

Axis TM Series Lubrication

Oil Types

All conveyor drum motors are oil filled before delivery. Standard factory filling is gear oil SAE 100 with the technical specification: Viscosity cST/40°C or Engler/50°, freezing point is -20°. The oil is for operating temperatures covering -20°C to +50°C. If other oil types are used, it is essential to ensure that the oil contains no additives which may damage the motor insulation. Furthermore, oil types containing graphite, molybdenum disulphide or other electrical conduction components may NOT be used as this will cause damage to the motor. NSF/H1-oil (food proof) is also available on request.

Oil Change

After the first 200 – 300 operating hours an oil change is recommended. After the first oil change, it is only necessary to change the oil after every 10,000 operating hours. The drain plugs are located in the drum flange adjacent to the terminal box. In order to drain the oil, remove both screw plugs, and rotate the drum until the plug nearest the circumference of the drum faces downward. This allows the oil to drain out.

ATTENTION: It is important that the marking “top” on the connection shaft or output site is positioned upright and horizontal or not more than 30° from the horizontal lubrication line; otherwise there will be no cooling and lubrication.

Axis TM Series Drum Motor Mounting

Using Support Bearings

The shaft trunnions must be securely fastened by means of the tab washers. It must be observed that as from Ø82mm the marking “up” or “open” may only point upwards or maximal 30° to the left or right otherwise the cooling and lubrication of the motors is no longer guaranteed.

The inclination of the motor may also not be increased during operation.

The bolts for securing the support bearings are to be chosen so that the weight of the drum motor and the expected belt tension can be adequately taken. The support bearings must lie on the framework over the full surface to avoid tensioning and twisting of the shaft trunnions.

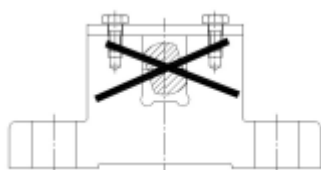


Figure 14.2

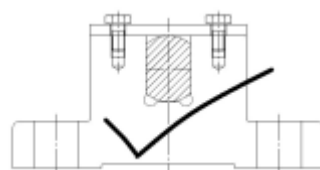


Figure 14.3

Without Support Bearings

- In applications where the drum motor mounting is integrated into the conveyor frame without support bearings it must be made sure that the trunnions are mounted with minimal play and no pre-tensioning.

Where no support bearings are used, the following must be observed:

- The individual trunnion mountings must cover at least 80% of the trunnion.
- The drum motors must be installed without axial play.
- The maximum tolerance between the shaft trunnions and the mounting may only be maximum $\pm 0.2\text{mm}$.

For reversals or high switching frequency, the drum motor must be installed without play.