



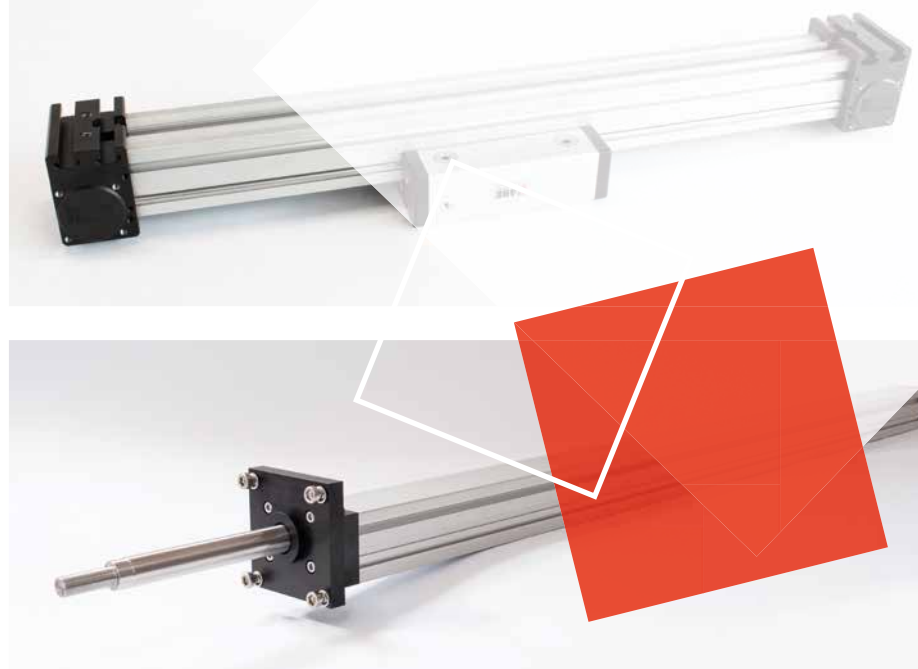
MODULAR LINEAR AXES ENTERING THE EXPLOSION- PROTECTION AREA



Where are the hold points located, what sizes and lifting heights are available, what kind of mounting options are there for additional components, and how can it all be integrated as conveniently as possible into the machine design? The typical questions asked when designing linear axes in factory automation are common in all production areas – including those that place special demands in terms of explosion protection.

Bahr Modultechnik has therefore designed a program of freely configurable linear axes specially developed for the various explosion-protection zones. With the available variety in lengths and drive properties, portal systems in the explosion-protection field can be designed and built to the exact requirements of the application. Solutions by Bahr Modultechnik are commonly used in bottling technology for explosive substances such as alcohol, benzene, gasoline, and other flammable chemical liquids. With regard to Bahr Modultechnik's systems approach, when it comes to the topic of ATEX especially, comprehensive advice relating to machine construction is a part of the overall service provided.





CERTIFIED LINEAR SYSTEMS SPICK AND SPAN

Toothed belt axes from the **ELZex** and **ELFZex** series are certified for use in explosion-protection areas. The linear systems conform with the new **EN ISO 80079-36 and -37 norm** for mechanical explosion protection. Furthermore, the axes are ATEX-approved and can therefore be used in Zone 2 for gas and dust.

Since 2019, the same applies to the new **EHTXex** spindle axes, which Bahr Modultechnik also developed for the explosion-protection field. In practice, the combination of toothed belt drive and spindle axis opens the way for being able to optimally combine the technical advantages of different drive principles without restrictions in the explosion-protection field with the specific application in mind.

With this approach, it is possible to open up new areas of application comparatively easily. The modular linear system is conceived as a full package and thus also includes accessories such as limit switches and couplings with ATEX approval.

Certified according to the following standards:

ATEX 2014/34/EU

⊕ II 2G Ex h IIB T4 Gb*

⊕ II 3D Ex h IIIB T125 °C Dc**

CONFORMITY

ISO 80079-36:2016*

ISO 80079-37:2016**

Technical Rules for Hazardous Substances
(TRGS) 727

Technical features

- any installation position
- maximum part length 6000 mm (ELZex)
- maximum length 3000 mm (ELFZex)
- maximum length 1500 mm (EHTXex)
- permissible surface temperature 125°C
- repeat accuracy ± 0.1 mm
- traverse speed < 1 m/s
- toothed belt design Conti HTD 5M/8M
HP-PAZ antistatic

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