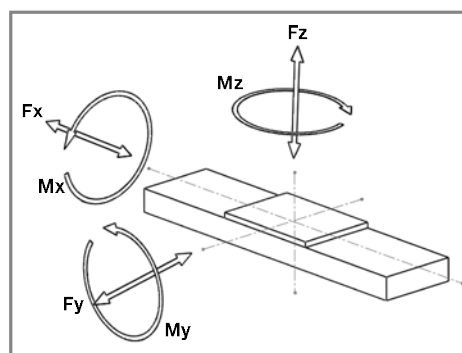


MLE 5 linear motor stages

Technical Description



Repeatability of measuring system: $\pm 1 \mu\text{m}$
 Repeatability of linear unit: $\pm 5 \mu\text{m}$
 Maximum speed: 6 m/s
 Maximum acceleration: 114 m/s^2
 Maximum Length without joints: up to 6.000 mm
 Operating voltage: 600Vdc
 Max. Operating voltage: 900Vdc



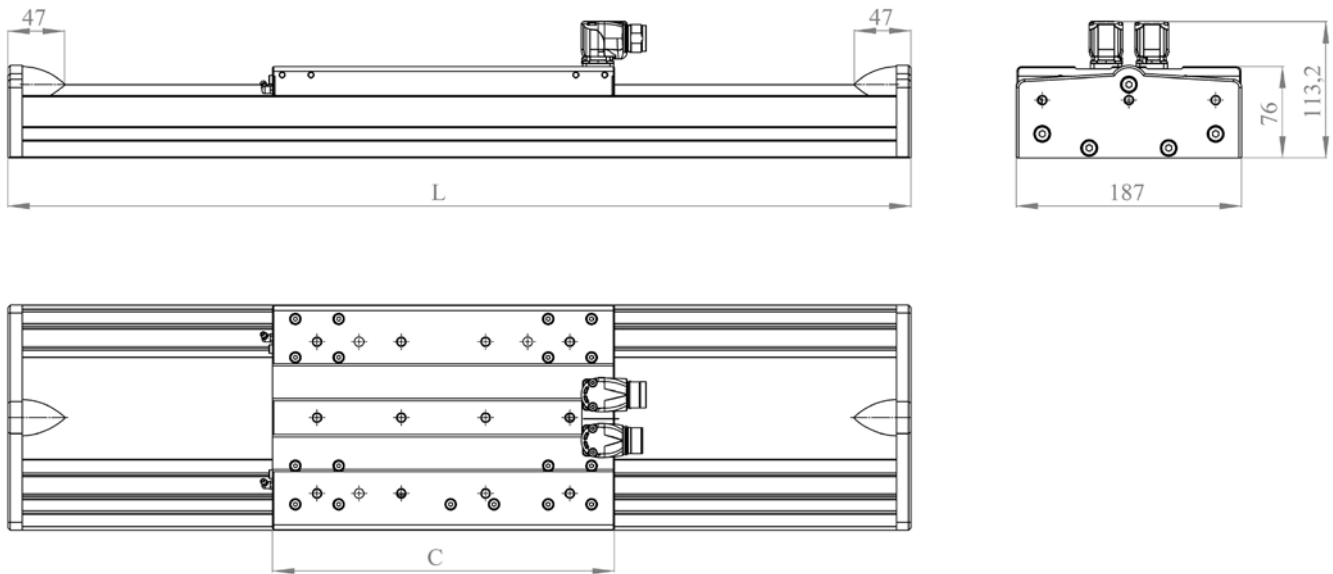
Mechanical specifications

Linear motor stage	MLE 50400		MLE 50800		MLE 51000		MLE 51200		MLE 51600							
Carriage type	S	R	S	R	S	R	S	R	S	R						
Linear motor features																
Maximum speed ¹⁾	m/s					3										
Continuous force aircooled ²⁾	N	200	400		500		600		800							
Peak force	N	400	800		1000		1200		1600							
Nominal current	A	2,26	4,5		4,7		6,8		9,0							
Peak current	A	5,0	10,0		10,4		15,0		20,0							
Guidance features																
Fy	N	3000	3000	3000	3000	3000	4500	4500	4500	4500						
Fz	N	2000	2000	2000	2000	2000	3000	3000	3000	3000						
Mx	Nm	450	450	450	450	450	750	750	750	750						
My	Nm	600	700	700	750	750	1000	1000	1500	2000						
Mz	Nm	600	700	700	750	750	1000	1000	1500	2000						
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)
Structure profile features											(Xx = max. catalogue value)					
Geometrical moments of inertia Lx	mm ⁴					2,7x10 ⁶										
Geometrical moments of inertia Ly	mm ⁴					86,82x10 ⁶										
Elastic module	N/mm ²					70000										
Weight																
Weight of carriage	kg	4,5	4,9	6,0	6,4	7,0	8,1	8,7	10,0	14,0	16,0					
Weight of 100 mm	kg					1,7										

⁽¹⁾ for a lifetime > 30.000 Km

⁽²⁾ depending on the application and ambient temperature

Dimensions MLE 5



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

Choice of stroke

Linear motor stage	MLE 50400		MLE 50800		MLE 51000		MLE 51200		MLE 51600	
Carriage type	S	R	S	R	S	R	S	R	S	R
Carriage length C, mm	212	284	284	334	334	376	376	508	508	570
Length, mm	Code		Stroke ¹⁾							
462	00462	156	84	34	34	-	-	-	-	-
558	00558	252	180	130	130	88	88	-	-	-
654	00654	348	276	226	226	184	184	52	52	-
750	00750	444	372	322	322	280	280	148	148	86
846	00846	540	468	418	418	376	376	244	244	182
942	00942	636	564	514	514	472	472	340	340	278
1038	01038	732	660	610	610	568	568	436	436	374
1134	01134	828	756	706	706	664	664	532	532	470
1230	01230	924	852	802	802	760	760	628	628	566
1326	01326	1020	948	898	898	856	856	724	724	662
1422	01422	1116	1044	994	994	952	952	820	820	758
1518	01518	1212	1140	1090	1090	1048	1048	916	916	854
1614	01614	1308	1236	1186	1186	1144	1144	1012	1012	950
1710	01710	1404	1332	1282	1282	1240	1240	1108	1108	1046
1806	01806	1500	1428	1378	1378	1336	1336	1204	1204	1142
1902	01902	1596	1524	1474	1474	1432	1432	1300	1300	1238
1998	01998	1692	1620	1570	1570	1528	1528	1396	1396	1334
2094	02094	1788	1716	1666	1666	1624	1624	1492	1492	1430
2382	02382	2076	2004	1954	1954	1912	1912	1780	1780	1718
2670	02670	2364	2292	2242	2242	2200	2200	2068	2068	2006
2958	02958	2652	2580	2530	2530	2488	2488	2356	2356	2294
3246	03246	2940	2868	2818	2818	2776	2776	2644	2644	2582
3534	03534	3228	3156	3106	3106	3064	3064	2932	2932	2870
3630	03630	3324	3252	3202	3202	3160	3160	3028	3028	2966

⁽¹⁾ Other stroke lengths are available under request

MLE 5 Options

Connector Options

■ straight connectors M23, up (0)



■ angled connectors 90° M23 (1)



■ side connectors M23 (30)



■ side connectors M23, down (31)



■ side connectors M23, up (32)



■ side connectors, hybrid (33)



■ cable output with connectors M23 (4)



■ cable output without connectors (5)

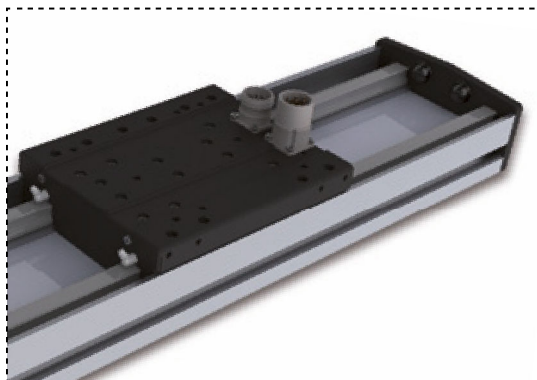


■ cable output with connectors YTEC (6)



Cover Options

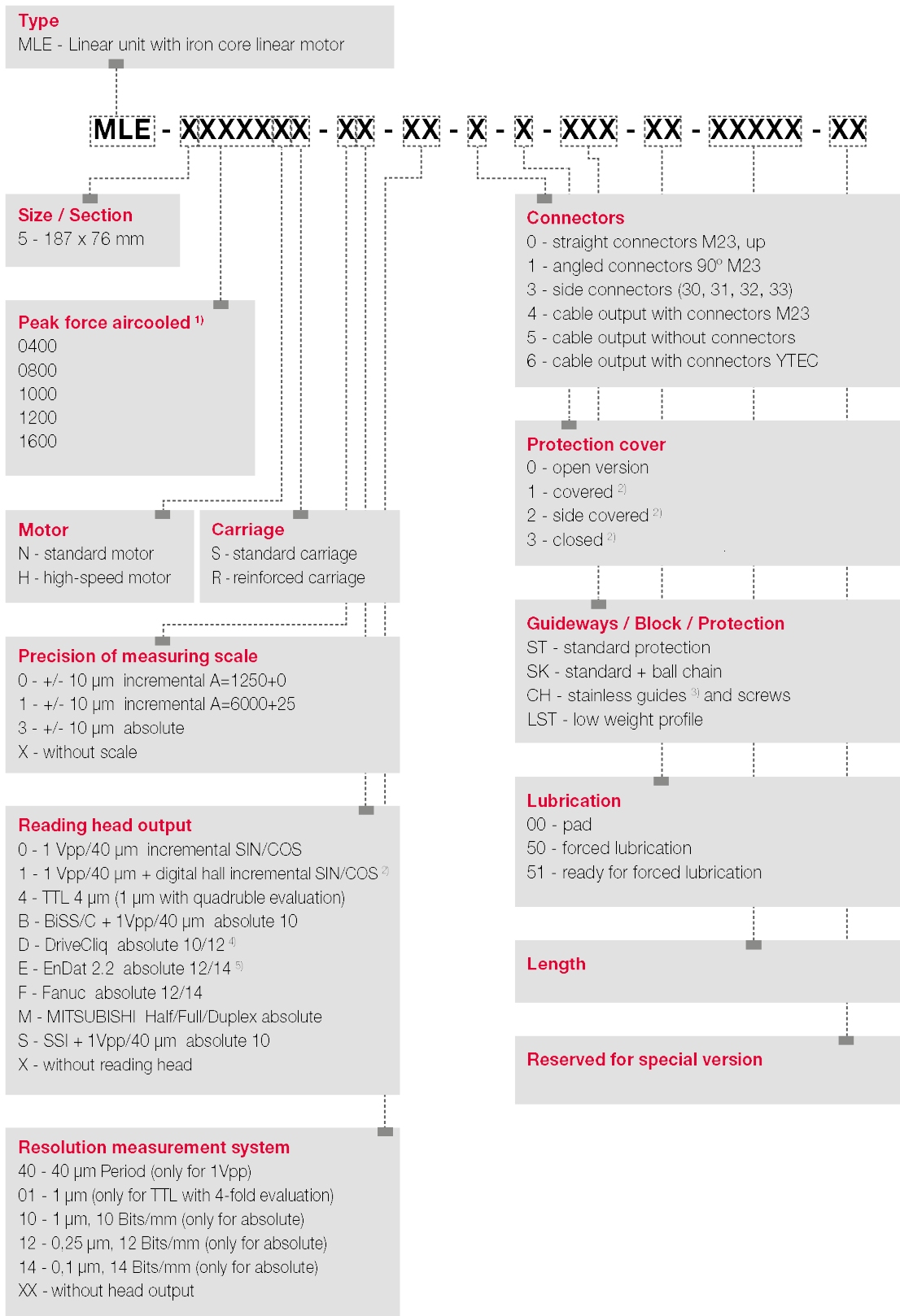
■ open version (0)



■ cover version (1)



Order Code MLE 5



¹⁾ Depends on application and temperature

²⁾ On request

³⁾ Guides, steel body of carriage and balls are made of stainless steel

⁴⁾ DriveCliq is a protected trademark of the Siemens joint-stock company

⁵⁾ EnDat 2.2 is a protected trademark of the Johannes Heidenhain GmbH company