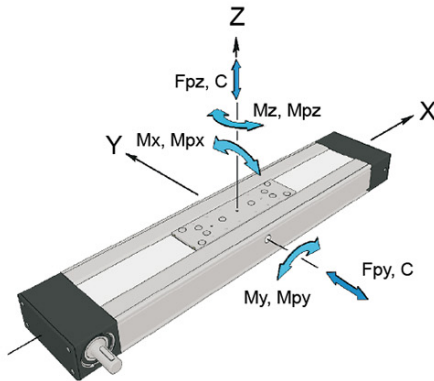


General data



For length/stroke over the stated value, please contact Rollco. Values for max. stroke are not valid for double carriage (equation of defining the linear unit length for particular size of the linear unit needs to be used).

For minimum stroke below the stated value, please contact Rollco.

Recommended values of loads

All the data of static and dynamic moments and load capacities stated are theoretical without considering any safety factor. The safety factor depends on the application and its requested safety.

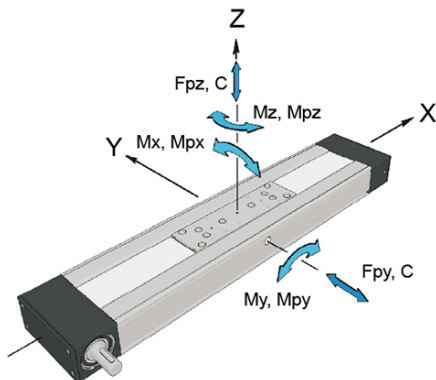
We recommend a minimum safety factor ($f_s = 5.0$).

Designation	Carriage Length L_v (mm)	Dynamic Moment M_x (Nm)	Dynamic Moment M_y (Nm)	Dynamic Moment M_z (Nm)	Dynamic Load Capacity C (N)
CTJ 90 S	102	125	17	34	4620
CTJ 90 L	156	250	290	290	9240

Designation	Static Load Capacity C_0 (N)	Max. Permissible Loads Forces F_{py} (N)	Max. Permissible Loads Forces F_{pz} (N)	Max. Permissible Loads Moments M_{px} (Nm)	Max. Permissible Loads Moments M_{py} (Nm)	Max. Permissible Loads Moments M_{pz} (Nm)
CTJ 90 S	6930	2000	4000	110	17	34
CTJ 90 L	13860	3990	8270	200	290	125

Designation	Moved Mass (kg)	Max. Repeatability (mm)	Max. Length L_{max} (mm)	Max. Stroke (mm)	Min. Stroke (mm)
CTJ 90 S	0.2	± 0.08	6000	5873	25
CTJ 90 L	0.35	± 0.08	6000	5819	25

General data double carriage



A - Distance between carriages.

Recommended values of loads

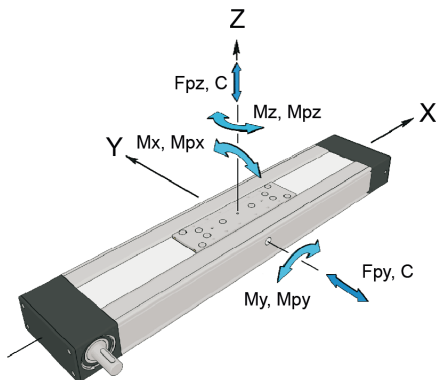
All the data of static and dynamic moments and load capacities stated are theoretical without considering any safety factor. The safety factor depends on the application and its requested safety.

We recommend a minimum safety factor ($f_s = 5.0$).

Designation	Carriage version	Dynamic Load Capacity C (N)	Static Load Capacity C0 (N)	Dynamic Moment Mx (Nm)	Dynamic Moment My (Nm)
CTJ 90 S	S2	9232	13860	250	$4.6 \times A$ (mm)
CTJ 90 L	S2	9232	13860	250	$4.6 \times A$ (mm)

Designation	Dynamic Moment Mz (Nm)	Max. Permissible Loads Forces Fpy (N)	Max. Permissible Loads Forces Fpz (N)	Max. Permissible Loads Moments Mpx (Nm)	Max. Permissible Loads Moments Mpy (Nm)	Max. Permissible Loads Moments Mpz (Nm)
CTJ 90 S	$4.6 \times A$ (mm)	4000	8000	220	$4.0 \times A$ (mm)	$2.0 \times A$ (mm)
CTJ 90 L	$4.6 \times A$ (mm)	4000	8000	220	$4.0 \times A$ (mm)	$2.0 \times A$ (mm)

Drive data



The stated values are for strokes up to 500 mm.
No load torque value increases with stroke elongation.

Max. acceleration (m/s²): 70

For acceleration over the stated value, please contact Rollco.

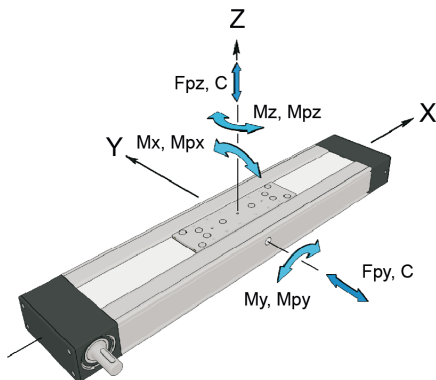
Mass calculation does not include mass of motor, reduction gear, switches and clamps.

Abs. stroke	Absolute stroke [mm]
A	Distance between carriages [mm]
nc	Number of carriages

Designation	Max. Travel Speed (m/s)	No Load Torque (Nm)	Pulley Drive Ratio (mm/rev)	Pulley Diameter	Belt Type
CTJ 90 S	5	0.4 × nc	90	28.65	AT 3
CTJ 90 L	5	0.42 × nc	90	28.65	AT 3

Designation	Belt Width	Max. Force Transmitted by Belt (N)	Specific Spring Constant Cspec (N)	Max. Drive Torque (Nm)	Planar Moment of Inertia Iy (cm ⁴)	Planar Moment of Inertia Iz (cm ⁴)
CTJ 90 S	35	520	402500	7.5	13.4	107
CTJ 90 L	35	520	402500	7.5	13.4	107

Mass and Mass moment



The stated values are for strokes up to 500 mm.
No load torque value increases with stroke elongation.

Max. acceleration (m/s²): 70

For acceleration over the stated value, please contact Rollco.

Mass calculation does not include mass of motor, reduction gear, switches and clamps.

Abs. stroke	Absolute stroke [mm]
A	Distance between carriages [mm]
nc	Number of carriages

Designation	Mass of Linear Unit (kg)	Mass Moment of Inertia (10 ⁻⁵ kg m ²)	Planar Moment of Inertia I _y (cm ⁴)	Planar Moment of Inertia I _z (cm ⁴)	Moved Mass (kg)
CTJ 90 S	1.7 + 0.0048 × (Abs. Stroke + (nc - 1) × A) + 0.20 × (nc - 1)	7 + 0.0031 × (Abs. Stroke + (nc - 1) × A) + 4.1 × (nc - 1)	13.4	107	0.2
CTJ 90 L	2.1 + 0.0048 × (Abs. Stroke + (nc - 1) × A) + 0.35 × (nc - 1)	11 + 0.0031 × (Abs. Stroke + (nc - 1) × A) + 7.2 × (nc - 1)	13.4	107	0.35

Designation	No Load Torque (Nm)
CTJ 90 S	0.4 × nc
CTJ 90 L	0.42 × nc