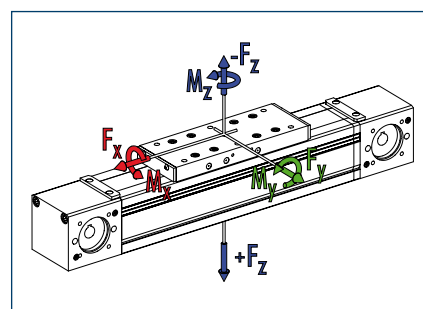


### Advantages of profiled rail guide

- High load bearing capacity
- Long lifetime
- High precision



### Loads and load torques



Load		Dynamic
<span style="color: red;">■</span> $F_x^{**}$	[N]	500
<span style="color: green;">■</span> $F_y$	[N]	500
<span style="color: blue;">■</span> $F_z$	[N]	600
<span style="color: blue;">■</span> $-F_z$	[N]	300
Load torques		Dynamic
<span style="color: red;">■</span> $M_x$	[Nm]	12
<span style="color: green;">■</span> $M_y$	[Nm]	30 (50)
<span style="color: blue;">■</span> $M_z$	[Nm]	30 (50)
<span style="color: blue;">■</span> $M_{zmax}$	[Nm]	8.3

\*\* Maximum value = Depending on speed

① Values in brackets relate to the long slide.

### Technical data

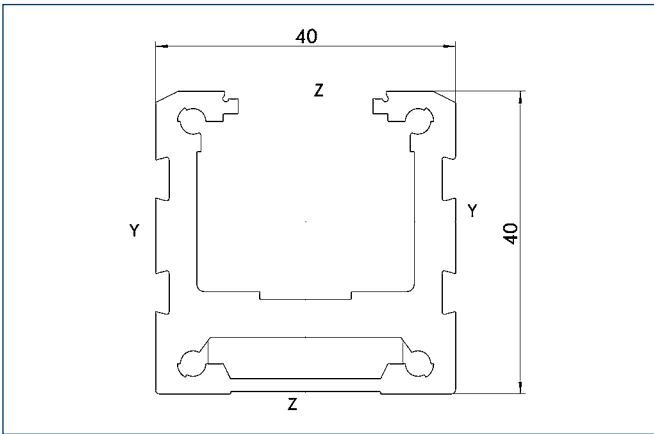
		B 40-ZSS
<b>Designation</b>		B 40-ZSS
Max. travel speed	[m/s]	3
Repeat accuracy	[mm]	± 0.08
Max. acceleration	[m/s <sup>2</sup> ]	30
Idle torque	[Nm]	0.3
<b>Drive</b>		
Drive element	Toothed belt	16 AT 5-E
Travel per revolution	[mm]	100
Maximum stroke	[mm]	850
Max. total length	[mm]	1070
Moment of inertia	[kgm <sup>2</sup> ]	0.0002
<b>Weights</b>		
Basic without travel	[kg]	1.7
Travel per 100 mm	[kg]	0.3
Slide plate 120 mm	[kg]	0.3
Slide plate 200 mm	[kg]	0.5



# B 40-ZSS

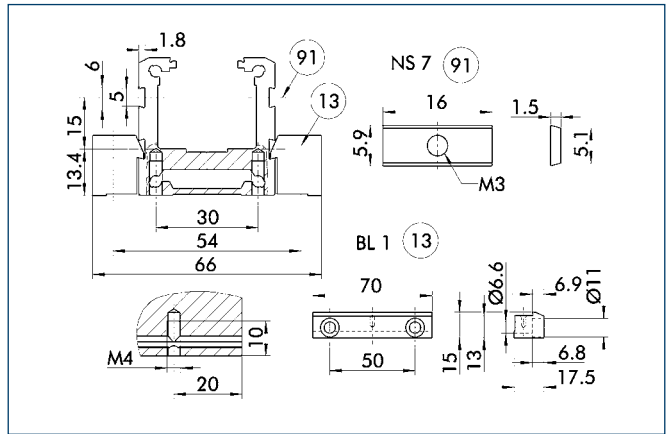
## Linear Axes • Toothed-belt Drive

### Profile ZSS



Specific mass	[kg/m]	1.71
Planar dimension	[mm <sup>2</sup> ]	635
Planar moment of inertia I <sub>y</sub>	[mm <sup>4</sup> ]	88917
Planar moment of inertia I <sub>z</sub>	[mm <sup>4</sup> ]	133350
Load torque W <sub>y</sub>	[mm <sup>3</sup> ]	3757
Load torque W <sub>z</sub>	[mm <sup>3</sup> ]	6665

### Mounting

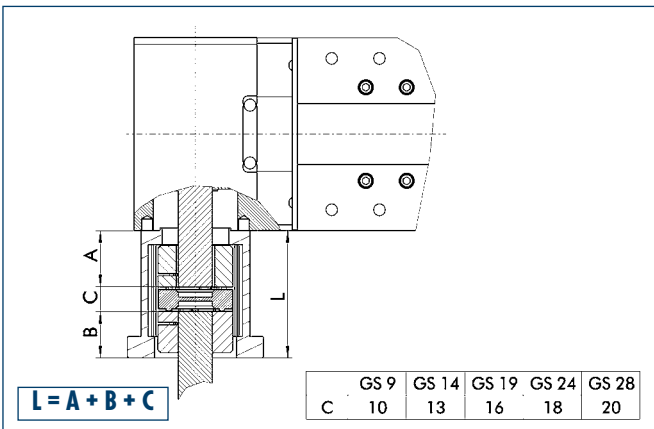


⑬ Mounting strip      ⑨① Side T-nut

The profile can be secured either using T-nuts or mounting strips.

Designation	Order designation	ID no.
T-nut	NS7	0331423
Mounting strip	BL1	0331400

### Motor flange schematic diagram



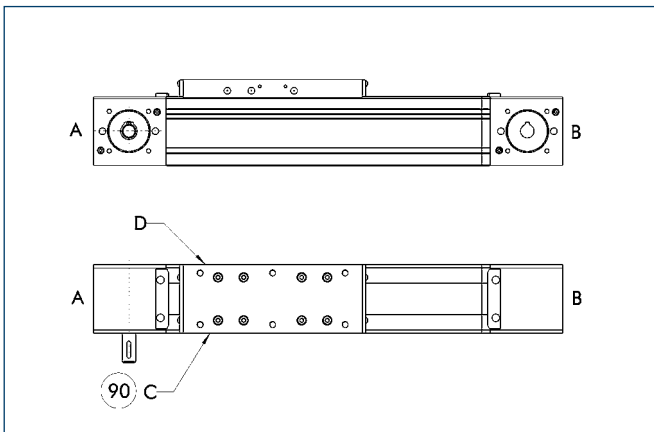
The table shows the relevant dimension **C** of the standard couplings. For dimension **A** refer to drive journal connection dimensions, for dimension **B** refer to corresponding motor dimension sheet, dimension **L** may differ in individual cases.

Different drive solutions can be attached to our axes. SCHUNK can supply you with the right motor flange and coupling for your drive.

① Because of the different thermal behavior of motors, we recommend that the drive solution is tested by the motor manufacturer.

More detailed information on pedestal bearings, connection shafts and bevel gears can be found in the "OPTIONS for System HSB" section of the catalog.

### Limit switch position



90 Limit switch standard position

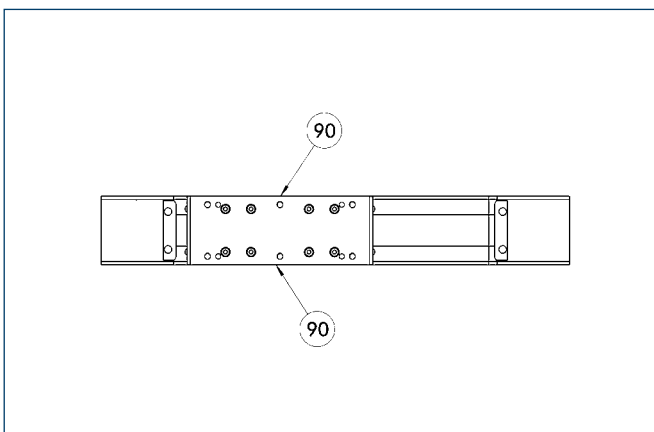
Two E02 switches are used as limit switches and an RS2 as the reference switch as standard.

ⓘ The positions and dimensions of limit switches, switching lugs, and mounting components may vary depending on the application and the selected limit switches. Please contact us for assistance.

### Limit switch selection

Designation	Order designation	ID no.
Inductive limit switch, opener, 2 m cable	E02	0331410
Inductive limit switch, opener, 10 m cable	E010	0331412
Inductive limit switch, closer, 2 m cable	ES2	0331411
Inductive limit switch, closer, 10 m cable	ES10	0331413
Mechanical limit switch (Siemens), opener	EMS	0331414
Mechanical limit switch (Balluff), opener	EMB	0331415

### Lubrication connections



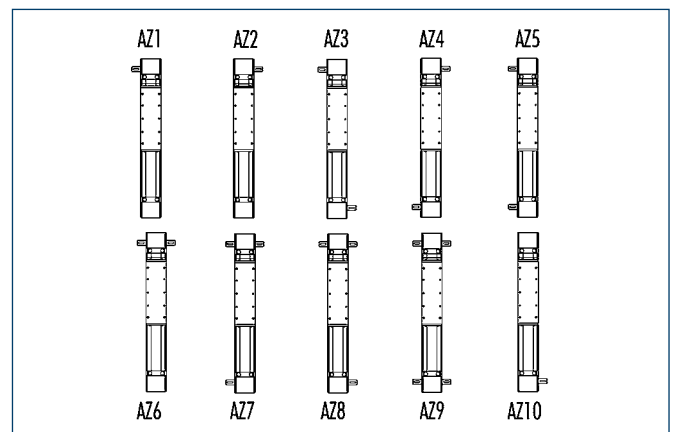
90 Standard lubrication connection

#### Standard connection

Lubrication nipple M8x1

If the lubrication connection has a different seat, this must be defined in the order text.

### Drive shafts



Depending on the axis application, the drive shaft seat may need to be defined in the order text. Particularly with axis combinations and mechanical synchronization, multiple drive shafts - some of them continuous shafts - are required.



More detailed information on pedestal bearings, connection shafts and bevel gears can be found in the "OPTIONS for System HSB" section of the catalog.