

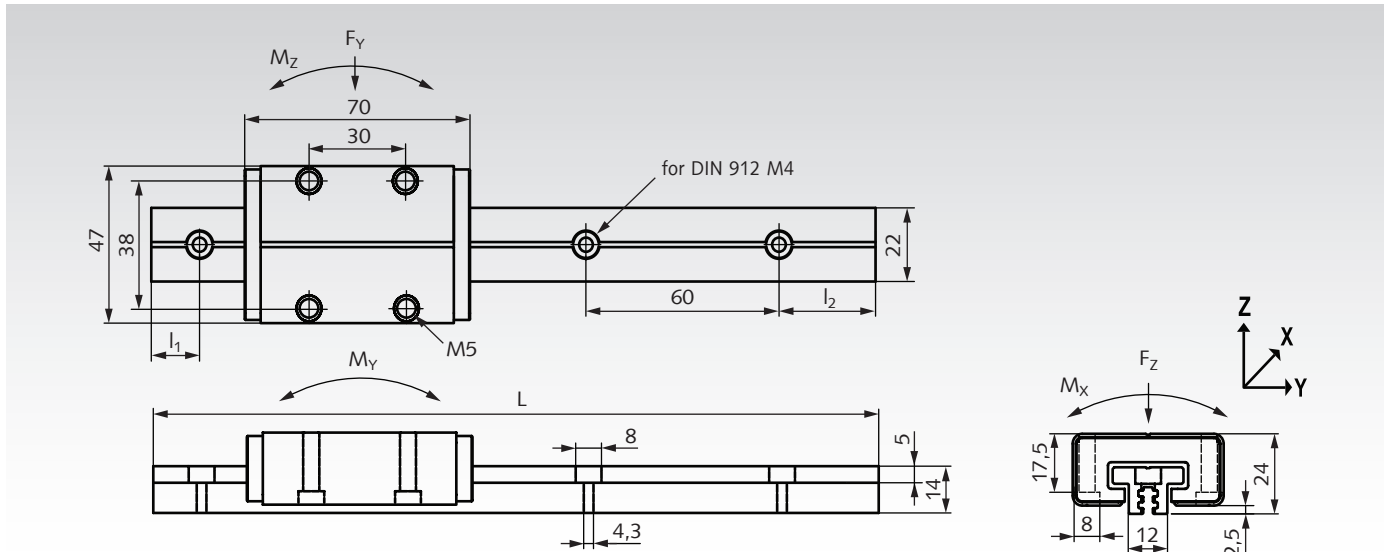
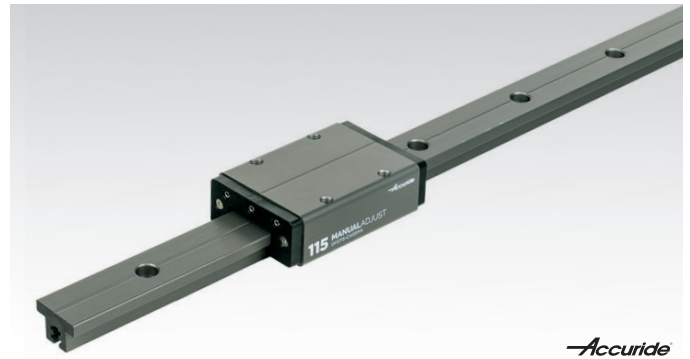
Linear Motion Guides DFG 115, Friction Guides

Material: Track and carriage from aluminium, hard anodised.
Plain bearings from advanced technical polymer.

Linear Motion Guides with plain bearings for universal use.

- Dimensionally interchangeable with rolling bearing linear motion guides ISO 12090 size 15.
- Three types of carriages on choice: non-adjustable / manual adjustable / automatic adjustment.
- Four track lengths on choice (for to cut by the customer).
- Several carriages can be used on one track.
- Resistant against corrosion, suitable for high pressure wash down.
- Long service life, maintenance-free.
- All parts have to be ordered separately.
- Temperature range: -40°C to +90°C.

Ordering details: e.g.: 1x Prod. No. 649 707 01, Carriage Non-Adjustable
1x Prod. No. 649 707 05, Track 500mm



Product No.	Type	Version	Weight
649 707 01	DFG115-CASSNA	non-adjustable	92 g
649 707 02	DFG115-CASSMA	manuel adjustable	98 g
649 707 03	DFG115-CASSAA	automatic adjustment	96 g

Product No.	Type	L	l ₁	l ₂	Weight
649 707 05	DFG115-0050	500	40	40	240 g
649 707 10	DFG115-0100	1000	20	20	480 g
649 707 15	DFG115-0150	1500	40	20	720 g
649 707 20	DFG115-0200	2000	40	40	960 g

Performance Values

Static loads: $F_Y = 2\text{ kN}$; $F_Z = 4\text{ kN}$; $-F_Z = 4\text{ kN}$.

Dynamic loads: $F_Y = 0.25\text{ kN}$; $F_Z = 0.5\text{ kN}$; $-F_Z = 0.5\text{ kN}$.

Static moments: $M_X = 10\text{ Nm}$; $M_Y = 10\text{ Nm}$; $M_Z = 10\text{ Nm}$.

Dynamic moments: $M_X = 1.25\text{ Nm}$; $M_Y = 1.25\text{ Nm}$; $M_Z = 1.25\text{ Nm}$.

Maximum values are mutually exclusive.

Speed: $v_{\text{max}} = 2\text{ m/s}$. **Temperature range:** -40°C to +90°C.

Travel at $v=1\text{ m/s}$ and 20°C, with load F_Z without moments:

Load F_Z :	100N	200N	300N	400N	500N
Travel:	9600km	4600km	3000km	2500km	2000km

Description of Carriage Types



Non-Adjustable

Product No. 649 707 01:
Carriage non-adjustable.
Most cost-effective version.
The clearance cannot be adjusted.
Play of new carriage: max. 0.125mm in Y and Z direction. It can be used for simpler applications or as 'floating bearing' on parallel rails.



Manuel Adjustable

Product No. 649 707 02:
Carriage manual adjustable.
For the most applications, this is the preferable type. The clearance or preload can be manual adjusted with an Allen key (SW 1.5mm). Adjustment range: from max. clearance 0.125mm in Y and Z direction up to a preload of 30N. Torque at the adjusting screws max. 0.1Nm.



Automatic Adjustment

Product No. 649 707 03:
Carriage with automatic adjustment.

Before installing the carriage, the 3 supplied installation pins must be inserted, pushed in and turned a quarter turn to reset and fix the preload springs. After setting the carriage on the track, the 3 installation pins must be turned a quarter turn again and taken out. This releases the preload springs for the automatic adjustment to a preload of approx. 4.5N (+/-1N). This adjustment will continue to operate throughout the life of the product.



Installation Pins