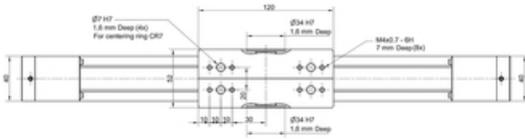




① The linear units do not include any safety stroke.  
 Absolute stroke = Effective stroke + 2 x safety stroke.

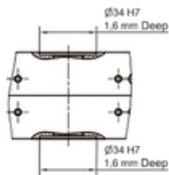
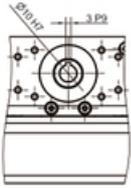


① Lifetime lubricated. ① All dimensions in mm. Drawings scales are not equal.



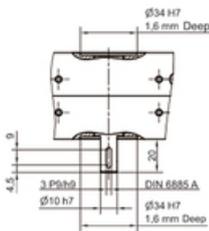
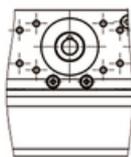
# Linear Unit MTJZ 40

**TYPE 0**



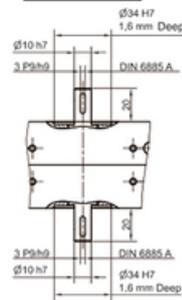
**TYPE 1**

① Journal with or without keyway.

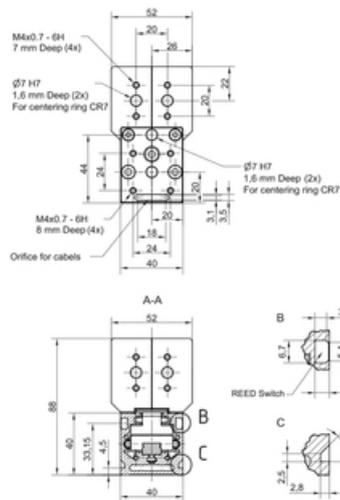


**TYPE 2**

① Journal with or without keyway.



# Linear Unit MTJZ 40

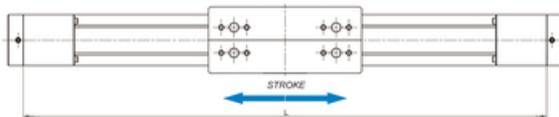


① All dimensions in mm. Drawings scales are not equal.

## Defining of the linear unit length

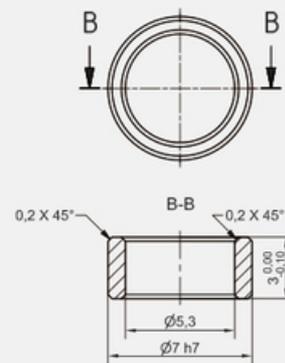
$$L = \text{Effective stroke} + 2 \times \text{Safety stroke} + 208 \text{ mm}$$

$$L_{\text{total}} = L + 24 \text{ mm}$$

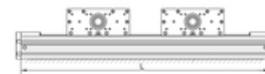


## CENTERING RING CR7

Material: 1.4305 ( AISI303)



## Multi drive block

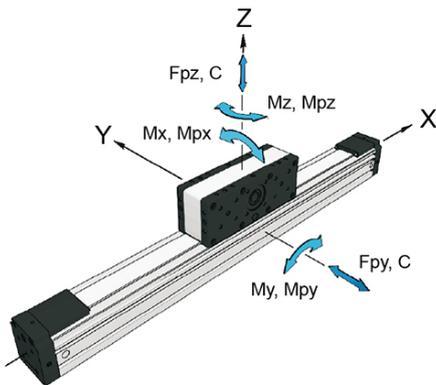


$$L = \text{Effective stroke} + 2 \times \text{Safety stroke} + 120 \times n_b + 88 \text{ mm}$$

$n_b$  - number of drive blocks

$$L_{\text{total}} = L + 24 \text{ mm}$$

## General Data



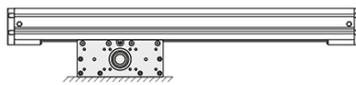
For minimum stroke below the stated value, please contact Rollco.

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

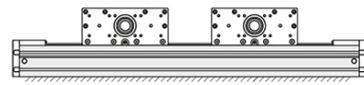
### Recommended values of loads

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 ( $f_s = 5.0$ ).

Version 1: Mounting by the drive block, profile travels



Version 2: Mounting by the profile, drive block travels



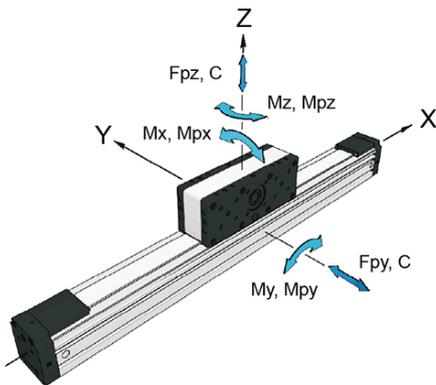
On request, multi drive blocks, which travel independently of each other, can be applied.

Designation	Dynamic Load Capacity C (N)	Static Load Capacity C0 (N)	Dynamic Moment Mx (Nm)	Dynamic Moment My (Nm)	Dynamic Moment Mz (Nm)
MTJZ 40	4610	6930	28	120	120

Designation	Mass of Drive Block (kg)	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)
MTJZ 40	0.95	2320	1510	14	40	62

Designation	Max. Repeatability (mm)	Max. Length Version 1 Lmax (mm)	Max. Length Version 2 Lmax (mm)	Max. Stroke Version 1 (mm)	Max. Stroke Version 2 (mm)	Min. Stroke (mm)
MTJZ 40	± 0.08	1000	3000	792	2792	25

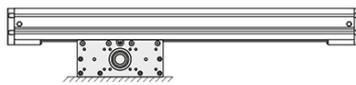
## Drive Data



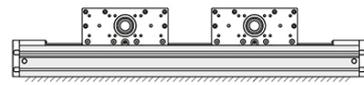
Max. acceleration (m/s<sup>2</sup>): 70\*

For acceleration over the stated value, please contact Rollco.

Version 1: Mounting by the drive block, profile travels



Version 2: Mounting by the profile, drive block travels

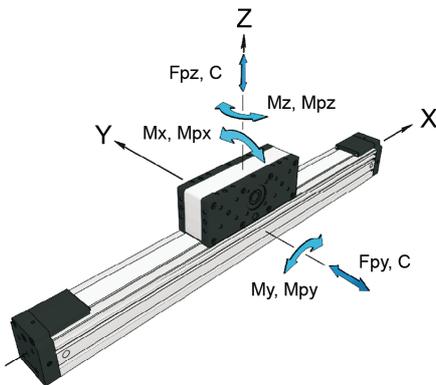


On request, multi drive blocks, which travel independently of each other, can be applied.

Designation	Max. Drive Torque (Nm)	Pulley Drive Ratio (mm/rev)	Pulley Diameter	Planar Moment of Inertia I <sub>y</sub> (cm <sup>4</sup> )	Planar Moment of Inertia I <sub>z</sub> (cm <sup>4</sup> )
<b>MTJZ 40</b>	3.6	99	31.51	9.8	11.6

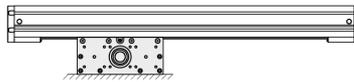
Designation	Belt Type	Belt Width	Max. Force Transmitted by Belt (N)	Specific Spring Constant Cspec (N)
<b>MTJZ 40</b>	AT3	20	230	225000

## Mass and Mass Moment

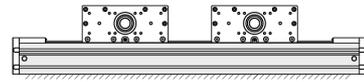


Mass calculation does not include mass of motor, reduction gear, switches and clamps.

Version 1: Mounting by the drive block, profile travels



Version 2: Mounting by the profile, drive block travels



On request, multi drive blocks, which travel independently of each other, can be applied.

Abs. stroke	Absolute stroke [mm]
A	Distance between two drive blocks [mm]
nb	Number of drive blocks

Designation	Mass of Linear Unit (kg)	Mass Moment of Inertia Version 1 (10 <sup>-4</sup> kg m <sup>2</sup> )	Mass Moment of Inertia of Drive Block Version 2 (10 <sup>-4</sup> kg m <sup>2</sup> )	Planar Moment of Inertia Iy (cm <sup>4</sup> )	Planar Moment of Inertia Iz (cm <sup>4</sup> )
<b>MTJZ 40</b>	1.7 + 0.0023 × (Abs. Stroke + (nb - 1) × A) + 0.95 × (nb - 1)	2.1 + 0.0058 × (Abs. Stroke × (nb - 1) × A) + 0.22 × (nb - 1)	2.6	9.8	11.6