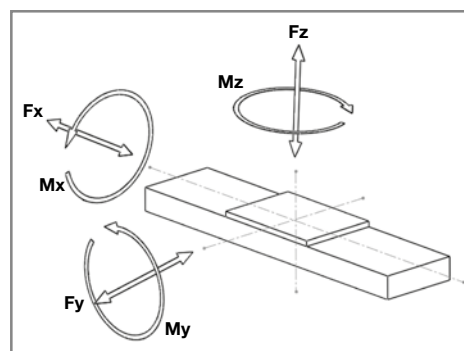


LPZ50 / LPZ55 / LPZ80 Series toothed belt linear motor stages

Technical Description



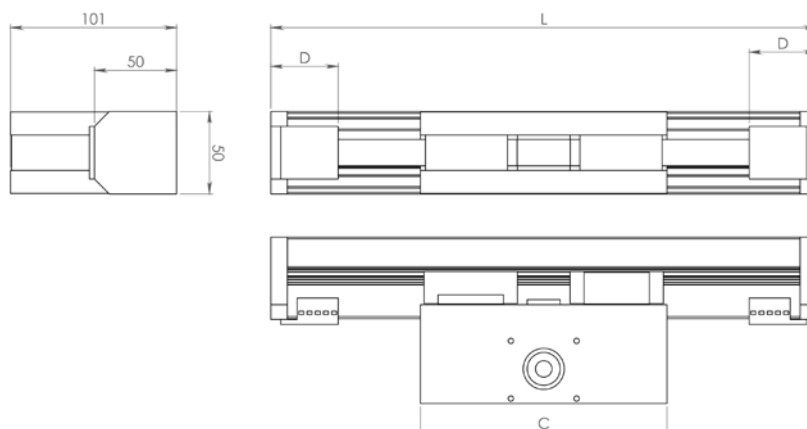
Internal recirculating ball rail guide for heavy loads.
 Compact design, width of the profile LTZ50: 50 mm, LTZ55: 55 mm, LTZ80: 80 mm.
 Rail guide system, LT50/55: size -15-, LTZ80: size-20-.
 Double carriage design for high load.

Mechanical specifications

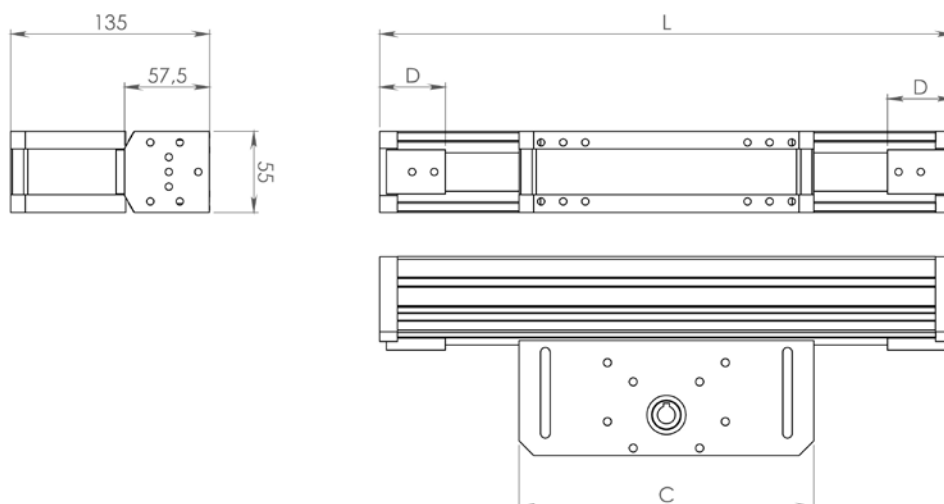
Linear motor stage		LPZ50-TR-S15D	LPZ55-TR-S15D	LPZ80-TR-S20D
Linear motor features				
Repeatability	mm	+0,1	+0,1	+0,1
Maximum speed	m/s	3	3	3
Maximum acceleration	m/s ²	30	30	30
Maximum stroke	mm	5730	3000	5700
No load torque	Nm	1,1	1,2	0,9
Movement per revolution	mm/rev.	100	150	200
Belt width and type	mm	16 AT10	25 AT5	32 AT10
Guidance features				
Fy	N	3400	3400	7400
Fz	N	3600	3600	7400
Mx	Nm	40	40	220
My	Nm	106	120	810
Mz	Nm	106	120	1040
For the sum of all forces and moments:		$\frac{F_{ye}}{F_y} + \frac{F_{ze}}{F_z} + \frac{M_{xe}}{M_x} + \frac{M_{ye}}{M_y} + \frac{M_{ze}}{M_z} < 1$		(Xe = calculated value) (Xx = max. catalogue value)
Structure profile features				
Geometrical moments of inertia Lx	mm ⁴	0,16x10 ⁵	2,77x10 ⁵	9,32x10 ⁵
Geometrical moments of inertia Ly	mm ⁴	1,05x10 ⁵	3,64x10 ⁵	1,39x10 ⁵
Elastic module	N/mm ²	70000	70000	70000
Weight				
Unit weight 0 mm stroke	kg	2,53	4,90	9,41
Weight per 100 mm	kg	0,28	0,40	0,72

Dimensions LPZ50 / LPZ55 / LPZ80

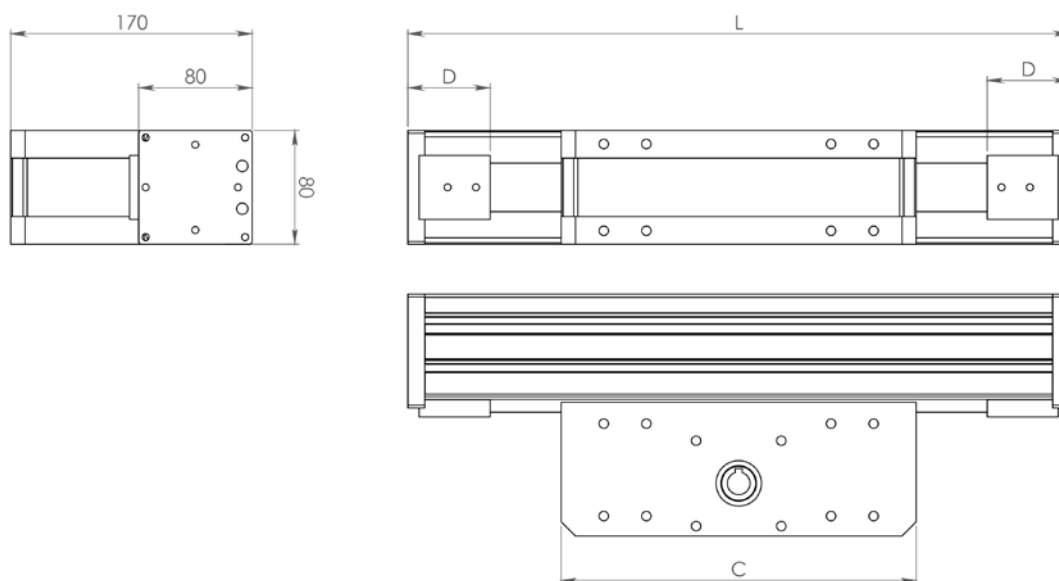
LPZ50



LPZ55



LPZ80



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

Choice of stroke

Linear motor stage	LPZ50-TR-S15D	LPZ55-TR-S15D	LPZ80-TR-S20D
C: Carriage length, mm	150	200	250
L: Total Length, mm	stroke + 250	350	400
D: Flexible shaft coupling, mm	150	75	75