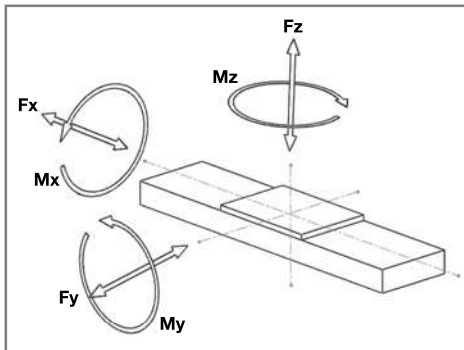




MLLZ 2 linear motor stages

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: 200 m/s²
 Maximum Length without joints: up to 286 mm
 Operating voltage: 600Vdc
 Max. Operating voltage: 900Vdc
 For code descriptions please go to the "Order Code" on page 34

Mechanical specifications

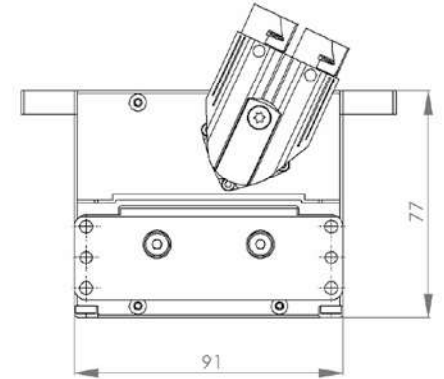
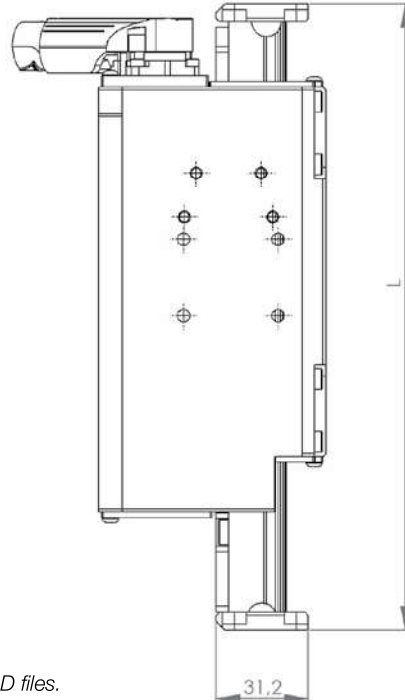
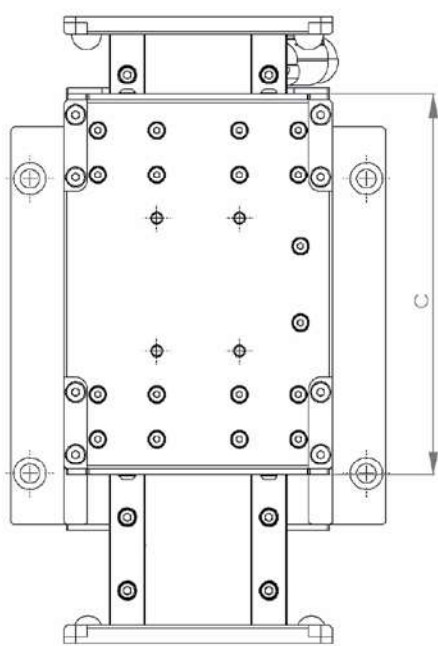
Linear motor stage		MLLZ 20100	MLLZ 20200
Carriage typ		R	S
Linear motor features			
Maximum speed ¹⁾	m/s	3	3
Continuous force aircooled ²⁾	N	55	105
Peak force	N	105	210
Nominal current	A	1,5	3,0
Peak current	A	3,1	6,2
Guidance features			
Fy	N	300	300
Fz	N	150	150
Mx	Nm	95	95
My	Nm	160	160
Mz	Nm	160	160
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	0,55x10 ⁴	
Geometrical moments of inertia Ly	mm ⁴	16,27x10 ⁴	
Elastic module	N/mm ²	70000	

¹⁾ for a lifetime > 30.000 Km

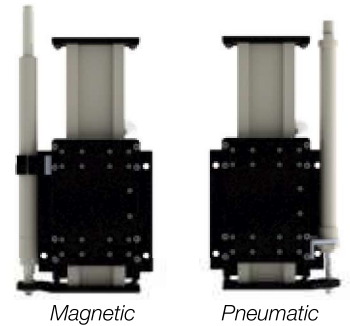
²⁾ depending on the application and ambient temperature



Dimensions MLLZ 2



Weight Compensation



Magnetic

Pneumatic

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

Choice of stroke

Linear motor stage		MLLZ 20100R / MLLZ 20200S				
Length	mm	262	310	358	406	454
Stroke ²⁾	mm	40	80	136	184	232
Carriage length, C	mm	156				

Weight

Carriage weight	kg	2,8				
Runner Weight	kg	1,27	1,5	1,73	1,96	2,19
Total weight	kg	4,07	4,3	4,53	4,76	4,99
Pneumatic weight compensation	kg	0,2	-	-	-	-
Magnetic weight compensation 03	kg	0,18	0,29	0,29	-	-
Magnetic weight compensation 04, 05, 06	kg	0,88	1,32	1,32	1,75	1,75

Weight compensation

Pneumatic	Typ	DPN16130	-	-	-	-
Maximum Force	N	50	-	-	-	-
Order Code		01	-	-	-	-
Magnetic	Typ	D22130	D22210	D22210	-	-
Maximum Force	N	9	7	3	-	-
Order Code		03	03	03	-	-
Magnetic	Typ	D40130	D40200	D40200	D40275	D40275
Maximum Force	N	27	25	22	20	17
Order Code		04	04	04	04	04 ²⁾
Magnetic	Typ	D50130	D50200	D50200	D50275	D50275
Maximum Force	N	37	35	32	30	27
Order Code		05	05	05	05	05 ²⁾
Magnetic	Typ	D60130	D60200	D60200	D60275	D60275
Maximum Force	N	47	45	42	40	37
Order Code		06	06	06	06	06 ²⁾

¹⁾ Other stroke lengths are available under request

²⁾ Stroke length of the compensator is limited to 275 mm