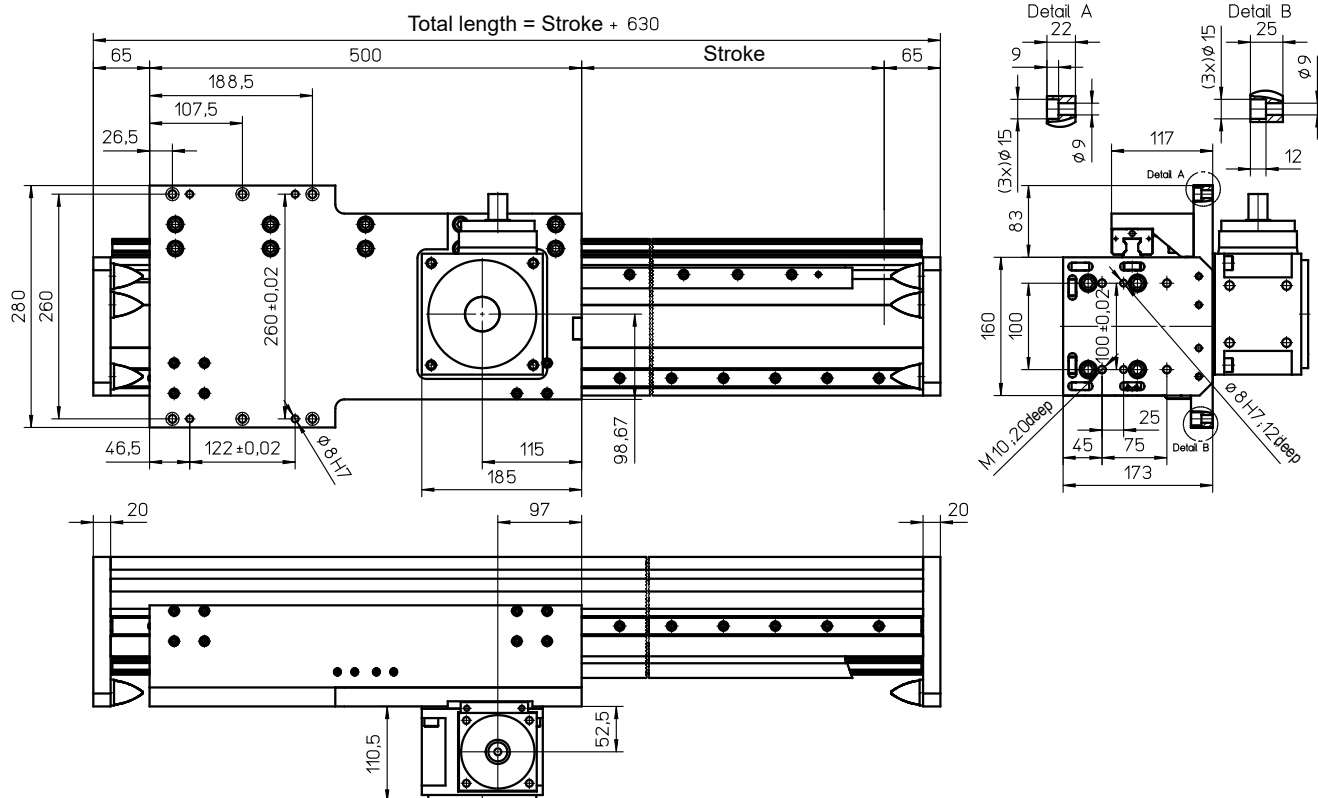


with rack-and-pinion drive (helical) and double linear guide (AZSH)

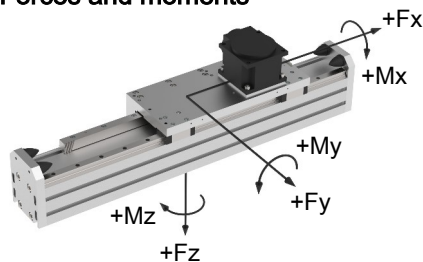


### Weights

|                              | AZSH            |
|------------------------------|-----------------|
| Basic length without stroke: | 34.05 kg*       |
| 100 mm stroke:               | 3.00 kg         |
| Carriage 500 mm:             | 14.70 kg        |
| Gears D75 / D90:             | 6.30 / 10.50 kg |

Max. total length: 8000 mm  
(longer on request)

### Forces and moments



|                | AZSH-D75     | AZSH-D90     |
|----------------|--------------|--------------|
| <b>Forces</b>  | Dynamic [N]  |              |
| $F_x$          | 1500-2200 ** | 3000-4000 ** |
| $F_y$          | 12000        |              |
| $F_z$          | 12000        |              |
| <b>Moments</b> | Dynamic [Nm] |              |
| $M_x$          | 2500         |              |
| $M_y$          | 7000         |              |
| $M_z$          | 7000         |              |

### Technical Data

|                               | AZSH                            |
|-------------------------------|---------------------------------|
| Max. speed:                   | 5.00 m/s (D75) / 4.50 m/s (D90) |
| Max. acceleration:            | 20 m/s <sup>2</sup>             |
| Repeat accuracy:              | ± 0.05 mm                       |
| Idle torque at drive pinion:  | 5.80 Nm                         |
| Rack and pinion:              | Module 2 helical                |
| Drive pinion:                 | Module 2, 30 teeth              |
| Stroke per pinion revolution: | 200 mm                          |
| Servo-high-performance-gear:  | DynaGear D75 / D 90             |
| Ratios:                       | 5 / 10 / 15                     |

|                              | D75         | D90  |
|------------------------------|-------------|------|
| <b>Load <math>F_x</math></b> | Dynamic [N] |      |
| $i = 5:1$                    | 2200        | 4000 |
| $i = 10:1$                   |             |      |
| $i = 15:1$                   |             |      |
|                              | 1500        | 3000 |

Preferred gear: D90

Efficiency of gears: > 96 %

Variants for gear mounting see page G29.

\* inclusive standard gear

\*\* depending on gear ratio (see table to right)