

# Linear guide rails

# LFS-8-4



Figure: LFS-8-4 with 2 steel shafts and an aluminium slot

Figure: LFS-8-4 with 4 steel shafts and two aluminium slide (optional)

## Features

- W 80 x H 80 mm
- 4 precision steel shafts Ø 8
- anti-twist
- aluminium shaft housing profiles, naturally anodised
- fixing from below with M6 tapped rails in the T-slot inserts or in the head side through M8 drillings
- side T-key inserts for limit switch securing
- conditionally self-supporting
- special lengths to order
- weight: approx. 7.2 kg/m
- options: stainless steel version with 2 steel shafts 2 slide or trolley

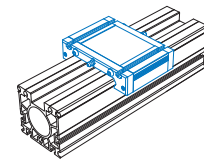
## Ordering key

### 235 00X XXXX

Standard = 6      Length in mm (in 100 mm raster)  
 Stainless = 7      e.g. 0029 = Length 298  
                              0299 = Length 2998

Steel shaft length: total length L - 3 mm

Profile up to 6000 mm available without impact connection, steel shafts divided.



## Aluminium slide

- Clamping surface plane milled
- M6 T-slot inserts
- Central lubrication option
- Adjustable for no play
- Option: stainless steel version

L 96 x W 130 x H 32 mm (WS 3/70)  
 (weight: approx. 0.5 kg)

Part no.: **223103 0070**  
 Stainless steel: **223103 1070**

L 176 x W 130 x H 32 mm (WS 3)  
 (weight: approx. 0.9 kg)

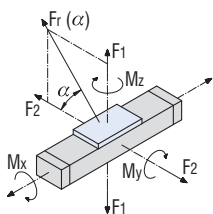
Part no.: **223103**  
 Stainless steel: **223103 1000**

## Load data

Shaft slide WS 3/70	
C <sub>0</sub>	3141 N
C	1879 N
F <sub>1</sub> static	2682 N
F <sub>1</sub> dynamic	1604 N
F <sub>2</sub> static	3141 N
F <sub>2</sub> dynamic	1879 N
M <sub>x</sub> static	115.7 Nm
M <sub>y</sub> static	105.3 Nm
M <sub>z</sub> static	123.3 Nm
M <sub>x</sub> dynamic	69.2 Nm
M <sub>y</sub> dynamic	62.9 Nm
M <sub>z</sub> dynamic	73.7 Nm

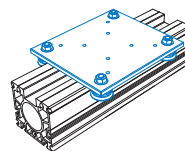
Shaft slide WS 3	
C <sub>0</sub>	6945 N
C	3190 N
F <sub>1</sub> static	5931 N
F <sub>1</sub> dynamic	2724 N
F <sub>2</sub> static	6945 N
F <sub>2</sub> dynamic	3190 N
M <sub>x</sub> static	255.9 Nm
M <sub>y</sub> static	232.8 Nm
M <sub>z</sub> static	272.5 Nm
M <sub>x</sub> dynamic	117.5 Nm
M <sub>y</sub> dynamic	106.9 Nm
M <sub>z</sub> dynamic	125.1 Nm

Trolley LW 7	
C <sub>0</sub>	2160 N
C	4000 N
F <sub>1</sub> static	4320 N
F <sub>1</sub> dynamic	3792 N
F <sub>2</sub> static	2160 N
F <sub>2</sub> dynamic	4000 N
M <sub>x</sub> static	246.8 Nm
M <sub>y</sub> static	302.4 Nm
M <sub>z</sub> static	151.2 Nm
M <sub>x</sub> dynamic	216.7 Nm
M <sub>y</sub> dynamic	265.4 Nm
M <sub>z</sub> dynamic	280 Nm



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

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



## Trolley LW 7

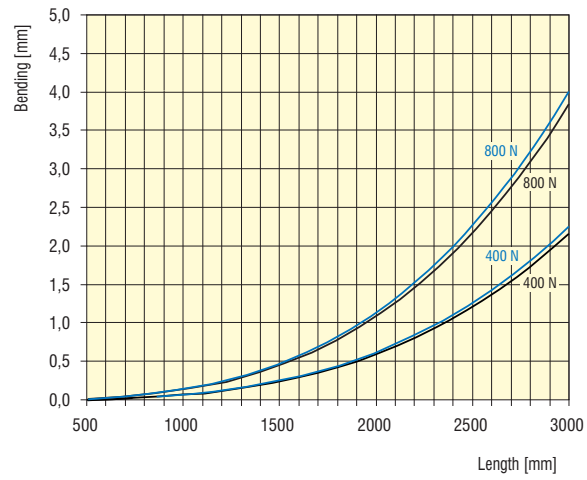
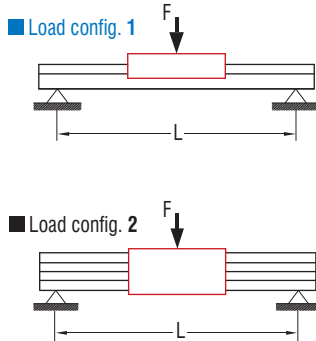
- L 175 x W 150 x H 7.5 mm
- ground steel plate
- 4 rollers Ø 31, sealed for life
- adjustable for no play
- weight: approx. 2 kg

Part no.: **223012**

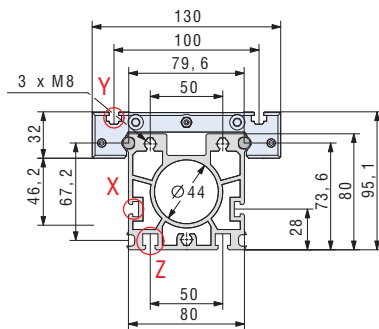
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# LFS-8-4

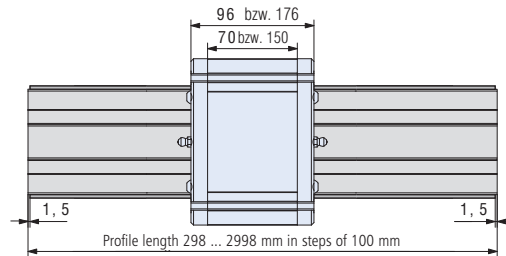
## Bending



## Dimensioned drawings



LFS-8-3 with aluminium slide WS 3/70 or WS 3



LFS-8-4 with trolley LW 7

