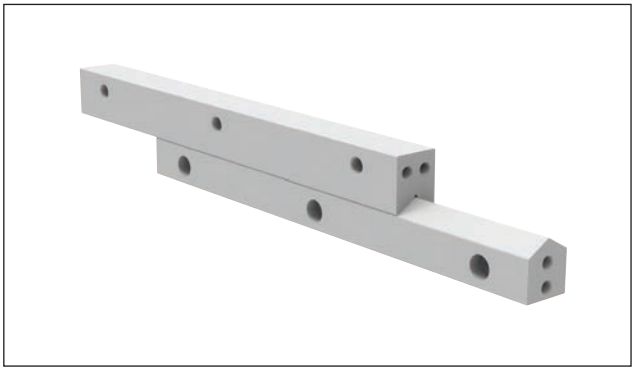
L1002 + L1003

- 3 x load capacity of standard rail sets (due to deep V groove)
- Two rail profiles (Sizes 4 & 6)
- Lengths 50mm to 400mm
- Anti-creep versions for high acceleration applications

Needle roller rail sets

L1004

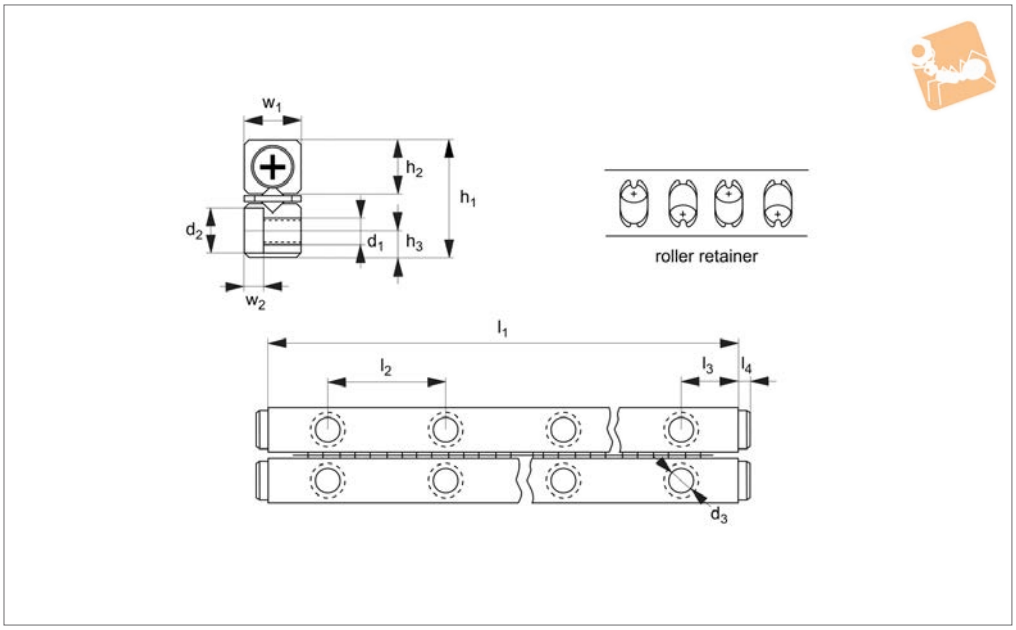
- Heavy load ratings and needle rollers are used
- Five rail profile size
- Lengths: 200mm to 1.2 metres



Anti-friction coated rail sets

L1005 & L1006

- Same profile as needle roller rails but contact face Teflon coated.
- Ideal for harsh, dirty conditions
- Vibration damping characteristics



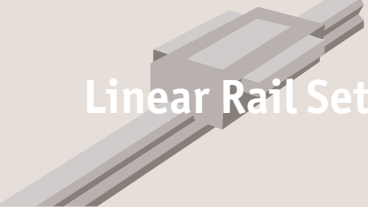
L1000

Material
Alloy steel rail and roller (DIN 1.2842), through hardened to 60±2 HRC.
Stainless steel roller retainer (AISI 304).

Technical Notes
Supplied in sets of 4 rails (with 2 roller cages and 8 end screws as standard). See table for number of rollers in each cage.

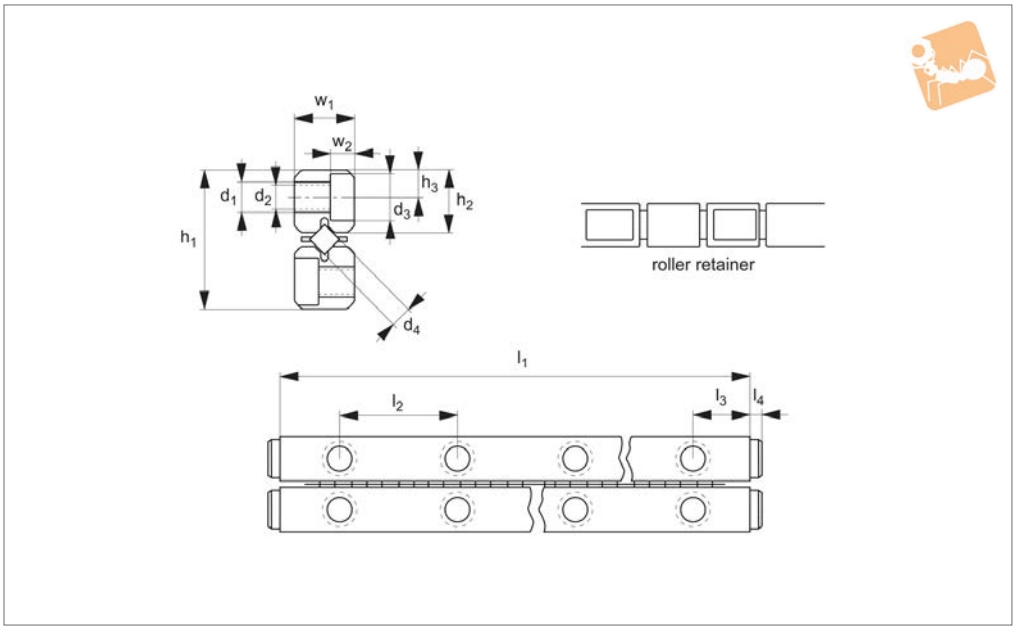
Crossed roller cages can be cut to length to alter stroke - but this affects load rating, please see technical pages.

Order No.	l_1	Stroke max.	w_1	d_1	d_2	d_3	h_1 +0|-0.3	h_2	h_3	l_2	l_3	l_4	w_2	No. of rollers	Dyn. load C kN max.	Static load C_0 kN max.	Weight kg
L1000.01-020	20	13	4	1,65	3,0	M 2	8,5	3,9	1,8	10	5	1,3	1,4	5	0,63	0,72	0,01
L1000.01-030	30	21	4	1,65	3,0	M 2	8,5	3,9	1,8	10	5	1,3	1,4	7	0,88	1,00	0,01
L1000.01-040	40	29	4	1,65	3,0	M 2	8,5	3,9	1,8	10	5	1,3	1,4	9	1,13	1,30	0,02
L1000.01-050	50	37	4	1,65	3,0	M 2	8,5	3,9	1,8	10	5	1,3	1,4	11	1,38	1,58	0,02
L1000.01-060	60	45	4	1,65	3,0	M 2	8,5	3,9	1,8	10	5	1,3	1,4	13	1,63	1,88	0,02
L1000.01-070	70	53	4	1,65	3,0	M 2	8,5	3,9	1,8	10	5	1,3	1,4	15	1,88	2,16	0,03
L1000.01-080	80	61	4	1,65	3,0	M 2	8,5	3,9	1,8	10	5	1,3	1,4	17	12,1	2,45	0,03
L1000.02-030	30	24	6	2,55	4,4	M 3	12	5,5	2,5	15	7,5	1,5	2,0	5	1,47	1,46	0,03
L1000.02-045	45	30	6	2,55	4,4	M 3	12	5,5	2,5	15	7,5	1,5	2,0	8	2,34	2,34	0,04
L1000.02-060	60	44	6	2,55	4,4	M 3	12	5,5	2,5	15	7,5	1,5	2,0	10	2,93	2,92	0,05
L1000.02-075	75	58	6	2,55	4,4	M 3	12	5,5	2,5	15	7,5	1,5	2,0	12	3,52	3,50	0,06
L1000.02-090	90	72	6	2,55	4,4	M 3	12	5,5	2,5	15	7,5	1,5	2,0	14	4,10	4,09	0,08
L1000.02-105	105	86	6	2,55	4,4	M 3	12	5,5	2,5	15	7,5	1,5	2,0	16	4,69	4,67	0,09
L1000.02-120	120	100	6	2,55	4,4	M 3	12	5,5	2,5	15	7,5	1,5	2,0	18	5,27	5,26	0,11
L1000.02-135	135	106	6	2,55	4,4	M 3	12	5,5	2,5	15	7,5	1,5	2,0	21	6,15	6,13	0,12
L1000.02-150	150	120	6	2,55	4,4	M 3	12	5,5	2,5	15	7,5	1,5	2,0	23	6,74	6,72	0,13
L1000.02-165	165	134	6	2,55	4,4	M 3	12	5,5	2,5	15	7,5	1,5	2,0	25	7,33	7,30	0,14
L1000.02-180	180	148	6	2,55	4,4	M 3	12	5,5	2,5	15	7,5	1,5	2,0	27	7,91	7,88	0,16
L1000.03-050	50	34	8	3,3	6,0	M 4	18	8,3	3,5	25	12,5	2,0	3,1	7	4,47	5,33	0,92
L1000.03-075	75	54	8	3,3	6,0	M 4	18	8,3	3,5	25	12,5	2,0	3,1	10	6,38	7,61	0,14
L1000.03-100	100	74	8	3,3	6,0	M 4	18	8,3	3,5	25	12,5	2,0	3,1	13	8,29	9,89	0,18
L1000.03-125	125	104	8	3,3	6,0	M 4	18	8,3	3,5	25	12,5	2,0	3,1	15	9,57	11,4	0,23
L1000.03-150	150	124	8	3,3	6,0	M 4	18	8,3	3,5	25	12,5	2,0	3,1	18	11,5	13,7	0,27
L1000.03-175	175	144	8	3,3	6,0	M 4	18	8,3	3,5	25	12,5	2,0	3,1	21	13,4	16,0	0,32
L1000.03-200	200	164	8	3,3	6,0	M 4	18	8,3	3,5	25	12,5	2,0	3,1	24	15,3	18,3	0,36
L1000.03-225	225	184	8	3,3	6,0	M 4	18	8,3	3,5	25	12,5	2,0	3,1	27	17,2	20,6	0,41
L1000.03-250	250	204	8	3,3	6,0	M 4	18	8,3	3,5	25	12,5	2,0	3,1	30	19,1	22,8	0,45
L1000.03-275	275	224	8	3,3	6,0	M 4	18	8,3	3,5	25	12,5	2,0	3,1	33	21,1	25,1	0,49
L1000.03-300	300	244	8	3,3	6,0	M 4	18	8,3	3,5	25	12,5	2,0	3,1	36	23,0	27,4	0,54
L1000.04-080	80	54	11	4,3	7,5	M 5	22	10	4,5	40	20	2,0	4,1	8	9,84	9,36	0,25
L1000.04-120	120	92	11	4,3	7,5	M 5	22	10	4,5	40	20	2,0	4,1	11	13,5	12,9	0,36
L1000.04-160	160	130	11	4,3	7,5	M 5	22	10	4,5	40	20	2,0	4,1	14	17,2	16,4	0,38



Crossed Roller Rail Sets

Order No.	l_1	Stroke max.	w_1	d_1	d_2	d_3	h_1 +0|-0.3	h_2	h_3	l_2	l_3	l_4	w_2	No. of rollers	Dyn. load C kN max.	Static load C_0 kN max.	Weight kg
L1000.04-200	200	154	11	4,3	7,5	M 5	22	10	4,5	40	20	2,0	4,1	18	22,1	21,1	0,60
L1000.04-240	240	192	11	4,3	7,5	M 5	22	10	4,5	40	20	2,0	4,1	21	25,8	24,6	0,71
L1000.04-280	280	230	11	4,3	7,5	M 5	22	10	4,5	40	20	2,0	4,1	24	29,5	28,1	0,83
L1000.04-320	320	254	11	4,3	7,5	M 5	22	10	4,5	40	20	2,0	4,1	28	34,4	32,8	0,95
L1000.04-360	360	292	11	4,3	7,5	M 5	22	10	4,5	40	20	2,0	4,1	31	38,1	36,3	1,06
L1000.04-400	400	330	11	4,3	7,5	M 5	22	10	4,5	40	20	2,0	4,1	34	41,8	39,8	1,18
L1000.04-440	440	354	11	4,3	7,5	M 5	22	10	4,5	40	20	2,0	4,1	38	46,7	44,5	1,40
L1000.04-480	480	392	11	4,3	7,5	M 5	22	10	4,5	40	20	2,0	4,1	41	50,4	48,0	1,41
L1000.06-100	100	80	15	5,3	9,5	M 6	31	14	6	50	25	2,0	5,2	7	18,0	18,4	0,58
L1000.06-150	150	108	15	5,3	9,5	M 6	31	14	6	50	25	2,0	5,2	11	28,3	29,0	0,87
L1000.06-200	200	154	15	5,3	9,5	M 6	31	14	6	50	25	2,0	5,2	14	36,0	36,9	1,16
L1000.06-250	250	200	15	5,3	9,5	M 6	31	14	6	50	25	2,0	5,2	17	43,7	44,7	1,44
L1000.06-300	300	246	15	5,3	9,5	M 6	31	14	6	50	25	2,0	5,2	20	51,4	52,6	1,73
L1000.06-350	350	274	15	5,3	9,5	M 6	31	14	6	50	25	2,0	5,2	24	61,7	63,2	2,01
L1000.06-400	400	320	15	5,3	9,5	M 6	31	14	6	50	25	2,0	5,2	27	69,4	71,1	2,30
L1000.06-450	450	366	15	5,3	9,5	M 6	31	14	6	50	25	2,0	5,2	30	77,1	79,0	2,59
L1000.06-500	500	412	15	5,3	9,5	M 6	31	14	6	50	25	2,0	5,2	33	84,8	86,9	2,87
L1000.06-550	550	458	15	5,3	9,5	M 6	31	14	6	50	25	2,0	5,2	36	92,5	94,8	3,16
L1000.06-600	600	486	15	5,3	9,5	M 6	31	14	6	50	25	2,0	5,2	40	103,0	105,0	2,55
L1000.09-200	200	158	22	6,8	10,5	M 8	44	20,2	9	100	50	3,5	5,2	9	64,7	65,5	2,54
L1000.09-300	300	246	22	6,8	10,5	M 8	44	20,2	9	100	50	3,5	5,2	13	93,5	94,6	3,78
L1000.09-400	400	306	22	6,8	10,5	M 8	44	20,2	9	100	50	3,5	5,2	18	129,0	131,0	5,02
L1000.09-500	500	394	22	6,8	10,5	M 8	44	20,2	9	100	50	3,5	5,2	22	158,0	160,0	6,27
L1000.09-600	600	482	22	6,8	10,5	M 8	44	20,2	9	100	50	3,5	5,2	26	187,0	189,0	7,51
L1000.09-700	700	570	22	6,8	10,5	M 8	44	20,2	9	100	50	3,5	5,2	30	216,0	218,0	9,26
L1000.09-800	800	658	22	6,8	10,5	M 8	44	20,2	9	100	50	3,5	5,2	34	245,0	247,0	9,83
L1000.09-900	900	746	22	6,8	10,5	M 8	44	20,2	9	100	50	3,5	5,2	38	273,0	276,0	11,05
L1000.09-1000	1000	805	22	6,8	10,5	M 8	44	20,2	9	100	50	3,5	5,2	43	309,0	311,0	12,20
L1000.09-1100	1100	894	22	6,8	10,5	M 8	44	20,2	9	100	50	3,5	5,2	47	337,0	341,0	13,50
L1000.09-1200	1200	982	22	6,8	10,5	M 8	44	20,2	9	100	50	3,5	5,2	51	366,0	371,0	14,70
L1000.12-200	200	160	28	8,5	13,5	M10	58	26,9	12	100	50	3,5	8,2	7	103,0	92,3	4,23
L1000.12-300	300	216	28	8,5	13,5	M10	58	26,9	12	100	50	3,5	8,2	11	162,0	145,0	6,32
L1000.12-400	400	308	28	8,5	13,5	M10	58	26,9	12	100	50	3,5	8,2	14	206,0	185,0	8,39
L1000.12-500	500	400	28	8,5	13,5	M10	58	26,9	12	100	50	3,5	8,2	17	250,0	224,0	10,49
L1000.12-600	600	492	28	8,5	13,5	M10	58	26,9	12	100	50	3,5	8,2	20	294,0	264,0	12,520
L1000.12-700	700	548	28	8,5	13,5	M10	58	26,9	12	100	50	3,5	8,2	24	353,0	317,0	15,47
L1000.12-800	800	640	28	8,5	13,5	M10	58	26,9	12	100	50	3,5	8,2	27	397,0	356,0	17,66
L1000.12-900	900	732	28	8,5	13,5	M10	58	26,9	12	100	50	3,5	8,2	30	441,0	396,0	18,52
L1000.12-1000	1000	824	28	8,5	13,5	M10	58	26,9	12	100	50	3,5	8,2	33	485,0	435,0	20,40
L1000.12-1100	1100	916	28	8,5	13,5	M10	58	26,9	12	100	50	3,5	8,2	36	529,0	474,0	22,60
L1000.12-1200	1200	972	28	8,5	13,5	M10	58	26,9	12	100	50	3,5	8,2	40	588,0	527,0	24,70



L1002

Material
Alloy steel rail and roller (DIN 1.2842), through hardened to 60±2 HRC.
Cross rollers retained in delrin cage.

Technical Notes
Supplied in sets of 4 rails (with 2 roller cages and 8 end screws as standard). See table for number of rollers in each cage. Crossed roller cages can be cut to length to alter stroke - but this affects load rating, please see technical pages.

Tips
This rail set type has improved load carrying capacity, typically 3x that of standard L1000 type sets (as they have a deeper V groove).

Order No.	l_1	Stroke max.	w_1	d_1	d_2	d_3	d_4	h_1	h_2	h_3	l_2	l_3	l_4	w_2	No. of rollers	Weight kg
L1002.04-050	50	40	9	4.5	M3	2.65	5.5	19	9	3.5	25	12.5	2.5	2.7	4	0.06
L1002.04-075	75	62	9	4.5	M3	2.65	5.5	19	9	3.5	25	12.5	2.5	2.7	6	0.09
L1002.04-100	100	81	9	4.5	M3	2.65	5.5	19	9	3.5	25	12.5	2.5	2.7	9	0.13
L1002.04-125	125	102	9	4.5	M3	2.65	5.5	19	9	3.5	25	12.5	2.5	2.7	11	0.16
L1002.04-150	150	121	9	4.5	M3	2.65	5.5	19	9	3.5	25	12.5	2.5	2.7	13	0.19
L1002.04-175	175	143	9	4.5	M3	2.65	5.5	19	9	3.5	25	12.5	2.5	2.7	16	0.20
L1002.04-200	200	161	9	4.5	M3	2.65	5.5	19	9	3.5	25	12.5	2.5	2.7	18	0.23
L1002.04-225	225	183	9	4.5	M3	2.65	5.5	19	9	3.5	25	12.5	2.5	2.7	20	0.25
L1002.04-250	250	201	9	4.5	M3	2.65	5.5	19	9	3.5	25	12.5	2.5	2.7	23	0.28
L1002.04-275	275	223	9	4.5	M3	2.65	5.5	19	9	3.5	25	12.5	2.5	2.7	25	0.31
L1002.04-300	300	242	9	4.5	M3	2.65	5.5	19	9	3.5	25	12.5	2.5	2.7	27	0.33
L1002.06-100	100	83	12	6.5	M4	3.30	7.0	25	12	5.0	25	12.5	3.0	3.2	6	0.18
L1002.06-150	150	120	12	6.5	M4	3.30	7.0	25	12	5.0	25	12.5	3.0	3.2	10	0.28
L1002.06-200	200	162	12	6.5	M4	3.30	7.0	25	12	5.0	25	12.5	3.0	3.2	14	0.37
L1002.06-250	250	203	12	6.5	M4	3.30	7.0	25	12	5.0	25	12.5	3.0	3.2	17	0.46
L1002.06-300	300	241	12	6.5	M4	3.30	7.0	25	12	5.0	25	12.5	3.0	3.2	21	0.55
L1002.06-350	350	282	12	6.5	M4	3.30	7.0	25	12	5.0	25	12.5	3.0	3.2	24	0.64
L1002.06-400	400	324	12	6.5	M4	3.30	7.0	25	12	5.0	25	12.5	3.0	3.2	28	0.74

Linear Cross Roller Rail Sets

Accuracy overview

Our cross roller rail sets are of the highest quality.

- Close tolerance ±5µ
- Speeds up to 50 m/min
- Temperature range -40°C to +80°C up to +250°C if applying a temperature factor
- Through hardened to 60 ±2 HRC
- Acceleration up to 50 m/sec^2
- Typical 0.003 coefficient of friction dependent on mounting surface accuracy

Expected life calculation:

$$\text{Life (Km)}\ L = (C/P)^{3.3} \times 1.15 \times 10^5 \text{m}$$

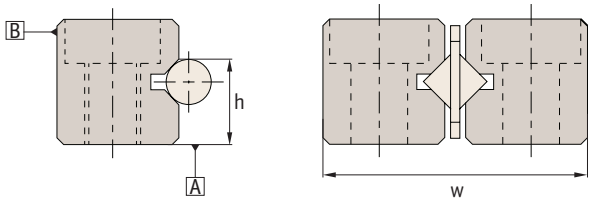
C = effective dynamic load (N)
P = equivalent load (N)

Working life calculation:

$$L_h\ \text{(hours)} = \frac{L \times 10^6}{2 \times L_s \times n \times 60}$$

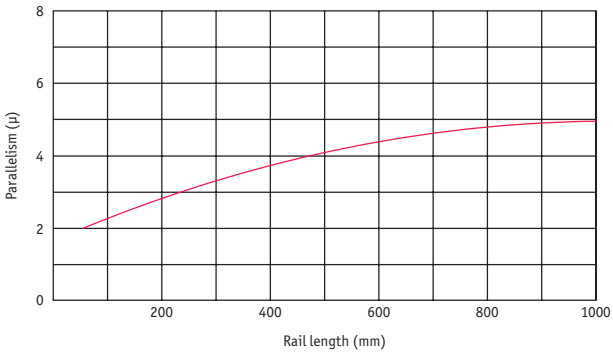
L = Life (Km), see above
L_s = Stroke Length (mm)
n = Number of operations/min

Accuracy Specification:



Accuracy level	
Parallelism of rolling plane A&B	graph below
Allowable height tolerance (h)	±0,02
Paired mutual height tolerance (h)	0,01
Allowable width tolerance (w)	+0, -0,02

Parallelism



Lubrication:

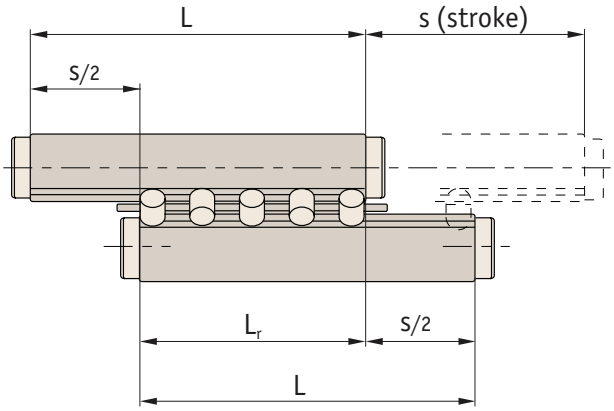
The units are lubricated with lithium soap lubricant. Relubricate if required.

Straightness		
Length (mm)		Straightness (µ)
Above	Below	
0	50	2,0
50	100	2,0
100	160	3,0
160	310	3,0
310	510	4,0
510	600	4,0

(Ra 0,2 µm)

Load capacity depends on:

- Rail size
- Number of rollers in cage
- Load rating = number of rollers x load rating/roller
- Number of rollers (N_r) = cage length (L_c) / pitch p
- Cage length affects the stroke and travel of the system



Load calculations

Calculations of retainer length and number of rollers:

$$L_r = L - \frac{S}{2}$$

L_r = distance between two rollers in ends of retainer (mm)

L = rail length (mm)

S = stroke length (mm)

Worked example:

Assume L1000.09-400 with a stroke of 250mm:

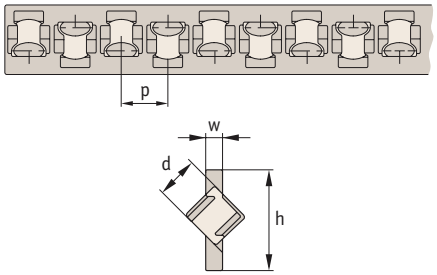
Cage length = 400 - (250/2) = 275mm

Roller Ø = 9mm with a pitch (see table) of 18mm:

Number of rollers = 275/18 = 15

Load rating of system = load/roller* x no. of rollers
(a pair of rollers) = 2420N x 15
= 36,300N

*See product table for allowable load per roller.
Allowable load rating with a 3x safety factor compared to static load.



Plastic cage

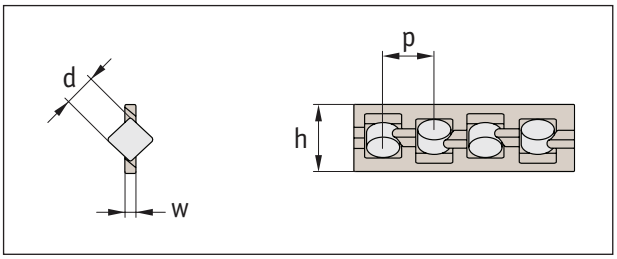
L1008.###-PR-xxx
Plastic cage with steel rollers, for horizontal and vertical use.

Steel cage

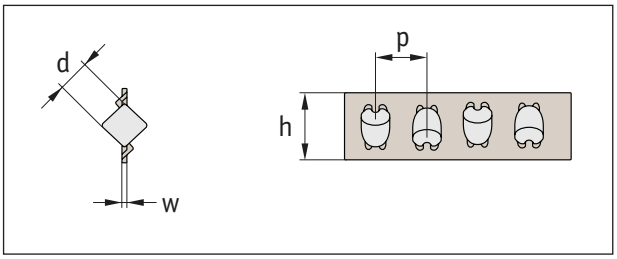
L1008.###-AA-xxx
Steel cage with steel rollers, for horizontal use only.

Order no.	d	p	h	w	Cage material
L1008.020-PR-xxx	2	3,9	5	0,75	Plastic - black
L1008.030-PR-xxx	3	5,0	7	1,00	Plastic - black
L1008.060-PR-xxx	6	8,5	14	2,00	Plastic - black
L1008.090-PR-xxx	9	14,0	20	3,00	Plastic - black
L1008.020-AA-xxx	2	4	5,5	0,80	Steel
L1008.030-AA-xxx	3	5	7,5	0,50	Steel
L1008.060-AA-xxx	6	12	14	0,80	Steel
L1008.090-AA-xxx	9	18	19,5	1,00	Steel
L1008.120-AA-xxx	12	22	25	1,20	Steel

Plastic cage (type PR)



Steel cage (type AA)

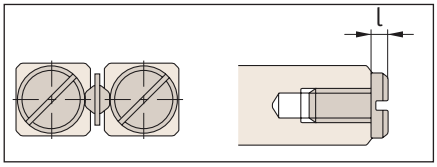


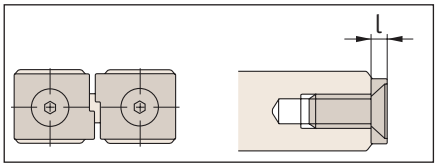
Roller load ratings (per roller)			
Rail size	Max. dynamic load C_o N	Max. static load C N	Allowable* load N
1	125	144	48
2	290	290	95
3	630	760	250
4	1230	1170	390
6	2570	2630	870
9	7190	7270	2420
12	14700	13100	4300

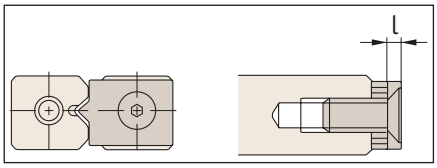
The more rollers the greater the load capacity

* Allowable load is 1/3 of max. static load/roller, to allow a safety factor in calculations of 3.

End pieces







Type GA

- For horizontal applications, most used.

Type GB

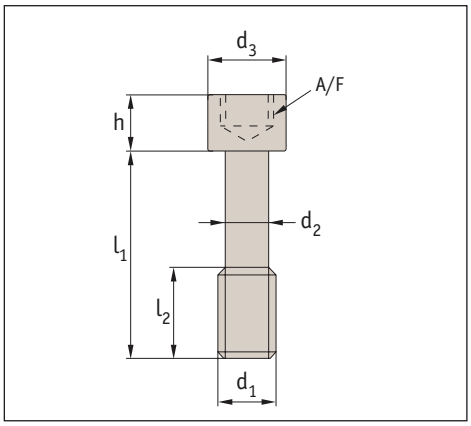
- For horizontal or vertical applications.

Type GC

- For horizontal or vertical applications.
- Mount on longer rail only.

Type			
Rail size	GA l	GB l	GC l
1	1,5	-	-
2	2	3	-
3	2	2	3
6	3	3	5
9	3	4	6
12	3	5	8

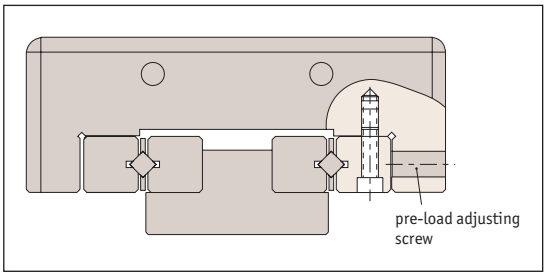
End screws



Rail	h	d_1	d_2	d_3	l_1	l_2	A/F
3	3	M3	2,3	5	12	5	2,5
6	5	M5	3,9	8	20	8	4
9	6	M6	4,6	8,5	30	12	5
12	8	M8	6,25	11,3	40	17	6

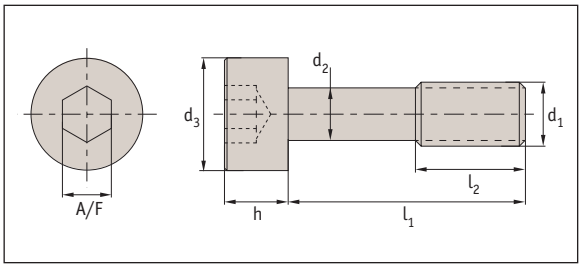
Recommended torque for pre-load screws

Rail size	Set screw size	Torque to Nm
1	M2	0,008
2	M3	0,012
3	M4	0,05
4	M4	0,08
6	M5	0,2
9	M6	0,4



Fixing screws

Rail size	d_1	d_2	d_3	h	l_1	l_2	A/F	Torque to Nm
3	M3	2,3	5	3	12	5	2,5	1,0
4	M4	3,1	5,8	4	15	7	3	2,4
6	M5	3,9	8	5	20	8	4	4,8
9	M6	4,6	8,5	6	30	12	5	8,1
11	M8	6,25	11,3	8	40	17	6	19,7



Important notes:

Inaccurate assembly

Inaccurate assembly or machining of surfaces will lead to low accuracy and cage creep which affects system reliability and life.

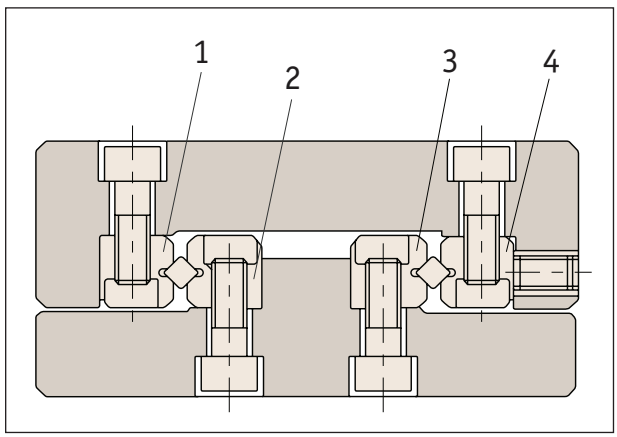
Cage creep

High speeds or off-set loads, high levels of vibration can cause cage creep.

End screws

These function to prevent the cage falling out. They are not designed as end stops. If this is required it should be designed into your system.

Ensure structure is rigid and machined accurately.



- Assemble rails 2 and 3
- Check for run-out and parallelism
- Install rails 3 and 4 without tightening screws
- Install cages and end pieces
- Slide the moving part to end of the travel to allow the centering of the cage
- Tighten the preload screws to eliminate clearance
- Tighten the retaining screws
- Ensure the extended end stops are hit before the cage hits the screws or end piece

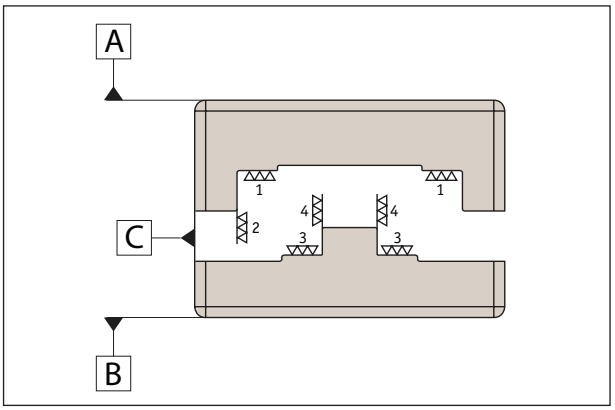
Linear Motion Slide Rail Set

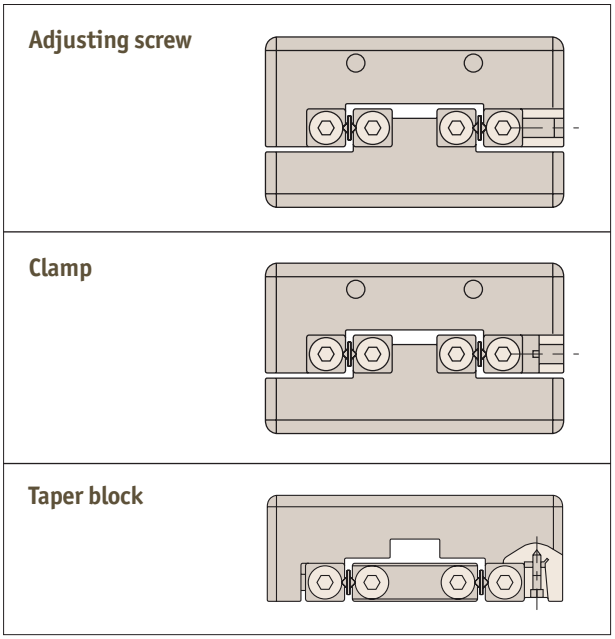
Assembly

Installation surfaces

All burrs, dents, dust, etc. on the table and base need to be reduced.

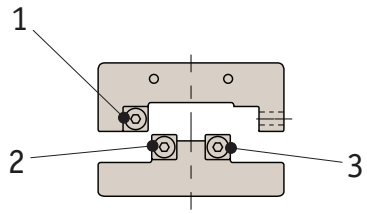
Pre-load adjustment; too much preload can cause damage & reduced life. We recommend to used no or a small amount of pre-load.



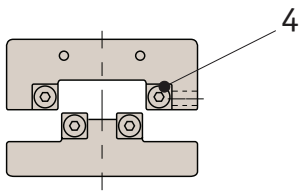


Assembly process

1. Apply a low viscosity oil on contact surface, fix rail (1,2 & 3) lightly.



2. Temporarily fix the rail in adjusted side (4)

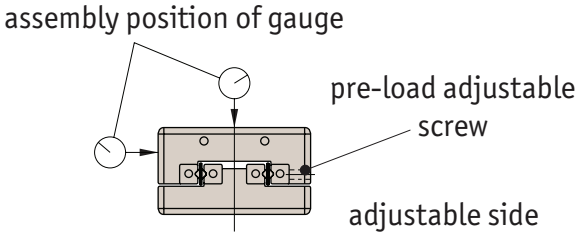


3. Disassemble end screw from one end, and carefully insert roller retainer to nearly the centre of the rail.

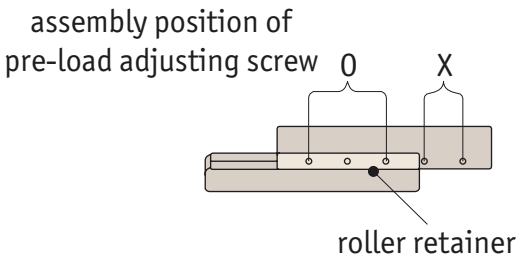
Replace the end screw.

Slowly move table back and forth to the rail end, and adjust roller retainer position to rail centre.

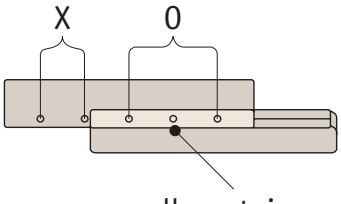
4. Fix gauges both in centre and the side of the table.



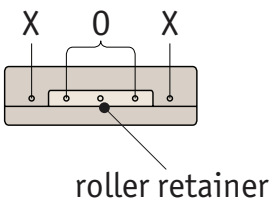
5. Move the table to one end and adjust pre-load screw slightly.



6. Move table to the other end and repeat.



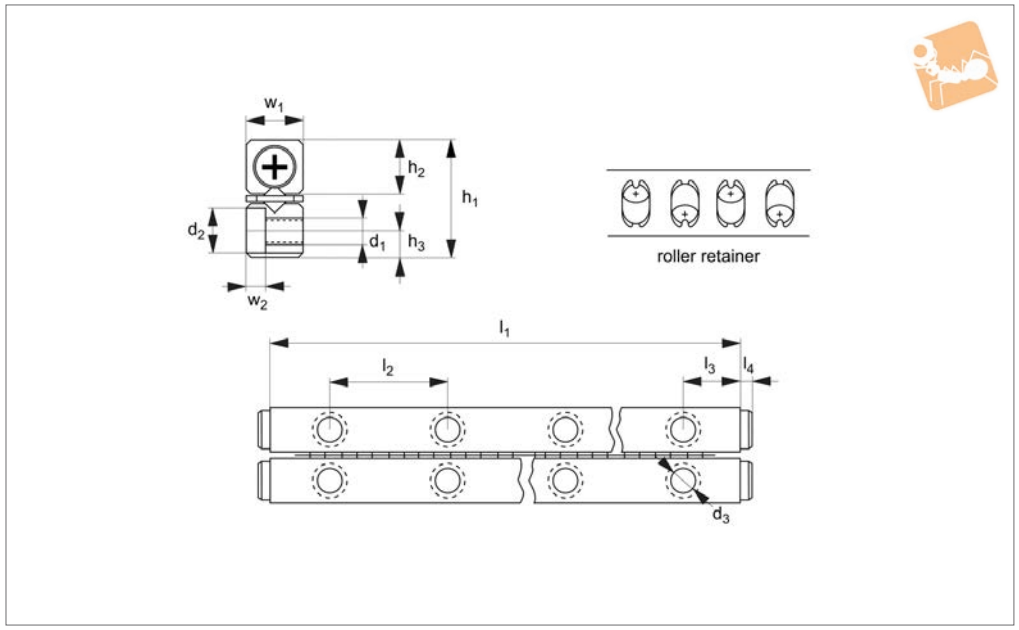
7. Return the table back to centre and lock the pre-load adjusting screw slightly. Adjust the clearance of table to zero. For final adjustment of preload, set correct torque value with a torque wrench and prepare to lock the rail fixing screw.



7. Finally securely lock the rail.

0 : Loading on to pre-load adjusting screw

X : Loading off to pre-load adjusting screw



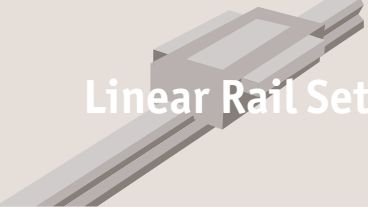
L1001

Material
Stainless steel rail and rollers (AISI 440C). Hardness 60±2 HRC. Stainless steel roller retainer (AISI 304).

Technical Notes
Supplied in sets of 4 rails (with 2 roller cages and 8 end screws as standard). See table for number of rollers in each cage.

Crossed roller cages can be cut to length to alter stroke - but this affects load rating, please see technical pages.

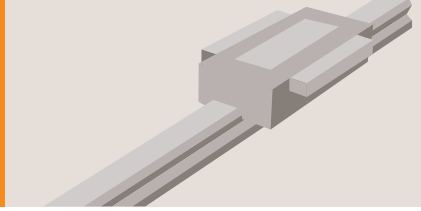
Order No.	l_1	Stroke max.	w_1	h_1 +0|-0.3	h_2	h_3	l_2	l_3	l_4	No. of rollers	Dyn. load C kN max.	Static load C_0 kN max.	d_1	d_2	d_3	w_2	Weight kg
L1001.01-020	20	13	4	8,5	3,9	1,8	10	5	1,3	5	0,63	0,72	1,65	3,0	M 2	1,4	0,01
L1001.01-030	30	21	4	8,5	3,9	1,8	10	5	1,3	7	0,88	1,01	1,65	3,0	M 2	1,4	0,01
L1001.01-040	40	29	4	8,5	3,9	1,8	10	5	1,3	9	1,13	1,30	1,65	3,0	M 2	1,4	0,02
L1001.01-050	50	37	4	8,5	3,9	1,8	10	5	1,3	11	1,38	1,58	1,65	3,0	M 2	1,4	0,02
L1001.01-060	60	45	4	8,5	3,9	1,8	10	5	1,3	13	1,63	1,88	1,65	3,0	M 2	1,4	0,03
L1001.01-070	70	53	4	8,5	3,9	1,8	10	5	1,3	15	1,88	2,16	1,65	3,0	M 2	1,4	0,03
L1001.01-080	80	61	4	8,5	3,9	1,8	10	5	1,3	17	12,1	2,45	1,65	3,0	M 2	1,4	0,03
L1001.02-030	30	24	6	12	5,5	2,5	15	7,5	1,5	5	1,47	1,46	2,55	4,4	M 3	2,0	0,03
L1001.02-045	45	30	6	12	5,5	2,5	15	7,5	1,5	8	2,34	2,34	2,55	4,4	M 3	2,0	0,04
L1001.02-060	60	44	6	12	5,5	2,5	15	7,5	1,5	10	2,93	2,92	2,55	4,4	M 3	2,0	0,06
L1001.02-075	75	58	6	12	5,5	2,5	15	7,5	1,5	12	3,52	3,50	2,55	4,4	M 3	2,0	0,07
L1001.02-090	90	72	6	12	5,5	2,5	15	7,5	1,5	14	4,10	4,09	2,55	4,4	M 3	2,0	0,08
L1001.02-105	105	86	6	12	5,5	2,5	15	7,5	1,5	16	2,50	4,34	2,55	4,0	M 3	2,0	0,10
L1001.02-120	120	100	6	12	5,5	2,5	15	7,5	1,5	18	5,27	5,26	2,55	4,4	M 3	2,0	0,11
L1001.02-135	135	106	6	12	5,5	2,5	15	7,5	1,5	21	6,15	6,13	2,55	4,4	M 3	2,0	0,13
L1001.02-150	150	120	6	12	5,5	2,5	15	7,5	1,5	23	6,74	6,72	2,55	4,4	M 3	2,0	0,14
L1001.02-165	165	134	6	12	5,5	2,5	15	7,5	1,5	25	7,33	7,30	2,55	4,4	M 3	2,0	0,15
L1001.02-180	180	148	6	12	5,5	2,5	15	7,5	1,5	27	7,91	7,88	2,55	4,4	M 3	2,0	0,17
L1001.03-050	50	34	8	18	8,3	3,5	25	12,5	2,0	7	4,47	5,33	3,3	6,0	M 4	3,1	0.10
L1001.03-075	75	54	8	18	8,3	3,5	25	12,5	2,0	10	6,38	7,61	3,3	6,0	M 4	3,1	0,15
L1001.03-100	100	74	8	18	8,3	3,5	25	12,5	2,0	13	8,29	9,89	3,3	6,0	M 4	3,1	0,20
L1001.03-125	125	104	8	18	8,3	3,5	25	12,5	2,0	15	9,57	11,4	3,3	6,0	M 4	3,1	0,24
L1001.03-150	150	124	8	18	8,3	3,5	25	12,5	2,0	18	11,5	13,7	3,3	6,0	M 4	3,1	0,29
L1001.03-175	175	144	8	18	8,3	3,5	25	12,5	2,0	21	13,4	16,0	3,3	6,0	M 4	3,1	0,34
L1001.03-200	200	164	8	18	8,3	3,5	25	12,5	2,0	24	15,3	18,3	3,3	6,0	M 4	3,1	0,38
L1001.03-225	225	184	8	18	8,3	3,5	25	12,5	2,0	27	17,2	20,6	3,3	6,0	M 4	3,1	0,43
L1001.03-250	250	204	8	18	8,3	3,5	25	12,5	2,0	30	19,1	22,8	3,3	6,0	M 4	3,1	0,48
L1001.03-275	275	224	8	18	8,3	3,5	25	12,5	2,0	33	21,1	25,1	3,3	6,0	M 4	3,1	0,53
L1001.03-300	300	244	8	18	8,3	3,5	25	12,5	2,0	36	23,0	27,4	3,3	6,0	M 4	3,1	0,57
L1001.04-080	80	54	11	22	10	4,5	40	20	2,0	8	9,84	9,36	4,3	7,5	M 5	4,1	0,26
L1001.04-120	120	92	11	22	10	4,5	40	20	2,0	11	13,5	12,9	4,3	7,5	M 5	4,1	0,39
L1001.04-160	160	130	11	22	10	4,5	40	20	2,0	14	17,2	16,4	4,3	7,5	M 5	4,1	0,51
L1001.04-200	200	154	11	22	10	4,5	40	20	2,0	18	22,1	21,1	4,3	7,5	M 5	4,1	0,64



Stainless Crossed Roller Rail Sets

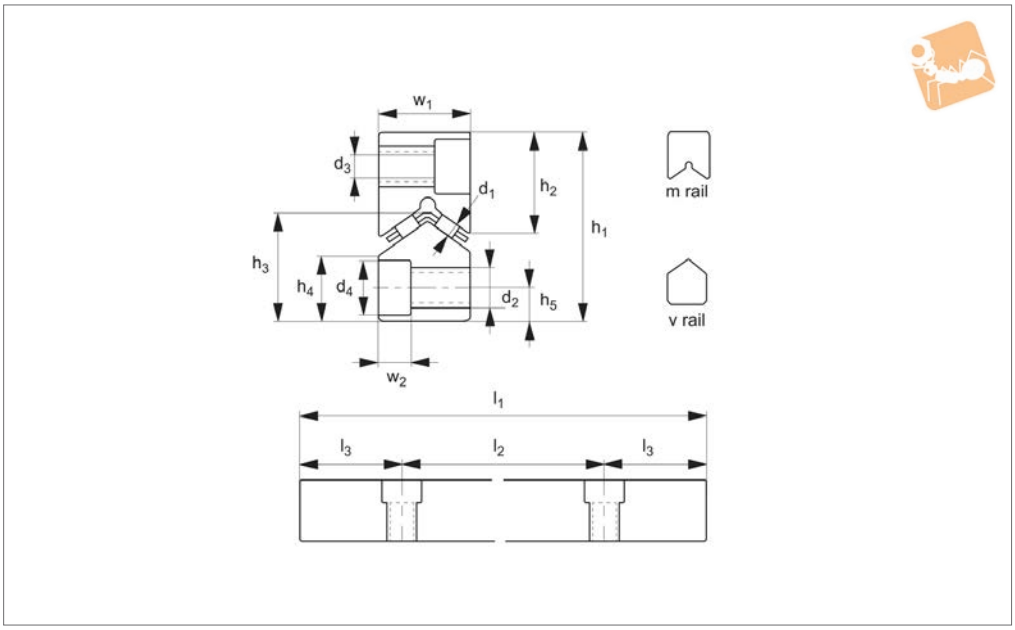
corrosion resistant

Order No.	l_1	Stroke max.	w_1	h_1 +0|-0.3	h_2	h_3	l_2	l_3	l_4	No. of rollers	Dyn. load C kN max.	Static load C_0 kN max.	d_1	d_2	d_3	w_2	Weight kg
L1001.04-240	240	192	11	22	10	4,5	40	20	2,0	21	25,8	24,6	4,3	7,5	M 5	4,1	0,76
L1001.04-280	280	230	11	22	10	4,5	40	20	2,0	24	29,5	28,1	4,3	7,5	M 5	4,1	0,89
L1001.04-320	320	254	11	22	10	4,5	40	20	2,0	28	34,4	32,8	4,3	7,5	M 5	4,1	1,01
L1001.04-360	360	292	11	22	10	4,5	40	20	2,0	31	38,1	36,3	4,3	7,5	M 5	4,1	1,14
L1001.04-400	400	330	11	22	10	4,5	40	20	2,0	34	41,8	39,8	4,3	7,5	M 5	4,1	1,27
L1001.04-440	440	354	11	22	10	4,5	40	20	2,0	38	46,7	44,5	4,3	7,5	M 5	4,1	1,39
L1001.04-480	480	392	11	22	10	4,5	40	20	2,0	41	50,4	48,0	4,3	7,5	M 5	4,1	1,51
L1001.06-100	100	80	15	31	14	6	50	25	2,0	7	18,0	18,4	5,3	9,5	M 6	5,2	9,62
L1001.06-150	150	108	15	31	14	6	50	25	2,0	11	28,3	29,0	5,3	9,5	M 6	5,2	0,93
L1001.06-200	200	154	15	31	14	6	50	25	2,0	14	36,0	36,9	5,3	9,5	M 6	5,2	1,24
L1001.06-250	250	200	15	31	14	6	50	25	2,0	17	43,7	44,8	5,3	9,5	M 6	5,2	1,55
L1001.06-300	300	246	15	31	14	6	50	25	2,0	20	51,4	52,6	5,3	9,5	M 6	5,2	1,85
L1001.06-350	350	274	15	31	14	6	50	25	2,0	24	61,7	63,2	5,3	9,5	M 6	5,2	2,16
L1001.06-400	400	320	15	31	14	6	50	25	2,0	27	69,4	71,1	5,3	9,5	M 6	5,2	2,47
L1001.06-450	450	366	15	31	14	6	50	25	2,0	30	77,1	79,0	5,3	9,5	M 6	5,2	2,77
L1001.06-500	500	412	15	31	14	6	50	25	2,0	33	84,8	86,9	5,3	9,5	M 6	5,2	3,08
L1001.06-550	550	458	15	31	14	6	50	25	2,0	36	92,5	94,8	5,3	9,5	M 6	5,2	3,38
L1001.06-600	600	486	15	31	14	6	50	25	2,0	40	103,0	105,0	5,3	9,5	M 6	5,2	3,69



Needle Roller Rail Sets - M rail
high load capacity

L1004.M



Material
Hardened steel alloy (DIN 1.2842), hardness 60±2 HRC.

Technical Notes
Normally supplied in a set of 4 (two M and two V) with needle rollers in aluminium cage - **(cage length required needs to be specified)**, with GM end stops.
M and V type rails do not need to be of same length.

Tips
For specific length needle roller cages (aluminium HW type normally used) and end stops please see technical pages.

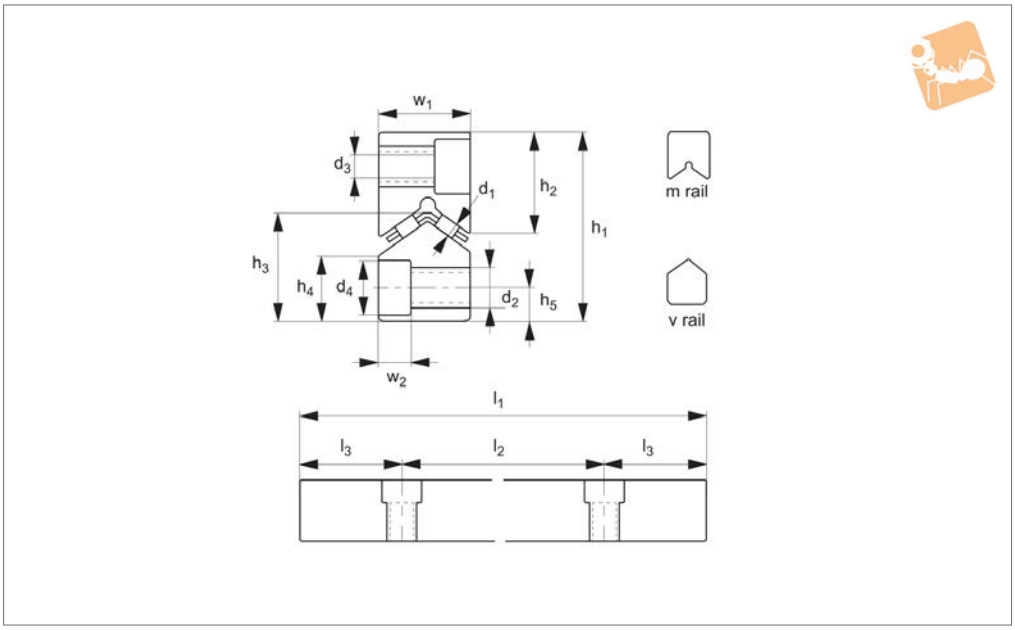
Needle roller rails have a higher load rating than cross roller rails (L1000). The length of the cage affects both the stroke of the rail and it's load carrying capacity see technical pages.

Order No.	Rail type	h_1 +0|-0.3	w_1	l_1	l_2	l_3	h_2	h_3	h_4	h_5	w_2	d_1	d_2	d_3	d_4	Weight kg
L1004.M22-0200	M	44	22	200	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	0.69
L1004.M22-0300	M	44	22	300	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	1.02
L1004.M22-0400	M	44	22	400	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	1.36
L1004.M22-0500	M	44	22	500	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	1.69
L1004.M22-0600	M	44	22	600	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	2.03
L1004.M22-0700	M	44	22	700	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	2.36
L1004.M22-0800	M	44	22	800	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	2.70
L1004.M22-0900	M	44	22	900	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	3.03
L1004.M22-1000	M	44	22	1000	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	3.37
L1004.M22-1100	M	44	22	1100	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	3.70
L1004.M22-1200	M	44	22	1200	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	4.04
L1004.M25-0200	M	52	25	200	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	0.90
L1004.M25-0300	M	52	25	300	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	1.37
L1004.M25-0400	M	52	25	400	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	1.83
L1004.M25-0500	M	52	25	500	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	2.30
L1004.M25-0600	M	52	25	600	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	2.76
L1004.M25-0700	M	52	25	700	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	3.23
L1004.M25-0800	M	52	25	800	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	3.69
L1004.M25-0900	M	52	25	900	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	4.16
L1004.M25-1000	M	52	25	1000	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	4.62
L1004.M25-1100	M	52	25	1100	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	5.09
L1004.M25-1200	M	52	25	1200	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	5.55
L1004.M30-0300	M	62	30	300	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	1.91
L1004.M30-0400	M	62	30	400	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	2.54
L1004.M30-0500	M	62	30	500	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	3.18
L1004.M30-0600	M	62	30	600	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	3.81
L1004.M30-0700	M	62	30	700	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	4.45
L1004.M30-0800	M	62	30	800	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	5.08
L1004.M30-0900	M	62	30	900	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	5.72
L1004.M30-1000	M	62	30	1000	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	6.35

Order No.	Rail type	h_1 +0|-0.3	w_1	l_1	l_2	l_3	h_2	h_3	h_4	h_5	w_2	d_1	d_2	d_3	d_4	Weight kg
L1004.M30-1100	M	62	30	1100	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	6.99
L1004.M30-1200	M	62	30	1200	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	7.62
L1004.M35-0400	M	74	35	400	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	3.66
L1004.M35-0500	M	74	35	500	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	4.58
L1004.M35-0600	M	74	35	600	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	5.49
L1004.M35-0700	M	74	35	700	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	6.41
L1004.M35-0800	M	74	35	800	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	7.32
L1004.M35-0900	M	74	35	900	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	8.24
L1004.M35-1000	M	74	35	1000	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	9.15
L1004.M35-1100	M	74	35	1100	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	10.07
L1004.M35-1200	M	74	35	1200	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	10.98
L1004.M45-0500	M	78	45	500	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	6.17
L1004.M45-0600	M	78	45	600	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	7.41
L1004.M45-0700	M	78	45	700	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	8.65
L1004.M45-0800	M	78	45	800	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	9.89
L1004.M45-0900	M	78	45	900	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	11.13
L1004.M45-1000	M	78	45	1000	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	12.37
L1004.M45-1100	M	78	45	1100	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	13.61
L1004.M45-1200	M	78	45	1200	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	14.85

Needle Roller Rail Sets - V rail
high load capacity

L1004.V



Material
Hardened steel alloy (DIN 1.2842), hardness 60±2 HRC.

Technical Notes
Normally supplied in a set of 4 (two M and two V) with needle rollers in aluminium cage - **(cage length required needs to be specified)**, with GM end stops.
M and V type rails do not need to be of same length.

Tips
For specific length needle roller cages (aluminium HW type normally used) and end stops please see technical pages.

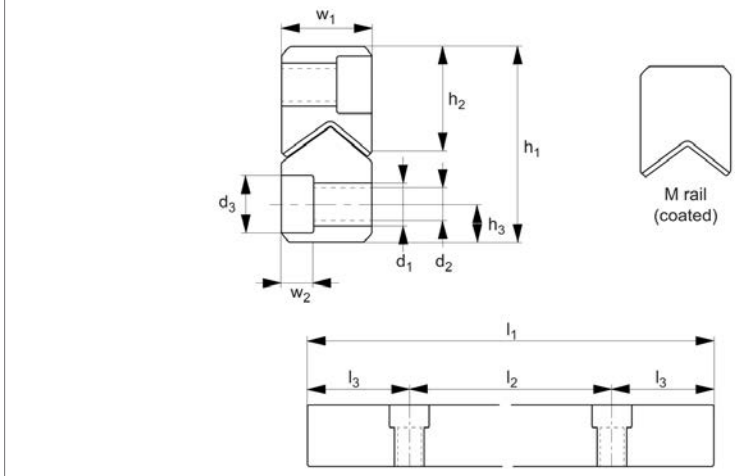
Needle roller rails have a higher load rating than cross roller rails (L1000). The length of the cage affects both the stroke of the rail and it's load carrying capacity see technical pages.

Order No.	Rail type	h_1 +0|-0.3	w_1	l_1	l_2	l_3	h_2	h_3	h_4	h_5	w_2	d_1	d_2	d_3	d_4	Weight kg
L1004.V22-0200	V	44	22	200	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	0.70
L1004.V22-0300	V	44	22	300	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	1.03
L1004.V22-0400	V	44	22	400	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	1.37
L1004.V22-0500	V	44	22	500	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	1.70
L1004.V22-0600	V	44	22	600	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	2.04
L1004.V22-0700	V	44	22	700	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	2.37
L1004.V22-0800	V	44	22	800	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	2.71
L1004.V22-0900	V	44	22	900	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	3.04
L1004.V22-1000	V	44	22	1000	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	3.38
L1004.V22-1100	V	44	22	1100	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	3.71
L1004.V22-1200	V	44	22	1200	100	50	24	24.5	15	9	6.2	2	M 8	6.8	10.5	4.05
L1004.V25-0200	V	52	25	200	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	0.90
L1004.V25-0300	V	52	25	300	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	1.35
L1004.V25-0400	V	52	25	400	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	1.80
L1004.V25-0500	V	52	25	500	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	2.25
L1004.V25-0600	V	52	25	600	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	2.70
L1004.V25-0700	V	52	25	700	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	3.15
L1004.V25-0800	V	52	25	800	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	3.60
L1004.V25-0900	V	52	25	900	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	4.05
L1004.V25-1000	V	52	25	1000	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	4.50
L1004.V25-1100	V	52	25	1100	100	50	28	29	18	10	8.2	2	M10	8.5	13.5	4.95
L1004.V25-1200	V	52	25	1200	100	50	28	28	18	10	8.2	2	M10	8.5	13.5	5.40
L1004.V30-0300	V	62	30	300	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	1.97
L1004.V30-0400	V	62	30	400	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	2.62
L1004.V30-0500	V	62	30	500	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	3.28
L1004.V30-0600	V	62	30	600	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	3.93
L1004.V30-0700	V	62	30	700	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	4.59
L1004.V30-0800	V	62	30	800	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	5.24
L1004.V30-0900	V	62	30	900	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	6.00
L1004.V30-1000	V	62	30	1000	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	6.65

Order No.	Rail type	h_1 +0|-0.3	w_1	l_1	l_2	l_3	h_2	h_3	h_4	h_5	w_2	d_1	d_2	d_3	d_4	Weight kg
L1004.V30-1100	V	62	30	1100	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	7.21
L1004.V30-1200	V	62	30	1200	100	50	34	35	22	12	10.2	2.5	M12	10.5	16.5	7.86
L1004.V35-0400	V	74	35	400	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	3.46
L1004.V35-0500	V	74	35	500	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	4.33
L1004.V35-0600	V	74	35	600	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	5.19
L1004.V35-0700	V	74	35	700	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	6.06
L1004.V35-0800	V	74	35	800	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	6.92
L1004.V35-0900	V	74	35	900	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	7.79
L1004.V35-1000	V	74	35	1000	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	8.65
L1004.V35-1100	V	74	35	1100	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	9.52
L1004.V35-1200	V	74	35	1200	100	50	42.5	40	25	14	12.2	3	M14	12.5	18.5	1.04
L1004.V45-0500	V	78	45	500	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	6.10
L1004.V45-0600	V	78	45	600	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	7.32
L1004.V45-0700	V	78	45	700	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	8.54
L1004.V45-0800	V	78	45	800	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	9.76
L1004.V45-0900	V	78	45	900	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	10.98
L1004.V45-1000	V	78	45	1000	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	12.20
L1004.V45-1100	V	78	45	1100	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	13.42
L1004.V45-1200	V	78	45	1200	100	50	45	45	25	14	12.2	3.5	M14	12.5	18.5	14.64

Anti-friction Coated M Rail
medium load capacity

L1005.M



Material
Hardened steel alloy (DIN 1,2842), coated with anti-friction material (Zedex 100).

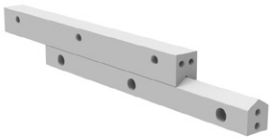
Technical Notes
These are similar in size to the L1000 rails but are primarily used as dirt-proof units, to reduce system vibration and improve rigidity.
Working temperature must be less than 50°C.
Load capacity per unit (cm^2) = 4500N (dynamic), 7500N (static).

For total load capacity take width of bearing surface (in cm) x length (in cm) x load capacity (above).

Tips
Use with V rail L1005.V.

Order No.	Rail type	l_1	h_1 +0|-0.3	w_1	l_2	l_3	d_1	h_2	h_3	w_2	d_2	d_3	Bearing surface width cm	Weight kg
L1005.M03-0050	M	50	18	8	25	12.5	M 4	9	3.5	3.1	3.3	6	0.3	0.02
L1005.M03-0075	M	75	18	8	25	12.5	M 4	9	3.5	3.1	3.3	6	0.3	0.03
L1005.M03-0100	M	100	18	8	25	12.5	M 4	9	3.5	3.1	3.3	6	0.3	0.04
L1005.M03-0125	M	125	18	8	25	12.5	M 4	9	3.5	3.1	3.3	6	0.3	0.05
L1005.M03-0150	M	150	18	8	25	12.5	M 4	9	3.5	3.1	3.3	6	0.3	0.06
L1005.M03-0175	M	175	18	8	25	12.5	M 4	9	3.5	3.1	3.3	6	0.3	0.07
L1005.M03-0200	M	200	18	8	25	12.5	M 4	9	3.5	3.1	3.3	6	0.3	0.09
L1005.M03-0225	M	225	18	8	25	12.5	M 4	9	3.5	3.1	3.3	6	0.3	0.10
L1005.M03-0250	M	250	18	8	25	12.5	M 4	9	3.5	3.1	3.3	6	0.3	0.11
L1005.M03-0275	M	275	18	8	25	12.5	M 4	9	3.5	3.1	3.3	6	0.3	0.12
L1005.M03-0300	M	300	18	8	25	12.5	M 4	9	3.5	3.1	3.3	6	0.3	0.13
L1005.M06-0100	M	100	31	15	50	25.0	M 6	16	6.0	5.2	5.3	10	0.6	0.15
L1005.M06-0150	M	150	31	15	50	25.0	M 6	16	6.0	5.2	5.3	10	0.6	0.22
L1005.M06-0200	M	200	31	15	50	25.0	M 6	16	6.0	5.2	5.3	10	0.6	0.29
L1005.M06-0250	M	250	31	15	50	25.0	M 6	16	6.0	5.2	5.3	10	0.6	0.36
L1005.M06-0300	M	300	31	15	50	25.0	M 6	16	6.0	5.2	5.3	10	0.6	0.44
L1005.M06-0350	M	350	31	15	50	25.0	M 6	16	6.0	5.2	5.3	10	0.6	0.51
L1005.M06-0400	M	400	31	15	50	25.0	M 6	16	6.0	5.2	5.3	10	0.6	0.58
L1005.M06-0450	M	450	31	15	50	25.0	M 6	16	6.0	5.2	5.3	10	0.6	0.65
L1005.M06-0500	M	500	31	15	50	25.0	M 6	16	6.0	5.2	5.3	10	0.6	0.73
L1005.M09-0200	M	200	44	22	100	50.0	M 8	24	9.0	6.2	6.8	11	1.2	0.64
L1005.M09-0300	M	300	44	22	100	50.0	M 8	24	9.0	6.2	6.8	11	1.2	0.96
L1005.M09-0400	M	400	44	22	100	50.0	M 8	24	9.0	6.2	6.8	11	1.2	1.27
L1005.M09-0500	M	500	44	22	100	50.0	M 8	24	9.0	6.2	6.8	11	1.2	1.59
L1005.M09-0600	M	600	44	22	100	50.0	M 8	24	9.0	6.2	6.8	11	1.2	1.90
L1005.M09-0700	M	700	44	22	100	50.0	M 8	24	9.0	6.2	6.8	11	1.2	2.22
L1005.M09-0800	M	800	44	22	100	50.0	M 8	24	9.0	6.2	6.8	11	1.2	2.53
L1005.M09-0900	M	900	44	22	100	50.0	M 8	24	9.0	6.2	6.8	11	1.2	2.85
L1005.M09-1000	M	1000	44	22	100	50.0	M 8	24	9.0	6.2	6.8	11	1.2	3.16
L1005.M12-0200	M	200	58	28	100	50.0	M10	33	12.0	8.2	8.5	15	1.6	1.13
L1005.M12-0300	M	300	58	28	100	50.0	M10	33	12.0	8.2	8.5	15	1.6	1.69

Order No.	Rail type	l_1	h_1 +0|-0.3	w_1	l_2	l_3	d_1	h_2	h_3	w_2	d_2	d_3	Bearing surface width cm	Weight kg
L1005.M12-0400	M	400	58	28	100	50.0	M10	33	12.0	8.2	8.5	15	1.6	2.25
L1005.M12-0500	M	500	58	28	100	50.0	M10	33	12.0	8.2	8.5	15	1.6	2.81
L1005.M12-0600	M	600	58	28	100	50.0	M10	33	12.0	8.2	8.5	15	1.6	3.37
L1005.M12-0700	M	700	58	28	100	50.0	M10	33	12.0	8.2	8.5	15	1.6	3.93
L1005.M12-0800	M	800	58	28	100	50.0	M10	33	12.0	8.2	8.5	15	1.6	4.49
L1005.M12-0900	M	900	58	28	100	50.0	M10	33	12.0	8.2	8.5	15	1.6	5.05
L1005.M12-1000	M	1000	58	28	100	50.0	M10	33	12.0	8.2	8.5	15	1.6	5.61
L1005.M12-1100	M	1100	58	28	100	50.0	M10	33	12.0	8.2	8.5	15	1.6	6.18
L1005.M12-1200	M	1200	58	28	100	50.0	M10	33	12.0	8.2	8.5	15	1.6	6.74



Load Capacity Example

Product Number : L100J-300

Given: Bearing surface width (table)
Length 300mm (30cm)

Load Rating / cm^2 (Data sheet)

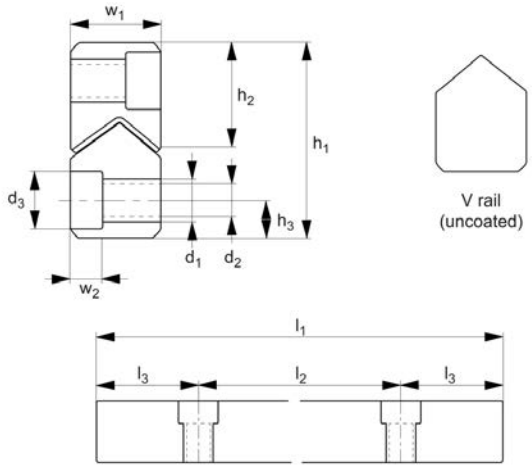
Dynamic Load (N) : 0.6 x 30 x4500 = 81.000N
= 81kN

Static Load (kN) : 0.6 x 30 x7500 = 135.000N
= 135kN

Anti-friction Coated Rail Set

V rail - uncoated

L1005.V



Material
Alloy steel rail and roller (DIN 1.2842), through hardened to 60±2 HRC.

Technical Notes
These are similar in size to the L1000 rails but are primarily used as dirt-proof units, to reduce system vibration and improve rigidity.
Working temperature must be less than 50°C.
Load capacity per unit (cm^2) = 4500N (dynamic), 7500N (static).

For total load capacity take width of bearing surface (in cm) x length (in cm) x load capacity (above).

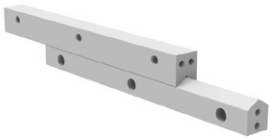
Tips
Use with V rail L1005.M.

Order No.	Rail type	l_1	h_1 +0|-0.3	w_1	l_2	l_3	d_1	h_2	h_3	w_2	d_2	d_3	Bearing surface width cm	Weight kg
L1005.V03-0050	V	50	18	8	25	12.5	M 4	10.8	3.5	3.1	3.3	6	0.3	0.03
L1005.V03-0075	V	75	18	8	25	12.5	M 4	10.8	3.5	3.1	3.3	6	0.3	0.04
L1005.V03-0100	V	100	18	8	25	12.5	M 4	10.8	3.5	3.1	3.3	6	0.3	0.05
L1005.V03-0125	V	125	18	8	25	12.5	M 4	10.8	3.5	3.1	3.3	6	0.3	0.06
L1005.V03-0150	V	150	18	8	25	12.5	M 4	10.8	3.5	3.1	3.3	6	0.3	0.08
L1005.V03-0175	V	175	18	8	25	12.5	M 4	10.8	3.5	3.1	3.3	6	0.3	0.09
L1005.V03-0200	V	200	18	8	25	12.5	M 4	10.8	3.5	3.1	3.3	6	0.3	0.10
L1005.V03-0225	V	225	18	8	25	12.5	M 4	10.8	3.5	3.1	3.3	6	0.3	0.12
L1005.V03-0250	V	250	18	8	25	12.5	M 4	10.8	3.5	3.1	3.3	6	0.3	0.13
L1005.V03-0275	V	275	18	8	25	12.5	M 4	10.8	3.5	3.1	3.3	6	0.3	0.14
L1005.V03-0300	V	300	18	8	25	12.5	M 4	10.8	3.5	3.1	3.3	6	0.3	0.16
L1005.V06-0100	V	100	31	15	50	25.0	M 6	19.3	6.0	5.2	5.3	10	0.6	0.18
L1005.V06-0150	V	150	31	15	50	25.0	M 6	19.3	6.0	5.2	5.3	10	0.6	0.26
L1005.V06-0200	V	200	31	15	50	25.0	M 6	19.3	6.0	5.2	5.3	10	0.6	0.35
L1005.V06-0250	V	250	31	15	50	25.0	M 6	19.3	6.0	5.2	5.3	10	0.6	0.44
L1005.V06-0300	V	300	31	15	50	25.0	M 6	19.3	6.0	5.2	5.3	10	0.6	0.53
L1005.V06-0350	V	350	31	15	50	25.0	M 6	19.3	6.0	5.2	5.3	10	0.6	0.61
L1005.V06-0400	V	400	31	15	50	25.0	M 6	19.3	6.0	5.2	5.3	10	0.6	0.70
L1005.V06-0450	V	450	31	15	50	25.0	M 6	19.3	6.0	5.2	5.3	10	0.6	0.79
L1005.V06-0500	V	500	31	15	50	25.0	M 6	19.3	6.0	5.2	5.3	10	0.6	0.88
L1005.V09-0200	V	200	44	22	100	50.0	M 8	28.0	9.0	6.2	6.8	11	1.2	0.64
L1005.V09-0300	V	300	44	22	100	50.0	M 8	28.0	9.0	6.2	6.8	11	1.2	0.96
L1005.V09-0400	V	400	44	22	100	50.0	M 8	28.0	9.0	6.2	6.8	11	1.2	1.27
L1005.V09-0500	V	500	44	22	100	50.0	M 8	28.0	9.0	6.2	6.8	11	1.2	1.59
L1005.V09-0600	V	600	44	22	100	50.0	M 8	28.0	9.0	6.2	6.8	11	1.2	1.90
L1005.V09-0700	V	700	44	22	100	50.0	M 8	28.0	9.0	6.2	6.8	11	1.2	2.22
L1005.V09-0800	V	800	44	22	100	50.0	M 8	28.0	9.0	6.2	6.8	11	1.2	2.53
L1005.V09-0900	V	900	44	22	100	50.0	M 8	28.0	9.0	6.2	6.8	11	1.2	2.85
L1005.V09-1000	V	1000	44	22	100	50.0	M 8	28.0	9.0	6.2	6.8	11	1.2	3.16
L1005.V12-0200	V	200	58	28	100	50.0	M10	35.5	12.0	8.2	8.5	15	1.6	1.13
L1005.V12-0300	V	300	58	28	100	50.0	M10	35.5	12.0	8.2	8.5	15	1.6	1.69

Anti-friction Coated Rail Set

V rail - uncoated

Order No.	Rail type	l_1	h_1 +0|-0.3	w_1	l_2	l_3	d_1	h_2	h_3	w_2	d_2	d_3	Bearing surface width cm	Weight kg
L1005.V12-0400	V	400	58	28	100	50.0	M10	35.5	12.0	8.2	8.5	15	1.6	2.25
L1005.V12-0500	V	500	58	28	100	50.0	M10	35.5	12.0	8.2	8.5	15	1.6	2.81
L1005.V12-0600	V	600	58	28	100	50.0	M10	35.5	12.0	8.2	8.5	15	1.6	3.37
L1005.V12-0700	V	700	58	28	100	50.0	M10	35.5	12.0	8.2	8.5	15	1.6	3.93
L1005.V12-0800	V	800	58	28	100	50.0	M10	35.5	12.0	8.2	8.5	15	1.6	4.49
L1005.V12-0900	V	900	58	28	100	50.0	M10	35.5	12.0	8.2	8.5	15	1.6	5.05
L1005.V12-1000	V	1000	58	28	100	50.0	M10	35.5	12.0	8.2	8.5	15	1.6	5.61
L1005.V12-1100	V	1100	58	28	100	50.0	M10	35.5	12.0	8.2	8.5	15	1.6	6.18
L1005.V12-1200	V	1200	58	28	100	50.0	M10	35.5	12.0	8.2	8.5	15	1.6	6.74



Load Capacity Example

Product Number : L100J-300

Given: Bearing surface width (table)
Length 300mm (30cm)

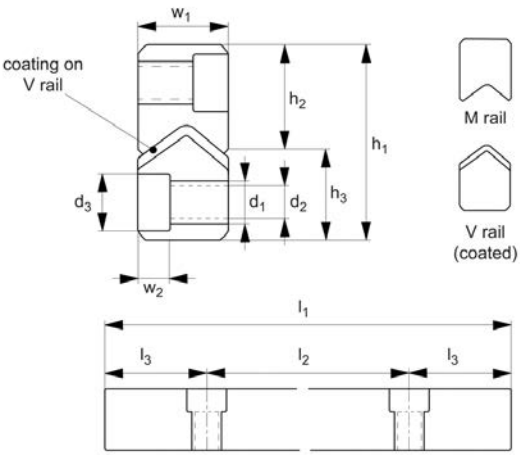
Load Rating / cm^2 (Data sheet)

Dynamic Load (N) : 0.6 x 30 x4500 = 81.000N
= 81kN

Static Load (kN) : 0.6 x 30 x7500 = 135.000N
= 135kN

Anti-friction Coated V Rail
high load capacity

L1006.V

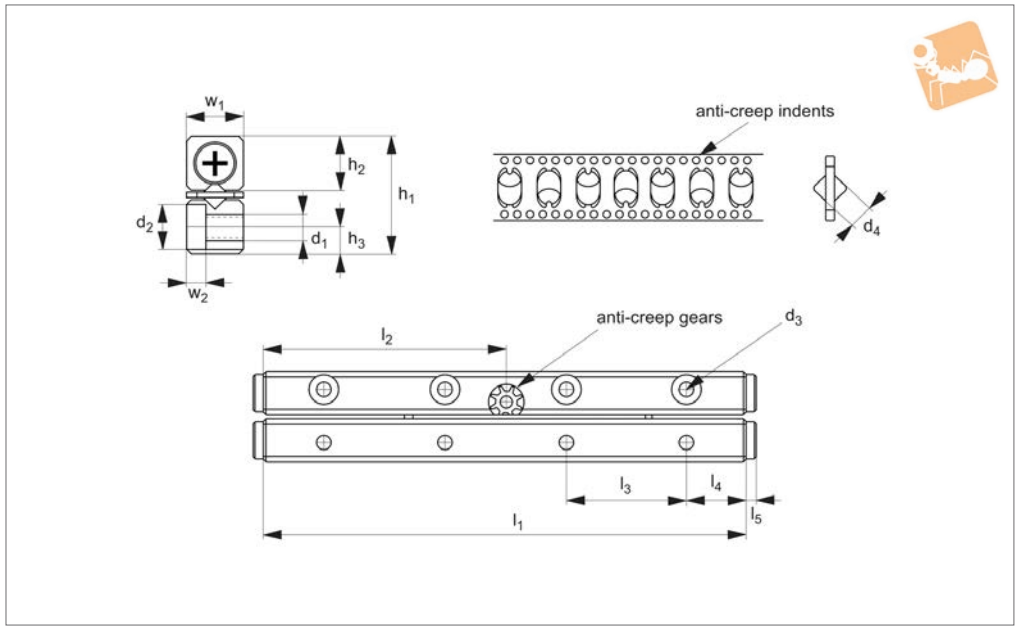


Material
Hardened steel alloy (DIN 1,2842), coated with anti-friction material (Zedex 100).

Technical Notes
These are similar in size to the L1004 rails but are primarily used as dirt-proof units:- to reduce any system vibration and improve rigidity.
Working temperature must be less than 50°C.
Load capacity per unit (cm^2) = 4500N (dynamic), 7500N (static).
For total load capacity take width of bearing surface (in cm) x length (in cm) x load capacity (above).

Tips
Select the anti-friction coated rail and combine with any length of standard L1004.M type rail.
Used where speed is relatively low (20m/minute max.).

Order No.	Rail size	l_1	h_1 +0|-0.3	w_1	l_2	l_3	d_1	h_2	h_3	w_2	d_2	d_3	Bearing surface width cm	Weight kg
L1006.V22-0200	22	200	44	22	100	50	M 8	24	9	6.2	6.8	10.5	1.05	0.70
L1006.V22-0300	22	300	44	22	100	50	M 8	24	9	6.2	6.8	10.5	1.05	1.03
L1006.V22-0400	22	400	44	22	100	50	M 8	24	9	6.2	6.8	10.5	1.05	1.34
L1006.V22-0500	22	500	44	22	100	50	M 8	24	9	6.2	6.8	10.5	1.05	1.70
L1006.V22-0600	22	600	44	22	100	50	M 8	24	9	6.2	6.8	10.5	1.05	2.04
L1006.V25-0200	25	200	52	25	100	50	M10	28	10	8.2	8.5	13.5	1.15	0.90
L1006.V25-0300	25	300	52	25	100	50	M10	28	10	8.2	8.5	13.5	1.15	1.35
L1006.V25-0400	25	400	52	25	100	50	M10	28	10	8.2	8.5	13.5	1.15	1.80
L1006.V25-0500	25	500	52	25	100	50	M10	28	10	8.2	8.5	13.5	1.15	2.25
L1006.V25-0600	25	600	52	25	100	50	M10	28	10	8.2	8.5	13.5	1.15	2.70
L1006.V30-0300	30	300	62	30	100	50	M12	34	12	10.2	10.5	16.5	1.50	1.97
L1006.V30-0400	30	400	62	30	100	50	M12	34	12	10.2	10.5	16.5	1.50	2.62
L1006.V30-0500	30	500	62	30	100	50	M12	34	12	10.2	10.5	16.5	1.50	3.28
L1006.V30-0600	30	600	62	30	100	50	M12	34	12	10.2	10.5	16.5	1.50	3.93
L1006.V35-0400	35	400	74	35	100	50	M14	42.5	14	12.2	12.5	18.5	1.75	3.46
L1006.V35-0500	35	500	74	35	100	50	M14	42.5	14	12.2	12.5	18.5	1.75	4.33
L1006.V35-0600	35	600	74	35	100	50	M14	42.5	14	12.2	12.5	18.5	1.75	5.19
L1006.V45-0600	45	600	78	45	100	50	M14	45	14	12.2	12.5	18.5	2.45	7.32
L1006.V45-0500	45	500	78	45	100	50	M14	45	14	12.2	12.5	18.5	2.45	6.10



L1003

Material
Stainless steel rail and rollers (AISI 440C), Ni plated apart from V groove. Hardness 60±2 HRC. Stainless steel rollers in brass retainer with special anti-creep mechanism (stainless 304).

Technical Notes
Supplied in sets of 4 rails (with 2 roller cages and 8 end screws as standard). See table for number of rollers in each cage and technical pages for load calculations (based on number of rollers).

Tips
These rail sets are designed for high acceleration applications, or systems with significant moment loads.

Order No.	l_1	Stroke max.	h_1	w_1	l_2	l_3	h_2	h_3	w_2	d_1	d_2	d_3	d_4	l_4	l_5	No. of rollers	Weight kg
L1003.02-030	30	22	12	6	15	15	55	2.5	2	2.6	4.4	M3	Ø2	7.5	1.5	5	0.03
L1003.02-045	45	18	12	6	15	15	55	2.5	2	2.6	4.4	M3	Ø2	7.5	1.5	9	0.04
L1003.02-060	60	40	12	6	30	15	55	2.5	2	2.6	4.4	M3	Ø2	7.5	1.5	10	0.06
L1003.02-075	75	52	12	6	30	15	55	2.5	2	2.6	4.4	M3	Ø2	7.5	1.5	12	0.07
L1003.02-090	90	74	12	6	45	15	55	2.5	2	2.6	4.4	M3	Ø2	7.5	1.5	13	0.08
L1003.02-105	105	78	12	6	45	15	55	2.5	2	2.6	4.4	M3	Ø2	7.5	1.5	16	0.10
L1003.02-120	120	100	12	6	60	15	55	2.5	2	2.6	4.4	M3	Ø2	7.5	1.5	17	0.11
L1003.02-135	135	106	12	6	60	15	55	2.5	2	2.6	4.4	M3	Ø2	7.5	1.5	20	0.12
L1003.02-150	150	127	12	6	75	15	55	2.5	2	2.6	4.4	M3	Ø2	7.5	1.5	21	0.14
L1003.02-165	165	140	12	6	75	15	55	2.5	2	2.6	4.4	M3	Ø2	7.5	1.5	23	0.15
L1003.02-180	180	144	12	6	90	15	55	2.5	2	2.6	4.4	M3	Ø2	7.5	1.5	26	0.16
L1003.03-050	50	34	18	8	25	25	8.3	3.5	3.1	3.3	6	M4	Ø3	12.5	2	8	0.10
L1003.03-075	75	50	18	8	30	25	8.3	3.5	3.1	3.3	6	M4	Ø3	12.5	2	12	0.15
L1003.03-100	100	76	18	8	50	25	8.3	3.5	3.1	3.3	6	M4	Ø3	12.5	2	15	0.19
L1003.03-125	125	100	18	8	55	25	8.3	3.5	3.1	3.3	6	M4	Ø3	12.5	2	18	0.24
L1003.03-150	150	125	18	8	75	25	8.3	3.5	3.1	3.3	6	M4	Ø3	12.5	2	21	0.29
L1003.03-175	175	150	18	8	80	25	8.3	3.5	3.1	3.3	6	M4	Ø3	12.5	2	24	0.34
L1003.03-200	20	166	18	8	100	25	8.3	3.5	3.1	3.3	6	M4	Ø3	12.5	2	28	0.38
L1003.03-225	225	182	18	8	105	25	8.3	3.5	3.1	3.3	6	M4	Ø3	12.5	2	32	0.43
L1003.03-250	250	208	18	8	125	25	8.3	3.5	3.1	3.3	6	M4	Ø3	12.5	2	35	0.48
L1003.03-275	275	216	18	8	130	25	8.3	3.5	3.1	3.3	6	M4	Ø3	12.5	2	40	0.52
L1003.03-300	300	248	18	8	150	25	8.3	3.5	3.1	3.3	6	M4	Ø3	12.5	2	42	0.57
L1003.04-080	80	62	22	11	40	40	10	4.5	4.1	4.3	7.5	M5	Ø4	20	2	8	0.26
L1003.04-120	120	92	22	11	50	40	10	4.5	4.1	4.3	7.5	M5	Ø4	20	2	12	0.39
L1003.04-160	160	134	22	11	80	40	10	4.5	4.1	4.3	7.5	M5	Ø4	20	2	15	0.51
L1003.04-200	200	164	22	11	90	40	10	4.5	4.1	4.3	7.5	M5	Ø4	20	2	19	0.63
L1003.04-240	240	194	22	11	120	40	10	4.5	4.1	4.3	7.5	M5	Ø4	20	2	23	0.76
L1003.04-280	280	236	22	11	130	40	10	4.5	4.1	4.3	7.5	M5	Ø4	20	2	26	0.88
L1003.04-320	320	252	22	11	160	40	10	4.5	4.1	4.3	7.5	M5	Ø4	20	2	31	1.01
L1003.04-360	360	308	22	11	170	40	10	4.5	4.1	4.3	7.5	M5	Ø4	20	2	33	1.14
L1003.04-400	400	338	22	11	200	40	10	4.5	4.1	4.3	7.5	M5	Ø4	20	2	37	1.26
L1003.04-440	440	355	22	11	210	40	10	4.5	4.1	4.3	7.5	M5	Ø4	20	2	42	1.39

Anti-Creep Crossed Roller Rail Sets

corrosion resistant

Order No.	l_1	Stroke max.	h_1	w_1	l_2	l_3	h_2	h_3	w_2	d_1	d_2	d_3	d_4	l_4	l_5	No. of rollers	Weight kg
L1003.04-480	480	396	22	11	240	40	10	4.5	4.1	4.3	7.5	M5	Ø4	20	2	45	1.51
L1003.06-100	10	86	31	14	50	50	14	6	5.2	5.3	9.5	M6	Ø6	25	2	7	0.62
L1003.06-150	150	118	31	14	65	50	14	6	5.2	5.3	9.5	M6	Ø6	25	2	11	0.93
L1003.06-200	200	168	31	14	80	50	14	6	5.2	5.3	9.5	M6	Ø6	25	2	14	1.24
L1003.06-250	250	212	31	14	115	50	14	6	5.2	5.3	9.5	M6	Ø6	25	2	17	1.55
L1003.06-300	300	260	31	14	120	50	14	6	5.2	5.3	9.5	M6	Ø6	25	2	20	1.85
L1003.06-350	350	292	31	14	165	50	14	6	5.2	5.3	9.5	M6	Ø6	25	2	24	2.17
L1003.06-400	400	340	31	14	160	50	14	6	5.2	5.3	9.5	M6	Ø6	25	2	27	2.46
L1003.06-450	450	388	31	14	215	50	14	6	5.2	5.3	9.5	M6	Ø6	25	2	30	2.77
L1003.06-500	500	436	31	14	200	50	14	6	5.2	5.3	9.5	M6	Ø6	25	2	33	3.08
L1003.06-550	550	484	31	14	265	50	14	6	5.2	5.3	9.5	M6	Ø6	25	2	36	3.38
L1003.06-600	600	516	31	14	300	50	14	6	5.2	5.3	9.5	M6	Ø6	25	2	40	3.69

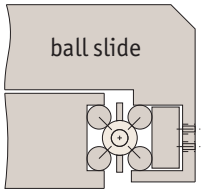
Cage creep can occur due to especially high acceleration and deceleration forces, system vibration, uneven loading or with high moment loads. Our anti-creep rail sets have a special cage which is linked to an anti-creep gear which runs up and down in the mating indents on the roller cage system. It is a sturdy, all metal design, allowing accelerations up to 15G and is integrated into the rail system.

Rail size	Max. dynamic load/roller N	Max. static load/roller N	Max. allowable load/roller N
L1003.02	290	290	95
L1003.03	630	760	250
L1003.04	1230	1170	390
L1003.06	2550	2630	875

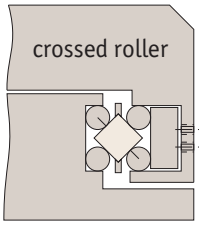
- Max. allowable load is 1/3 of max. static load to give a 3 x safety factor.

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.

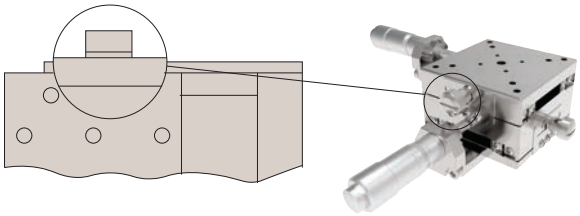


Cross roller slides:
These have the same dimensions but have rollers allowing the slide to carry large loads and absorb greater moment loads up to 54Kg.

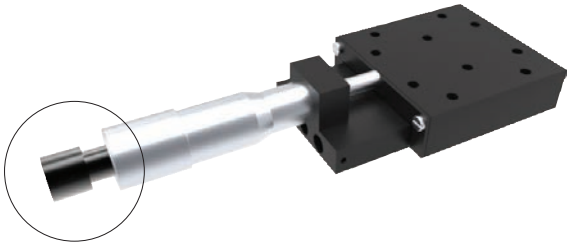


Locking options

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

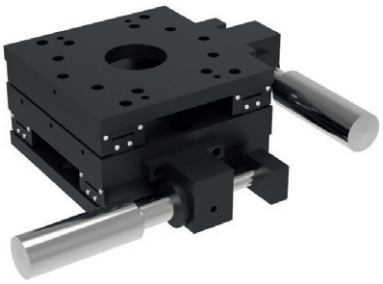
X Stage

XY Stage

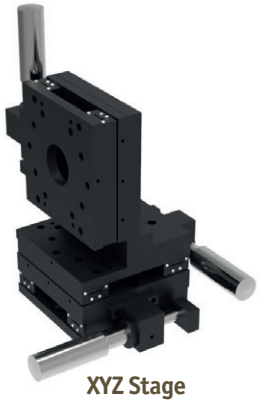
XYZ Stage

Side drive micrometer positioning stages

X Stage



XY Stage



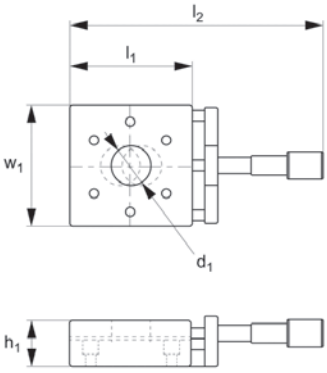
XYZ Stage

Also available in stainless steel.

Positioning Stages - Front Micrometer

X Stage, main dimensions

L3100



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). Not available for .0101, .0201 and .0301 sizes.
- PL (posi-lock carriage lock)
For XY and XYZ axes see L3106-L3113.

Important Notes

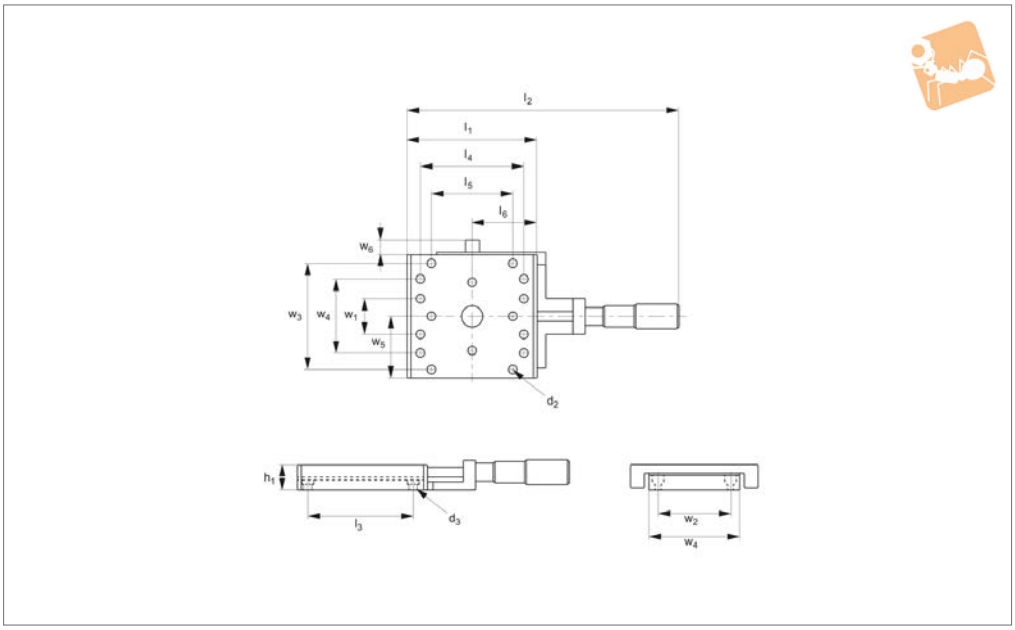
Stroke is centred on the mid-point of the slides (ie 50% of total stroke each way).
3D CAD available.

Order No.	Type	Travel	l_1	l_2	h_1	Through hole d_1	w_1	Load X & XY kg max.	Load Z kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.	Weight kg
L3100.0099-B	Ball	6	19,1	57,9	13,5		19,1	2,3	0,7	0,11	0,11	0,11	2,3
L3100.0101-B	Ball	13	31,8	82,6	9,7		31,8	1,8	0,7	0,19	0,18	0,18	1,8
L3100.0201-B	Ball	13	44,5	95,3	9,7		44,5	1,8	0,7	0,28	0,27	0,27	1,8
L3100.0301-B	Ball	13	38,1	88,9	15,7	8	38,1	5,4	0,9	0,50	0,50	0,50	5,4
L3100.0450-B	Ball	13	44,5	111,3	19,1		44,5	9,1	0,9	0,96	0,96	0,96	9,1
L3100.0451-B	Ball	25	44,5	149,4	19,1		44,5	9,1	0,9	0,96	0,96	0,96	9,1
L3100.0453-B	Ball	13	44,5	111,3	19,1	13	44,5	9,1	0,9	0,96	0,96	0,96	9,1
L3100.0750-B	Ball	13	66,5	133,4	25,4		66,5	27,2	0,9	4,94	4,94	4,94	27,2
L3100.0751-B	Ball	25	66,5	171,5	25,4		66,5	27,2	0,9	4,94	4,94	4,94	27,2
L3100.0753-B	Ball	13	66,5	133,4	25,4	25	66,5	27,2	0,9	4,94	4,94	4,94	27,2
L3100.0401-B	Ball	13	50,8	117,3	19,1		44,5	9,1	9,0	0,96	0,96	0,96	9,1
L3100.0501-B	Ball	13	82,6	148,8	19,1		44,5	19,0	9,0	2,02	2,02	2,02	19,0
L3100.0502-B	Ball	25	82,6	188,2	19,1		44,5	19,0	9,0	2,02	2,02	2,02	19,0
L3100.0701-B	Ball	13	101,6	168,1	25,4		66,5	27,2	9,0	4,94	4,94	4,94	27,2
L3100.0702-B	Ball	25	101,6	209,6	25,4		66,5	27,2	9,0	4,94	4,94	4,94	27,2
L3100.1201-B	Ball	25	79,2	184,2	23,1		79,2	13,6	13,6	2,05	1,95	1,95	13,6
L3100.1203-B	Ball	25	79,2	184,2	23,1	25	79,2	13,6	13,6	2,05	1,95	1,95	13,6
L3100.2201-B	Ball	25	104,6	209,6	23,1		104,6	13,6	13,6	3,21	3,04	3,04	13,6
L3100.2202-B	Ball	50	104,6	260,4	23,1		104,6	13,6	13,6	3,21	3,04	3,04	13,6
L3100.2203-B	Ball	25	104,6	209,6	23,1	38	104,6	13,6	13,6	3,21	3,04	3,04	13,6
L3100.2204-B	Ball	50	104,6	260,4	23,1	38	104,6	13,6	13,6	3,21	3,04	3,04	13,6
L3100.3201-B	Ball	25	130,2	235,0	23,1		130,2	13,6	13,6	4,25	4,05	4,05	13,6
L3100.3202-B	Ball	50	130,2	285,8	23,1		130,2	13,6	13,6	4,25	4,05	4,05	13,6
L3100.3203-B	Ball	25	130,2	235,0	23,1	51	130,2	13,6	13,6	4,25	4,05	4,05	13,6
L3100.3204-B	Ball	50	130,2	285,8	23,1	51	130,2	13,6	13,6	4,25	4,05	4,05	13,6

Order No.	Type	Travel	l_1	l_2	h_1	Through hole d_1	w_1	Load X & XY kg max.	Load Z kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.	Weight kg
L3100.0099-R	Roller	6	19,1	57,9	13,5		19,1	18,1	0,7				18,1
L3100.0101-R	Roller	13	31,8	82,6	9,7		31,8	10,4	0,7	1,09	1,04	1,04	10,4
L3100.0201-R	Roller	13	44,5	95,3	9,7		44,5	10,4	0,7	1,64	1,56	1,56	10,4
L3100.0301-R	Roller	13	38,1	88,9	15,7	8	38,1	18,1	0,9	2,88	2,88	2,88	18,1
L3100.0450-R	Roller	13	44,5	111,3	19,1		44,5	18,1	0,9	1,92	1,92	1,92	18,1
L3100.0451-R	Roller	25	44,5	149,4	19,1		44,5	18,1	0,9	1,92	1,92	1,92	18,1
L3100.0453-R	Roller	13	44,5	111,3	19,1	13	44,5	18,1	0,9	1,92	1,92	1,92	18,1
L3100.0750-R	Roller	13	66,5	133,4	25,4		66,5	54,4	0,9	9,88	9,88	9,88	54,4
L3100.0751-R	Roller	25	66,5	171,5	25,4		66,5	54,4	0,9	9,88	9,88	9,88	54,4
L3100.0753-R	Roller	13	66,5	133,4	25,4	25	66,5	54,4	0,9	9,88	9,88	9,88	54,4
L3100.0401-R	Roller	13	50,8	117,3	19,1		44,5	18,1	9,0	1,92	1,92	1,92	18,1
L3100.0501-R	Roller	13	82,6	148,8	19,1		44,5	36,3	9,0	3,84	3,84	3,84	36,3
L3100.0502-R	Roller	25	82,6	188,2	19,1		44,5	36,3	9,0	3,84	3,84	3,84	36,3
L3100.0701-R	Roller	13	101,6	168,1	25,4		66,5	72,5	9,0	13,18	13,18	13,18	72,5
L3100.0702-R	Roller	25	101,6	209,6	25,4		66,5	72,5	9,0	13,18	13,18	13,18	72,5
L3100.1201-R	Roller	25	79,2	184,2	23,1		79,2	38,5	13,6	5,81	5,53	5,53	38,5
L3100.1203-R	Roller	25	79,2	184,2	23,1	25	79,2	38,5	13,6	5,81	5,53	5,53	38,5
L3100.2201-R	Roller	25	104,6	209,6	23,1		104,6	38,5	13,6	9,10	8,60	8,60	38,5
L3100.2202-R	Roller	50	104,6	260,4	23,1		104,6	38,5	13,6	9,10	8,60	8,60	38,5
L3100.2203-R	Roller	25	104,6	209,6	23,1	38	104,6	38,5	13,6	9,10	8,60	8,60	38,5
L3100.2204-R	Roller	50	104,6	260,4	23,1	38	104,6	38,5	13,6	9,10	8,60	8,60	38,5
L3100.3201-R	Roller	25	130,2	235,0	23,1		130,2	38,5	13,6	12,05	11,47	11,47	38,5
L3100.3202-R	Roller	50	130,2	285,8	23,1		130,2	38,5	13,6	12,05	11,47	11,47	38,5
L3100.3203-R	Roller	25	130,2	235,0	23,1	51	130,2	38,5	13,6	12,05	11,47	11,47	38,5
L3100.3204-R	Roller	50	130,2	285,8	23,1	51	130,2	38,5	13,6	12,05	11,47	11,47	38,5

Front Micrometer Stages
further fixing holes detail

L3100.FH

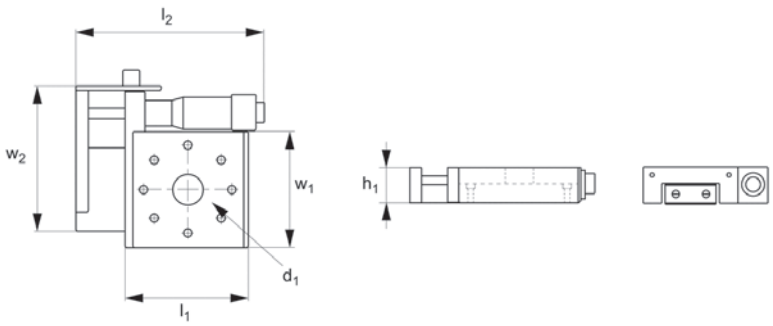


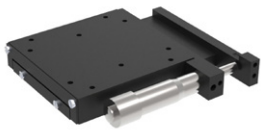
Material
Aluminium carriage and base, black anodised steel fixing, hardened steel shafts and balls and roller elements.

Technical Notes
For main dimensions and load ratings please see product page then refer to this information for detailed hole fixing data. These tables simply show additional mounting and fixing hole information. Dimensions l_6 and w_7 relate to optional posilock device.

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

Order No.	l_1	l_2	l_3	l_4	l_5	l_6	d_2	d_3 for	w_1	w_2	w_3	w_4	w_5	w_6
L3100.0099-X	19.1	57.9	13.5	14.3	7.9	-	M2	M2	13.5	7.9	-	-	14.3	-
L3100.0101-X	31.8	82.6	25.4	25.4	17.5	32.1	M2	M2	25.4	12.7	-	23.9	17.5	5.7
L3100.0201-X	44.5	95.3	38.1	38.1	30.2	38.5	M2	M2	38.1	25.4	-	36.6	30.2	5.7
L3100.0301-X	38.1	88.9	30.1	30.1	0.0	29.5	M3	M3	-	30.1	-	22.2	-	6.1
L3100.0450-X	44.5	111.3	33.3	25.4	-	45.0	M4	M4	25.4	-	-	22.2	-	6.1
L3100.0451-X	44.5	149.4	33.3	25.4	0.0	60.7	M4	M4	25.4	16.7	-	22.2	-	6.1
L3100.0453-X	44.5	111.3	33.3	25.4	-	45.0	M5	M5	25.4	16.7	-	38.1	-	6.1
L3100.0750-X	66.5	133.4	50.8	50.8	35.9	45.5	M5	M5	22.2	-	-	38.1	-	6.1
L3100.0751-X	66.5	171.5	50.8	50.8	35.9	60.7	M5	M5	22.2	-	-	38.1	-	6.1
L3100.0753-X	66.5	133.4	50.8	50.8	?	45.5	M5	M5	22.2	-	-	38.1	-	6.1
L3100.0401-X	50.8	117.3	41.1	25.4	-	45.0	M4	M4	22.2	-	-	22.2	-	6.4
L3100.0501-X	82.6	148.8	69.9	56.0	28.0	45.0	M4	M4	22.2	-	-	22.2	-	6.4
L3100.0502-X	82.6	188.2	69.9	56.0	28.0	60.7	M4	M4	22.2	-	-	22.2	-	6.4
L3100.0701-X	101.6	168.1	85.9	50.8	-	45.0	M5	M5	31.8	-	-	38.1	-	6.4
L3100.0702-X	101.6	209.6	85.9	50.8	-	60.7	M5	M5	31.8	-	-	38.1	-	6.4
L3100.1201-X	79.2	184.2	66.7	54.0	31.5	44.5	M5	M5	66.7	54.0	31.5	-	-	5.9
L3100.1203-X	79.2	184.2	66.7	54.0	31.5	44.5	M5	M5	66.7	54.0	31.5	-	-	5.9
L3100.2201-X	104.6	208.6	92.1	79.4	31.5	57.2	M5	M5	92.1	79.4	31.5	-	-	5.9
L3100.2202-X	104.6	260.4	92.1	79.4	31.5	57.2	M5	M5	92.1	79.4	31.5	-	-	5.9
L3100.2203-X	104.6	209.6	92.1	79.4	31.5	57.2	M5	M5	92.1	79.4	31.5	-	-	5.9
L3100.2204-X	104.6	206.4	92.1	79.4	31.5	57.2	M5	M5	92.1	79.4	31.5	-	-	5.9
L3100.3201-X	130.2	235.0	117.5	104.8	31.5	69.9	M5	M5	117.5	104.8	31.5	-	-	5.9
L3100.3202-X	130.2	285.8	117.5	104.8	31.5	69.9	M5	M5	117.5	104.8	31.5	-	-	5.9
L3100.3203-X	130.2	235.0	117.5	104.8	31.5	69.9	M5	M5	117.5	104.8	31.5	-	-	5.9
L3100.3204-X	130.2	285.8	117.5	104.8	31.5	69.9	M5	M5	117.5	104.8	31.5	-	-	5.9





L3102

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). Not available for .0101, .0201 and .0301 sizes.
- PL (posi-lock carriage lock)
For XY and XYZ axes see L3106-L3113.

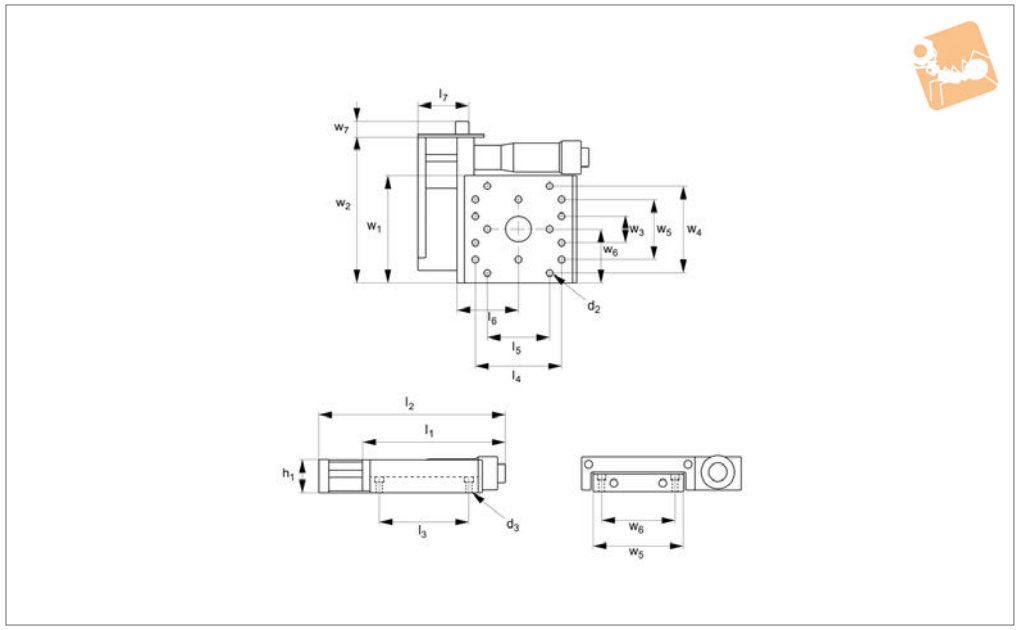
Important Notes
Stroke is centred on the mid-point of the slides (ie 50% of total stroke each way).
3D CAD available.

Order No.	Type	Travel	l_1	l_2	h_1	Through hole d_1	w_1	w_2	Load X & XY kg max.	Load Z kg max.	Moment load X N max.	Moment load Y N max.	Moment load Z N max.	Weight kg
L3102.0099-B	Ball	6	19,1	37,6	13,5		19,1	32,7	2,3	0,7	0,11	0,11	0,11	2,3
L3102.0101-B	Ball	13	31,8	54,9	9,7		31,8	44,5	1,8	0,7	0,19	0,18	0,18	1,8
L3102.0201-B	Ball	13	44,5	61,5	9,7		44,5	57,4	1,8	0,7	0,28	0,27	0,27	1,8
L3102.0301-B	Ball	13	38,1	55,4	15,7	8	38,1	51,1	5,4	0,9	0,50	0,50	0,50	5,4
L3102.0450-B	Ball	13	44,5	74,9	19,1		44,5	61,0	9,1	0,9	0,96	0,96	0,96	9,1
L3102.0451-B	Ball	25	44,5	114,5	19,1		44,5	64,8	9,1	0,9	0,96	0,96	0,96	9,1
L3102.0453-B	Ball	13	44,5	74,9	19,1	13	44,5	61,0	9,1	0,9	0,96	0,96	0,96	9,1
L3102.0750-B	Ball	13	66,5	89,4	25,4		66,5	83,1	27,2	0,9	4,94	4,94	4,94	27,2
L3102.0751-B	Ball	25	66,5	113,8	25,4		66,5	87,1	27,2	0,9	4,94	4,94	4,94	27,2
L3102.0753-B	Ball	13	66,5	89,4	25,4	25	66,5	83,1	27,2	0,9	4,94	4,94	4,94	27,2
L3102.0401-B	Ball	13	50,8	74,9	19,1		44,5	61,0	9,1	9,0	0,96	0,96	0,96	9,1
L3102.0501-B	Ball	13	82,6	105,4	19,1		44,5	61,0	19,0	9,0	2,02	2,02	2,02	19,0
L3102.0502-B	Ball	25	82,6	114,5	19,1		44,5	64,8	19,0	9,0	2,02	2,02	2,02	19,0
L3102.0701-B	Ball	13	101,6	124,5	25,4		66,5	84,1	27,2	9,0	4,94	4,94	4,94	27,2
L3102.0702-B	Ball	25	101,6	131,6	25,4		66,5	87,1	27,2	9,0	4,94	4,94	4,94	27,2
L3102.1201-B	Ball	25	79,2	120,7	23,1		79,2	102,6	13,6	13,6	2,05	1,95	1,95	13,6
L3102.1203-B	Ball	25	79,2	120,7	23,1	25	79,2	102,6	13,6	13,6	2,05	1,95	1,95	13,6
L3102.2201-B	Ball	25	104,6	120,7	23,1		104,6	128,0	13,6	13,6	3,21	3,04	3,04	13,6
L3102.2202-B	Ball	50	104,6	171,7	23,1		104,6	128,0	13,6	13,6	3,21	3,04	3,04	13,6
L3102.2203-B	Ball	25	104,6	120,7	23,1	38	104,6	128,0	13,6	13,6	3,21	3,04	3,04	13,6
L3102.2204-B	Ball	50	104,6	171,7	23,1	38	104,6	128,0	13,6	13,6	3,21	3,04	3,04	13,6
L3102.3201-B	Ball	25	130,0	130,0	23,1		130,0	153,4	13,6	13,6	4,25	4,05	4,05	13,6
L3102.3202-B	Ball	50	130,0	171,7	23,1		130,0	153,4	13,6	13,6	4,25	4,05	4,05	13,6
L3102.3203-B	Ball	25	130,0	130,0	23,1	51	130,0	153,4	13,6	13,6	4,25	4,05	4,05	13,6
L3102.3204-B	Ball	50	130,0	171,7	23,1	51	130,0	153,4	13,6	13,6	4,25	4,05	4,05	13,6

Positioning Stages - Side Micrometer

X stage, main dimensions

Order No.	Type	Travel	l_1	l_2	h_1	Through hole d_1	w_1	w_2	Load X & XY kg max.	Load Z kg max.	Moment load X N max.	Moment load Y N max.	Moment load Z N max.	Weight kg
L3102.0099-R	Roller	6	19,1	37,6	13,5		19,1	32,7	18,1	0,7				18,1
L3102.0101-R	Roller	13	31,8	54,9	9,7		31,8	44,5	10,4	0,7	1,09	1,04	1,04	10,4
L3102.0201-R	Roller	13	44,5	61,5	9,7		44,5	57,4	10,4	0,7	1,64	1,56	1,56	10,4
L3102.0301-R	Roller	13	38,1	55,4	15,7	8	38,1	51,1	18,1	0,9	2,88	2,88	2,88	18,1
L3102.0450-R	Roller	13	44,5	74,9	19,1		44,5	61,0	18,1	0,9	1,92	1,92	1,92	18,1
L3102.0451-R	Roller	25	44,5	114,5	19,1		44,5	64,8	18,1	0,9	1,92	1,92	1,92	18,1
L3102.0453-R	Roller	13	44,5	74,9	19,1	13	44,5	61,0	18,1	0,9	1,92	1,92	1,92	18,1
L3102.0750-R	Roller	13	66,5	89,4	25,4		66,5	83,1	54,4	0,9	9,88	9,88	9,88	54,4
L3102.0751-R	Roller	25	66,5	113,8	25,4		66,5	87,1	54,4	0,9	9,88	9,88	9,88	54,4
L3102.0753-R	Roller	13	66,5	89,4	25,4	25	66,5	83,1	54,4	0,9	9,88	9,88	9,88	54,4
L3102.0401-R	Roller	13	50,8	74,9	19,1		44,5	61,0	18,1	9,0	1,92	1,92	1,92	18,1
L3102.0501-R	Roller	13	82,6	105,4	19,1		44,5	61,0	36,3	9,0	3,84	3,84	3,84	36,3
L3102.0502-R	Roller	25	82,6	114,5	19,1		44,5	64,8	36,3	9,0	3,84	3,84	3,84	36,3
L3102.0701-R	Roller	13	101,6	124,5	25,4		66,5	84,1	72,5	9,0	13,18	13,18	13,18	72,5
L3102.0702-R	Roller	25	101,6	131,6	25,4		66,5	87,1	72,5	9,0	13,18	13,18	13,18	72,5
L3102.1201-R	Roller	25	79,2	120,7	23,1		79,2	102,6	38,5	13,6	5,81	5,53	5,53	38,5
L3102.1203-R	Roller	25	79,2	120,7	23,1	25	79,2	102,6	38,5	13,6	5,81	5,53	5,53	38,5
L3102.2201-R	Roller	25	104,6	120,7	23,1		104,6	128,0	38,5	13,6	9,10	8,60	8,60	38,5
L3102.2202-R	Roller	50	104,6	171,7	23,1		104,6	128,0	38,5	13,6	9,10	8,60	8,60	38,5
L3102.2203-R	Roller	25	104,6	120,7	23,1	38	104,6	128,0	38,5	13,6	9,10	8,60	8,60	38,5
L3102.2204-R	Roller	50	104,6	171,7	23,1	38	104,6	128,0	38,5	13,6	9,10	8,60	8,60	38,5
L3102.3201-R	Roller	25	130,0	130,0	23,1		130,0	153,4	38,5	13,6	12,05	11,47	11,47	38,5
L3102.3202-R	Roller	50	130,0	171,7	23,1		130,0	153,4	38,5	13,6	12,05	11,47	11,47	38,5
L3102.3203-R	Roller	25	130,0	130,0	23,1	51	130,0	153,4	38,5	13,6	12,05	11,47	11,47	38,5
L3102.3204-R	Roller	50	130,0	171,7	23,1	51	130,0	153,4	38,5	13,6	12,05	11,47	11,47	38,5



L3102.FH

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

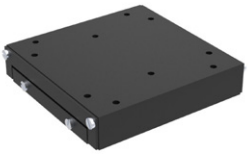
Technical Notes
For main dimensions and load ratings please see product page then refer to this information for detailed hole fixing data. These tables simply show additional mounting and fixing hole information. Dimensions l_7 and w_7 relate to optional posilock device.

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

Order No.	l_3	l_4	l_5	l_6	l_7	d_2	d_3 for	w_2	w_3	w_4	w_5	w_6	w_7
L3102.0099-X	13.5	14.3	7.9	-	-	M2	M2	13.5	7.9	-	-	14.3	-
L3102.0101-X	25.4	25.4	17.5	15.5	15.5	M2	M2	25.4	12.7	-	23.9	17.5	5.7
L3102.0201-X	38.1	38.1	30.2	15.5	15.5	M2	M2	38.1	25.4	-	36.6	30.2	5.7
L3102.0301-X	30.1	30.1	0.0	16.0	16.0	M3	M3	0.0	30.1	-	22.2	-	6.1
L3102.0450-X	33.3	25.4	-	25.6	25.6	M4	M4	25.4	-	-	22.2	-	6.1
L3102.0451-X	33.3	25.4	0.0	25.6	25.6	M4	M4	25.4	16.7	-	22.2	-	6.1
L3102.0453-X	33.3	25.4	-	25.6	25.6	M5	M5	25.4	16.7	-	38.1	-	6.1
L3102.0750-X	50.8	?	?	26.1	26.1	M5	M5	50.8	35.9	-	38.1	-	6.1
L3102.0751-X	50.8	?	?	38.2	38.2	M5	M5	50.8	35.9	-	38.1	-	6.1
L3102.0753-X	50.8	?	?	38.2	38.2	M5	M5	50.8	35.9	-	38.1	-	6.1
L3102.0401-X	41.1	25.4	-	25.6	25.6	M4	M4	22.2	-	-	22.2	-	6.4
L3102.0501-X	69.9	56.0	28.0	25.6	25.6	M4	M4	22.2	-	-	22.2	-	6.4
L3102.0502-X	69.9	56.0	28.0	38.2	38.2	M4	M4	22.2	-	-	22.2	-	6.4
L3102.0701-X	85.9	50.8	-	26.1	26.1	M5	M5	31.8	-	-	38.1	-	6.4
L3102.0702-X	85.9	50.8	-	38.2	38.2	M5	M5	31.8	-	-	38.1	-	6.4
L3102.1201-X	66.7	54.0	31.5	44.5	44.5	M5	M5	66.7	54.0	31.5	-	-	5.9
L3102.1203-X	66.7	54.0	31.5	44.5	55.6	M5	M5	66.7	54.0	31.5	-	-	5.9
L3102.2201-X	92.1	79.4	31.5	55.6	69.9	M5	M5	92.1	79.4	31.5	-	-	5.9
L3102.2202-X	92.1	79.4	31.5	55.6	69.9	M5	M5	92.1	79.4	31.5	-	-	5.9
L3102.2203-X	92.1	79.4	31.5	55.6	69.9	M5	M5	92.1	79.4	31.5	-	-	5.9
L3102.2204-X	92.1	79.4	31.5	55.6	69.9	M5	M5	92.1	79.4	31.5	-	-	5.9
L3102.3201-X	117.5	104.8	31.5	69.9	69.9	M5	M5	117.5	104.8	31.5	-	-	5.9
L3102.3202-X	117.5	104.8	31.5	69.9	69.9	M5	M5	117.5	104.8	31.5	-	-	5.9
L3102.3203-X	117.5	104.8	31.5	69.9	69.9	M5	M5	117.5	104.8	31.5	-	-	5.9
L3102.3204-X	117.5	104.8	31.5	69.9	69.9	M5	M5	117.5	104.8	31.5	-	-	5.9

Positioning Stages - Plain

X Stage, main dimensions



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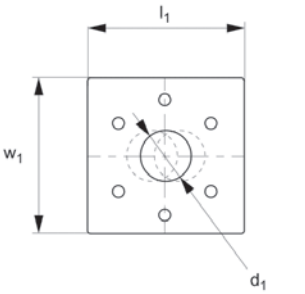


Material

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.
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

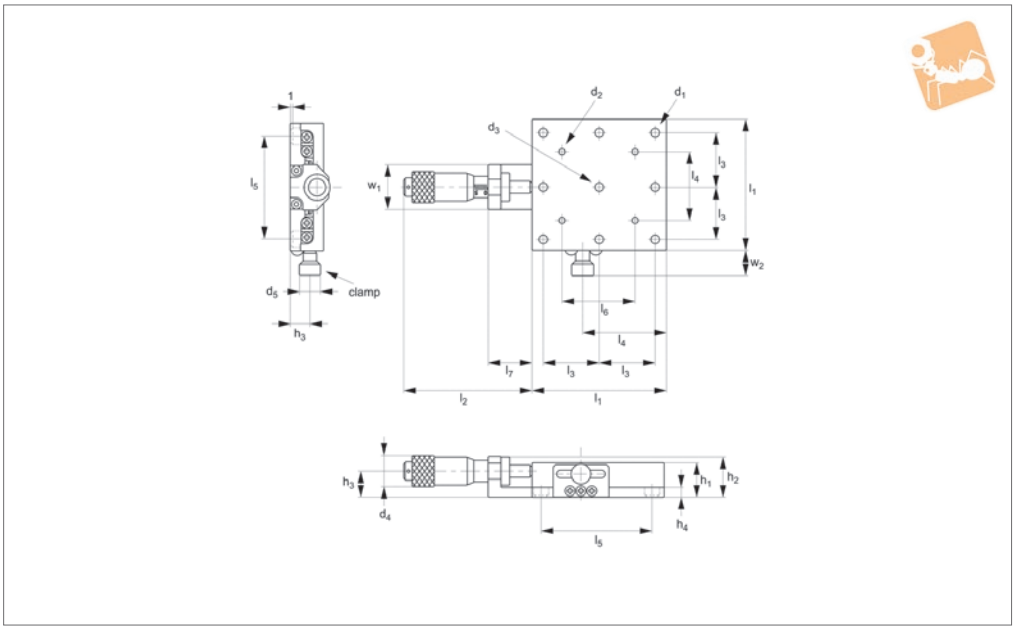
Stroke is centred on the mid-point of the slides (ie 50% of total stroke each way).
3D CAD available.

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

Stainless Micrometer X Stages
front drive

L3120



Material
Stainless steel (440C) with electroless nickel plating.

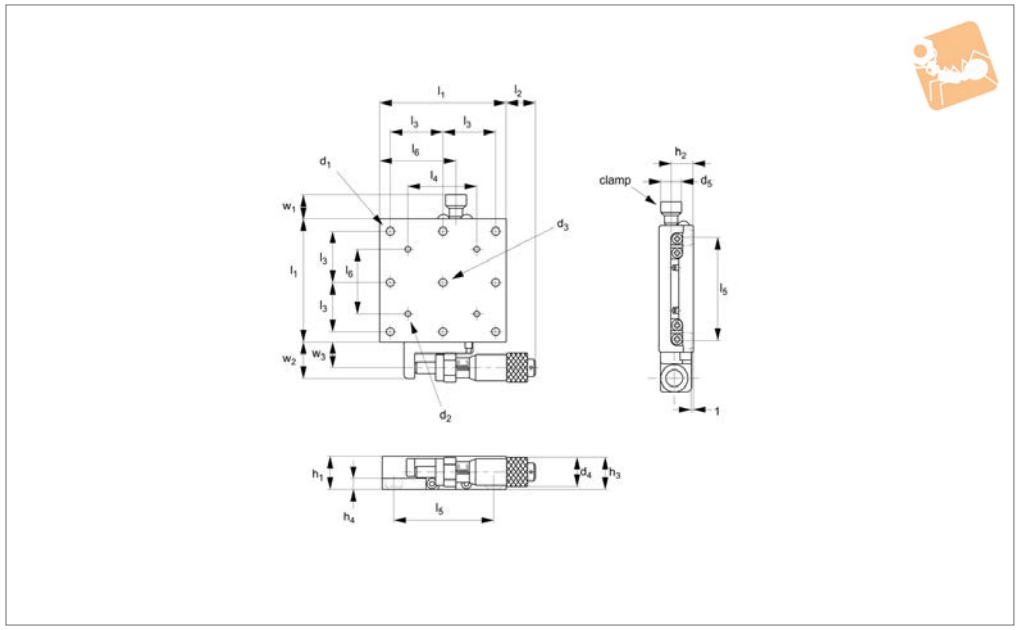
Technical Notes
Straightness accuracy 5µ.

Spring loaded micrometer allows precise repeatable adjustments with low friction and zero backlash.
Micrometer increments 0,01mm.

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

Order No.	Travel	l_1	l_2	l_3	l_4	l_5	l_6	l_7	h_1	h_2	h_3
L3120.040	13	40	58.5	16	26	32	-	20.5	16.0	19.0	10.5
L3120.060	13	60	58.5	25	36	50	32	20.5	16.0	19.0	10.5
L3120.080	25	80	80.0	35	55	70	50	24.5	20.0	24.3	16.8
L3120.100	25	100	80.0	45	67.5	90	70	24.5	20.0	24.3	16.8

Order No.	h_4	d_1	d_2	d_3	d_4	d_5	w_1	w_2	Load kg max.
L3120.040	4.5	M3	-	4	13	10	20	11.5	10.0
L3120.060	5.0	M4	M3	4	13	10	20	11.5	20.0
L3120.080	6.5	M4	M4	4	13	10	24	11.2	27.0
L3120.100	6.5	M4	M4	4	13	10	24	11.2	35.0



L3122

Material
Stainless steel (440C) with electroless nickel plating.

Technical Notes
Straightness accuracy 5µ.

Spring loaded micrometer allows precise repeatable adjustments with low friction and zero backlash.
Micrometer increments 0,01mm.

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

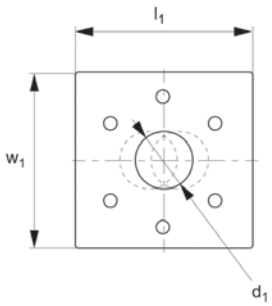
Order No.	Travel	l_1	l_2	l_3	l_4	l_5	l_6	h_1	h_2	h_3	h_4
L3122.040	13	40	23.7	16	-	32	26	16.0	10.5	9	4.5
L3122.060	13	60	13.8	25	32	50	36	16.0	10.5	9	5.0
L3122.080	25	80	32.5	25	50	70	55	20.0	14.5	10.8	6.5
L3122.100	25	100	17.5	25	70	90	67.5	20.0	14.5	10.8	6.5

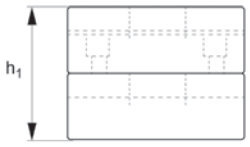
Order No.	d_1	d_2	d_3	d_4	d_5	w_1	w_2	Load kg max.
L3122.040	M3	-	4	13	10	18.5	12	10.0
L3122.060	M4	M3	4	13	10	18.5	12	20.0
L3122.080	M4	M4	4	13	10	23.5	17	27.0
L3122.100	M4	M4	4	13	10	23.5	17	35.0

Plain Positioning XY Stages

XY Stage, main dimensions

L3104



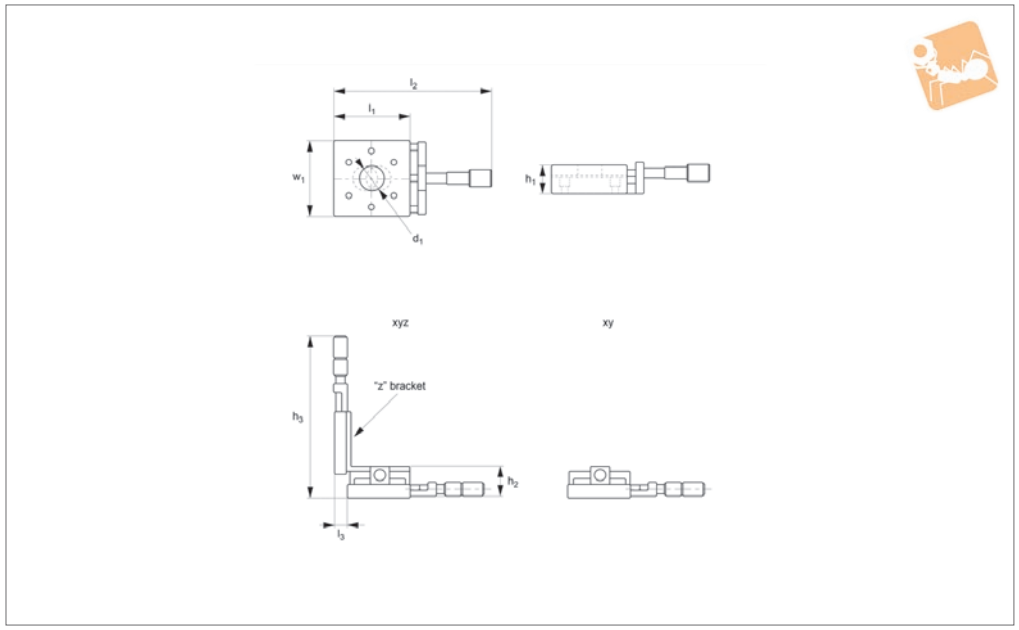


Material
Aluminium carriage and base, black anodised steel fixing, hardened steel shafts and balls and roller elements

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.
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.

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_1	l_1	w_1	Through hole d_1	Load X & XY kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.	Weight kg
L3104.0101-B	XY Ball	13	19.0	31.8	31.8	-	1.8	-	-	-	1.8
L3104.0201-B	XY Ball	13	19.0	44.5	44.5	-	1.8	-	-	-	1.8
L3104.0301-B	XY Ball	13	31.8	38.1	38.1	8	5.4	0.50	0.68	0.71	5.4
L3104.0451-B	XY Ball	25	38.1	44.5	44.5	-	9.1	0.96	1.13	1.19	9.1
L3104.0452-B	XY Ball	25	38.1	44.5	44.5	13	9.1	0.96	1.13	1.19	9.1
L3104.0751-B	XY Ball	25	50.8	66.5	66.5	-	27.2	4.94	5.75	6.04	27.2
L3104.0752-B	XY Ball	25	50.8	66.5	66.5	25	27.2	4.94	5.75	6.04	27.2
L3104.1202-B	XY Ball	50	46.2	79.2	79.2	-	13.6	2.89	1.95	2.05	13.6
L3104.1204-B	XY Ball	50	46.2	79.2	79.2	25	13.6	2.89	1.95	2.05	13.6
L3104.2205-B	XY Ball	75	46.2	104.6	104.6	-	13.6	4.80	3.04	3.21	13.6
L3104.2206-B	XY Ball	75	46.2	104.6	104.6	38	13.6	4.80	3.04	3.21	13.6
L3104.3205-B	XY Ball	100	46.2	130.2	130.2	-	13.6	4.80	3.04	3.21	13.6
L3104.3206-B	XY Ball	100	46.2	130.2	130.2	51	13.6	7.11	4.05	4.25	13.6
L3104.0101-R	XY Roller	13	19.0	31.8	31.8	-	10.4	-	-	-	10.4
L3104.0201-R	XY Roller	13	19.0	44.5	44.5	-	10.4	-	-	-	10.4
L3104.0301-R	XY Roller	13	31.8	38.1	38.1	8	18.1	1.67	2.26	2.37	18.1
L3104.0451-R	XY Roller	25	38.1	44.5	44.5	-	18.1	1.92	2.26	2.37	18.1
L3104.0452-R	XY Roller	25	38.1	44.5	44.5	13	18.1	1.92	2.26	2.37	18.1
L3104.0751-R	XY Roller	25	50.8	66.5	66.5	-	54.4	9.88	11.50	12.07	54.4
L3104.0752-R	XY Roller	25	50.8	66.5	66.5	25	54.4	9.88	11.50	12.07	54.4
L3104.1202-R	XY Roller	50	46.2	79.2	79.2	-	38.5	8.19	5.53	5.81	38.5
L3104.1204-R	XY Roller	50	46.2	79.2	79.2	25	38.5	8.19	5.53	5.81	38.5
L3104.2205-R	XY Roller	75	46.2	104.6	104.6	-	38.5	13.60	8.60	9.10	38.5
L3104.2206-R	XY Roller	75	46.2	104.6	104.6	38	38.5	13.60	8.60	9.10	38.5
L3104.3205-R	XY Roller	100	46.2	130.2	130.2	-	38.5	13.60	8.60	9.10	38.5
L3104.3206-R	XY Roller	100	46.2	130.2	130.2	51	38.5	20.15	11.47	12.05	38.5



L3105

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.

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

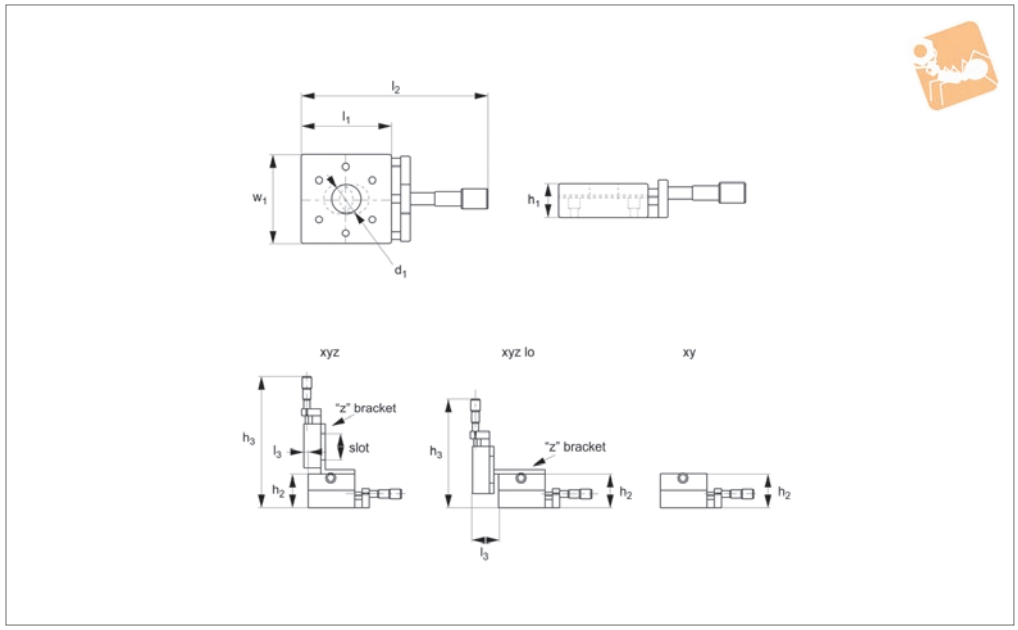
Important Notes
Stroke is centred on the mid-point of the slides (ie 50% of total stroke each way).
3D CAD available.

Order No.	Type	Travel	h_1	h_2	h_3	l_1	l_2	l_3	w_1	Weight kg
L3105.0101-XYB	XY Ball	13	9.7	19.0	-	31.8	82.6	-	31.8	1.8
L3105.0201-XYB	XY Ball	13	9.7	19.0	-	44.5	95.3	-	44.5	1.8
L3105.0101-XYR	XY Roller	13	9.7	19.0	-	31.8	82.6	-	31.8	10.4
L3105.0201-XYR	XY Roller	13	9.7	19.0	-	44.5	95.3	-	44.5	10.4
L3105.0101-XYZB	XYZ Ball	13	9.7	19.0	98.3	31.8	82.6	9.7	31.8	1.8
L3105.0201-XYZB	XYZ Ball	13	9.7	19.0	111.0	44.5	95.3	11.3	44.5	1.8
L3105.0101-XYZR	XYZ Roller	13	9.7	19.0	98.3	31.8	82.6	9.7	31.8	10.4
L3105.0201-XYZR	XYZ Roller	13	9.7	19.0	111.0	44.5	95.3	11.3	44.5	10.4

Order No.	Load Z kg max.	Load X & XY kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.
L3105.0101-XYB	0.7	1.8	0.19	0.18	0.18
L3105.0201-XYB	0.7	1.8	0.28	0.27	0.27
L3105.0101-XYR	0.7	10.4	1.09	1.04	1.04
L3105.0201-XYR	0.7	10.4	1.64	1.56	1.56
L3105.0101-XYZB	0.7	1.8	0.19	0.18	0.18
L3105.0201-XYZB	0.7	1.8	0.28	0.27	0.27
L3105.0101-XYZR	0.7	10.4	1.09	1.04	1.04
L3105.0201-XYZR	0.7	10.4	1.64	1.56	1.56

Micrometer Positioning XY, XYZ

front drive, small sizes



L3106

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_1	h_2	h_3	l_1	l_2	l_3	w_1	Weight kg
L3106.0301-XYB	XY Ball	13	15.7	31.8	-	38.1	88.9	-	38.1	5.4
L3106.0450-XYB	XY Ball	13	19.1	38.1	-	44.5	111.3	-	44.5	9.1
L3106.0451-XYB	XY Ball	25	19.1	38.1	-	44.5	149.4	-	44.5	9.1
L3106.0453-XYB	XY Ball	13	19.1	38.1	-	44.5	111.3	-	44.5	9.1
L3106.0750-XYB	XY Ball	13	25.4	50.8	-	66.5	133.4	-	66.5	27.2
L3106.0751-XYB	XY Ball	25	25.4	50.8	-	66.5	171.5	-	66.5	27.2
L3106.0753-XYB	XY Ball	13	25.4	50.8	-	66.5	133.4	-	66.5	27.2
L3106.0301-XYR	XY Roller	13	15.7	31.8	-	38.1	88.9	-	38.1	18.1
L3106.0450-XYR	XY Roller	13	19.1	38.1	-	44.5	111.3	-	44.5	18.1
L3106.0451-XYR	XY Roller	25	19.1	38.1	-	44.5	149.4	-	44.5	18.1
L3106.0453-XYR	XY Roller	13	19.1	38.1	-	44.5	111.3	-	44.5	18.1
L3106.0750-XYR	XY Roller	13	25.4	50.8	-	66.5	133.4	-	66.5	54.4
L3106.0751-XYR	XY Roller	25	25.4	50.8	-	66.5	171.5	-	66.5	54.4
L3106.0753-XYR	XY Roller	13	25.4	50.8	-	66.5	133.4	-	66.5	54.4
L3106.0301-XYZB	XYZ Ball	13	15.7	31.8	130	38.1	88.9	8.1	38.1	5.4
L3106.0450-XYZB	XYZ Ball	13	19.1	38.1	162.1	44.5	111.3	0	44.5	9.1
L3106.0451-XYZB	XYZ Ball	25	19.1	38.1	200.2	44.5	149.4	0	44.5	9.1
L3106.0453-XYZB	XYZ Ball	13	19.1	38.1	162.1	44.5	111.3	0	44.5	9.1
L3106.0750-XYZB	XYZ Ball	13	25.4	50.8	199.9	66.5	133.4	1.5	66.5	27.2
L3106.0751-XYZB	XYZ Ball	25	25.4	50.8	238	66.5	171.5	1.5	66.5	27.2
L3106.0753-XYZB	XYZ Ball	13	25.4	50.8	199.9	66.5	133.4	1.5	66.5	27.2
L3106.0301-XYZR	XYZ Roller	13	15.7	31.8	130	38.1	88.9	8.1	38.1	18.1
L3106.0450-XYZR	XYZ Roller	13	19.1	38.1	162.1	44.5	111.3	0	44.5	18.1
L3106.0451-XYZR	XYZ Roller	25	19.1	38.1	200.2	44.5	149.4	0	44.5	18.1
L3106.0453-XYZR	XYZ Roller	13	19.1	38.1	162.1	44.5	111.3	0	44.5	18.1
L3106.0750-XYZR	XYZ Roller	13	25.4	50.8	199.9	66.5	133.4	1.5	66.5	54.4
L3106.0751-XYZR	XYZ Roller	25	25.4	50.8	238	66.5	171.5	1.5	66.5	54.4
L3106.0753-XYZR	XYZ Roller	13	25.4	50.8	199.9	66.5	133.4	1.5	66.5	54.4

Micrometer Positioning XY, XYZ

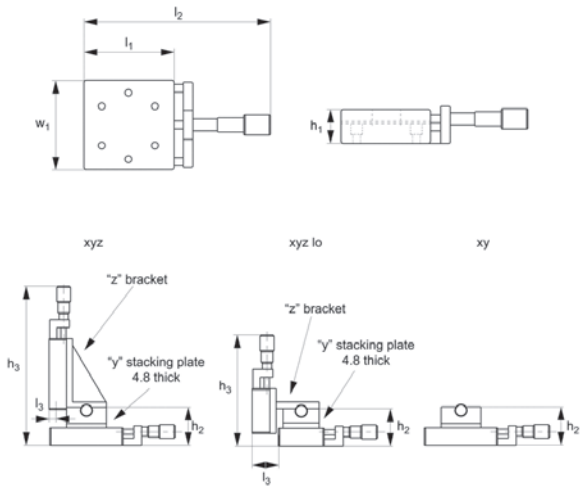
front drive, medium sizes

Order No.	Type	Travel	h_1	h_2	h_3	l_1	l_2	l_3	w_1	Weight kg
L3106.0301-XYZLB	XYZ Ball Lo	13	15.7	31.8	100.1	38.1	88.9	25.4	38.1	5.4
L3106.0450-XYZLB	XYZ Ball Lo	13	19.1	38.1	128.8	44.5	111.3	28.4	44.5	9.1
L3106.0451-XYZLB	XYZ Ball Lo	25	19.1	38.1	166.9	44.5	149.4	28.4	44.5	9.1
L3106.0453-XYZLB	XYZ Ball Lo	13	19.1	38.1	128.8	44.5	111.3	28.4	44.5	9.1
L3106.0750-XYZLB	XYZ Ball Lo	13	25.4	50.8	150.9	66.5	133.4	38.1	66.5	27.2
L3106.0751-XYZLB	XYZ Ball Lo	25	25.4	50.8	189	66.5	171.5	38.1	66.5	27.2
L3106.0753-XYZLB	XYZ Ball Lo	13	25.4	50.8	150.9	66.5	133.4	38.1	66.5	27.2
L3106.0301-XYZLR	XYZ Roller Lo	13	15.7	31.8	106.4	38.1	88.9	25.4	38.1	18.1
L3106.0450-XYZLR	XYZ Roller Lo	13	19.1	38.1	128.8	44.5	111.3	28.4	44.5	18.1
L3106.0451-XYZLR	XYZ Roller Lo	25	19.1	38.1	166.9	44.5	149.4	28.4	44.5	18.1
L3106.0453-XYZLR	XYZ Roller Lo	13	19.1	38.1	128.8	44.5	111.3	28.4	44.5	18.1
L3106.0750-XYZLR	XYZ Roller Lo	13	25.4	50.8	150.9	66.5	133.4	38.1	66.5	54.4
L3106.0751-XYZLR	XYZ Roller Lo	25	25.4	50.8	189	66.5	171.5	38.1	66.5	54.4
L3106.0753-XYZLR	XYZ Roller Lo	13	25.4	50.8	150.9	66.5	133.4	38.1	66.5	54.4

Order No.	Through hole d_1	Load Z kg max.	Load X & XY kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.	Slot size
L3106.0301-XYB	8	0.9	5.4	0.50	0.50	0.50	-
L3106.0450-XYB	-	0.9	9.1	0.96	0.96	0.96	-
L3106.0451-XYB	-	0.9	9.1	0.96	0.96	0.96	-
L3106.0453-XYB	13	0.9	9.1	0.96	0.96	0.96	-
L3106.0750-XYB	-	0.9	27.2	4.94	4.94	4.94	-
L3106.0751-XYB	-	0.9	27.2	4.94	4.94	4.94	-
L3106.0753-XYB	25	0.9	27.2	4.94	4.94	4.94	-
L3106.0301-XYR	8	0.9	18.1	2.88	2.88	2.88	-
L3106.0450-XYR	-	0.9	18.1	1.92	1.92	1.92	-
L3106.0451-XYR	-	0.9	18.1	1.92	1.92	1.92	-
L3106.0453-XYR	13	0.9	18.1	1.92	1.92	1.92	-
L3106.0750-XYR	-	0.9	54.4	9.88	9.88	9.88	-
L3106.0751-XYR	-	0.9	54.4	9.88	9.88	9.88	-
L3106.0753-XYR	25	0.9	54.4	9.88	9.88	9.88	-
L3106.0301-XYZB	8	0.9	5.4	0.50	0.50	0.50	10x22
L3106.0450-XYZB	-	0.9	9.1	0.96	0.96	0.96	13x25
L3106.0451-XYZB	-	0.9	9.1	0.96	0.96	0.96	13x25
L3106.0453-XYZB	13	0.9	9.1	0.96	0.96	0.96	13x25
L3106.0750-XYZB	-	0.9	27.2	4.94	4.94	4.94	25x38
L3106.0751-XYZB	-	0.9	27.2	4.94	4.94	4.94	25x38
L3106.0753-XYZB	25	0.9	27.2	4.94	4.94	4.94	25x38
L3106.0301-XYZR	8	0.9	18.1	2.88	2.88	2.88	10x22
L3106.0450-XYZR	-	0.9	18.1	1.92	1.92	1.92	13x25
L3106.0451-XYZR	-	0.9	18.1	1.92	1.92	1.92	13x25
L3106.0453-XYZR	13	0.9	18.1	1.92	1.92	1.92	13x25
L3106.0750-XYZR	-	0.9	54.4	9.88	9.88	9.88	25x38
L3106.0751-XYZR	-	0.9	54.4	9.88	9.88	9.88	25x38
L3106.0753-XYZR	25	0.9	54.4	9.88	9.88	9.88	25x38
L3106.0301-XYZLB	8	0.9	5.4	0.50	0.50	0.50	10x22
L3106.0450-XYZLB	-	0.9	9.1	0.96	0.96	0.96	13x25
L3106.0451-XYZLB	-	0.9	9.1	0.96	0.96	0.96	13x25
L3106.0453-XYZLB	13	0.9	9.1	0.96	0.96	0.96	13x25
L3106.0750-XYZLB	-	0.9	27.2	4.94	4.94	4.94	25x38
L3106.0751-XYZLB	-	0.9	27.2	4.94	4.94	4.94	25x38
L3106.0753-XYZLB	25	0.9	27.2	4.94	4.94	4.94	25x38
L3106.0301-XYZLR	8	0.9	18.1	2.88	2.88	2.88	10x22
L3106.0450-XYZLR	-	0.9	18.1	1.92	1.92	1.92	13x25
L3106.0451-XYZLR	-	0.9	18.1	1.92	1.92	1.92	13x25
L3106.0453-XYZLR	13	0.9	18.1	1.92	1.92	1.92	13x25
L3106.0750-XYZLR	-	0.9	54.4	9.88	9.88	9.88	25x38
L3106.0751-XYZLR	-	0.9	54.4	9.88	9.88	9.88	25x38
L3106.0753-XYZLR	25	0.9	54.4	9.88	9.88	9.88	25x38

Micrometer Positioning XY, XYZ
front drive, medium sizes

L3107



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).

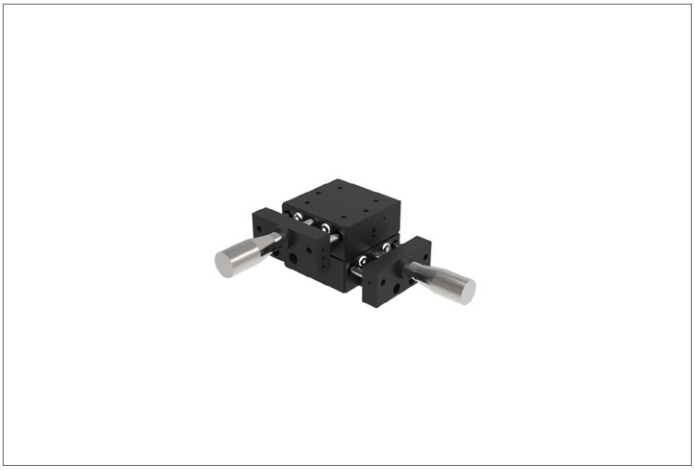
Loads on the Z axis may extend springs if the loads are too heavy. These stages have the micrometer bracket reversed to prevent this and increase the Z load capacity.

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_1	h_2	h_3	l_1	l_2	l_3	w_1	Weight kg
L3107.0401-XYB	XY Ball	13	19.1	42.9	-	50.8	117.3	-	44.5	9.1
L3107.0501-XYB	XY Ball	13	19.1	42.9	-	82.6	148.8	-	44.5	19.0
L3107.0502-XYB	XY Ball	25	19.1	42.9	-	82.6	188.2	-	44.5	19.0
L3107.0701-XYB	XY Ball	13	25.4	55.6	-	101.6	168.1	-	66.5	27.2
L3107.0702-XYB	XY Ball	25	25.4	55.6	-	101.6	209.6	-	66.5	27.2
L3107.0401-XYR	XY Roller	13	19.1	42.9	-	50.8	117.3	-	44.5	18.1
L3107.0501-XYR	XY Roller	13	19.1	42.9	-	82.6	148.8	-	44.5	36.3
L3107.0502-XYR	XY Roller	25	19.1	42.9	-	82.6	188.2	-	44.5	36.3
L3107.0701-XYR	XY Roller	13	25.4	55.6	-	101.6	168.1	-	66.5	72.5
L3107.0702-XYR	XY Roller	25	25.4	55.6	-	101.6	209.6	-	66.5	72.5
L3107.0401-XYZLB	XYZ Ball Lo	13	19.1	42.9	130	50.8	117.3	28.4	44.5	9.1
L3107.0501-XYZB	XYZ Ball	13	19.1	42.9	188.4	82.6	148.8	0	44.5	19.0
L3107.0502-XYZB	XYZ Ball	25	19.1	42.9	227.8	82.6	188.2	0	44.5	19.0
L3107.0701-XYZB	XYZ Ball	13	25.4	55.6	220.4	101.6	168.1	8.1	66.5	27.2
L3107.0702-XYZB	XYZ Ball	25	25.4	55.6	261.9	101.6	209.6	8.1	66.5	27.2
L3107.0401-XYZLR	XYZ Roller Lo	13	19.1	42.9	130	50.8	117.3	28.4	44.5	18.1
L3107.0501-XYZR	XYZ Roller	13	19.1	42.9	188.4	82.6	148.8	0	44.5	36.3
L3107.0502-XYZR	XYZ Roller	25	19.1	42.9	227.8	82.6	188.2	0	44.5	36.3
L3107.0701-XYZR	XYZ Roller	13	25.4	55.6	220.4	101.6	168.1	8.1	66.5	72.5
L3107.0702-XYZR	XYZ Roller	25	25.4	55.6	261.9	101.6	209.6	8.1	66.5	72.5

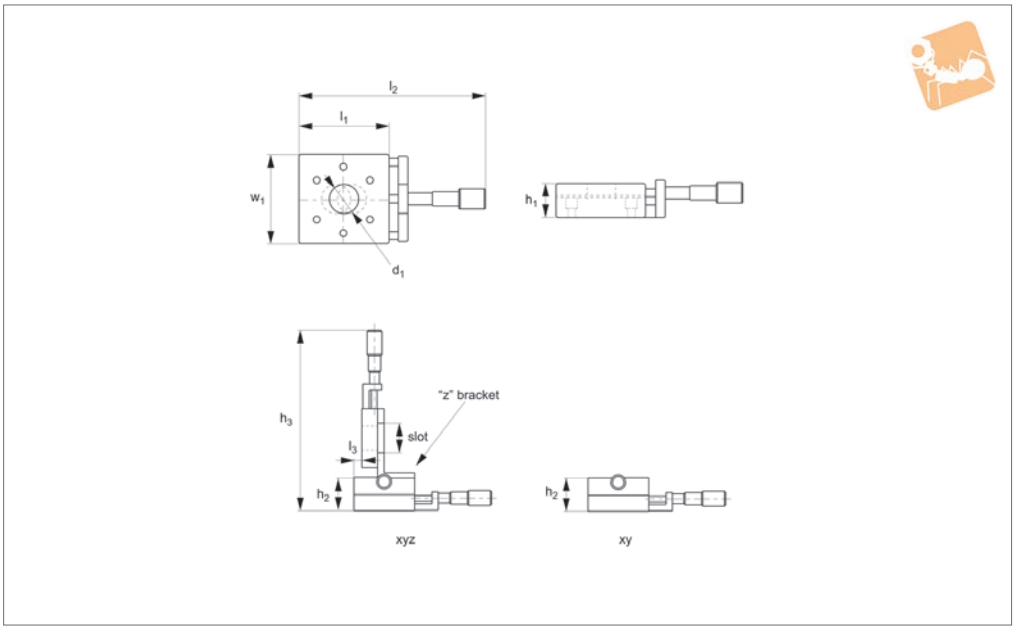
Order No.	Load Z kg max.	Load X & XY kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.
L3107.0401-XYB	9.0	9.1	0.96	0.96	0.96
L3107.0501-XYB	9.0	19.0	2.02	2.02	2.02

Order No.	Load Z kg max.	Load X & XY kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.
L3107.0502-XYB	9.0	19.0	2.02	2.02	2.02
L3107.0701-XYB	9.0	27.2	4.94	4.94	4.94
L3107.0702-XYB	9.0	27.2	4.94	4.94	4.94
L3107.0401-XYR	9.0	18.1	1.92	1.92	1.92
L3107.0501-XYR	9.0	36.3	3.84	3.84	3.84
L3107.0502-XYR	9.0	36.3	3.84	3.84	3.84
L3107.0701-XYR	9.0	72.5	13.18	13.18	13.18
L3107.0702-XYR	9.0	72.5	13.18	13.18	13.18
L3107.0401-XYZLB	9.0	9.1	0.96	0.96	0.96
L3107.0501-XYZB	9.0	19.0	2.02	2.02	2.02
L3107.0502-XYZB	9.0	19.0	2.02	2.02	2.02
L3107.0701-XYZB	9.0	27.2	4.94	4.94	4.94
L3107.0702-XYZB	9.0	27.2	4.94	4.94	4.94
L3107.0401-XYZLR	9.0	18.1	1.92	1.92	1.92
L3107.0501-XYZR	9.0	36.3	3.84	3.84	3.84
L3107.0502-XYZR	9.0	36.3	3.84	3.84	3.84
L3107.0701-XYZR	9.0	72.5	13.18	13.18	13.18
L3107.0702-XYZR	9.0	72.5	13.18	13.18	13.18



Micrometer Positioning XY, XYZ
front drive, large sizes

L3108



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

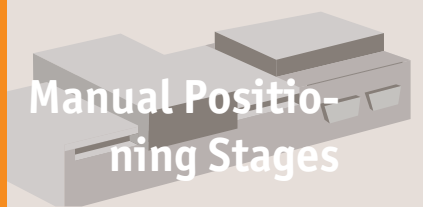
Technical Notes
Ball roller versions recommended for light loads. Cross roller versions for heavier loads and moment loads.
Straight line accuracy 12µ/25mm travel.
Repeatability 3µ.
Spring loaded micrometer allows precise repeatable adjustments with low friction and zero backlash.
Micrometer increments 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).

Loads on the Z axis may extend springs if the loads are too heavy. These stages have the micrometer bracket reversed to prevent this and increase the Z load capacity.

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_1	h_2	h_3	l_1	l_2	l_3	w_2	Weight kg
L3108.1201-XYB	XY Ball	25	23.1	46.2	-	79.2	184.2	-	79.2	13.6
L3108.1203-XYB	XY Ball	25	23.1	46.2	-	79.2	184.2	-	79.2	13.6
L3108.2201-XYB	XY Ball	25	23.1	46.2	-	104.6	209.6	-	104.6	13.6
L3108.2202-XYB	XY Ball	50	23.1	46.2	-	104.6	260.4	-	104.6	13.6
L3108.2203-XYB	XY Ball	25	23.1	46.2	-	104.6	209.6	-	104.6	13.6
L3108.2204-XYB	XY Ball	50	23.1	46.2	-	104.6	260.4	-	104.6	13.6
L3108.3201-XYB	XY Ball	25	23.1	46.2	-	130.2	235.0	-	130.2	13.6
L3108.3202-XYB	XY Ball	50	23.1	46.2	-	130.2	285.8	-	130.2	13.6
L3108.3203-XYB	XY Ball	25	23.1	46.2	-	130.2	235.0	-	130.2	13.6
L3108.3204-XYB	XY Ball	50	23.1	46.2	-	130.2	285.8	-	130.2	13.6
L3108.1201-XYR	XY Roller	25	23.1	46.2	-	79.2	184.2	-	79.2	38.5
L3008.1203-XYR	XY Roller	25	23.1	46.2	-	79.2	184.2	-	79.2	38.5
L3108.2201-XYR	XY Roller	25	23.1	46.2	-	104.6	209.6	-	104.6	38.5
L3108.2202-XYR	XY Roller	50	23.1	46.2	-	104.6	260.4	-	104.6	38.5
L3108.2203-XYR	XY Roller	25	23.1	46.2	-	104.6	209.6	-	104.6	38.5
L3108.2204-XYR	XY Roller	50	23.1	46.2	-	104.6	260.4	-	104.6	38.5
L3108.3201-XYR	XY Roller	25	23.1	46.2	-	130.2	235.0	-	130.2	38.5
L3108.3202-XYR	XY Roller	50	23.1	46.2	-	130.2	285.8	-	130.2	38.5
L3108.3203-XYR	XY Roller	25	23.1	46.2	-	130.2	235.0	-	130.2	38.5
L3108.3204-XYR	XY Roller	50	23.1	46.2	-	130.2	285.8	-	130.2	38.5
L3108.1201-XYZB	XYZ Ball	25	23.1	46.2	249.7	79.2	184.2	8.4	79.2	13.6
L3108.1203-XYZB	XYZ Ball	25	23.1	46.2	249.7	79.2	184.2	8.4	79.2	13.6
L3108.2201-XYZB	XYZ Ball	25	23.1	46.2	287.8	104.6	209.6	13.2	104.6	13.6
L3108.2202-XYZB	XYZ Ball	50	23.1	46.2	338.6	104.6	260.4	13.2	104.6	13.6
L3108.2203-XYZB	XYZ Ball	25	23.1	46.2	287.8	104.6	209.6	13.2	104.6	13.6
L3108.2204-XYZB	XYZ Ball	50	23.1	46.2	338.6	104.6	260.4	13.2	104.6	13.6

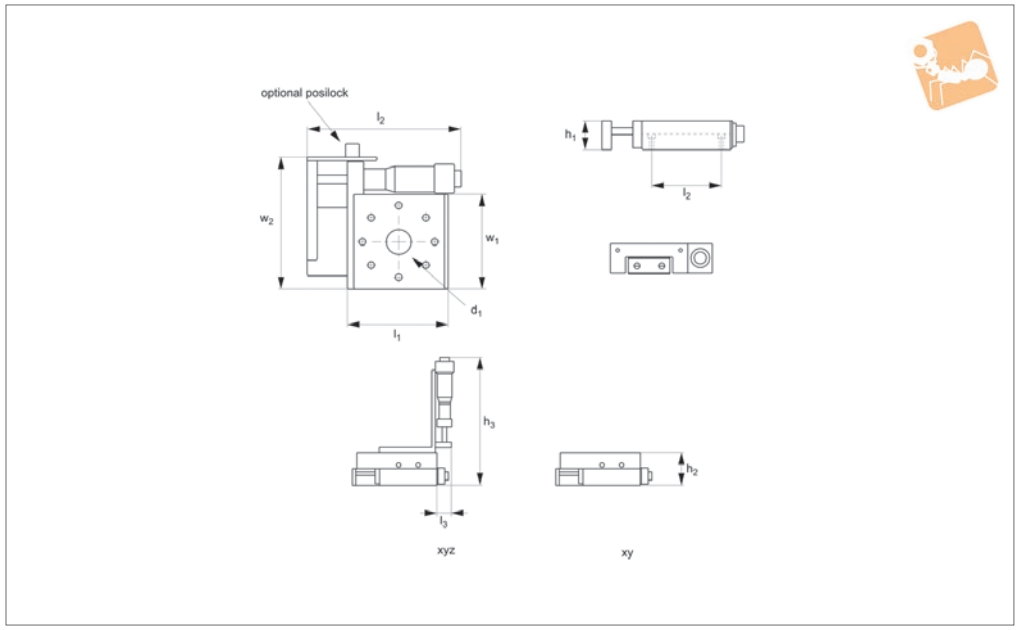


Order No.	Type	Travel	h_1	h_2	h_3	l_1	l_2	l_3	w_2	Weight kg
L3108.3201-XYZB	XYZ Ball	25	23.1	46.2	313.2	130.2	235.0	27.7	130.2	13.6
L3108.3202-XYZB	XYZ Ball	50	23.1	46.2	364.0	130.2	285.8	27.7	130.2	13.6
L3108.3203-XYZB	XYZ Ball	25	23.1	46.2	313.2	130.2	235.0	27.7	130.2	13.6
L3108.3204-XYZB	XYZ Ball	50	23.1	46.2	364.0	130.2	285.8	27.7	130.2	13.6
L3108.1201-XYZR	XYZ Roller	25	23.1	46.2	249.7	79.2	184.2	8.4	79.2	38.5
L3008.1203-XYZR	XYZ Roller	25	23.1	46.2	249.7	79.2	184.2	8.4	79.2	38.5
L3108.2201-XYZR	XYZ Roller	25	23.1	46.2	287.8	104.6	209.6	13.2	104.6	38.5
L3108.2202-XYZR	XYZ Roller	50	23.1	46.2	338.6	104.6	260.4	13.2	104.6	38.5
L3108.2203-XYZR	XYZ Roller	25	23.1	46.2	287.8	104.6	209.6	13.2	104.6	38.5
L3108.2204-XYZR	XYZ Roller	50	23.1	46.2	338.6	104.6	260.4	13.2	104.6	38.5
L3108.3201-XYZR	XYZ Roller	25	23.1	46.2	313.2	130.2	235.0	27.7	130.2	38.5
L3108.3202-XYZR	XYZ Roller	50	23.1	46.2	364.0	130.2	285.8	27.7	130.2	38.5
L3108.3203-XYZR	XYZ Roller	25	23.1	46.2	313.2	130.2	235.0	27.7	130.2	38.5
L3108.3204-XYZR	XYZ Roller	50	23.1	46.2	364.0	130.2	285.8	27.7	130.2	38.5

Order No.	Through hole dia. d_1	Load Z kg max.	Load X & XY kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.
L3108.1201-XYB	-	13.6	13.6	2.05	1.95	1.95
L3108.1203-XYB	25	13.6	13.6	2.05	1.95	1.95
L3108.2201-XYB	-	13.6	13.6	3.21	3.04	3.04
L3108.2202-XYB	-	13.6	13.6	3.21	3.04	3.04
L3108.2203-XYB	38	13.6	13.6	3.21	3.04	3.04
L3108.2204-XYB	38	13.6	13.6	3.21	3.04	3.04
L3108.3201-XYB	-	13.6	13.6	4.25	4.05	4.05
L3108.3202-XYB	-	13.6	13.6	4.25	4.05	4.05
L3108.3203-XYB	51	13.6	13.6	4.25	4.05	4.05
L3108.3204-XYB	51	13.6	13.6	4.25	4.05	4.05
L3108.1201-XYR	-	13.6	38.5	5.81	5.53	5.53
L3008.1203-XYR	25	13.6	38.5	5.81	5.53	5.53
L3108.2201-XYR	-	13.6	38.5	9.10	8.60	8.60
L3108.2202-XYR	-	13.6	38.5	9.10	8.60	8.60
L3108.2203-XYR	38	13.6	38.5	9.10	8.60	8.60
L3108.2204-XYR	38	13.6	38.5	9.10	8.60	8.60
L3108.3201-XYR	-	13.6	38.5	12.05	11.47	11.47
L3108.3202-XYR	-	13.6	38.5	12.05	11.47	11.47
L3108.3203-XYR	51	13.6	38.5	12.05	11.47	11.47
L3108.3204-XYR	51	13.6	38.5	12.05	11.47	11.47
L3108.1201-XYZB	-	13.6	13.6	2.05	1.95	1.95
L3108.1203-XYZB	25	13.6	13.6	2.05	1.95	1.95
L3108.2201-XYZB	-	13.6	13.6	3.21	3.04	3.04
L3108.2202-XYZB	-	13.6	13.6	3.21	3.04	3.04
L3108.2203-XYZB	38	13.6	13.6	3.21	3.04	3.04
L3108.2204-XYZB	38	13.6	13.6	3.21	3.04	3.04
L3108.3201-XYZB	-	13.6	13.6	4.25	4.05	4.05
L3108.3202-XYZB	-	13.6	13.6	4.25	4.05	4.05
L3108.3203-XYZB	51	13.6	13.6	4.25	4.05	4.05
L3108.3204-XYZB	51	13.6	13.6	4.25	4.05	4.05
L3108.1201-XYZR	-	13.6	38.5	5.81	5.53	5.53
L3008.1203-XYZR	25	13.6	38.5	5.81	5.53	5.53
L3108.2201-XYZR	-	13.6	38.5	9.10	8.60	8.60
L3108.2202-XYZR	-	13.6	38.5	9.10	8.60	8.60
L3108.2203-XYZR	38	13.6	38.5	9.10	8.60	8.60
L3108.2204-XYZR	38	13.6	38.5	9.10	8.60	8.60
L3108.3201-XYZR	-	13.6	38.5	12.05	11.47	11.47
L3108.3202-XYZR	-	13.6	38.5	12.05	11.47	11.47
L3108.3203-XYZR	51	13.6	38.5	12.05	11.47	11.47
L3108.3204-XYZR	51	13.6	38.5	12.05	11.47	11.47

Micrometer Positioning XY, XYZ

front drive, large sizes



L3110

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.

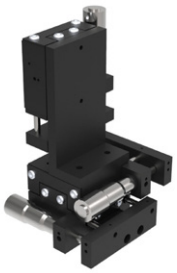
Tips
Other options:
- LM (locking micrometer).
- PL (posi-lock carriage lock).

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

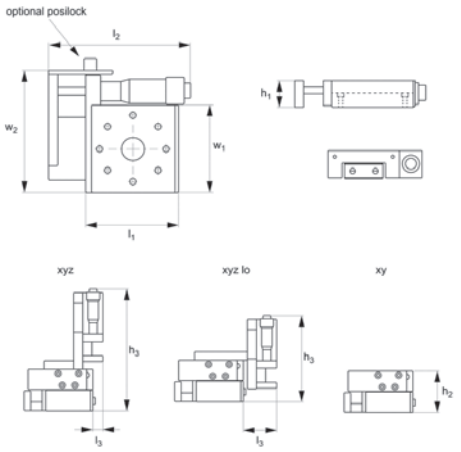
Order No.	Type	Travel	h_1	h_2	h_3	l_1	l_2	l_3	w_1	Weight kg
L3110.0101-XYB	XY Ball	13	9.7	19.0	-	31.8	54.9	-	31.8	1.8
L3110.0201-XYB	XY Ball	13	9.7	19.0	-	44.5	61.5	-	44.5	1.8
L3110.0101-XYR	XY Roller	13	9.7	19.0	-	31.8	54.9	-	31.8	10.4
L3110.0201-XYR	XY Roller	13	9.7	19.0	-	44.5	61.5	-	44.5	10.4
L3110.0101-XYZB	XYZ Ball	13	9.7	19.0	77.1	31.8	54.9	9.7	31.8	1.8
L3110.0201-XYZB	XYZ Ball	13	9.7	19.0	83.7	44.5	61.5	11.2	44.5	1.8
L3110.0101-XYZR	XYZ Roller	13	9.7	19.0	77.1	31.8	54.9	9.7	31.8	10.4
L3110.0201-XYZR	XYZ Roller	13	9.7	19.0	83.7	44.5	61.5	11.2	44.5	10.4

Order No.	w_2	Load Z kg max.	Load X & XY kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.
L3110.0101-XYB	44.5	0.7	1.8	0.19	0.18	0.18
L3110.0201-XYB	57.4	0.7	1.8	0.28	0.27	0.27
L3110.0101-XYR	44.5	0.7	10.4	1.09	1.04	1.04
L3110.0201-XYR	57.4	0.7	10.4	1.64	1.56	1.56
L3110.0101-XYZB	44.5	0.7	1.8	0.19	0.18	0.18
L3110.0201-XYZB	57.4	0.7	1.8	0.28	0.27	0.27
L3110.0101-XYZR	44.5	0.7	10.4	1.09	1.04	1.04
L3110.0201-XYZR	57.4	0.7	10.4	1.64	1.56	1.56

Micrometer Positioning XY, XYZ
side drive, medium sizes



L3111



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.

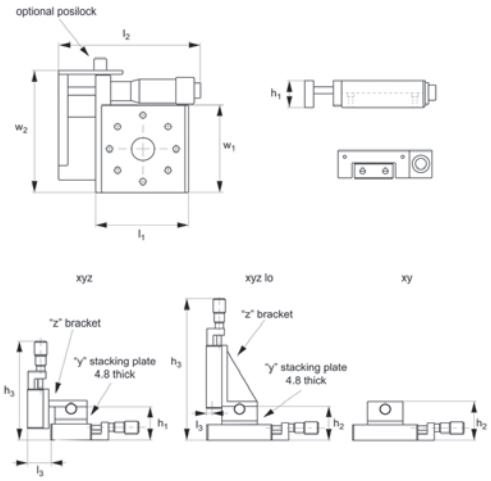
Order No.	Type	Travel	h_1	h_2	h_3	l_1	l_2	l_3	w_1	Weight kg
L3111.0301-XYB	XY Ball	13	15.7	31.8	-	38.1	55.4	-	38.1	5.4
L3111.0450-XYB	XY Ball	13	19.1	38.1	-	44.5	74.9	-	44.5	9.1
L3111.0451-XYB	XY Ball	25	19.1	38.1	-	44.5	114.5	-	44.5	9.1
L3111.0453-XYB	XY Ball	13	19.1	38.1	-	44.5	74.9	-	44.5	9.1
L3111.0750-XYB	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_1	h_2	h_3	l_1	l_2	l_3	w_1	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_2	Through hole dia. d_1	Load Z kg max.	Load X & XY 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

Micrometer Positioning XY, XYZ
side drive, medium sizes

L3112



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).

Loads on the Z axis may extend springs if the loads are too heavy. These stages have the micrometer bracket reversed to prevent this and increase the Z load capacity.

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

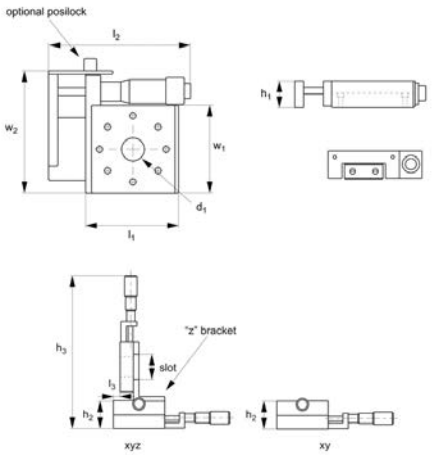
Order No.	Type	Travel	h_1	h_2	h_3	l_1	l_2	l_3	w_1	Weight kg
L3112.0401-XYB	XY Ball	13	19.1	42.9	-	50.8	74.9	-	44.5	9.1
L3112.0501-XYB	XY Ball	13	19.1	42.9	-	82.6	105.4	-	44.5	19.0
L3112.0502-XYB	XY Ball	25	19.1	42.9	-	82.6	114.5	-	44.5	19.0
L3112.0701-XYB	XY Ball	13	25.4	55.6	-	101.6	124.5	-	66.5	27.2
L3112.0702-XYB	XY Ball	25	25.4	55.6	-	101.6	131.6	-	66.5	27.2
L3112.0401-XYR	XY Roller	13	19.1	42.9	-	50.8	74.9	-	44.5	18.1
L3112.0501-XYR	XY Roller	13	19.1	42.9	-	82.6	105.4	-	44.5	36.3
L3112.0502-XYR	XY Roller	25	19.1	42.9	-	82.6	114.5	-	44.5	36.3
L3112.0701-XYR	XY Roller	13	25.4	55.6	-	101.6	124.5	-	66.5	72.5
L3112.0702-XYR	XY Roller	25	25.4	55.6	-	101.6	131.6	-	66.5	72.5
L3112.0401-XYZB	XYZ Ball	13	19.1	42.9	124.2	50.8	74.9	14.6	44.5	9.1
L3112.0501-XYZB	XYZ Ball	13	19.1	42.9	154.7	82.6	105.4	0	44.5	19.0
L3112.0502-XYZB	XYZ Ball	25	19.1	42.9	163.8	82.6	114.5	0	44.5	19.0
L3112.0701-XYZB	XYZ Ball	13	25.4	55.6	189.5	101.6	124.5	9.3	66.5	27.2
L3112.0702-XYZB	XYZ Ball	25	25.4	55.6	196.6	101.6	131.6	9.3	66.5	27.2
L3112.0401-XYZR	XYZ Roller	13	19.1	42.9	124.2	50.8	74.9	14.6	44.5	18.1
L3112.0501-XYZR	XYZ Roller	13	19.1	42.9	154.7	82.6	105.4	0	44.5	36.3
L3112.0502-XYZR	XYZ Roller	25	19.1	42.9	163.8	82.6	114.5	0	44.5	36.3
L3112.0701-XYZR	XYZ Roller	13	25.4	55.6	189.5	101.6	124.5	9.3	66.5	72.5
L3112.0702-XYZR	XYZ Roller	25	25.4	55.6	196.6	101.6	131.6	9.3	66.5	72.5

Order No.	w_2	Load Z kg max.	Load X & XY kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.
L3112.0401-XYB	61.0	9.0	9.1	0.96	0.96	0.96
L3112.0501-XYB	61.0	9.0	19.0	2.02	2.02	2.02

Order No.	w_2	Load Z kg max.	Load X & XY kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.
L3112.0502-XYB	64.8	9.0	19.0	2.02	2.02	2.02
L3112.0701-XYB	84.1	9.0	27.2	4.94	4.94	4.94
L3112.0702-XYB	87.1	9.0	27.2	4.94	4.94	4.94
L3112.0401-XYR	61.0	9.0	18.1	1.92	1.92	1.92
L3112.0501-XYR	61.0	9.0	36.3	3.84	3.84	3.84
L3112.0502-XYR	64.8	9.0	36.3	3.84	3.84	3.84
L3112.0701-XYR	84.1	9.0	72.5	13.18	13.18	13.18
L3112.0702-XYR	87.1	9.0	72.5	13.18	13.18	13.18
L3112.0401-XYZB	61.0	9.0	9.1	0.96	0.96	0.96
L3112.0501-XYZB	61.0	9.0	19.0	2.02	2.02	2.02
L3112.0502-XYZB	64.8	9.0	19.0	2.02	2.02	2.02
L3112.0701-XYZB	84.1	9.0	27.2	4.94	4.94	4.94
L3112.0702-XYZB	87.1	9.0	27.2	4.94	4.94	4.94
L3112.0401-XYZR	61.0	9.0	18.1	1.92	1.92	1.92
L3112.0501-XYZR	61.0	9.0	36.3	3.84	3.84	3.84
L3112.0502-XYZR	64.8	9.0	36.3	3.84	3.84	3.84
L3112.0701-XYZR	84.1	9.0	72.5	13.18	13.18	13.18
L3112.0702-XYZR	87.1	9.0	72.5	13.18	13.18	13.18

Micrometer Positioning XY, XYZ
side drive, large sizes

L3113



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).

Loads on the Z axis may extend springs if the loads are too heavy. These stages have the micrometer bracket reversed to prevent this and increase the Z load capacity.

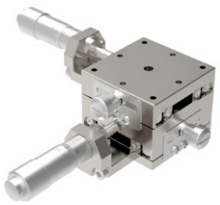
Important Notes
Stroke is centred on the mid-point of the slides (ie 50% of total stroke each way).
3D CAD available.

Order No.	Type	Travel	h_1	h_2	h_3	l_1	l_2	l_3	w_1	Weight kg
L3113.1201-XYB	XY Ball	25	23.1	46.2	-	79.2	120.7	-	79.2	13.6
L3113.1203-XYB	XY Ball	25	23.1	46.2	-	79.2	120.7	-	79.2	13.6
L3113.2201-XYB	XY Ball	25	23.1	46.2	-	104.6	120.7	-	104.6	13.6
L3113.2202-XYB	XY Ball	50	23.1	46.2	-	104.6	171.7	-	104.6	13.6
L3113.2203-XYB	XY Ball	25	23.1	46.2	-	104.6	120.7	-	104.6	13.6
L3113.2204-XYB	XY Ball	50	23.1	46.2	-	104.6	171.7	-	104.6	13.6
L3113.3201-XYB	XY Ball	25	23.1	46.2	-	130.0	130.0	-	130.0	13.6
L3113.3202-XYB	XY Ball	50	23.1	46.2	-	130.0	171.7	-	130.0	13.6
L3113.3203-XYB	XY Ball	25	23.1	46.2	-	130.0	130.0	-	130.0	13.6
L3113.3204-XYB	XY Ball	50	23.1	46.2	-	130.0	171.7	-	130.0	13.6
L3113.1201-XYR	XY Roller	25	23.1	46.2	-	79.2	120.7	-	79.2	38.5
L3113.1203-XYR	XY Roller	25	23.1	46.2	-	79.2	120.7	-	79.2	38.5
L3113.2201-XYR	XY Roller	25	23.1	46.2	-	104.6	120.7	-	104.6	38.5
L3113.2202-XYR	XY Roller	50	23.1	46.2	-	104.6	171.7	-	104.6	38.5
L3113.2203-XYR	XY Roller	25	23.1	46.2	-	104.6	120.7	-	104.6	38.5
L3113.2204-XYR	XY Roller	50	23.1	46.2	-	104.6	171.7	-	104.6	38.5
L3113.3201-XYR	XY Roller	25	23.1	46.2	-	130.0	130.0	-	130.0	38.5
L3113.3202-XYR	XY Roller	50	23.1	46.2	-	130.0	171.7	-	130.0	38.5
L3113.3203-XYR	XY Roller	25	23.1	46.2	-	130.0	130.0	-	130.0	38.5
L3113.3204-XYR	XY Roller	50	23.1	46.2	-	130.0	171.7	-	130.0	38.5
L3113.1201-XYZB	XYZ Ball	25	23.1	46.2	186.2	79.2	120.7	8.4	79.2	13.6
L3113.1203-XYZB	XYZ Ball	25	23.1	46.2	186.2	79.2	120.7	8.4	79.2	13.6
L3113.2201-XYZB	XYZ Ball	25	23.1	46.2	198.9	104.6	120.7	13.2	104.6	13.6
L3113.2202-XYZB	XYZ Ball	50	23.1	46.2	249.9	104.6	171.7	13.2	104.6	13.6
L3113.2203-XYZB	XYZ Ball	25	23.1	46.2	198.9	104.6	120.7	13.2	104.6	13.6
L3113.2204-XYZB	XYZ Ball	50	23.1	46.2	249.9	104.6	171.7	13.2	104.6	13.6

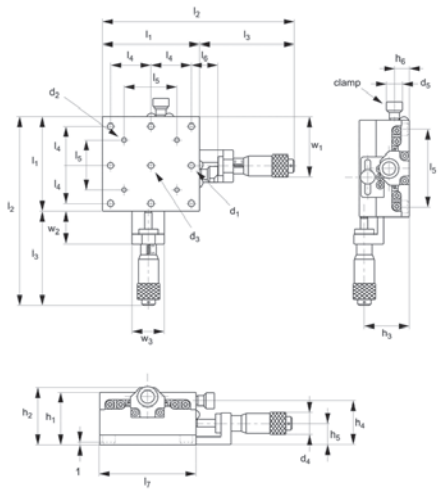
Order No.	Type	Travel	h_1	h_2	h_3	l_1	l_2	l_3	w_1	Weight kg
L3113.3201-XYZB	XYZ Ball	25	23.1	46.2	208.2	130.0	130.0	27.7	130.0	13.6
L3113.3202-XYZB	XYZ Ball	50	23.1	46.2	249.9	130.0	171.7	27.7	130.0	13.6
L3113.3203-XYZB	XYZ Ball	25	23.1	46.2	208.2	130.0	130.0	27.7	130.0	13.6
L3113.3204-XYZB	XYZ Ball	50	23.1	46.2	249.9	130.0	171.7	27.7	130.0	13.6
L3113.1201-XYZR	XYZ Roller	25	23.1	46.2	186.2	79.2	120.7	8.4	79.2	38.5
L3113.1203-XYZR	XYZ Roller	25	23.1	46.2	186.2	79.2	120.7	8.4	79.2	38.5
L3113.2201-XYZR	XYZ Roller	25	23.1	46.2	198.9	104.6	120.7	13.2	104.6	38.5
L3113.2202-XYZR	XYZ Roller	50	23.1	46.2	249.9	104.6	171.7	13.2	104.6	38.5
L3113.2203-XYZR	XYZ Roller	25	23.1	46.2	198.9	104.6	120.7	13.2	104.6	38.5
L3113.2204-XYZR	XYZ Roller	50	23.1	46.2	249.9	104.6	171.7	13.2	104.6	38.5
L3113.3201-XYZR	XYZ Roller	25	23.1	46.2	208.2	130.0	130.0	27.7	130.0	38.5
L3113.3202-XYZR	XYZ Roller	50	23.1	46.2	249.9	130.0	171.7	27.7	130.0	38.5
L3113.3203-XYZR	XYZ Roller	25	23.1	46.2	208.2	130.0	130.0	27.7	130.0	38.5
L3113.3204-XYZR	XYZ Roller	50	23.1	46.2	249.9	130.0	171.7	27.7	130.0	38.5

Order No.	w_2	Through hole d_1	Load Z kg max.	Load X & XY kg max.	X moment load Nm max.	Y moment load Nm max.	Z moment load Nm max.
L3113.1201-XYB	102.6	-	13.6	13.6	2.05	1.95	1.95
L3113.1203-XYB	102.6	25	13.6	13.6	2.05	1.95	1.95
L3113.2201-XYB	128.0	-	13.6	13.6	3.21	3.04	3.04
L3113.2202-XYB	128.0	-	13.6	13.6	3.21	3.04	3.04
L3113.2203-XYB	128.0	38	13.6	13.6	3.21	3.04	3.04
L3113.2204-XYB	128.0	38	13.6	13.6	3.21	3.04	3.04
L3113.3201-XYB	153.4	-	13.6	13.6	4.25	4.05	4.05
L3113.3202-XYB	153.4	-	13.6	13.6	4.25	4.05	4.05
L3113.3203-XYB	153.4	51	13.6	13.6	4.25	4.05	4.05
L3113.3204-XYB	153.4	51	13.6	13.6	4.25	4.05	4.05
L3113.1201-XYR	102.6	-	13.6	38.5	5.81	5.53	5.53
L3113.1203-XYR	102.6	25	13.6	38.5	5.81	5.53	5.53
L3113.2201-XYR	128.0	-	13.6	38.5	9.10	8.60	8.60
L3113.2202-XYR	128.0	-	13.6	38.5	9.10	8.60	8.60
L3113.2203-XYR	128.0	38	13.6	38.5	9.10	8.60	8.60
L3113.2204-XYR	128.0	38	13.6	38.5	9.10	8.60	8.60
L3113.3201-XYR	153.4	-	13.6	38.5	12.05	11.47	11.47
L3113.3202-XYR	153.4	-	13.6	38.5	12.05	11.47	11.47
L3113.3203-XYR	153.4	51	13.6	38.5	12.05	11.47	11.47
L3113.3204-XYR	153.4	51	13.6	38.5	12.05	11.47	11.47
L3113.1201-XYZB	102.6	-	13.6	13.6	2.05	1.95	1.95
L3113.1203-XYZB	102.6	25	13.6	13.6	2.05	1.95	1.95
L3113.2201-XYZB	128.0	-	13.6	13.6	3.21	3.04	3.04
L3113.2202-XYZB	128.0	-	13.6	13.6	3.21	3.04	3.04
L3113.2203-XYZB	128.0	38	13.6	13.6	3.21	3.04	3.04
L3113.2204-XYZB	128.0	38	13.6	13.6	3.21	3.04	3.04
L3113.3201-XYZB	153.4	-	13.6	13.6	4.25	4.05	4.05
L3113.3202-XYZB	153.4	-	13.6	13.6	4.25	4.05	4.05
L3113.3203-XYZB	153.4	51	13.6	13.6	4.25	4.05	4.05
L3113.3204-XYZB	153.4	51	13.6	13.6	4.25	4.05	4.05
L3113.1201-XYZR	102.6	-	13.6	38.5	5.81	5.53	5.53
L3113.1203-XYZR	102.6	25	13.6	38.5	5.81	5.53	5.53
L3113.2201-XYZR	128.0	-	13.6	38.5	9.10	8.60	8.60
L3113.2202-XYZR	128.0	-	13.6	38.5	9.10	8.60	8.60
L3113.2203-XYZR	128.0	38	13.6	38.5	9.10	8.60	8.60
L3113.2204-XYZR	128.0	38	13.6	38.5	9.10	8.60	8.60
L3113.3201-XYZR	153.4	-	13.6	38.5	12.05	11.47	11.47
L3113.3202-XYZR	153.4	-	13.6	38.5	12.05	11.47	11.47
L3113.3203-XYZR	153.4	51	13.6	38.5	12.05	11.47	11.47
L3113.3204-XYZR	153.4	51	13.6	38.5	12.05	11.47	11.47

Stainless Micrometer XY Stages
front drive



L3121



Material
Stainless steel (440C) with electroless nickel plating.

Technical Notes
Straightness accuracy 5µ.

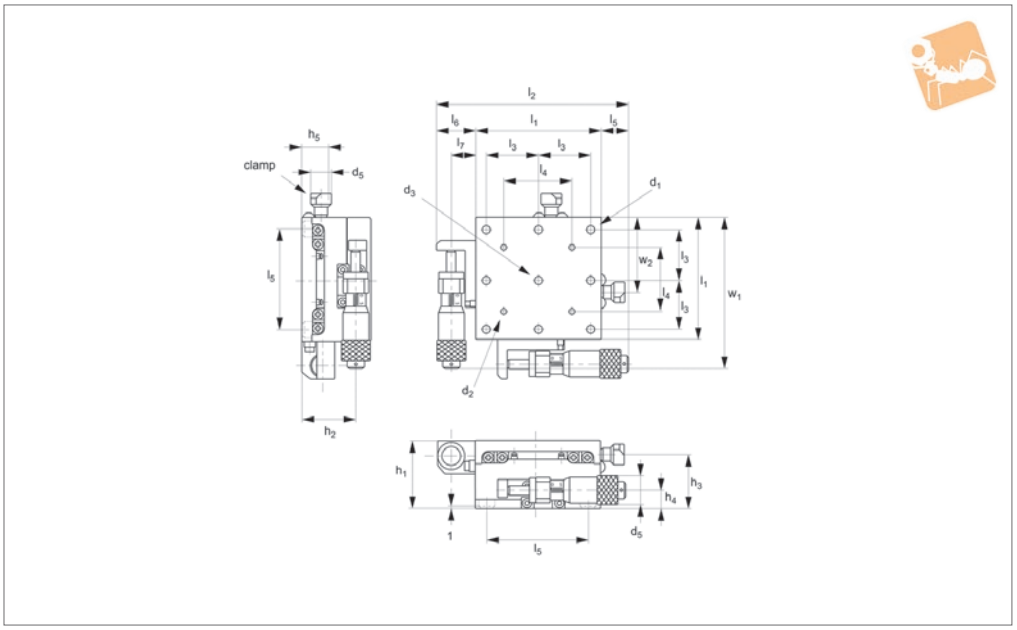
Spring loaded micrometer allows precise repeatable adjustments with low friction and zero backlash.
Micrometer increments 0,01mm.

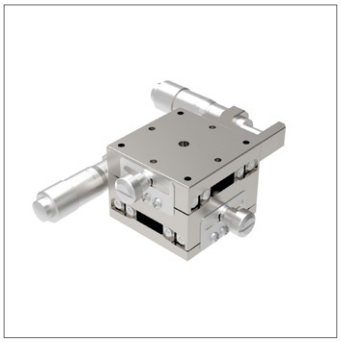
Important Notes
Stroke is centred on the mid-point of the slides (ie 50% of total stroke each way).
3D CAD available.

Order No.	Travel	d_1	d_2	d_3 tol. H7	d_4	d_5	h_1	h_2	h_3	h_4	h_5
L3121.040	13	M3	-	4	13	10	32.0	35.0	29.0	26.5	13.0
L3121.060	13	M4	M3	4	13	10	32.0	35.0	29.0	26.5	13.0
L3121.080	25	M4	M3	4	13	10	40.0	44.3	36.8	34.5	16.8
L3121.100	25	M4	M4	4	13	10	40.0	44.3	36.8	34.5	16.8

Order No.	h_6	l_1	l_2	l_3	l_4	l_5	l_6	l_7	w_1	w_2	w_3	Load kg max.
L3121.040	10.5	40	98.5	58.5	16	32	15.5	32	26	20.5	21	9.7
L3121.060	10.5	60	118.5	58.5	25	50	16.5	50	36	20.5	20	19.6
L3121.080	14.5	80	160	80.0	25	70	24.5	70	55	24.5	24	26.1
L3121.100	14.5	100	180	80.0	25	90	24.5	90	67.5	24.5	24	33.6

Stainless Micrometer XY Stages
side drive





L3123

Material
Stainless steel (440C) with electroless nickel plating.

Technical Notes
Straightness accuracy 5µ.

Spring loaded micrometer allows precise repeatable adjustments with low friction and zero backlash.
Micrometer increments 0,01mm.

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

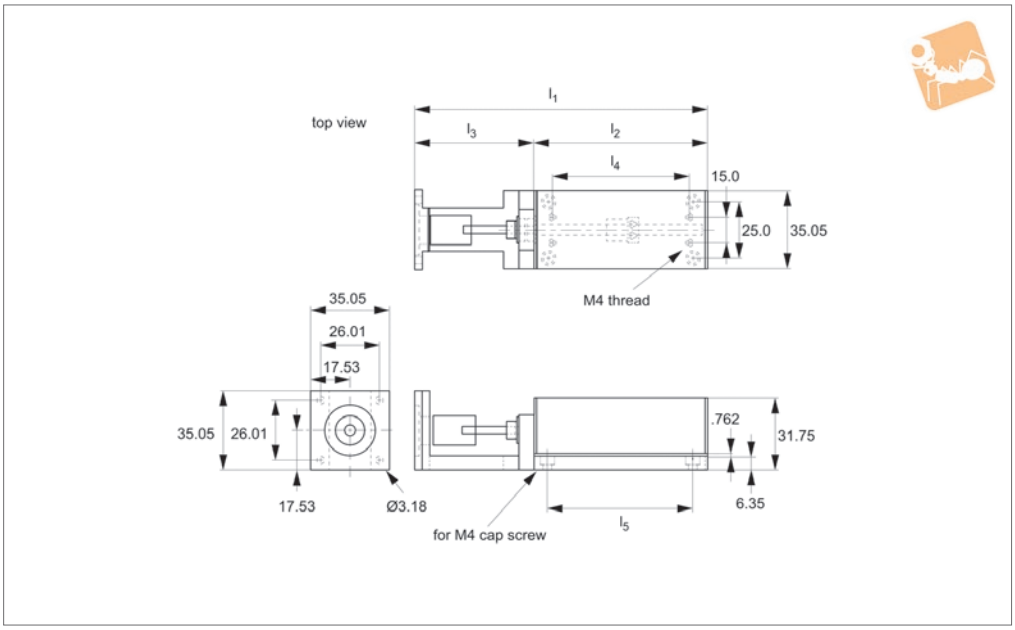
Order No.	Travel	d_1	d_2	d_3	d_4	d_5	h_1	h_2	h_3	h_4	h_5
L3123.040	13	M3	-	4	13	10	32.0	25.0	26.5	9	10.5
L3123.060	13	M4	M3	4	13	10	32.0	25.0	26.5	9	10.5
L3123.080	25	M4	M4	4	13	10	40.0	30.8	34.5	10.8	14.5
L3123.100	25	M4	M4	4	13	10	40.0	30.8	34.5	10.8	14.5

Order No.	l_1	l_2	l_3	l_4	l_5	l_6	l_7	w_1	Load kg max.
L3123.040	40	82.3	16	-	23.8	18.5	12	75	9.7
L3123.060	60	92.3	25	32	13.8	18.5	12	73.75	19.6
L3123.080	80	136	25	70	32.5	23.5	17	123.7	26.1
L3123.100	100	141	25	90	17.5	23.5	17	128.7	33.6

Lead Screw Driven Stages

size 1 light duty, prepared for motor

L3141



Material

Black anodised aluminium. Hardened cross roller or ball slides, lead screw with anti-backlash nut.

Technical Notes

Driven by lead screw 4.3mm diameter 0.5mm pitch lead with anti-backlash nut and zero backlash flexible coupling for 5mm motor shaft.

Cross roller versions are heavier duty.
Ready to accept Nema 14 motor. Max. 1200 rpm.
Accuracy 3µ/25mm, repeatability 3µ.

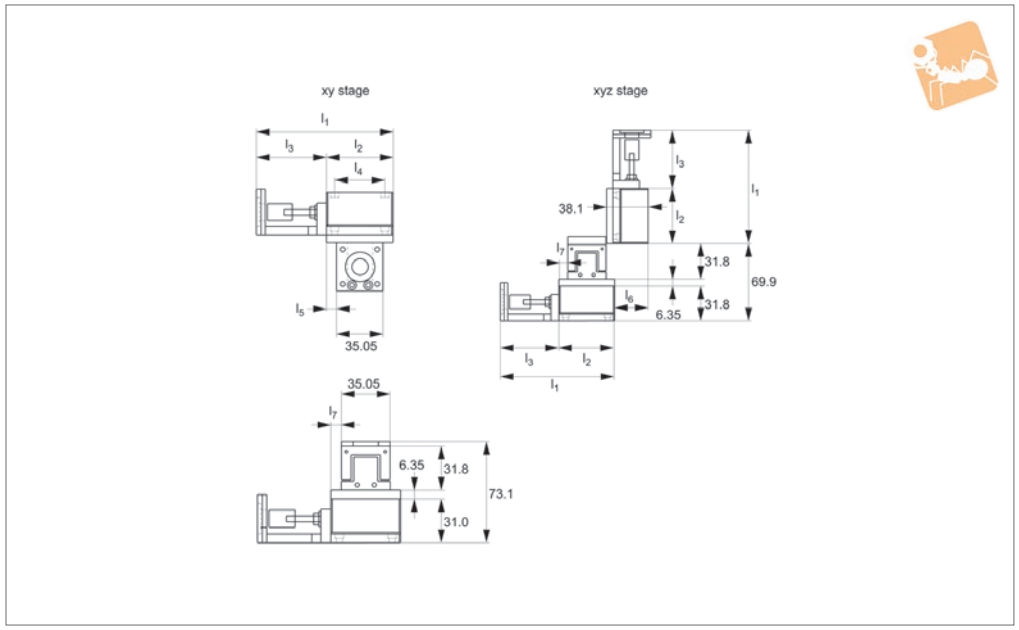
Tips

Supplied without motor. We can quote to supply motors or can also supply with a handwheel for manual operation.
Available in XY and XYZ combinations.

Important Notes

We can also offer end or travel and/or home position switches, normally open or normally closed, with 3 metre cables.
-EHP = end-of-travel and home switches, PNP.
-EHN = end-of-travel and home switches, NPN.

Order No.	Type	Travel	l_1	l_2	l_3	l_4	l_5	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw pitch	Load kg max.
L3141.025B-X	Ball	25	103.4	50.8	52.6	35	37	0.6	0.6	0.7	0.5	3.6
L3141.050B-X	Ball	50	128.8	76.2	52.6	60	60	0.8	1.3	1.4	0.5	4.5
L3141.075B-X	Ball	75	154.2	101.6	52.6	85	85	1.0	2.2	2.3	0.5	6.8
L3141.100B-X	Ball	100	211.3	152.4	58.9	135	100	1.4	5.5	5.8	0.5	9.1
L3141.025R-X	Roller	25	103.4	50.8	52.6	35	37	5.5	6.6	7.0	0.5	6.8
L3141.050R-X	Roller	50	128.8	76.2	52.6	60	60	6.3	9.5	10.0	0.5	9.1
L3141.075R-X	Roller	75	154.2	101.6	52.6	85	85	7.3	15.6	16.3	0.5	13.6
L3141.100R-X	Roller	100	211.3	152.4	58.9	135	100	12.8	46.7	49.1	0.5	18.1



L3141.XY

Material
Black anodised aluminium. Hardened cross roller or ball slides, lead screw with anti-backlash nut.

Technical Notes
Driven by lead screw 4.3mm diameter 0.5mm pitch lead with anti-backlash nut and zero backlash flexible coupling for 5mm motor shaft. Cross roller versions are heavier duty.

Ready to accept Nema 14 motor. Max. 1200 rpm.
Accuracy 3µ/25mm, repeatability 3µ.

Tips
For other fixing and mounting hole dimensions refer to the X stage layout. Supplied without motor. We can quote to supply motors or can also supply with a hand-wheel for manual operation.
Available in XY and XYZ combinations.

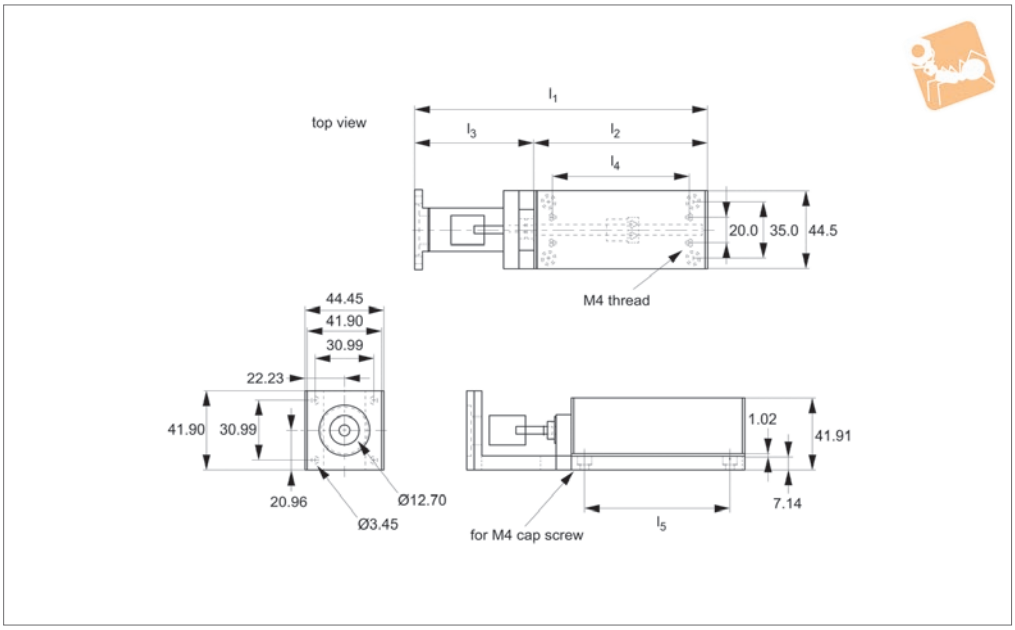
Important Notes
We can also offer end or travel and/or home position switches, normally open or normally closed, with 3 metre cables.
-EHP = end-of-travel and home switches, PNP.
-EHN = end-of-travel and home switches, NPN.

Order No.	Type	Travel	l_1	l_2	l_3	l_4	l_5	l_6	l_7	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw pitch	Load kg max.
L3141.025B-XY	XY Ball	25	103,4	50,8	52,6	35	37	30,20	7,87	0,63	0,68	0,71	0,5	3,6
L3141.050B-XY	XY Ball	50	128,8	76,2	52,6	60	60	17,52	20,57	0,83	1,36	1,42	0,5	4,5
L3141.075B-XY	XY Ball	75	154,2	101,6	52,6	85	85	25,15	34,04	1,04	2,26	2,37	0,5	6,8
L3141.100B-XY	XY Ball	100	211,3	152,4	58,9	135	100	25,15	58,67	1,46	5,54	5,81	0,5	9,1
L3141.025R-XY	XY Roller	25	103,4	50,8	52,6	35	37	30,20	7,87	5,50	6,68	7,02	0,5	6,8
L3141.050R-XY	XY Roller	50	128,8	76,2	52,6	60	60	17,52	20,57	6,29	9,55	10,03	0,5	9,1
L3141.075R-XY	XY Roller	75	154,2	101,6	52,6	85	85	25,15	34,04	7,34	15,59	16,37	0,5	13,6
L3141.100R-XY	XY Roller	100	211,3	152,4	58,9	135	100	25,15	58,67	12,84	46,77	49,11	0,5	18,1
L3141.025B-XYZ	XYZ Ball	25	103,4	50,8	52,6	35	37	30,20	7,87	0,63	0,68	0,71	0,5	3,6
L3141.050B-XYZ	XYZ Ball	50	128,8	76,2	52,6	60	60	17,52	20,57	0,83	1,36	1,42	0,5	4,5
L3141.075B-XYZ	XYZ Ball	75	154,2	101,6	52,6	85	85	25,15	34,04	1,04	2,26	2,37	0,5	6,8
L3141.100B-XYZ	XYZ Ball	100	211,3	152,4	58,9	135	100	25,15	58,67	1,46	5,54	5,81	0,5	9,1
L3141.025R-XYZ	XYZ Roller	25	103,4	50,8	52,6	35	37	30,20	7,87	5,50	6,68	7,02	0,5	6,8
L3141.050R-XYZ	XYZ Roller	50	128,8	76,2	52,6	60	60	17,52	20,57	6,29	9,55	10,03	0,5	9,1
L3141.075R-XYZ	XYZ Roller	75	154,2	101,6	52,6	85	85	25,15	34,04	7,34	15,59	16,37	0,5	13,6
L3141.100R-XYZ	XYZ Roller	100	211,3	152,4	58,9	135	100	25,15	58,67	12,84	46,77	49,11	0,5	18,1

Lead Screw Driven Stages

size 2 medium duty, prepared for motor

L3142



Material

Black anodised aluminium. Hardened cross roller or ball slides, lead screw with anti-backlash nut.

Technical Notes

Driven by lead screw 6.3mm diameter 2mm pitch lead with anti-backlash nut and zero backlash flexible coupling for 5mm motor shaft. Cross roller versions are heavier duty.

For other lead screw pitches replace -02X with -01X (for 1mm) and -03X (for 3mm). Ready to accept Nema 17 motor. Max. 1200 rpm.
Accuracy 3µ/25mm, repeatability 3µ.

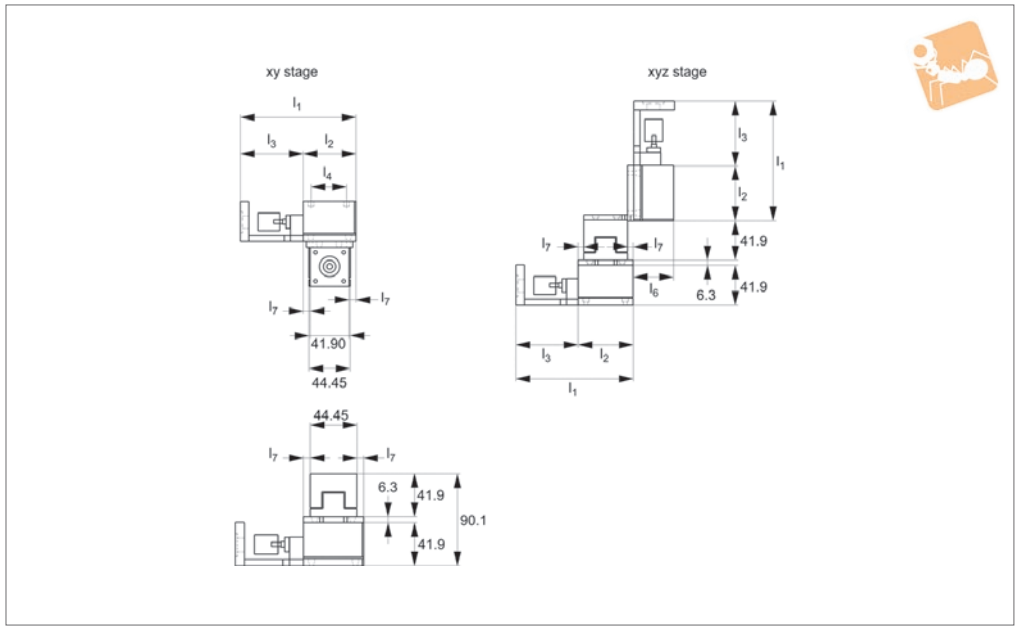
Tips

Supplied without motor. We can quote to supply motors or can also supply with a handwheel for manual operation.
Available in XY and XYZ combinations.

Important Notes

We can also offer end or travel and/or home position switches, normally open or normally closed, with 3 metre cables.
-EHP = end-of-travel and home switches, PNP.
-EHN = end-of-travel and home switches, NPN.

Order No.	Type	Travel	l_1	l_2	l_3	l_4	l_5	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw pitch	Load kg max.
L3142.025B-02X	Ball	25	124.0	57.2	66.8	35	38	0.9	0.9	0.9	2	4.5
L3142.038B-02X	Ball	38	143.0	76.2	66.8	55	55	1.4	2.0	2.1	2	6.8
L3142.050B-02X	Ball	50	155.7	88.9	66.8	65	65	2.0	3.3	3.5	2	9.1
L3142.075B-02X	Ball	75	174.8	108.0	66.8	85	85	2.5	4.7	4.9	2	11.0
L3142.100B-02X	Ball	100	219.2	152.4	66.8	140	100	2.8	9.5	9.9	2	14.0
L3142.025R-02X	Roller	25	124.0	57.2	66.8	35	38	6.3	6.6	7.0	2	9.1
L3142.038R-02X	Roller	38	143.0	76.2	66.8	55	55	7.0	10.4	11.1	2	14.0
L3142.050R-02X	Roller	50	155.7	88.9	66.8	65	65	8.4	13.3	14.0	2	18.0
L3142.075R-02X	Roller	75	174.8	108.0	66.8	85	85	9.9	15.6	16.3	2	23.0
L3142.100R-02X	Roller	100	219.2	152.4	66.8	140	100	14.8	46.7	49.1	2	27.0



L3142.XY

Material
Black anodised aluminium. Hardened cross roller or ball slides, lead screw with anti-backlash nut.

Technical Notes
Driven by lead screw 6.3mm diameter 2mm pitch lead with anti-backlash nut and zero backlash flexible coupling for 5mm motor shaft. Cross roller versions are heavier duty.

For other lead screw pitches replace -02X with -01X (for 1mm) and -03X (for 3mm). Ready to accept Nema 17 motor. Max. 1200 rpm.
Accuracy 3µ/25mm, repeatability 3µ.

Tips
For other fixing and mounting hole dimensions refer to the X stage layout. Supplied without motor. We can quote to supply motors or can also supply with a hand-wheel for manual operation.
Available in XY and XYZ combinations.

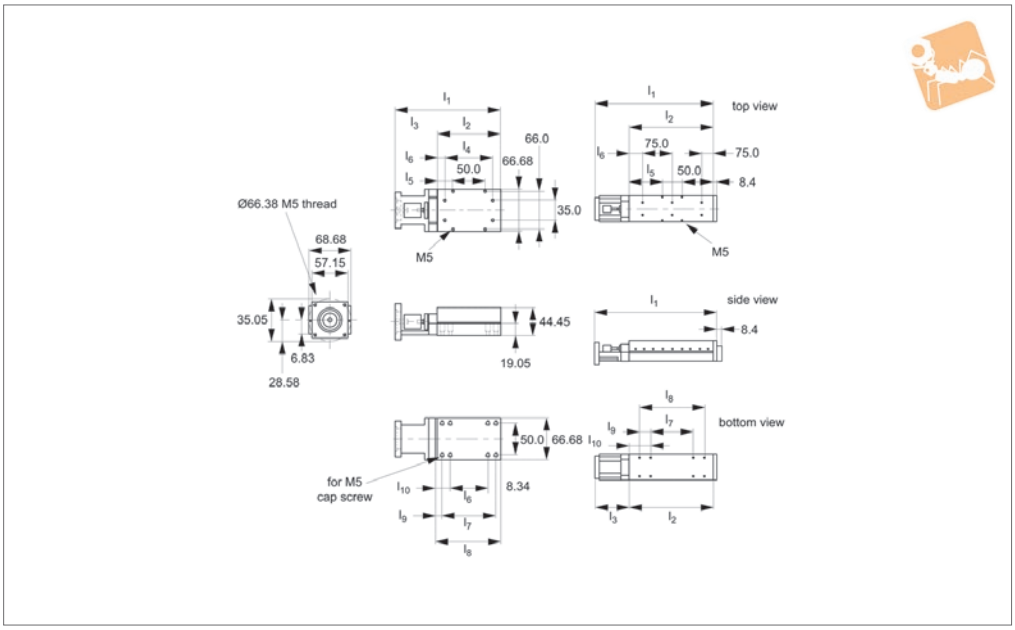
Important Notes
We can also offer end or travel and/or home position switches, normally open or normally closed, with 3 metre cables.
-EHP = end-of-travel and home switches, PNP.
-EHN = end-of-travel and home switches, NPN.

Order No.	Type	Travel	l_1	l_2	l_3	l_4	l_5	l_6	l_7	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw pitch	Load kg max.
L3142.025B-02XY	XY Ball	25	124,0	57,2	66,8	35	38	41,91	6,35	0,93	0,90	0,95	2	4,5
L3142.038B-02XY	XY Ball	38	143,0	76,2	66,8	55	55	32,39	15,88	1,44	2,03	2,14	2	6,8
L3142.050B-02XY	XY Ball	50	155,7	88,9	66,8	65	65	26,04	22,23	2,02	3,32	3,49	2	9,1
L3142.075B-02XY	XY Ball	75	174,8	108,0	66,8	85	85	16,51	31,75	2,50	4,70	4,94	2	11,0
L3142.100B-02XY	XY Ball	100	219,2	152,4	66,8	140	100	45,09	53,98	2,88	9,49	9,97	2	14,0
L3142.025R-02XY	XY Roller	25	124,0	57,2	66,8	35	38	41,91	6,35	6,34	6,68	7,02	2	9,1
L3142.038R-02XY	XY Roller	38	143,0	76,2	66,8	55	55	32,39	15,88	7,06	10,42	11,12	2	14,0
L3142.050R-02XY	XY Roller	50	155,7	88,9	66,8	65	65	26,04	22,23	8,46	13,36	14,03	2	18,0
L3142.075R-02XY	XY Roller	75	174,8	108,0	66,8	85	85	16,51	31,75	9,86	15,59	16,29	2	23,0
L3142.100R-02XY	XY Roller	100	219,2	152,4	66,8	140	100	45,09	53,98	14,80	46,77	49,11	2	27,0
L3142.025B-02XYZ	XYZ Ball	25	124,0	57,2	66,8	35	38	41,91	6,35	0,93	0,90	0,95	2	4,5
L3142.038B-02XYZ	XYZ Ball	38	143,0	76,2	66,8	55	55	32,39	15,88	1,44	2,03	2,14	2	6,8
L3142.050B-02XYZ	XYZ Ball	50	155,7	88,9	66,8	65	65	26,04	22,23	2,02	3,32	3,49	2	9,1
L3142.075B-02XYZ	XYZ Ball	75	174,8	108,0	66,8	85	85	16,51	31,75	2,50	4,70	4,94	2	11,0
L3142.100B-02XYZ	XYZ Ball	100	219,2	152,4	66,8	140	100	45,09	53,98	2,88	9,49	9,97	2	14,0
L3142.025R-02XYZ	XYZ Roller	25	124,0	57,2	66,8	35	38	41,91	6,35	6,34	6,68	7,02	2	9,1
L3142.038R-02XYZ	XYZ Roller	38	143,0	76,2	66,8	55	55	32,385	15,88	7,06	10,42	11,12	2	14,0
L3142.050R-02XYZ	XYZ Roller	50	155,7	88,9	66,8	65	65	26,035	22,23	8,46	13,36	14,03	2	18,0
L3142.075R-02XYZ	XYZ Roller	75	174,8	108,0	66,8	85	85	16,51	31,75	9,86	15,59	16,29	2	23,0
L3142.100R-02XYZ	XYZ Roller	100	219,2	152,4	66,8	140	100	45,085	53,98	14,80	46,77	49,11	2	27,0

Lead Screw Driven Stages

size 3 medium duty, prepared for motor

L3143



Material

Black anodised aluminium. Hardened cross roller or ball slides, lead screw with anti-backlash nut.

Technical Notes

Driven by lead screw 10mm diameter 2mm pitch lead with anti-backlash nut and zero backlash flexible coupling for 8mm motor shaft. Cross roller versions are heavier duty.

For other lead screw pitches replace -02X with -03X (for 3mm) and -20X (for 20mm). Ready to accept Nema 23 motor. Max. 1200 rpm (for 2mm pitch) and 600 rpm for 3mm and 20mm lead screw pitch options. Accuracy 3µ/25mm, repeatability 3µ.

Tips

Supplied without motor. We can quote to supply motors or can also supply with a handwheel for manual operation. Available in XY and XYZ combinations.

Important Notes

We can also offer end or travel and/or home position switches, normally open or normally closed, with 3 metre cables.
-EHP = end-of-travel and home switches, PNP.
-EHN = end-of-travel and home switches, NPN.

Order No.	Type	Travel	h_1	h_2	h_3	l_1	l_{10}	l_{11}	l_{12}
L3143.025B-02X	Ball	25	95	-	8	143	8.0	5	52
L3143.050B-02X	Ball	50	95	-	8	168	21.0	17	40
L3143.075B-02X	Ball	75	95	-	8	194	33.5	30	27
L3143.100B-02X	Ball	100	95	-	19	219	46.0	43	14
L3143.150B-02X	Ball	150	104	10	44	321	64.5	81	-24
L3143.200B-02X	Ball	200	104	10	70	397	64.5	106	-49
L3143.250B-02X	Ball	250	104	10	95	473	65.0	132	-75
L3143.300B-02X	Ball	300	104	10	121	549	65.5	157	-100
L3143.025R-02X	Roller	25	95	-	8	143	8.0	5	52
L3143.050R-02X	Roller	50	95	-	8	168	21.0	17	40
L3143.075R-02X	Roller	75	95	-	8	194	33.5	30	27
L3143.100R-02X	Roller	100	95	-	19	219	46.0	43	14
L3143.150R-02X	Roller	150	104	10	44	321	64.5	81	-24
L3143.200R-02X	Roller	200	104	10	70	397	64.5	106	-49
L3143.250R-02X	Roller	250	104	10	95	473	65.0	132	-75
L3143.300R-02X	Roller	300	104	10	121	549	65.5	157	-100

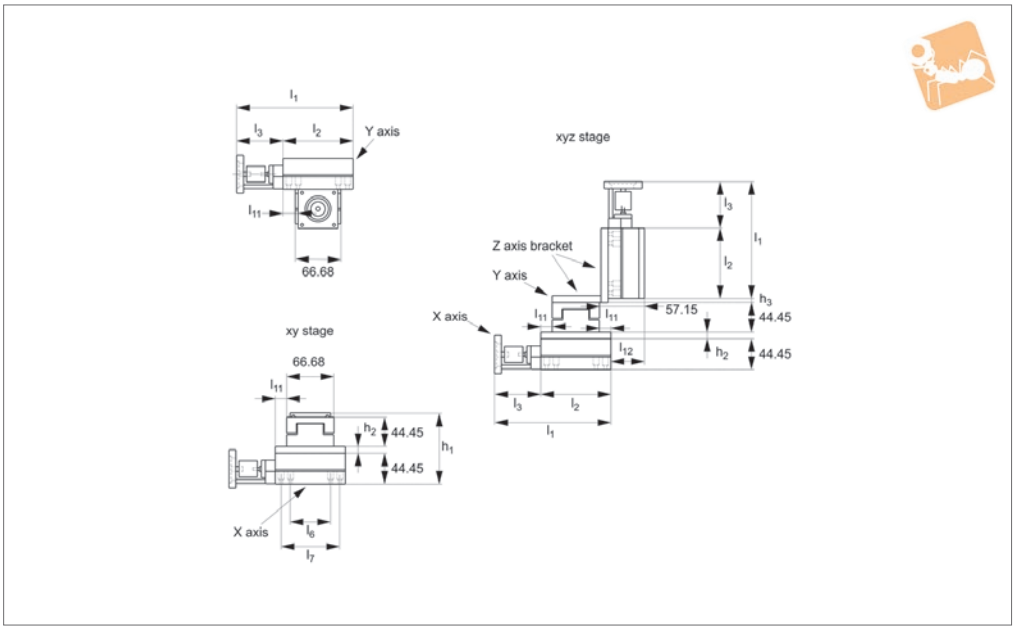
Order No.	l_2	l_3	l_4	l_5	l_6	l_7	l_8	l_9	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw pitch	Load kg max.
L3143.025B-02X	76	67	55	13.0	10.5	60	-	-	2.47	1.9	2.0	2	14
L3143.050B-02X	102	67	75	26.0	13.5	60	85	8.5	5.11	6.8	7.2	2	16
L3143.075B-02X	127	67	100	38.5	13.5	60	110	8.5	7.25	12.5	13.1	2	18
L3143.100B-02X	152	67	125	51.0	13.5	60	135	8.5	9.72	10.5	21.5	2	20
L3143.150B-02X	229	92	-	89.5	39.5	100	175	27.0	12.35	40.3	42.3	2	25
L3143.200B-02X	279	118	-	114.5	27.0	150	225	27.0	13.84	49.9	53.9	2	27
L3143.250B-02X	330	143	-	140.0	15.0	200	275	27.5	16.03	71.1	75.1	2	34

Order No.	l_2	l_3	l_4	l_5	l_6	l_7	l_8	l_9	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw pitch	Load kg max.
L3143.300B-02X	381	168	-	165.5	40.5	250	325	28.0	16.89	81.0	85.1	2	41
L3143.025R-02X	76	67	55	13.0	10.5	60	-	-	21.54	17.9	18.8	2	27
L3143.050R-02X	102	67	75	26.0	13.5	60	85	8.5	28.72	35.8	37.5	2	32
L3143.075R-02X	127	67	100	38.5	13.5	60	110	8.5	35.91	59.6	62.6	2	36
L3143.100R-02X	152	67	125	51.0	13.5	60	135	8.5	42.75	74.5	78.3	2	41
L3143.150R-02X	229	92	-	89.5	39.5	100	175	27.0	57.45	167.0	175.4	2	50
L3143.200R-02X	279	118	-	114.5	27.0	150	225	27.0	64.35	206.8	223.3	2	54
L3143.250R-02X	330	143	-	140.0	15.0	200	275	27.5	74.54	294.6	311.2	2	68
L3143.300R-02X	381	168	-	165.5	40.5	250	325	28.0	78.78	324.4	352.7	2	82

Lead Screw Driven XY & XYZ Stages

size 3 medium duty, prepared for motor

L3143.XY



Material

Black anodised aluminium. Hardened cross roller or ball slides, lead screw with anti-backlash nut.

Technical Notes

Driven by lead screw 10mm diameter 2mm pitch lead with anti-backlash nut and zero backlash flexible coupling for 8mm motor shaft. Cross roller versions are heavier duty.
For other lead screw pitches replace -02X with -03X (for 3mm) and -20X (for 20mm). Ready to accept Nema 23 motor. Max. 1200 rpm (for 2mm pitch) and 600 rpm for 3mm and 20mm lead screw pitch options. Accuracy 3µ/25mm, repeatability 3µ.

Tips

For other fixing and mounting hole dimensions refer to the X stage layout. Supplied without motor. We can quote to supply motors or can also supply with a hand-wheel for manual operation.
Available in XY and XYZ combinations.

Important Notes

We can also offer end or travel and/or home position switches, normally open or normally closed, with 3 metre cables.
-EHP = end-of-travel and home switches, PNP.
-EHN = end-of-travel and home switches, NPN.

Order No.	Type	Travel	h_1	h_2	h_3	l_1	l_{10}	l_{11}	l_{12}
L3143.025B-02XY	XY Ball	25	95	-	8	143	8.0	5	52
L3143.050B-02XY	XY Ball	50	95	-	8	168	21.0	17	40
L3143.075B-02XY	XY Ball	75	95	-	8	194	33.5	30	27
L3143.100B-02XY	XY Ball	100	95	-	19	219	46.0	43	14
L3143.150B-02XY	XY Ball	150	104	10	44	321	64.5	81	-24
L3143.200B-02XY	XY Ball	200	104	10	70	397	64.5	106	-49
L3143.250B-02XY	XY Ball	250	104	10	95	473	65.0	132	-75
L3143.300B-02XY	XY Ball	300	104	10	121	549	65.5	157	-100
L3143.025R-02XY	XY Roller	25	95	-	8	143	8.0	5	52
L3143.050R-02XY	XY Roller	50	95	-	8	168	21.0	17	40
L3143.075R-02XY	XY Roller	75	95	-	8	194	33.5	30	27
L3143.100R-02XY	XY Roller	100	95	-	19	219	46.0	43	14
L3143.150R-02XY	XY Roller	150	104	10	44	321	64.5	81	-24
L3143.200R-02XY	XY Roller	200	104	10	70	397	64.5	106	-49
L3143.250R-02XY	XY Roller	250	104	10	95	473	65.0	132	-75
L3143.300R-02XY	XY Roller	300	104	10	121	549	65.5	157	-100
L3143.025B-02XYZ	XYZ Ball	25	95	-	8	143	8.0	5	52
L3143.050B-02XYZ	XYZ Ball	50	95	-	8	168	21.0	17	40
L3143.075B-02XYZ	XYZ Ball	75	95	-	8	194	33.5	30	27
L3143.100B-02XYZ	XYZ Ball	100	95	-	19	219	46.0	43	14
L3143.150B-02XYZ	XYZ Ball	150	104	10	44	321	64.5	81	-24
L3143.200B-02XYZ	XYZ Ball	200	104	10	70	397	64.5	106	-49
L3143.250B-02XYZ	XYZ Ball	250	104	10	95	473	65.0	132	-75
L3143.300B-02XYZ	XYZ Ball	300	104	10	121	549	65.5	157	-100
L3143.025R-02XYZ	XYZ Roller	25	95	-	8	143	8.0	5	52
L3143.050R-02XYZ	XYZ Roller	50	95	-	8	168	21.0	17	40

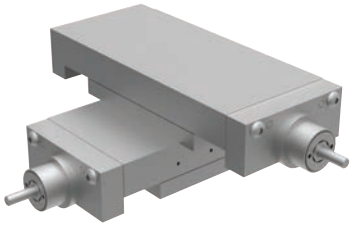
Order No.	Type	Travel	h_1	h_2	h_3	l_1	l_{10}	l_{11}	l_{12}
L3143.075R-02XYZ	XYZ Roller	75	95	-	8	194	33.5	30	27
L3143.100R-02XYZ	XYZ Roller	100	95	-	19	219	46.0	43	14
L3143.150R-02XYZ	XYZ Roller	150	104	10	44	321	64.5	81	-24
L3143.200R-02XYZ	XYZ Roller	200	104	10	70	397	64.5	106	-49
L3143.250R-02XYZ	XYZ Roller	250	104	10	95	473	65.0	132	-75
L3143.300R-02XYZ	XYZ Roller	300	104	10	121	549	65.5	157	-100

Order No.	l_2	l_3	l_4	l_5	l_6	l_7	l_8	l_9	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw pitch	Load kg max.
L3143.025B-02XY	76	67	55	13.0	10.5	60	-	-	2.47	1.90	1.99	2	14
L3143.050B-02XY	102	67	75	26.0	13.5	60	85	8.5	5.11	6.86	7.21	2	16
L3143.075B-02XY	127	67	100	38.5	13.5	60	110	8.5	7.25	12.53	13.15	2	18
L3143.100B-02XY	152	67	125	51.0	13.5	60	135	8.5	9.72	10.53	21.56	2	20
L3143.150B-02XY	229	92	-	89.5	39.5	100	175	27.0	12.35	40.34	42.35	2	25
L3143.200B-02XY	279	118	-	114.5	27.0	150	225	27.0	13.84	49.94	53.92	2	27
L3143.250B-02XY	330	143	-	140.0	15.0	200	275	27.5	16.03	71.14	75.16	2	34
L3143.300B-02XY	381	168	-	165.5	40.5	250	325	28.0	16.89	81.07	85.12	2	41
L3143.025R-02XY	76	67	55	13.0	10.5	60	-	-	21.54	17.90	18.79	2	27
L3143.050R-02XY	102	67	75	26.0	13.5	60	85	8.5	28.72	35.79	37.58	2	32
L3143.075R-02XY	127	67	100	38.5	13.5	60	110	8.5	35.91	59.66	62.64	2	36
L3143.100R-02XY	152	67	125	51.0	13.5	60	135	8.5	42.75	74.57	78.30	2	41
L3143.150R-02XY	229	92	-	89.5	39.5	100	175	27.0	57.45	167.04	175.39	2	50
L3143.200R-02XY	279	118	-	114.5	27.0	150	225	27.0	64.35	206.81	223.29	2	54
L3143.250R-02XY	330	143	-	140.0	15.0	200	275	27.5	74.54	294.61	311.25	2	68
L3143.300R-02XY	381	168	-	165.5	40.5	250	325	28.0	78.78	324.41	352.70	2	82
L3143.025B-02XYZ	76	67	55	13.0	10.5	60	-	-	2.47	1.90	1.99	2	14
L3143.050B-02XYZ	102	67	75	26.0	13.5	60	85	8.5	5.11	6.86	7.21	2	16
L3143.075B-02XYZ	127	67	100	38.5	13.5	60	110	8.5	7.25	12.53	13.15	2	18
L3143.100B-02XYZ	152	67	125	51.0	13.5	60	135	8.5	9.72	10.53	21.56	2	20
L3143.150B-02XYZ	229	92	-	89.5	39.5	100	175	27.0	12.35	40.34	42.35	2	25
L3143.200B-02XYZ	279	118	-	114.5	27.0	150	225	27.0	13.84	49.94	53.92	2	27
L3143.250B-02XYZ	330	143	-	140.0	15.0	200	275	27.5	16.03	71.14	75.16	2	34
L3143.300B-02XYZ	381	168	-	165.5	40.5	250	325	28.0	16.89	81.07	85.12	2	41
L3143.025R-02XYZ	76	67	55	13.0	10.5	60	-	-	21.54	17.90	18.79	2	27
L3143.050R-02XYZ	102	67	75	26.0	13.5	60	85	8.5	28.72	35.79	37.58	2	32
L3143.075R-02XYZ	127	67	100	38.5	13.5	60	110	8.5	35.91	59.66	62.64	2	36
L3143.100R-02XYZ	152	67	125	51.0	13.5	60	135	8.5	42.75	74.57	78.30	2	41
L3143.150R-02XYZ	229	92	-	89.5	39.5	100	175	27.0	57.45	167.04	175.39	2	50
L3143.200R-02XYZ	279	118	-	114.5	27.0	150	225	27.0	64.35	206.81	223.29	2	54
L3143.250R-02XYZ	330	143	-	140.0	15.0	200	275	27.5	74.54	294.61	311.25	2	68
L3143.300R-02XYZ	381	168	-	165.5	40.5	250	325	28.0	78.78	324.41	352.70	2	82

Heavy Duty Linear Stages

Overview

Heavy duty linear stages

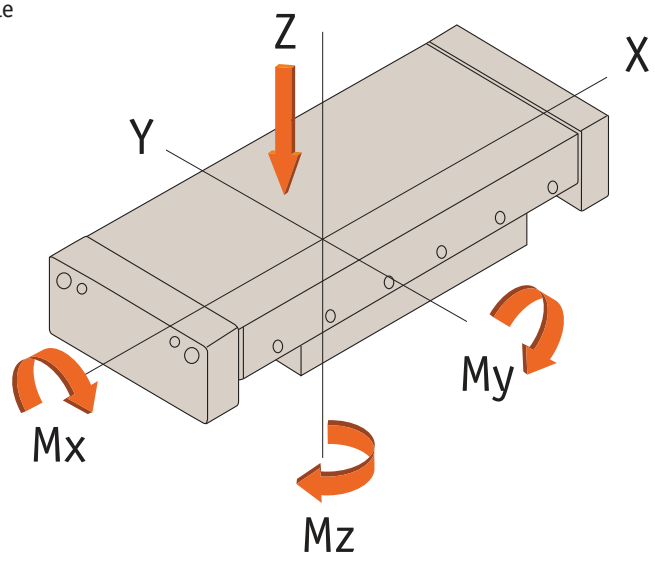
Plain stages	Lead screw & handle	Lead screw & knob
		
XYθ stage	**Motorised stage**	**XY stage**
		

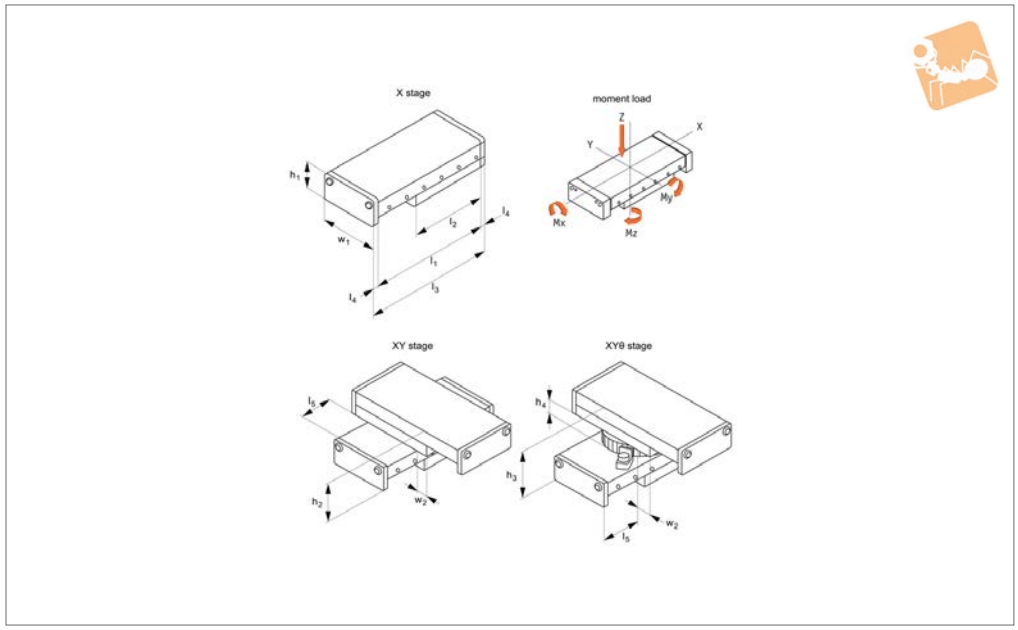
Available with the following sliding elements:

Cross roller:	For medium loads, low friction.
Dovetail:	Less expensive, higher friction, higher loads.
Needle roller:	Highest loads, low friction, more expensive.

Moment loads

All loads shown in tables are based upon an evenly distributed load with slide in centre position. All loads apply to a single slide.





L3170

Material
Cast iron body (ENGJL-250), with hardened cross roller linear rail set.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity. Other versions are also available - dovetail slides (L3480) for vibration damping, and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide. Coefficient of friction 0,003.

Tips
With no lead screw drive.
Replace -* with
-X for X axis stage
- XY for X,Y axes stage
-XYT for X,Y,. stage
Centre mounting of compound slides is standard. Please advise dimensions w_2 and l_5 when off-centre mounting is required.

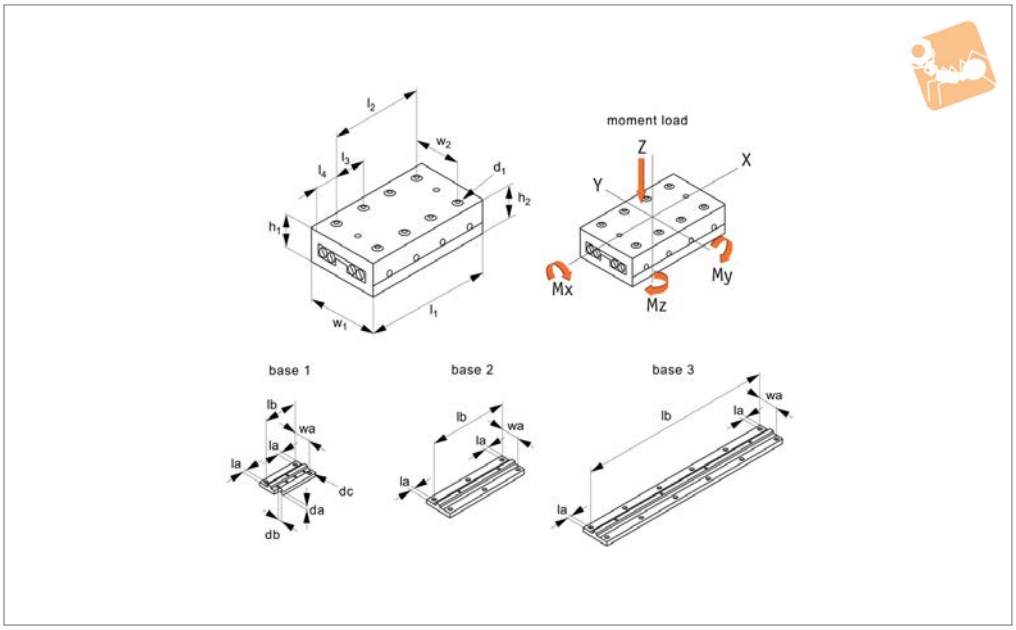
Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

Order No.	w_1	Stroke	l_1	h_1	h_2	h_3	h_4	l_2	l_3	Weight kg
L3170.050-022-*	50	22	76	25	50	-	-	50	88	0.6
L3170.050-025-*	50	25	102	25	50	-	-	76	114	0.8
L3170.050-050-*	50	50	152	25	50	-	-	101	164	1.1
L3170.075-025-*	75	25	102	32	64	82	18	76	114	1.8
L3170.075-026-*	75	25	127	32	64	82	18	101	139	2.0
L3170.075-050-*	75	50	152	32	64	82	18	101	164	2.5
L3170.100-025-*	100	25	152	37	74	92	18	126	164	4.0
L3170.100-050-*	100	50	203	37	74	92	18	152	215	4.7
L3170.100-051-*	100	50	254	37	74	92	18	203	266	6.1
L3170.100-075-*	100	75	305	37	74	92	18	228	317	7.0
L3170.150-050-*	150	50	203	50	100	120	20	152	219	10.0
L3170.150-100-*	150	100	305	50	100	120	20	203	321	13.2
L3170.150-101-*	150	100	406	50	100	120	20	304	422	18.0
L3170.150-150-*	150	150	406	50	100	120	20	253	422	16.5
L3170.200-150-*	200	150	457	58	116	136	20	304	473	30.0
L3170.200-200-*	200	200	610	58	116	136	20	406	626	40.0
L3170.300-100-*	300	100	410	75	150	180	30	308	430	59.0
L3170.300-200-*	300	200	610	75	150	180	30	408	630	80.0
L3170.300-300-*	300	300	710	75	150	180	30	408	730	91.5
L3170.300-400-*	300	400	910	75	150	180	30	508	930	110
L3170.300-500-*	300	500	1010	75	150	180	30	508	1030	125
L3170.300-600-*	300	600	1210	75	150	180	30	608	1230	145

Plain Positioning Stages

cross roller

Order No.	l_4	l_5	w_2	Load kN max.	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L3170.050-022-*	6	13.0	0.0	0.34	12	5.7	6.4
L3170.050-025-*	6	26.0	13.0	0.59	20	17	19
L3170.050-050-*	6	51.0	25.5	0.74	25	26	29
L3170.075-025-*	6	13.5	0.5	0.59	32	18	19
L3170.075-026-*	6	26.0	13.0	0.84	45	37	39
L3170.075-050-*	6	38.5	13.0	0.74	40	27	29
L3170.100-025-*	6	26.0	13.0	1.08	67	41	48
L3170.100-050-*	6	51.5	26.0	1.23	76	52	62
L3170.100-051-*	6	77.0	51.5	1.72	106	104	124
L3170.100-075-*	6	102.5	64.0	1.82	112	118	141
L3170.150-050-*	8	26.5	1.0	2.60	220	104	123
L3170.150-100-*	8	77.5	26.5	3.20	270	157	186
L3170.150-101-*	8	128.0	77.0	5.43	460	460	545
L3170.150-150-*	8	128.0	51.5	3.82	324	220	260
L3170.200-150-*	8	128.5	52.0	5.03	705	445	455
L3170.200-200-*	8	205.0	103.0	6.64	935	798	815
L3170.300-100-*	10	55.0	4.0	8.38	3190	800	825
L3170.300-200-*	10	155.0	54.0	10.4	3950	1205	1245
L3170.300-300-*	10	205.0	54.0	8.38	3190	800	825
L3170.300-400-*	10	305.0	104.0	10.4	3950	1205	1245
L3170.300-500-*	10	355.0	104.0	8.38	3190	800	825
L3170.300-600-*	10	455.0	154.0	10.4	3950	1205	1245



L3171

Material
Cast iron body (ENGJL-250), with hardened cross roller linear rail set.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Other versions are also available - dovetail slides (L3480) for vibration damping, and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position.
Coefficient of friction 0,003.

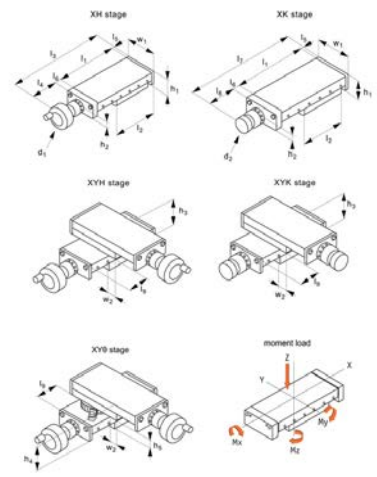
Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

Order No.	w_1	Stroke	d_1	d_a	d_b	d_c	l_1	h_1	h_2	Hole pattern	l_2	Weight kg
L3171.030-012	30	12	4.3	2.3	2.4	4.3	25	17	9.0	1	$1xl_3$	0.1
L3171.030-018	30	18	4.3	2.3	2.4	4.3	35	17	9.0	1	$2xl_3$	0.1
L3171.030-025	30	25	4.3	2.3	2.4	4.3	45	17	9.0	1	$3xl_3$	0.1
L3171.030-032	30	32	4.3	2.3	2.4	4.3	55	17	9.0	2	$4xl_3$	0.2
L3171.030-040	30	40	4.3	2.3	2.4	4.3	65	17	9.0	2	$5xl_3$	0.2
L3171.030-045	30	45	4.3	2.3	2.4	4.3	75	17	9.0	2	$6xl_3$	0.2
L3171.030-050	30	50	4.3	2.3	2.4	4.3	85	17	9.0	2	$7xl_3$	0.3
L3171.040-018	40	18	6.0	3.5	3.4	6.0	35	21	11.0	1	$1xl_3$	0.2
L3171.040-030	40	30	6.0	3.5	3.4	6.0	50	21	11.0	1	$2xl_3$	0.3
L3171.040-040	40	40	6.0	3.5	3.4	6.0	65	21	11.0	1	$3xl_3$	0.3
L3171.040-050	40	50	6.0	3.5	3.4	6.0	80	21	11.0	2	$4xl_3$	0.4
L3171.040-060	40	60	6.0	3.5	3.4	6.0	95	21	11.0	2	$5xl_3$	0.5
L3171.040-070	40	70	6.0	3.5	3.4	6.0	110	21	11.0	2	$6xl_3$	0.6
L3171.040-080	40	80	6.0	3.5	3.4	6.0	125	21	11.0	2	$7xl_3$	0.7
L3171.060-030	60	30	8.0	4.5	4.5	8.0	55	28	14.5	1	$1xl_3$	0.6
L3171.060-045	60	45	8.0	4.5	4.5	8.0	80	28	14.5	1	$2xl_3$	0.8
L3171.060-060	60	60	8.0	4.5	4.5	8.0	105	28	14.5	1	$3xl_3$	1.0
L3171.060-075	60	75	8.0	4.5	4.5	8.0	130	28	14.5	1	$4xl_3$	1.3
L3171.060-090	60	90	8.0	4.5	4.5	8.0	155	28	14.5	2	$5xl_3$	1.5
L3171.060-105	60	105	8.0	4.5	4.5	8.0	180	28	14.5	2	$6xl_3$	1.7
L3171.060-130	60	130	8.0	4.5	4.5	8.0	205	28	14.5	3	$7xl_3$	2.0
L3171.100-060	100	60	11.0	6.5	6.6	11.0	110	45	23.5	1	$1xl_3$	3.1
L3171.100-095	100	95	11.0	6.5	6.6	11.0	160	45	23.5	1	$2xl_3$	4.5
L3171.100-130	100	130	11.0	6.5	6.6	11.0	210	45	23.5	2	$3xl_3$	5.9
L3171.100-165	100	165	11.0	6.5	6.6	11.0	260	45	23.5	2	$4xl_3$	7.2
L3171.100-200	100	200	11.0	6.5	6.6	11.0	310	45	23.5	2	$5xl_3$	8.6
L3171.100-235	100	235	11.0	6.5	6.6	11.0	360	45	23.5	3	$6xl_3$	10.0
L3171.100-265	100	265	11.0	6.5	6.6	11.0	410	45	23.5	3	$7xl_3$	11.4
L3171.145-130	145	130	15.0	8.5	9.0	15.0	210	60	32.0	1	$1xl_3$	11.8

Plain Compact Positioning Stages
cross roller

Order No.	w_1	Stroke	d_1	d_a	d_b	d_c	l_1	h_1	h_2	Hole pattern	l_2	Weight kg
L3171.145-180	145	180	15.0	8.5	9.0	15.0	310	60	32.0	1	$2xl_3$	17.3
L3171.145-350	145	350	15.0	8.5	9.0	15.0	410	60	32.0	2	$3xl_3$	22.8
L3171.145-450	145	450	15.0	8.5	9.0	15.0	510	60	32.0	2	$4xl_3$	28.3
L3171.145-550	145	550	15.0	8.5	9.0	15.0	610	60	32.0	2	$5xl_3$	33.8
L3171.145-650	145	650	15.0	8.5	9.0	15.0	710	60	32.0	3	$6xl_3$	39.3
L3171.145-750	145	750	15.0	8.5	9.0	15.0	810	60	32.0	2	$7xl_3$	44.8
L3171.145-850	145	850	15.0	8.5	9.0	15.0	910	60	32.0	3	$8xl_3$	50.3
L3171.145-950	145	950	15.0	8.5	9.0	15.0	1010	60	32.0	2	$9xl_3$	55.8

Order No.	l_3	l_4	l_a	l_b	w_2	w_a	Load kN max.	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L3171.030-012	10	7.5	3.5	1x18	18.4	22	0.16	1.4	0.4	0.4
L3171.030-018	10	7.5	3.5	1x18	18.4	22	0.28	2.4	1.2	1.3
L3171.030-025	10	7.5	3.5	1x38	18.5	22	0.36	3.0	2.1	2.4
L3171.030-032	10	7.5	3.5	1x10 / 1x28 / 1x10	18.6	22	0.44	3.7	3.3	3.7
L3171.030-040	10	7.5	3.5	1x10 / 1x38 / 1x10	18.7	22	0.52	4.4	4.7	5.2
L3171.030-045	10	7.5	3.5	1x10 / 1x48 / 1x10	18.8	22	0.60	5.1	6.6	7.3
L3171.030-050	10	7.5	3.5	1x10 / 1x58 / 1x10	18.9	22	0.72	6.1	9.3	10
L3171.040-018	15	10	5.0	1x25	25.0	30	0.29	3.8	1.3	1.5
L3171.040-030	15	10	5.0	1x40	25.0	30	0.41	5.4	2.9	3.2
L3171.040-040	15	10	5.0	1x55	25.0	30	0.59	7.7	5.9	6.6
L3171.040-050	15	10	5.0	1x15 / 1x40 / 1x15	25.0	30	0.71	9.2	9.1	10
L3171.040-060	15	10	5.0	1x15 / 1x55 / 1x15	25.0	30	0.89	11	14	15
L3171.040-070	15	10	5.0	1x15 / 1x70 / 1x15	25.0	30	1.01	13	18	21
L3171.040-080	15	10	5.0	1x15 / 1x85 / 1x15	25.0	30	1.19	15	25	28
L3171.060-030	25	15	10.0	1x35	39.0	40	0.70	12	5.1	5.6
L3171.060-045	25	15	10.0	1x60	39.0	40	1.0	18	11	13
L3171.060-060	25	15	10.0	1x85	39.0	40	1.40	25	23	25
L3171.060-075	25	15	10.0	1x110	39.0	40	1.70	30	36	40
L3171.060-090	25	15	10.0	1x25 / 1x85 / 1x25	39.0	40	2.10	38	54	60
L3171.060-105	25	15	10.0	1x25 / 1x110 / 1x25	39.0	40	2.40	43	73	81
L3171.060-130	25	15	10.0	2x25 / 1x85 / 2x22	39.0	40	27.0	49	91	101
L3171.100-060	50	30	10.0	1x90	64.0	60	2.05	59	28	33
L3171.100-095	50	30	10.0	1x140	64.0	60	3.20	93	70	83
L3171.100-130	50	30	10.0	1x50 / 1x85 / 1x50	64.0	60	4.37	127	131	156
L3171.100-165	50	30	10.0	1x50 / 1x140 / 1x50	64.0	60	5.20	152	200	235
L3171.100-200	50	30	10.0	1x50 / 1x190 / 1x50	64.0	60	6.40	186	295	350
L3171.100-235	50	30	10.0	2x50 / 1x140 / 1x50	64.0	60	7.28	210	395	470
L3171.100-265	50	30	10.0	2x50 / 1x190 / 1x50	64.0	60	8.45	245	530	635
L3171.145-130	100	55	55.0	1x100	98.0	90	6.90	270	180	210
L3171.145-180	100	55	55.0	1x200	98.0	90	11.5	455	500	590
L3171.145-350	100	55	55.0	3x100	98.0	90	12.2	485	575	680
L3171.145-450	100	55	55.0	1x100/1x200/1x100	98.0	90	14.5	575	855	1010
L3171.145-550	100	55	55.0	5x100	98.0	90	17.6	695	1240	1465
L3171.145-650	100	55	55.0	2x10/1x200/2x100	98.0	90	19.9	790	1635	1930
L3171.145-750	100	55	55.0	7x100	98.0	90	23.0	910	2155	2545
L3171.145-850	100	55	55.0	3x100/1x200/3x100	98.0	90	25.3	1000	2665	3150
L3171.145-950	100	55	55.0	9x100	98.0	90	28.3	1125	3320	3920



L3172

Material
Cast iron body (ENGJL-250), with hardened cross roller linear rail set. Hardened and ground lead screw, pitch accuracy ±0.02mm/300mm.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity. Other versions are also available - dovetail slides (L3480) for vibration damping, and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide. Coefficient of friction 0,003.

Tips
Replace -* with
-XH for X axis stage with handle
-XK for X axis stage with knob
-XYH for X,Y axes stage with handle
-XYK for X,Y axes stage with knob
-XYTH for X,Y,. stage with handle
-XYTK for X,Y,. stage with knob

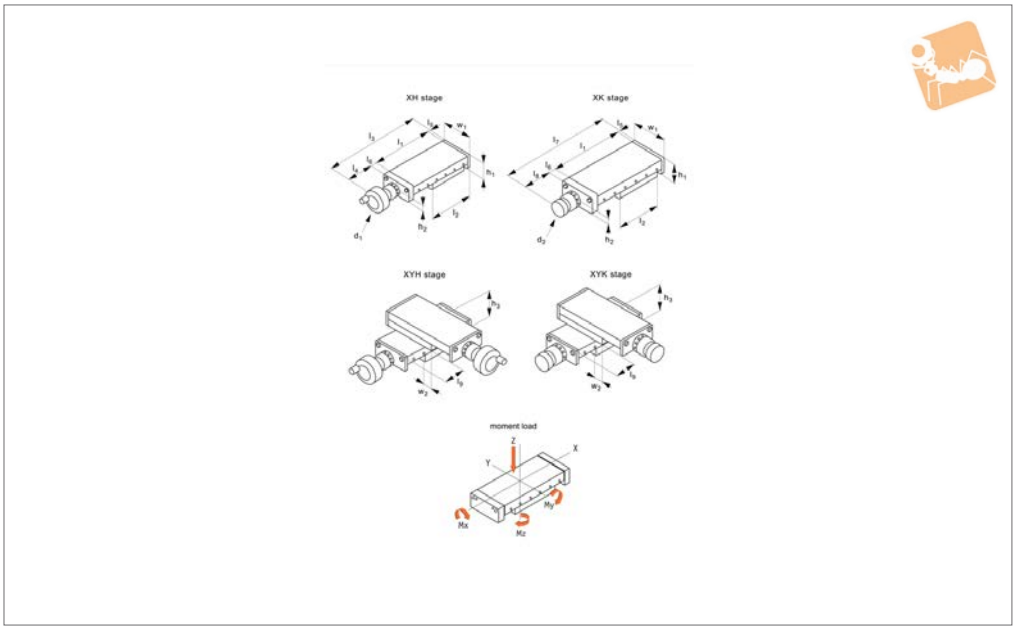
Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

Order No.	w_1	Stroke	d_1	d_2	l_1	h_1	h_2	h_3	h_4	h_5	l_2	l_3	Weight kg
L3172.050-022-*	50	22	50	23.9	76	25	12.5	50	-	-	50	156	0.6
L3172.050-025-*	50	25	50	23.9	102	25	12.5	50	-	-	76	182	0.8
L3172.050-050-*	50	50	50	23.9	152	25	12.5	50	-	-	101	232	1.1
L3172.075-025-*	75	25	56	31	102	32	16.0	64	82	18	76	193	1.8
L3172.075-026-*	75	25	56	31	127	32	16.0	64	82	18	101	218	2.0
L3172.075-050-*	75	50	56	31	152	32	16.0	64	82	18	101	243	2.5
L3172.100-025-*	100	25	56	35	152	37	18.0	74	92	18	126	243	4.0
L3172.100-050-*	100	50	56	35	203	37	18.0	74	92	18	152	294	4.7
L3172.100-051-*	100	50	56	35	254	37	18.0	74	92	18	203	345	6.1
L3172.100-075-*	100	75	56	35	305	37	18.0	74	92	18	228	396	7.0
L3172.150-050-*	150	50	106	48	203	50	24.3	100	120	20	152	334	10.0
L3172.150-100-*	150	100	106	48	305	50	24.3	100	120	20	203	436	13.2
L3172.150-101-*	150	100	106	48	406	50	24.3	100	120	20	304	537	18.0
L3172.150-150-*	150	150	106	48	406	50	24.3	100	120	20	253	537	16.5
L3172.200-150-*	200	150	106	48	457	58	28.3	116	136	20	304	588	30.0
L3172.200-200-*	200	200	106	48	610	58	28.3	116	136	20	406	741	40.0
L3172.300-100-*	300	100	125	68	410	75	35.0	150	180	30	308	607	59.0
L3172.300-200-*	300	200	125	68	610	75	35.0	150	180	30	408	807	80.0
L3172.300-300-*	300	300	125	68	408	75	35.0	150	180	30	408	907	91.5
L3172.300-400-*	300	400	125	68	910	75	35.0	150	180	30	508	1107	110.0
L3172.300-500-*	300	500	125	68	1010	75	35.0	150	180	30	508	1207	125.0
L3172.300-600-*	300	600	125	68	1210	75	35.0	150	180	30	608	1407	145.0

Manual Lead Screw Stages

cross roller

Order No.	l_4	l_5	l_6	l_7	l_8	l_9	w_2	Lead screw	Load kN max.	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L3172.050-022-*	60	6	14	138	42	13.0	0.0	M 6x1	0.3	12	5.7	6.4
L3172.050-025-*	60	6	14	164	42	26.0	13.0	M 6x1	0.6	20	17	19
L3172.050-050-*	60	6	14	214	42	51.0	25.5	M 6x1	0.7	25	26	29
L3172.075-025-*	70	6	15	170	47	13.5	0.5	M 6x1	0.6	32	18	19
L3172.075-026-*	70	6	15	195	47	26.0	13.0	M 8x1	0.8	45	37	39
L3172.075-050-*	70	6	15	220	47	38.5	13.0	M 8x1	0.7	40	27	29
L3172.100-025-*	70	6	15	222	49	26.0	13.0	M 8x1	1.1	67	41	48
L3172.100-050-*	70	6	15	273	49	51.5	26.0	M12x1	1.2	76	52	62
L3172.100-051-*	70	6	15	324	49	77.0	51.5	M12x1	1.7	106	104	124
L3172.100-075-*	70	6	15	375	49	102.5	64.0	M12x1	1.8	112	118	141
L3172.150-050-*	107	8	16	297	70	26.5	1.0	M12x1	2.6	220	104	123
L3172.150-100-*	107	8	16	399	70	77.5	26.5	M20x1	3.2	270	157	186
L3172.150-101-*	107	8	16	500	70	128.0	77.0	M20x1	5.4	460	460	545
L3172.150-150-*	107	8	16	500	70	128.0	51.5	M20x1	3.8	324	220	260
L3172.200-150-*	107	8	16	551	70	128.5	52.0	M20x1	5.0	705	445	455
L3172.200-200-*	107	8	16	704	70	205.0	103.0	M20x1	6.6	935	795	815
L3172.300-100-*	166.5	8	20	538	97.5	55.0	4.0	Tr26x4	8.4	3190	800	825
L3172.300-200-*	166.5	10	20	738	97.5	155.0	54.0	Tr26x4	10.4	3950	1205	1245
L3172.300-300-*	166.5	10	20	838	97.5	54.0	54.0	Tr26x4	8.4	3190	800	825
L3172.300-400-*	166.5	10	20	1038	97.5	305.0	104.0	Tr26x4	10.4	3950	1205	1245
L3172.300-500-*	166.5	10	20	1138	97.5	355.0	104.0	Tr26x4	8.4	3190	800	825
L3172.300-600-*	166.5	10	20	1338	97.5	455.0	154.0	Tr26x4	10.4	3950	1205	1245



L3173

Material
Cast iron body (ENGJL-250), with hardened cross roller linear rail set. Hardened and ground lead screw, pitch accuracy ±0.02mm/300mm.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity. Other versions are also available - dovetail slides (L3480) for vibration damping, and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide. Coefficient of friction 0,003.

Tips
Replace -* with
-XH for X axis stage with handle
-XK for X axis stage with knob
-XYH for X,Y axes stage with handle
-XYK for X,Y axes stage with knob

Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

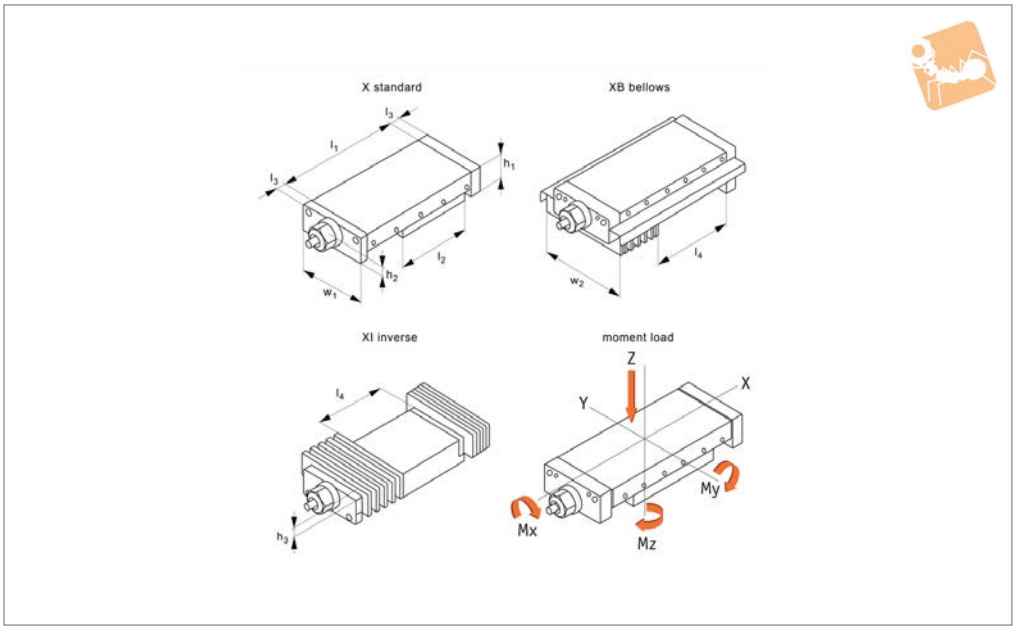
Order No.	w_1	Stroke	d_1	d_2	l_1	h_1	h_2	h_3	l_2	l_3	Weight kg
L3173.060-025-*	60	25	50	23.9	80	28	14	56	55	160	0.8
L3173.060-050-*	60	50	50	23.9	130	28	14	56	80	210	1.2
L3173.060-075-*	60	75	50	23.9	205	28	14	56	130	285	1.9
L3173.060-100-*	60	100	50	23.9	255	28	14	56	155	335	2.3
L3173.100-025-*	100	25	50	35.0	135	45	21	90	110	226	3.3
L3173.100-050-*	100	50	56	35.0	210	45	21	90	160	301	5.9
L3173.100-075-*	100	75	56	35.0	285	45	21	90	210	376	7.5
L3173.100-100-*	100	100	56	35.0	360	45	21	90	260	451	9.5
L3173.100-150-*	100	150	56	35.0	460	45	21	90	310	551	11.4
L3173.100-175-*	100	175	56	35.0	535	45	21	90	360	626	13.8
L3173.100-200-*	100	200	56	35.0	610	45	21	90	410	701	14.5
L3173.145-050-*	145	50	106	48.0	260	60	26	120	210	391	13.0
L3173.145-100-*	145	100	106	48.0	310	60	26	120	210	441	14.2
L3173.145-150-*	145	150	106	48.0	460	60	26	120	310	591	19.3
L3173.145-200-*	145	200	106	48.0	510	60	26	120	310	641	23.0
L3173.145-250-*	145	250	106	48.0	660	60	26	120	410	791	26.8
L3173.145-300-*	145	300	106	48.0	710	60	26	120	410	841	30.0

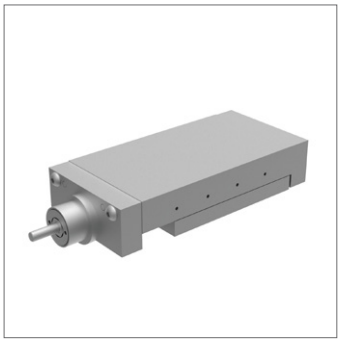
Order No.	l_4	l_5	l_6	l_7	l_8	l_9	w_2	Lead screw	Load kN max.	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L3173.060-025-*	142	6	14	142	42	10.0	0.0	M 6x1	0.4	12	5.5	6.1
L3173.060-050-*	192	6	14	192	42	35.0	10.0	M 6x1	0.6	18	11	12
L3173.060-075-*	267	6	14	267	42	72.5	35.0	M 6x1	1.0	30	36	40

Manual Lead Screw Stages

compact, cross roller

Order No.	l_4	l_5	l_6	l_7	l_8	l_9	w_2	Lead screw	Load kN max.	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L3173.060-100-*	317	6	14	317	42	97.5	47.5	M 8x1	1.2	36	49	54
L3173.100-025-*	205	6	15	205	49	17.5	5.0	M 8x1	1.6	76	47	56
L3173.100-050-*	280	6	15	280	49	55.0	30.0	M 8x1	2.3	110	104	124
L3173.100-075-*	355	6	15	355	49	92.5	55.0	M12x1	3.1	152	193	230
L3173.100-100-*	430	6	15	430	49	130.0	80.0	M12x1	3.8	186	295	350
L3173.100-150-*	530	6	15	530	49	180.0	105.0	M12x1	4.3	210	380	455
L3173.100-175-*	605	6	15	605	49	217.5	130.0	M12x1	5.1	245	520	620
L3173.100-200-*	680	6	15	680	49	255.0	155.0	M20x1	5.8	275	685	815
L3173.145-050-*	354	8	16	354	70	57.5	32.5	M20x1	6.4	365	325	385
L3173.145-100-*	404	8	16	404	70	82.5	32.5	M20x1	5.3	300	225	265
L3173.145-150-*	554	8	16	554	70	157.5	82.5	M20x1	8.5	485	575	680
L3173.145-200-*	604	8	16	604	70	182.5	82.5	TR26x4	7.5	425	440	520
L3173.145-250-*	754	8	16	754	70	257.5	132.5	TR26x4	10.1	575	855	1010
L3173.145-300-*	804	8	16	804	70	282.5	132.5	TR26x4	9.1	515	685	815





L3174

Material
Cast iron body (ENGJL-250), with hardened cross roller linear rail set. Hardened and ground lead screw, pitch accuracy ±0.02mm/300mm.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity. Other versions are also available - dovetail slides (L3480) for vibration damping, and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,003.
Speeds up to 3000 rpm, max. 20 m/min.
Positioning accuracy max. 0.001mm.

Tips
Replace -* with
-X for X axis stage
-XB for X axis stage with bellows
-XI for inverse X axis stage with bellows.
Optionally with ball screw not lead screw.
When limit switches are installed the stroke is reduced by approx. 20mm.

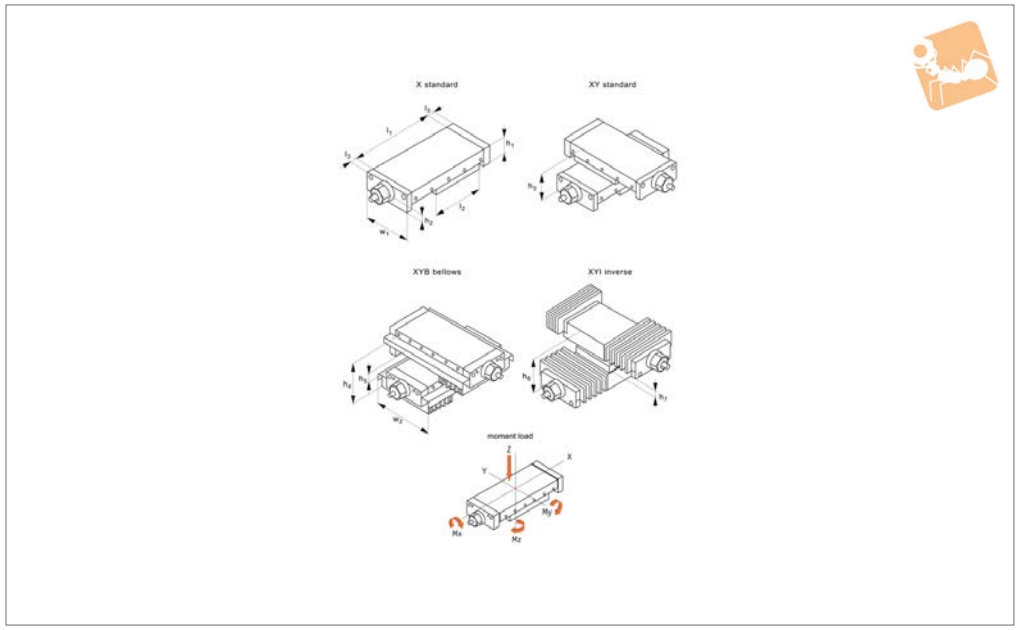
Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

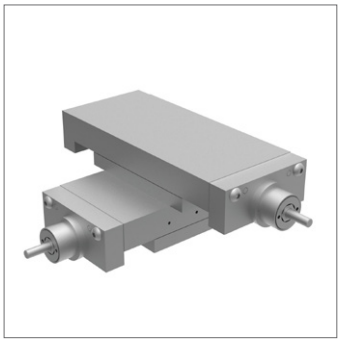
Order No.	w_1	Stroke	l_1	h_1	h_2	h_3	l_2	l_3	Weight kg
L3174.075-025-*	75	25	102	32	11.5	14	76	15	1.8
L3174.075-026-*	75	25	127	32	11.5	14	101	15	2.0
L3174.075-050-*	75	50	152	32	11.5	14	101	15	2.5
L3174.100-025-*	100	25	152	37	13.5	14	126	15	4.0
L3174.100-050-*	100	50	203	37	13.5	14	152	15	4.7
L3174.100-051-*	100	50	254	37	13.5	14	203	15	6.1
L3174.100-075-*	100	75	305	37	13.5	14	228	15	7.0
L3174.150-050-*	150	50	203	50	19.0	24	152	16	10.0
L3174.150-100-*	150	100	305	50	19.0	24	203	16	13.2
L3174.150-101-*	150	100	406	50	19.0	24	406	16	18.0
L3174.150-150-*	150	150	406	50	19.0	24	253	16	16.5
L3174.200-150-*	200	150	457	58	21.5	24	304	16	30.0
L3174.200-200-*	200	200	610	58	21.5	24	406	16	40.0
L3174.300-100-*	300	100	410	75	26.0	32	308	20	59.0
L3174.300-200-*	300	200	610	75	26.0	32	408	20	80.0
L3174.300-300-*	300	300	710	75	26.0	32	408	20	92.0
L3174.300-400-*	300	400	910	75	26.0	32	508	20	110.0
L3174.300-500-*	300	500	1010	75	26.0	32	508	20	125.0
L3174.300-600-*	300	600	1210	75	26.0	32	608	20	145.0

Motor Lead Screw X Stages

cross roller

Order No.	l_4	l_5	w_2	Lead screw	Load kN max.	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L3174.075-025-*	50	13.5	0.5	8x1	0.6	32	18	19
L3174.075-026-*	65	26.0	13.0	8x1	0.8	45	37	40
L3174.075-050-*	55	38.5	13.0	8x1	0.7	40	27	29
L3174.100-025-*	100	26.0	13.0	8x1	1.2	67	41	48
L3174.100-050-*	115	51.5	26.0	8x1	1.2	76	52	62
L3174.100-051-*	160	77.0	51.5	8x1	1.7	106	104	124
L3174.100-075-*	180	102.5	64.0	8x1	1.8	112	118	141
L3174.150-050-*	120	26.5	1.0	15x2	2.6	220	104	123
L3174.150-100-*	150	77.5	26.5	15x2	3.2	270	157	186
L3174.150-101-*	250	128.0	128.0	15x2	5.4	460	460	545
L3174.150-150-*	190	128.0	51.5	15x2	3.8	320	220	260
L3174.200-150-*	250	128.5	52.0	15x2	5.0	705	445	455
L3174.200-200-*	340	205.0	103.0	15x2	6.6	935	795	815
L3174.300-100-*	280	55.0	4.0	23x4	8.4	3190	800	825
L3174.300-200-*	380	155.0	54.0	23x4	10.4	3950	1205	1245
L3174.300-300-*	380	205.0	54.0	23x4	8.4	3190	800	825
L3174.300-400-*	480	305.0	104.0	23x4	10.4	3950	1205	1245
L3174.300-500-*	480	355.0	104.0	23x4	8.4	3190	800	825
L3174.300-600-*	580	455.0	154.0	23x4	10.4	3950	1205	1245





L3175

Material
Cast iron body (ENGJL-250), with hardened cross roller linear rail set. Hardened and ground lead screw, pitch accuracy ±0.02mm/300mm.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity. Other versions are also available - dovetail slides (L3480) for vibration damping, and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,003.
Speeds up to 3000 rpm, max. 20 m/min.
Positioning accuracy up to +/- 0.015mm.

Tips
Replace -* with
-XY for XY axis stage
-XYB for XY axis stage with bellows
-XYI for inverse X axis stage with bellows.
Optionally with ball screw not lead screw.
When limit switches are installed the stroke is reduced by approx. 20mm.

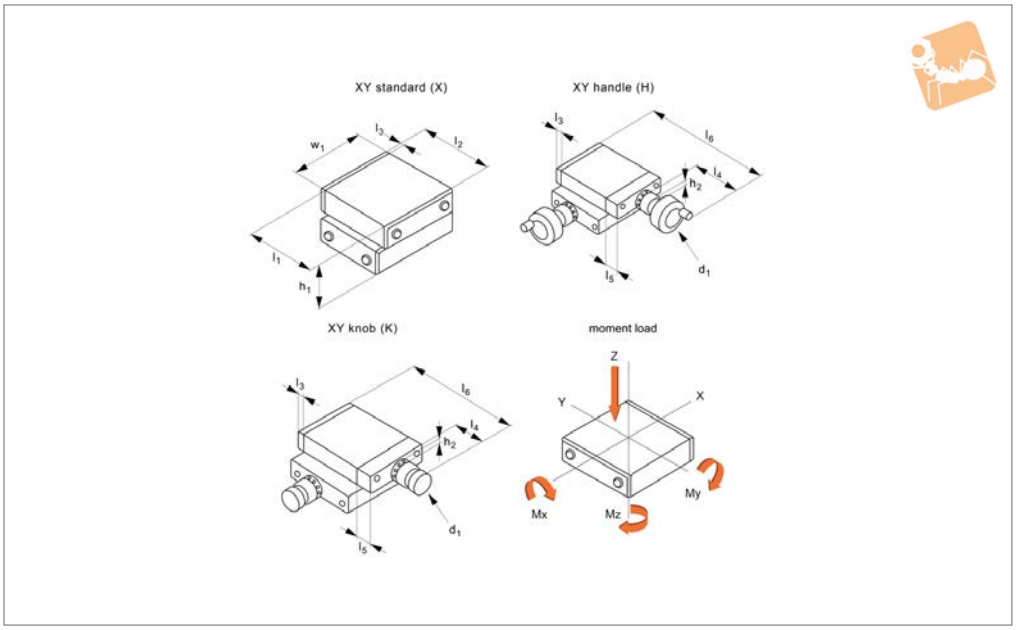
Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

Order No.	w_1	Stroke	l_1	h_1	h_2	h_3	h_4	h_5	h_6	h_7	Weight kg
L3175.075-025-*	75	25	102	32	11.5	64	79	15	79	15	1.8
L3175.075-026-*	75	25	127	32	11.5	64	79	15	79	15	2.0
L3175.075-050-*	75	50	152	32	11.5	64	79	15	79	15	2.5
L3175.100-025-*	100	25	152	37	13.5	74	89	15	89	15	4.0
L3175.100-050-*	100	50	203	37	13.5	74	89	15	89	15	4.7
L3175.100-051-*	100	50	254	37	13.5	74	89	15	89	15	6.1
L3175.100-075-*	100	75	305	37	13.5	74	89	15	89	15	7.0
L3175.150-050-*	150	50	203	50	19.0	100	125	25	125	25	10.0
L3175.150-100-*	150	100	305	50	19.0	100	125	25	125	25	13.2
L3175.150-101-*	150	100	406	50	19.0	100	125	25	125	25	18.0
L3175.150-150-*	150	150	406	50	19.0	100	125	25	125	25	16.5
L3175.200-150-*	200	150	457	58	21.5	116	141	25	141	25	30.0
L3175.200-200-*	200	200	610	58	21.5	116	141	25	141	25	40.0
L3175.300-100-*	300	100	410	75	26.0	150	185	35	185	35	59.0
L3175.300-200-*	300	200	610	75	26.0	150	150	-	185	-	80.0
L3175.300-300-*	300	300	710	75	26.0	150	150	-	150	-	92.0
L3175.300-400-*	300	400	910	75	26.0	150	150	-	150	-	110.0
L3175.300-500-*	300	500	1010	75	26.0	150	150	-	150	-	125.0
L3175.300-600-*	300	600	1210	75	26.0	150	150	-	150	-	145.0

Motor Lead Screw XY Stages

cross roller

Order No.	l_2	l_3	w_2	Lead screw	Load kN max.	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L3175.075-025-*	76	15	110	8x1	0.6	32	18	19
L3175.075-026-*	101	15	110	8x1	0.8	45	37	40
L3175.075-050-*	101	15	110	8x1	0.7	40	27	29
L3175.100-025-*	126	15	135	8x1	1.1	67	41	48
L3175.100-050-*	152	15	135	8x1	1.2	76	52	62
L3175.100-051-*	203	15	135	8x1	1.7	106	104	124
L3175.100-075-*	228	15	135	8x1	1.8	112	118	141
L3175.150-050-*	152	16	205	15x2	2.6	220	104	123
L3175.150-100-*	203	16	205	15x2	3.2	270	157	186
L3175.150-101-*	406	16	205	15x2	5.4	460	460	545
L3175.150-150-*	253	16	205	15x2	3.8	320	220	260
L3175.200-150-*	304	16	255	15x2	5.0	705	445	455
L3175.200-200-*	406	16	255	15x2	6.6	935	795	815
L3175.300-100-*	308	20	375	23x4	8.4	3190	800	825
L3175.300-200-*	408	20	375	23x4	10.4	3950	1205	1245
L3175.300-300-*	408	20	375	23x4	8.4	3190	800	825
L3175.300-400-*	508	20	375	23x4	10.4	3950	1205	1245
L3175.300-500-*	508	20	375	23x4	8.4	3190	800	825
L3175.300-600-*	608	20	375	23x4	10.4	3950	1205	1245



L3177

Material
Cast iron body (ENGJL-250), with hardened cross roller linear rail set. Hardened and ground lead screw M6x1, pitch accuracy ±0,02mm/300mm.

Technical Notes
Suitable for horizontal applications requiring smooth movement, long life and high load capacity. Other versions are also available - cross roller slides (L3470), and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,003.

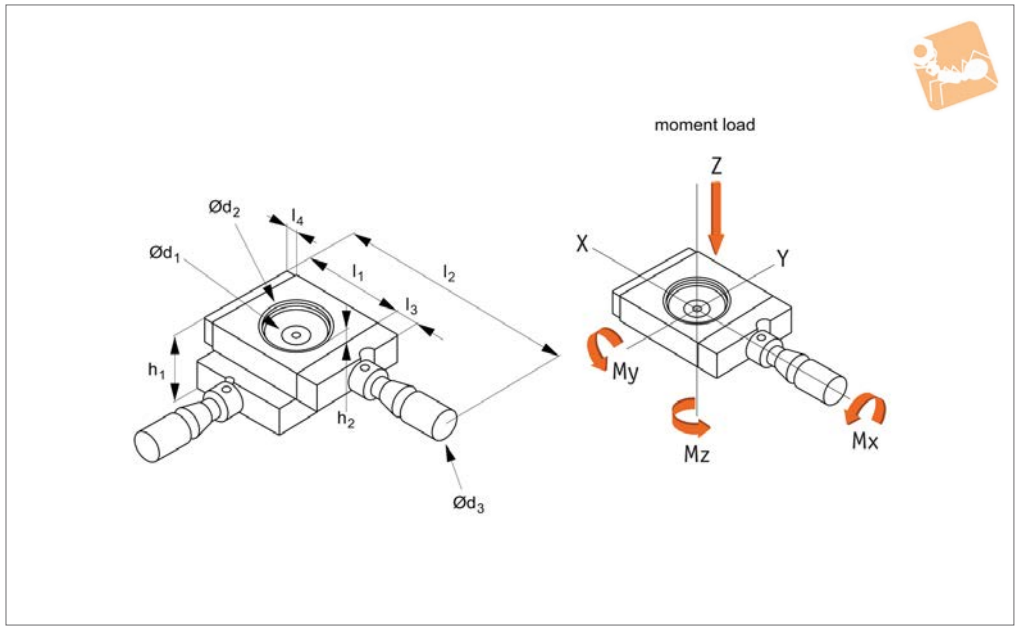
Tips
Lead screw pitch M6x1, apart from size 300 = M8x1.

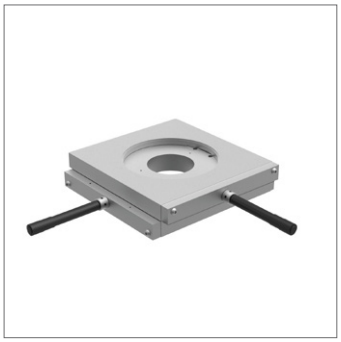
Order No.	w_1	Stroke	d_1	l_1	h_1	h_2	l_2	l_3	l_4	Weight kg
L3177.075-025-X	75	25	-	75	50	-	87	6	-	1.6
L3177.100-025-X	100	25	-	100	50	-	112	6	-	2.5
L3177.150-050-X	150	50	-	150	58	-	166	8	-	7.0
L3177.200-050-X	200	50	-	200	58	-	216	8	-	14.0
L3177.300-100-X	300	100	-	300	80	-	316	8	-	34.0
L3177.075-025-H	75	25	50.0	75	50	12.5	-	6	60	1.6
L3177.100-025-H	100	25	50.0	100	50	12.5	-	6	60	2.5
L3177.150-050-H	150	50	50.0	150	58	16.0	-	8	60	7.0
L3177.200-050-H	200	50	50.0	200	58	16.0	-	8	60	14.0
L3177.075-025-K	75	25	23.9	75	50	12.5	-	6	42	1.6
L3177.100-025-K	100	25	23.9	100	50	12.5	-	6	42	2.5
L3177.150-050-K	150	50	23.9	150	58	16.0	-	8	42	7.0
L3177.200-050-K	200	50	23.9	200	58	16.0	-	8	42	14.0
L3177.300-100-K	300	100	31.0	300	80	23.0	-	8	47	34.0

Order No.	l_5	l_6	Lead screw	Load kN max.	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L3177.075-025-X	14	-	M6x1	0.3	18	5.7	6.1
L3177.100-025-X	14	-	M6x1	0.6	36	11	14
L3177.150-050-X	14	-	M6x1	0.7	64	18	21
L3177.200-050-X	14	-	M6x1	1.2	190	60	62
L3177.300-100-X	15	-	M8x1	3.2	1140	183	188
L3177.075-025-H	14	155	M6x1	0.3	18	5.7	6.1
L3177.100-025-H	14	180	M6x1	0.6	36	11	14
L3177.150-050-H	14	232	M6x1	0.7	64	18	21
L3177.200-050-H	14	282	M6x1	1.2	190	60	62
L3177.075-025-K	14	137	M6x1	0.3	18	5.7	6.1
L3177.100-025-K	14	162	M6x1	0.6	36	11	14
L3177.150-050-K	14	214	M6x1	0.7	64	18	21

Miniature XY stages
cross roller

Order No.	l_5	l_6	Lead screw	Load kN max.	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L3177.200-050-K	14	264	M6x1	1.2	190	60	62
L3177.300-100-K	15	370	M8x1	3.2	1140	183	188





L3179

Material
Cast iron body (ENGJL-250), with hardened cross roller linear rail set.

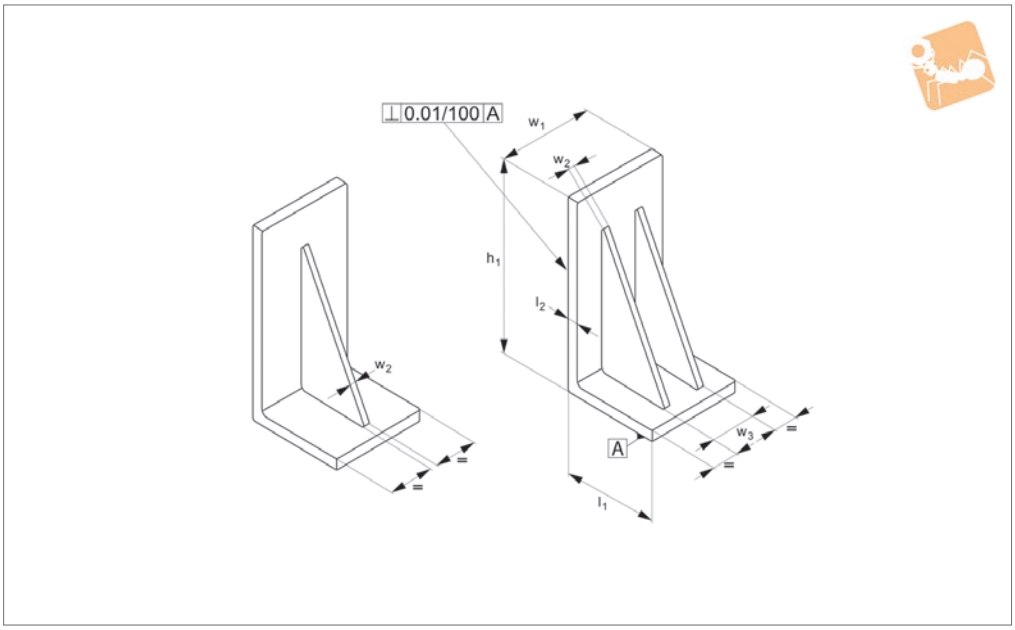
Technical Notes
Suitable for horizontal applications requiring smooth movement, long life and high load capacity. Low height profile. The stage has a through hole.
No backlash due to pull back spring, each micrometer has a locking device.
Coefficient of friction 0,003.
Micrometer pitch =1,0 apart from 20mm stroke = 0,5.

Tips
Micrometer pitch 1,0mm except first two sizes = 0,5mm.
For scientific and medical applications.

Important Notes
3D CAD models available.

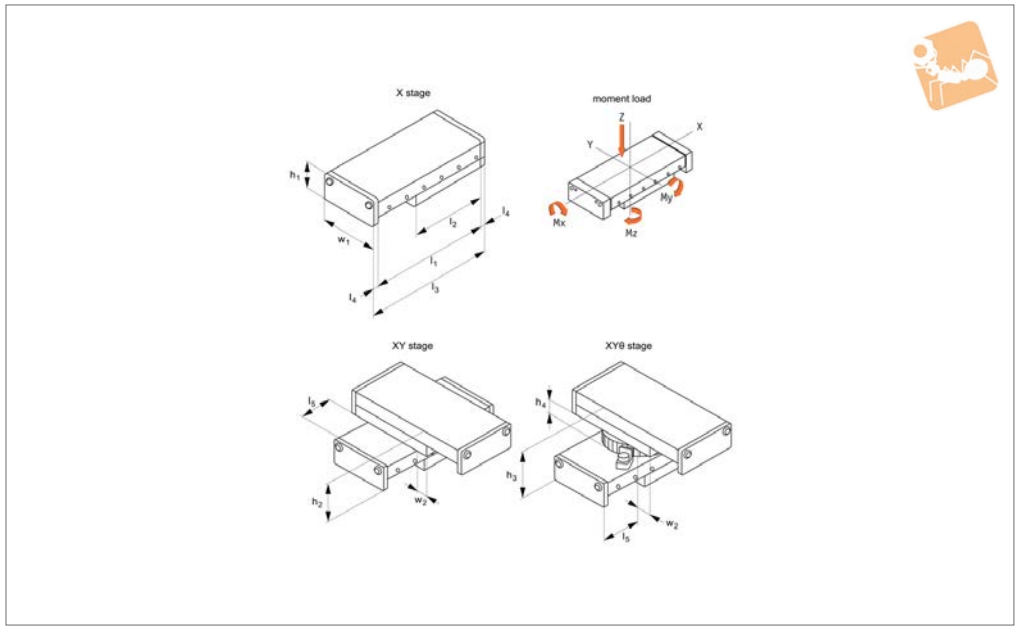
Order No.	Stroke	d_1	d_2	d_3	l_1	h_1	h_2	l_2	l_3	l_4	Load kN max.	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Weight kg
L3179.075-020	20	20	55	20	75	40	3	186	14	6	0.37	26	7.1	7.5	1.3
L3179.100-020	20	50	80	20	100	40	3	211	14	6	0.64	44	13	15	2.0
L3179.150-045	45	50	105	20	150	50	3	303	16	8	0.74	64	18	22	6.3
L3179.200-045	45	75	130	20	200	50	3	355	16	8	1.23	190	62	63	13.0
L3179.300-095	95	100	205	24	300	70	3	543	20	10	3.22	1140	186	192	32.0

L3199



Material
Cast iron, ground. Aluminium alternative on request.

Order No.	w_1	l_1	h_1	l_2	w_2	w_3	No. of ribs
L3199.050-050	50	50	50	8	8	-	1
L3199.050-100	50	50	100	8	8	-	1
L3199.075-075	75	75	75	10	8	-	1
L3199.075-150	75	75	150	10	8	-	1
L3199.100-100	100	100	100	15	12	-	1
L3199.100-200	100	100	200	15	12	-	1
L3199.150-150	150	150	150	18	10	50	2
L3199.150-300	150	150	300	18	10	45	2
L3199.200-200	200	200	200	22	10	75	2
L3199.200-350	200	200	350	22	10	70	2
L3199.300-400	300	300	400	30	15	145	2
L3199.400-500	400	400	500	35	20	210	2



L3180

Material
Cast iron body (ENGJL-250), with dovetail slide system.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity.

Dovetail linear guideways are very stable for use when a degree of vibration damping is required. Other versions are also available - cross roller slides (L3470), and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,1.

Tips
With no lead screw drive.

Replace -* with
-X for X axis stage
- XY for X,Y axes stage
-XYT for X,Y,. stage

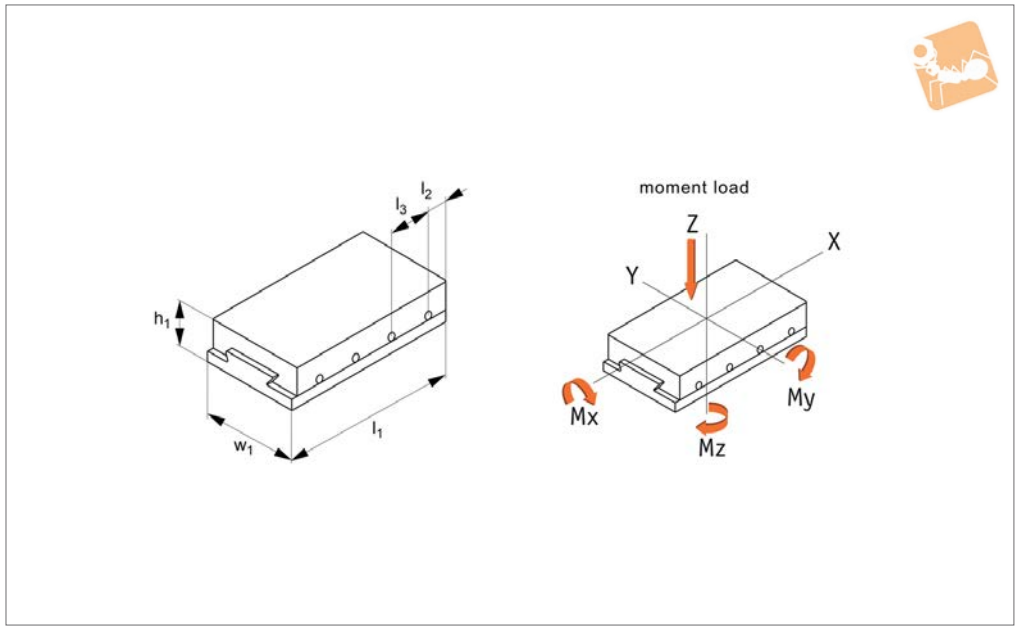
Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

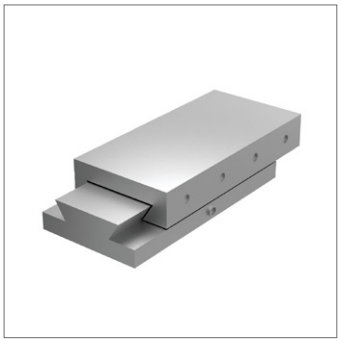
Order No.	Stroke	w_1	Load kN max.	h_1	l_1	l_2	l_3	l_4	l_5	Weight kg
L3180.050-022-*	22	50	0.5	25	76	50	88	6	13.0	0.6
L3180.050-025-*	25	50	0.7	25	102	76	114	6	26.0	0.8
L3180.050-050-*	50	50	1.0	25	152	101	164	6	51.0	1.1
L3180.075-025-*	25	75	10.5	32	102	76	114	6	13.5	1.8
L3180.075-026-*	25	75	14.0	32	127	101	139	6	26.0	2.0
L3180.075-050-*	50	75	14.0	32	152	101	164	6	38.5	2.5
L3180.100-025-*	25	100	19.5	37	152	126	164	6	26.0	4.0
L3180.100-050-*	50	100	23.6	37	203	152	215	6	51.5	4.7
L3180.100-051-*	50	100	31.5	37	254	203	266	6	77.0	6.1
L3180.100-075-*	75	100	35.4	37	305	228	317	6	102.5	7.0
L3180.150-050-*	50	150	30.7	50	203	152	219	8	26.5	10.0
L3180.150-100-*	100	150	41.0	50	305	203	321	8	77.5	13.2
L3180.150-101-*	100	150	61.5	50	406	304	422	8	128.0	18.0
L3180.150-150-*	150	150	51.2	50	406	253	422	8	128.0	16.5
L3180.200-150-*	150	200	86.8	58	457	304	473	8	128.5	30.0
L3180.200-200-*	200	200	116	58	610	406	626	8	205.0	40.0
L3180.300-100-*	100	300	114	75	410	308	430	10	55.0	59.0
L3180.300-200-*	200	300	150	75	610	408	630	10	155.0	80.0
L3180.300-300-*	300	300	150	75	710	408	730	10	205.0	92.0
L3180.300-400-*	400	300	187	75	910	508	930	10	305.0	110.0
L3180.300-500-*	500	300	187	75	1010	508	1030	10	355.0	125.0
L3180.300-600-*	600	300	224	75	1210	608	1230	10	455.0	145.0
L3180.400-200-*	200	400	233	102	610	408	650	20	105.0	169.0

Plain Positioning Stages
dovetail

Order No.	Stroke	w_1	Load kN max.	h_1	l_1	l_2	l_3	l_4	l_5	Weight kg
L3180.400-300-*	300	400	233	102	710	408	750	20	155.0	182.0
L3180.400-400-*	400	400	233	102	810	408	850	20	205.0	195.0
L3180.400-401-*	400	400	290	102	910	508	950	20	255.0	225.0
L3180.400-500-*	500	400	290	102	1010	508	1050	20	305.0	238.0
L3180.400-600-*	600	400	290	102	1110	508	1150	20	355.0	251.0
L3180.400-601-*	600	400	347	102	1210	608	1250	20	405.0	270.0

Order No.	w_2	h_2	h_3	h_4	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L3180.050-022-*	0.0	50	-	-	3.4	1.8	2.1
L3180.050-025-*	13.0	50	-	-	5.2	4.1	4.9
L3180.050-050-*	25.5	50	-	-	6.9	7.2	8.6
L3180.075-025-*	0.5	64	82	18	10.0	5.1	6.1
L3180.075-026-*	13.0	64	82	18	14.0	9.1	10.0
L3180.075-050-*	13.0	64	82	18	14.0	9.1	10.0
L3180.100-025-*	13.0	74	92	18	33.0	20.0	24.0
L3180.100-050-*	26.0	74	92	18	40.0	29.0	35.0
L3180.100-051-*	51.5	74	92	18	54.0	52.0	63.0
L3180.100-075-*	64.0	74	92	18	61.0	66.0	79.0
L3180.150-050-*	1.0	100	120	20	77.0	30.0	36.0
L3180.150-100-*	26.5	100	120	20	103	54.0	65.0
L3180.150-101-*	77.0	100	120	20	155	123	146
L3180.150-150-*	51.5	100	120	20	129	85.0	101
L3180.200-150-*	52.0	116	136	20	275	164	195
L3180.200-200-*	103.0	116	136	20	365	290	245
L3180.300-100-*	4.0	150	180	30	605	235	280
L3180.300-200-*	54.0	150	180	30	800	410	490
L3180.300-300-*	54.0	150	180	30	800	410	490
L3180.300-400-*	104.0	150	180	30	1000	640	760
L3180.300-500-*	104.0	150	180	30	1000	640	760
L3180.300-600-*	154.0	150	180	30	1195	915	1095
L3180.400-200-*	4.0	204	244	40	1360	470	560
L3180.400-300-*	4.0	204	244	40	1360	470	560
L3180.400-400-*	4.0	204	244	40	1360	470	560
L3180.400-401-*	54.0	204	244	40	1695	730	870
L3180.400-500-*	54.0	204	244	40	1685	730	870
L3180.400-600-*	54.0	204	244	40	1695	730	870
L3180.400-601-*	104.0	204	244	40	2025	1050	1250





L3181

Material

Cast iron body (ENGJL-250), with dovetail slide system.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes

Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity.
Dovetail linear guideways are very stable for use when a degree of vibration damping is required. Other versions are also available - cross roller slides (L3470), and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,1.

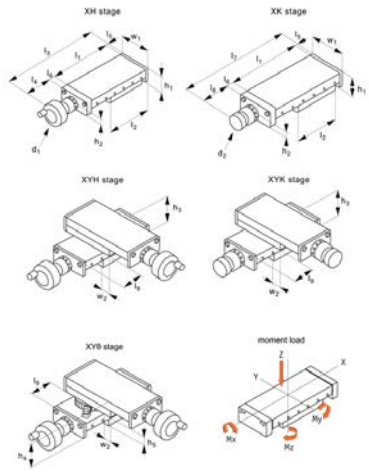
Important Notes

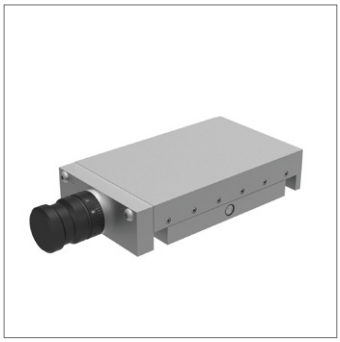
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

Order No.	Stroke	w_1	Load kN max.	h_1	l_1	l_2	l_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Weight kg
L3181.050-025	25	50	0.5	25	50	12.5	1 x25	3.4	1.8	2.1	0.5
L3181.050-050	50	50	1.0	25	101	13.0	3 x25	6.9	7.2	8.6	0.7
L3181.050-075	75	50	1.4	25	152	13.5	5 x25	10	16	19	1.4
L3181.050-100	100	50	1.9	25	202	13.5	7 x25	13	29	34	1.8
L3181.075-050	50	75	1.4	32	102	13.0	3 x25	14	9.2	11	1.8
L3181.075-075	75	75	2.1	32	152	13.5	5 x25	21	20	24	2.9
L3181.075-100	100	75	2.8	32	202	13.5	7 x25	28	36	43	3.9
L3181.075-125	125	75	3.5	32	252	13.5	9 x25	35	56	67	4.8
L3181.075-150	150	75	4.2	32	302	13.5	11x25	42	81	96	6.0
L3181.100-050	50	100	1.6	37	102	13.5	3 x25	27	13	15	8.4
L3181.100-075	75	100	2.3	37	152	13.5	5 x25	40	29	35	4.2
L3181.100-100	100	100	3.2	37	203	14.5	7 x25	54	52	63	5.9
L3181.100-125	125	100	3.9	37	254	14.5	9 x25	67	82	98	6.8
L3181.100-150	150	100	4.7	37	305	15.0	11x25	81	119	142	8.8
L3181.100-175	175	100	5.5	37	355	15.0	13x25	94	161	192	10.5
L3181.100-200	200	100	6.3	37	405	15.0	15x25	108	210	250	11.8
L3181.100-225	225	100	7.1	37	445	15.0	17x25	121	265	315	12.9
L3181.100-250	250	100	7.8	37	505	15.0	19x25	135	325	385	14.0
L3181.150-050	50	150	3.1	50	152	26.0	2 x50	77	30	36	11.0
L3181.150-075	75	150	3.1	50	152	26.0	2 x50	77	30	36	11.0
L3181.150-100	100	150	4.1	50	203	26.5	3 x50	103	54	65	13.8
L3181.150-125	125	150	5.1	50	253	26.5	4 x50	129	85	101	15.0
L3181.150-150	150	150	6.2	50	305	27.5	5 x50	155	123	147	16.0
L3181.150-200	200	150	8.2	50	406	28.0	7 x50	205	219	260	22.0
L3181.150-250	250	150	10.2	50	506	28.0	9 x50	255	340	405	27.5

Plain Compact Stages
dovetail

Order No.	Stroke	w_1	Load kN max.	h_1	l_1	l_2	l_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Weight kg
L3181.150-300	300	150	12.3	50	606	28.0	11x50	305	485	580	32.5
L3181.200-050	50	200	5.8	58	203	26.5	3 x50	184	73	87	23.0
L3181.200-100	100	200	5.8	58	203	26.5	3 x50	184	73	87	23.0
L3181.200-150	150	200	8.7	58	304	27.0	5 x50	275	164	195	26.1
L3181.200-200	200	200	11.6	58	406	28.0	7 x50	365	290	345	34.4
L3181.200-250	250	200	14.6	58	510	30.0	9 x50	460	460	550	43.0
L3181.200-300	300	200	17.4	58	610	30.0	11x50	550	660	785	51.5
L3181.200-350	350	200	20.3	58	710	30.0	13x50	645	895	1065	60.0
L3181.200-400	400	200	23.1	58	810	30.0	15x50	735	1165	1385	67.0
L3181.200-500	500	200	23.1	58	810	30.0	15x50	735	1165	1385	67.0
L3181.200-600	600	200	23.1	58	810	30.	15x50	735	1165	1385	67.0





L3182

Material
Cast iron body (ENGJL-250), with dovetail slide system. Hardened and ground lead screw, pitch accuracy ±0.02mm/300mm. Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity.

Dovetail linear guideways are very stable for use when a degree of vibration damping is required. Other versions are also available - cross roller slides (L3470), and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,1.

Tips
Replace -* with
-XH for X axis stage with handle
-XK for X axis stage with knob
-XYH for X,Y axes stage with handle
-XYK for X,Y axes stage with knob
-XYTH for X,Y,. stage with handle
-XYTK for X,Y,. stage with knob

Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

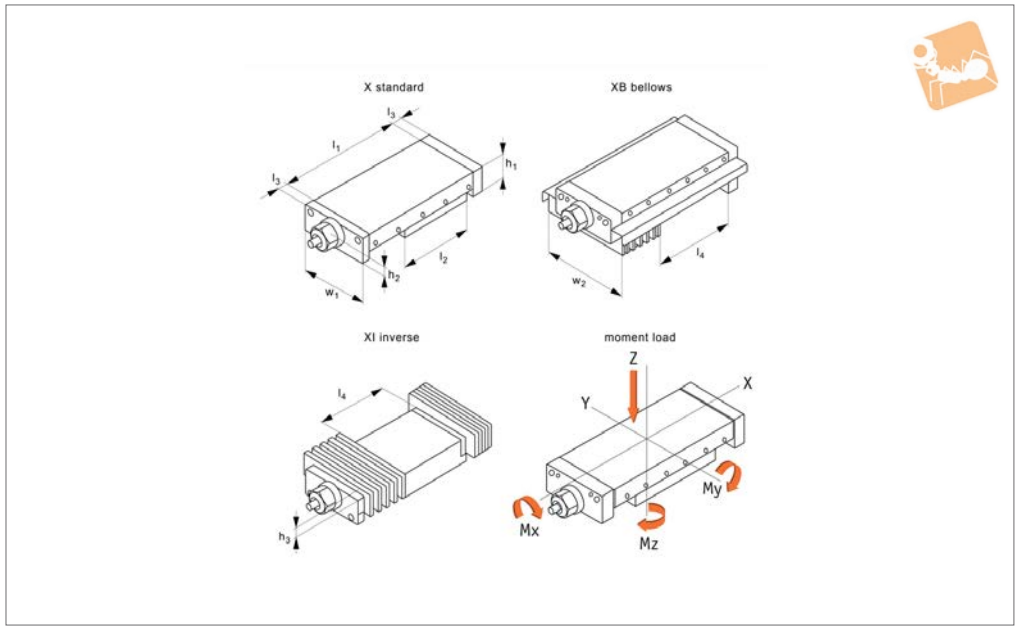
Order No.	Stroke	w_1	Load kN max.	h_1	l_1	l_2	l_3	l_4	l_5	l_6	l_7	l_8	Weight kg
L3182.050-022-*	22	50	0.5	25	76	50	156	60.0	14	14	138	42.0	0.8
L3182.050-025-*	25	50	0.7	25	102	76	182	60.0	14	14	164	42.0	0.8
L3182.050-050-*	50	50	1.0	20	152	101	232	60.0	14	14	214	42.0	1.1
L3182.075-025-*	25	75	1.1	32	102	76	193	70.0	15	15	170	47.0	1.8
L3182.075-026-*	25	75	1.4	32	127	101	218	70.0	15	15	195	47.0	2.0
L3182.075-050-*	50	75	1.4	32	152	101	243	70.0	15	15	220	47.0	2.5
L3182.100-025-*	25	100	2.0	37	152	126	243	70.0	15	15	222	49.0	4.0
L3182.100-050-*	50	100	2.4	37	203	152	294	70.0	15	15	273	49.0	4.7
L3182.100-051-*	50	100	3.2	37	254	203	345	70.0	15	15	324	49.0	6.1
L3182.100-075-*	75	100	3.5	37	305	228	396	70.0	15	15	375	49.0	7.0
L3182.150-050-*	50	150	3.1	50	203	152	334	107.0	16	16	297	70.0	10.0
L3182.150-100-*	100	150	4.1	50	305	203	436	107.0	16	16	399	70.0	13.2
L3182.150-101-*	100	150	6.2	50	406	304	357	107.0	16	16	500	70.0	18.0
L3182.150-150-*	150	150	5.1	50	406	253	537	107.0	16	16	500	70.0	16.5
L3182.200-150-*	150	200	8.7	58	457	304	588	107.0	16	16	551	70.0	30.0
L3182.200-200-*	200	200	11.6	58	610	406	741	107.0	16	16	704	70.0	40.0
L3182.300-100-*	100	300	11.4	75	410	308	607	166.5	20	20	538	97.5	59.0
L3182.300-200-*	200	300	15.0	75	610	408	87	166.5	20	20	738	97.5	80.0
L3182.300-300-*	300	300	15.0	75	710	408	907	166.5	20	20	838	97.5	92.0
L3182.300-400-*	400	300	18.7	75	910	508	1107	166.5	20	20	1038	97.5	110.0
L3182.300-500-*	500	300	18.7	75	1010	508	1207	166.5	20	20	1138	97.5	125.0
L3182.300-600-*	600	300	22.4	75	1210	608	1407	166.5	20	20	1338	97.5	145.0

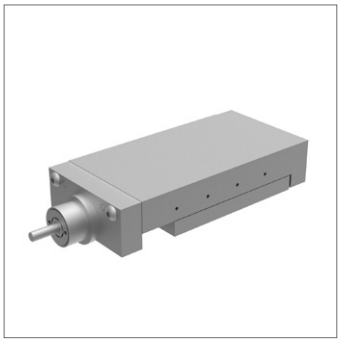
Manual Lead Screw Stages

dovetail

Order No.	Stroke	w_1	Load kN max.	h_1	l_1	l_2	l_3	l_4	l_5	l_6	l_7	l_8	Weight kg
L3182.400-200-*	200	400	23.3	102	610	408	868	208.0	30	30	783	123.0	169.0
L3182.400-300-*	300	400	23.3	102	710	408	968	208.0	30	30	883	123.0	182.0
L3182.400-400-*	400	400	23.3	102	810	408	1068	208.0	30	30	983	123.0	195.0
L3182.400-401-*	400	400	29.0	102	910	508	1168	208.0	30	30	1083	123.0	225.0
L3182.400-500-*	500	400	29.0	102	1010	508	1268	208.0	30	30	1183	123.0	238.0
L3182.400-600-*	600	400	29.0	102	1110	508	1368	208.0	30	30	1283	123.0	251.0
L3182.400-601-*	600	400	34.7	102	1210	608	1468	208.0	30	30	1383	123.0	270.0

Order No.	l_9	w_2	h_2	h_3	h_4	h_5	d_1	d_2	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw
L3182.050-022-*	13.0	0.0	12.5	50	-	-	50	23.9	3.4	1.8	2.1	M 6x1
L3182.050-025-*	26.0	13.0	12.5	50	-	-	50	23.9	5.2	4.1	4.9	M 6x1
L3182.050-050-*	51.0	25.5	12.5	50	-	-	50	23.9	9.9	7.2	8.6	M 6x1
L3182.075-025-*	13.5	0.5	16.0	64	82	18	56	31.0	10	5.1	6.1	M 8x1
L3182.075-026-*	26.0	13.0	16.0	64	82	18	56	31.0	14	9.1	10	M 8x1
L3182.075-050-*	38.5	13.0	16.0	64	82	18	56	31.0	14	9.1	10	M 8x1
L3182.100-025-*	26.0	13.0	18.0	74	92	18	56	35.0	33	20	24	M12x1
L3182.100-050-*	51.5	26.0	18.0	74	92	18	56	35.0	40	29	35	M12x1
L3182.100-051-*	77.0	51.5	18.0	74	92	18	56	35.0	54	52	63	M12x1
L3182.100-075-*	102.5	64.0	18.0	74	92	18	56	35.0	61	66	79	M12x1
L3182.150-050-*	26.5	1.0	24.3	100	120	20	106	48.0	77	30	36	M20x1
L3182.150-100-*	77.5	26.5	24.3	100	120	20	106	48.0	103	54	65	M20x1
L3182.150-101-*	128.0	77.0	24.3	100	120	20	106	48.0	155	123	146	M20x1
L3182.150-150-*	128.0	51.5	24.3	100	120	20	106	48.0	129	85	101	M20x1
L3182.200-150-*	128.5	52.0	28.3	116	136	20	106	48.0	275	164	195	M20x1
L3182.200-200-*	205.0	103.0	28.3	116	136	20	106	48.0	365	290	245	M20x1
L3182.300-100-*	55.0	4.0	35.0	150	180	30	125	68.0	605	235	280	TR26x4
L3182.300-200-*	155.0	54.0	35.0	150	180	30	125	68.0	800	410	490	TR26x4
L3182.300-300-*	205.0	54.0	35.0	150	180	30	125	68.0	800	410	490	TR26x4
L3182.300-400-*	305.0	104.0	35.0	150	180	30	125	68.0	1000	640	760	TR26x4
L3182.300-500-*	355.0	104.0	35.0	150	180	30	125	68.0	1000	640	760	TR26x4
L3182.300-600-*	455.0	154.0	35.0	150	180	30	125	68.0	1195	915	1095	TR26x4
L3182.400-200-*	105.0	4.0	43.5	204	244	40	200	84.0	1360	470	560	TR32x4
L3182.400-300-*	155.0	4.0	43.5	204	244	40	200	84.0	1360	470	560	TR32x4
L3182.400-400-*	205.0	4.0	43.5	204	244	40	200	84.0	1360	470	560	TR32x4
L3182.400-401-*	255.0	54.0	43.5	204	244	40	200	84.0	1695	730	870	TR32x4
L3182.400-500-*	305.0	54.0	43.5	204	244	40	200	84.0	1685	730	870	TR32x4
L3182.400-600-*	355.0	54.0	43.5	204	244	40	200	84.0	1695	730	870	TR32x4
L3182.400-601-*	405.0	104.0	43.5	204	244	40	200	84.0	2025	1050	1250	TR32x4





L3184

Material
Cast iron body (ENGJL-250), with dovetail slide system. Hardened and ground lead screw, pitch accuracy ±0.015mm/300mm. Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity.
Dovetail linear guideways are very stable for use when a degree of vibration damping is required. Other versions are also available - cross roller slides (L3470), and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,1.
Speeds up to 3000 rpm, max. 20 m/min.
Positioning accuracy max. 0.001mm.

Tips
Replace -* with
-X for X axis stage
-XB for X axis stage with bellows
-XI for inverse X axis stage with bellows
When limit switches are installed the stroke is reduced by approx. 20mm.

Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

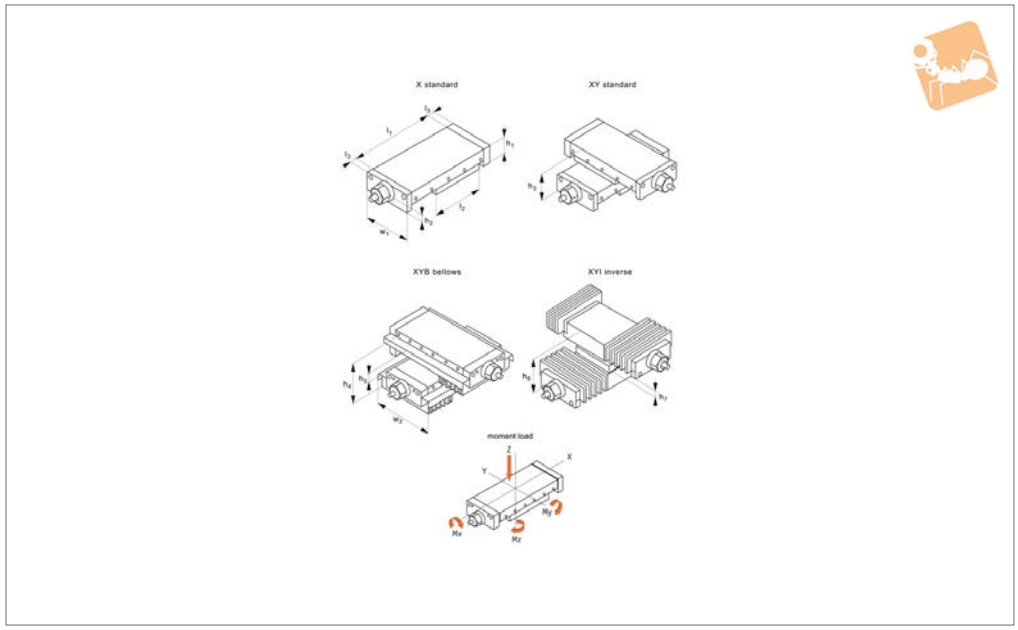
Order No.	Stroke	w_1	Load kN max.	h_1	l_1	l_2	l_3	l_4	Weight kg
L3184.075-025-*	25	75	1.0	32	102	76	15	50	1.8
L3184.075-026-*	25	75	1.4	32	127	101	15	65	2.0
L3184.075-050-*	50	75	1.4	32	152	101	15	55	2.5
L3184.100-025-*	25	100	2.0	37	152	126	15	100	4.0
L3184.100-050-*	50	100	2.4	37	203	152	15	115	4.7
L3184.100-051-*	50	100	3.2	37	254	203	15	160	6.1
L3184.100-075-*	75	100	3.5	37	305	228	15	180	7.0
L3184.150-050-*	50	150	3.1	50	203	152	16	120	10.0
L3184.150-100-*	100	150	4.1	50	305	203	16	150	13.2
L3184.150-101-*	100	150	6.2	50	406	304	16	250	18.0
L3184.150-150-*	150	150	5.1	50	406	253	16	190	16.5
L3184.200-150-*	150	200	8.7	58	457	304	16	250	30.0
L3184.200-200-*	200	200	11.6	58	610	406	16	340	40.0
L3184.300-100-*	100	300	11.4	75	410	308	20	280	59.0
L3184.300-200-*	200	300	15.0	75	610	408	20	380	80.0
L3184.300-300-*	300	300	15.0	75	710	408	20	380	92.0
L3184.300-400-*	400	300	18.7	75	910	508	20	480	110.0
L3184.300-500-*	500	300	18.7	75	1010	508	20	480	125.0
L3184.300-600-*	600	300	22.4	75	1210	608	20	580	145.0
L3184.400-200-*	200	400	23.3	102	610	408	70	380	169.0
L3184.400-300-*	300	400	23.3	102	710	408	70	380	182.0

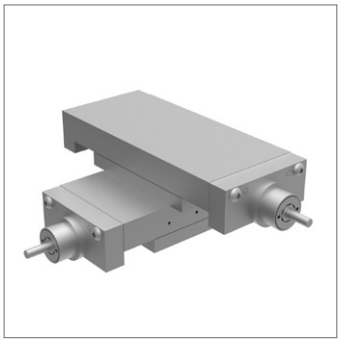
Motor Lead Screw X Stages

dovetail

Order No.	Stroke	w_1	Load kN max.	h_1	l_1	l_2	l_3	l_4	Weight kg
L3184.400-400-*	400	400	23.3	102	810	408	90	380	195.0
L3184.400-401-*	400	400	29.0	102	910	508	90	480	225.0
L3184.400-500-*	500	400	29.0	102	1010	508	100	480	238.0
L3184.400-600-*	600	400	29.0	102	1110	508	100	480	251.0
L3184.400-601-*	600	400	34.7	102	1210	508	100	580	270.0

Order No.	w_2	h_2	h_3	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw
L3184.075-025-*	110	11.5	14	10	5.1	6.1	8 x1
L3184.075-026-*	110	11.5	14	14	9.1	10	8 x1
L3184.075-050-*	110	11.5	14	14	9.1	10	8 x1
L3184.100-025-*	135	13.5	14	33	20	24	8 x1
L3184.100-050-*	135	13.5	14	40	29	35	8 x1
L3184.100-051-*	135	13.5	14	54	52	63	8 x1
L3184.100-075-*	135	13.5	14	61	66	79	8 x1
L3184.150-050-*	205	19.0	24	77	30	36	15x2
L3184.150-100-*	205	19.0	24	103	54	65	15x2
L3184.150-101-*	205	19.0	24	155	123	146	15x2
L3184.150-150-*	205	19.0	24	129	85	101	15x2
L3184.200-150-*	255	21.5	24	275	164	195	15x2
L3184.200-200-*	255	21.5	24	365	290	345	15x2
L3184.300-100-*	375	26.0	32	605	235	280	23x4
L3184.300-200-*	375	26.0	32	800	410	490	23x4
L3184.300-300-*	375	26.0	32	800	410	490	23x4
L3184.300-400-*	375	26.0	32	1000	640	760	23x4
L3184.300-500-*	375	26.0	32	1000	640	760	23x4
L3184.300-600-*	375	26.0	32	1195	915	1095	23x4
L3184.400-200-*	480	34.0	37	1360	470	560	23x4
L3184.400-300-*	480	34.0	37	1360	470	560	23x4
L3184.400-400-*	480	34.0	37	1360	470	560	23x4
L3184.400-401-*	480	34.0	37	1695	730	870	23x4
L3184.400-500-*	480	34.0	37	1685	730	870	23x4
L3184.400-600-*	480	34.0	37	1695	730	870	23x4
L3184.400-601-*	480	34.0	37	2025	1050	1250	23x4





L3185

Material
Cast iron body (ENGJL-250), with dovetail slide system. Hardened and ground lead screw, pitch accuracy ±0.015mm/300mm. Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity.
Dovetail linear guideways are very stable for use when a degree of vibration damping is required. Other versions are also available - cross roller slides (L3470), and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,1.
Speeds up to 3000 rpm, max. 20 m/min.
Positioning accuracy max. 0.001mm.

Tips
Replace -* with
-XY for XY axis stage
-XYB for XY axis stage with bellows
-XYI for inverse X axis stage with bellows
When limit switches are installed the stroke is reduced by approx. 20mm.

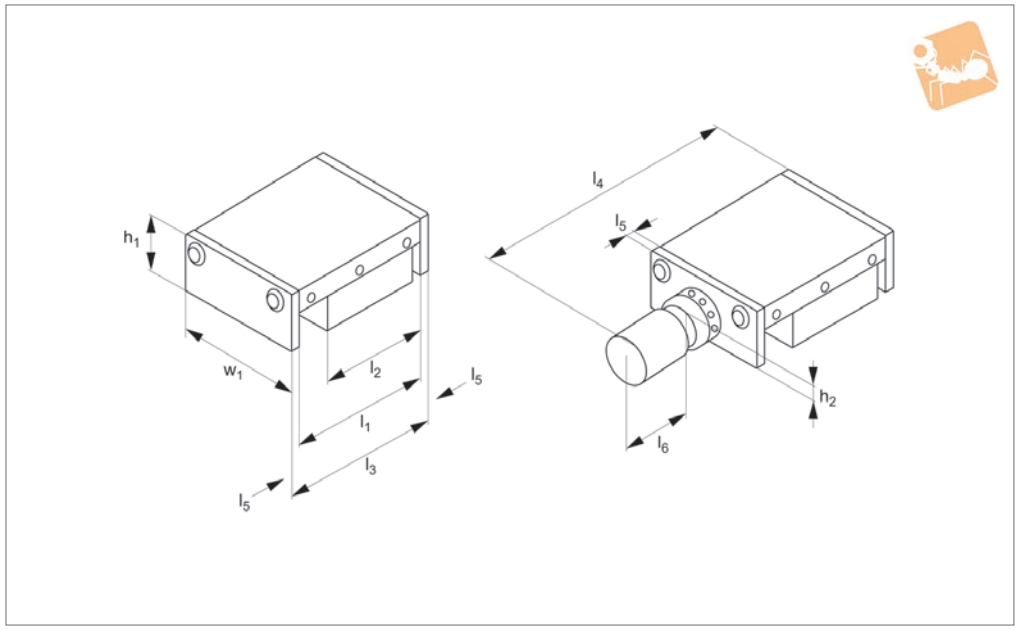
Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

Order No.	Stroke	w_1	Load kN max.	h_1	l_1	l_2	l_3	w_2	h_2	h_3	Weight kg
L3185.075-025-*	25	75	1.0	32	102	76	15	110	11.5	64	1.8
L3185.075-026-*	25	75	1.4	32	127	101	15	110	11.5	64	2.0
L3185.075-050-*	50	75	1.4	32	152	101	15	110	11.5	64	2.5
L3185.100-025-*	25	100	2.0	37	152	126	15	135	13.5	74	4.0
L3185.100-050-*	50	100	2.4	37	203	152	15	135	13.5	74	4.7
L3185.100-051-*	50	100	3.2	37	254	203	15	135	13.5	74	6.1
L3185.100-075-*	75	100	3.5	37	305	228	15	135	13.5	74	7.0
L3185.150-050-*	50	150	3.1	50	203	152	16	205	19.0	100	10.0
L3185.150-100-*	100	150	4.1	50	305	203	16	205	19.0	100	13.2
L3185.150-101-*	100	150	6.2	50	406	304	16	205	19.0	100	18.0
L3185.150-150-*	150	150	5.1	50	406	253	16	205	19.0	100	16.5
L3185.200-150-*	150	200	8.7	58	457	304	16	255	21.5	116	30.0
L3185.200-200-*	200	200	11.6	58	610	406	16	255	21.5	116	40.0
L3185.300-100-*	100	300	11.4	75	410	308	20	375	26.0	150	59.0
L3185.300-200-*	200	300	15.0	75	610	408	20	375	26.0	150	80.0
L3185.300-300-*	300	300	15.0	75	710	408	20	375	26.0	150	92.0
L3185.300-400-*	400	300	18.7	75	910	508	20	375	26.0	150	110.0
L3185.300-500-*	500	300	18.7	75	1010	508	20	375	26.0	150	125.0
L3185.300-600-*	600	300	22.4	75	1210	608	20	375	26.0	150	145.0
L3185.400-200-*	200	400	23.3	102	610	408	70	480	34.0	204	169.0
L3185.400-300-*	300	400	23.3	102	710	408	0	480	34.0	204	182.0

Motor Lead Screw XY Stages
dovetail

Order No.	Stroke	w_1	Load kN max.	h_1	l_1	l_2	l_3	w_2	h_2	h_3	Weight kg
L3185.400-400-*	400	400	23.3	102	810	408	90	480	34.0	204	195.0
L3185.400-401-*	400	400	29.0	102	910	508	90	480	34.0	204	225.0
L3185.400-500-*	500	400	29.0	102	1010	508	100	480	34.0	204	238.0
L3185.400-600-*	600	400	29.0	102	1110	508	100	480	34.0	204	251.0
L3185.400-601-*	600	400	34.7	102	1210	508	100	480	34.0	204	270.0

Order No.	h_4	h_5	h_6	h_7	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw
L3185.075-025-*	79	15	79	15	10	5.1	6.1	8 x1
L3185.075-026-*	79	15	79	15	14	9.1	10	8 x1
L3185.075-050-*	79	15	79	15	14	9.1	10	8 x1
L3185.100-025-*	89	15	89	15	33	20	24	8 x1
L3185.100-050-*	89	15	89	15	40	29	35	8 x1
L3185.100-051-*	89	15	89	15	54	52	63	8 x1
L3185.100-075-*	89	15	89	15	61	66	79	8 x1
L3185.150-050-*	125	25	125	25	77	30	36	15x2
L3185.150-100-*	125	25	125	25	103	54	65	15x2
L3185.150-101-*	125	25	125	25	155	123	146	15x2
L3185.150-150-*	125	25	125	25	129	85	101	15x2
L3185.200-150-*	141	25	141	25	275	164	195	15x2
L3185.200-200-*	141	25	141	25	365	290	345	15x2
L3185.300-100-*	185	35	185	35	605	235	280	23x4
L3185.300-200-*	185	-	185	-	800	410	490	23x4
L3185.300-300-*	185	-	185	-	800	410	490	23x4
L3185.300-400-*	185	-	185	-	1000	640	760	23x4
L3185.300-500-*	185	-	185	-	1000	640	760	23x4
L3185.300-600-*	185	-	185	-	1195	915	1095	23x4
L3185.400-200-*	229	25	229	25	1360	470	560	30x4
L3185.400-300-*	229	25	229	25	1360	470	560	30x4
L3185.400-400-*	229	25	229	25	1360	470	560	30x4
L3185.400-401-*	229	25	229	25	1695	730	870	30x4
L3185.400-500-*	204	-	204	-	1685	730	870	30x4
L3185.400-600-*	204	-	204	-	1695	730	870	30x4
L3185.400-601-*	204	-	204	-	2025	1050	1250	30x4



L3188

Material
Cast iron body (ENGJL-250), with dovetail slide system. Hardened and ground lead screw, pitch accuracy ±0.02mm/300mm.

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity.
Dovetail linear guideways are very stable for use when a degree of vibration damping is required. Other versions are also available - cross roller slides (L3470), and needle roller slides (L3490) for even higher load ratings. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,1.

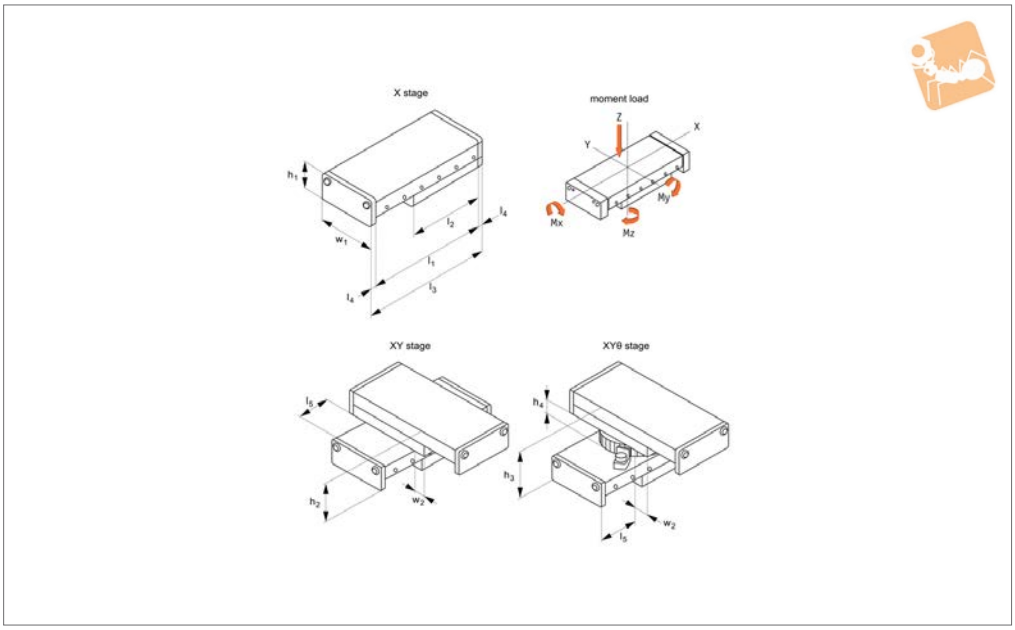
Tips
Lead screw pitch M6 x 0,5.
Centre mounting of compound slides is standard. Please advise dimensions w_2 and l_7 when off-centre mounting is required.

Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

Order No.	Stroke	w_1	Load kN max.	h_1	l_1	l_2	l_3	l_4	l_5	h_2	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw	Weight kg
L3188.030-010	10	30	0.15	17	35	25	41	-	3	8.5	0.5	0.2	0.3	M6x0,5	0.2
L3188.030-020	20	30	0.22	17	55	35	61	-	3	8.5	0.7	0.4	0.5	M6x0,5	0.3
L3188.030-030	30	30	0.22	17	65	35	71	-	3	8.5	0.7	0.4	0.5	M6x0,5	0.4
L3188.030-040	40	30	0.28	17	85	45	91	-	3	8.5	1.0	0.7	0.8	M6x0,5	0.5
L3188.030-050	50	30	0.34	17	105	55	111	-	3	8.5	1.2	1.0	1.2	M6x0,5	0.6
L3188.030-010-K	10	30	0.15	17	35	25	41	65	3	8.5	0.5	0.2	0.3	M6x0,5	0.2
L3188.030-020-K	20	30	0.22	17	55	35	61	85	3	8.5	0.7	0.4	0.5	M6x0,5	0.3
L3188.030-030-K	30	30	0.22	17	65	35	71	95	3	8.5	0.7	0.4	0.5	M6x0,5	0.4
L3188.030-040-K	40	30	0.28	17	85	45	91	115	3	8.5	1.0	0.7	0.8	M6x0,5	0.5
L3188.030-050-K	50	30	0.34	17	105	55	111	135	3	8.5	1.2	1.0	1.2	M6x0,5	0.6

Plain Positioning Stages
needle roller

L3190



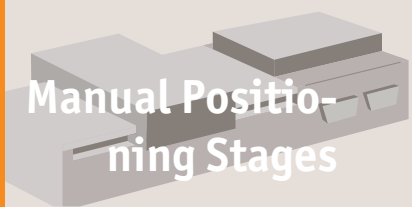
Material
Cast iron body (ENGJL-250), with hardened needle roller linear rail set.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity.
Needle roller stages are the highest load rating stages. Other versions are also available - cross roller slides (L3470), and dovetail slides (L3480) for use when vibration damping is required. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,003.

Tips
With no lead screw drive.
Replace -* with
-X for X axis stage
- XY for X,Y axes stage
-XYT for X,Y,. stage
Centre mounting of compound slides is standard. Please advise dimensions w_2 and l_5 when off-centre mounting is required.

Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

Order No.	w_1	Stroke	Load kN max.	l_1	h_1	l_2	h_2	h_3	h_4	Weight kg
L3190.150-050-*	150	50	21.1	203	50	152	100	120	20	10.0
L3190.150-100-*	150	100	28.6	305	50	203	100	120	20	13.2
L3190.150-101-*	150	100	42.9	406	50	304	100	120	20	18.0
L3190.150-150-*	150	150	21.1	305	50	152	100	120	20	12.5
L3190.150-151-*	150	150	35.4	406	50	253	100	120	20	16.5
L3190.150-200-*	150	200	28.6	406	50	203	100	120	20	15.0
L3190.150-250-*	150	250	21.1	406	50	152	100	120	20	13.5
L3190.200-100-*	200	100	22.0	305	58	203	116	136	20	21.0
L3190.200-150-*	200	150	35.4	406	58	253	116	136	20	26.0
L3190.200-151-*	200	150	42.9	457	58	304	116	136	20	30.0
L3190.200-200-*	200	200	42.9	510	58	304	116	136	20	31.5
L3190.200-201-*	200	200	57.2	610	58	405	116	136	20	40.0
L3190.200-250-*	200	250	35.4	510	58	253	116	136	20	29.0
L3190.200-300-*	200	300	42.9	610	58	304	116	136	20	34.5
L3190.300-100-*	300	100	21.0	410	75	308	150	190	30	65.0
L3190.300-200-*	300	200	21.0	510	75	308	150	190	30	70.0
L3190.300-300-*	300	300	21.0	610	75	308	150	190	30	78.0
L3190.300-400-*	300	400	21.0	710	75	308	150	190	30	85.0
L3190.300-201-*	300	200	39.2	610	75	408	150	190	30	88.0
L3190.300-301-*	300	300	39.2	710	75	408	150	190	30	94.0
L3190.300-401-*	300	400	39.2	810	75	408	150	190	30	100.0
L3190.300-500-*	300	500	39.2	910	75	408	150	190	30	108.0

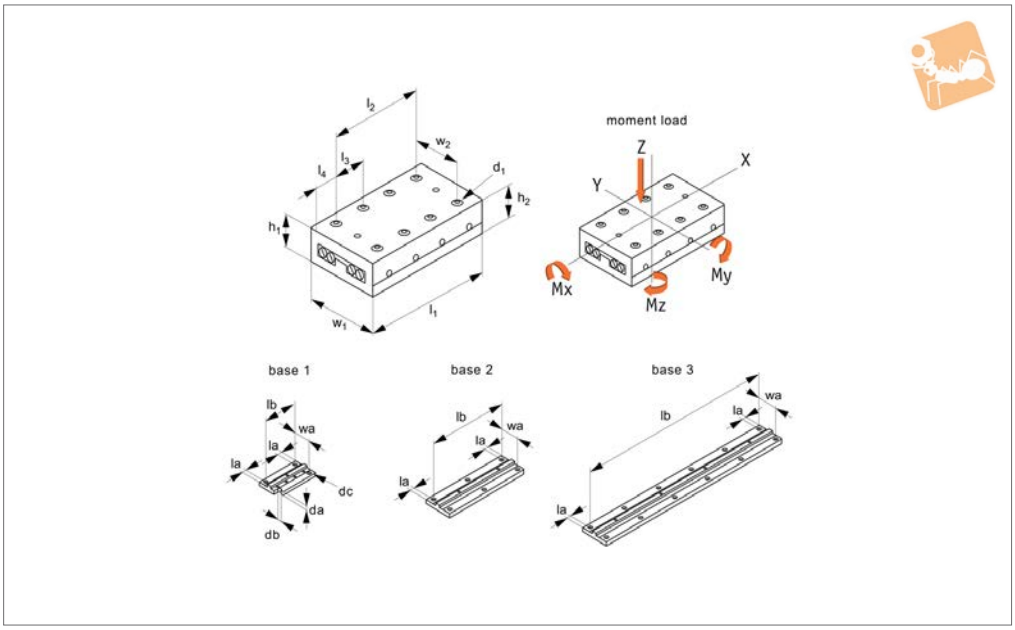


Order No.	w_1	Stroke	Load kN max.	l_1	h_1	l_2	h_2	h_3	h_4	Weight kg
L3190.300-600-*	300	600	39.2	1010	75	408	150	190	30	115.0
L3190.300-700-*	300	700	39.2	1110	75	408	150	190	30	122.0
L3190.300-800-*	300	800	39.2	1210	75	408	150	190	30	128.0
L3190.300-302-*	300	300	39.2	810	75	508	150	190	30	111.0
L3190.300-402-*	300	400	39.2	910	75	508	150	190	30	118.0
L3190.300-501-*	300	500	39.2	1010	75	508	150	190	30	125.0
L3190.300-601-*	300	600	39.2	1110	75	508	150	190	30	132.0
L3190.300-701-*	300	700	39.2	1210	75	508	150	190	30	137.0
L3190.400-200-*	400	200	44.3	610	102	408	204	244	40	169.0
L3190.400-300-*	400	300	44.3	710	102	408	204	244	40	182.0
L3190.400-400-*	400	400	44.3	810	102	408	204	244	40	195.0
L3190.400-500-*	400	500	44.3	910	102	408	204	244	40	208.0
L3190.400-600-*	400	600	44.3	1010	102	408	204	244	40	222.0
L3190.400-700-*	400	700	44.3	1110	102	408	204	244	40	235.0
L3190.400-800-*	400	800	44.3	1210	102	408	204	244	40	249.0
L3190.400-301-*	400	300	58.5	810	102	508	204	244	40	210.0
L3190.400-401-*	400	400	58.5	910	102	508	204	244	40	225.0
L3190.400-501-*	400	500	58.5	1010	102	508	204	244	40	238.0
L3190.400-601-*	400	600	58.5	1110	102	508	204	244	40	251.0
L3190.400-701-*	400	700	58.5	1210	102	508	204	244	40	265.0

Order No.	l_3	l_4	l_5	w_2	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.
L3190.150-050-*	219	8	26.5	1.0	940	435	435
L3190.150-100-*	321	8	77.5	26.5	1270	800	800
L3190.150-101-*	422	8	128.0	77.0	1910	1830	1830
L3190.150-150-*	321	8	77.5	1.0	940	435	435
L3190.150-151-*	422	8	128.0	51.5	1570	1250	1250
L3190.150-200-*	422	8	128.0	26.5	1270	800	800
L3190.150-250-*	422	8	128.0	1.0	940	435	435
L3190.200-100-*	321	8	52.5	1.5	1150	720	720
L3190.200-150-*	422	8	103.0	26.5	2215	1250	1250
L3190.200-151-*	473	8	128.5	52.0	2680	1830	1830
L3190.200-200-*	526	8	155.0	52.0	2680	1830	1830
L3190.200-201-*	626	8	205.0	102.5	3575	3275	3275
L3190.200-250-*	526	8	155.0	26.5	2215	1250	1250
L3190.200-300-*	626	8	205.0	52.0	2680	1830	1830
L3190.300-100-*	430	10	55.0	4.0	5520	2100	2100
L3190.300-200-*	530	10	105.0	4.0	5520	2100	2100
L3190.300-300-*	630	10	155.0	4.0	5520	2100	2100
L3190.300-400-*	730	10	205.0	4.0	5520	2100	2100
L3190.300-201-*	630	10	155.0	54.0	7440	4060	4060
L3190.300-301-*	730	10	205.0	54.0	7440	4060	4060
L3190.300-401-*	830	10	255.0	54.0	7440	4060	4060
L3190.300-500-*	930	10	305.0	54.0	7440	4060	4060
L3190.300-600-*	1030	10	355.0	54.0	7440	4060	4060
L3190.300-700-*	1130	10	405.0	54.0	7440	4060	4060
L3190.300-800-*	1230	10	455.0	54.0	7440	4060	4060
L3190.300-302-*	830	10	255.0	104.0	9290	6600	6600
L3190.300-402-*	930	10	305.0	104.0	9290	6600	6600
L3190.300-501-*	1030	10	355.0	104.0	9290	6600	6600
L3190.300-601-*	1130	10	405.0	104.0	9290	6600	6600
L3190.300-701-*	1230	10	455.0	104.0	9290	6600	6600
L3190.400-200-*	650	10	105.0	4.0	13000	5920	5920
L3190.400-300-*	750	20	155.0	4.0	13000	5920	5920
L3190.400-400-*	850	20	205.0	4.0	13000	5920	5920
L3190.400-500-*	950	20	255.0	4.0	13000	5920	5920
L3190.400-600-*	1050	20	305.0	4.0	13000	5920	5920
L3190.400-700-*	1150	20	355.0	4.0	13000	5920	5920
L3190.400-800-*	1250	20	405.0	4.0	13000	5920	5920
L3190.400-301-*	850	20	205.0	54.0	16430	9750	9750
L3190.400-401-*	950	20	255.0	54.0	16430	9750	9750
L3190.400-501-*	1050	20	305.0	54.0	16430	9750	9750
L3190.400-601-*	1150	20	355.0	54.0	16430	9750	9750
L3190.400-701-*	1250	20	405.0	54.0	16430	9750	9750

Plain Compact Positioning Stages
needle roller

L3191



Material
Cast iron body (ENGJL-250), with hardened needle roller linear rail set.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity.
Needle roller stages are the highest load rating stages. Other versions are also available - cross roller slides (L3470), and dovetail slides (L3480) for use when vibration damping is required. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,003.

Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

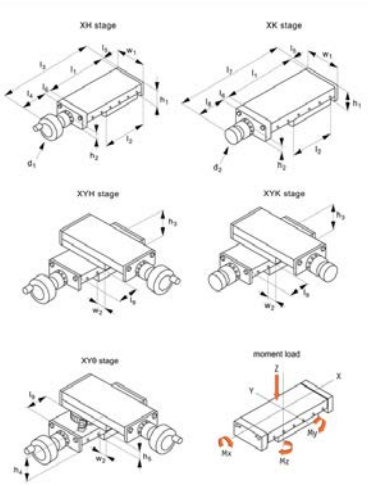
Order No.	w_1	Stroke	Load kN max.	l_1	h_1	l_2	d_1	d_a	d_b	d_c	h_2	Weight kg
L3191.100-060	100	60	9.70	110	45	1xl_3	11	6.5	6.6	11	23.5	3.1
L3191.100-095	100	95	14.3	160	45	2xl_3	11	6.5	6.6	11	23.5	4.5
L3191.100-130	100	130	18.8	210	45	3xl_3	11	6.5	6.6	11	23.5	5.9
L3191.100-165	100	165	23.4	260	45	4xl_3	11	6.5	6.6	11	23.5	7.2
L3191.100-200	100	200	28.6	310	45	5xl_3	11	6.5	6.6	11	23.5	8.6
L3191.100-235	100	235	33.1	360	45	6xl_3	11	6.5	6.6	11	23.5	10.0
L3191.100-265	100	265	37.7	410	45	7xl_3	11	6.5	6.6	11	23.5	11.4
L3191.145-130	145	130	18.8	210	60	1xl_3	15	8.5	9.0	15	32.0	11.8
L3191.145-180	145	180	29.7	310	60	2xl_3	15	8.5	9.0	15	32.0	17.3
L3191.145-350	145	350	32.0	410	60	3xl_3	15	8.5	9.0	15	32.0	22.8
L3191.145-450	145	450	38.8	510	60	4xl_3	15	8.5	9.0	15	32.0	28.3
L3191.145-550	145	550	46.3	610	60	5xl_3	15	8.5	9.0	15	32.0	22.8
L3191.145-650	145	650	53.1	710	60	6xl_3	15	8.5	9.0	15	32.0	39.3
L3191.145-750	145	750	60.6	810	60	7xl_3	15	8.5	9.0	15	32.0	44.8
L3191.145-850	145	850	67.4	910	60	8xl_3	15	8.5	9.0	15	32.0	50.3
L3191.145-950	145	950	74.9	1010	60	9xl_3	15	8.5	9.0	15	32.0	55.8

Order No.	l_3	l_4	l_a	l_b	w_2	w_a	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Hole pattern
L3191.100-060	50	30	10	1x90	64	60	215	104	104	1
L3191.100-095	50	30	10	1x140	64	60	320	230	230	1
L3191.100-130	50	30	10	1x50 / 1x90 / 1x50	64	60	420	410	410	2
L3191.100-165	50	30	10	1x50 / 1x140 / 1x50	64	60	525	645	645	2
L3191.100-200	50	30	10	1x50 / 1x190 / 1x50	64	60	640	950	950	2

Order No.	l_3	l_4	l_a	l_b	w_2	w_a	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Hole pattern
L3191.100-235	50	30	10	2x50 / 1x140 / 2x50	64	60	745	1285	1285	3
L3191.100-265	50	30	10	2x50 / 1x190 / 2x50	64	60	845	1695	1695	3
L3191.145-130	100	55	55	1x100	98	90	675	410	410	1
L3191.145-180	100	55	55	1x200	98	90	1070	1035	1035	1
L3191.145-350	100	55	55	3x100	98	90	1150	1200	1200	2
L3191.145-450	100	55	55	1x100 /1x200 /1x100	98	90	1400	1795	1795	2
L3191.145-550	100	55	55	5x100	98	90	1665	2540	2540	2
L3191.145-650	100	55	55	2x100 /1x200 /2x100	98	90	1915	3375	3375	3
L3191.145-750	100	55	55	7x100	98	90	2180	4375	4375	2
L3191.145-850	100	55	55	3x100 /1x200 /3x100	98	90	2425	5455	5455	3
L3191.145-950	100	55	55	9x100	98	90	2695	6705	6705	2

Manual Lead Screw Positioning Stages
needle roller

L3192



Material
Cast iron body (ENGJL-250), with hardened needle roller linear rail set. Hardened and ground lead screw, pitch accuracy ±0.02mm/300mm.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity.

Needle roller stages are the highest load rating stages. Other versions are also available - cross roller slides (L3470), and dovetail slides (L3480) for use when vibration damping is required. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,003.

Tips
Replace -* with
-XH for X axis stage with handle
-XK for X axis stage with knob
-XYH for X,Y axes stage with handle
-XYK for X,Y axes stage with knob
-XYTH for X,Y,. stage with handle
-XYTK for X,Y,. stage with knob
Centre mounting of compound slides is standard. Please advise dimensions w_2 and l_9 when off-centre mounting is required.

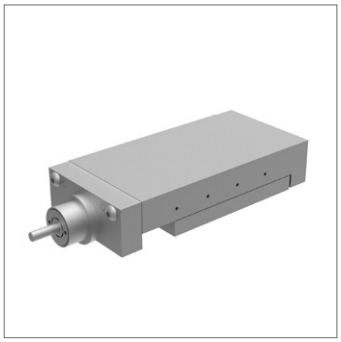
Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

Order No.	w_1	Stroke	Load kN max.	l_1	h_1	l_2	d_1	d_2	h_2	h_3	h_4	h_5	Weight kg
L3192.150-050-*	150	50	21.1	203	50	152	106	48	24.3	100	120	20	10.0
L3192.150-100-*	150	100	28.6	305	50	203	106	48	24.3	100	120	20	13.2
L3192.150-101-*	150	100	42.9	406	50	304	106	48	24.3	100	120	20	18.0
L3192.150-150-*	150	150	21.1	305	50	152	106	48	24.3	100	120	20	12.5
L3192.150-151-*	150	150	35.4	406	50	253	106	48	24.3	100	120	20	16.5
L3192.150-200-*	150	200	28.6	406	50	203	106	48	24.3	100	120	20	15.0
L3192.150-250-*	150	250	21.1	406	50	152	106	48	24.3	100	120	20	13.5
L3192.200-100-*	200	100	22.0	305	58	203	106	48	28.3	116	136	20	21.0
L3192.200-150-*	200	150	35.4	406	58	253	106	48	28.3	116	136	20	26.0
L3192.200-151-*	200	150	42.9	457	58	304	106	48	28.3	116	136	20	30.0
L3192.200-200-*	200	200	42.9	510	58	304	106	48	28.3	116	136	20	31.5
L3192.200-201-*	200	200	57.2	610	58	406	106	48	28.3	116	136	20	40.0
L3192.200-250-*	200	250	35.4	510	58	253	106	48	28.3	116	136	20	29.0
L3192.200-300-*	200	300	42.9	610	58	304	106	48	28.3	116	136	20	34.5
L3192.300-100-*	300	100	21.0	410	75	308	125	68	35.0	150	190	30	65
L3192.300-200-*	300	200	21.0	510	75	308	125	68	35.0	150	190	30	70
L3192.300-300-*	300	300	21.0	610	75	308	125	68	35.0	150	190	30	78
L3192.300-400-*	300	400	21.0	710	75	308	125	68	35.0	150	190	30	85
L3192.300-201-*	300	200	30.2	610	75	408	125	68	35.0	150	190	30	88
L3192.300-301-*	300	300	30.2	710	75	408	125	68	35.0	150	190	30	94
L3192.300-401-*	300	400	30.2	810	75	408	125	68	35.0	150	190	30	100

Order No.	w_1	Stroke	Load kN max.	l_1	h_1	l_2	d_1	d_2	h_2	h_3	h_4	h_5	Weight kg
L3192.300-500-*	300	500	30.2	910	75	408	125	68	35.0	150	190	30	108
L3192.300-600-*	300	600	30.2	1010	75	408	125	68	35.0	150	190	30	115
L3192.300-700-*	300	700	30.2	1110	75	408	125	68	35.0	150	190	30	122
L3192.300-800-*	300	800	39.2	1210	75	408	125	68	35.0	150	190	30	128
L3192.300-302-*	300	300	39.2	810	75	508	125	68	35.0	150	190	30	111
L3192.300-402-*	300	400	39.2	910	75	508	125	68	35.0	150	190	30	118
L3192.300-502-*	300	500	39.2	1010	75	508	125	68	35.0	150	190	30	125
L3192.300-602-*	300	600	39.2	1110	75	508	125	68	35.0	150	190	30	132
L3192.300-702-*	300	700	39.2	1210	75	508	125	68	35.0	150	190	30	137
L3192.400-203-*	400	200	44.3	610	102	408	200	84	43.5	204	244	40	169
L3192.400-303-*	400	300	44.3	710	102	408	200	84	43.5	204	244	40	182
L3192.400-403-*	400	400	44.3	810	102	408	200	84	43.5	204	244	40	195
L3192.400-503-*	400	500	44.3	910	102	408	200	84	43.5	204	244	40	208
L3192.400-603-*	400	600	44.3	1010	102	408	200	84	43.5	204	244	40	222
L3192.400-703-*	400	700	44.3	1110	102	408	200	84	43.5	204	244	40	235
L3192.400-803-*	400	800	44.3	1210	102	408	200	84	43.5	204	244	40	249
L3192.400-304-*	400	300	58.2	810	102	508	200	84	43.5	204	244	40	210
L3192.400-404-*	400	400	58.2	910	102	508	200	84	43.5	204	244	40	225
L3192.400-504-*	400	500	58.2	1010	102	508	200	84	43.5	204	244	40	238
L3192.400-604-*	400	600	58.2	1110	102	508	200	84	43.5	204	244	40	251
L3192.400-704-*	400	700	58.2	1210	102	508	200	84	43.5	204	244	40	265

Order No.	l_3	l_4	l_5	l_6	l_7	l_8	l_9	w_2	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw
L3192.150-050-*	334	107	8	16	297	70.0	26.5	1.0	940	435	435	M20x1
L3192.150-100-*	436	107	8	16	399	70.0	77.5	26.5	1270	800	800	M20x1
L3192.150-101-*	537	107	8	16	500	70.0	128.0	77.0	1910	1830	1830	M20x1
L3192.150-150-*	436	107	8	16	399	70.0	77.5	1.0	940	435	435	M20x1
L3192.150-151-*	537	107	8	16	500	70.0	128.0	51.5	1570	1250	1250	M20x1
L3192.150-200-*	537	107	8	16	500	70.0	128.0	26.5	1270	800	800	M20x1
L3192.150-250-*	537	107	8	16	600	70.0	128.0	1.0	940	435	435	M20x1
L3192.200-100-*	436	107	8	16	399	70.0	52.5	1.5	1150	720	720	M20x1
L3192.200-150-*	537	107	8	16	500	70.0	103.0	26.5	2215	1250	1250	M20x1
L3192.200-151-*	588	107	8	16	551	70.0	128.5	52.0	2680	1830	1830	M20x1
L3192.200-200-*	641	107	8	16	604	70.0	155.0	52.0	2680	1830	1830	M20x1
L3192.200-201-*	741	107	8	16	704	70.0	205.0	103.0	3575	3275	3275	M20x1
L3192.200-250-*	841	107	8	16	604	70.0	155.0	26.5	2215	1250	1250	M20x1
L3192.200-300-*	741	107	8	16	704	70.0	205.0	52.0	2680	1830	1830	M20x1
L3192.300-100-*	607	166.5	10	20	538	97.5	55.0	4.0	5520	2100	2100	TR26x4
L3192.300-200-*	707	166.5	10	20	638	97.5	105.0	4.0	5520	2100	2100	TR26x4
L3192.300-300-*	807	166.5	10	20	738	97.5	155.0	4.0	5520	2100	2100	TR26x4
L3192.300-400-*	907	166.5	10	20	838	97.5	205.0	4.0	5520	2100	2100	TR26x4
L3192.300-201-*	807	166.5	10	20	738	97.5	155.0	54.0	7440	4060	4060	TR26x4
L3192.300-301-*	907	166.5	10	20	838	97.5	205.0	54.0	7440	4060	4060	TR26x4
L3192.300-401-*	1007	166.5	10	20	938	97.5	255.0	54.0	7440	4060	4060	TR26x4
L3192.300-500-*	1107	166.5	10	20	1038	97.5	305.0	54.0	7440	4060	4060	TR26x4
L3192.300-600-*	1207	166.5	10	20	1138	97.5	355.0	54.0	7440	4060	4060	TR26x4
L3192.300-700-*	1307	166.5	10	20	1238	97.5	405.0	54.0	7440	4060	4060	TR26x4
L3192.300-800-*	1407	166.5	10	20	1338	97.5	455.0	54.0	7440	4060	4060	TR26x4
L3192.300-302-*	1007	166.5	10	20	938	97.5	255.0	104.0	9290	6600	6600	TR26x4
L3192.300-402-*	1107	166.5	10	20	1038	97.5	305.0	104.0	9290	6600	6600	TR26x4
L3192.300-502-*	1207	166.5	10	20	1138	97.5	355.0	104.0	9290	6600	6600	TR26x4
L3192.300-602-*	1307	166.5	10	20	1238	97.5	405.0	104.0	9290	6600	6600	TR26x4
L3192.300-702-*	1407	166.5	10	20	1338	97.5	455.0	104.0	9290	6600	6600	TR26x4
L3192.400-203-*	868	208.0	20	30	783	123.0	105.0	4.0	13000	5920	5920	TR32x4
L3192.400-303-*	968	208.0	20	30	883	123.0	155.0	4.0	13000	5920	5920	TR32x4
L3192.400-403-*	1068	208.0	20	30	983	123.0	205.0	4.0	13000	5920	5920	TR32x4
L3192.400-503-*	1168	208.0	20	30	1083	123.0	255.0	4.0	13000	5920	5920	TR32x4
L3192.400-603-*	1268	208.0	20	30	1183	123.0	305.0	4.0	13000	5920	5920	TR32x4
L3192.400-703-*	1368	208.0	20	30	1283	123.0	355.0	4.0	13000	5920	5920	TR32x4
L3192.400-803-*	1468	208.0	20	30	1383	123.0	405.0	4.0	13000	5920	5920	TR32x4
L3192.400-304-*	1068	208.0	20	30	983	123.0	205.0	54.0	16430	9750	9750	TR32x4
L3192.400-404-*	1168	208.0	20	30	1083	123.0	255.0	54.0	16430	9750	9750	TR32x4
L3192.400-504-*	1268	208.0	20	30	1183	123.0	305.0	54.0	16430	9750	9750	TR32x4
L3192.400-604-*	1368	208.0	20	30	1283	123.0	355.0	54.0	16430	9750	9750	TR32x4
L3192.400-704-*	1468	208.0	20	30	1383	123.0	405.0	54.0	16430	9750	9750	TR32x4

Motor Lead Screw X Stages
needle roller



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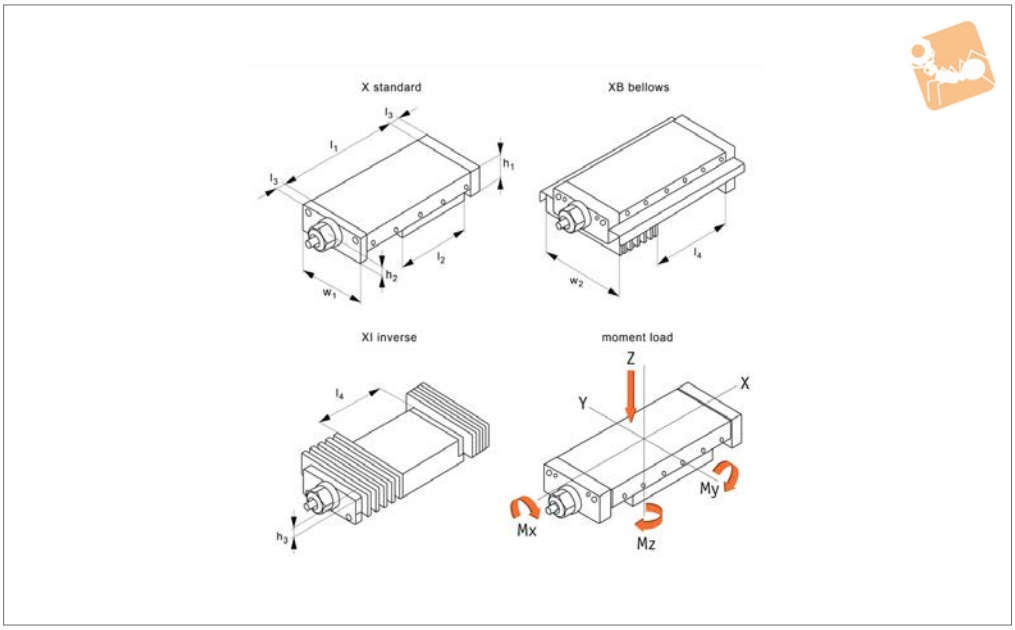


Material
Cast iron body (ENGJL-250), with hardened needle roller linear rail set. Hardened and ground lead screw, pitch accuracy ±0.015mm/300mm.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity.

Needle roller stages are the highest load rating stages. Other versions are also available - cross roller slides (L3470), and dovetail slides (L3480) for use when vibration damping is required. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,003.
Speeds up to 2000 rpm, max. 20 m/min.
Positioning accuracy max. 0.001mm.

Tips
Replace -* with
-X for X axis stage

-XB for X axis stage with bellows
-XI for inverse X axis stage with bellows
When limit switches are installed the stroke is reduced by approx. 20mm.

Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

Order No.	w_1	Stroke	Load kN max.	l_1	h_1	l_2	h_2	h_3	Weight kg
L3194.150-050-*	150	50	21.1	203	50	152	19.0	24	10.0
L3194.150-100-*	150	100	21.1	285	50	152	19.0	24	12.0
L3194.150-101-*	150	100	28.6	305	50	203	19.0	24	13.2
L3194.150-102-*	150	100	42.9	406	50	304	19.0	24	18.0
L3194.150-150-*	150	150	21.1	305	50	152	19.0	24	12.5
L3194.150-151-*	150	150	35.4	406	50	253	19.0	24	16.5
L3194.150-200-*	150	200	28.6	406	50	203	19.0	24	15.0
L3194.150-250-*	150	250	21.1	406	50	152	19.0	24	13.5
L3194.150-300-*	150	300	28.6	530	50	203	19.0	24	19.0
L3194.150-400-*	150	400	28.6	650	50	203	19.0	24	19.5
L3194.150-500-*	150	500	28.6	770	50	203	19.0	24	21.0
L3194.150-600-*	150	600	28.6	880	50	203	19.0	24	22.5
L3194.200-100-*	200	100	28.6	335	58	220	21.5	24	22.5
L3194.200-150-*	200	150	35.4	406	58	253	21.5	24	26.0
L3194.200-151-*	200	150	42.9	457	58	304	21.5	24	30.0
L3194.200-200-*	200	200	28.6	460	58	220	21.5	24	25.5
L3194.200-201-*	200	200	42.9	510	58	304	21.5	24	31.5
L3194.200-202-*	200	200	57.2	610	58	406	21.5	24	40.0
L3194.200-250-*	200	250	35.4	520	58	253	21.5	24	29.0
L3194.200-300-*	200	300	28.6	580	58	220	21.5	24	29.0
L3194.200-301-*	200	300	42.9	610	58	304	21.5	24	34.5

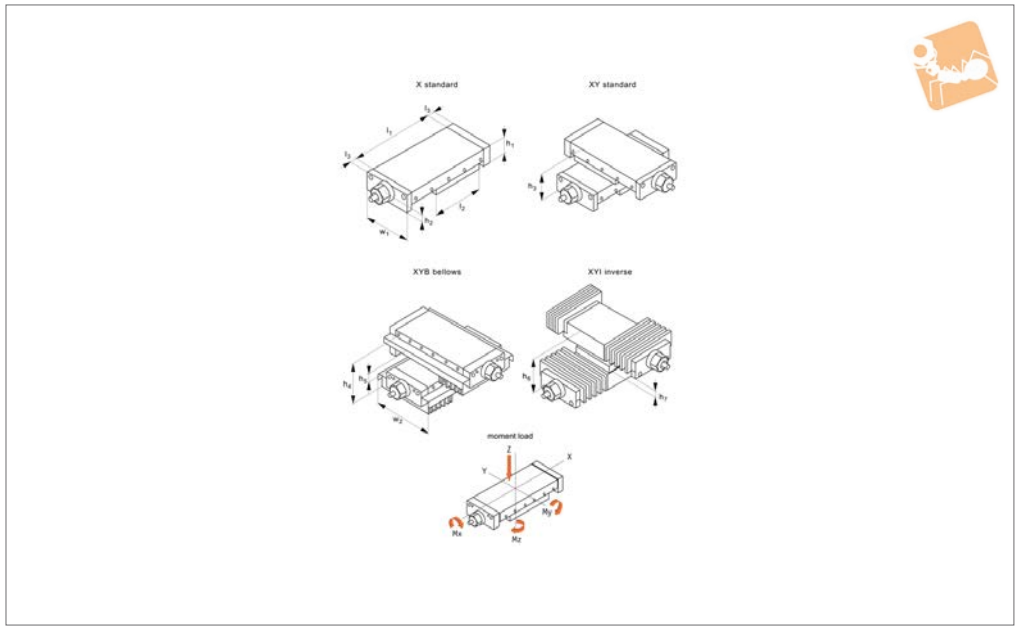
Order No.	w_1	Stroke	Load kN max.	l_1	h_1	l_2	h_2	h_3	Weight kg
L3194.200-400-*	200	400	28.6	700	58	220	21.5	24	32.0
L3194.200-500-*	200	500	28.6	820	58	220	21.5	24	35.5
L3194.200-600-*	200	600	28.6	940	58	220	21.5	24	38.5
L3194.200-700-*	200	700	28.6	1070	58	220	21.5	24	42.0
L3194.200-800-*	200	800	28.6	1185	58	220	21.5	24	45.0
L3194.300-100-*	300	100	21.0	410	75	280	26	32	70.0
L3194.300-200-*	300	200	21.0	510	75	280	26	32	75.0
L3194.300-300-*	300	300	21.0	610	75	280	26	32	83.0
L3194.300-400-*	300	400	21.0	710	75	280	26	32	90.0
L3194.300-201-*	300	200	30.2	610	75	380	26	32	93.0
L3194.300-301-*	300	300	30.2	710	75	380	26	32	98.0
L3194.300-401-*	300	400	30.2	810	75	380	26	32	105.0
L3194.300-500-*	300	500	30.2	910	75	380	26	32	113.0
L3194.300-600-*	300	600	30.2	1010	75	380	26	32	120.0
L3194.300-700-*	300	700	30.2	1110	75	380	26	32	127.0
L3194.300-800-*	300	800	30.2	1210	75	380	26	32	133.0
L3194.300-302-*	300	300	39.2	810	75	480	26	32	115.0
L3194.300-402-*	300	400	39.2	910	75	480	26	32	123.0
L3194.300-502-*	300	500	39.2	1010	75	480	26	32	130.0
L3194.300-602-*	300	600	39.2	1110	75	480	26	32	137.0
L3194.300-702-*	300	700	39.2	1210	75	480	26	32	142.0
L3194.400-200-*	400	200	44.3	610	102	380	34	37	174.0
L3194.400-300-*	400	300	44.3	710	102	380	34	37	186.0
L3194.400-400-*	400	400	44.3	810	102	380	34	37	200.0
L3194.400-500-*	400	500	44.3	910	102	380	34	37	213.0
L3194.400-600-*	400	600	44.3	1010	102	380	34	37	227.0
L3194.400-700-*	400	700	44.3	1110	102	380	34	37	240.0
L3194.400-800-*	400	800	44.3	1210	102	380	34	37	254.0
L3194.400-301-*	400	300	58.2	810	102	480	34	37	215.0
L3194.400-401-*	400	400	58.2	910	102	480	34	37	230.0
L3194.400-501-*	400	500	58.2	1010	102	480	34	37	243.0
L3194.400-601-*	400	600	58.2	1110	102	480	34	37	256.0
L3194.400-701-*	400	700	58.2	1210	102	480	34	37	270.0

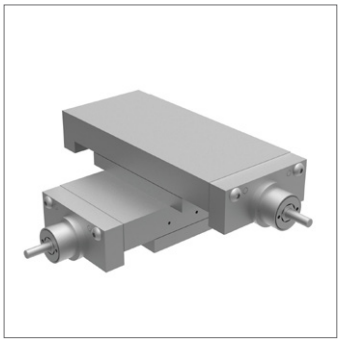
Order No.	l_3	l_4	w_2	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw
L3194.150-050-*	16	120	200	940	435	435	15x2
L3194.150-100-*	16	120	200	940	435	435	15x2
L3194.150-101-*	16	150	200	1270	800	800	15x2
L3194.150-102-*	16	250	200	1910	1830	1830	15x2
L3194.150-150-*	30	130	200	940	435	435	15x2
L3194.150-151-*	16	190	200	1570	1250	1250	15x2
L3194.150-200-*	16	150	200	1270	800	800	15x2
L3194.150-250-*	35	130	200	940	435	435	15x2
L3194.150-300-*	16	150	200	1270	800	800	15x2
L3194.150-400-*	16	150	200	1270	800	800	15x2
L3194.150-500-*	16	150	200	1270	800	800	15x2
L3194.150-600-*	16	150	200	1270	800	800	15x2
L3194.200-100-*	16	200	250	1270	800	800	15x2
L3194.200-150-*	16	200	250	2215	1250	1250	15x2
L3194.200-151-*	16	200	250	2680	1830	1830	15x2
L3194.200-200-*	16	200	250	1785	800	800	15x2
L3194.200-201-*	16	200	250	2680	1830	1830	15x2
L3194.200-202-*	16	200	250	3575	3275	3275	15x2
L3194.200-250-*	16	200	250	2215	1250	1250	15x2
L3194.200-300-*	16	200	250	1785	800	800	15x2
L3194.200-301-*	16	200	250	2680	1830	1830	15x2
L3194.200-400-*	16	200	250	1785	800	800	15x2
L3194.200-500-*	16	200	250	1785	800	800	15x2
L3194.200-600-*	16	200	250	1785	800	800	15x2
L3194.200-700-*	16	200	250	1785	800	800	15x2
L3194.200-800-*	16	200	250	1785	800	800	15x2
L3194.300-100-*	70	280	375	5520	2100	2100	23x4
L3194.300-200-*	70	280	375	5520	2100	2100	23x4
L3194.300-300-*	70	280	375	5520	2100	2100	23x4
L3194.300-400-*	70	280	375	5520	2100	2100	23x4

Motor Lead Screw X Stages

needle roller

Order No.	l_3	l_4	w_2	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw
L3194.300-201-*	70	380	375	7440	4060	4060	23x4
L3194.300-301-*	70	380	375	7440	4060	4060	23x4
L3194.300-401-*	70	380	375	7440	4060	4060	23x4
L3194.300-500-*	90	380	375	7440	4060	4060	23x4
L3194.300-600-*	100	380	375	7440	4060	4060	23x4
L3194.300-700-*	100	380	375	7440	4060	4060	23x4
L3194.300-800-*	110	380	375	7440	4060	4060	23x4
L3194.300-302-*	70	480	375	9290	6600	6600	23x4
L3194.300-402-*	70	480	375	9290	6600	6600	23x4
L3194.300-502-*	90	480	375	9290	6600	6600	23x4
L3194.300-602-*	100	480	375	9290	6600	6600	23x4
L3194.300-702-*	100	480	375	9290	6600	6600	23x4
L3194.400-200-*	70	380	480	13000	5920	5920	30x4
L3194.400-300-*	70	380	480	13000	5920	5920	30x4
L3194.400-400-*	90	380	480	13000	5920	5920	30x4
L3194.400-500-*	90	380	480	13000	5920	5920	30x4
L3194.400-600-*	100	380	480	13000	5920	5920	30x4
L3194.400-700-*	100	380	480	13000	5920	5920	30x4
L3194.400-800-*	110	380	480	13000	5920	5920	30x4
L3194.400-301-*	90	480	480	16430	9750	9750	30x4
L3194.400-401-*	90	480	480	16430	9750	9750	30x4
L3194.400-501-*	100	480	480	16430	9750	9750	30x4
L3194.400-601-*	100	480	480	16430	9750	9750	30x4
L3194.400-701-*	110	480	480	16430	9750	9750	30x4





L3195

Material
Cast iron body (ENGJL-250), with hardened needle roller linear rail set. Hardened and ground lead screw, pitch accuracy ±0.015mm/300mm.
Can also be supplied with an aluminium body when lighter weight stages are required (approx. 50% of weight of standard slides and have 50% of the load capacity).

Technical Notes
Suitable for horizontal and vertical applications requiring smooth movement, long life and high load capacity.

Needle roller stages are the highest load rating stages. Other versions are also available - cross roller slides (L3470), and dovetail slides (L3480) for use when vibration damping is required. Load ratings are based on even surface loading with the slide in the centre position, and apply to a single slide.
Coefficient of friction 0,003.
Speeds up to 2000 rpm, max. 20 m/min.
Positioning accuracy max. 0.001mm.

Tips
Replace -* with
-XY for XY axis stage

-XYB for XY axis stage with bellows
-XYI for inverse X axis stage with bellows
Centre mounting of compound slides is standard. Please advise dimensions w_2 and l_9 when off-centre mounting is required. When limit switches are installed the stroke is reduced by approx. 20mm.

Important Notes
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request.
3D CAD models available.

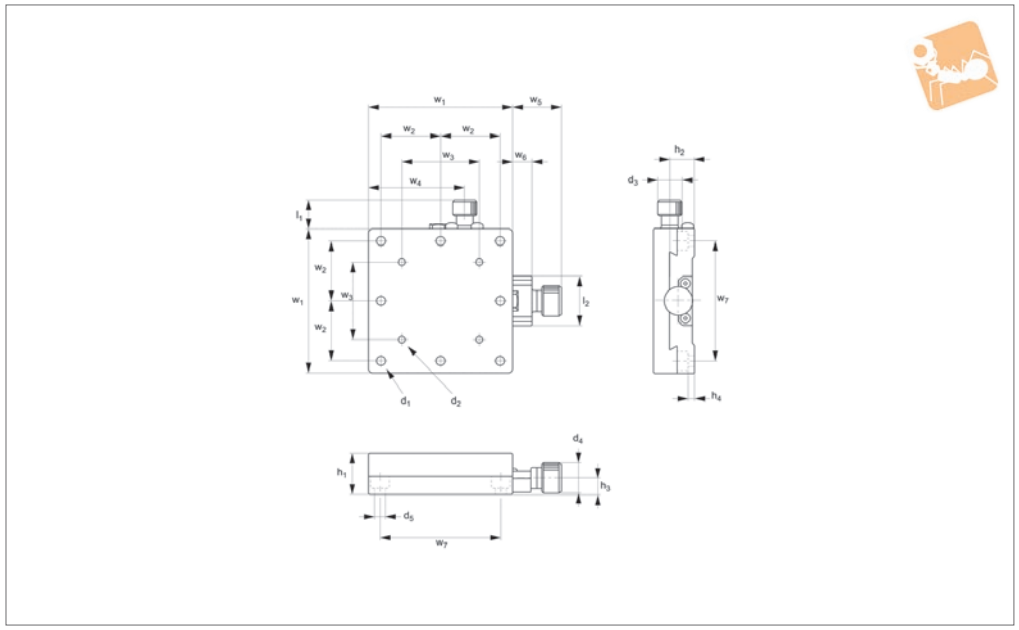
Order No.	w_1	Stroke	Load kN max.	l_1	h_1	l_2	h_2	h_3	h_4	h_5	Weight kg
L3195.300-100-*	300	100	21.0	410	75	308	26	220	185	35	70
L3195.300-200-*	300	200	21.0	510	75	308	26	220	185	35	75
L3195.300-300-*	300	300	21.0	610	75	308	26	220	185	35	83
L3195.300-400-*	300	400	21.0	710	75	308	26	220	185	35	90
L3195.300-201-*	300	200	30.2	610	75	408	26	185	150	-	93
L3195.300-301-*	300	300	30.2	710	75	408	26	185	150	-	98
L3195.300-401-*	300	400	30.2	810	75	408	26	185	150	-	105
L3195.300-500-*	300	500	30.2	910	75	408	26	185	150	-	113
L3195.300-600-*	300	600	30.2	1010	75	408	26	185	150	-	120
L3195.300-700-*	300	700	30.2	1110	75	408	26	185	150	-	127
L3195.300-800-*	300	800	30.2	1210	75	408	26	185	150	-	133
L3195.300-302-*	300	300	39.2	810	75	508	26	150	150	-	115
L3195.300-402-*	300	400	39.2	910	75	508	26	150	150	-	123
L3195.300-502-*	300	500	39.2	1010	75	508	26	150	150	-	130
L3195.300-602-*	300	600	39.2	1110	75	508	26	150	150	-	137
L3195.300-702-*	300	700	39.2	1210	75	508	26	150	150	-	142
L3195.300-202-*	400	200	44.3	610	102	408	34	284	244	40	174
L3195.300-303-*	400	300	44.3	710	102	408	34	284	244	40	186
L3195.300-403-*	400	400	44.3	810	102	408	34	284	244	40	200
L3195.300-503-*	400	500	44.3	910	102	408	34	284	244	40	213
L3195.300-603-*	400	600	44.3	1010	102	408	34	284	244	40	227

Motor Lead Screw XY Stages

needle roller

Order No.	w_1	Stroke	Load kN max.	l_1	h_1	l_2	h_2	h_3	h_4	h_5	Weight kg
L3195.300-703-*	400	700	44.3	1110	102	408	34	284	244	40	240
L3195.300-803-*	400	800	44.3	1210	102	408	34	284	244	40	254
L3195.300-304-*	400	300	58.2	810	102	508	34	244	204	-	215
L3195.300-404-*	400	400	58.2	910	102	508	34	244	204	-	230
L3195.300-504-*	400	500	58.2	1010	102	508	34	244	204	-	243
L3195.300-604-*	400	600	58.2	1110	102	508	34	244	204	-	256
L3195.300-704-*	400	700	58.2	1210	102	508	34	244	204	-	270

Order No.	h_6	h_7	l_3	w_2	Moment M_x Nm max.	Moment M_y Nm max.	Moment M_z Nm max.	Lead screw
L3195.300-100-*	185	35	20	375	5520	2100	2100	23x4
L3195.300-200-*	185	35	20	375	5520	2100	2100	23x4
L3195.300-300-*	185	35	20	375	5520	2100	2100	23x4
L3195.300-400-*	185	35	20	375	5520	2100	2100	23x4
L3195.300-201-*	150	-	20	375	7440	4060	4060	23x4
L3195.300-301-*	150	-	20	375	7440	4060	4060	23x4
L3195.300-401-*	150	-	20	375	7440	4060	4060	23x4
L3195.300-500-*	150	-	20	375	7440	4060	4060	23x4
L3195.300-600-*	150	-	20	375	7440	4060	4060	23x4
L3195.300-700-*	150	-	20	375	7440	4060	4060	23x4
L3195.300-800-*	150	-	20	375	7440	4060	4060	23x4
L3195.300-302-*	150	-	20	375	9290	6600	6600	23x4
L3195.300-402-*	150	-	20	375	9290	6600	6600	23x4
L3195.300-502-*	150	-	20	375	9290	6600	6600	23x4
L3195.300-602-*	150	-	20	375	9290	6600	6600	23x4
L3195.300-702-*	150	-	20	375	9290	6600	6600	23x4
L3195.300-202-*	229	25	30	480	13000	5920	5920	30x4
L3195.300-303-*	229	25	30	480	13000	5920	5920	30x4
L3195.300-403-*	229	25	30	480	13000	5920	5920	30x4
L3195.300-503-*	229	25	30	480	13000	5920	5920	30x4
L3195.300-603-*	229	25	30	480	13000	5920	5920	30x4
L3195.300-703-*	229	25	30	480	13000	5920	5920	30x4
L3195.300-803-*	229	25	30	480	13000	5920	5920	30x4
L3195.300-304-*	204	-	30	480	16430	9750	9750	30x4
L3195.300-404-*	204	-	30	480	16430	9750	9750	30x4
L3195.300-504-*	204	-	30	480	16430	9750	9750	30x4
L3195.300-604-*	204	-	30	480	16430	9750	9750	30x4
L3195.300-704-*	204	-	30	480	16430	9750	9750	30x4



L3300.X

Material
Brass, blackened body, aluminium knob.

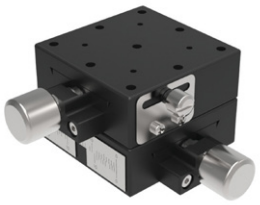
Technical Notes
Travel 0,5mm for one revolution.

Minimum vernier reading 0,1mm.
Straightness accuracy 30µ.

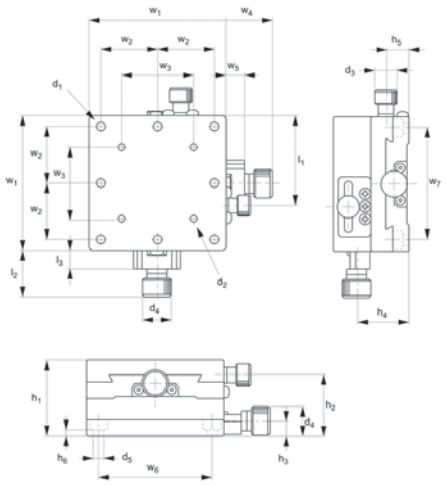
Order No.	h_1	Travel	Load kg max.	w_1	d_1	d_2	d_3	d_4
L3300.025-X	15	±3	3.0	25	M2	-	6	12
L3300.040-X	15	±7	3.0	40	M3	M2	6	12
L3300.060-X	17	±9	4.0	60	M4	M3	10	12

Order No.	d_5	h_2	h_3	l_1	l_2	w_2	w_3	w_4	w_5	w_6	w_7
L3300.025-X	2.5	11.5	7.0	6.7	23	10	-	15	20	8	20
L3300.040-X	3.5	11.5	7.0	6.7	23	20	20	28	20	8	32
L3300.060-X	4.5	10.5	6.5	11.5	20	25	32	40	20	8	50

Miniature Dovetail Stages
XY axis



L3300.XY



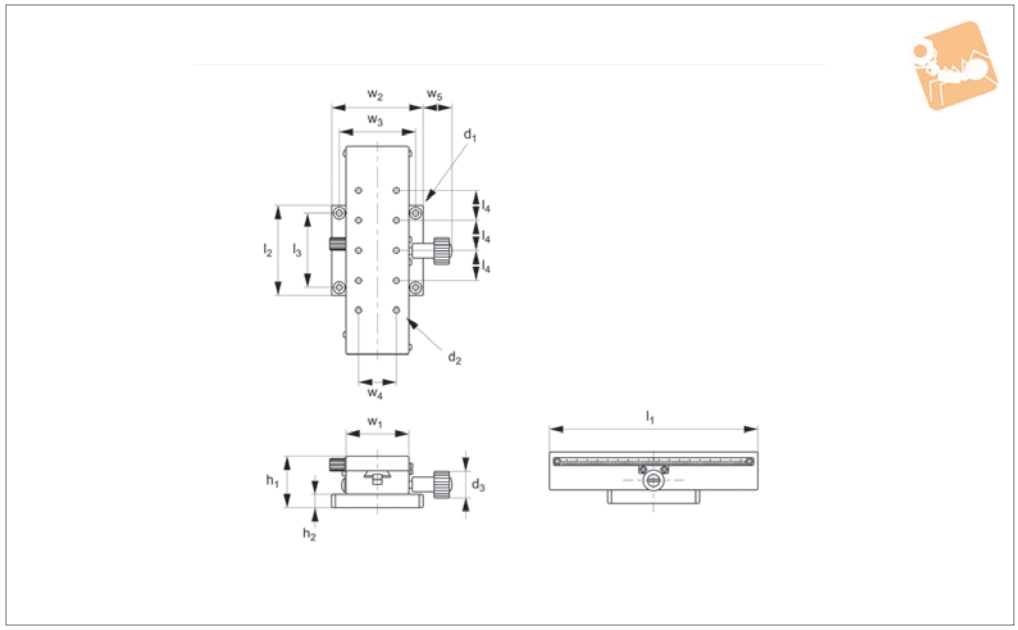
Material
Brass, blackened body, aluminium knob.

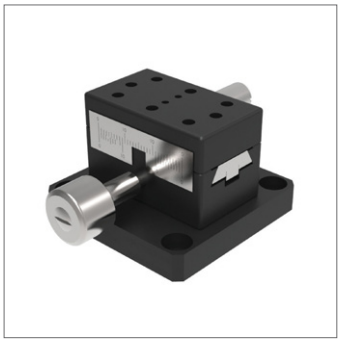
Technical Notes
Travel 0,5mm for one revolution.

Minimum vernier reading 0,1mm.
Straightness accuracy 30µ.

Order No.	h_1	Travel	Load kg max.	w_1	d_1	d_2	d_3	d_4
L3300.025-XY	30	±3	2.9	25	M2	-	6	12
L3300.040-XY	30	±7	2.8	40	M3	M2	6	12
L3300.060-XY	34	±9	3.4	60	M4	M3	10	12

Order No.	d_5	h_2	h_3	h_4	h_5	h_6	l_1	l_2	l_3	w_2	w_3	w_4	w_5	w_6	w_7
L3300.025-XY	2.5	26.5	7.0	22.0	11.5	4.5	15	20	8	10	-	20	8.0	8	20
L3300.040-XY	3.5	26.5	7.0	22.0	11.5	3.5	28	20	8	20	20	20	8.0	8	32
L3300.060-XY	4.5	27.5	6.5	23.5	10.5	2.5	40	20	8	25	32	20	11.5	8	50





L3303.X

Material
Aluminium body blackened, steel knob.

Technical Notes
Travel 18mm for one revolution.

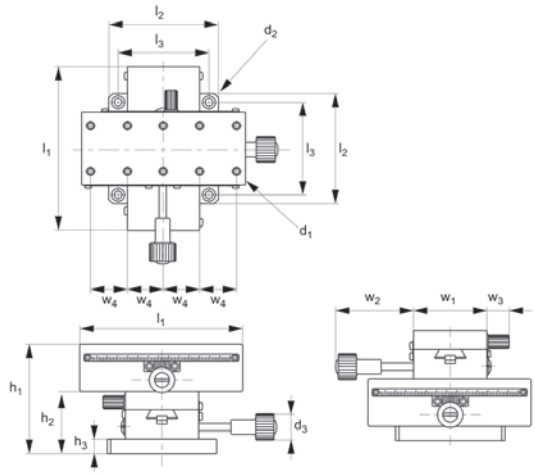
Minimum vernier reading 0,1mm.
Straightness accuracy 30µ.

Order No.	h_1	Travel	Load kg max.	w_1	d_1	d_2	d_3	h_2	l_1	l_2	l_3	l_4	w_2	w_3	w_4	w_5
L3303.042-X	34	±12	3.0	24.8	4.5	M4	15	8	42	50	40	20	50	40	15	17.8
L3303.060-X	34	±21	4.0	40.0	4.5	M4	15	8	60	60	50	20	60	50	25	17.8
L3303.090-X	34	±35	4.0	40.0	4.5	M4	15	8	90	60	50	20	60	50	25	17.8
L3303.140-X	34	±60	4.0	40.0	4.5	M4	15	8	140	60	50	20	60	50	25	17.8

Dovetail Stages - Rack & Pinion

XY axis

L3303.XY

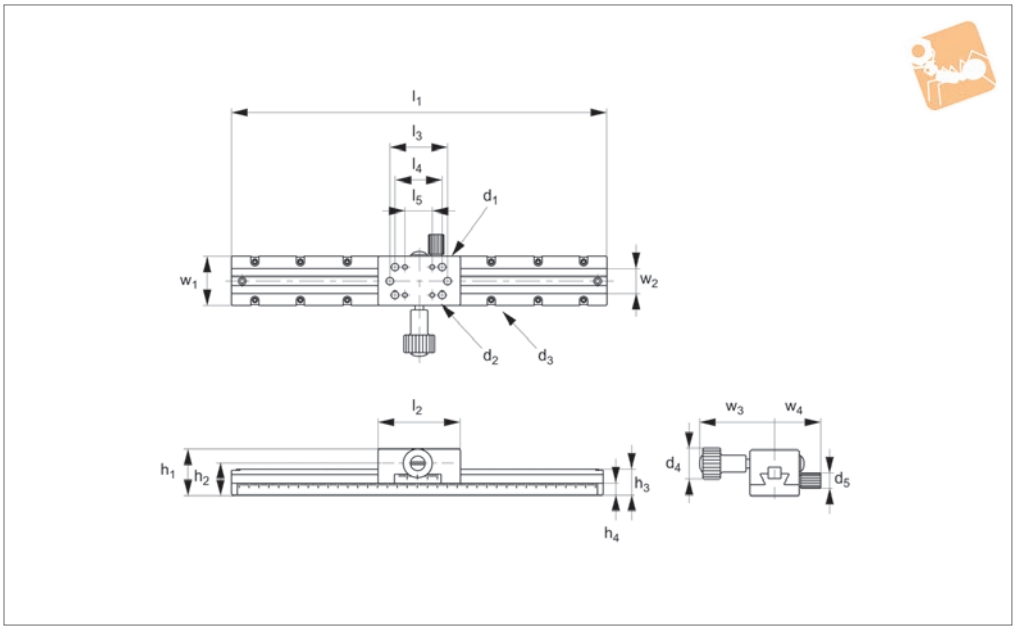


Material
Aluminium body blackened, steel knob.

Technical Notes
Travel 18mm for one revolution.

Minimum vernier reading 0,1mm.
Straightness accuracy 30µ.

Order No.	h_1	Travel	Load kg max.	w_1	d_1	d_2	d_3	h_2	h_3	l_1	l_2	l_3	w_2	w_3	w_4
L3303.042-XY	60	±12	2.5	24.8	M4	4.5	15	8	34	42	50	40	28	12	12.5
L3303.060-XY	60	±21	3.5	40.0	M4	4.5	15	8	34	60	60	50	28	12	20
L3303.090-XY	60	±35	3.5	40.0	M4	4.5	15	8	34	90	60	50	43	13	20



L3305

Material
Aluminium body blackened, steel knob.

Technical Notes
Travel 18mm for one revolution.

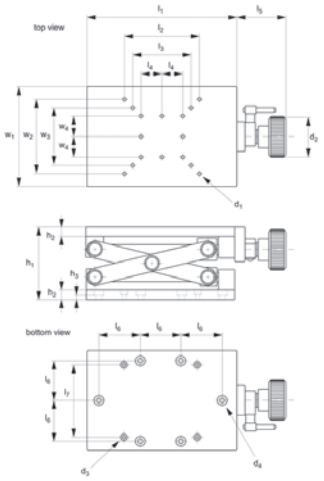
Minimum vernier reading 0,1mm.
Straightness accuracy 30µ.
Use screwdriver to adjust knob to allow coarse or fine adjustment.

Order No.	h_1	Travel	Load kg max.	w_1	Accuracy	d_1	d_2	d_3 for
L3305.100	25	±40	3.0	25	30µ	M2	M2	M3
L3305.150	25	±60	3.0	25	40µ	M4	M2	M3
L3305.200	25	±95	3.0	25	50µ	M4	M2	M3

Order No.	d_4	d_5	h_2	h_3	h_4	l_1	l_2	l_3	l_4	l_5	w_2	w_3	w_4
L3305.100	15	8	17.1	14.8	6	100	42	30	25	15	15	40.2	24.5
L3305.150	15	8	17.1	14.8	6	150	42	30	25	15	15	40.2	24.5
L3305.200	15	8	17.1	14.8	6	200	42	30	25	15	15	40.2	24.5

Manual Laboratory Jacks
Z axis

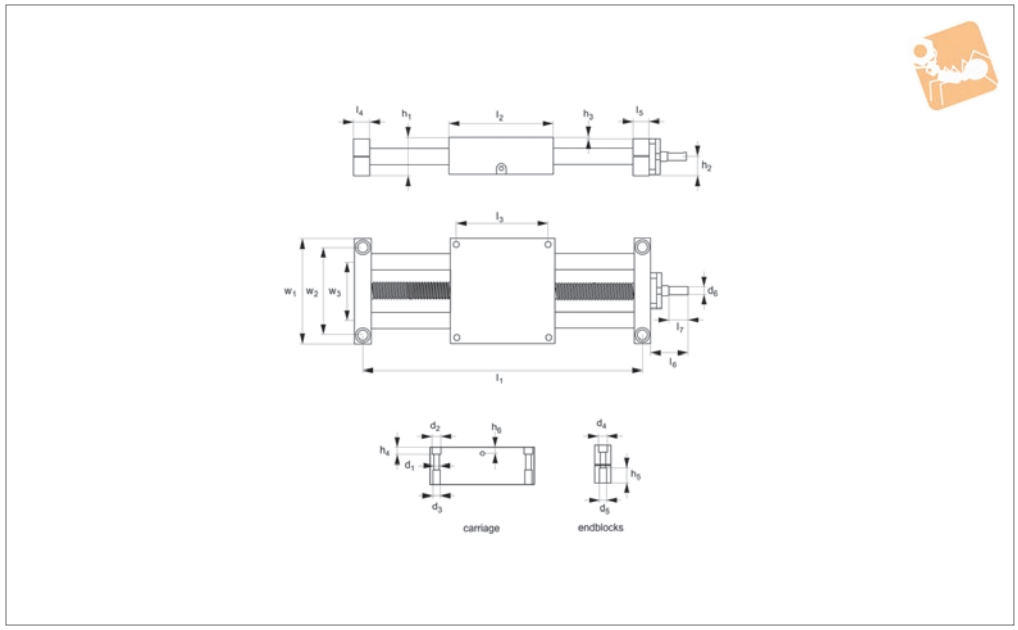
L3320



Material
Aluminium body blackened, steel knob.

Order No.	h_1	w_1	Holding force kgf	Parallelism	d_1	d_2	d_3	d_4
L3320.080	60-100	80	7	0.2	M4	35	4.5	7.0
L3320.120	90-160	120	10	0.2	M4	50	4.5	8.0

Order No.	h_2	h_3	l_1	l_2	l_3	l_4	l_5	l_6	l_7	w_2	w_3	w_4
L3320.080	8	3.5	120	70	-	25	43	35	-	70	-	25
L3320.120	12	5.5	180	90	70	25	61	50	90	90	70	25



L3149.12

Material
Hardened steel shafts.
Aluminium alloy bearing block and end supports.
Self-aligning linear ball bearings, hardened and ground steel body with resin retainers.
Steel ball screw and nut.

Technical Notes
Self-aligning linear ball bearings are used as standard to ensure that the balls are permanently in contact with the shaft, even if the shafts bend slightly due to the load put on the table.
Different stroke lengths available on request.

Tips
Handwheels to suit are available (see part number L1455)

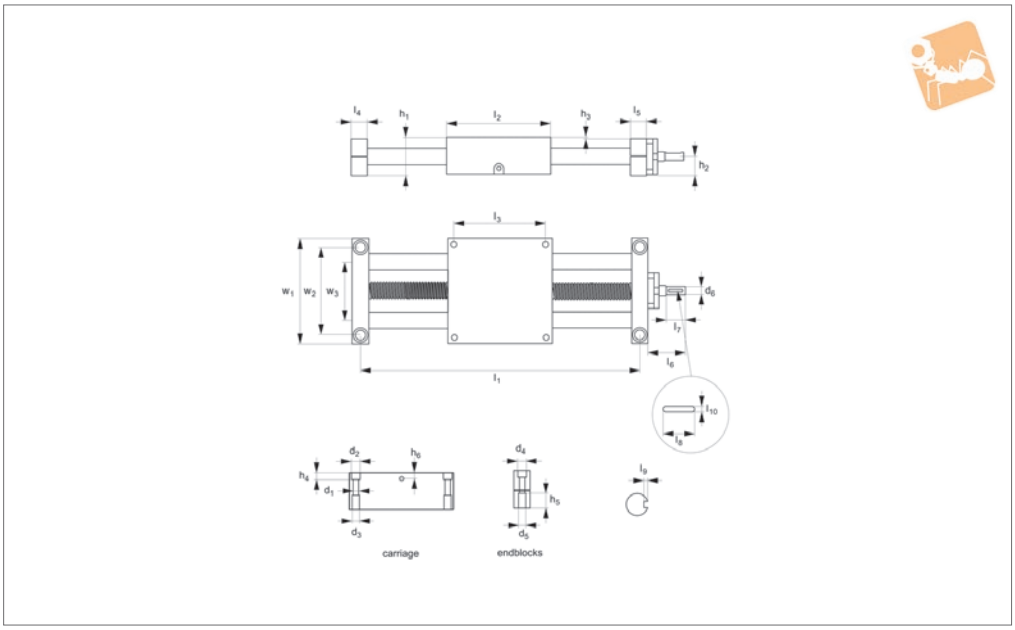
Bellows protection of the lead screw and shaft is available, add -B suffix to the part number.
We strongly recommend you add 50mm to your required stroke.

Order No.	Stroke	l_1	h_1	l_2	l_3	l_4	l_5	l_6	l_7	w_1	w_2	w_3	Weight kg
L3149.12-0100	100	198	31.5	85	73	12	14	23	8	85	73	45	2.2
L3149.12-0150	150	248	31.5	85	73	12	14	23	8	85	73	45	3.3
L3149.12-0200	200	298	31.5	85	73	12	14	23	8	85	73	45	4.4
L3149.12-0250	250	348	31.5	85	73	12	14	23	8	85	73	45	5.5
L3149.12-0300	300	398	31.5	85	73	12	14	23	8	85	73	45	6.6
L3149.12-0350	350	448	31.5	85	73	12	14	23	8	85	73	45	7.7
L3149.12-0400	400	498	31.5	85	73	12	14	23	8	85	73	45	8.8
L3149.12-0450	450	548	31.5	85	73	12	14	23	8	85	73	45	9.9
L3149.12-0500	500	598	31.5	85	73	12	14	23	8	85	73	45	10.10

Order No.	d_1	d_2	d_3	d_4	d_5	d_6	h_2	h_3	h_4	h_5	h_6	Ball screw dia. x lead	Static load N max.
L3149.12-0100	5.2	10	M6x12	5.5	10.7	4	15	1.5	5.5	5.7	7.5	8x2,5	3900
L3149.12-0150	5.2	10	M6x12	5.5	10.7	4	15	1.5	5.5	5.7	7.5	8x2,5	3100
L3149.12-0200	5.2	10	M6x12	5.5	10.7	4	15	1.5	5.5	5.7	7.5	8x2,5	2500
L3149.12-0250	5.2	10	M6x12	5.5	10.7	4	15	1.5	5.5	5.7	7.5	8x2,5	1500
L3149.12-0300	5.2	10	M6x12	5.5	10.7	4	15	1.5	5.5	5.7	7.5	8x2,5	1200
L3149.12-0350	5.2	10	M6x12	5.5	10.7	4	15	1.5	5.5	5.7	7.5	8x2,5	1000
L3149.12-0400	5.2	10	M6x12	5.5	10.7	4	15	1.5	5.5	5.7	7.5	8x2,5	900
L3149.12-0450	5.2	10	M6x12	5.5	10.7	4	15	1.5	5.5	5.7	7.5	8x2,2	750
L3149.12-0500	5.2	10	M6x12	5.5	10.7	4	15	1.5	5.5	5.7	7.5	8x2,5	500

Ball Screw Linear Tables
20mm shafts

L3149.20



Material
Hardened steel shafts.
Aluminium alloy bearing block and end supports.
Self-aligning linear ball bearings, hardened and ground steel body with resin retainers.
Steel ball screw and nut.

Technical Notes
Self-aligning linear ball bearings are used as standard to ensure that the balls are permanently in contact with the shaft, even if the shafts bend slightly due to the load put on the table.
Different stroke lengths available on request.

Tips
Handwheels to suit are available (see part number L1455)

Bellows protection of the lead screw and shaft is available, add -B suffix to the part number.
We strongly recommend you add 50mm to your required.

Order No.	Stroke	l_1	h_1	l_2	l_3	l_4	l_5	l_6	l_7	l_8	l_9	l_{10}	w_1	w_2	Weight kg
L3149.20-0100	100	250	48	130	115	20	20	49	25	18	3	1.8	130	108	6.4
L3149.20-0150	150	300	48	130	115	20	20	49	25	18	3	1.8	130	108	9.6
L3149.20-0200	200	350	48	130	115	20	20	49	25	18	3	1.8	130	108	12.8
L3149.20-0250	250	400	48	130	115	20	20	49	25	18	3	1.8	130	108	16.0
L3149.20-0300	300	450	48	130	115	20	20	49	25	18	3	1.8	130	108	19.2
L3149.20-0350	350	500	48	130	115	20	20	49	25	18	3	1.8	130	108	22.4
L3149.20-0400	400	550	48	130	115	20	20	49	25	18	3	1.8	130	108	25.6
L3149.20-0450	450	600	48	130	115	20	20	49	25	18	3	1.8	130	108	28.8
L3149.20-0500	500	650	48	130	115	20	20	49	25	18	3	1.8	130	108	32.0
L3149.20-0550	550	700	48	130	115	20	20	49	25	18	3	1.8	130	108	35.2
L3149.20-0600	600	750	48	130	115	20	20	49	25	18	3	1.8	130	108	38.4
L3149.20-0650	650	800	48	130	115	20	20	49	25	18	3	1.8	130	108	41.6
L3149.20-0700	700	850	48	130	115	20	20	49	25	18	3	1.8	130	108	44.8
L3149.20-0750	750	900	48	130	115	20	20	49	25	18	3	1.8	130	108	48.0
L3149.20-0800	800	950	48	130	115	20	20	49	25	18	3	1.8	130	108	51.2
L3149.20-0850	850	1000	48	130	115	20	20	49	25	18	3	1.8	130	108	54.4
L3149.20-0900	900	1050	48	130	115	20	20	49	25	18	3	1.8	130	108	57.6
L3149.20-0950	950	1100	48	130	115	20	20	49	25	18	3	1.8	130	108	60.8
L3149.20-1000	1000	1150	48	130	115	20	20	49	25	18	3	1.8	130	108	64.0

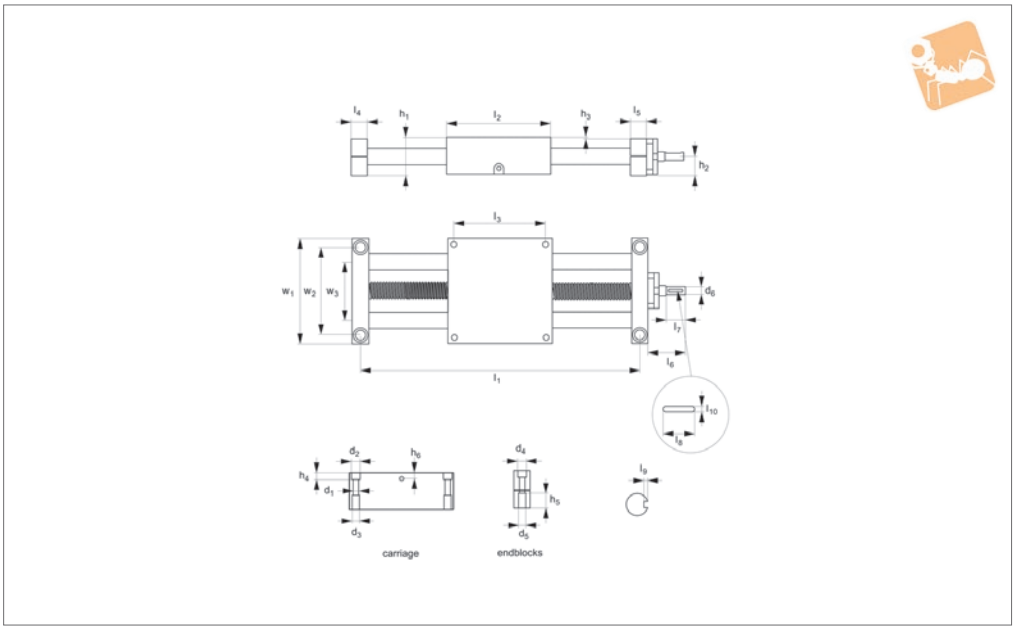
Order No.	w_3	d_1	d_2	d_3	d_4	d_5	d_6	h_2	h_3	h_4	h_5	h_6	Ball screw dia. x lead	Static load N max.
L3149.20-0100	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	6750
L3149.20-0150	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	6750
L3149.20-0200	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	6750

Order No.	w_3	d_1	d_2	d_3	d_4	d_5	d_6	h_2	h_3	h_4	h_5	h_6	Ball screw dia. x lead	Static load N max.
L3149.20-0250	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	6750
L3149.20-0300	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	6750
L3149.20-0350	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	6000
L3149.20-0400	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	4750
L3149.20-0450	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	3500
L3149.20-0500	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	2500
L3149.20-0550	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	1750
L3149.20-0600	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	1500
L3149.20-0650	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	1250
L3149.20-0700	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	1000
L3149.20-0750	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	750
L3149.20-0800	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	750
L3149.20-0850	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	600
L3149.20-0900	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	500
L3149.20-0950	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	400
L3149.20-1000	72	6.8	11	M8x18	11	18	10	24	2	8.5	13.5	7.5	16x05	300

Ball Screw Linear Tables

30mm shafts

L3149.30



Material

Hardened steel shafts.
Aluminium alloy bearing block and end supports.
Self-aligning linear ball bearings, hardened and ground steel body with resin retainers.
Steel ball screw and nut.

Technical Notes

Self-aligning linear ball bearings are used as standard to ensure that the balls are permanently in contact with the shaft, even if the shafts bend slightly due to the load put on the table.
Different stroke lengths available on request.

Tips

Handwheels to suit are available (see part number L1455)

Bellows protection of the lead screw and shaft is available, add -B suffix to the part number.
We strongly recommend you add 50mm to your required.

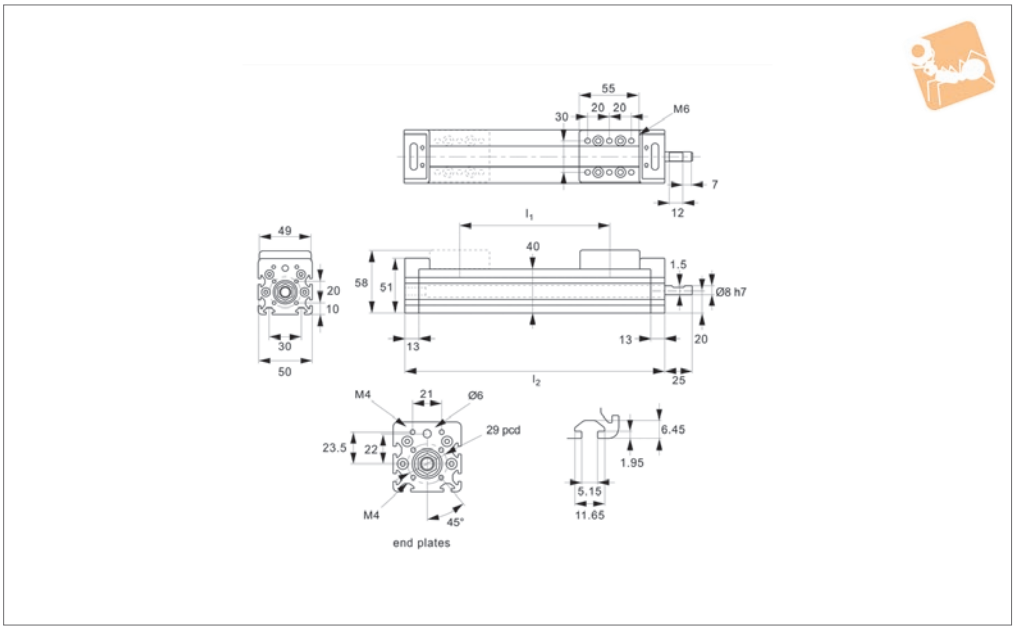
Order No.	Stroke	l_1	h_1	l_2	l_3	l_4	l_5	l_6	l_7	l_8	l_9	l_{10}	w_1	w_2	Weight g
L3149.30-0100	100	322	70	200	184	22	22	80	45	36	5	3	200	178	17.1
L3149.30-0150	150	372	70	200	184	22	22	80	45	36	5	3	200	178	25.6
L3149.30-0200	200	422	70	200	184	22	22	80	45	36	5	3	200	178	34.2
L3149.30-0250	250	472	70	200	184	22	22	80	45	36	5	3	200	178	42.7
L3149.30-0300	300	522	70	200	184	22	22	80	45	36	5	3	200	178	51.3
L3149.30-0350	350	572	70	200	184	22	22	80	45	36	5	3	200	178	59.8
L3149.30-0400	400	622	70	200	184	22	22	80	45	36	5	3	200	178	68.4
L3149.30-0450	450	672	70	200	184	22	22	80	45	36	5	3	200	178	76.9
L3149.30-0500	500	722	70	200	184	22	22	80	45	36	5	3	200	178	85.5
L3149.30-0550	550	772	70	200	184	22	22	80	45	36	5	3	200	178	94.0
L3149.30-0600	600	822	70	200	184	22	22	80	45	36	5	3	200	178	102.6
L3149.30-0650	650	872	70	200	184	22	22	80	45	36	5	3	200	178	111.1
L3149.30-0700	700	922	70	200	184	22	22	80	45	36	5	3	200	178	119.7
L3149.30-0750	750	972	70	200	184	22	22	80	45	36	5	3	200	178	128.2
L3149.30-0800	800	1022	70	200	184	22	22	80	45	36	5	3	200	178	136.8
L3149.30-0850	850	1072	70	200	184	22	22	80	45	36	5	3	200	178	145.3
L3149.30-0900	900	1122	70	200	184	22	22	80	45	36	5	3	200	178	153.9
L3149.30-0950	950	1172	70	200	184	22	22	80	45	36	5	3	200	178	162.4
L3149.30-1000	1000	1222	70	200	184	22	22	80	45	36	5	3	200	178	171.0

Order No.	w_3	d_1	d_2	d_3	d_4	d_5	d_6	h_2	h_3	h_4	h_5	h_6	Ball screw dia. x lead	Static load N max.
L3149.30-0100	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	11500
L3149.30-0150	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	11500
L3149.30-0200	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	11500

Order No.	w_3	d_1	d_2	d_3	d_4	d_5	d_6	h_2	h_3	h_4	h_5	h_6	Ball screw dia. x lead	Static load N max.
L3149.30-0250	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	11500
L3149.30-0300	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	11500
L3149.30-0350	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	11500
L3149.30-0400	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	11500
L3149.30-0450	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	11500
L3149.30-0500	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	10800
L3149.30-0550	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	9000
L3149.30-0600	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	7000
L3149.30-0650	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	5750
L3149.30-0700	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	4800
L3149.30-0750	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	4000
L3149.30-0800	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	3500
L3149.30-0850	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	3000
L3149.30-0900	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	2500
L3149.30-0950	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	2250
L3149.30-1000	130	6.8	11	M8x18	13	20	16	36	2	8.5	14	15	32x05	2000

Lead Screw Linear Stages
single carriage

L3147.S

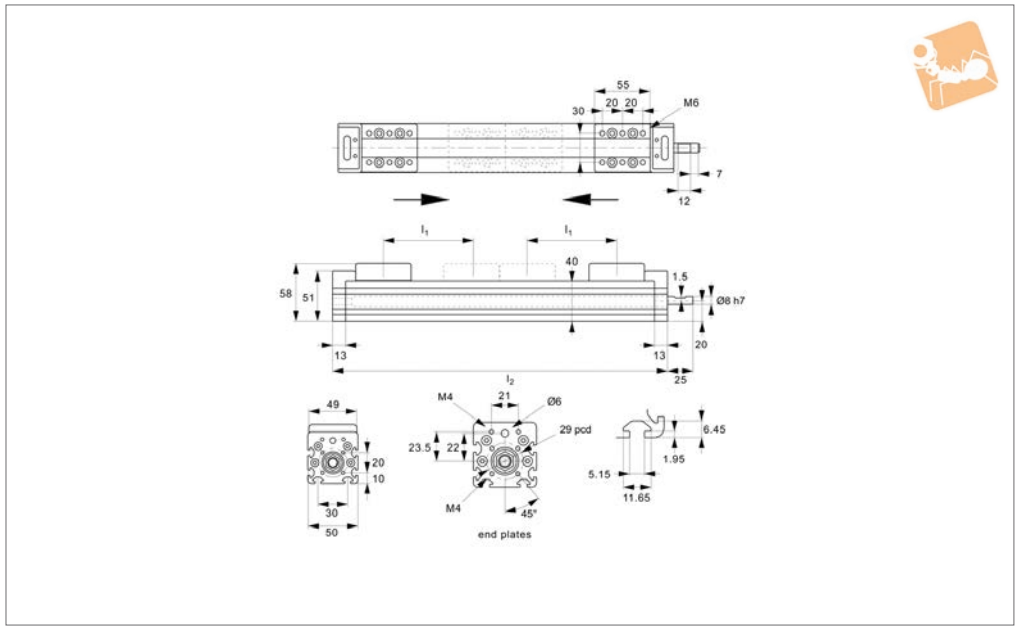


Material
Aluminium body (anodised), with die cast zinc end plates. Steel lead screw with bronze nut. Stainless steel dust cover (AISI 304).

Technical Notes
Uses a 14 trapezoidal lead screw with 3mm pitch.
Rigid, economical and light-weight. Can be used as a single in series, or a single or double unit in parallel, (connected via pulleys and belt drive). Ideal for slide adjustment on conveyors, fixtures, packing machines etc.

Tips
Often used in conjunction with one touch lock spindles, position indicators, hand-wheels etc.

Order No.	Travel l_1	Rotation direction	l_2	Weight kg
L3147.S150-L	150	Counter-clockwise	250	1.7
L3147.S200-R	200	Clockwise	300	1.9
L3147.S200-L	200	Counter-clockwise	300	1.9
L3147.S300-R	300	Clockwise	400	2.0
L3147.S300-L	300	Counter-clockwise	400	2.0
L3147.S150-R	150	Clockwise	250	1.7
L3147.S250-R	250	Clockwise	350	2.0
L3147.S250-L	250	Counter-clockwise	350	2.0



L3147.D

Material
Aluminium body (anodised), with die cast zinc end plates. Steel lead screw with bronze nut. Stainless steel dust cover (AISI 304).

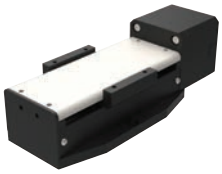
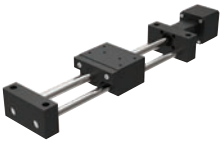
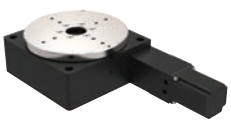
Technical Notes
Uses a 14 trapezoidal lead screw with 3mm pitch.
Rigid, economical and light-weight. Can be used as a single in series, or a single or double unit in parallel, (connected via pulleys and belt drive). Ideal for slide adjustment on conveyors, fixtures, packing machines etc.

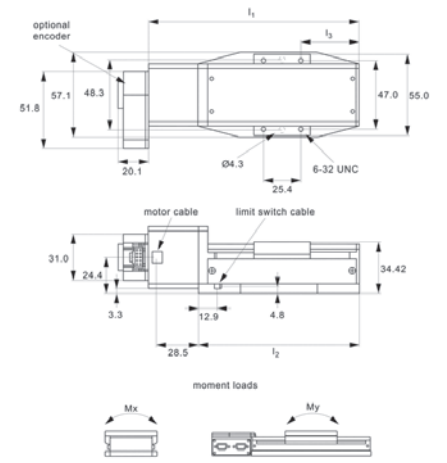
Tips
Often used in conjunction with one touch lock spindles, position indicators, hand-wheels etc.

Order No.	Travel l_1	l_2	Weight kg
L3147.D150	150	455	2.4
L3147.D100	100	355	2.4

Motorised Linear & Rotary Stages

Overview

L3500 **Medium duty motorised stage** 	**L3504** **Heavy-duty motorised stage** 	**L3505** **Motorised linear stage** 	**L3506** **Miniature motorised stage** 
L3508 **Motorised linear stage** 	**L3510** **Motorised linear stage** 	**L3521** **Single axis stepper controller** 	**L3522** **Two axes stepper controller** 
L3524 **Multi-axes stepper controller** 	**L3525** **Single axis servo controller** 	**L3550** **Motorised rotary stage Ø50** 	**L3552** **Motorised rotary stage Ø75** 
L3554 **Motorised rotary stage Ø75** 	**L3556** **Motorised rotary stage Ø125** 	**L3558** **Motorised rotary stage Ø125** 	**L3559** **Manual rotary stage Ø125** 
L3562 **Motorised rotary stage Ø200** 	**L3569** **High speed rotary table** 	**L3591** **Vertical lift stage motorised** 	**L3592** **Vertical lift stage motorised** 



L3506

Material
Black anodised aluminium body (6061). Hardened linear guideways, stainless steel Acme lead screw (with internally lubricated anti-backlash nut).

Technical Notes
Compact, high precision slide.
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 many pre-existing software packages (such as Labview) can be used.
Can be readily supplied in XY, XZ and XYZ configurations.
Applications - research, semi-conductors, fibre optics, automation etc.
Max. speed 8 mm/sec.
Accuracy ±50µ. Uni-directional repeatability ±5µ, resolution ±0,7µ.

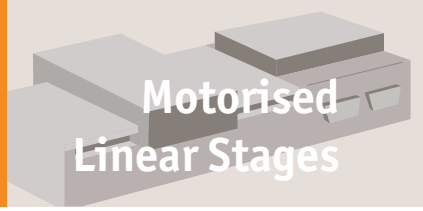
Tips
Motor options:
Stepper - Nema 17, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Option with 1000 line rotary encoder.
Intelligent stepper - Nema 17 high torque 1.8° stepper motor with a fully programmable motion controller inbuilt (ie no need for an external motion controller). Two +5 to +24VDC I/O lines. One 10 bit analogue input selectable 0 to +10VDC, 0 to +5VDC. RS-422/485 communications. Input voltage 24VDC.
Limit switches are wired normally open.
Drawings show stepper motor configuration. See special pages for further motor options.

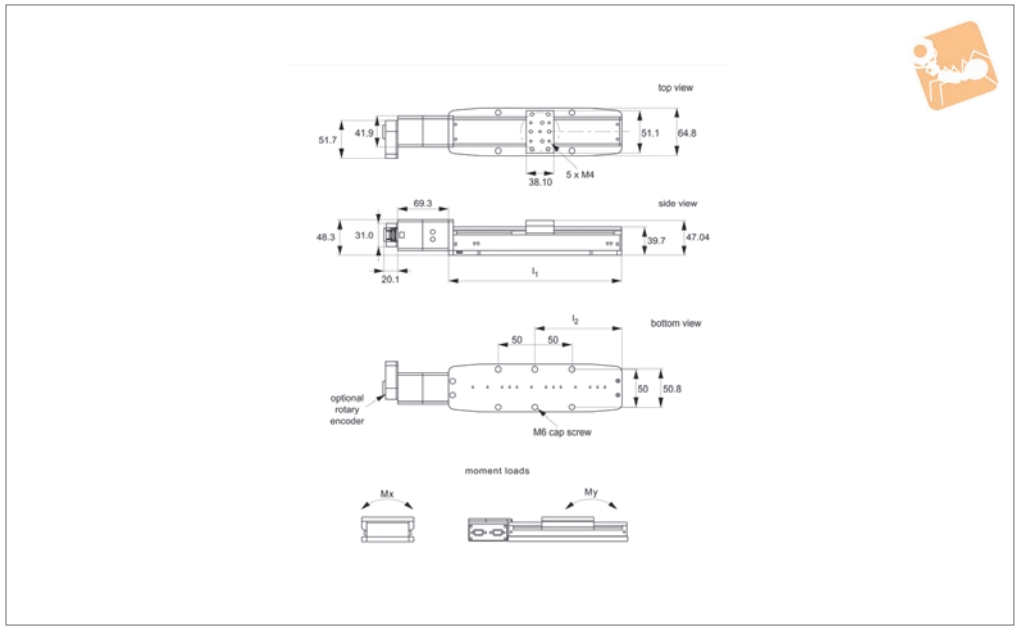
Important Notes
Max. moment loads:
Mx = 4,0 Nm
My = 6,5 Nm
For combined stages, add suffixes:
XY - for XY stage
XZ - for XZ stage
XYZ - for XYZ stage

Order No.	Travel	Horizontal load kg max.	Axial load kg max.	Side load kg max.	Lead screw pitch	l_1	Motor code	Motor type	Weight kg
L3506.025-STA	25	2.2	2.2	0.9	1.058	109.2	-STA	Stepper	0.46
L3506.050-STA	50	2.2	2.2	0.9	1.058	143.3	-STA	Stepper	0.59
L3506.025-STB	25	2.2	2.2	0.9	1.058	109.2	-STB	Stepper & enc.	0.46
L3506.050-STB	50	2.2	2.2	0.9	1.058	143.3	-STB	Stepper & enc.	0.59
L3506.025-IMA	25	2.2	2.2	0.9	1.058	109.2	-IMA	Int. stepper	0.46
L3506.050-IMA	50	2.2	2.2	0.9	1.058	143.3	-IMA	Int. stepper	0.59

Order No.	l_2	l_3	Speed mm/s max.	Resolution ±	Accuracy ±	Uni-directional repeatability ±
L3506.025-STA	83.9	41.9	8	0,7µ	50µ	5µ
L3506.050-STA	117.9	54.6	8	0,7µ	50µ	5µ
L3506.025-STB	83.9	41.9	8	0,7µ	50µ	5µ
L3506.050-STB	117.9	54.6	8	0,7µ	50µ	5µ
L3506.025-IMA	83.9	41.9	8	0,7µ	50µ	5µ
L3506.050-IMA	117.9	54.6	8	0,7µ	50µ	5µ

Miniature Motorised Stages
high precision





L3508

Material
Black anodised aluminium body (6061). Hardened linear guideways, stainless steel Acme lead screw (with internally lubricated anti-backlash nut).

Technical Notes
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 many pre-existing software packages (such as Labview) can be used. Integrated limit switches are provided as standard.
Can be readily supplied in XY, XZ and XYZ configurations.
Applications - research, semi-conductors, fibre optics, automation etc.
Replace -XXX in part number with the code for your preferred motor type - see second data table for codes and specifications.

Tips
Motor options:
Stepper Nema 17, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Option with 1000 line encoder.
Intelligent stepper - Nema 17 with a fully programmable motion controller inbuilt (ie 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. RS 422/485 communications. Input voltage 24VDC.
Option with 512 line encoder.
Limit switches are wired normally closed.
Drawings show stepper motor configuration. See special pages for further motor points.

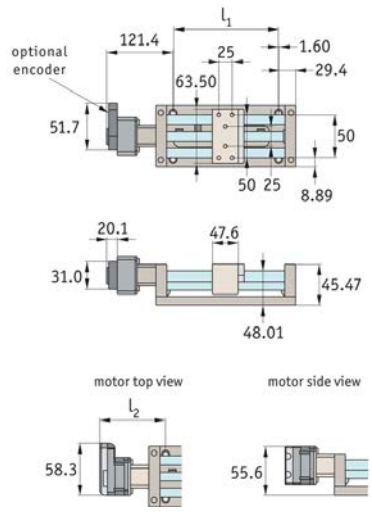
Important Notes
Max. moment loads:
Mx = 12 Nm
My = 8 Nm
For combined stages, add suffixes:
XY - for XY stage
XZ - for XZ stage
XYZ - for XYZ stage

Order No.	Travel	Horizontal load kg max.	Accuracy mm ±	Repeatability ±	Lead screw pitch	Axial load (for 2mm lead screw) kg max.	Axial load (for 10mm lead screw) kg max.	l_1	Weight kg
L3508.025-STA	25	4,5	0,6µ	5µ	2	2,5	0,5	109,0	0,73
L3508.025-STB	25	4,5	0,6µ	5µ	10	2,5	0,5	109,0	0,73
L3508.025-STC	25	4,5	0,6µ	5µ	2	2,5	0,5	109,0	0,73
L3508.025-STD	25	4,5	0,6µ	5µ	10	2,5	0,5	109,0	0,73
L3508.025-IMA	25	4,5	0,6µ	5µ	2	2,5	0,5	109,0	0,73
L3508.050-STA	50	4,5	0,6µ	5µ	2	2,5	0,5	134,4	0,77
L3508.050-STB	50	4,5	0,6µ	5µ	10	2,5	0,5	134,4	0,77
L3508.050-STC	50	4,5	0,6µ	5µ	2	2,5	0,5	134,4	0,77
L3508.050-STD	50	4,5	0,6µ	5µ	10	2,5	0,5	134,4	0,77
L3508.050-IMA	50	4,5	0,6µ	5µ	2	2,5	0,5	134,4	0,77
L3508.100-STA	100	4,5	0,6µ	5µ	2	2,5	0,5	185,2	0,89
L3508.100-STB	100	4,5	0,6µ	5µ	10	2,5	0,5	185,2	0,89
L3508.100-STC	100	4,5	0,6µ	5µ	2	2,5	0,5	185,2	0,89
L3508.100-STD	100	4,5	0,6µ	5µ	10	2,5	0,5	185,2	0,89
L3508.100-IMA	100	4,5	0,6µ	5µ	2	2,5	0,5	185,2	0,89
L3508.150-STA	150	4,5	0,6µ	5µ	2	2,5	0,5	236,0	1,01
L3508.150-STB	150	4,5	0,6µ	5µ	10	2,5	0,5	236,0	1,01

Motorised Linear Stages
high precision

Order No.	Travel	Horizontal load kg max.	Accuracy mm ±	Repeatability ±	Lead screw pitch	Axial load (for 2mm lead screw) kg max.	Axial load (for 10mm lead screw) kg max.	l_1	Weight kg
L3508.150-STC	150	4,5	0,6µ	5µ	2	2,5	0,5	236,0	1,01
L3508.150-STD	150	4,5	0,6µ	5µ	10	2,5	0,5	236,0	1,01
L3508.150-IMA	150	4,5	0,6µ	5µ	2	2,5	0,5	236,0	1,01
L3508.200-STA	200	4,5	0,6µ	5µ	2	2,5	0,5	286,8	1,13
L3508.200-STB	200	4,5	0,6µ	5µ	10	2,5	0,5	286,8	1,13
L3508.200-STC	200	4,5	0,6µ	5µ	2	2,5	0,5	286,8	1,13
L3508.200-STD	200	4,5	0,6µ	5µ	10	2,5	0,5	286,8	1,13
L3508.200-IMA	200	4,5	0,6µ	5µ	2	2,5	0,5	286,8	1,13

Order No.	Motor code	Motor type	l_2	Speed mm/s	Resolution
L3508.025-STA	-STA	Stepper	54.5	25	0,04µ
L3508.025-STB	-STB	Stepper	54.5	100	0,2µ
L3508.025-STC	-STC	Stepper & enc.	54.5	25	0,04µ
L3508.025-STD	-STD	Stepper & enc.	54.5	100	0,2µ
L3508.025-IMA	-IMA	Int. stepper	54.5	25	0,04µ
L3508.050-STA	-STA	Stepper	67.2	25	0,04µ
L3508.050-STB	-STB	Stepper	67.2	100	0,2µ
L3508.050-STC	-STC	Stepper & enc.	67.2	25	0,04µ
L3508.050-STD	-STD	Stepper & enc.	67.2	100	0,2µ
L3508.050-IMA	-IMA	Int. stepper	67.2	25	0,04µ
L3508.100-STA	-STA	Stepper	62.6	25	0,04µ
L3508.100-STB	-STB	Stepper	62.6	100	0,2µ
L3508.100-STC	-STC	Stepper & enc.	62.6	25	0,04µ
L3508.100-STD	-STD	Stepper & enc.	62.6	100	0,2µ
L3508.100-IMA	-IMA	Int. stepper	62.6	25	0,04µ
L3508.150-STA	-STA	Stepper	67.2	25	0,04µ
L3508.150-STB	-STB	Stepper	67.2	100	0,2µ
L3508.150-STC	-STC	Stepper & enc.	67.2	25	0,04µ
L3508.150-STD	-STD	Stepper & enc.	67.2	100	0,2µ
L3508.150-IMA	-IMA	Int. stepper	67.2	25	0,04µ
L3508.200-STA	-STA	Stepper	92.6	25	0,04µ
L3508.200-STB	-STB	Stepper	92.6	100	0,2µ
L3508.200-STC	-STC	Stepper & enc.	92.6	25	0,04µ
L3508.200-STD	-STD	Stepper & enc.	92.6	100	0,2µ
L3508.200-IMA	-IMA	Int. stepper	92.6	25	0,04µ



L3510

Material
Black anodised aluminium body (6061). Hardened linear guideways, stainless steel Acme lead screw (with internally lubricated anti-backlash nut).

Technical Notes
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 limit switches are provided as standard.
Can be readily supplied in XY, XZ and XYZ configurations (for travel lengths <150mm).
Replace -XXX in part number with the code for your preferred motor type - see second data table for codes and specifications.

Tips
Motor options:
Stepper - Nema 17, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Option with 1000 line encoder.
Intelligent stepper - Nema 17 with a fully programmable motion controller inbuilt (ie 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. Option with 512 line encoder.
Limit switches are wired normally closed. Drawings show stepper motor configuration. See special pages for further motor points.

Important Notes
For combined stages, add suffixes:
XY - for XY stage
XZ - for XZ stage
XYZ - for XYZ stage

Order No.	Travel	Horizontal load kg max.	Accuracy mm ±	Repeatability ±	Lead screw pitch	l_1	Motor code	Motor type	Speed mm/s max.	Resolution µm ±	Weight kg
L3510.050-IMA	50	4,5	0,06µ	30µ	2	100	IMA	Int. stepper	20	0,04	1,1
L3510.050-IMB	50	4,5	0,06µ	30µ	12	100	IMB	Int. stepper	150	0,24	1,1
L3510.050-STA	50	4,5	0,06µ	30µ	2	100	STA	Stepper	20	0,04	1,1
L3510.050-STB	50	4,5	0,06µ	30µ	12	100	STB	Stepper	150	0,24	1,1
L3510.050-STC	50	4,5	0,06µ	30µ	2	100	STC	Stepper & enc.	20	0,04	1,1
L3510.050-STD	50	4,5	0,06µ	30µ	12	100	STD	Stepper & enc.	150	0,24	1,1
L3510.100-IMA	100	4,5	0,06µ	30µ	2	150	IMA	Int. stepper	20	0,04	1,5
L3510.100-IMB	100	4,5	0,06µ	30µ	12	150	IMB	Int. stepper	150	0,24	1,6
L3510.100-STA	100	4,5	0,06µ	30µ	2	150	STA	Stepper	20	0,04	1,1
L3510.100-STB	100	4,5	0,06µ	30µ	12	150	STB	Stepper	150	0,24	1,2
L3510.100-STC	100	4,5	0,06µ	30µ	2	150	STC	Stepper & enc.	20	0,04	1,3
L3510.100-STD	100	4,5	0,06µ	30µ	12	150	STD	Stepper & enc.	150	0,24	1,4
L3510.150-IMA	150	4,5	0,06µ	30µ	2	200	IMA	Int. stepper	20	0,04	1,5
L3510.150-IMB	150	4,5	0,06µ	30µ	12	200	IMB	Int. stepper	150	0,24	1,6
L3510.150-STA	150	4,5	0,06µ	30µ	2	200	STA	Stepper	20	0,04	1,1
L3510.150-STB	150	4,5	0,06µ	30µ	12	200	STB	Stepper	150	0,24	1,2
L3510.150-STC	150	4,5	0,06µ	30µ	2	200	STC	Stepper & enc.	20	0,04	1,3
L3510.150-STD	150	4,5	0,06µ	30µ	12	200	STD	Stepper & enc.	150	0,24	1,4
L3510.200-IMA	200	4,5	0,06µ	30µ	2	250	IMA	Int. stepper	20	0,04	1,5
L3510.200-IMB	200	4,5	0,06µ	30µ	12	250	IMB	Int. stepper	150	0,24	1,6

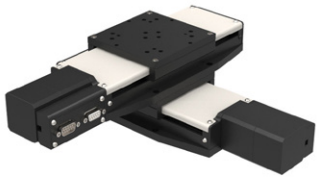
Motorised Linear Stages
economy

Order No.	Travel	Horizontal load kg max.	Accuracy mm ±	Repeatability ±	Lead screw pitch	l_1	Motor code	Motor type	Speed mm/s max.	Resolution µm ±	Weight kg
L3510.200-STA	200	4,5	0,06µ	30µ	2	250	STA	Stepper	20	0,04	1,1
L3510.200-STB	200	4,5	0,06µ	30µ	12	250	STB	Stepper	150	0,24	1,2
L3510.200-STC	200	4,5	0,06µ	30µ	2	250	STC	Stepper & enc.	20	0,04	1,3
L3510.200-STD	200	4,5	0,06µ	30µ	12	250	STD	Stepper & enc.	150	0,24	1,4
L3510.250-IMA	250	4,5	0,06µ	30µ	2	300	IMA	Int. stepper	20	0,04	1,5
L3510.250-IMB	250	4,5	0,06µ	30µ	12	300	IMB	Int. stepper	150	0,24	1,6
L3510.250-STA	250	4,5	0,06µ	30µ	2	300	STA	Stepper	20	0,04	1,1
L3510.250-STB	250	4,5	0,06µ	30µ	12	300	STB	Stepper	150	0,24	1,2
L3510.250-STC	250	4,5	0,06µ	30µ	2	300	STC	Stepper & enc.	20	0,04	1,3
L3510.250-STD	250	4,5	0,06µ	30µ	12	300	STD	Stepper & enc.	150	0,24	1,4
L3510.300-IMA	300	4,5	0,06µ	30µ	2	350	IMA	Int. stepper	20	0,04	1,5
L3510.300-IMB	300	4,5	0,06µ	30µ	12	350	IMB	Int. stepper	150	0,24	1,6
L3510.300-STA	300	4,5	0,06µ	30µ	2	350	STA	Stepper	20	0,04	1,1
L3510.300-STB	300	4,5	0,06µ	30µ	12	350	STB	Stepper	150	0,24	1,2
L3510.300-STC	300	4,5	0,06µ	30µ	2	350	STC	Stepper & enc.	20	0,04	1,3
L3510.300-STD	300	4,5	0,06µ	30µ	12	350	STD	Stepper & enc.	150	0,24	1,4

Our motorised linear stages are precise, heavy duty and available from 25mm stroke to 800mm.
They can be easily controlled either with an Intelligent motor (this is a motor with an inbuilt driver and controller) or with a motor and one of our motion controller stages.
Programming for both the intelligent motor (less expensive) and the motion controllers is very simple and we provide free software and sample source code for Labview, VB, C++, OSX etc. It is also possible to download a stand-alone programmed to the device so it can run independently of a host.
We also offer a Joystick controller.

The stages can be readily supplied in X, XY, XZ and XYZ configurations and can also be used with our range of rotary tables (L3550 to L3562).

XY Assembly



XY Assembly

XY Assembly

Using intelligent motors

- RS-485 - USB connection.
- Can run independently from host.
- Joystick control option

Using motion controllers

- RS-485 - USB connection.
- Can run independently from host.
- Joystick control option

Stepper limitations

For all of their advantages, stepper motors have a number of limitations which can cause significant implementation and operational issues depending on your application. Stepper motors do not have any reserve power. In fact, stepper motors lose a significant amount of their torque as they approach their maximum driver speed. A loss of 80% of the rated torque at 90% of the maximum speed is typical.

Stepper motors are also not as good as servo motors in accelerating a load. Attempting to accelerate a load too fast where the stepper cannot generate enough torque to move to the next step before the next drive pulse will result in a skipped step and a loss in position. If positional accuracy is essential, either the load on the motor must never exceed its torque or the stepper must be combined with a position encoder to ensure positional accuracy.

Stepper motors may also suffer from vibration and resonance problems. At certain speeds, partially depending on the load dynamics, they may resonate and be unable to drive the load. This may result in skipped steps, stalled motors, excessive vibration and noise.

Servo limitations

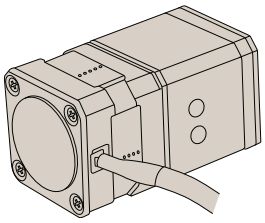
Servo motors are capable of delivering more power than stepper motors, but do require much more complex drive circuitry and positional feedback for accurate positioning. Servo motors are also much considerably expensive than stepper motors and are often harder to find. Servo motors often require gear boxes, especially for lower speed operation.

The requirement for a gearbox and a position encoder makes servo motor designs more mechanically complex and increases the maintenance requirements for the system. To top it all off, servo motors are more expensive than stepper motors before adding on the cost of a position encoder.

Summary

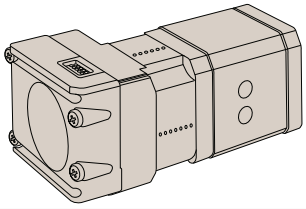
Selecting the best motor for your application depends on a few key design criteria for your system including cost, positional accuracy requirements, torque requirements, drive power availability, and acceleration requirements. Overall, servo motors are best for high speed, high torque applications while stepper motors are better suited for lower acceleration, high holding torque applications as well as generally being less expensive and easier to control.

Motor options



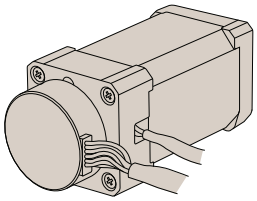
Stepper motor

- Standard
- With rotary encoder (1000 line)



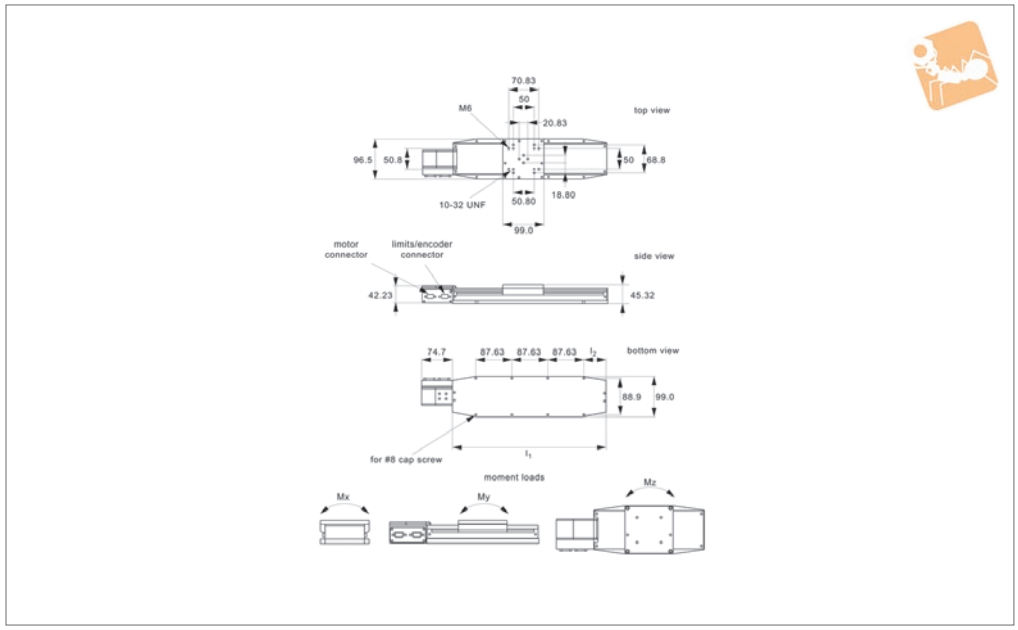
Intelligent stepper motor

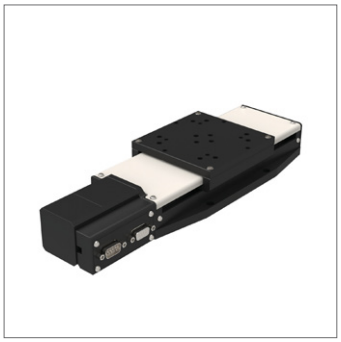
- Standard
- With rotary encoder (512 line)



Servo motor

- Standard
- With rotary encoder (1000 line)





L3500

Material

Black anodised aluminium body (6061). Hardened linear guideways, stainless steel Acme lead screw (with internally lubricated anti-backlash nut).

Technical Notes

These are smooth running, precise and stiff linear stages. For ease of use they have separate connections for motor power and limit/encoder signals. Integrated limit switches are provided as standard.
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 many pre-existing software packages (such as Labview) can be used.
Can be readily supplied in XY, XZ and XYZ configurations.
Applications - research, semi-conductors, fibre optics, automation etc.
Replace -XXX in part number with the code for your preferred motor type - see second data table for codes and specifications.

Tips

Motor options:
Stepper - Nema 17, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Optional Stepper & 1000 line linear encoder.
Servo - Nema 17, brushless DC motor. Continuous stall torque 0.25Nm, peak torque 0.7 Nm, with 1000 line rotary encoder.
Intelligent stepper - Nema 17 with a fully programmable motion controller inbuilt (ie 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.
Limit switches are wired normally open. Option with 512 line encoder. Drawings show stepper motor configuration. See special pages for further motor options.

Important Notes

Max. moment loads:
Mx = 20 Nm
My = 20 Nm
Mz = 19 Nm
For 50mm travel stage Ma and Mb = 12 Nm.
For combined stages, add suffixes:
XY - for XY stage
XZ - for XZ stage
XYZ - for XYZ stage

Order No.	Travel	Motor type	Motor code	Accuracy µm/mm	Bi-directional repeatability	Horizontal load kg max.	Vertical load kg max.	Side load kg max.	Weight kg
L3500.050-STA	50	Stepper	-STA	0,6µ	10µ	23	6.5	18	1.36
L3500.050-STB	50	Stepper	-STB	0,6µ	10µ	23	6.5	18	1.36
L3500.050-STC	50	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	1.36
L3500.050-STD	50	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	1.36
L3500.050-IMA	50	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	1.36
L3500.050-IMB	50	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	1.36
L3500.050-IMC	50	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	1.36
L3500.050-IMD	50	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	1.36
L3500.050-SVA	50	Servo & encoder	-SVA	0,6µ	10µ	23	6.5	18	1.36
L3500.050-SVB	50	Servo & encoder	-SVB	0,6µ	10µ	23	6.5	18	1.36
L3500.150-STA	150	Stepper	-STA	0,6µ	10µ	23	6.5	18	2.41
L3500.150-STB	150	Stepper	-STB	0,6µ	10µ	23	6.5	18	2.41
L3500.150-STC	150	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	2.41

Medium-Duty Motorised Stages
high precision

Order No.	Travel	Motor type	Motor code	Accuracy µm/mm	Bi-directional repeatability	Horizontal load kg max.	Vertical load kg max.	Side load kg max.	Weight kg
L3500.150-STD	150	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	2.41
L3500.150-IMA	150	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	2.41
L3500.150-IMB	150	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	2.41
L3500.150-IMC	150	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	2.41
L3500.150-IMD	150	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	2.41
L3500.150-SVA	150	Servo & encoder	-SVA	0,6µ	10µ	23	6.5	18	2.41
L3500.150-SVB	150	Servo & encoder	-SVB	0,6µ	10µ	23	6.5	18	2.41
L3500.200-STA	200	Stepper	-STA	0,6µ	10µ	23	6.5	18	2.59
L3500.200-STB	200	Stepper	-STB	0,6µ	10µ	23	6.5	18	2.59
L3500.200-STC	200	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	2.59
L3500.200-STD	200	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	2.59
L3500.200-IMA	200	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	2.59
L3500.200-IMB	200	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	2.59
L3500.200-IMC	200	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	2.59
L3500.200-IMD	200	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	2.59
L3500.200-SVA	200	Servo & encoder	-SVA	0,6µ	10µ	23	6.5	18	2.59
L3500.200-SVB	200	Servo & encoder	-SVB	0,6µ	10µ	23	6.5	18	2.59
L3500.250-STA	250	Stepper	-STA	0,6µ	10µ	23	6.5	18	2.86
L3500.250-STB	250	Stepper	-STB	0,6µ	10µ	23	6.5	18	2.86
L3500.250-STC	250	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	2.86
L3500.250-STD	250	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	2.86
L3500.250-IMA	250	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	2.86
L3500.250-IMB	250	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	2.86
L3500.250-IMC	250	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	2.86
L3500.250-IMD	250	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	2.86
L3500.250-SVA	250	Servo & encoder	-SVA	0,6µ	10µ	23	6.5	18	2.86
L3500.250-SVB	250	Servo & encoder	-SVB	0,6µ	10µ	23	6.5	18	2.86
L3500.300-STA	300	Stepper	-STA	0,6µ	10µ	23	6.5	18	3.13
L3500.300-STB	300	Stepper	-STB	0,6µ	10µ	23	6.5	18	3.13
L3500.300-STC	300	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	3.13
L3500.300-STD	300	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	3.13
L3500.300-IMA	300	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	3.13
L3500.300-IMB	300	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	3.13
L3500.300-IMC	300	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	3.13
L3500.300-IMD	300	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	3.13
L3500.300-SVA	300	Servo & encoder	-SVA	0,6µ	10µ	23	6.5	18	3.13
L3500.300-SVB	300	Servo & encoder	-SVB	0,6µ	10µ	23	6.5	18	3.13
L3500.350-STA	350	Stepper	-STA	0,6µ	10µ	23	6.5	18	3.41
L3500.350-STB	350	Stepper	-STB	0,6µ	10µ	23	6.5	18	3.41
L3500.350-STC	350	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	3.41
L3500.350-STD	350	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	3.41
L3500.350-IMA	350	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	3.41
L3500.350-IMB	350	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	3.41
L3500.350-IMC	350	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	3.41
L3500.350-IMD	350	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	3.41
L3500.350-SVA	350	Servo & encoder	-SVA	0,6µ	10µ	23	6.5	18	3.41
L3500.350-SVB	350	Servo & encoder	-SVB	0,6µ	10µ	23	6.5	18	3.41
L3500.400-STA	400	Stepper	-STA	0,6µ	10µ	23	6.5	18	3.68
L3500.400-STB	400	Stepper	-STB	0,6µ	10µ	23	6.5	18	3.68
L3500.400-STC	400	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	3.68
L3500.400-STD	400	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	3.68
L3500.400-IMA	400	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	3.68
L3500.400-IMB	400	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	3.68
L3500.400-IMC	400	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	3.68
L3500.400-IMD	400	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	3.68
L3500.400-SVA	400	Servo & encoder	-SVA	0,6µ	10µ	23	6.5	18	3.68
L3500.400-SVB	400	Servo & encoder	-SVB	0,6µ	10µ	23	6.5	18	3.68
L3500.500-STA	500	Stepper	-STA	0,6µ	10µ	23	6.5	18	3.95
L3500.500-STB	500	Stepper	-STB	0,6µ	10µ	23	6.5	18	3.95
L3500.500-STC	500	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	3.95

Order No.	Travel	Motor type	Motor code	Accuracy µm/mm	Bi-directional repeatability	Horizontal load kg max.	Vertical load kg max.	Side load kg max.	Weight kg
L3500.500-STD	500	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	3.95
L3500.500-IMA	500	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	3.95
L3500.500-IMB	500	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	3.95
L3500.500-IMC	500	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	3.95
L3500.500-IMD	500	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	3.95
L3500.500-SVA	500	Servo & encoder	-SVA	0,6µ	10µ	23	6.5	18	3.95
L3500.500-SVB	500	Servo & encoder	-SVB	0,6µ	10µ	23	6.5	18	3.95
L3500.600-STA	600	Stepper	-STA	0,6µ	10µ	23	6.5	18	4.23
L3500.600-STB	600	Stepper	-STB	0,6µ	10µ	23	6.5	18	4.23
L3500.600-STC	600	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	4.23
L3500.600-STD	600	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	4.23
L3500.600-IMA	600	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	4.23
L3500.600-IMB	600	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	4.23
L3500.600-IMC	600	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	4.23
L3500.600-IMD	600	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	4.23
L3500.600-SVA	600	Servo & encoder	-SVA	0,6µ	10µ	23	6.5	18	4.23
L3500.600-SVB	600	Servo & encoder	-SVB	0,6µ	10µ	23	6.5	18	4.23
L3500.100-STA	100	Stepper	-STA	0,6µ	10µ	23	6.5	18	2.14
L3500.100-STB	100	Stepper	-STB	0,6µ	10µ	23	6.5	18	2.14
L3500.100-STC	100	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	2.14
L3500.100-STD	100	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	2.14
L3500.100-IMA	100	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	2.14
L3500.100-IMB	100	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	2.14
L3500.100-IMC	100	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	2.14
L3500.100-IMD	100	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	2.14
L3500.100-SVA	100	Servo & encoder	-SVA	0,6µ	10µ	23	6.5	18	2.14
L3500.100-SVB	100	Servo & encoder	-SVB	0,6µ	10µ	23	6.5	18	2.14

Order No.	Lead screw pitch	Speed mm/s max.	I_1	I_2	Resolution
L3500.050-STA	1.5875	12.0	176	44.5	0,3µ
L3500.050-STB	6.35	50.0	176	44.5	0,13µ
L3500.050-STC	1.5875	12.0	176	44.5	0,4µ
L3500.050-STD	6.35	50.0	176	44.5	1,6µ
L3500.050-IMA	1.5875	12.0	176	44.5	0,4µ
L3500.050-IMB	6.35	12.0	176	44.5	1,6µ
L3500.050-IMC	1.5875	25.0	176	44.5	0,4µ
L3500.050-IMD	6.35	50.0	176	44.5	1,6µ
L3500.050-SVA	1.5875	25.0	176	44.5	0,4µ
L3500.050-SVB	6.35	100.0	176	44.5	1,6µ
L3500.150-STA	1.5875	12.0	277	94.3	0,3µ
L3500.150-STB	6.35	50.0	277	94.3	0,13µ
L3500.150-STC	1.5875	12.0	277	94.3	0,4µ
L3500.150-STD	6.35	50.0	277	94.3	1,6µ
L3500.150-IMA	1.5875	12.0	277	94.3	0,4µ
L3500.150-IMB	6.35	12.0	277	94.3	1,6µ
L3500.150-IMC	1.5875	25.0	277	94.3	0,4µ
L3500.150-IMD	6.35	50.0	277	94.3	1,6µ
L3500.150-SVA	1.5875	25.0	277	94.3	0,4µ
L3500.150-SVB	6.35	100.0	277	94.3	1,6µ
L3500.200-STA	1.5875	12.0	327	119.7	0,3µ
L3500.200-STB	6.35	50.0	327	119.7	0,13µ
L3500.200-STC	1.5875	12.0	327	119.7	0,4µ
L3500.200-STD	6.35	50.0	327	119.7	1,6µ
L3500.200-IMA	1.5875	12.0	327	119.7	0,4µ
L3500.200-IMB	6.35	12.0	327	119.7	1,6µ
L3500.200-IMC	1.5875	25.0	327	119.7	0,4µ
L3500.200-IMD	6.35	50.0	327	119.7	1,6µ
L3500.200-SVA	1.5875	25.0	327	119.7	0,4µ
L3500.200-SVB	6.35	100.0	327	119.7	1,6µ
L3500.250-STA	1.5875	12.0	378	57.5	0,3µ
L3500.250-STB	6.35	50.0	378	57.5	0,13µ

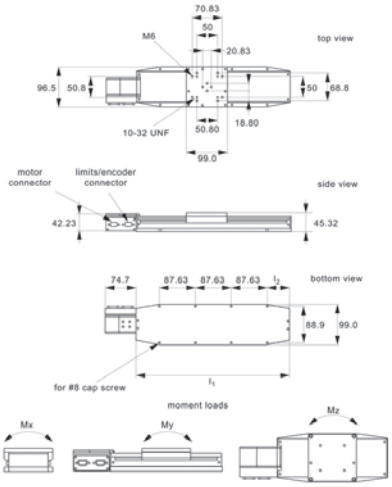
Medium-Duty Motorised Stages
high precision

Order No.	Lead screw pitch	Speed mm/s max.	l_1	l_2	Resolution
L3500.250-STC	1.5875	12.0	378	57.5	0,4µ
L3500.250-STD	6.35	50.0	378	57.5	1,6µ
L3500.250-IMA	1.5875	12.0	378	57.5	0,4µ
L3500.250-IMB	6.35	12.0	378	57.5	1,6µ
L3500.250-IMC	1.5875	25.0	378	57.5	0,4µ
L3500.250-IMD	6.35	50.0	378	57.5	1,6µ
L3500.250-SVA	1.5875	25.0	378	57.5	0,4µ
L3500.250-SVB	6.35	100.0	378	57.5	1,6µ
L3500.300-STA	1.5875	12.0	429	82.7	0,3µ
L3500.300-STB	6.35	50.0	429	82.7	0,13µ
L3500.300-STC	1.5875	12.0	429	82.7	0,4µ
L3500.300-STD	6.35	50.0	429	82.7	1,6µ
L3500.300-IMA	1.5875	12.0	429	82.7	0,4µ
L3500.300-IMB	6.35	12.0	429	82.7	1,6µ
L3500.300-IMC	1.5875	25.0	429	82.7	0,4µ
L3500.300-IMD	6.35	50.0	429	82.7	1,6µ
L3500.300-SVA	1.5875	25.0	429	82.7	0,4µ
L3500.300-SVB	6.35	100.0	429	82.7	1,6µ
L3500.350-STA	1.5875	12.0	480	82.7	0,3µ
L3500.350-STB	6.35	50.0	480	82.7	0,13µ
L3500.350-STC	1.5875	12.0	480	82.7	0,4µ
L3500.350-STD	6.35	50.0	480	82.7	1,6µ
L3500.350-IMA	1.5875	12.0	480	82.7	0,4µ
L3500.350-IMB	6.35	12.0	480	82.7	1,6µ
L3500.350-IMC	1.5875	25.0	480	82.7	0,4µ
L3500.350-IMD	6.35	50.0	480	82.7	1,6µ
L3500.350-SVA	1.5875	25.0	480	82.7	0,4µ
L3500.350-SVB	6.35	100.0	480	82.7	1,6µ
L3500.400-STA	1.5875	12.0	531	133.7	0,3µ
L3500.400-STB	6.35	50.0	531	133.7	0,13µ
L3500.400-STC	1.5875	12.0	531	133.7	0,4µ
L3500.400-STD	6.35	50.0	531	133.7	1,6µ
L3500.400-IMA	1.5875	12.0	531	133.7	0,4µ
L3500.400-IMB	6.35	12.0	531	133.7	1,6µ
L3500.400-IMC	1.5875	25.0	531	133.7	0,4µ
L3500.400-IMD	6.35	50.0	531	133.7	1,6µ
L3500.400-SVA	1.5875	25.0	531	133.7	0,4µ
L3500.400-SVB	6.35	100.0	531	133.7	1,6µ
L3500.500-STA	1.5875	12.0	632	185.5	0,3µ
L3500.500-STB	6.35	50.0	632	185.5	0,13µ
L3500.500-STC	1.5875	12.0	632	185.5	0,4µ
L3500.500-STD	6.35	50.0	632	185.5	1,6µ
L3500.500-IMA	1.5875	12.0	632	185.5	0,4µ
L3500.500-IMB	6.35	12.0	632	185.5	1,6µ
L3500.500-IMC	1.5875	25.0	632	185.5	0,4µ
L3500.500-IMD	6.35	50.0	632	185.5	1,6µ
L3500.500-SVA	1.5875	25.0	632	185.5	0,4µ
L3500.500-SVB	6.35	100.0	632	185.5	1,6µ
L3500.600-STA	1.5875	12.0	734	235.3	0,3µ
L3500.600-STB	6.35	50.0	734	235.3	0,13µ
L3500.600-STC	1.5875	12.0	734	235.3	0,4µ
L3500.600-STD	6.35	50.0	734	235.3	1,6µ
L3500.600-IMA	1.5875	12.0	734	235.3	0,4µ
L3500.600-IMB	6.35	12.0	734	235.3	1,6µ
L3500.600-IMC	1.5875	25.0	734	235.3	0,4µ
L3500.600-IMD	6.35	50.0	734	235.3	1,6µ
L3500.600-SVA	1.5875	25.0	734	235.3	0,4µ
L3500.600-SVB	6.35	100.0	734	235.3	1,6µ
L3500.100-STA	1.5875	12.0	226	68.9	0,3µ
L3500.100-STB	6.35	50.0	226	68.9	0,13µ
L3500.100-STC	1.5875	12.0	226	68.9	0,4µ
L3500.100-STD	6.35	50.0	226	68.9	1,6µ
L3500.100-IMA	1.5875	12.0	226	68.9	0,4µ
L3500.100-IMB	6.35	12.0	226	68.9	1,6µ
L3500.100-IMC	1.5875	25.0	226	68.9	0,4µ
L3500.100-IMD	6.35	50.0	226	68.9	1,6µ
L3500.100-SVA	1.5875	25.0	226	68.9	0,4µ

Order No.	Lead screw pitch	Speed mm/s max.	l_1	l_2	Resolution
L3500.100-SVB	6.35	100.0	226	68.9	1,6µ

Vacuum Compatible Motorised Stages
high precision

L3502



Material
Black anodised aluminium body (6061). Hardened linear guideways, stainless steel Acme lead screw (with internally lubricated anti-backlash nut).

Technical Notes
Operation down to 10^{-6} Torr.
Teflon jacketed wire, fluxless soldered connections. Vacuum compatible motor and limit switches. Low vapour pressure lubricant, blind holes are vented. All parts are thoroughly cleaned followed by latex gloved assembly.
Replace -XXX in part number with the code for your preferred motor type - see second data table for codes and specifications.
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 many pre-existing software packages (such as Labview) can be used.
Can be readily supplied in XY, XZ and XYZ configurations.
Applications - research, semi-conductors, fibre optics, automation etc.
Replace -XXX in part number with the code for your preferred motor type - see second data table for codes and specifications.

Tips
Motor options:
Stepper - Nema 17, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step.
Intelligent stepper - Nema 17 with a fully programmable motion controller inbuilt (ie 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.
Drawings show stepper motor configuration. See special pages for further motor options.

Important Notes
Max. moment loads:
Mx = 20 Nm
My = 20 Nm
Mz= 19 Nm
For 50mm travel stage Ma and Mb = 12 Nm.
For combined stages, add suffixes:
XY - for XY stage
XZ - for XZ stage
XYZ - for XYZ stage

Order No.	Travel	Motor type	Motor code	Accuracy mm ±	Bi-directional repeatability ±	Horizontal load kg max.	Vertical load kg max.	Side load kg max.	Weight kg
L3502.050-STA	50	Stepper	-STA	0,6µ	10µ	23	6.5	18	1.36
L3502.050-STB	50	Stepper	-STB	0,6µ	10µ	23	6.5	18	1.36
L3502.050-STC	50	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	1.36
L3502.050-STD	50	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	1.36
L3502.050-IMA	50	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	1.36
L3502.050-IMB	50	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	1.36
L3502.050-IMC	50	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	1.36
L3502.050-IMD	50	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	1.36
L3502.100-STA	100	Stepper	-STA	0,6µ	10µ	23	6.5	18	2.14
L3502.100-STB	100	Stepper	-STB	0,6µ	10µ	23	6.5	18	2.14
L3502.100-STC	100	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	2.14
L3502.100-STD	100	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	2.14
L3502.100-IMA	100	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	2.14

Order No.	Travel	Motor type	Motor code	Accuracy mm ±	Bi-directional repeatability ±	Horizontal load kg max.	Vertical load kg max.	Side load kg max.	Weight kg
L3502.100-IMB	100	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	2.14
L3502.100-IMC	100	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	2.14
L3502.100-IMD	100	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	2.14
L3502.150-STA	150	Stepper	-STA	0,6µ	10µ	23	6.5	18	2.41
L3502.150-STB	150	Stepper	-STB	0,6µ	10µ	23	6.5	18	2.41
L3502.150-STC	150	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	2.41
L3502.150-STD	150	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	2.41
L3502.150-IMA	150	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	2.41
L3502.150-IMB	150	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	2.41
L3502.150-IMC	150	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	2.41
L3502.150-IMD	150	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	2.41
L3502.200-STA	200	Stepper	-STA	0,6µ	10µ	23	6.5	18	2.59
L3502.200-STB	200	Stepper	-STB	0,6µ	10µ	23	6.5	18	2.59
L3502.200-STC	200	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	2.59
L3502.200-STD	200	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	2.59
L3502.200-IMA	200	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	2.59
L3502.200-IMB	200	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	2.59
L3502.200-IMC	200	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	2.59
L3502.200-IMD	200	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	2.59
L3502.250-STA	250	Stepper	-STA	0,6µ	10µ	23	6.5	18	2.86
L3502.250-STB	250	Stepper	-STB	0,6µ	10µ	23	6.5	18	2.86
L3502.250-STC	250	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	2.86
L3502.250-STD	250	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	2.86
L3502.250-IMA	250	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	2.86
L3502.250-IMB	250	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	2.86
L3502.250-IMC	250	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	2.86
L3502.250-IMD	250	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	2.86
L3502.300-STA	300	Stepper	-STA	0,6µ	10µ	23	6.5	18	3.13
L3502.300-STB	300	Stepper	-STB	0,6µ	10µ	23	6.5	18	3.13
L3502.300-STC	300	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	3.13
L3502.300-STD	200	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	3.13
L3502.300-IMA	250	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	3.13
L3502.300-IMB	300	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	3.13
L3502.300-IMC	350	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	3.13
L3502.300-IMD	400	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	3.13
L3502.350-STA	350	Stepper	-STA	0,6µ	10µ	23	108.3	18	3.41
L3502.350-STB	350	Stepper	-STB	0,6µ	10µ	23	108.3	18	3.41
L3502.350-STC	350	Stepper & enc.	-STC	0,6µ	10µ	23	108.3	18	3.41
L3502.350-STD	350	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	3.41
L3502.350-IMA	350	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	3.41
L3502.350-IMB	350	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	3.41
L3502.350-IMC	350	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	3.41
L3502.350-IMD	350	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	3.41
L3502.400-STA	400	Stepper	-STA	0,6µ	10µ	23	6.5	18	3.68
L3502.400-STB	400	Stepper	-STB	0,6µ	10µ	23	6.5	18	3.68
L3502.400-STC	400	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	3.68
L3502.400-STD	400	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	3.68
L3502.400-IMA	400	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	3.68
L3502.400-IMB	400	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	3.68
L3502.400-IMC	400	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	3.68
L3502.400-IMD	400	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	3.68
L3502.500-STA	500	Stepper	-STA	0,6µ	10µ	23	6.5	18	3.95
L3502.500-STB	500	Stepper	-STB	0,6µ	10µ	23	6.5	18	3.95
L3502.500-STC	500	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	3.95
L3502.500-STD	500	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	3.95
L3502.500-IMA	500	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	3.95
L3502.500-IMB	500	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	3.95
L3502.500-IMC	500	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	3.95

Vacuum Compatible Motorised Stages
high precision

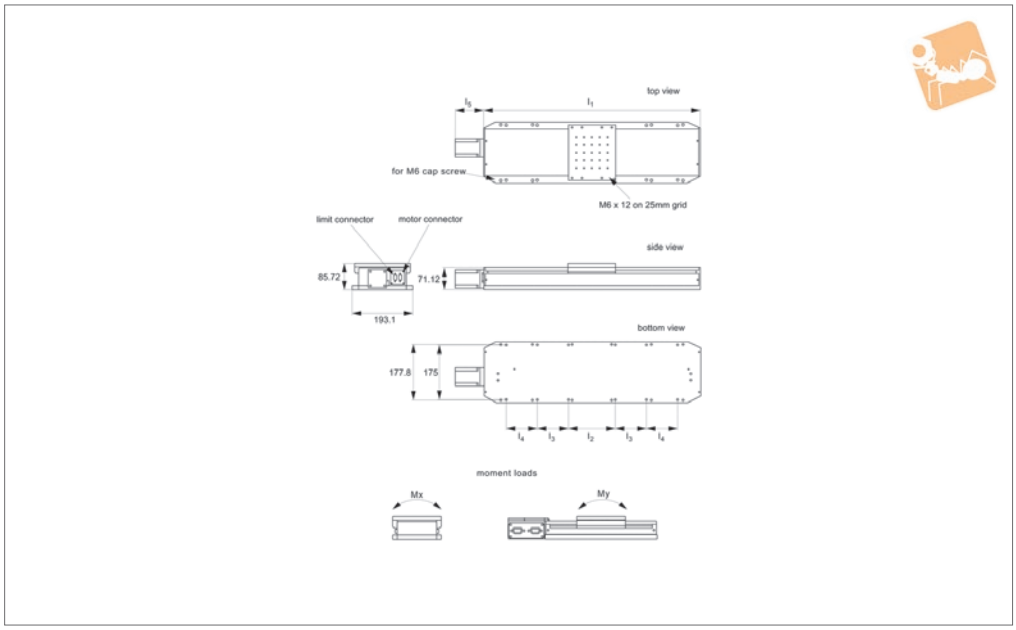
Order No.	Travel	Motor type	Motor code	Accuracy mm ±	Bi-directional repeatability ±	Horizontal load kg max.	Vertical load kg max.	Side load kg max.	Weight kg
L3502.500-IMD	500	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	3.95
L3502.600-STA	600	Stepper	-STA	0,6µ	10µ	23	6.5	18	4.23
L3502.600-STB	600	Stepper	-STB	0,6µ	10µ	23	6.5	18	4.23
L3502.600-STC	600	Stepper & enc.	-STC	0,6µ	10µ	23	6.5	18	4.23
L3502.600-STD	600	Stepper & enc.	-STD	0,6µ	10µ	23	6.5	18	4.23
L3502.600-IMA	600	Int. stepper	-IMA	0,6µ	10µ	23	6.5	18	4.23
L3502.600-IMB	600	Int. stepper	-IMB	0,6µ	10µ	23	6.5	18	4.23
L3502.600-IMC	600	Int. stepper & enc.	-IMC	0,6µ	10µ	23	6.5	18	4.23
L3502.600-IMD	600	Int. stepper	-IMD	0,6µ	10µ	23	6.5	18	4.23

Order No.	Lead screw pitch	Speed mm/s max.	l_1	l_2	Resolution ±
L3502.050-STA	1.5875	12.0	176	44.5	0,03µ
L3502.050-STB	6.35	50.0	176	44.5	0,13µ
L3502.050-STC	1.5875	12.0	176	44.5	0,4µ
L3502.050-STD	6.35	50.0	176	44.5	1,6µ
L3502.050-IMA	1.5875	12.0	176	44.5	0,4µ
L3502.050-IMB	6.35	12.0	176	44.5	1,6µ
L3502.050-IMC	1.5875	25.0	176	44.5	0,4µ
L3502.050-IMD	6.35	50.0	176	44.5	1,6µ
L3502.100-STA	1.5875	12.0	226	68.9	0,03µ
L3502.100-STB	6.35	50.0	226	68.9	0,13µ
L3502.100-STC	1.5875	12.0	226	68.9	0,4µ
L3502.100-STD	6.35	50.0	226	68.9	1,6µ
L3502.100-IMA	1.5875	12.0	226	68.9	0,4µ
L3502.100-IMB	6.35	12.0	226	68.9	1,6µ
L3502.100-IMC	1.5875	25.0	226	68.9	0,4µ
L3502.100-IMD	6.35	50.0	226	68.9	1,6µ
L3502.150-STA	1.5875	12.0	277	44.5	0,03µ
L3502.150-STB	6.35	50.0	277	68.9	0,13µ
L3502.150-STC	1.5875	12.0	277	94.3	0,4µ
L3502.150-STD	6.35	50.0	277	119.7	1,6µ
L3502.150-IMA	1.5875	12.0	277	57.5	0,4µ
L3502.150-IMB	6.35	12.0	277	82.7	1,6µ
L3502.150-IMC	1.5875	25.0	277	108.3	0,4µ
L3502.150-IMD	6.35	50.0	277	133.7	1,6µ
L3502.200-STA	1.5875	12.0	327	119.7	0,03µ
L3502.200-STB	6.35	50.0	327	119.7	0,13µ
L3502.200-STC	1.5875	12.0	327	119.7	0,4µ
L3502.200-STD	6.35	50.0	327	119.7	1,6µ
L3502.200-IMA	1.5875	12.0	327	119.7	0,4µ
L3502.200-IMB	6.35	12.0	327	119.7	1,6µ
L3502.200-IMC	1.5875	25.0	327	119.7	0,4µ
L3502.200-IMD	6.35	50.0	327	119.7	1,6µ
L3502.250-STA	1.5875	12.0	378	57.5	0,03µ
L3502.250-STB	6.35	50.0	378	57.5	0,13µ
L3502.250-STC	1.5875	12.0	378	57.5	0,4µ
L3502.250-STD	6.35	50.0	378	57.5	1,6µ
L3502.250-IMA	1.5875	12.0	378	57.5	0,4µ
L3502.250-IMB	6.35	12.0	378	57.5	1,6µ
L3502.250-IMC	1.5875	25.0	378	57.5	0,4µ
L3502.250-IMD	6.35	50.0	378	57.5	1,6µ
L3502.300-STA	1.5875	12.0	429	82.7	0,03µ
L3502.300-STB	6.35	50.0	429	82.7	0,13µ
L3502.300-STC	1.5875	12.0	429	82.7	0,4µ
L3502.300-STD	6.35	50.0	429	82.7	1,6µ
L3502.300-IMA	1.5875	12.0	429	82.7	0,4µ
L3502.300-IMB	6.35	12.0	429	82.7	1,6µ
L3502.300-IMC	1.5875	25.0	429	82.7	0,4µ
L3502.300-IMD	6.35	50.0	429	82.7	1,6µ
L3502.350-STA	1.5875	12.0	480	44.5	0,03µ
L3502.350-STB	6.35	50.0	480	68.9	0,13µ
L3502.350-STC	1.5875	12.0	480	94.3	0,4µ
L3502.350-STD	6.35	50.0	480	108.3	1,6µ

Order No.	Lead screw pitch	Speed mm/s max.	l_1	l_2	Resolution ±
L3502.350-IMA	1.5875	12.0	480	108.3	0,4µ
L3502.350-IMB	6.35	12.0	480	108.3	1,6µ
L3502.350-IMC	1.5875	25.0	480	108.3	0,4µ
L3502.350-IMD	6.35	50.0	480	108.3	1,6µ
L3502.400-STA	1.5875	12.0	531	133.7	0,03µ
L3502.400-STB	6.35	50.0	531	133.7	0,13µ
L3502.400-STC	1.5875	12.0	531	133.7	0,4µ
L3502.400-STD	6.35	50.0	531	133.7	1,6µ
L3502.400-IMA	1.5875	12.0	531	133.7	0,4µ
L3502.400-IMB	6.35	12.0	531	133.7	1,6µ
L3502.400-IMC	1.5875	25.0	531	133.7	0,4µ
L3502.400-IMD	6.35	50.0	531	133.7	1,6µ
L3502.500-STA	1.5875	12.0	632	185.5	0,03µ
L3502.500-STB	6.35	50.0	632	185.5	0,13µ
L3502.500-STC	1.5875	12.0	632	185.5	0,4µ
L3502.500-STD	6.35	50.0	632	185.5	1,6µ
L3502.500-IMA	1.5875	12.0	632	185.5	0,4µ
L3502.500-IMB	6.35	12.0	632	185.5	1,6µ
L3502.500-IMC	1.5875	25.0	632	185.5	0,4µ
L3502.500-IMD	6.35	50.0	632	185.5	1,6µ
L3502.600-STA	1.5875	12.0	734	235.3	0,03µ
L3502.600-STB	6.35	50.0	734	235.3	0,13µ
L3502.600-STC	1.5875	12.0	734	235.3	0,4µ
L3502.600-STD	6.35	50.0	734	235.3	1,6µ
L3502.600-IMA	1.5875	12.0	734	235.3	0,4µ
L3502.600-IMB	6.35	12.0	734	235.3	1,6µ
L3502.600-IMC	1.5875	25.0	734	235.3	0,4µ
L3502.600-IMD	6.35	50.0	734	235.3	1,6µ

Heavy-Duty Motorised Stages
high precision

L3504



Material
Black anodised aluminium body (6061). Hardened linear guideways, stainless steel Acme lead screw with internally lubricated anti-backlash nut.

Technical Notes
These are smooth running, precise and stiff linear stages. For ease of use they have separate connections for motor power and limit/encoder signals. Integrated limit switches are provided as standard.
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.

Replace -XXX in part number with the code for your preferred motor type. See the second data table for these codes and the specifications of these motors.

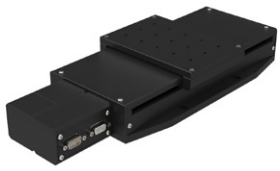
Tips
Motor options:
Stepper - Nema 23, high torque. 2.8 Amp/phase, 0.9 Ohm/phase, 2.5 mH/phase, 1.8°/step. Optionally with optical linear encoder or 1000 line rotary encoder.
Servo - Nema 23 brushless DC motor. Continuous stall torque 0.51Nm, peak torque 1.34 Nm. Option with 4000 count/rev optical rotary encoder with index mark.
Intelligent stepper - Nema 23 with a fully programmable motion controller inbuilt (ie 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.
Limit switches are wired normally closed. Drawings show stepper motor configuration. See special pages for further motor options.

Important Notes
Max. moment loads:
Mx = 200 Nm
My = 280 Nm
For combined stages, add suffixes:
XY - for XY stage
XZ - for XZ stage
XYZ - for XYZ stage

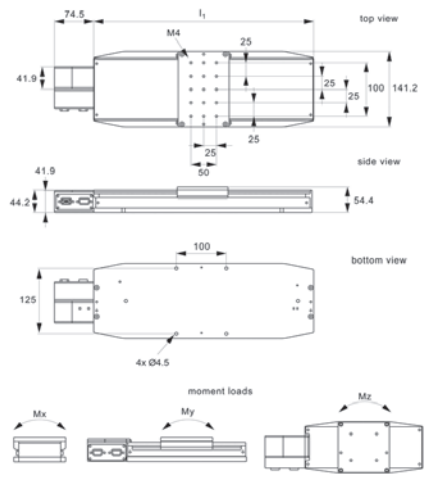
Order No.	Travel	Motor type	Motor code	Horizontal load kg max.	Vertical load kg max.	Accuracy ± /200m	Side load kg max.	Lead screw pitch	Speed mm/s max.	l_1	Weight kg
L3504.200-STA	200	Stepper	-STA	113	36	30µ/200mm	36	4	25	389	9
L3504.200-STB	200	Stepper & rot. enc.	-STB	113	36	30µ/200mm	36	4	25	389	9
L3504.200-STC	200	Stepper & lin. enc.	-STC	113	36	5µ	36	4	25	389	9
L3504.200-IMA	200	Int. stepper	-IMA	113	36	30µ/200mm	36	4	25	389	9
L3504.300-STA	300	Stepper	-STA	113	36	30µ/200mm	36	4	25	490	10
L3504.300-STB	300	Stepper & rot. enc.	-STB	113	36	30µ/200mm	36	4	25	490	10
L3504.300-STC	400	Stepper & lin. enc.	-STC	113	36	5µ	36	4	25	490	10
L3504.300-IMA	500	Int. stepper	-IMA	113	36	30µ/200mm	36	4	25	490	10
L3504.400-STA	400	Stepper	-STA	113	36	30µ/200mm	36	4	25	592	12
L3504.400-STB	400	Stepper & rot. enc.	-STB	113	36	30µ/200mm	36	4	25	592	12
L3504.400-STC	400	Stepper & lin. enc.	-STC	113	36	5µ	36	4	25	592	12
L3504.400-IMA	400	Int. stepper	-IMA	113	36	30µ/200mm	36	4	25	592	12
L3504.500-STA	500	Stepper	-STA	113	36	30µ/200mm	36	4	25	694	14
L3504.500-STB	500	Stepper & rot. enc.	-STB	113	36	30µ/200mm	36	4	25	694	14
L3504.500-STC	500	Stepper & lin. enc.	-STC	113	36	5µ	36	4	25	694	14
L3504.500-IMA	500	Int. stepper	-IMA	113	36	30µ/200mm	36	4	25	694	14

Order No.	l_2	l_3	l_4	l_5	Resolution	Uni-directional repeatability
L3504.200-STA	150	-	-	70	0,08µ	1,0µ
L3504.200-STB	150	-	-	70	1,0µ	1,0µ
L3504.200-STC	150	-	-	70	1,0µ	1,0µ
L3504.200-IMA	150	-	100	70	1,0µ	1,0µ
L3504.300-STA	150	100	-	156	0,08µ	1,0µ
L3504.300-STB	150	100	-	156	1,0µ	1,0µ
L3504.300-STC	150	100	-	156	1,0µ	1,0µ
L3504.300-IMA	150	100	-	156	1,0µ	1,0µ
L3504.400-STA	150	100	-	112	0,08µ	1,0µ
L3504.400-STB	150	100	-	112	1,0µ	1,0µ
L3504.400-STC	150	100	-	112	1,0µ	1,0µ
L3504.400-IMA	150	100	100	112	1,0µ	1,0µ
L3504.500-STA	150	100	100	70	0,08µ	1,0µ
L3504.500-STB	150	100	100	70	1,0µ	1,0µ
L3504.500-STC	150	100	100	70	1,0µ	1,0µ
L3504.500-IMA	150	100	100	70	1,0µ	1,0µ

Motorised Linear Stages
high precision



L3505



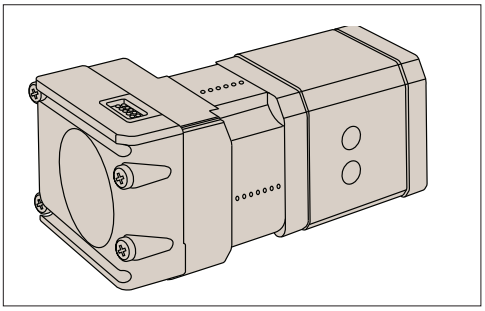
Material
Black anodised aluminium body (6061). Hardened linear guideways, stainless steel Acme lead screw (with internally lubricated anti-backlash nut).

Technical Notes
These are smooth running, precise and stiff linear stages. For ease of use they have separate connections for motor power and limit/encoder signals. Integrated limit switches are provided as standard. Supplied with optical linear encoder.
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 many pre-existing software packages (such as Labview) can be used.
Can be readily supplied in XY, XZ and XYZ configurations for 100 and 150mm stroke models.
Applications - research, semi-conductors, fibre optics, automation etc.

Tips
Stepper motor - Nema 17, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step.
Limit switches wired normally closed.
Supplied with in-built linear encoder to increase positional accuracy. Drawings show stepper motor configuration. See special pages for further motor options.

Important Notes
Max. moment loads:
My = 20 Nm
Mz = 20 Nm.
For combined stages, add suffixes:
XY - for XY stage
XZ - for XZ stage
XYZ - for XYZ stage

Order No.	Travel	Motor type	Horizontal load kg max.	Accuracy ±	Side load kg max.	Repeatability ±	Lead screw pitch	Speed mm/s max.	l_1	l_2	Resolution ±	Weight kg
L3505.100	100	Stepper & enc.	22,6	3µ	4,5	0,5µ	5	50	225,4	74,7	0,1µ	2,9
L3505.150	150	Stepper & enc.	22,6	3µ	4,5	0,5µ	5	50	275,4	74,7	0,1µ	3,2
L3505.200	200	Stepper & enc.	22,6	3µ	4,5	0,5µ	5	50	325,4	74,7	0,1µ	3,6
L3505.250	250	Stepper & enc.	22,6	3µ	4,5	0,5µ	5	50	375,4	74,7	0,1µ	3,9
L3505.300	300	Stepper & enc.	22,6	3µ	4,5	0,5µ	5	50	425,4	74,7	0,1µ	4,2
L3505.050	50	Stepper & enc.	22,6	3µ	4,5	0,5µ	5	50	174,6	74,7	0,1µ	2,7



Intelligent stepper motor

- No need for separate motion controller.
- Inbuilt motor, driver and controller.

Options

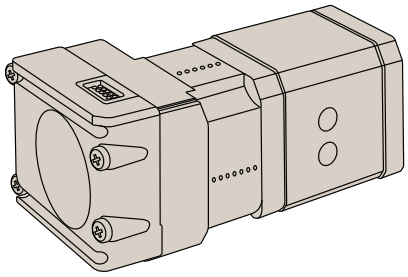
- Standard
- With rotary encoder (512 line)

Separate motor controllers (single axis)

Single axis stepper controller

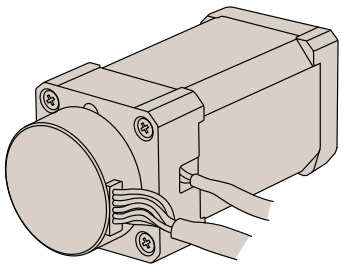
Single axis servo controller

Intelligent stepper motor



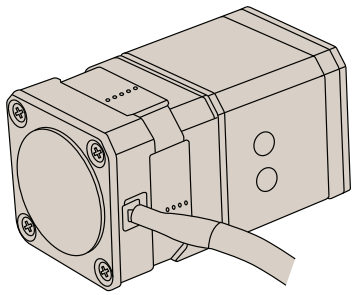
- Standard
- With rotary encoder (512 line)

Stepper motor



- Standard
- With rotary encoder (1000 line)

Servo motor

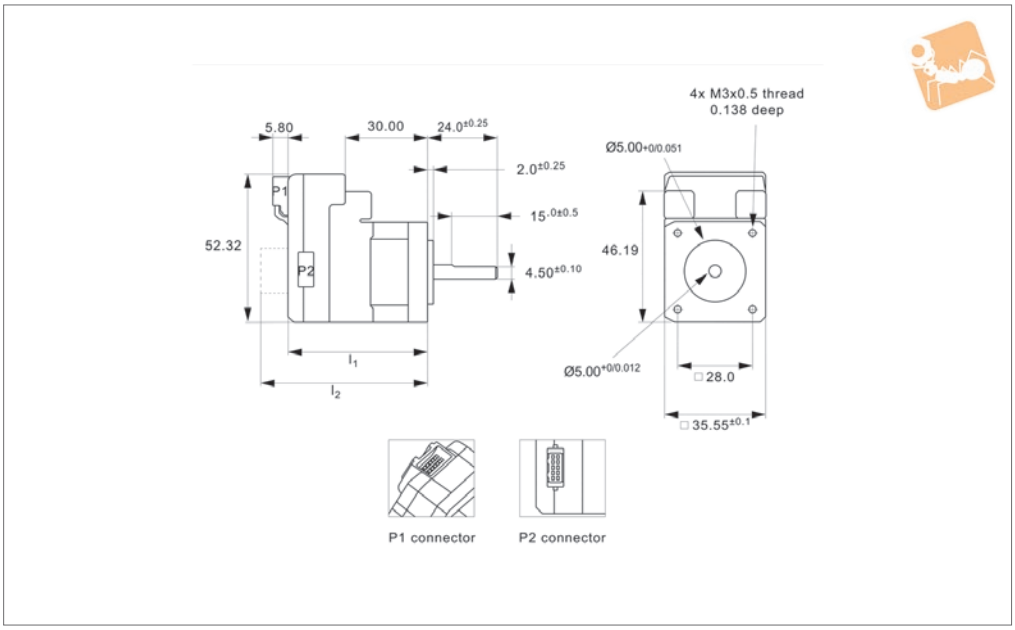


- Standard
- With rotary encoder (1000 line)

Positioning Stages from Automotion Components

Intelligent NEMA 14 Stepper Motors
with mcode software

L3530



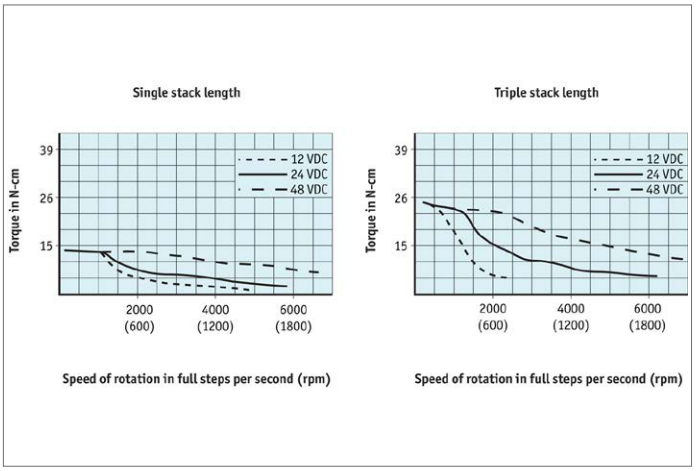
Material
Combined 2 phase, high torque stepper motors with in-built power driver and controller.
IP20 rated (IP 67 optional).

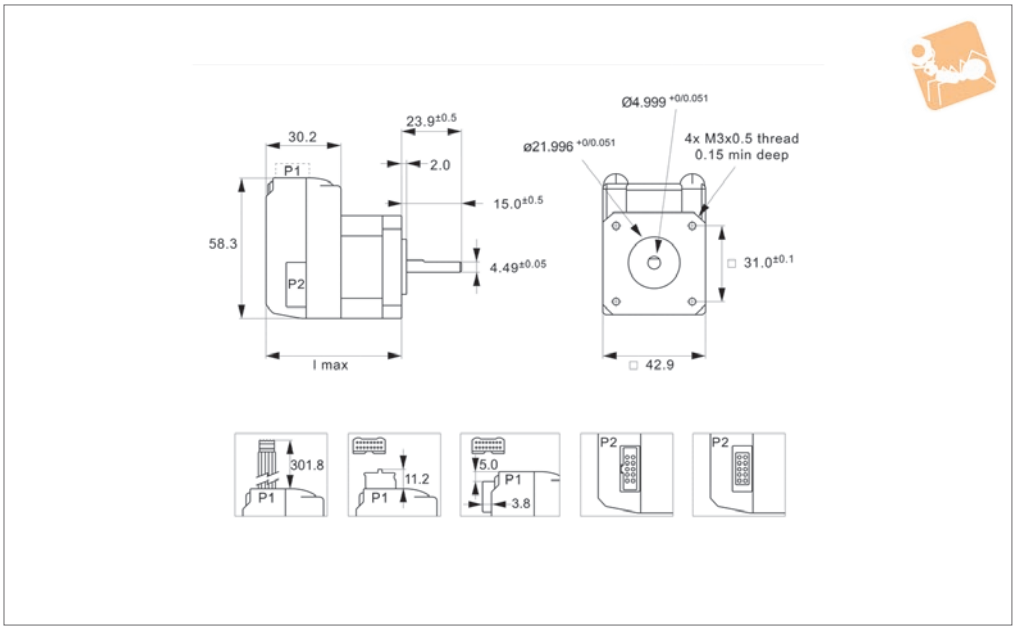
Technical Notes
Allows easy control from a PC or PLC for single or multiple motors. Low cost alternative to motors, drivers and controllers. Easy to use free software, little cabling.
Voltage 12 to 48V DC.
20 microstepping resolutions up to 51,200 steps per rev.
Up to 8 I/O lines, one 10 bit selectable analogue input.

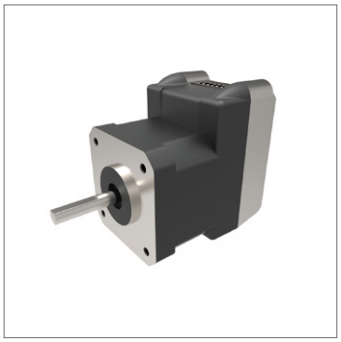
Tips
Can readily be programmed in Labview, VB etc. The motor can be run independently from PC if required (programmed can be downloaded to motor). Easy connection via RS422/485.
Optional encoders, gearing, motor brake etc.

Important Notes
We have a free motor selection help service - including a free motor configuration software programme and technical help to ensure the motor is to your requirement - please consult our technical department for full motor specifications.

Order No.	Holding torque Nm	Flange dimensions	l_1 max.	l_2 max.	Shaft +0|-0.013	Rotor inertia kg·cm²	Weight kg
L3530.14-1	0.13	35x35	49	67	5.00	0.014	0.15
L3530.14-3	0.25	35x35	77	95	5.00	0.057	0.38







L3532

Material
Combined 2 phase, high torque stepper motors with in-built power driver and controller.
IP20 rated (IP 67 optional).

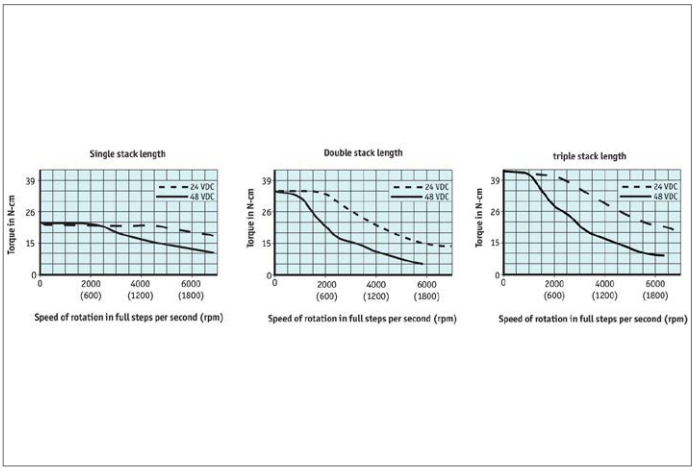
Technical Notes
Allows easy control from a PC or PLC for single or multiple motors. Low cost alternative to motors, drivers and controllers. Easy to use free software, little cabling.

Voltage 12 to 48V DC.
20 microstepping resolutions up to 51,200 steps per rev.
Up to 8 I/O lines, one 10 bit selectable analogue input.

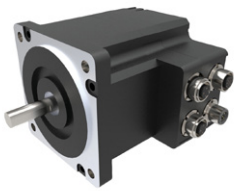
Tips
Can readily be programmed in Labview, VB etc. The motor can be run independently from PC if required (programmed can be downloaded to motor). Easy connection via RS422/485.
Optional encoders, gearing, motor brake etc.

Important Notes
We have a free motor selection help service - including a free motor configuration software programme and technical help to ensure the motor is to your requirement - please consult our technical department for full motor specifications.

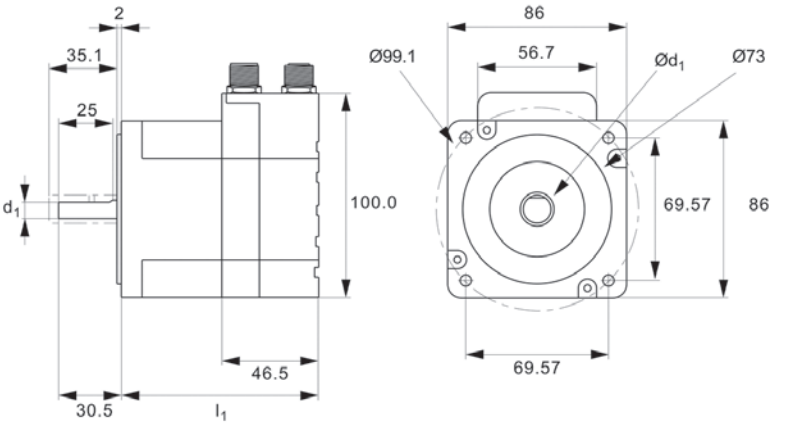
Order No.	Holding torque Nm	Flange dimensions	l_1 max.	Shaft +0|-0.013	Rotor inertia kg·cm²	Weight kg
L3532.17-1	0.23	43x43	56	5.00	0.038	0.30
L3532.17-2	0.42	43x43	62	5.00	0.057	0.34
L3532.17-3	0.53	43x43	71	5.00	0.082	0.43



Intelligent NEMA 34 Stepper Motors
with mactalk software



L3536



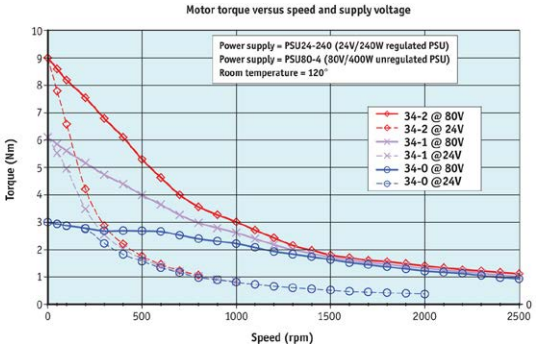
Material
Combined 2 phase, high torque stepper motors with in-built power driver and controller.
IP42/55 rated (IP 67 optional).

Technical Notes
Allows easy control from a PC or PLC for single or multiple motors. Low cost alternative to motors, drivers and controllers. Easy to use free software, little cabling. The I/O points can be set up by users as Input or Output or as analogue input.
Resolution: 409600 counts/rev.
Mainly supply voltage: 12-80V DC.
Control and main I/O supply voltage: 12-28V DC.
Nominal speed range 0.01-3000 rpm.

Tips
8 I/O's that can be configured to Inputs, Outputs or analogue Inputs.
Can readily be programmed in Labview, VB etc. The motor can be run independently from PC if required (programmed can be downloaded to motor). Easy connection via USB port, RS 485, optional wireless and ethernet control.
Optional encoders, gearing, motor brake etc.

Important Notes
We have a free motor selection help service - including a free motor configuration software programme and technical help to ensure the motor is to your requirement - please consult our technical department for full motor specifications.

Order No.	Holding torque Nm	Flange dimensions	Length	Shaft +0|-0.013	Power W max.	Rotor inertia kg·cm²	Typical supply current @24V DC ADC RMS	Typical supply current @48V DC ADC RMS	Typical supply current @80V DC ADC RMS	Weight kg
L3536.34-0	3,0	87x87	95	9,53	260	1,4	5,1	5,1	5,1	2,0
L3536.34-1	6,1	87x87	126	9,53	288	2,7	5,6	5,3	5,6	3,1
L3536.34-2	9,0	87x87	156	14,0	315	4,0	6,0	5,4	6,1	4,2
L3536.34-3	10,5	87x87	220	14,0	>320	5,3	6,3	5,7	6,6	5,3


Motor torque versus speed and supply voltage
Power supply = PSU24-240 (24V/240W regulated PSU)
Power supply = PSU80-4 (80V/400W unregulated PSU)
Room temperature = 120°
34-2 @ 80V
34-2 @ 24V
34-1 @ 80V
34-1 @24V
34-0 @ 80V
34-0 @24V
Torque (Nm)
Speed (rpm)
0
1
2
3
4
5
6
7
8
9
10
500
1000
1500
2000
2500

Motorised Stages

Controllers & accessories

Positioning Stages from Automotion Components

Controllers

L3294 Single axis stepper motor controller

- Communicate via RS-232 or Ethernet interface
- Uses virtually any programming language

L3295 Two axis stepper motor controller

- Communicate via RS-232 or Ethernet interface
- Programming via Labupu, VB, C++ and OSX etc.
- Stand alone programs can be downloaded
- Max output of 1.5A

L3296 Multi axis stepper motor controller

- Communicate via RS-232 or Ethernet interface
- Can control 4 axis and perform coordinated or independent motion of each or all the axis simultaneously
- Uses virtually and programming language

L3297 Single axis servo motor controller

- Communicate via RS-232 or Ethernet interface
- Uses virtually any programming language

Accessories

Joysticks

Digital readout

Connector RS232-USB

Connector RS422-USB

These have major benefits as they combine the motor (from size NEMA17 up) with an inbuilt driver and controller.

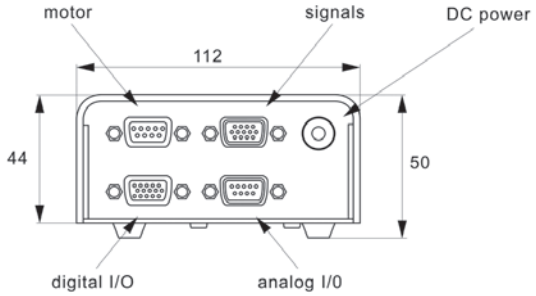
- Stepper or servo motor versions.
- Simple to install
- CE certified
- Free software programming

Plug and play

- Download free software
- Connect motor to computer (USB port)
- Connect power supply to the motor
- Start controlling/programming

- Low cost solution.
- The I/O points can be set by users to input, output or analogue input.
- NEMA17, 23, 34, 43 and larger sizes available.
- 12-48VDC.
- High torque stepper motors (1.2 to 10.5 Nm).
- Simple Windows software program provided free).
- Also Labview VB etc. programs.
- IP67, Motor brake.
- Optional Joysticks.

L3521



controller depth = 86mm

Material

Includes universal AC power adapter, user interface software and USB cable.

Technical Notes

Communication: USB 2,0 or RS-485 ASCII (9600 - 115200 bps)
Digital IO Communication: 4 bit motion profile select inputs (DI3-DI6). One start motion input (DI1). One abort/clear motion input (DI2). One in position output (DO1). One error output (DO2).
A/B/Z differential encoder inputs: StepNLoop closed loop control (position verification)
2 x 10-bit analog inputs (joystick control).
Opto-isolated I/O: 6 x inputs, 2 x outputs, 1 x high speed position capture latch input, +limit/-limit/home inputs.

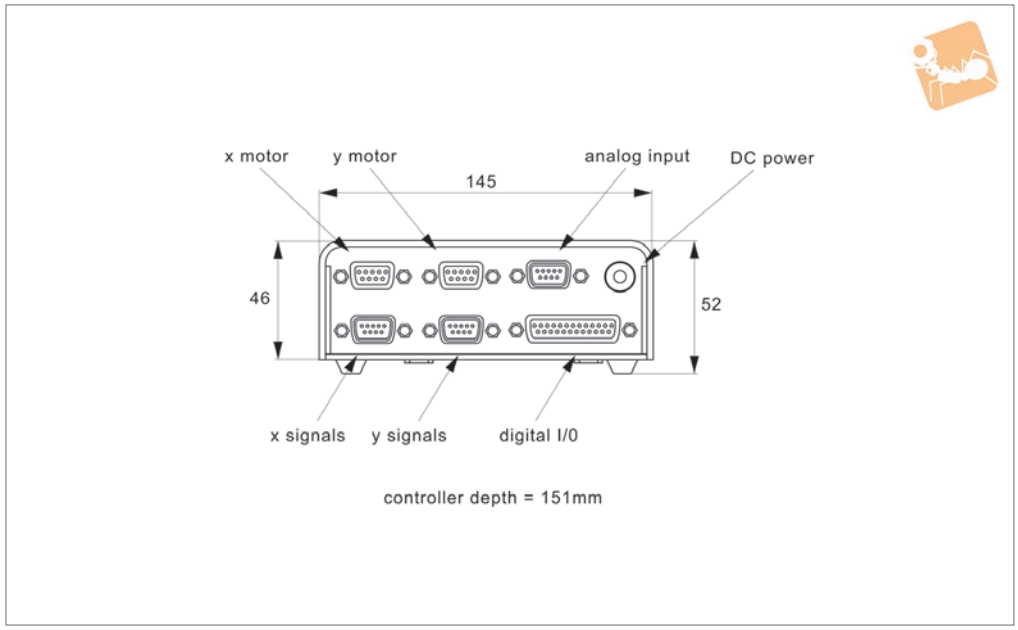
Tips

Can only be plugged into, and control a single axis. Comes with cables and software. Simple plug and play system via USB port of your laptop or PC. Also has analogue inputs for connection of a joystick control.
This motion controller can only be used with stages that have a stepper motor attached. If you have a servo motor, see part number L3297.
Micro-stepping is the number of steps per step of the motor output shaft. e.g the stepper motors have 200 steps per revolution of the shaft. The motion controllers are defaulted to 250 microsteps. This means that the motor shaft has 50,000 steps per revolution (250 x 200).
Compatible with LabView, Matlab, VB, C++, Python, and OS X.

Important Notes

When using with Matlab a RS-485 to USB adapter will be required.

Order No.	No. of axes	Encoder	Input voltage V DC	Output current Amps max.	Micro-step resolution	Weight kg
L3521.ST1X	One	No	+12 to +24	3.0	2 to 500	0.34
L3521.ST1X-E	One	Yes	+12 to +24	3.0	2 to 500	0.34
L3521.RS485	USB cable	-	-	-	-	



L3522

Material
Includes universal AC power adapter, user interface software and USB cable.

Technical Notes
Communication: USB 2,0 or RS-485 ASCII (9600 - 115200 bps)
Digital IO Communication: 4 bit motion profile select inputs (DI3-DI6). One start motion input (DI1). One abort/clear motion input (DI2). One in position output (DO1). One error output (DO2).
A/B/Z differential encoder inputs (Max frequency of 5 MHz): StepNLoop closed loop control (position verification)
2 x 10-bit analog inputs.
Opto-isolated I/O: 8 x inputs, 8 x outputs, +Limit/-Limit/Home inputs per axis
Stand alone programmable.
Max. pulse input rate of 400K.

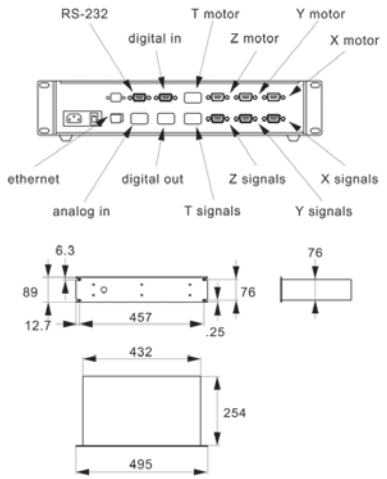
Tips
Can be plugged into, and control two axis simultaneously. Comes with cables and software. Simple plug and play system via USB port of your laptop or PC.
This motion controller can only be used with stages that have a stepper motor attached. If you have a Servo motor, see part number L3297.
Micro-stepping is the number of steps per step of the motor output shaft. e.g the stepper motors have 200 steps per revolution of the shaft. If the motion controllers are set to 8 microsteps, this means that the motor shaft has 1600 steps per revolution (8 x 200).
Compatible with LabView, Matlab, VB, C++, Python, and OS X.

Important Notes
When using with Matlab a RS-485 to USB adapter will be required.

Order No.	No. of axes	Encoder	Input voltage V DC	Output current Amps max.	Micro-step resolution	Weight kg
L3522.ST2X	Two	No	+12 to +24	1.5	1 to 8	0.45
L3522.ST2X-E	Two	Yes	+12 to +24	1.5	1 to 8	0.45
L3522.RS485	USB cable	-	-	-	-	

Multi-Axes Stepper Controllers

L3524



Material

Incorporates a Motorola 32 bit microcomputer. Configurable to run up to four stepper or servo motors. For 2/4 phase bipolar stepper motors.
Power input 100-240V AC, 47-63 Hz.

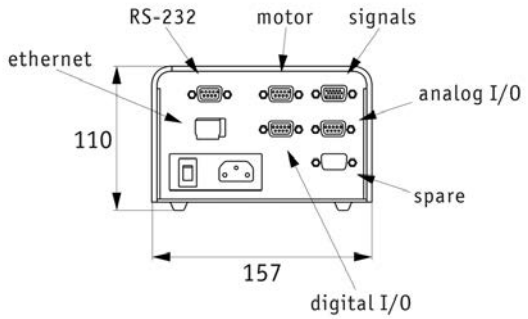
Technical Notes

Communication: RS-485 (up to 19,2 kbps) 10 Base-T Ethernet.
Encoder feedback: High speed differential inputs up to 12Mhz.
Number of I/O: 4 x inputs, 4 x outputs.
Program and data storage: 1000 lines x 80 characters. 510 variables. 8000 array elements in up to 30 arrays.
Easy programming with simple command language. Communication drivers are available for Windows, .NET, Mac OSX and Linux.
Operating temperature 0°C to 50°C, humidity 20-95%.

Tips

Can be plugged into, and control up to four axes simultaneously. Comes with cables and software. Simple plug and play system via USB port of your laptop or PC.
Micro-stepping is the number of steps per revolution of the motor output shaft.

Order No.	No. of axes	Encoder	Voltage for stepper driver	Output current continuous Amps	Output current peak Amps
L3524.ST2X	Two stepper	No	24V DC	-	3
L3524.ST2X-E	Two stepper	Yes	24V DC	-	3
L3524.ST3X	Three stepper	No	24V DC	-	3
L3524.ST3X-E	Three stepper	Yes	24V DC	-	3
L3524.ST4X	Four stepper	No	24V DC	-	3
L3524.ST4X-E	Four stepper	Yes	24V DC	-	3
L3524.SV2X	Two servo	No	48V DC	7	10
L3524.SV2X-E	Two servo	Yes	48V DC	7	10
L3524.SV3X	Three servo	No	48V DC	7	10
L3524.SV3X-E	Three servo	Yes	48V DC	7	10
L3524.STV4X	Four servo	No	48V DC	7	10
L3524.SV4X-E	Four servo	Yes	48V DC	7	10



controller depth = 254mm

L3525

Technical Notes

The L3297 servo motion controller is a single-axis controller and amplifier designed for use with all servo motor stages. The controller can communicate with the host computer through an RS-232 or 10/100 Base-T Ethernet interface. With built-in high level functionality such as position tracking, contouring and teach/playback, programming the controller is greatly simplified.
The motion controller can operate as a stand-alone system through the digital I/O for synchronizing motion with external events. It utilises a 32-bit microprocessor to control the trajectory profile, acceleration, velocity, deceleration and program memory with multi-tasking for simultaneously running up to eight programs.

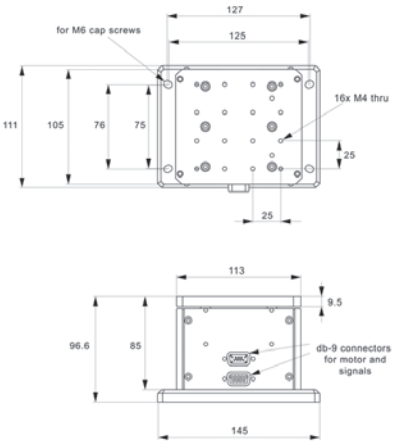
Tips

Features:
Single-axis motion controller with on-board PWM drive for brush or brushless servo motor and integrated power supply.
Ethernet 10/100 Base-T and (1) 19.2kb RS232 port.
Accepts encoder feedback up to 12 MHz.
Advanced PID compensation with velocity and acceleration feedforward, integration limits, notch filter and low-pass filter.
Modes of motion include jogging, point-to-point positioning, contouring, electronic gearing and ECAM.
Multi-tasking for concurrent execution of up to eight application programs.
Non-volatile memory for application programs, variables and arrays.
Over 200 English-like commands executable by controller. Includes conditional statements and event triggers.
Home input and forward and reverse limits.
Four TTL uncommitted inputs and 4 outputs.
TWO uncommitted analog inputs (0-5V).

Order No.	No. of axes	Input power	Drive current continuous Amps	Drive current peak Amps
L3525.SV1X	One	120-240V AC	7	10

Motorised Vertical Lift Stages
high precision

L3591



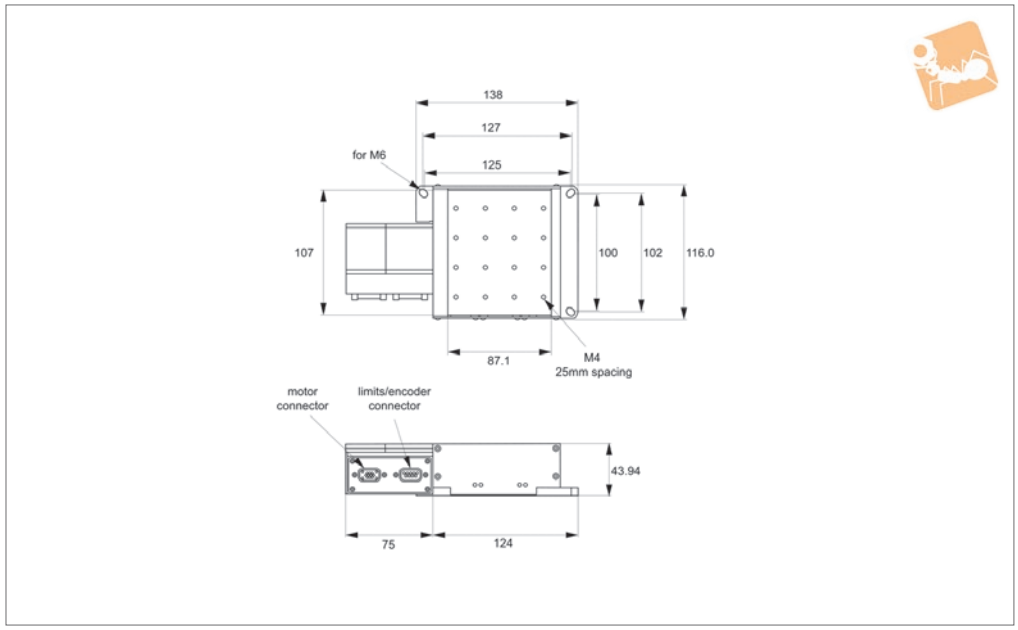
Material
Black anodised aluminium body (6061). Hardened linear guideways, stainless steel Acme lead screw (with internally lubricated anti-backlash nut).

Technical Notes
Easy plug and play system. Integrated limit switches are provided as standard. Controllable from PC or PLC when used in conjunction with a motion controller. Controllers come with their own software but many pre-existing software packages (such as Labview) can be used. Applications - research, semi-conductors, fibre optics, automation etc.

Tips
Stepper - Nema 17, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Option with 1000 line rotary encoder.
Limit switches are wired normally closed.

Important Notes
Motor resolution 0,03µ, encoder resolution 0,4µ. Minimum step size 0,5µ.

Order No.	Travel	Accuracy ±	Uni-directional repeatability ±	Load kg max.	Speed mm/s max.	Lead screw pitch	Motor type	Weight kg
L3591.025-STA	25	10µ	1µ	7.0	10	1.5875	Stepper	2.5
L3591.025-STB	25	10µ	1µ	7.0	10	1.5875	Stepper & enc.	2.5



L3592

Material
Black anodised aluminium body (6061). Hardened linear guideways, stainless steel Acme lead screw (with internally lubricated anti-backlash nut).

Technical Notes
Easy plug and play system. Integrated limit switches are provided as standard. Controllable from PC or PLC when used in conjunction with a motion controller. Controllers come with their own software but many pre-existing software packages (such as Labview) can be used. Applications - research, semi-conductors, fibre optics, automation etc.

Tips
Motor options:
Stepper - Nema 17, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Option with 1000 line encoder.
Intelligent stepper - Nema 17 with a fully programmable motion controller inbuilt (ie 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.
Option with 512 line encoder.
Limit switches are wired normally closed.
Drawings show stepper motor configuration. See special pages for further motor options.

Important Notes
Motor resolution 0.03µ, encoder resolution 0.4µ.

Order No.	Travel	Accuracy ±	Uni-directional repeatability ±	Load kg max.	Speed mm/s max.	Lead screw pitch	Motor type	Weight kg
L3592.015-STB	15	10µ	1µ	7.0	5	1.5875	Stepper & enc.	1.1
L3592.015-IMA	15	10µ	1µ	7.0	5	1.5875	Int. stepper & enc.	1.1
L3592.015-IMB	15	10µ	1µ	7.0	5	1.5875	Int. stepper	1.1
L3592.015-STA	15	10µ	1µ	7.0	5	1.5875	Stepper	1.1

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

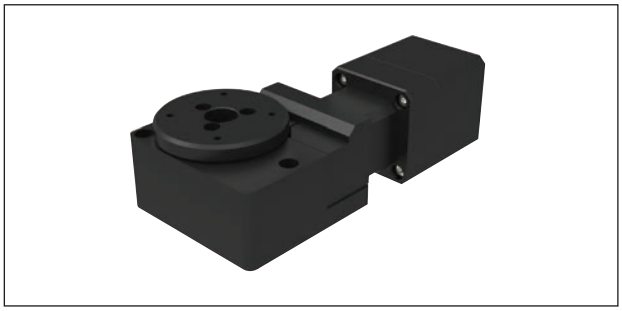
The difference between the control and instructed position.

Backlash errors

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

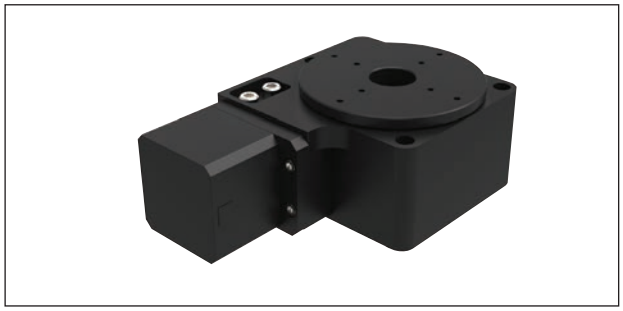
Encoder errors

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



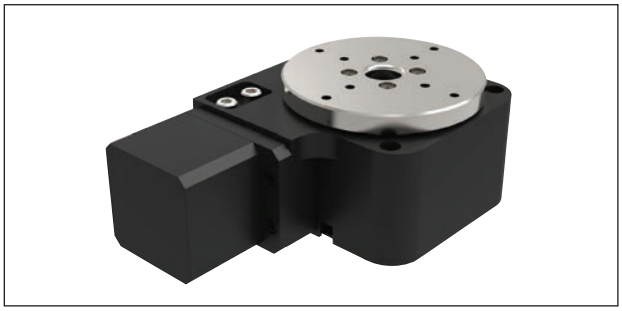
L3550 Ø50 Rotary stage

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



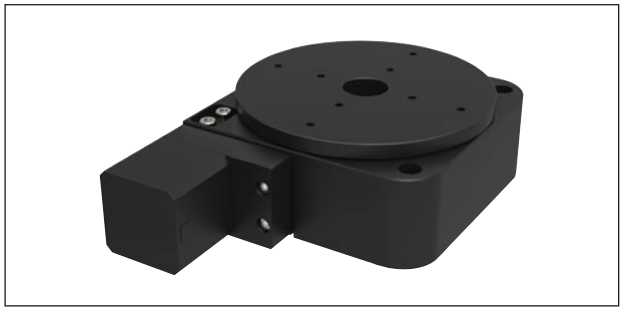
L3552 Ø75 Rotary stage

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



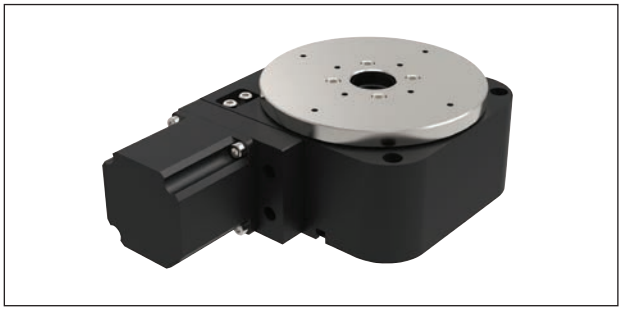
L3554 Ø75 Rotary stage, heavy duty

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



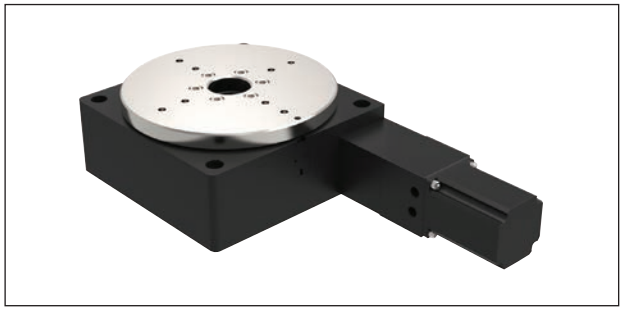
L3556 Ø125 Rotary stage, medium duty

- 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.

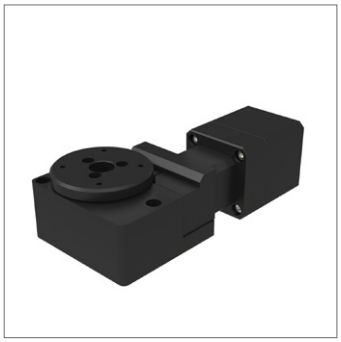


L3662 Ø200 Rotary stage

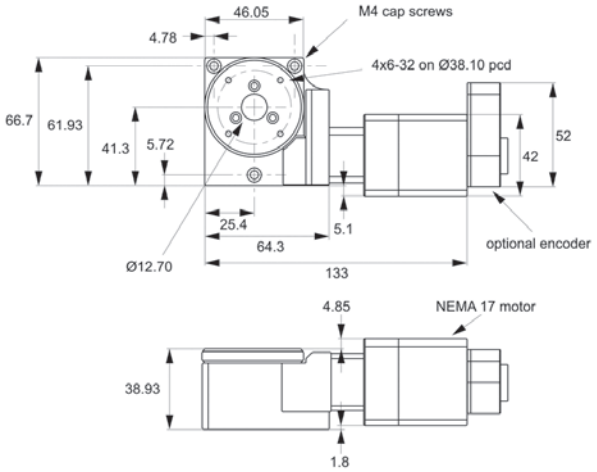
- Motorised.
- Accurate to 70 arc-secs, repeatedly to 5 arc-secs.
- Loads up to 125kg.

Motorised Rotary Stages Ø50

high precision, medium duty



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.

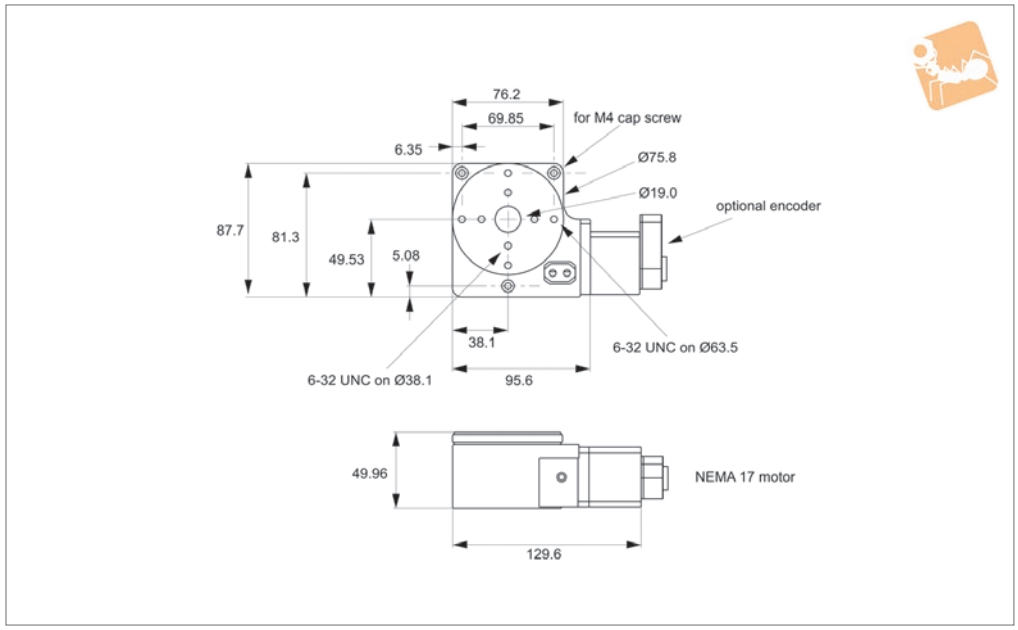
Integrated stepper motor has a motion controller built into it.
The stages are offered with different gear ratio options. A proprietary preload system ensures zero backlash in the gear train.
The travel is 360° continuous.
Easy to use plug and play system when used with a motion controller. Can be used in conjunction with motorised linear stages for multi-axis applications.

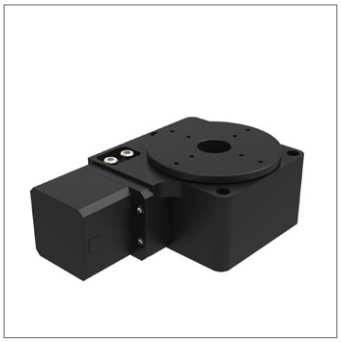
Tips

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“





L3552

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.

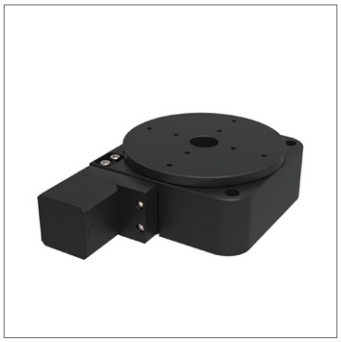
Tips
Requires external home switch (if required).
Motor options:
Stepper - Nema 17, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Optionally with home switch and/or 1000 line rotary encoder.
Intelligent stepper - Nema 17 with a fully programmable motion controller inbuilt (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

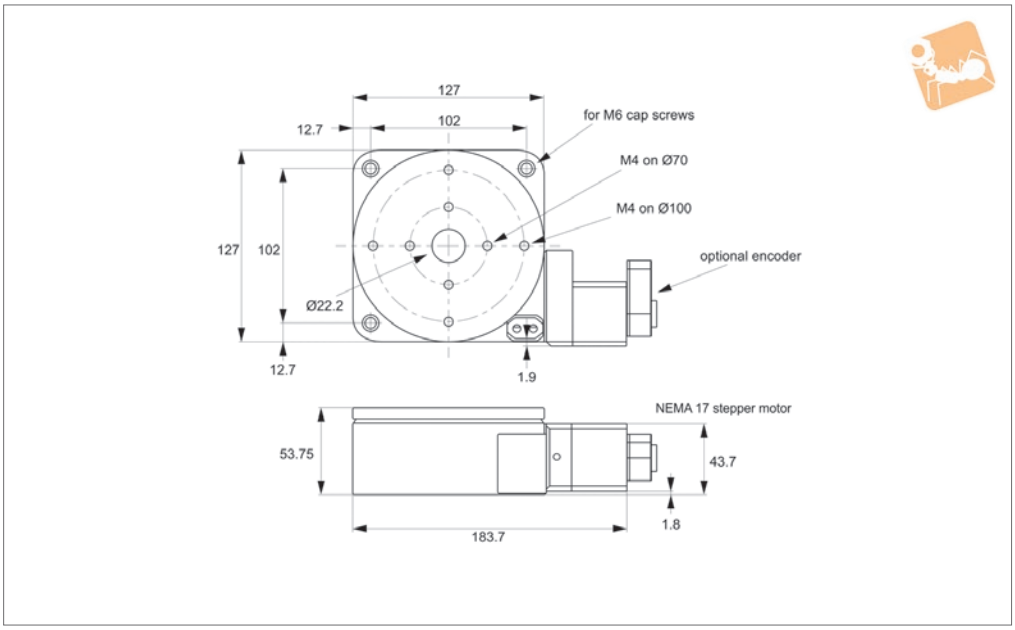
Order No.	Moment load Nm max.	Accuracy ± arc-secs	Uni-directional repeatability ±	Bi-directional repeatability ±	Gear ratio	Resolution ± arc-secs
L3552.075-STA	5.1	70“	5“	45“	90:1	0,29“
L3552.075-IMA	5.1	70“	5“	45“	90:1	0,29“
L3552.075-STB	5.1	70“	5“	45“	90:1	0,29“

Motorised Rotary Stage Ø125

high precision, medium duty



L3556



Material

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

Technical Notes

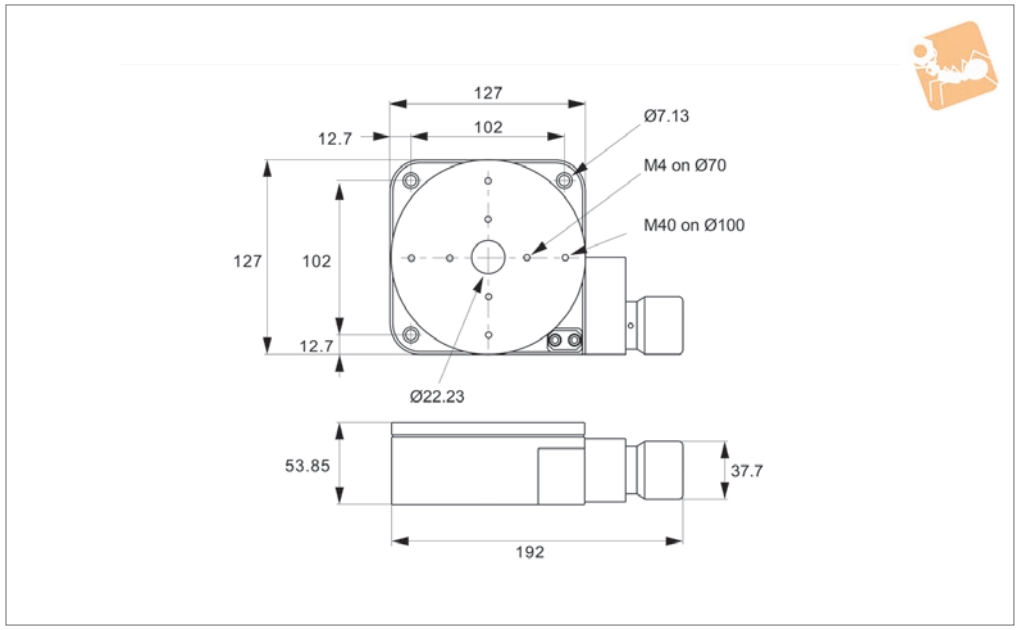
The design utilises a thrust bearing system for the table movement. This offers excellent stability at low cost, but as a result, is not really suitable for use in a vertical application. For vertical applications see L3254 and L3258 - L3262.
Easy plug and play system. Controllable from PC or PLC when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

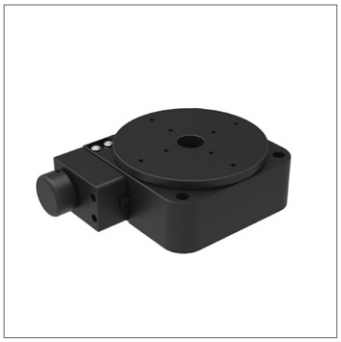
Tips

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“





L3559

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°.

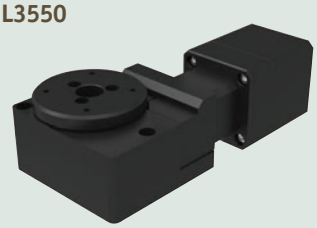
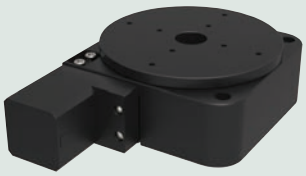
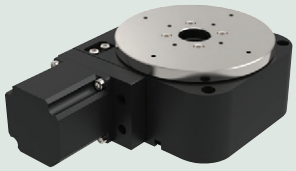
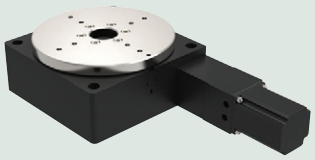
Tips
A precision rotary encoder provide positional information to a small digital readout (DRO) unit. Positive and negative measurements.
Includes 12V power adapter.
Seven 12mm high numeric digits with blue

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	-	-	-	-	-	-	-	-	

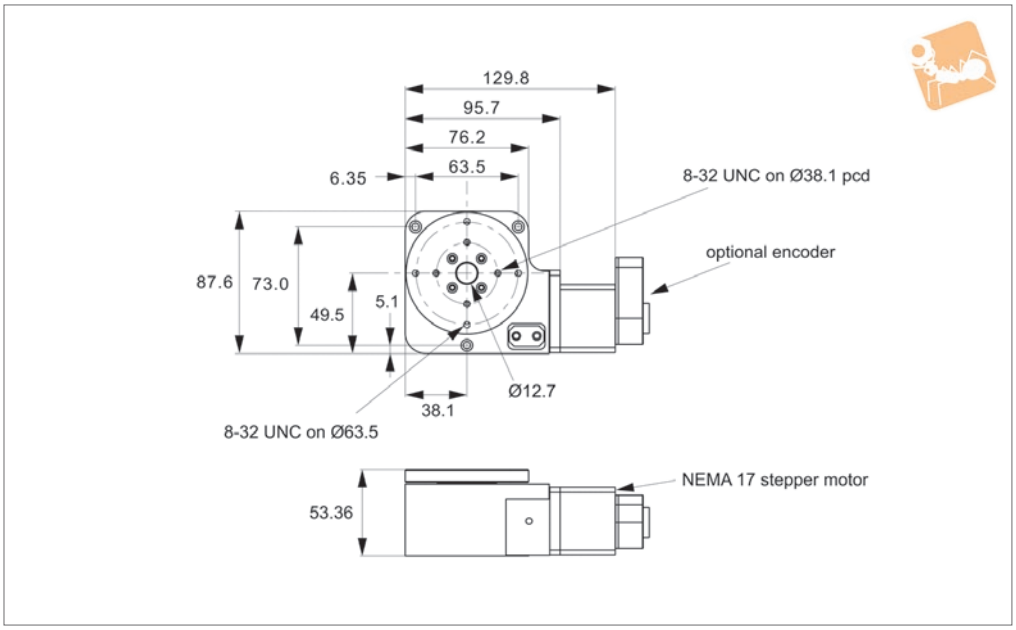
Rotary Stages

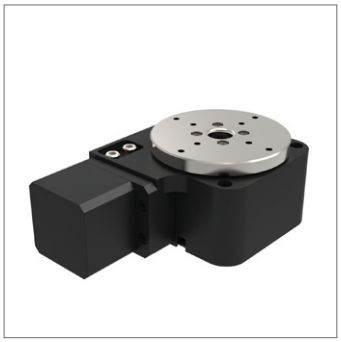
Motor options

Positioning Stages from Automotion Components

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

ov-rotary-stages-motor-options-lnh - Updated - 03-03-2023





L3554

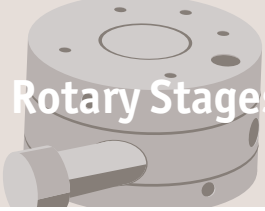
Material
Aluminium alloy body (light, stiff and stable), black anodised.
Weight 1,4 Kg.

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

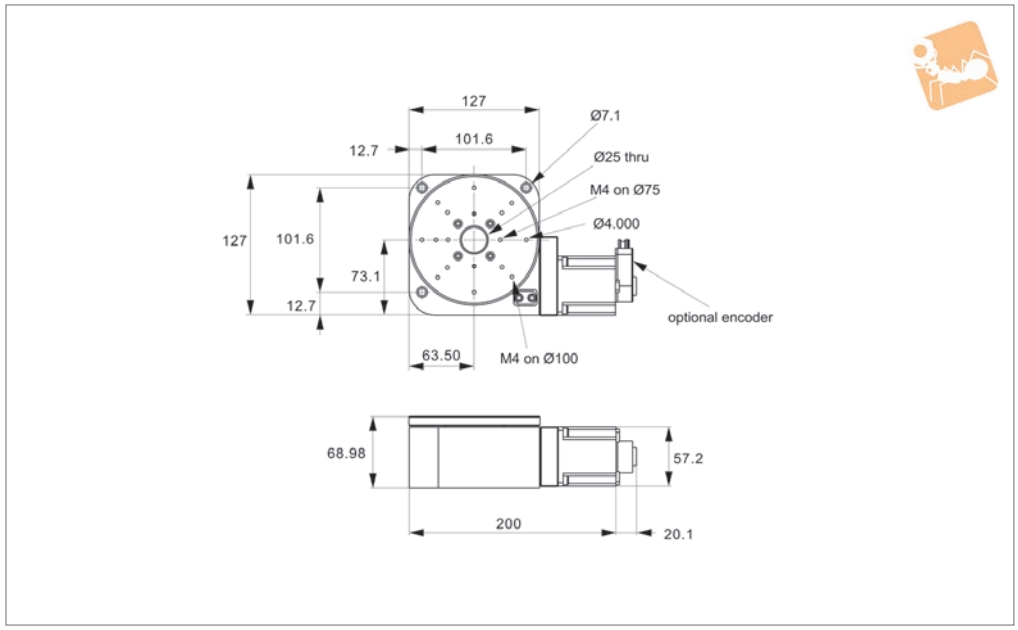
Order No.	Uni-directional repeatability ± arc-secs	Bi-directional repeatability ± arc-secs	Accuracy ± arc-secs	Gear ratio	Resolution ± arc-secs
L3554.075-STA	5“	45“	70“	90:1	0.3

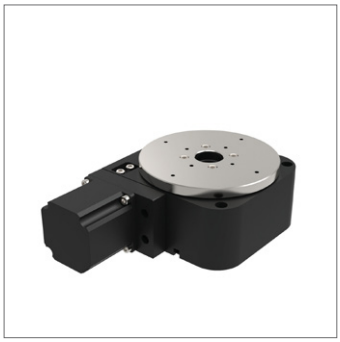


Motorised Rotary Stages Ø75

high precision, heavy duty

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

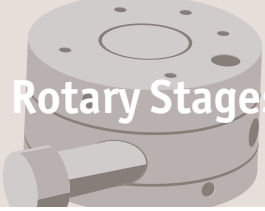
Material
Aluminium alloy body (light, stiff and stable), black anodised.
Weight 3,6 Kg.

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

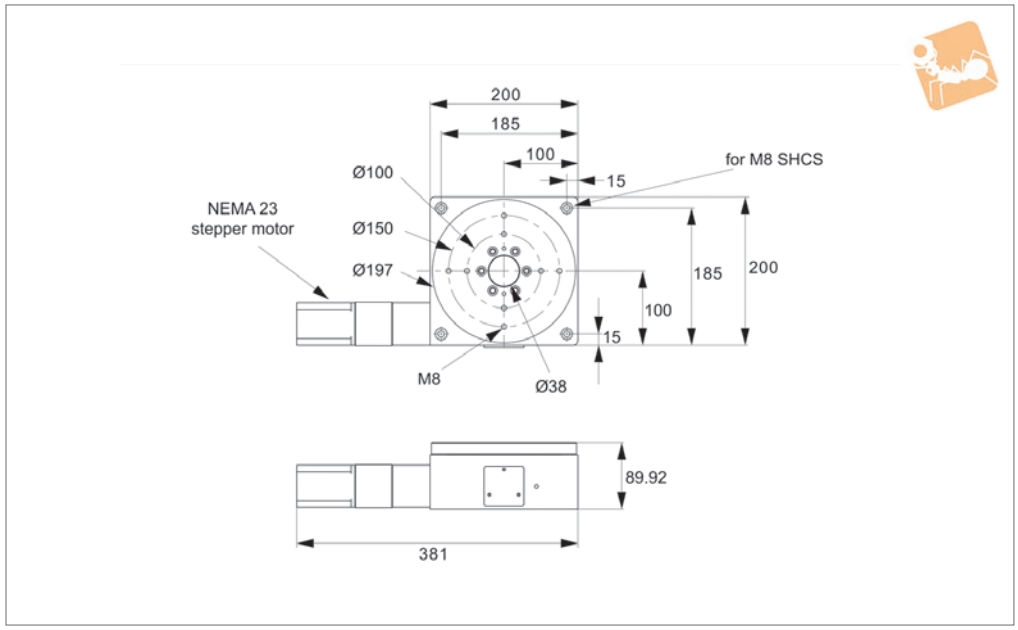
Order No.	Uni-directional repeatability ± arc-secs	Bi-directional repeatability ± arc-secs	Accuracy ± arc-secs	Gear ratio	Resolution ± arc-secs
L3558.125-STA	5“	45“	70“	72:1	0,36“
L3558.125-SVA	5“	45“	70“	72:1	4,5“
L3558.125-STC	5“	45“	70“	72:1	0,36“
L3558.125-IMA	5“	45“	70“	72:1	0,36“
L3558.125-IMC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

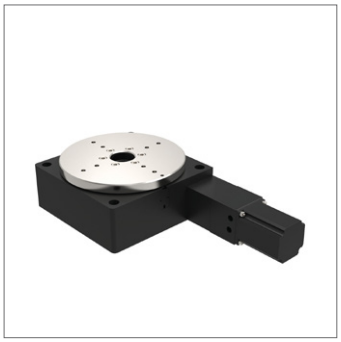


Motorised Rotary Stage Ø125

high precision, heavy duty

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 fro added stability when stopped.

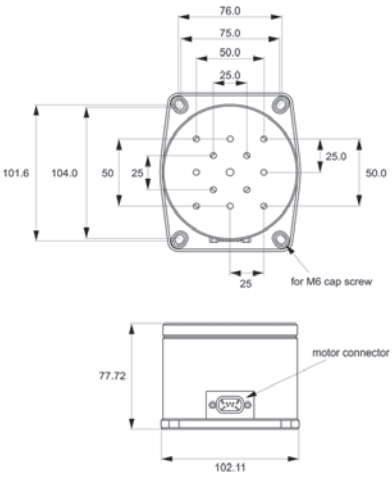
Tips
Requires external home switch (if required).
Motor options:
Stepper - Nema 23, high torque, brushless. 0.95 Amp/phase, 5.0 Ohm/phase, 3.1 mH/phase, 1.8°/step. Optionally with home switch and/or 1000 line rotary encoder.
Servo - Nema 23,with home switch and 1000 line rotary encoder.
Intelligent stepper - 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“

High Speed Rotary Tables

L3569

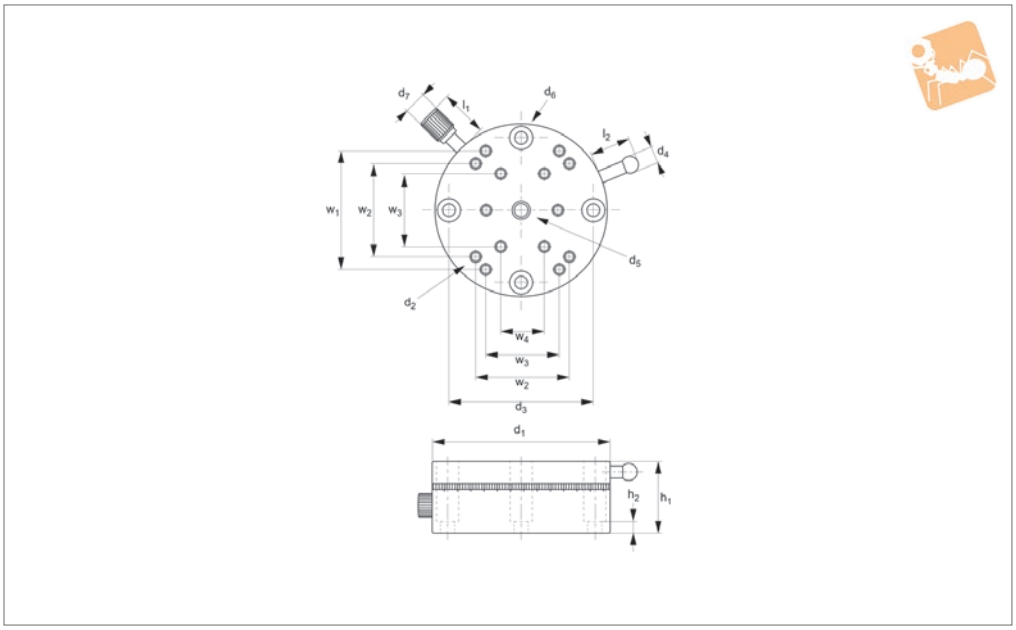


Material
Aluminium alloy body (light, stiff and stable).

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^2.

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^2 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

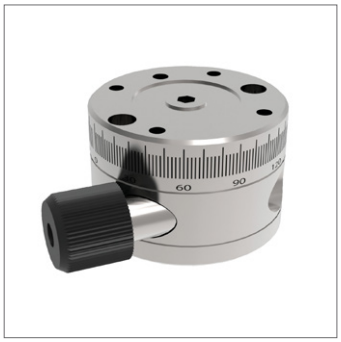
Material
Aluminium body blackened, steel knob.

Technical Notes
360° adjustment.
Runout 50µ.

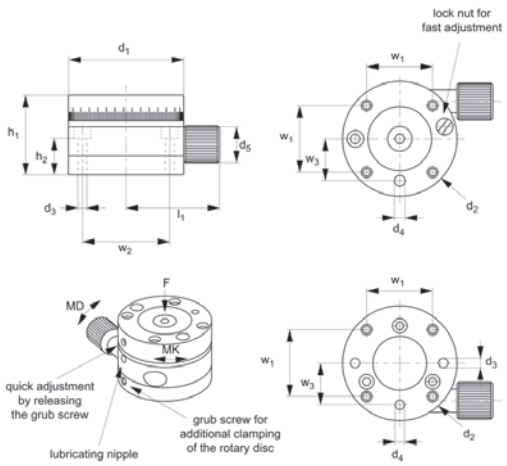
Order No.	Load N max.	d_1	Vernier reading min.	h_1	h_2	d_2	d_3	d_4	Weight kg
L3330.040	5.0	40	2°	20	4	M2	25	5.5	0.14
L3330.060	7.0	60	1°	25	4	M4	50	5.5	0.20

Order No.	d_5	d_6	d_7	l_1	l_2	w_1	w_2	w_3	w_4
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



L3339

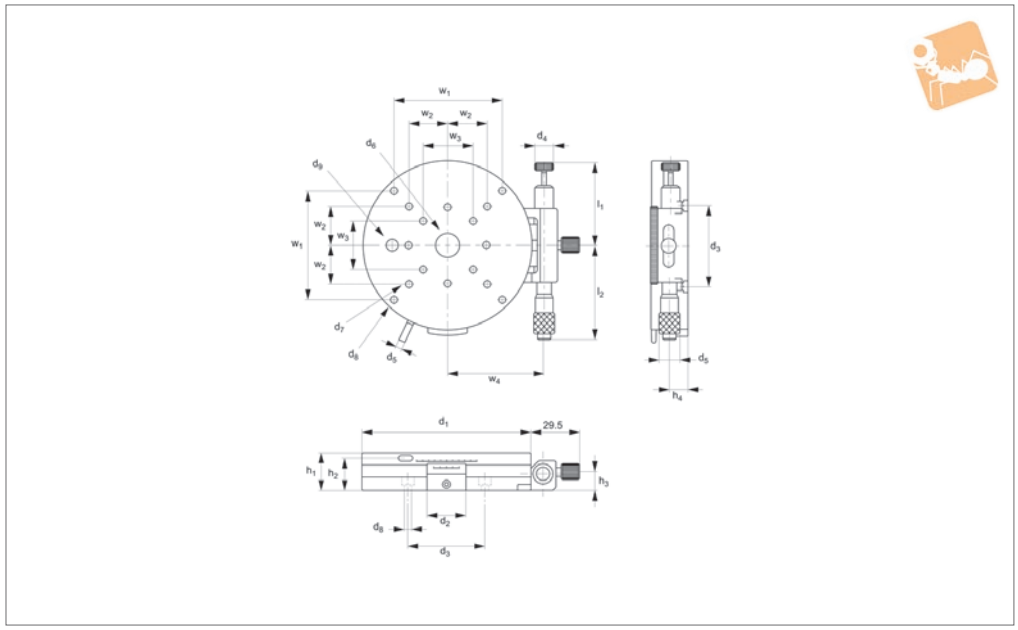


Material
Stainless steel AISI 303 rotary disc, black anodized aluminium control knob. All other part steel or brass.

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_1 tol. h7	h_1	h_2	d_2	d_3	d_4 tol. H7	d_5	l_1	w_1	w_2	w_3 ±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_d 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.

±5°.

Technical Notes
Coarse 360° adjustment., fine adjustment

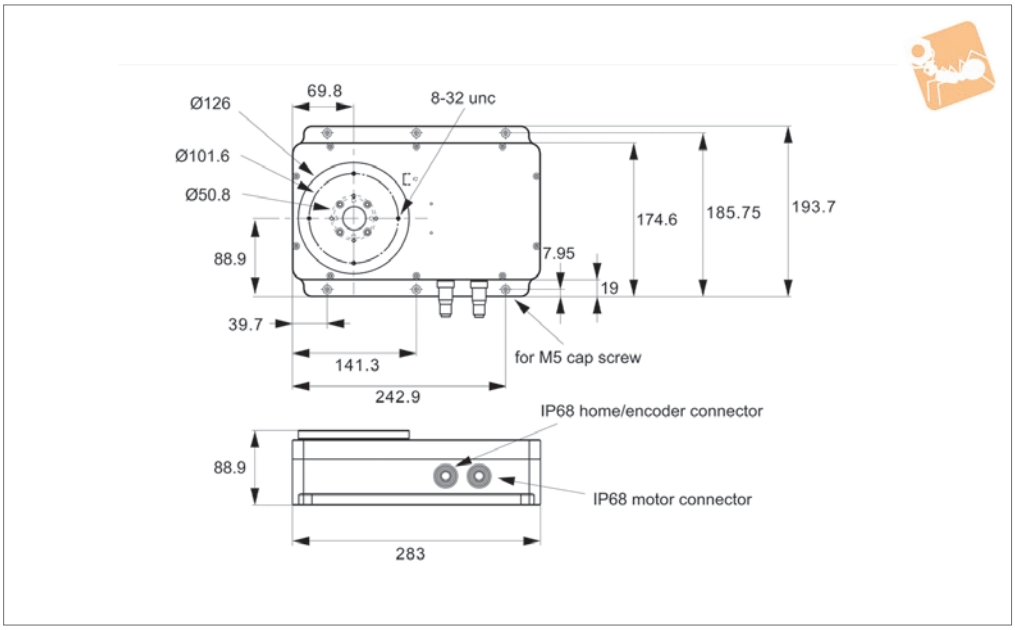
Order No.	d_1	Load N max.	Vernier reading min.	h_1	h_2	h_3	h_4	d_2	Weight kg
L3331.038	38	1.0	1‘ 26“	17.5	11	10.5	4.5	16	0.09
L3331.060	60	3.0	0‘ 55“	22.5	13	12.5	11.5	15	0.28
L3331.085	85	4.0	0‘ 43“	25	22	13.0	11.5	20	0.48
L3331.110	110	5.0	0‘ 34“	25	22	13.0	11.5	25	0.75

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

Motorised Rotary Stage Ø125

high precision, submersible

L3560



Material

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

Technical Notes

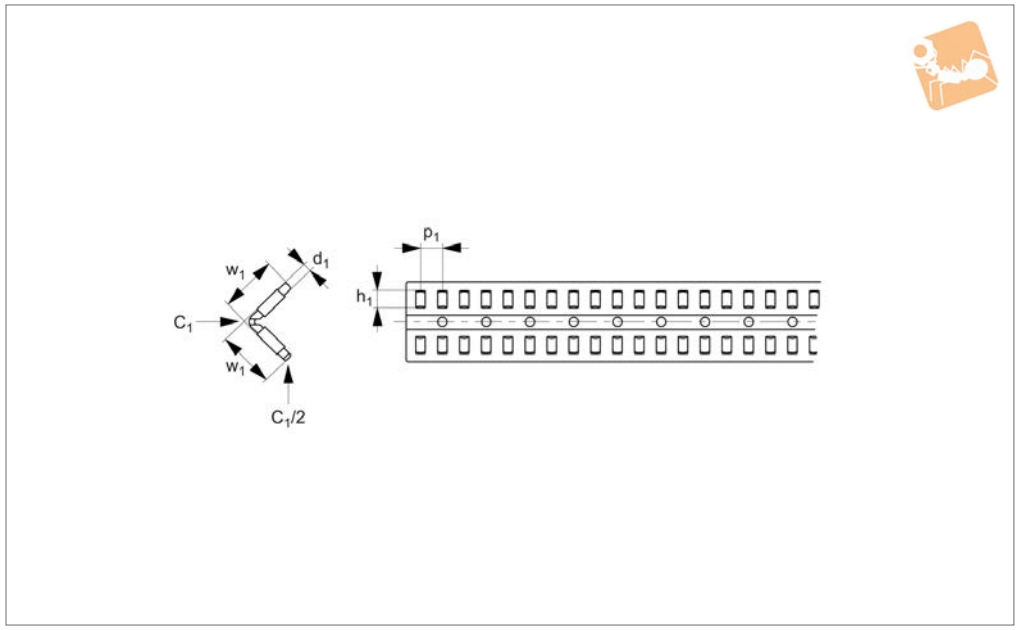
The design utilises a single preloaded crossed roller bearing system for the table movement. This eliminates the use of dual bearing configuration, thus improving axial runout and wobble.
The stages are offered with different gear ratio options. A proprietary preload system ensures zero backlash in the 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“



L1004.HW

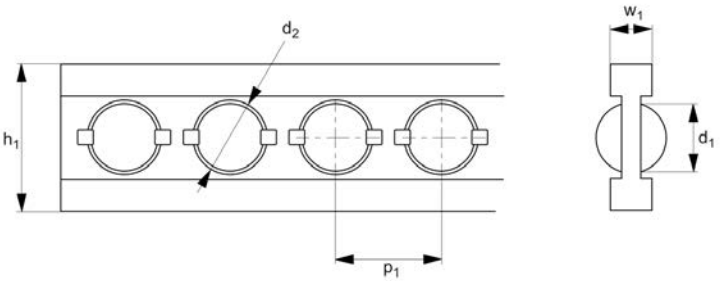
Material
Steel rollers (100Cr6, hardened to 60 HRC), aluminium retaining cage (apart from L1004.HW10 - steel).

Technical Notes
When ordering please specify the length required (must be a multiple of pitch, p). Supplied in max. 1 metre lengths.
Ordering example:
L1004.HW15-030 is a 3mm diameter roller strip 45mm long with 30 rollers (as 10xp = 45mm).

Tips
See technical pages for load rating calculations - based on rail size and number of rollers in the system cages.

Order No.	d_1 ±0.001	p_1	h_1	w_1	Dyn. load C /pair of rollers N max.	To suit rail
L1004.HW10-xxx	2.0	4.0	4.8	10	2.500	L1004.22
L1004.HW15-xxx	2.0	4.5	6.8	15	4.000	L1004.25
L1004.HW20xxx	2.5	5.5	9.8	20	7.300	L1004.30
L1004.HW25-xxx	3.0	6.0	13.8	25	12.500	L1004.35
L1004.HW30-xxx	3.5	7.0	17.8	30	18.500	L1004.45

L1007



Material

Ball steel (100Cr6 to DIN 5401, class 3), ball cage plastic (PA 12).
Can also be supplied with corrosion resistant stainless balls (AISI 304) balls, plastic balls (POM) or ceramic balls.

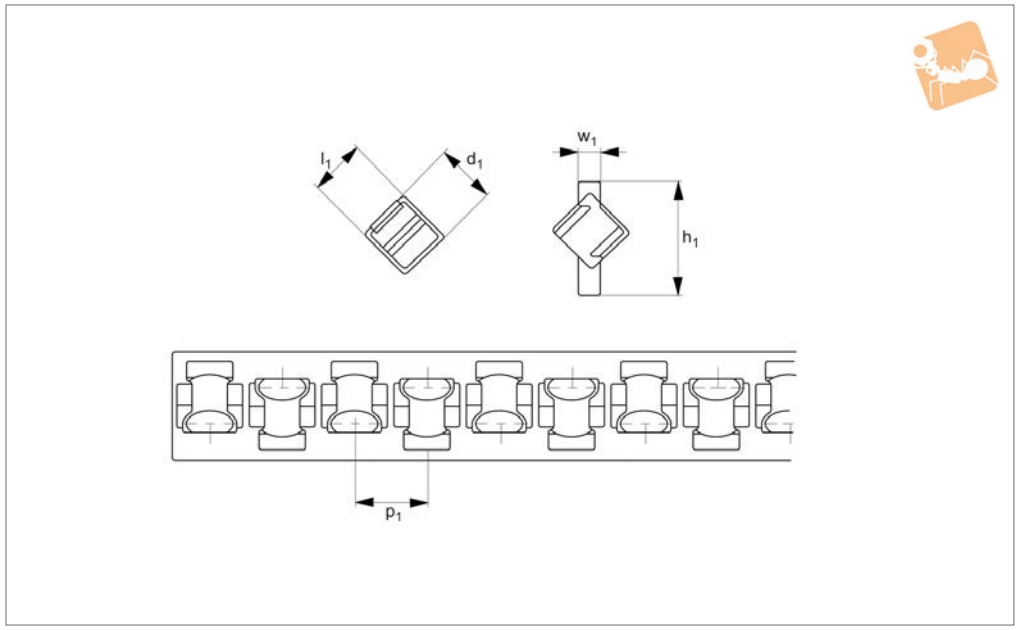
Technical Notes

When ordering please specify the length required (must be a multiple of pitch, p).
Supplied in max. 1 metre lengths.

Tips

Ordering example:
L1007.030-020 is a 3mm diameter ball strip length 84mm with 20 rollers (as 20xp = 84mm).

Order No.	d_1	p_1	h_1	w_1	d_2
L1007.020-xxx	2.0	3.0	5.0	0.75	2.1
L1007.030-xxx	3.0	4.2	7.0	1.00	3.2
L1007.040-xxx	4.0	5.8	6.3	1.30	4.2
L1007.050-xxx	5.0	6.8	8.0	1.50	5.2
L1007.060-xxx	6.0	7.8	9.0	1.60	6.2
L1007.080-xxx	8.0	12.0	12.0	2.00	8.2
L1007.090-xxx	9.0	11.5	15.0	2.00	9.2
L1007.100-xxx	10.0	12.5	13.2	2.50	10.2
L1007.110-xxx	11.0	14.0	13.7	2.50	11.2
L1007.120-xxx	12.0	15.0	15.0	2.50	12.2
L1007.160-xxx	16.0	20.0	20.0	3.50	16.2



L1008

Material
Steel rollers (100Cr6, class 3, hardened to 60 HRC) retaining cage plastic (PA 12) or steel.
Stainless version - stainless rollers (440C), stainless cage (AISI 304).

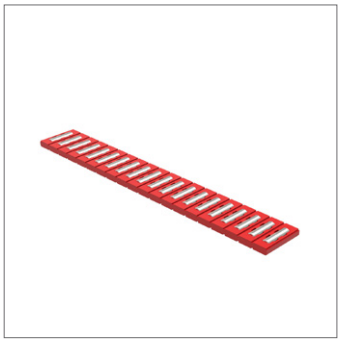
Technical Notes
When ordering please specify the length required (must be a multiple of pitch, p). Supplied in max. 1 metre lengths.

Tips
Ordering example:
L1008.030-PR-010 is a 3mm diameter roller strip 50mm long with 10 rollers (as 10xp = 50mm).

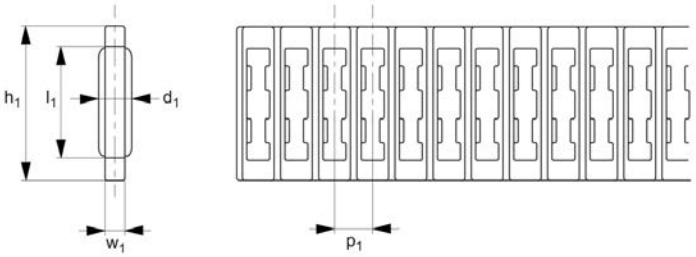
Important Notes
For load ratings calculations the maximum recommended load is 1/3 of the max. static load.

Order No.	d_1	p_1	h_1	w_1	Dyn. load C N max.	Static load C N max.	Cage material
L1008.020-PR-xxx	2	3.9	5	0.75	290	295	Plastic
L1008.030-PR-xxx	3	5.0	7	1.00	630	760	Plastic
L1008.060-PR-xxx	6	8.5	14	2.00	2500	2600	Plastic
L1008.090-PR-xxx	9	14.0	20	3.00	7100	7200	Plastic
L1008.015-AA-xxx	1.5	3	3.75	0.2	125	144	Steel
L1008.020-AA-xxx	2.0	4	5.50	0.3	290	295	Steel
L1008.030-AA-xxx	3.0	5	7.50	0.4	630	760	Steel
L1008.060-AA-xxx	6.0	9	14.00	0.8	2500	2600	Steel
L1008.090-AA-xxx	9.0	14	20.50	1.0	7100	7274	Steel
L1008.120-AA-xxx	12.0	18	26.50	1.2	12700	13200	Steel
L1008.015-SS-xxx	1.5	3	3.75	0.2	125	144	Stainless
L1008.020-SS-xxx	2.0	4	5.50	0.3	290	295	Stainless
L1008.030-SS-xxx	3.0	5	7.50	0.4	630	760	Stainless
L1008.060-SS-xxx	6.0	9	14.00	0.8	2500	2600	Stainless
L1008.090-SS-xxx	9.0	14	20.50	1.0	7100	7274	Stainless

Linear Cage - Needle Roller



L1009



Material
Needle roller, steel (100Cr6 to DIN5401, grade 28, class 3), retaining cage plastic (PA 12).

Technical Notes
When ordering please specify the length required (must be a multiple of pitch, p). Supplied in max. 1 metre lengths.

Tips
Ordering example:
L1009.050-030 is a 5mm diameter roller strip 225mm long with 30 rollers (as 30xp = 225mm).

Order No.	d_1	p_1	h_1	l_1	w_1
L1009.015-xxx	1.5	2.9	10	7.8	1.1
L1009.025-xxx	2.5	4.8	18	13.8	2.0
L1009.030-xxx	3.0	5.2	20	15.8	2.5
L1009.040-xxx	4.0	7.0	30	23.8	3.0
L1009.050-xxx	5.0	7.5	10	5.0	2.5
L1009.051-xxx	5.0	8.0	23	15.0	3.5
L1009.052-xxx	5.0	9.0	35	27.8	3.5
L1009.100-xxx	10.0	13.0	16	10.0	2.5
L1009.120-xxx	12.0	16.0	40	30.0	5.0
L1009.160-xxx	16.0	22.0	28	16.0	4.0