

LT55 / LT60S / LT80 / LT80S Series

Technical Description



Internal recirculating ball rail guide, LT55: size -15-, LT80: size -20-, LT80S, size -20-.

Compact design, width of the profile LT55: 55 mm, LT60S: 60 mm, LT80: 80 mm, LT80S: 80 mm.

Guide system of hardened wheels on hardened shafts or rail guide, LT55: size -15-, LT60S: size -15-, LT80: size -10-, LT80S: -20-.

Double carriage design for high load.

Magnetic switches for position detection, TL55: T-slot, TL80: T-slot.

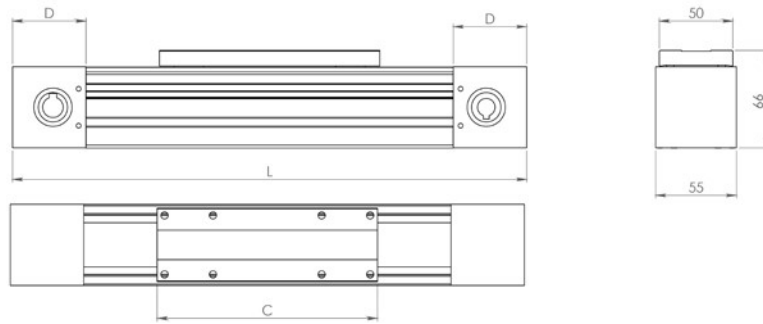
Advanced internal lubrication system.

Mechanical specifications

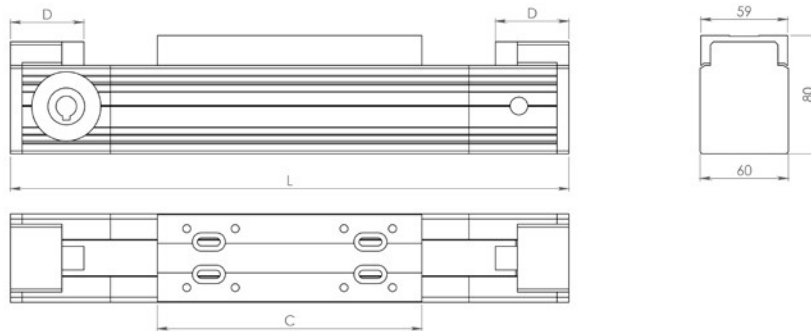
Linear motor stage		LT55-TR-S15D	LT60S-TR-S15D	LT60S-TR-S15D****L	LT80-TR-G10	LT80-TR-S20D	LT80S-TR-20D
Linear motor features							
Repeatability	mm	+0,1	+0,1	+0,1	+0,1	+0,1	+0,1
Maximum speed	m/s	3000	3000	3000	5000	3000	5000
Maximum acceleration	m/s ²	30	30	30	50	30	50
Maximum stroke	mm	5750	5750	5750	5750	5750	5000
No load torque	Nm	0,6	0,6	0,6	0,8	1,1	0,8
Movement per revolution	mm/rev.	150	150	150	200	200	200
Belt width and type	mm	25 ATS	25 ATS	25 ATS	32 AT10	32 AT10	32 AT10
Guidance features							
Fy	N	3400	3400	3400	1400	7400	7400
Fz	N	3600	3600	3600	1400	7400	7400
Mx	Nm	40	40	40	50	220	220
My	Nm	106	128	172	86	720	720
Mz	Nm	106	128	172	126	960	960
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	2,77x10 ⁵	4,62x10 ⁵	4,62x10 ⁵	9,32x10 ⁵	9,32x10 ⁵	16,03x10 ⁵
Geometrical moments of inertia Ly	mm ⁴	3,64x110 ⁵	6,10x10 ⁵	6,10x10 ⁵	1,39x10 ⁵	1,39x10 ⁵	19,45x10 ⁵
Elastic module	N/mm ²	70000	70000	70000	70000	70000	70000
Weight							
Weight of carriage	kg	0,97	0,98	1,38	2,25	2,25	2,30-2,45
Weight of 100 mm	kg	0,4	0,4	0,4	0,72	0,72	0,72

Dimensions LT55 / LT60S / LT80 / LT80S

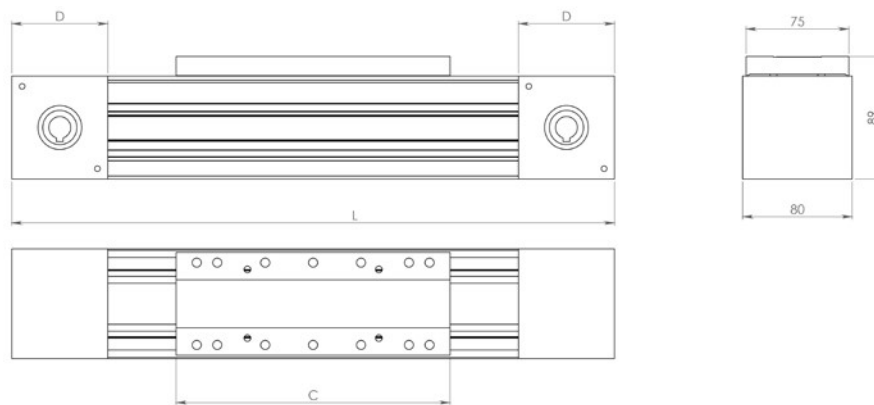
LT55



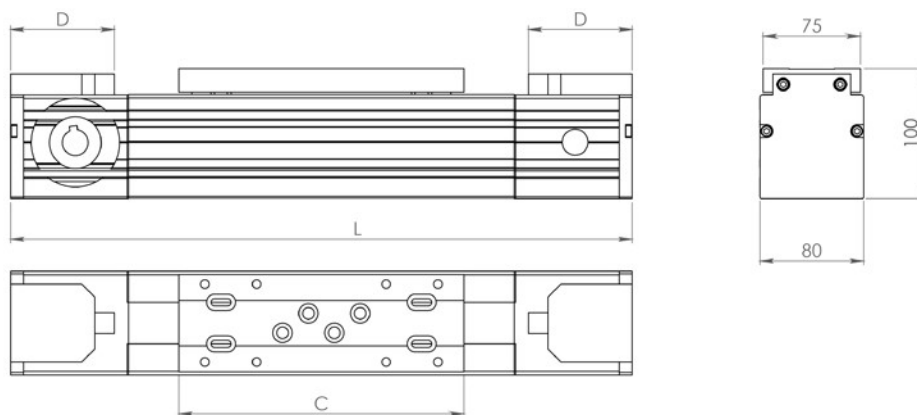
LT60S



LT80



LT80S



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

Choice of stroke

Linear motor stage	LT55	LT60S	LT60S-TR-S15D-****L	LT80-TR-G10	LT80S-TR-S20D
C: Carriage length, mm	150	180	230	200	200
L: Total Length, mm	Base length +				
	250	280	330	340	340
D: Flexible shaft coupling, mm	50	70	70	80	80