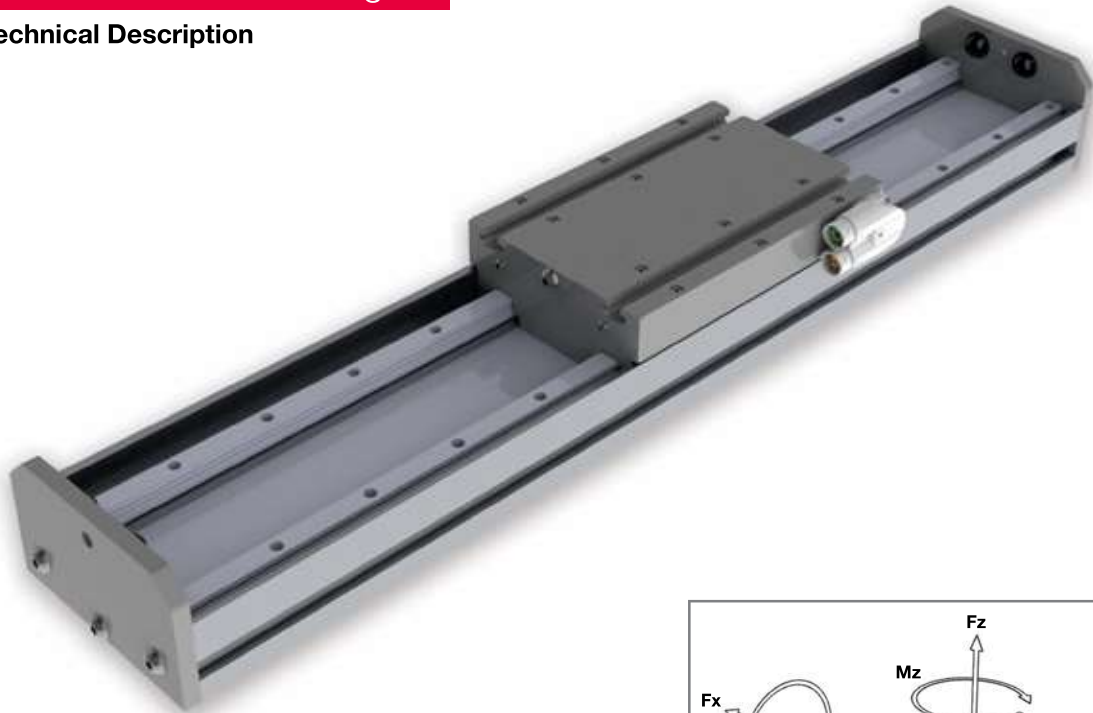


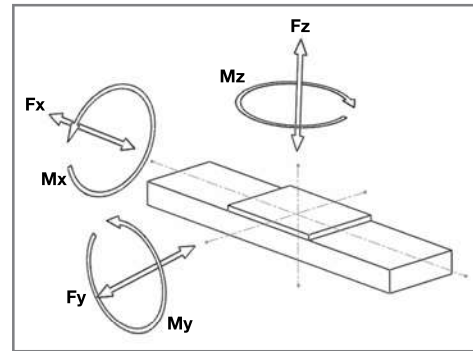


# MLL 3 linear motor stages

## Technical Description



Repeatability of measuring system:  $\pm 30 \mu\text{m}$   
 Repeatability linear unit:  $\pm 100 \mu\text{m}$   
 Maximum speed: 3 m/s  
 Maximum acceleration:  $86 \text{ m/s}^2$   
 Maximum Length without joints: up to 3.600 mm  
 Operating voltage: 600Vdc  
 Max. Operating voltage: 900Vdc  
 For code descriptions please go to the "Order Code" on page 33



### Mechanical specifications

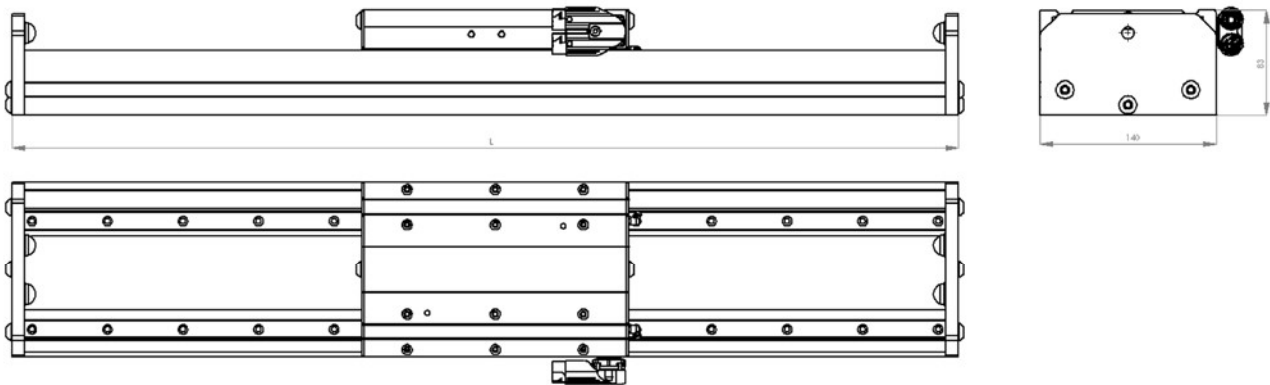
Linear motor stage		MLL 30200	MLL 30400	MLL 30600	
Carriage typ		S	S	S	
<b>Linear motor features</b>					
Maximum speed <sup>1)</sup>	m/s		3		
Continuous force aircooled <sup>2)</sup>	N	100	200	300	
Peak force	N	200	400	600	
Nominal current	A	3,0	6,0	4,5	
Peak current	A	6,0	12,0	9,2	
<b>Guidance features</b>					
Fy	N	1200	1200	1800	
Fz	N	600	600	900	
Mx	Nm	180	180	200	
My	Nm	200	250	300	
Mz	Nm	200	250	300	
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)
<b>Structure profile features</b>					
Geometrical moments of inertia Lx	mm <sup>4</sup>	3,72x10 <sup>5</sup>			
Geometrical moments of inertia Ly	mm <sup>4</sup>	55,58x10 <sup>5</sup>			
Elastic module	N/mm <sup>2</sup>	70000			
<b>Weight</b>					
Weight of carriage	kg	3,2	4,7	6,2	
Weight of 100 mm	kg	1,1			

<sup>1)</sup> for a lifetime > 30.000 Km

<sup>2)</sup> depending on the application and ambient temperature



## Dimensions MLL 3



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

### Choice of stroke

Linear motor stage	MLL 30200	MLL 30400	MLL 30600
Carriage typ	S	S	S
Carriage length C, mm	212	310	406

Length, mm	Code	Stroke <sup>(1)</sup>		
320	00320	68	-	-
368	00368	116	18	-
416	00416	164	66	-
512	00512	260	162	66
560	00560	308	210	114
608	00608	356	258	162
656	00656	404	306	210
704	00704	452	354	258
752	00752	500	402	306
800	00800	548	450	354
896	00896	644	546	450
944	00944	692	594	498
992	00992	740	642	546
1040	01040	788	690	594
1088	01088	836	738	642
1136	01136	884	786	690
1184	01184	932	834	738
1280	01280	1028	930	834
1328	01328	1076	978	882
1376	01376	1124	1026	930
1472	01472	1220	1122	1026
1568	01568	1316	1218	1122
1712	01712	1460	1362	1266
1856	01856	1604	1506	1410
1952	01952	1700	1602	1506
2096	02096	1844	1746	1650
2240	02240	1988	1890	1794
2336	02336	2084	1986	1890
2480	02480	2228	2130	2034
2624	02624	2372	2274	2178
2720	02720	2468	2370	2274
2864	02864	2612	2514	2418
3008	03008	2756	2658	2562
3104	03104	2852	2754	2658
3248	03248	2996	2898	2802
3392	03392	3140	3042	2946
3488	03488	3236	3138	3042
3584	03584	3332	3234	3138

<sup>1)</sup> Other stroke lengths are available under request