

CUSTOM BI-STABLE DOOR LOCK BDL Datasheet

Project: Bi-Stable Door Lock (BDL)
Revision: 0
Date: 6/3/16
Industry: Smart Home Automation (IOT)

Specifications

Operation

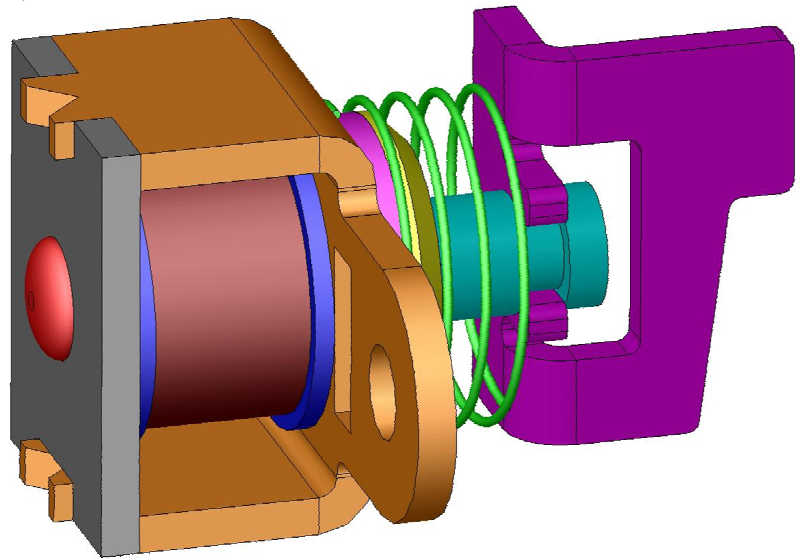
Bi-Stable Solenoid with Cam Lock

Physical

Footprint: Within std 2-1/4" door cutout
(around typical lock cylinder provided)
Stroke: 0.15"
Cycle Life: >50,000 Cycles
Temperature: -40 to 140°F

Electrical

Power System: Reversible DC Pulse
(battery powered)
Voltage: 5.0+/-0.1 vdc
Current: 0.45-0.50 A max
ON Time: 20 ms max
Duty Cycle: 10%
Lead Wires: 3", 22 AWG Copper Wire



This customer needed a small battery powered bi-stable solenoid that could fit within the gap between a std door lock cylinder and the std hole cutout. We designed both the production and prototype versions of this unique product. We also assisted in the design of a locking cam that integrates with the std lock cylinder to provide the locking function.

This solenoid was designed to operate with very low power. This met the customer's requirement to be battery driven with a reasonable battery life. Meeting these goals allowed the customer's project to succeed, which is always our goal.

At Preston Solenoid, we work with our customers to help them achieve their goals. Contact us to see if you might make use of our capabilities and experience. We will be glad to provide you with a budgetary estimate and initial design proposal, all at no cost or obligation.

