

Elektro - Precise movement, total control



# **ELEKTRO Actuators Series**

Our electric actuators stand out for their ability to provide linear or rotary motion with precision, allowing torque and speed control while ensuring reliable performance even in complex industrial environments. Thanks to next-generation electric motors, high-efficiency gearboxes, and advanced controllers, our actuators offer a fast response and optimized management of applied forces, allowing precise operations in continuous work cycles.

Designed for integration into industrial automation systems, our actuators are available invarious configurations and sizes to meet a wide range of applications, from valve control to the automation of production lines. High resistance to industrial environments, combined with long service life and minimal maintenance, makes them ideal also for harsh environments and 24/7 operations.

All our actuators are the result of meticulous mechanical design aimed at maximizing performance and reliability while minimizing costs. They are made using high-quality materials and are refined down to the smallest detail. Multiple configurations are available, designed to be paired with various types of Metal Work supplied motors. Upon specific request, it is also possible to customize the motor interface to match the motor selected by the customer. This ensures quick integration into existing systems and reduces installation times.

Discover the customized solutions that Metal Work can offer for your installation.









# **ELECTRIC ACTUATORS - SERIES ELEKTRO**

#### **ELECTRIC CYLINDERS**

#### Series ELEKTRO ISO 15552

- Hardened screw system and ball recirculation nut;
  with or without anti-rotation of the piston rod; in-line or geared version;
- Size: ø32, ø50, ø63, ø80, ø100;
- Stroke: from 80 mm to 1500 mm;
- Motors: STEPPING or BRUSHLESS with or without planetary gearbox.

#### Series ELEKTRO ISO 15552 EK

- Hardened screw system and ball recirculation nut or acme screw with bronze nut;
  with or without anti-rotation of the piston rod; in-line version;
- Size: ø32;
- Stroke: from 4 mm to 500 mm;
- Motors: STEPPING or BRUSHLESS.



#### Series ELEKTRO SSC

- Extremely compact actuator; extension with hardened and tempered steel screw and a ball recirculating screw nut or a lead stainless steel screw and technopolymer lead nut;
- Size: ø32 mm;
- Stroke: 30 mm, 55 mm, 80 mm, 100 mm, 125 mm, 150 mm, 200 mm;
- Motors: STEPPING or BRUSHLESS.



#### Series ELEKTRO MINI DC

- the extension movement of the piston rod is obtained via acme screw with self-lubricating technopolymer nut;
- Size: ø25;
- Stroke: 50 mm, 100 mm, 150 mm, 200 mm, 250 mm, 300 mm;
- Motors: direct current DC.



# Series ELEKTRO ROUND DC

- the extension movement of the piston rod is obtained via acme or lead screw with a self-lubricating technopolymer nut;
- Size: ø32;
- Stroke: from 30 mm to 1000 mm;
- Gearmotors: direct current DC.



#### **ELECTRIC AXIS**

#### Series ELEKTRO SK with screw

- Anodised extruded aluminium structure, with V-Lock fixing interface;
- Carriage extension system consisting of a tempered screw and recirculating all nut or steel screw and lead technopolymer nut;
- Stroke: from 50 mm to 1200 mm;
- Motors: STEPPING or BRUSHLESS.

# Series ELEKTRO BK with belt

- Anodised extruded aluminium structure, with V-Lock fixing interface;
- Carriage extension by polyurethane toothed belt with steel cables;
- Available in two sizes with roller or ball bearing guide system;
- Stroke: from 110 mm to 3800 mm;
- Motors: STEPPING or BRUSHLESS.





#### Series ELEKTRO VBK

- Mobile structures in anodized aluminum extrusions with V-Lock fixing interface and motor unit integral with the carriage;
- Mainly used in vertical applications;
- Stroke: from 110 mm to 1000 mm;
- BRUSHLESS motors: with planetary gearbox

# Series ELEKTRO SVAK

- Mobile structures in anodized aluminum extrusions with V-Lock fixing interface and motor unit integral with the carriage;
- Mainly used in vertical applications;
- Stroke: from 200 mm to 800 mm;
- BRUSHLESS motors: with toothed belt speed reducer.

#### Series ELEKTRO SHAK

- Belt-driven rodless electric cylinder made of a sturdy anodized aluminium extruded profile;
- Stroke: from 400 mm to 2400 mm;
- Motors: STEPPING or BRUSHLESS.

#### Series ELEKTRO SHAK GANTRY

- Two parallel SHAK axes, connected to each other by an anodized aluminum shaft and a SHAK axis mounted on the X-axis carriages transversely to them;
- Stroke: from 400 mm to 2400 mm (axis X) and to 2200 mm (axis Y);
- Motors: STEPPING or BRUSHLESS.





## **GUIDED CYLINDER AND ELECTRIC SLIDE**

## Series ELEKTRO MULTIFIX

- Guided piston rod supported by two columns sliding along bushings mounted in the main extruded and anodized aluminum body;
- Anti-rotation of the piston-rod;
- Size: ø25 mm;
- Stroke: 50 mm, 75 mm, 100 mm, 125 mm, 150 mm, 200 mm, 250 mm, 300mm;
- Motors: STEPPING or BRUSHLESS.

# Series ELEKTRO CS

- Guide and a ball-recirculating pad, for high radial loads on the piston rod;
- Anti-rotation of the piston-rod;
- Interface for fixing on carriage: standard or V-Lock;
- Size: ø32 mm;
- Stroke: 55 mm, 80 mm, 100 mm, 125 mm, 150mm, 200 mm.
- Motors: STEPPING or BRUSHLESS.





# **ELECTRIC ROTATORS**

#### Series ELEKTRO RBA

- Rotation angle: multi-turn 360°;
- Toothed belt drive with a specific gear ratio, for high performance in reduced dimensions;
- Motors: STEPPING or BRUSHLEŠS.



### **ELECTRIC MOTORS AND DRIVES**

#### Electric motors

- STEPPING motors
- STEPPING motors with encoder
- STEPPING motors with brake
- STEPPING motors with brake + encoder
- **BRUSHLESS** motors
- BRUSHLESS motors with brake

# Programmable unit E.MOTION

### **Drives**

- for STEPPING motor
- for STEPPING motor E.DRIVE
- for BRUSHLESS motor
- E.DIRECT for direct current motors





### **ELEKTRO TOOLS**

# Dimensioning electric cylinders

Easy Elektro software





Electric cylinder sizing form





