

BISS Servo Electric Actuators are most commonly used for static and fatigue testing in tensile or compression mode. Additional test types which can be conducted by actuator on test system using suitable grips and fixtures include tensile, compression, creep, creep fatigue crack growth rate and low cycle fatigue. Application solutions include tests on materials like plastics, metals, rubber, automotive components, composites, adhesives, non-ambient temperature applications and many more. Electric actuators are driven by AC servomotor and high precision servo drive with an in-built high-resolution encoder via planetary gear box.

Technical features

- Static and Fatigue force rating 5kN to 300kN
- Up to 200 mm total stroke rating
- Digital encoder for stroke measurement & control. Magnetostrictive encoders optional.
- Test speed range: 0.00001 to 250 mm/min
- Accuracy of encoder: $\pm 0.5\%$ of read out value
- Resolution of encoder down to 0.00001mm
- High performance servo motor and servo drive for precise actuator movement and control. Works on 1 \emptyset 230VAC / 3 \emptyset 440VAC, 50Hz
- High strength, High-stiffness hard chrome plated monolithic piston
- High precision aligned pre-loaded ball screws, bearings and nut offer quiet and excellent performance
- Up to 100% side load carrying capabilities
- Low friction and wear resistance design
- Anti-rotation features to guide and to avoid piston rotation in dedicated application to ensure only linear movement
- Designed to conduct tests in stroke, load and strain control modes
- Generates standard waveform: sine, ramp, triangle and square
- Test frequency range 0.001 to 2 Hz
- Load train inter-connection with: M 27 x 2
- Spiral washers for interconnection of grips
- Superior reliability and versatility in Actuator force ratings



Model No.	Dynamic Capacity (kN)	Max Stroke (mm)
AC-02-0110E	10	+/-75
AC-02-0125E	25	+/-75
AC-02-0150E	50	+/-100
AC-02-0210E	100	+/-100
AC-02-0215E	300	+/-100

Note: Specifications are subject to change without prior notice

Applications

- Universal testing machine
- Low cycle fatigue
- Creep, Stress Relaxation
- Stress Rupture Testing
- Creep fatigue interaction
- Creep crack growth
- Creep fatigue crack growth
- Biomédical testing
- Servo Electric Shake Tables