

The following linear units can be supplied in ATEX:

- HSB-beta®
- HSB-delta®

These are classified as follows:

- ⊕ II 2G Ex h IIB T4 Gb $-10^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
- ⊕ II 2D Ex h IIIC T130°C Db $-10^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
- ⊕ II 3G Ex h IIB T4 Gc $-10^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
- ⊕ II 3D Ex h IIIC T130°C Dc $-10^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

DANGER



Failure to comply with the specifications may result in death or serious injury.

The following specifications in accordance with ATEX must be observed by the manufacturer of the machine or the operator and implemented according to requirements:

- The linear unit must be checked at least weekly and ideally daily. This check should include: Smooth operation, function of all seals and sufficient lubrication. If any findings are made in this respect, they must be checked by a competent person and, if necessary, rectified immediately. If a toothed belt is used as the drive type, the required belt tension must also be checked with the aid of a belt tension measurement device and, if necessary, the tension must be set correctly. It must also be ensured that the maximum surface resistance in accordance with the ISO 9563 standard of $10^4 \Omega$ is not exceeded. If this is detected, the toothed belt must be replaced immediately.
- After the calculated nominal service life of 90% has been reached, the corresponding components such as guides, toothed belts, bearings and so on must be replaced. However, every 24 months at the latest, the linear unit must be checked for proper functioning.
- Before commissioning, it is important to ensure that the linear unit is integrated into the equipotential bonding of the entire system at the thread ports provided for this purpose. Equipotential bonding in the area of the motor/bell housing must be ensured via the motor's earth connection. This must be checked for conductivity prior to commissioning. The leakage resistance to the equipotential bonding must be $<1 \text{ MOhm}$.
- When mounting the motor to the motor/bell housing, it is important to ensure that the drive can be moved freely. The synchronised pulleys on a deflection belt drive must be mounted at a distance of approx. 1 mm to 1.5 mm from the basic plate to ensure free movement. The couplings and clamping sets used must be mounted according to the manufacturer's specifications.

- When used in dust explosive areas, the compressed air supply to the linear unit must also be connected to the designated connections. Depending on the application, it is important to ensure that there is a continuous positive pressure during commissioning. The maximum pressurisation per connection must not exceed 0.25 bar. The test must be carried out under normal conditions and the maximum designed values.
If seals have to be replaced due to wear, the existing positive pressure must be checked again. In addition, this must be checked by the operator using a test plan specified by the machine manufacturer according to the application.
 - Dusts prone to self-ignition are excluded.
 - Dust deposits should be avoided.
- When selecting and installing electrical components, the requirements of EN 60079-14 and national regulations must be observed.
- The operator must ensure that block movement can be ruled out by suitable measures.
- The motor used must have active cooling so that the heat can be dissipated as effectively as possible.
- Ambient conditions must be clarified with our Sales department during project planning.
- The linear unit may only be operated in enclosed spaces.
- The operator must take suitable lightning protection measures.
- Alterations and repairs to the specified devices are not permitted, except with explicit written permission from the manufacturer.
- If the specified devices are installed in a superordinated machine, any new risks that result from the installation must be assessed by the manufacturer of the new machine.
- The linear unit may only be used under the operating conditions approved by the manufacturer. This includes:
 - Operation in dust explosive areas only with cover band (Valflon) and pressurisation
 - Installation position: horizontal or vertical
 - The utilisation of the catalogue values must not exceed 50%
 - Duty cycle
 - Ambient conditions
 - Ambient temperature
 - Speed: maximum 2 m/s *
 - * >1 m/s only using monitored central lubrication, in dust area with additional monitored compressed air supply. (Except for linear units from the Delta series with a center bar)