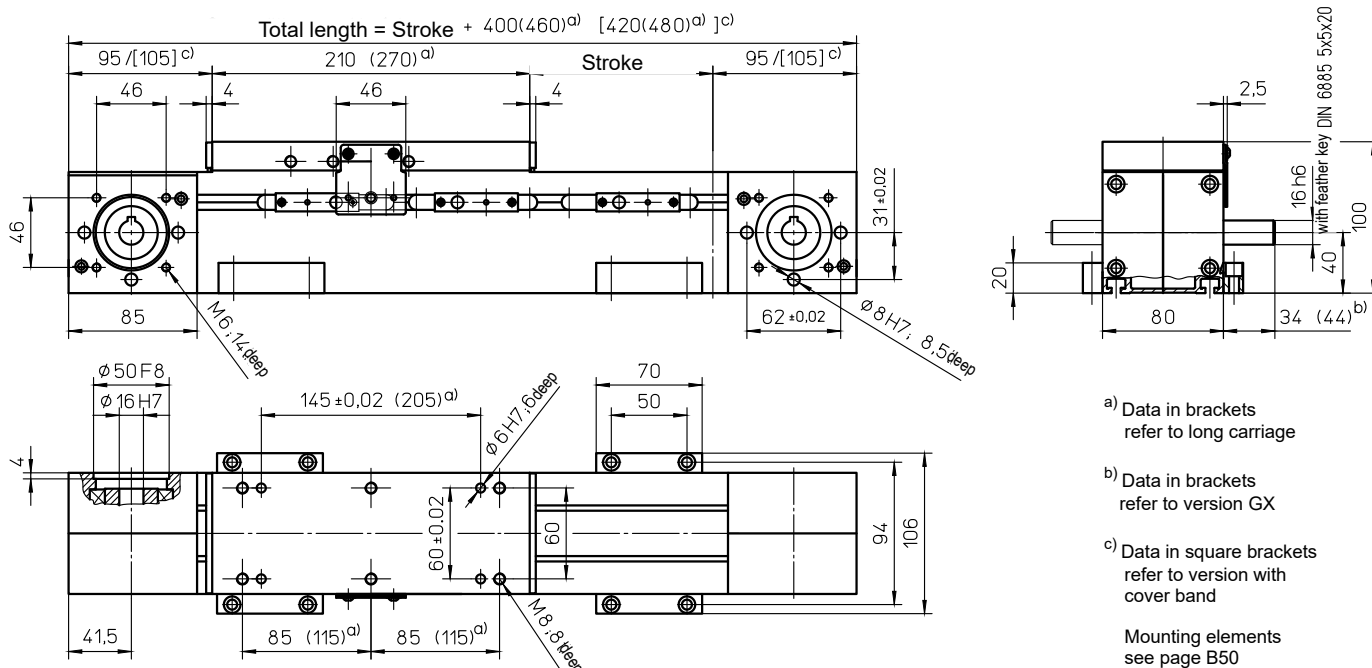


with toothed belt drive and roller guide (ZRS) or rail guide (ZSS)



### Weights

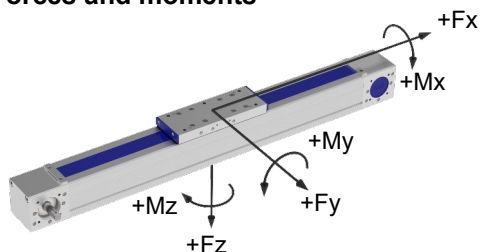
|                              | ZRS     | ZSS     |
|------------------------------|---------|---------|
| Basic length without stroke: | 5.50 kg | 6.10 kg |
| 100 mm stroke:               | 0.60 kg | 0.85 kg |
| Entire carriage 210 mm:      | 2.10 kg | 1.80 kg |
| Entire carriage 270 mm:      | 2.70 kg | 2.30 kg |

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

### Technical Data

|                        | ZRS                                      | ZSS                                      |
|------------------------|------------------------------------------|------------------------------------------|
| Max. speed:            | 8.00 m/s                                 | 5.00 m/s                                 |
| Max. acceleration:     | 40 m/s <sup>2</sup>                      |                                          |
| Repeat accuracy:       | ± 0.08 mm                                |                                          |
| Idle torque:           | 1.50 Nm                                  |                                          |
| Moment of inertia:     | 3.30 · 10 <sup>-3</sup> kgm <sup>2</sup> | 3.00 · 10 <sup>-3</sup> kgm <sup>2</sup> |
| Drive element:         | Toothed belt 32 AT5-E                    |                                          |
| Stroke per revolution: | 220 mm                                   |                                          |

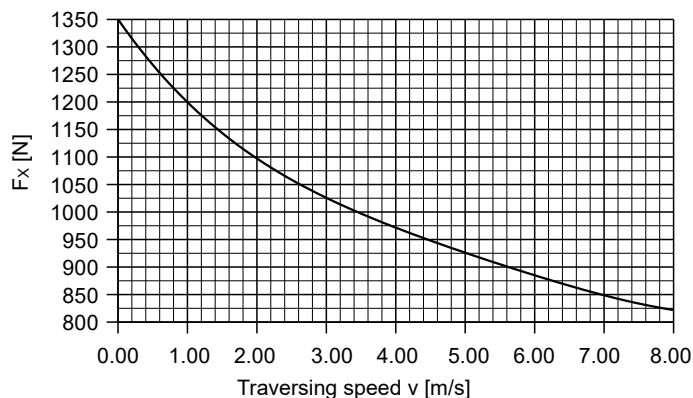
### Forces and moments



|                              | ZRS          | ZSS       |
|------------------------------|--------------|-----------|
| <b>Forces</b>                | Dynamic [N]  |           |
| F <sub>x</sub> <sup>d)</sup> | 1350         | 1350      |
| F <sub>y</sub>               | 500          | 800       |
| F <sub>z</sub>               | 1500         | 3000      |
| -F <sub>z</sub>              | 800          | 2000      |
| <b>Moments</b>               | Dynamic [Nm] |           |
| M <sub>x</sub>               | 50           | 100       |
| M <sub>y</sub>               | 180 (220)    | 250 (300) |
| M <sub>z</sub>               | 100 (130)    | 250 (300) |

d) Maximum value (see diagram "F<sub>x</sub>-v-Diagram")  
Data in brackets refer to long carriage plate (270)

### F<sub>x</sub> - v - Diagram



For mechanical linear drives with roller guide, the static load rating "C<sub>stat</sub>" (page TL11) applies for static loads.