

BISS uses low friction wear resistance seals and hydrostatic bearing surfaces on heads to provide long life and stick slip free operation. Bonded polymer bearings offer high side-load and high velocity. The piston and end caps are protected during full stroke or high-velocity operations by hydraulic cushions. Actuators use large diameter monolithic piston rods made of high yield material for infinite fatigue life, providing strength and maximum lateral stiffness. The chrome plated piston rod is micro ground and super-polished to minimize friction. High-pressure seals designed for low friction, long life, and outstanding performance in high-frequency/low-displacement applications. For applications where reduced friction is a requirement an actuator can be supplied for operation without high pressure seals. Servo valve manifolds with oversize ports and provisions for interfacing to a variety of servo valves and service manifolds are available. Their design provides for fluid conditioning and low/high pressure control and allows the actuator to accept a number of servo-valves. Optional dual servo valve and three-stage servo valve configurations are available. Rod end swivels and base ends swivels can help reduce side loads and force alignment problems and eliminate backlash in test setups. Spiral washers preload force train element connections to avoid backlash and fatigue failure between attached components. Available in varying thickness spiral washers for quickly preload attached components.

Standard features

- Fatigue rated
- Contamination insensitive servo valves
- Hydraulic cushions at either end
- Single ended and double ended options
- Integrated manifold design
- Operating frequency up to 200Hz
- Peak Velocity up to 4m/s
- Operating pressure – 210 bar
- Force rating up to 5000kN
- Stroke range 50-500mm
- Low friction and wear resistance seals
- Co-axial LVDT



Specifications and Dimensions

Model no	Force kN	Rod (ID) threading	≈Length (L) mm	Rod diameter mm	Weight (Kg)	B mm	S mm
AC-02-0105S	5	M16 x 2	500	30	20	80	50
AC-02-0110S	10	M27 x 2	500	40	32	110	
AC-02-0115S	15	M27 x 2	500	40	38	110	
AC-02-0125S	25	M27 x 2	700	40	45	110	
AC-02-0150S	50	M27 x 2	700	50	65	110	
AC-02-0210S	100	M27 x 2	700	63	70	110	
AC-02-0215S	150	M27 x 2	700	63	95	140	
AC-02-0225S	250	M27 x 2	700	125	180	140	
AC-02-0250S	500	M42 x 3	800	125	300	160	
AC-02-0310S	1000	M90 x 2	800	180	750	160	
AC-02-0320S	2000	M120 x 2	1400	250	1000	185	
AC-02-0330S	3000	M120 x 2	1400	250	1250	185	
AC-02-0350S	5000	M150 x 2	1400	300	1600	185	

Applications

- Automotive Sub-assembly Testing
- Civil Structural Testing
- Stewart Tables
- Bi-axial and Tri-axial shake tables
- Air Frame Structural Testing
- Multi Axes Simulation Test Rig

