

## Lab 1: Pendulum

### Parts list:

Sensor Rotary Position 12 MM SMD

Bourns Inc. MFG P/N: 3382G-1-103G

DigiKey P/N: 3382G-1-103GCT-ND

4 mm x 28 mm steel dowel pins, D profile (negative tolerance on 4 mm diameter)

Right angle termination breakaway header pins,

Sullins P-E-0.100-36-S-BC-N (6 mm head, 8 mm tail)

Mounted miniature ball bearing pillow block w/4 mm inner diameter for shaft, loose fit

spyraflo MFG P/N: PB0-SMR604ZZ

Printed Circuit Board (by Bradley Minch), design available via [bradley.minch@olin.edu](mailto:bradley.minch@olin.edu); <https://www.customcircuitboards.com/>

Editable documents, schematics and foundry files are downloadable at : <https://pages.olin.edu/isim/4-module1>

Mounting hardware (screws)

protractor

C-clamps to mount the aluminum plate to a table edge

Aluminum mounting plate

Pendulum: 1" x 12" x 1/4" with hole diameter for light press fit to dowel pin

