

Stainless steel roller guides

Technical Information

The most important characteristics:

- Available sizes: 20, 30, 45.
- Corrosion-resistant, even when scratched or exposed to solvents and impact.
- The roller axles are permanently lubricated.
- Compensation for errors in parallelism.
- Resistant to dirt due to internal tracks.
- Easy adjustment of the roller guide carriage to the guide rail.
- Standard rail lengths up to 3120 mm, other lengths on request.
- Low coefficient of friction.
- Combination of T-rails and U-rails for fixed bearing/ floating bearing applications.
- Easy adjustment of the pretension on the roller guide carriage.
- Track rollers protected from sprayed water by plastic seal.
- Rail highly resistant to temperatures from -30 °C to 100 °C.
- Max. traversing speed of the roller guide carriage in fixed/floating bearing rail:
1.5 m/s (depending on the application).
- Max. acceleration: up to 2 m/s².
- Max. travel: 3060 mm (depending on size).
- Max. radial base load: 1740 N per roller guide carriage.

Preferred fields of application:

- Construction and machine engineering (e.g. safety doors, washer plant accessories).
- Medical technology (e.g., hospital equipment, medical equipment).
- Transport (e.g., railroad transport, ships, automobile industry).
- Food and beverage industry (e.g., packaging).
- Building technology (e.g., louvres).
- Energy technology (e.g., industrial furnaces, boilers).

Adjustment of the roller guide carriage:

If the linear guides are supplied as a system, the carriages are already adjusted. If supplied separately or if the carriage is to be installed on a separate rail, it must be readjusted.

In this case, observe the following points:

- Check the cleanliness of the tracks.
- Remove any wiper that may be present, loosen the centre roller stud and place the carriage on the rail.
- Position the carriage at one end of the rail.
- With U-rails, place a metal shim between the carriage and rail (e.g., adjustment spanner) to allow a horizontal alignment of the carriage to the rail.
- Slip the supplied flat spanner between the rail and carriage from the side and position it on the eccentric pin to be adjusted.

- By turning the flat spanner clockwise, press the roller to be adjusted against the upper track until the carriage is seated play-free in the rail. Avoid an excessively high preload, as this will reduce the service life due to higher friction.
- Hold the roller stud in the correct position with the adjustment spanner and carefully tighten the locking screw.
- Move the carriage in the rail and check the preload over the entire length of the rail. The movement should be smooth and play-free over the entire length of the rail. Tighten the fastening screws to the tightening torque specified in the table while, at the same time holding the angular position of the stud steady with the flat spanner.
- Any wipers may now be re-mounted.

Size	Tightening torque (Nm)
20	3
30	7
45	12

Notes:

- The roller guide carriages are equipped with rollers that are alternately in contact with both tracks. A marking on the body above the external roller studs shows the correct arrangement of the rollers in respect to the external load.
Important: the two outer rollers are used to absorb radial loads.
By simply moving the centre cam roller, the roller carriage can be adjusted to be play-free or under the desired preload in the rail.
- The compact version of the roller carriage has a plastic wiper to clean the tracks as standard equipment.
- A wiper for the heavy-duty version of the roller carriage is available on request.
- We advise against joining rails together (end to end).
- Recommended fastening screws: in compliance with ISO 7380 with a low screw head or TORX® screws.