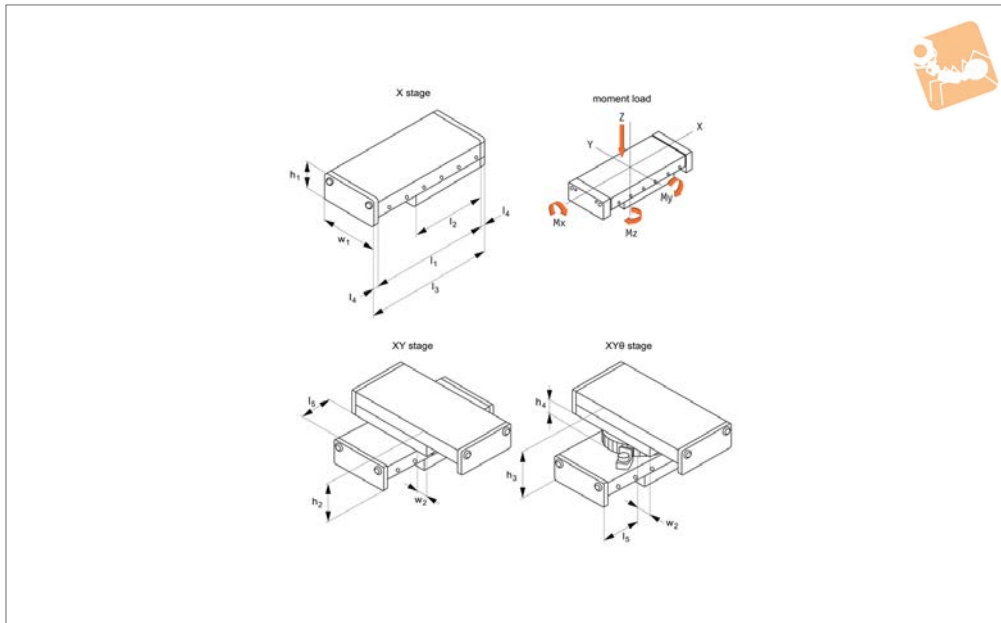




Plain Positioning Stages

needle roller

Manual Positioning Stages



L3190

MANUAL POSITIONING STAGES

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,θ 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

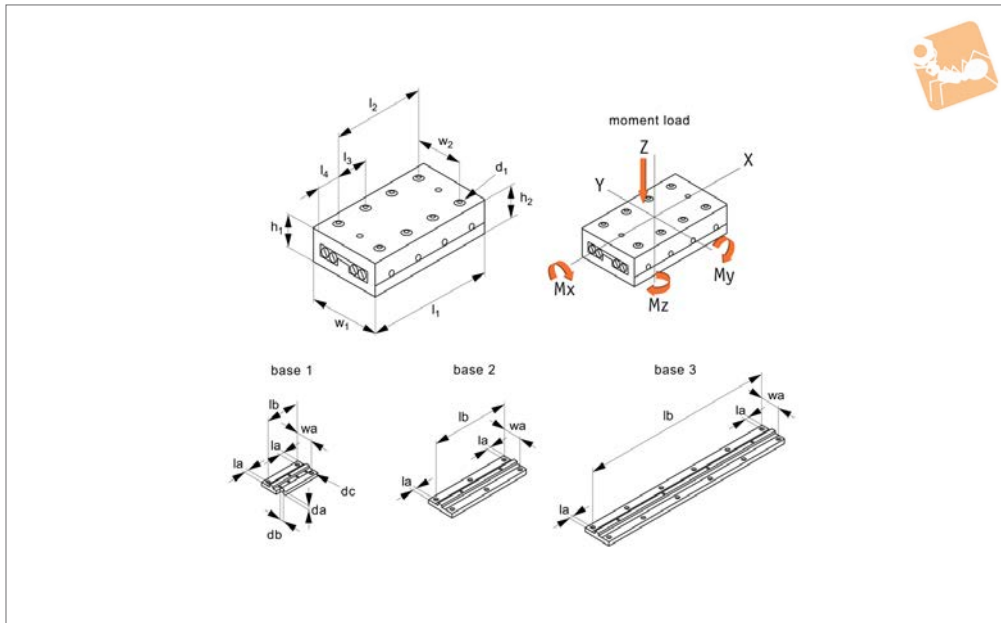
Order No.	l ₃	l ₄	l ₅	w ₂	Moment M _x Nm max.	Moment M _y Nm max.	Moment M _z Nm max.
L3190.150-050-*	219	8	26.5	1.0	940	435	435
L3190.150-100-*	321	8	77.5	26.5	1270	800	800
L3190.150-101-*	422	8	128.0	77.0	1910	1830	1830
L3190.150-150-*	321	8	77.5	1.0	940	435	435
L3190.150-151-*	422	8	128.0	51.5	1570	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

Manual Positioning Stages



L3191

MANUAL POSITIONING STAGES

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 appli-

cations 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

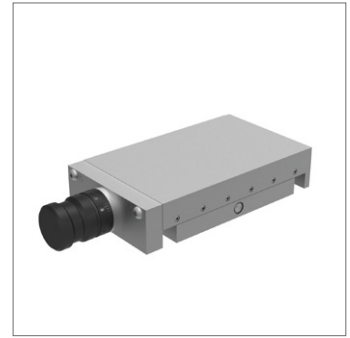
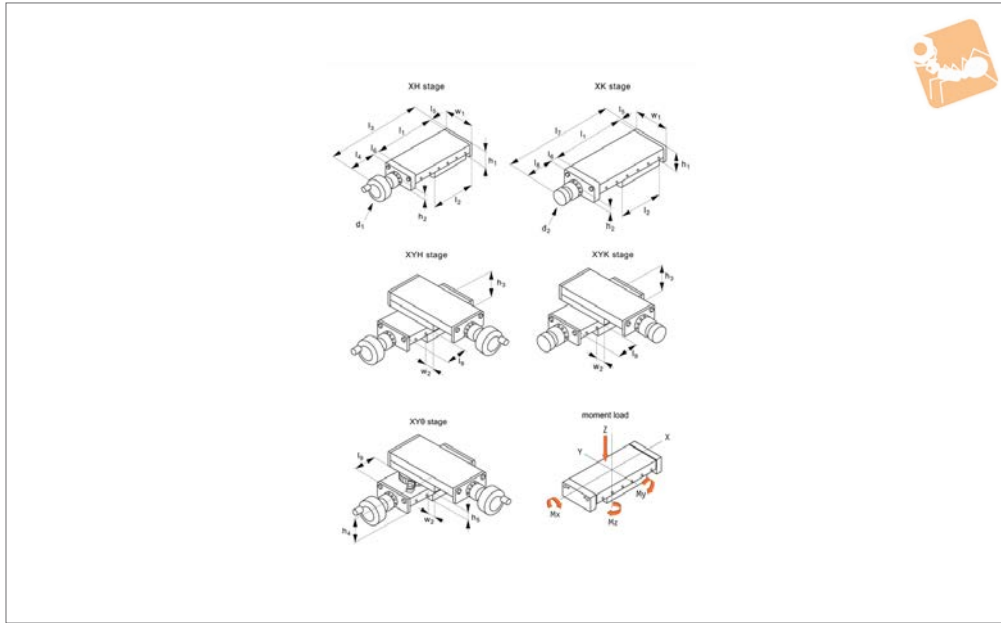
See technical pages for straightness and parallelism accuracy and standard carriage and base fixing holes - other fixing holes can be machined on request. 3D CAD models available.

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	1x _{l₃}	11	6.5	6.6	11	23.5	3.1
L3191.100-095	100	95	14.3	160	45	2x _{l₃}	11	6.5	6.6	11	23.5	4.5
L3191.100-130	100	130	18.8	210	45	3x _{l₃}	11	6.5	6.6	11	23.5	5.9
L3191.100-165	100	165	23.4	260	45	4x _{l₃}	11	6.5	6.6	11	23.5	7.2
L3191.100-200	100	200	28.6	310	45	5x _{l₃}	11	6.5	6.6	11	23.5	8.6
L3191.100-235	100	235	33.1	360	45	6x _{l₃}	11	6.5	6.6	11	23.5	10.0
L3191.100-265	100	265	37.7	410	45	7x _{l₃}	11	6.5	6.6	11	23.5	11.4
L3191.145-130	145	130	18.8	210	60	1x _{l₃}	15	8.5	9.0	15	32.0	11.8
L3191.145-180	145	180	29.7	310	60	2x _{l₃}	15	8.5	9.0	15	32.0	17.3
L3191.145-350	145	350	32.0	410	60	3x _{l₃}	15	8.5	9.0	15	32.0	22.8
L3191.145-450	145	450	38.8	510	60	4x _{l₃}	15	8.5	9.0	15	32.0	28.3
L3191.145-550	145	550	46.3	610	60	5x _{l₃}	15	8.5	9.0	15	32.0	22.8
L3191.145-650	145	650	53.1	710	60	6x _{l₃}	15	8.5	9.0	15	32.0	39.3
L3191.145-750	145	750	60.6	810	60	7x _{l₃}	15	8.5	9.0	15	32.0	44.8
L3191.145-850	145	850	67.4	910	60	8x _{l₃}	15	8.5	9.0	15	32.0	50.3
L3191.145-950	145	950	74.9	1010	60	9x _{l₃}	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	Moment M _y	Moment M _z	Hole pattern
							Nm max.	Nm max.	Nm max.	
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



L3192

MANUAL POSITIONING STAGES

Material

Cast iron body (ENGJL-250), with hardened needle roller linear rail set. Hardened and ground lead screw, pitch accuracy $\pm 0.02\text{mm}/300\text{mm}$. 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

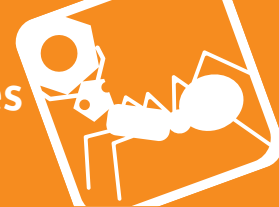
-XYTK for X,Y,. stage with knob

Centre mounting of compound slides is standard. Please advise dimensions w_2 and l_0 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



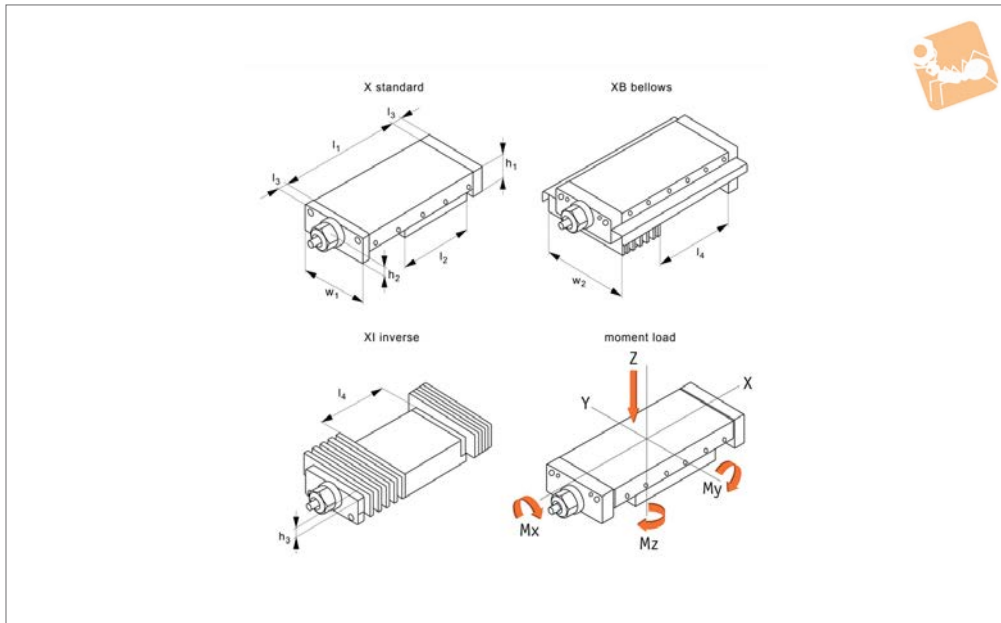
Order No.	w ₁	Stroke	Load kN max.	l ₁	h ₁	l ₂	d ₁	d ₂	h ₂	h ₃	h ₄	h ₅	Weight kg
L3192.300-500-*	300	500	30.2	910	75	408	125	68	35.0	150	190	30	108
L3192.300-600-*	300	600	30.2	1010	75	408	125	68	35.0	150	190	30	115
L3192.300-700-*	300	700	30.2	1110	75	408	125	68	35.0	150	190	30	122
L3192.300-800-*	300	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

Manual Positioning Stages



L3194

MANUAL POSITIONING STAGES

Material

Cast iron body (ENGJL-250), with hardened needle roller linear rail set. Hardened and ground lead screw, pitch accuracy $\pm 0.015\text{mm}/300\text{mm}$. 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

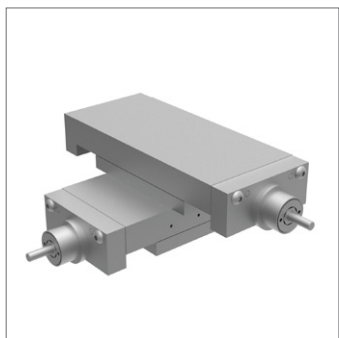


Motor Lead Screw X Stages needle roller

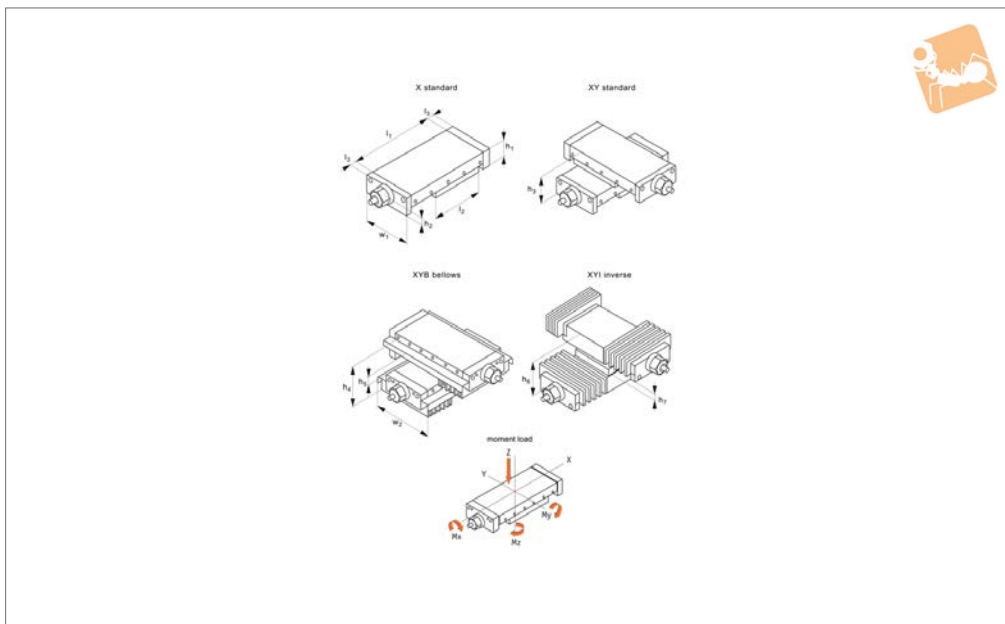
Manual Positioning Stages

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

MANUAL POSITIONING STAGES



L3195



Material

Cast iron body (ENGJL-250), with hardened needle roller linear rail set. Hardened and ground lead screw, pitch accuracy $\pm 0.015\text{mm}/300\text{mm}$.

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

Manual Positioning Stages

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

MANUAL POSITIONING STAGES