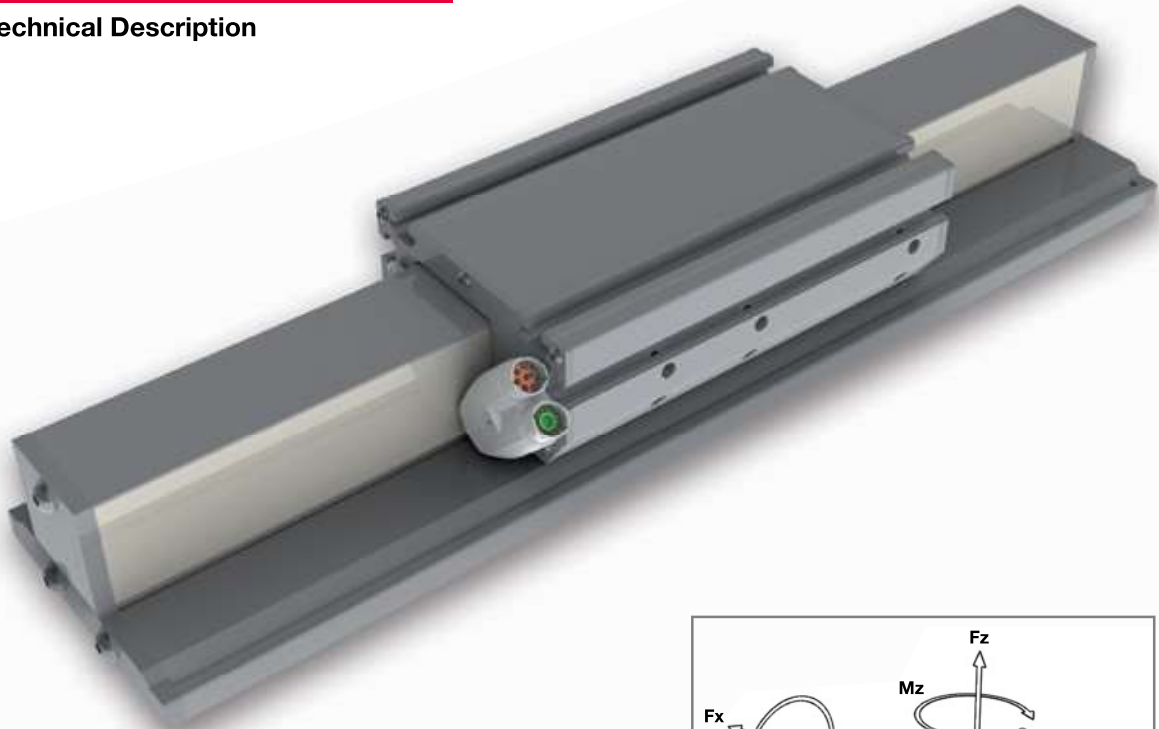


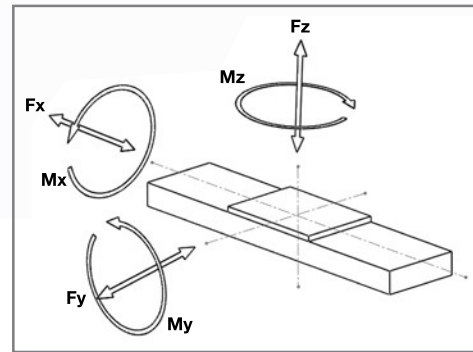


MLL 2 linear motor stages

Technical Description



Repeatability of measuring system: $\pm 30 \mu\text{m}$
 Repeatability linear unit: $\pm 100 \mu\text{m}$
 Maximum speed: 9 m/s
 Maximum acceleration: 88 m/s^2
 Maximum Length without joints: up to 4.020 mm
 Operating voltage: 600Vdc
 Max. Operating voltage: 900Vdc
 For code descriptions please go to the "Order Code" on page 33



Mechanical specifications

Linear motor stage		MLL 20200	MLL 20200	MLL 20400	MLL 20600
Carriage typ		S	R	S	S
Linear motor features					
Maximum speed ¹⁾	m/s			3	
Continuous force aircooled ²⁾	N	100	100	200	300
Peak force	N	200	200	400	600
Nominal current	A	3,0	3,0	6,0	4,5
Peak current	A	6,0	6,0	12,0	9,2
Guidance features					
Fy	N	900	900	900	900
Fz	N	900	900	900	900
Mx ³⁾	Nm	70	70	70	85
My	Nm	200	300	300	350
Mz	Nm	200	300	300	350
For the sum of all forces and moments:		$\frac{F_{ye}}{F_y} + \frac{F_{ze}}{F_z} + \frac{M_{xe}}{M_x} + \frac{M_{ye}}{M_y} + \frac{M_{ze}}{M_z} < 1$			(Xxe = calculated value) (Xx = max. catalogue value)
Structure profile features					
Geometrical moments of inertia Lx	mm ⁴			13,43x10 ⁵	
Geometrical moments of inertia Ly	mm ⁴			27,75x10 ⁵	
Elastic module	N/mm ²			70000	
Weight					
Weight of carriage	kg	3,1	4,2	4,5	6,2
Weight of 100 mm	kg			1,25	

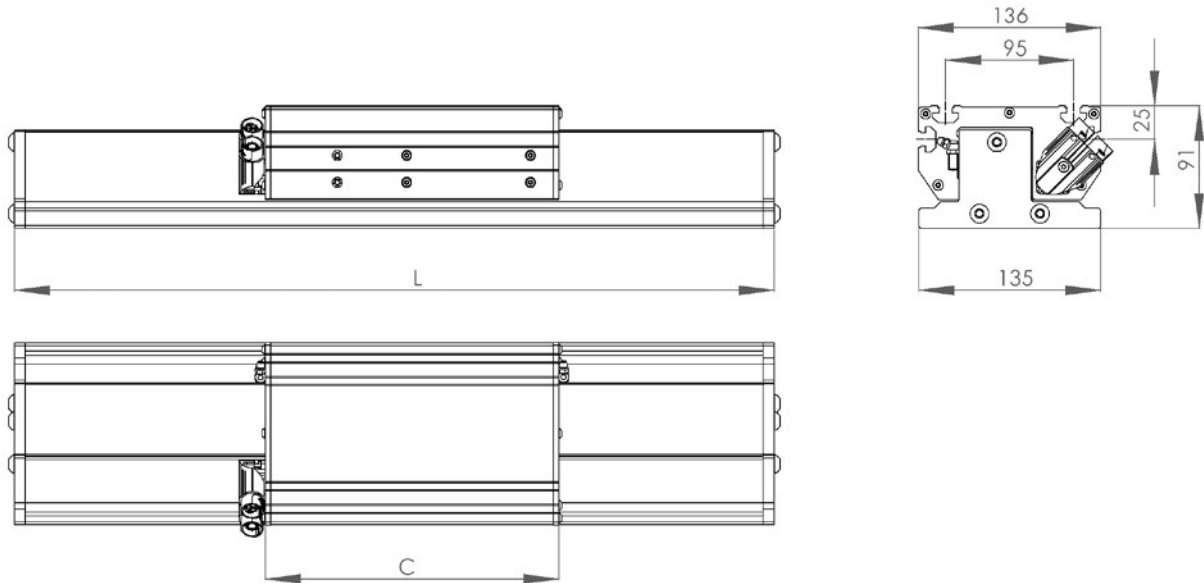
¹⁾ for a lifetime > 30.000 Km

²⁾ depending on the application and ambient temperature

³⁾ as there's only one guide rail, the moment distribution is not symmetrical



Dimensions MLL 2



Drawing for reference only. Please ask for ready 3D files.

Choice of stroke

Linear motor stage	MLL 20200	MLL 20200	MLL 20400	MLL 20600
Carriage type	S	R	S	S
Carriage length C, mm	218	316	316	411

Length, mm	Code	Stroke ⁽¹⁾			
324	00324	70	-	-	-
420	00420	166	68	68	-
564	00564	310	212	212	117
708	00708	454	356	356	261
804	00804	550	452	452	357
948	00948	694	596	596	501
1092	01092	838	740	740	645
1188	01188	934	836	836	741
1332	01332	1078	980	980	885
1476	01476	1222	1124	1124	1029
1572	01572	1318	1220	1220	1125
1716	01716	1462	1364	1364	1269
1860	01860	1606	1508	1508	1413
1956	01956	1702	1604	1604	1509
2100	02100	1846	1748	1748	1653
2244	02244	1990	1892	1892	1797
2340	02340	2086	1988	1988	1893
2484	02484	2230	2132	2132	2037
2628	02628	2374	2276	2276	2181
2724	02724	2470	2372	2372	2277
2868	02868	2614	2516	2516	2421
3012	03012	2758	2660	2660	2565
3108	03108	2854	2756	2756	2661
3252	03252	2998	2900	2900	2805
3396	03396	3142	3044	3044	2949
3492	03492	3238	3140	3140	3045
3636	03636	3382	3284	3284	3189
3780	03780	3526	3428	3428	3333
3876	03876	3622	3524	3524	3429
4020	04020	3766	3668	3668	3573

¹⁾ Other stroke lengths are available under request