



Low Force Systems for Mechanical Testing

## Features

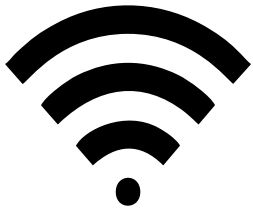
- 500 N to 10 kN load capacity
- Up to 10 Hz cyclic capabilities
- Virtually noiseless
- High precision servo-control
- Multiple fixtures adaptable to frame



BISS Low Force Systems (LFS) cover the needs of practically any mechanical test on materials and subcomponents. They reflect over three decades of innovation, research and worldwide experience in servo-test technology. LFS are ideal for testing of miniature material specimens, micro-electronic connections and subcomponents, biomaterial (tissue engineering) and much more.

## Uniqueness

- High precision, high performance
- Minimum space requirement
- 32 bit Digital Servo-Controller
- Better than 0.1  $\mu\text{m}$  resolution displacement measurement
- Just 'Plug n Play'
- T/W (Test by Wire/Wireless/Wi-Fi): All operator controls concentrated onto a single device
- Technical support for customized applications



Test by WiFi



Tether free operation



Plug and Play

## Monocolumn Systems

These single column low force Axial/Axial-Torsion Systems provide testing solutions for applications with precision displacement control and accurate force measurements. The versatile design offers flexibility for testing materials, electronic components and for tissue engineering applications. A compact table top construction offers flexibility and access for modulation of the test configuration thereby simplifying test operations, while providing advanced testing capabilities.



## Dual column Systems

The dual column LFS is designed with high stiffness load frames, precision servo-control actuators, ISO certified load cells and best in class high performance DSP digital controllers. These systems are supplied with standard and customized grips, fixtures, baths or environmental chambers for various testing applications.



## T/W® (Test-by-Wire or Test-by-Wireless or Test-by-WiFi)

What it means to the user: Absolutely all operator controls concentrated onto a single device with context sensitive touchscreen display.

- Proprietary single-point-of-action tablet operator console that permits the operator to perform all machine control operations as well as test setup, monitoring and specimen handling operation



## Mono Column System Specifications

Parameter	Unit	LF-01-XXXX	LF-01-XXXX	LF-02-2502
Load Capacity	N	±200	±500	±250
Stroke	mm	±20	±40	±50
Static Performance	mm/min	0.05 - 4800	0.05 - 4800	0.05 - 4800
Dynamic Performance		10 Hz at ±1 mm amplitude	10 Hz at ±1 mm amplitude	-
Torque	Nm	-	-	±2 (continuous)
Rotational Performance	°	-	-	±360 (up to 500 rpm)
Operating Environment		+10 to +38°C and 10 to 95% humidity (incubator compatible)		
Dimensions	mm (W x D x H)	250 x 160 x 450		250 x 160 x 500
Weight	kg	< 20		
Power Requirements		120/240 V, 50-60 Hz (<5A)		



## Dual Column System Specifications

Specifications		LF-01-2502	LF-01-2505	LF-01-2510
Load Capacity	kN	±2	±5	±10
Stroke	mm	±25		
Static Performance	mm/sec	300		
Dynamic Performance		10 Hz (Dependant on specimen deflection)		
Horizontal Daylight	mm	350		
Vertical Daylight	mm	246 to 546 (automatically adjustable)		
Dimensions	mm (W x D x H)	510 x 400 x 1256		
Weight	kg	< 130		
Power Requirements		200 – 240 V, 15 Amp, Single Phase Supply (10 kN Dynamic System)		





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