

MINIATURE SLIDE SWITCHES

PERFORMANCE STANDARDS

CW switches are designed to perform to the standards listed when operated within ambient conditions detailed below:

Operating temperature—104°C maximum, -10°C minimum.

Relative humidity—Switches will be operable and insulation resistance shall be greater than 100 megohms if allowed to dry for 100 hours at room temperature of 25°C and after exposure for one hour in an atmosphere having 95% relative humidity and a temperature of 50°C.

High voltage breakdown—Minimum of 1000 volts rms 60 Hz for one minute between parts of opposite polarity.

Contact resistance—Less than 0.01 ohm at 20 milliamperes dc.

Life cycling (no load)—Switches will be operative after 10,000 (minimum) cycles at the rate of 10 cycles per minute.

Life cycling (load)—Switches will be operative after 6000 (minimum) cycles at the rate of 10 cycles per minute at rated load.

MATERIALS OF CONSTRUCTION

Buttons—Black type 6/6 nylon.

Housings—Cold-rolled steel.

Housing plating—4-point PC board mount switches—electro-tin; others—zinc followed by clear chromate.

Moving contact—Copper or copper alloy.

Moving contact plating—Silver is standard. Gold (30 microinches of gold over 50 microinches of nickel) is available. Other gold thicknesses are available if your quantities are sufficient.

Moving contact spring—Phosphor bronze or beryllium copper.

Terminals—Copper.

Terminal plating—Silver is standard. Gold (30 microinches over 50 microinches of nickel) on many popular types is available.

Terminal board—NEMA Grade XP phenolic laminate.

(Other materials to suit your application are available if volume is sufficient. Consult factory.)

CW switches will perform properly if they are installed and used properly. Causes for failure often encountered in the field that are the responsibility of the user are:

1. Removal of factory applied lubricants from switch contacts and moving parts.
2. Introduction of foreign material into switching mechanism...

nism... flux, solder, cleaning materials, potting compounds.

3. Restriction of movement of switch button.
4. Excessive heat often introduced while soldering.
5. Switching loads in excess of rating.

Manufacturing Engineers are cautioned to avoid misusing switches and resultant switch failures.

U.L. AND C.S.A.

CW test laboratories are fully equipped to monitor and test CW switches to U.L. and C.S.A. published standards. Most CW switches are listed by these agencies as having conformed to those standards in tests applied on a continuing basis. A record of types of CW switches listed is retained in U.L. File Number E-9556 and in C.S.A. File Number LR20985.

CW PATENTS

CW Engineers are constantly trying to upgrade the quality and cost effectiveness of our switches. Often this results in new inventions. Switch products shown in this catalog may be covered by one or more of the following U.S. patents:

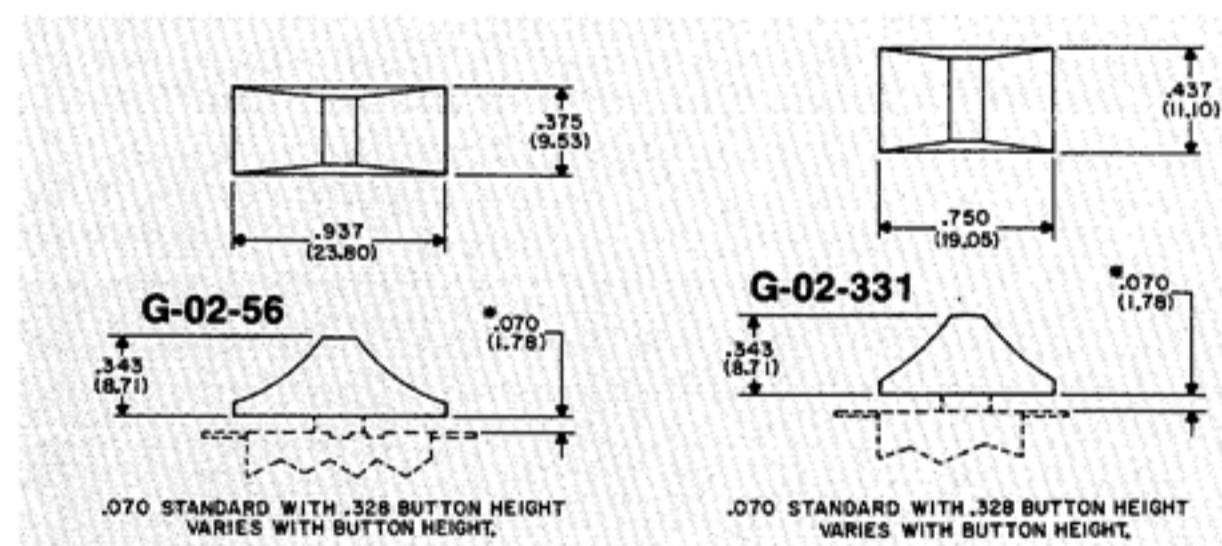
3,270,149	3,993,881
3,271,535	4,404,437
3,311,719	4,128,745
3,461,252	4,410,232

Other patent applications are pending.

HOW TO ORDER

Specify CW part number by referencing drawing that shows switch of your choice. If switch you require differs from drawing, specify differences from options available.

AVAILABLE OPTIONS



“Toppers”—Shown are toppers that can change your panel appearance and product styling.

Terminals—CW switches can be terminated by hand solder, PC board, wire-wrap, or receptacle. See page 15 for terminal options.

Solder Shields—To comply with C.S.A. creepage distance requirements for hand-soldered terminations or for added protection against flux, solder, and foreign materials, request .020” thick vulcanized fiber shield shipped separately or assembled to switch terminals. On single pole switches, solder shields are available for switches having “IN LINE” terminals only.

Hot Stamping—Functional or decorative marking of your choice can be imprinted on the “Topper” with CW’s “in-house” facilities.

Colors—CW stores molding powders in many colors. “Toppers” and buttons are available in a variety of colors if your quantity is sufficient.