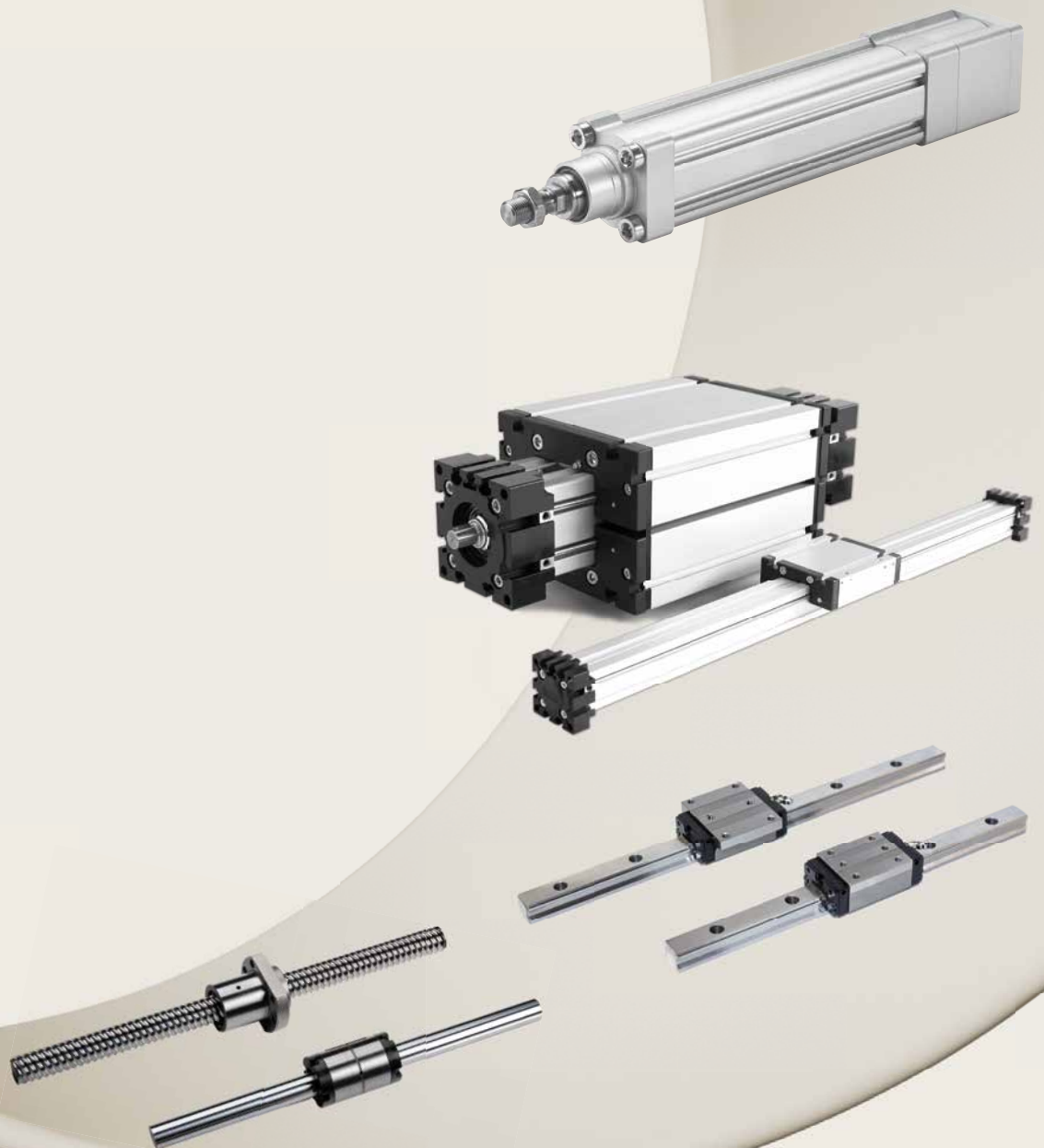




# Industrial Automation

IMI Bahr

Electric Cylinders, Linear Axis,  
Linear Guides and Ball Screws



Breakthrough  
engineering for  
a better world



# Breakthrough engineering for a better world

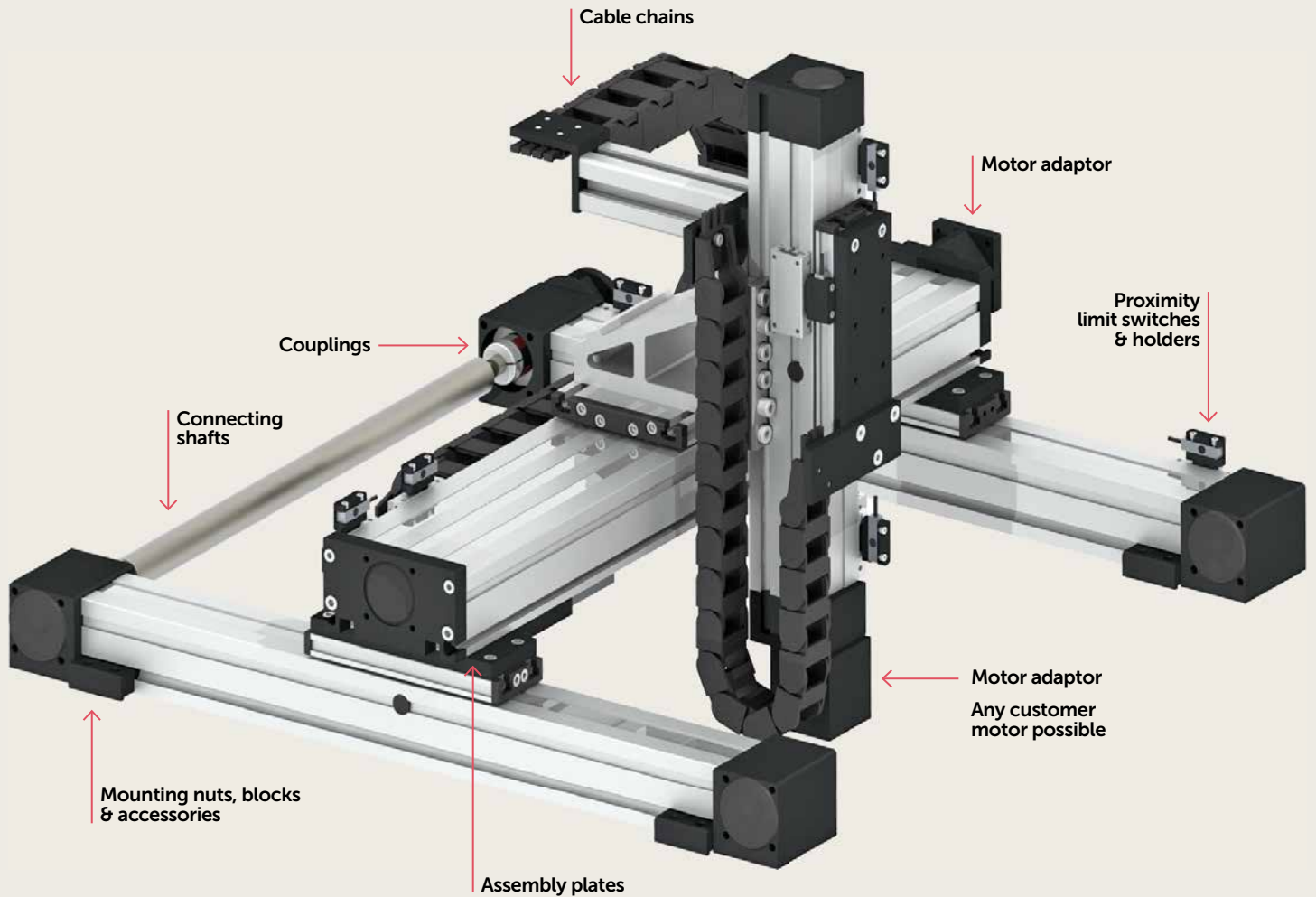
We create solutions for our customers which enable smarter, safer, more productive and sustainable factories, production lines and warehouse operations. Our pneumatic and electric motion systems help machine builders and end users around the world automate and optimise manufacturing and warehousing processes.

We have partnered with customers in industrial automation for over a century, applying our experience and innovation to create lasting value for their businesses. Our solutions support critical industries such as automotive, food and beverage, pharmaceuticals and even the space industry. We support the automation of precision manufacturing, product assembly, testing and packaging.

We use the latest digital technologies in our automation products and constantly innovate in close partnership with our customers. By applying our deep expertise, we can solve their toughest automation challenges, today and tomorrow. Through increased productivity, efficiency and safety, our customers can serve their own customers better, creating sustainable competitive advantage and delivering growth.

Our world-class product portfolio includes IMI Norgren, IMI Bimba, IMI Bahr and IMI Buschjost.

Breakthrough engineering you can count on.



# Your Specialist for Linear Technology

Our products are developed with our customers' most demanding standards in mind. We provide you with customised solutions and unique service.

Our dedicated and highly qualified team is always at your side to assist with advise and selection of the solution that suits you application.

- Technical consultation and needs assessment
- Design and development support in the prototype phase
- Complete offer with 3D models and drawings within 48 hours
- Structural analysis and service life calculation
- Gearbox, motor and energy chain design
- Repair and maintenance
- Reliable delivery within 4 weeks
- Cost-effective production of custom-made products from a batch size of 1



Rapid responses with  
direct contact partner



Expert advice and  
technical support



30 years of experience  
with more than 10,000  
projects realised in all  
sectors



# Rodless Actuators

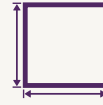
Customised, high-quality linear units. The modular product portfolio allows endless combinations, high flexibility and maximum customisation for almost all automation applications.

## Technical Specifications

- Wide range of more than 200 individual actuators
- Available in all drive and guide systems
- Structural profiles with high rigidity and pressing quality
- Compatible with all motor systems
- Certified for demanding environmental conditions
- Reliable & durable quality

## Optional

- Individualisation outside of the portfolio through high-quality technical services and vertical integration with high product quality.



- Sizes 30, 40, 60, 80, 100, 120, 160, 200 mm



- Combination options for linear actuators with toothed belt, spindle, rack and pinion, linear motor drive; roller, sliding and rail guides



- 100 mm - 60.000 mm stroke



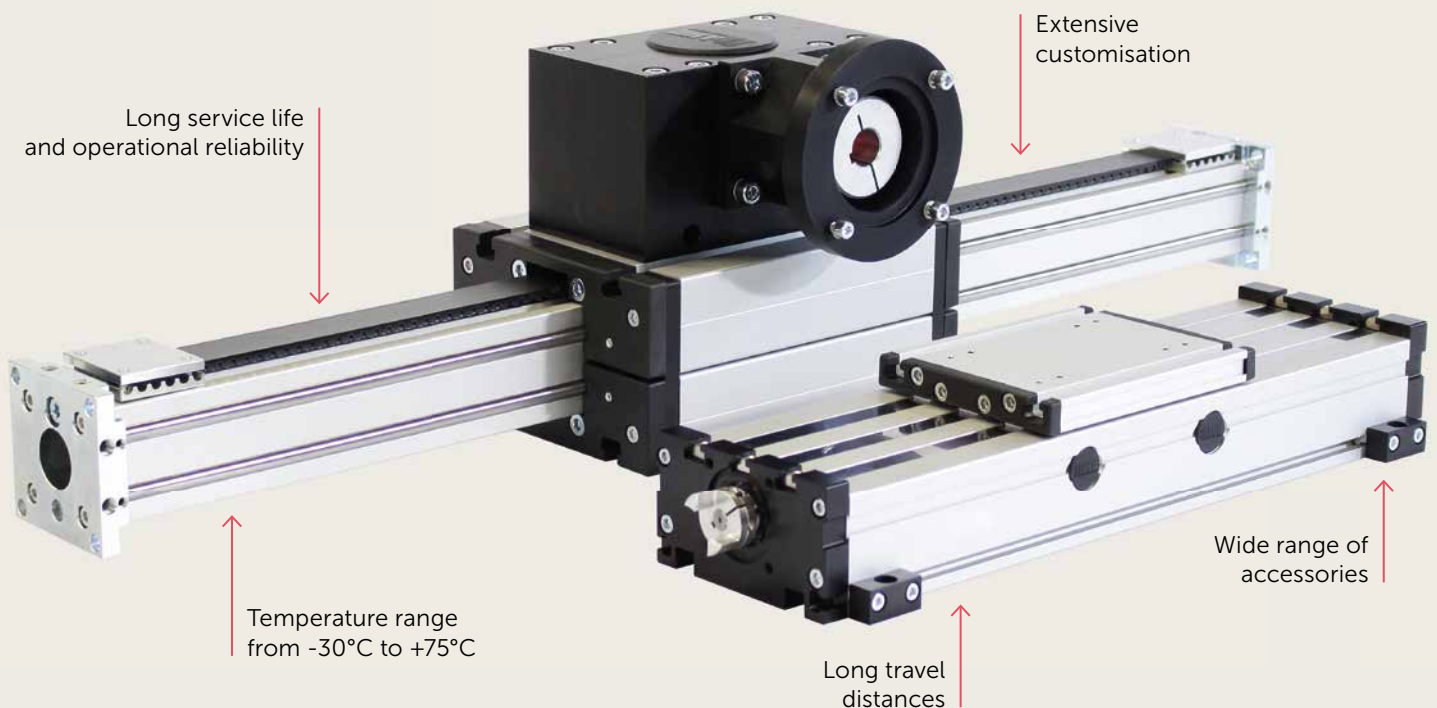
- Speed up to 12 m/s



- Load capacity from 1 kg to 1000 kg depending on the application



- Certified for clean room, ATEX and low temperature range down to -30°C



# Rodstyle Actuators

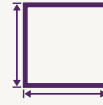
The electric rod-style cylinder is based on ISO 15552 dimensions and is available in six different sizes, with and without a motor.

## Technical Specifications

- Rod-style cylinders with ball screw drive
- 6 sizes
- Axial and parallel motor adaptation
- Robust design
- Based on ISO 15552
- Maintenance free
- Protection class IP65 with motor
- Reliable & durable quality

## Optional

- Piston rod extension
- Internally threaded piston rod
- Piston rod bellows



- 32, 40, 50, 63, 80, 100 mm



- Operating temperature  
Cylinder: 0°C to +80°C



- Max. 1.6 m/s



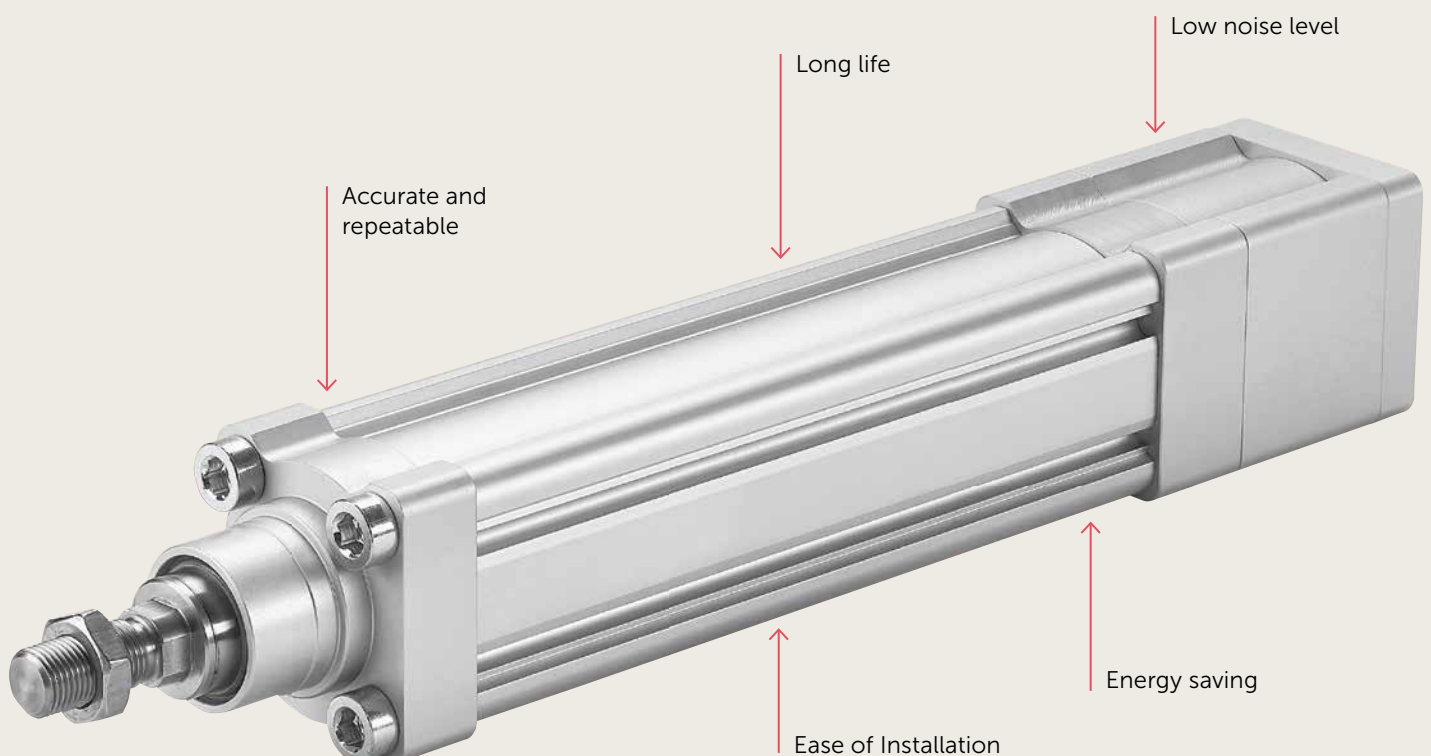
- Up to 30.4 kN



- 100 mm - 1500 mm stroke



- Protection Class IP40 or IP65



# Linear Guides

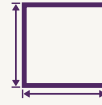
Linear rail guide system with very high load capacity and rigidity. With their smooth and even motion, high dynamics and accuracy, they are the ideal solution for moving heavy loads.

## Technical Specifications

- High accuracy with low friction
- High stiffness and self-alignment
- High tensile strength due to stainless steel reinforcement
- High load and moment capacity
- High dynamics
- Low maintenance
- Self-lubricating
- Dust-tight design
- Suitable for low-contamination environments

## Optional

- Customisation options such as special seals and surface treatments are available on request.



### Rail guide

- Miniature 7/9/12/15mm
- Standard 15/20/25/30/35/45/55/65
- Assembly height 8 mm - 90 mm
- Standard rail length 4000 mm, more on request



- Speed up to 4 m/s
- Acceleration up to 100 m/s<sup>2</sup>



- Max. load C 273 kN; C0 420 kN
- Max. static moment:  
Mx 12950 Nm; Myz 61907 Nm



- Precision N, H, P, SP, UP



- Preload ZF, Z0, Z1, Z2, Z3



# Ball Screws

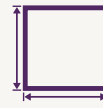
Compact and cost-effective ball screw spindle with an optimal combination of high load capacity, speed and accuracy for high-precision applications.

## Technical Specifications

- High accuracy
- High rigidity
- Dust-tight standard design
- Available with right-left thread
- Reliable and durable quality
- Ground or rolled
- Wide range of lead nuts

## Optional

- Customisation options such as special seals and surface treatments are available on request.



- Diameter 4 mm – 80 mm



- Slope 1 – 100



- Maximum load  
Ca 627N – 219kN  
Coa 950N – 890kN



- Precision C3, C5, C7



- Preload P0, P1, P2, P3, P4



Our Industrial Automation sector operates four global centres of technical excellence and a sales and service network in 50 countries, as well as manufacturing capability in Europe, Americas and Asia Pacific.

Supported by distributors worldwide.

For further information, scan this QR code or visit

[www.imiplc.com/industrial-automation](http://www.imiplc.com/industrial-automation)



# Industrial Automation

IMI Norgren

IMI Bimba

IMI Bahr

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