

Force Sensor II

XLS 1029



Technical Specifications

Range: $\pm 10\text{N}$ or $\pm 80\text{N}$

Resolution: 10N range $\pm 0.0056\text{N}$; 80N range $\pm 0.056\text{N}$

Frequency range: 100Hz ~ 7KHz

Gauging principle: Electrical strain gauge

Instructions

- Select the appropriate measuring range ($\pm 10\text{N}$ or $\pm 80\text{N}$) for the experiment by using the range select switch on the side of the sensor.
- The force sensor can be used with either the hook (for measuring pull forces) or the buffer (for measuring push forces).
- The sensor should be securely attached to a fixed object or motion trolley to obtain accurate readings.
- The sensor may be attached to a retort stand using the supplied metal rod and the attachment hole with thumbscrew on the sensor.
- The sensor is designed to read zero when horizontal, ie no weight forces acting on it. If using at any other angle the “zero” error will need to be taken into account by taking a reading with the experiment set up but no applied force acting on the measuring system.