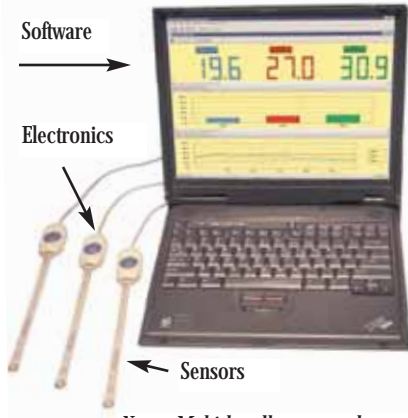


# FlexiForce® B201 Force & Load Sensors

Used exclusively with Tekscan's ELF™ Data Acquisition Systems

Sensing area →

## System Description



Note: Multi-handle system shown

The *ELF*System is a user-friendly, cost-effective load measurement system. This system combines *FlexiForce* sensors, USB-interface electronics, and Windows-compatible software\*, turning your PC or laptop into a force measurement instrument.

### Key features include:

- 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 triggering
- Sampling rates up to 200 Hz
- High-Speed version available, up to 5760 Hz

Compatible with Windows 2000, XP and Vista

## Physical Properties

Thickness	0.008" (0.208 mm)
Length	9" (228.6 mm) End-to-end
Width	0.55" (14 mm)
Sensing Area	0.375" diameter (9.53 mm)
Connector	Interface to <i>ELF</i> ™ data acquisition system handle (handle connects to USB port)
Substrate	Polyester (ex: Mylar)

## Recommended Maximum Force (Variable gain feature of the *ELF*System enables adjustable force ranges)

Sensor	<b>High Gain</b> Maximum Force	<b>Low Gain</b> Maximum Force
B201-L	0 - 1 lb (4.4 N)	0 - 25 lb (111 N)
B201-M	0 - 25 lb (111 N)	0 - 150 lb (667 N)
B201-H	0 - 150 lb (667 N)	0 - 1000 lb (4448 N)

## Typical Performance

Linearity (Error)	< ±3%
Repeatability	< ±2.5% of Full Scale
Hysteresis	< 4.5 % of Full Scale
Drift	< 5% per Logarithmic Time Scale
Sampling Rate	Up to 200 Hz Up to 5.7 kHz
Operating Temperature	15°F - 140°F (-9°C - 60°C)*

## Evaluation Conditions

Line drawn from 0 to 50% load  
 Conditioned sensor, 80% of full force applied  
 Conditioned sensor, 80% of full force applied  
 Constant load of 25 lb (111 N)  
*ELF*System 1 (basic system)  
*ELF*System 2 (high-speed system)

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

\*For loads less than 10 lb, the operating temperature can be increased to 165°F (74°C)



Tekscan, Inc. 307 West First Street South Boston, MA 02127-1309 USA tel: 617.464.4500/800.248.3669  
 fax: 617.464.4266 e-mail: marketing@tekscan.com URL: www.tekscan.com