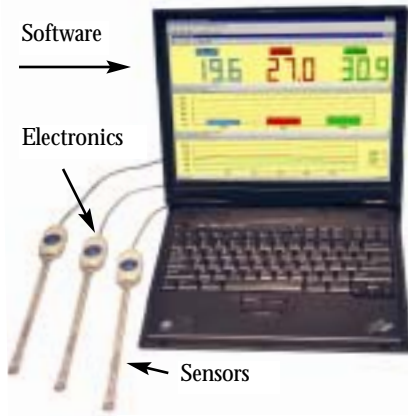


FlexiForce® B201 Force & Load Sensors

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 with serial-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
- LabVIEW VI Driver Software available
- Movie recording & saving
- Multi-point calibration
- Capability to tare a load
- Internal triggering
- 8 sampling rates to 200 Hz
- High-speed option to 5.7 kHz available

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 serial port)
Substrate	Polyester (ex: Mylar)

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

Sensor	<i>High Gain</i> Maximum Force	<i>Low Gain</i> 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)	< ±5%
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)



Actual size of sensor

