

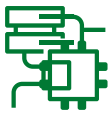


**PNEUMAX**



# **ELECTRIC ACTUATION**

SPEED, PRECISION AND RELIABILITY



## ELECTRIC ACTUATION

- **Electric cylinders**
- **Screw electric axes**
- **Belt electric axes**
- **Servo motors**
- **Drives**

Full  
offer  
360°

Pneumax has developed a range electric actuation products including **axes as ball recirculating guides, belt drive and cylinders both in-line and parallel motors**. The axes options selection to order is available as the customer requirement, as the mechanical cylinder only or equipped with electric motor and drive provided by the partnership with Siemens.

The Pneumax electric product range is flexible for any applications for motion control including full accessories, mounting brackets according to ISO 15552, and adaptors for any type of electric motors suitable to setting multi-actuator interpolation.





# Pneumax Group

## Smart Technologies and Human Competence

Founded in 1976, PNEUMAX S.p.A. is today one of the leading international manufacturers of components and systems for automation. It is at the forefront of a group comprised of **25 companies**, with **over 800 employees worldwide**.

Ongoing investment in research and development has allowed Pneumax to continually expand its range of standard products and customised solutions, adding to the well-established pneumatic technology, a range of electric drive actuators and fluid control components.

The ability to provide various technologies and solutions for each of our clients' applications is the main objective of the Company, making Pneumax the ideal strategic partner. What defines us is the **"Pneumax Business Attitude"**, which stems from the ability to combine industry sectors, technology and our application skills via the clients collaboration with our sector Business Specialists and Product Specialists focused on the products, and is the real distinguishing factor of the Pneumax offer.



### 3 TECHNOLOGIES



**Pneumatic technology**



**Electric actuation**



**Fluid control**





## ELECTRIC CYLINDERS

### Reliability and flexibility

Anti-rotation rod

Speed management and acceleration and deceleration ramps

Option of using magnetic sensors

Thrust force control

IP65 Rating

Fixing dimensions compliant with ISO15552

Available in four sizes: 32-40-50-63

Mid-stroke positioning with centesimal precision repeatability

Versions with in-line or parallel motors



Series 1800 electric cylinders use a recirculating ball screw for motion transmission that converts the motors rotary motion into a linear motion managing acceleration, deceleration and stops at mid-stroke with repeatability precision in hundredths of millimeters. The internal piston non-rotating with built-in calibrated slides to reduce any torsional backlash of the piston rod and to obtain optimal precision for positioning. The cylinders are equipped of magnetic as matching the position with sensors or linear position transducers. Easy maintenance by the quick lubrication to the ball screw just removing the nut . Series 1800 cylinders are designed to operate with Siemens motors, assembly kit for any type of drive is available on request.

# BALL SCREW LINEAR ACTUATORS

## Solidity and precision



Linear actuators with ball screw transmission are available in different sizes and version range to manage and positioning loads as maximum precision and reliability.

The T-slots of anodized aluminum profiles are suitable for external sensors. By the “auto-clean” device of hardened stainless steel strips, dust and impurities removed by the sliding of the external carriage. The double guide versions with are suggested for high loads and moments of inertia.

# TOOTHED BELT LINEAR ACTUATORS

## Speed and versatility

Anodised aluminium carriage with T-slot for load fixing



Axis with motor secured to the gearbox for vertical applications

Option of fixing motor with male or female shaft

Single or double carriage with opposing two-way movement

Integrated tensioning system

Version with a flat profile

Square profile with single or double carriage



These linear actuators are equipped with a toothed belt made of reinforced polyurethane with steel strands and integrated tensioning system. They are available in the versions with one or two ball recirculating guide systems to support any type of load.

The T-slots enable fixing of position sensors along the entire actuator. Based on the application, it is possible to mount the motor with a male or female shaft. Fixing the load on the carriage is facilitated by the presence of special T-slots.

## SERVO MOTORS & DRIVES

### Productivity and efficiency

Maximum productivity  
and energy efficiency

Versions available with  
IP65 Rating

Positioning with  
pulse train input  
(PTI)

Option of position  
control via internal  
setpoint (IPos)

Profinet  
interface  
connection

Option of overload  
up to three times  
the rated torque

Safe Brake Control



Thanks to the partnership between Pneumax and Siemens, the range of Pneumax axes and electric cylinders can be supplied complete with SIEMENS brushless motors (IP65) with relative encoder (100W, 400W, 750W, 1000W, 1500W, 2000W). Versions with brake or absolute encoders are available upon request. The motors can be controlled via Siemens drive 220 ... 240V 1AC/3AC, ideal for applications where positioning precision, high speed and torque are required.

It is also possible to supply additional drives models capable of managing multi-axis interpolation.



**PNEUMAX**

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