





The following designs can be realized for the **Beta** and **Delta** series.

Offer details

Customer:

Offer number:

ATEX – Ausführung

-  II 2G Ex h IIB T4 Gb $-10^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$ for Zone 1 (gas atmosphere)
-  II 2D Ex h IIIC T130°C Db $-10^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$ for Zone 21 (dust atmosphere)
-  II 3G Ex h IIB T4 Gc $-10^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$ for Zone 2 (gas atmosphere)
-  II 3D Ex h IIIC T130°C Dc $-10^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$ for Zone 22 (dust atmosphere)

Ambient temperature: min and max temperature

Ex-areas are divided into zones according to the frequency of the occurrence of hazardous explosive atmospheres:			
frequency	gases	dusts	by definition BG RCI*
occasionally	Gb Zone 1	Db Zone 21	More than once a month or for more than 30 minutes, but not predominantly in time.
rare, short term	Gc Zone 2	Dc Zone 22	A few times a year, for example once a month, but only for a maximum of 30 minutes.

*Source: Employer's Liability Insurance Association for Raw Materials and the Chemical Industry

Temperature class: T4 - 135 °C max. surface temperature

Temperature range: 130 °C max. surface temperature

Group of gases and dusts: IIB - A typical substance would be ethylene | IIIC - A typical substance would be conductive dust

Ignition protection type: Describes the ignition protection type of the non-electronic explosion protection.

Designation "Ex": The device complies with at least one or more ignition protection types

Type of explosive atmosphere: G_(as) - mixture of gases, mists or vapors | D_(ust) - dust-air mixture

Equipment category: 2 - High level of safety for zone 1/21 | 3 - Normal level of safety for zone 2/22

Device group: May only be operated "above ground"

cover band:	yes*	The installation position must not be overhead or to the side
	no	Only possible for toothed belt axes used in the gas sector
* maximum possible total length:		Spindle axis = results from the critical speed at 0 spindle supports Timing belt axis = maximum one-piece profile length

Particularities

**except Delta with center bar

- antistatic cover band made of Valflon
- potential equalization drilling in the profile
- only scrapper sheet possible
- maximum speed 1 m/s
- no wiper felts for roller guides
- no sliding guide
- no limit switches
- no spindle support
- conductive toothed belt made of TPUAS7
- potential equalization drilling in the carriage
- air barrier in the dust area
- with central lubrication maximum speed 2 m/s**
- internal parts are not coated or anodized
- no lengthwise sealing
- no deflection belt drive
- No end position dampers for spindle axes

ESD – Ausführung

Marking the potential equalization holes



HSB linear units are manufactured for the ESD area according to the ATEX standard, since grounding is an essential part of the ATEX approval. If only the ESD version is required, the ATEX designation is omitted.

The linear units are suitable for use in potentially explosive atmospheres, but the supplement to these assembly and maintenance instructions "FM 319 Use-in-Atex-zones-MuW" must be observed.