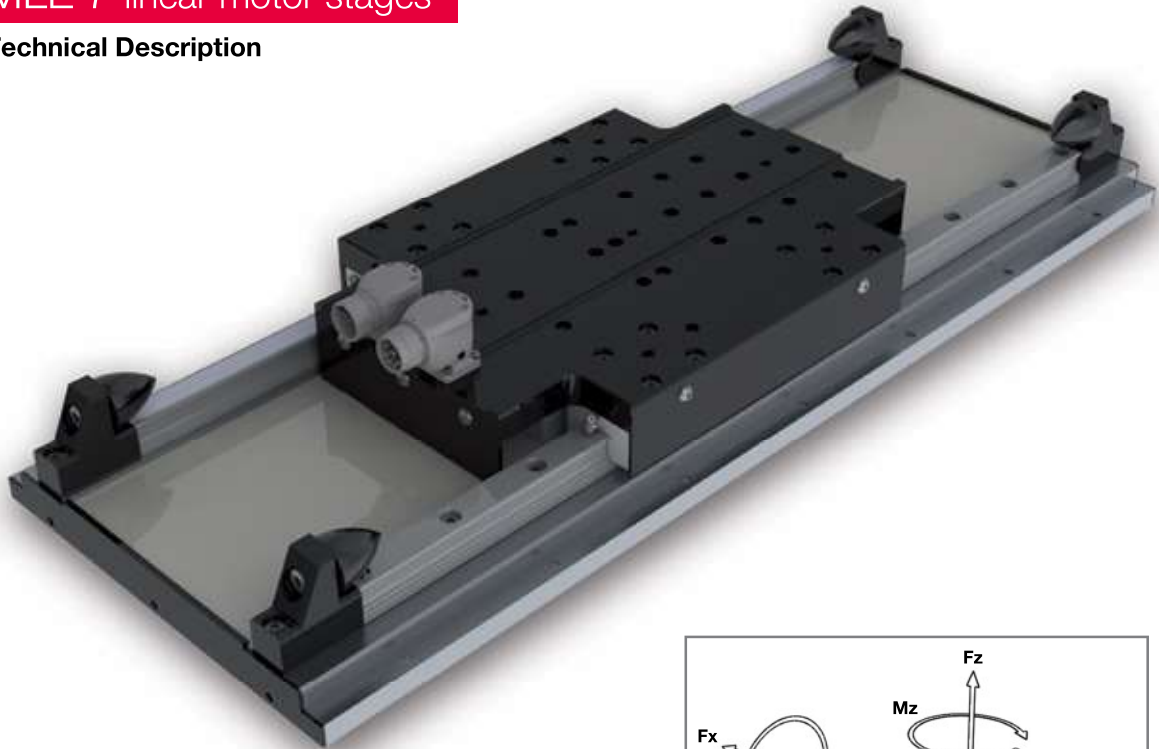


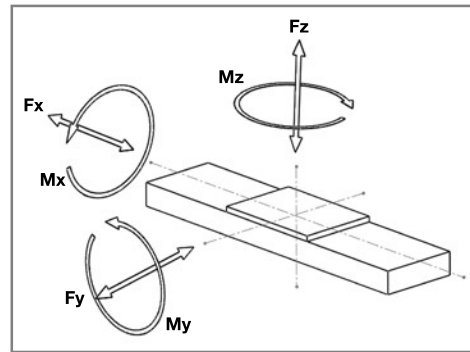


MLE 7 linear motor stages

Technical Description



Repeatability of measuring system: $\pm 1 \mu\text{m}$
 Repeatability linear unit: $\pm 5 \mu\text{m}$
 Maximum speed: 4 m/s
 Maximum acceleration: 186 m/s²
 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 30



Mechanical specifications

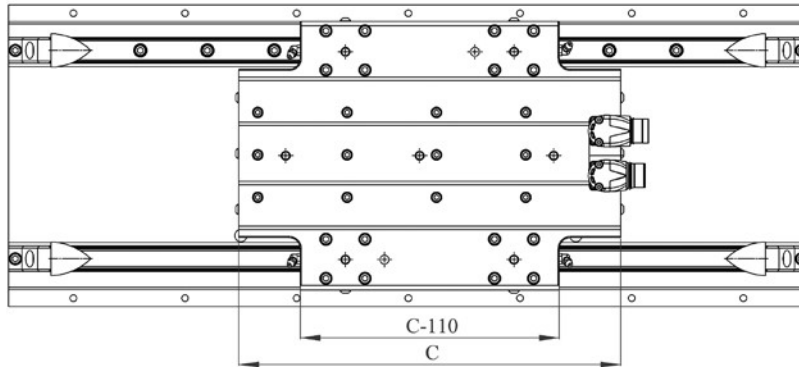
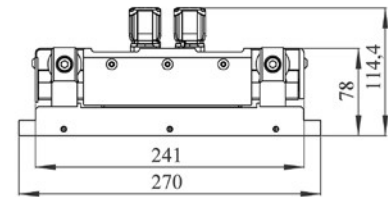
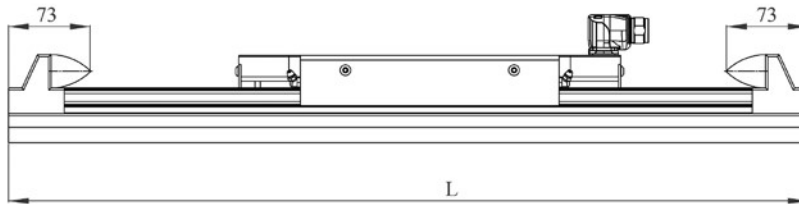
Linear motor stage		MLE 71600	MLE 72000	MLE 74000	
Carriage typ		R	S R	S	
Linear motor features					
Maximum speed ¹⁾	m/s	3	2,5	2,5	
Continuous force aircooled ²⁾	N	400	500	1000	
Peak force	N	1600	2000	4000	
Nominal current	A	4,1	4,2	8,5	
Peak current	A	10	10	20	
Guidance features					
Fy	N	5000	5000 7000	7000	
Fz	N	3000	3000 5000	5000	
Mx	Nm	800	800 1100	1100	
My	Nm	900	900 1300	1300	
Mz	Nm	900	900 1300	1300	
For the sum of all forces and moments:		$\frac{F_{ye}}{F_y} + \frac{F_{ze}}{F_z} + \frac{M_{xe}}{M_x} + \frac{M_{ye}}{M_y} + \frac{M_{ze}}{M_z} < 1$			(Xx = calculated value) (Xx = max. catalogue value)
Structure profile features					
Geometrical moments of inertia Lx	mm ⁴	2,30x10 ⁵			
Geometrical moments of inertia Ly	mm ⁴	338,14x10 ⁵			
Elastic module	N/mm ²	70000			
Weight					
Weight of carriage	kg	10,5	11,5 15,0	21,5	
Weight of 100 mm	kg	3,0			

¹⁾ for a lifetime > 30.000 Km

²⁾ depending on the application and ambient temperature



Dimensions MLE 7



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

Choice of stroke

Linear motor stage	MLE 71600	MLE 72000		MLE 74000
Carriage typ	R	S	R	S
Carriage length C, mm	342	342	620	620

Length, mm	Code	Stroke ⁽¹⁾		
524	00524	146	146	-
716	00716	338	338	60
812	00812	434	434	156
908	00908	530	530	252
1004	01004	626	626	348
1100	01100	722	722	444
1196	01196	818	818	540
1292	01292	914	914	636
1388	01388	1010	1010	732
1484	01484	1106	1106	828
1580	01580	1202	1202	924
1676	01676	1298	1298	1020
1772	01772	1394	1394	1116
1868	01868	1490	1490	1212
1964	01964	1586	1586	1308
2060	02060	1682	1682	1404
2156	02156	1778	1778	1500
2252	02252	1874	1874	1596
2348	02348	1970	1970	1692
2444	02444	2066	2066	1788
2636	02636	2258	2258	1980
2732	02732	2354	2354	2076
2828	02828	2450	2450	2172
2924	02924	2546	2546	2268
3020	03020	2642	2642	2364
3116	03116	2738	2738	2460
3212	03212	2834	2834	2556
3308	03308	2930	2930	2652

¹⁾ Other stroke lengths are available under request