
# FlexiForce™

## Economical Load & Force Measurement (ELF™)

The ELF System is a user-friendly, cost-effective load measurement system. This system combines three FlexiForce B201 sensors, USB-interface electronics, and Windows-compatible software*, turning your PC or laptop into a force measurement instrument. This system is capable of multi-point sensing and available in a high-speed version.

** Compatible with Windows 7, 8.1, and 10*

** Software v 4.3 and above is not compatible with previous wired handles starting with serial#125 (see back of handle)*

## Features

- Real-time data capture
- ASCII output to data analysis software
- Simple and storable calibration
- Adjustable sensitivity
- Multiple handle capability available
- Displays in strip chart, column graph, or digital readout
- Movie recording & saving
- Multi-point calibration
- Capability to tare a load
- Internal load triggering
- Sampling rates up to 200 Hz
- High-Speed version available, up to 6000 Hz
- Includes 3 FlexiForce B201 sensors
- ELF is compatible with all FlexiForce sensor models using the ELF adapter tab
- Additional handles available for purchase

| ELF System | Sampling Rate | Max # of Handles | Includes |
|---|---|---|---|
| Standard | Up to 200 Hz | Up to 16 | • (1) Handle<br>• (3) B201 Sensors<br>• ELF Software |
| High-Speed | Up to 6,000 Hz | Up to 16 | • (1) Handle<br>• (3) B201 Sensors<br>• High-Speed ELF Software |



*ISO 9001:2008 Compliant & 13485:2016 Registered*

Tekscan™

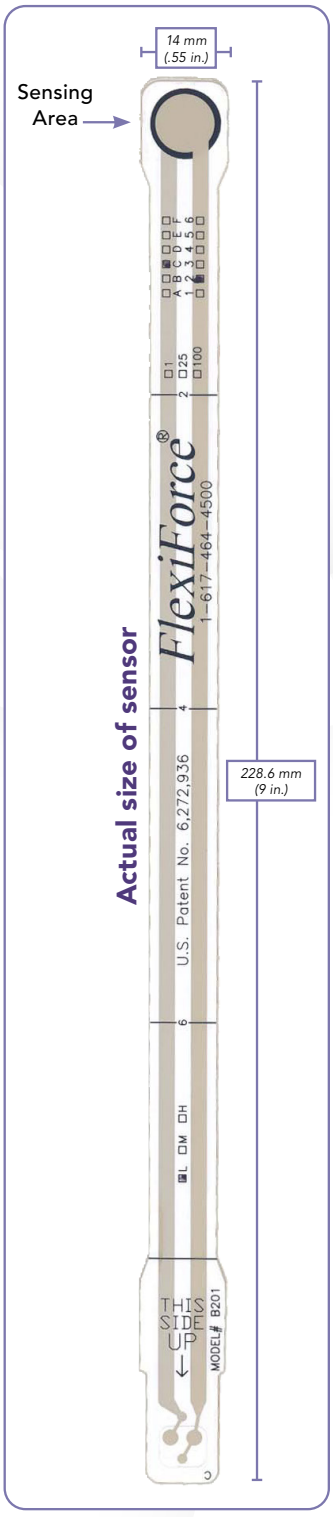
# Physical Properties of B201 Sensor

| | |
|---|---|
| Thickness | 0.203 mm (0.008 in.) |
| Length | 228.6 mm (9 in.) End-to-end |
| Width | 14 mm (.55 in.) |
| Sensing Area | 9.53 mm (0.375 in.) diameter |
| Connector | Interface to ELF™ data acquisition system handle (handle connects to USB port) |
| Substrate | Polyester |

The ELF system is compatible with all FlexiForce sensor models using the ELF adapter tab.

✓ROHS COMPLIANT

## B201 SENSOR




# Recommended Maximum Force

**(variable gain feature of the ELF System enables adjustable force ranges)**

| Sensor | High Gain Maximum Force | Low Gain Maximum Force |
|---|---|---|
| **B201-L** | 4.4 N (0 - 1 lb) | 111 N (0 - 25 lb) |
| **B201-M** | 111 N (0 - 25 lb) | 667 N (0 - 150 lb) |
| **B201-H** | 667 N (0 - 150 lb) | 4448 N (0 - 1,000 lb) |

| | Typical Performance | Evaluation Conditions |
|---|---|---|
| Linearity (Error) | < ±3% of full scale | Line drawn from 0 to 50% load |
| Repeatability | < ±2.5% | Conditioned sensor, 80% of full force applied |
| Hysteresis | < 4.5% of full scale | Conditioned sensor, 80% of full force applied |
| Drift | < 5% per logarithmic time scale | Constant load of 111 N (25 lb) |
| Operating Temperature | -40°C - 60°C (-40°F - 140°F) | Convection and conduction heat sources |

Force reading change per degree of temperature change = 0.36%/°C (±0.2%/°F)