

Intended Use

The belt drive slides ZF 2 and ZF 3 are designed for the positioning of devices, work pieces, tools etc. The maximum possible weight on the slide depends on the acceleration.

The belt drive slides are available in different lengths. Each slide is available with and without drive module.



Danger of Bruising

Always provide safety measures to prevent bruising!!!



Assembly

The isel belt drive slides ZF 2 and ZF 3 are completely assembled units (eventually completely with drive motor).

Cleaning

The belt drive slides ZF 2 and ZF 3 are open units. Remove dust and shavings regularly from the slide. It is important that nothing (f. e. shavings) can get underneath the belts or inside the profiles or lie on the steel shafts.

Basic Greasing

The belt drive slides ZF2 and ZF3 are completely greased ex works and can be indicated immediately. Only the steel shafts (3) have to be re-greased through the grease nipple (1) on the bearing carriage (2) according to the instructions. All bearing and drive components received a life-time greasing and do not require anymore greasing.

Greasing Instruction

The greasing is done using either a pushing press (8) or a hand lever press (7). Doing so 1 gram of grease complies with three portions of the isel pushing press. The greasing is done through the grease nipple (1) located at the front end of the bearing carriage (2).

Please note that the grease nipple can be pushed out of the plastic thread track when handled with too much strength.

Clean as described as follows:

1. If required remove dirt and solids from the steel shafts (3) and the grease nipple (1).
2. Put the press onto the clean grease nipple (1) and push one portion of grease inside.
3. Move the carriage (2) back and forth several times to spread the admitted grease.
4. Continue adding and spreading grease until the required amount has been added.

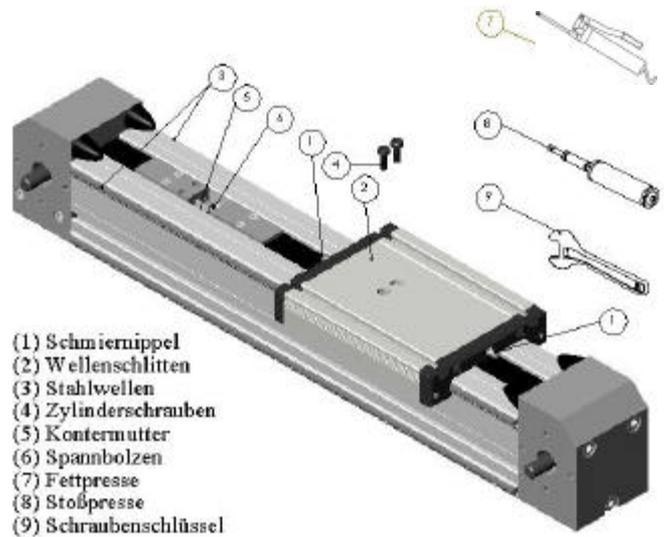
Greasing Plan

Check the greasing film on both steel shafts regularly for missing spots and dirt and re-grease if required. On idle running or average impacts there should be a re-greasing with a sodium saponified grease GP00/00F-20 according to DIN 51 502 or a comparable grease (Article no. 299031) every 300 working hours.

Re-clamping the belt

It is not required to re-clamp the belt under normal application conditions. Should it be required under certain conditions please follow these instructions:

1. Remove both screws (4) on the upside of the carriage.
2. Move the bearing carriage (2) to the side.
3. Dismantle the counter nut (5) and turn the clamping bolt (6).
4. Re-counter the bolts and screw the carriage (2) to the clamping unit by means of the two cylinder screws (4).



Initial Belt Tension

The belt should be mounted so tight that it is deflected off the straight line by $d = s/50$ under the testing force F on half centre distance $s/2$.

The testing force depends on the driving power and the belt speed.

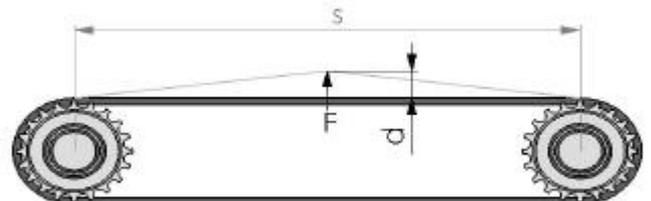
To adjust the initial belt tension we recommend the following: **Testing Force $F = 10N \dots 15N$**



An initial belt tension that is unnecessarily high decreases the durability of the drive, increases the impact on the bearings as well as the wear out of the teeth and brings forward running noises.



If the initial belt tension is not tight enough the belt teeth might not interlock faultlessly with the toothing of the wheel and even skip in case of and overload.



Technical Data

Belt Drive Slide	ZF 2	ZF 3
Aluminium Profile	MLF 5 - W 115 x H 40 mm	MLF 4 - W 80 x H 80 mm
Slide weight	4,72 kg/m	6,48 kg/m
Clearance-free belt	HTD – 5M Width 25mm	
Bearing carriage	WS 3 - L 176 x W 130 mm	
Feed per revolution	70 mm	70 (150) mm
Repeat accuracy	? 0,2 mm	
Travel	Profile length L – 235 mm	
Maximum speed	3,5 m/s	5 m/s
Maximum compound to be accelerated relating to belt cohesiveness	13 kg if 20 m/s ²	20 kg if 20 m/s ²
Length	L = 698 ... Lmax = 5998 (im Raster 100mm)	