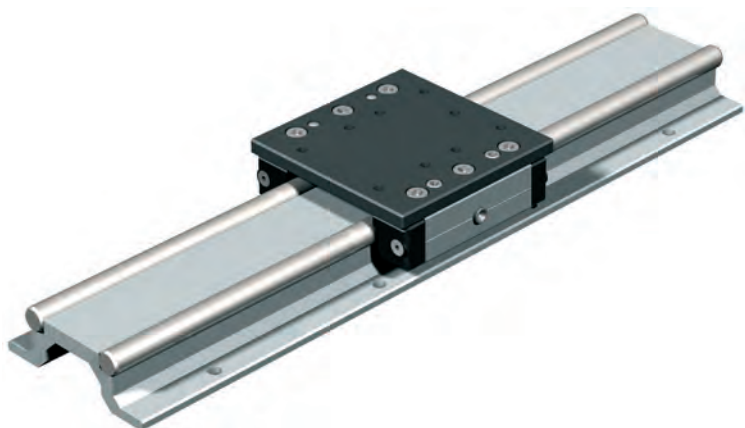


# Linear guide rail

# LFS-12-3



## Features

- W 90 × H 31 mm
- 2 precision steel shafts Ø 12
- anti-twist
- Aluminium shaft housing profile, naturally anodised
- increased shaft spacing allows higher torques to be absorbed
- Securing from above or below with M6 drillings in 100 mm raster
- Any guide length
- Weight: appr. 3.9 kg/m

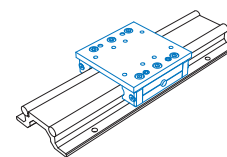
## Ordering key

**235 300 XXXX**

Length in mm (in 100 mm raster)  
 e.g. **0029** = Length 298  
**0299** = Length 2998

Profile length = Length overall L - 2 mm

Special lengths over 3000 mm with rod linkage to order.



## Slide

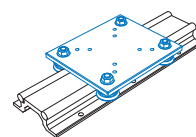
- ground steel plate
- central lubrication system option
- adjustable for no play

L 100 × W 100 × H 32 mm (WS 7/70)  
 (Weight: appr. 0.8 kg)

Part no.: **223107 0070**

L 200 × W 100 × H 32 mm (WS 7)  
 (Weight: appr. 1.7 kg)

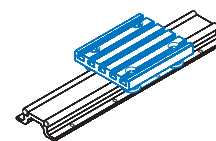
Part no.: **223107**



## Carriage LW 8

- L 150 × W 125 × H 7.5 mm
- ground steel plate
- 4 rollers Ø 31, sealed for life
- adjustable for no play
- Weight: 1.51 kg

Part no.: **223013**



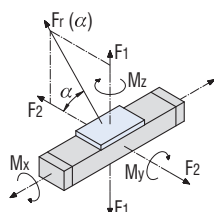
## Carriage LW 2

- L 150 × W 125 × H 34.5 mm
- Aluminium T-groove plate
- 4 rollers Ø 31, sealed for life
- adjustable for no play
- Weight: 0.97 kg

Part no.: **223005**

## Loading data

| Shaft slide WS 7/70  |          | Shaft slide WS 7     |          | Carriage LW 2        |          | Carriage LW 8        |          |
|----------------------|----------|----------------------|----------|----------------------|----------|----------------------|----------|
| C <sub>0</sub>       | 3303 N   | C <sub>0</sub>       | 7303 N   | C <sub>0</sub>       | 3114 N   | C <sub>0</sub>       | 2160 N   |
| C                    | 1873 N   | C                    | 3179 N   | C                    | 1846 N   | C                    | 4000 N   |
| F <sub>1</sub> stat. | 2821 N   | F <sub>1</sub> stat. | 6237 N   | F <sub>1</sub> stat. | 2659 N   | F <sub>1</sub> stat. | 4320 N   |
| F <sub>1</sub> dyn.  | 1599 N   | F <sub>1</sub> dyn.  | 2715 N   | F <sub>1</sub> dyn.  | 1576 N   | F <sub>1</sub> dyn.  | 3846 N   |
| F <sub>2</sub> stat. | 3303 N   | F <sub>2</sub> stat. | 7303 N   | F <sub>2</sub> stat. | 3114 N   | F <sub>2</sub> stat. | 2160 N   |
| F <sub>2</sub> dyn.  | 1873 N   | F <sub>2</sub> dyn.  | 3179 N   | F <sub>2</sub> dyn.  | 1846 N   | F <sub>2</sub> dyn.  | 4000 N   |
| M <sub>x</sub> stat. | 82.0 Nm  | M <sub>x</sub> stat. | 181.2 Nm | M <sub>x</sub> stat. | 216.0 Nm | M <sub>x</sub> stat. | 189.2 Nm |
| M <sub>y</sub> stat. | 105.3 Nm | M <sub>y</sub> stat. | 232.8 Nm | M <sub>y</sub> stat. | 100.5 Nm | M <sub>y</sub> stat. | 248.4 Nm |
| M <sub>z</sub> stat. | 123.3 Nm | M <sub>z</sub> stat. | 272.5 Nm | M <sub>z</sub> stat. | 108.0 Nm | M <sub>z</sub> stat. | 124.2 Nm |
| M <sub>x</sub> dyn.  | 46.4 Nm  | M <sub>x</sub> dyn.  | 78.8 Nm  | M <sub>x</sub> dyn.  | 168.4 Nm | M <sub>x</sub> dyn.  | 168.4 Nm |
| M <sub>y</sub> dyn.  | 59.7 Nm  | M <sub>y</sub> dyn.  | 101.3 Nm | M <sub>y</sub> dyn.  | 192.3 Nm | M <sub>y</sub> dyn.  | 221.1 Nm |
| M <sub>z</sub> dyn.  | 69.9 Nm  | M <sub>z</sub> dyn.  | 118.6 Nm | M <sub>z</sub> dyn.  | 200.0 Nm | M <sub>z</sub> dyn.  | 230.0 Nm |



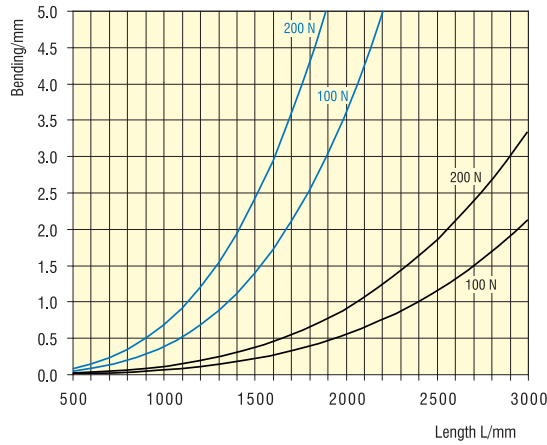
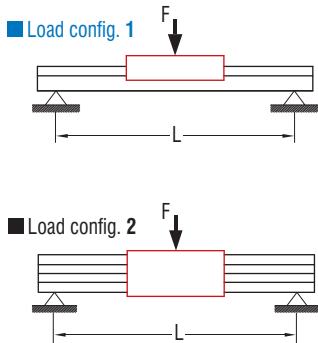
$$F_r(\alpha) = \frac{F_2}{\cos \alpha}$$

$$F_r(\alpha) = \frac{F_1}{\sin \alpha}$$

# Linear guide rail

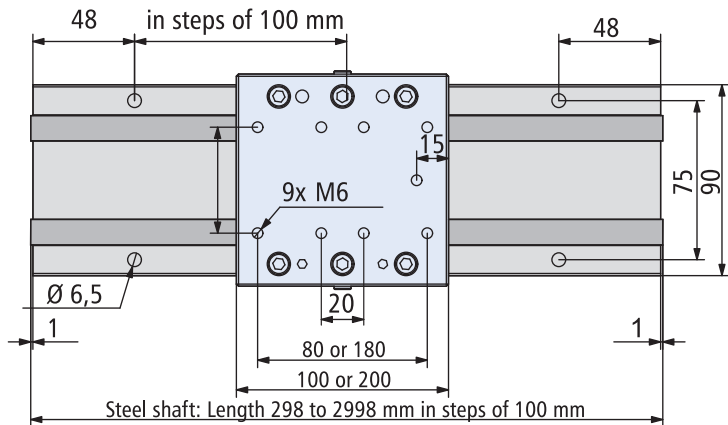
# LFS-12-3

## Bending

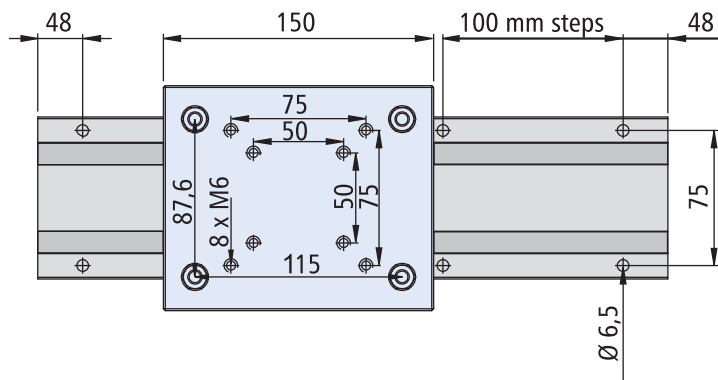


## Dimensioned drawings

LFS-12-3 with aluminium slide WS 7



LFS-12-3 with Carriage LW 8



LFS-12-3 with Carriage LW 2

