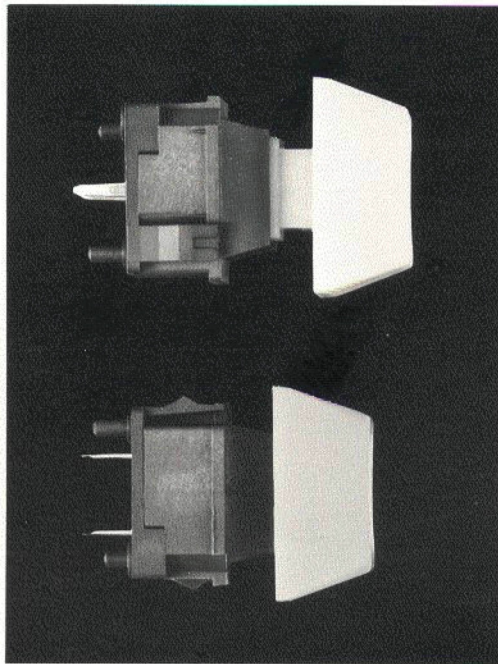


DC-60



DC-60 Series Low Profile Key Switches

NEW LOW COST

Value engineered for high performance at substantially lower cost than conventional mechanical switches.

HIGH RELIABILITY

Proven trifurcated gold contact design, guaranteed for 10,000,000 cycles minimum.

FAST ASSEMBLY

Snap in panel mount, or direct mount to printed circuit board by either contact terminal solder connection or heat staked guide posts. No external spring required.

HUMAN ENGINEERED

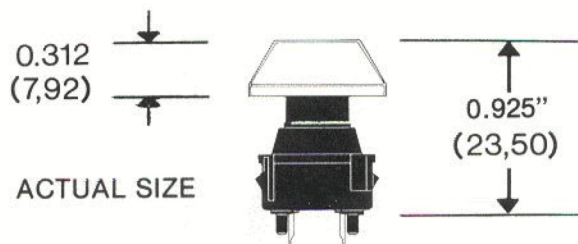
Teaseproof operation with tactile feedback at operating point.

LOW PROFILE

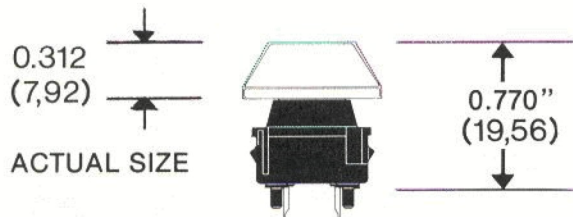
0.770 inches overall, including keycap

Datanetics

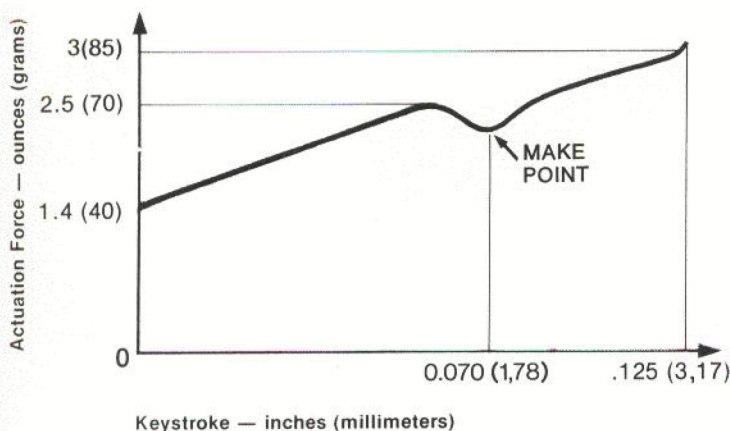
GENERAL DESCRIPTION



DC-60 SERIES KEYSWITCH STANDARD PROFILE



DC-60 SERIES KEYSWITCH LOW PROFILE



FORCE / STROKE DIAGRAM

The Series DC-60 Low Profile Key-switch is basically simple in design to reduce cost, yet cleverly engineered to provide the expensive features of teaseproof action, tactile feel and long life.

Its low price and advanced performance make it the ideal keyswitch for the entire spectrum of keyboard applications, from a low cost, "hunt-and-peck" calculator to a most sophisticated, high throughput communication terminal.

The low profile (0.770 inches with key caps) is consistent with modern industrial design and improved human engineering.

The versatile mounting features, which include snap-in clips, high strength solder terminal mounting and heat stakable bottom locating pins will reduce design, manufacturing and maintenance cost.

The stainless steel, gold inlayed, trifurcated switch contacts have low bounce and low contact resistance over the 10,000,000 plus operations life of the switch.

The mineral filled nylon housing insures high stability over extreme environmental conditions throughout the life of the switch.

The keystem is made of Delrin for long wear and low friction, and has a large bearing surface to minimize side-loading and keystem wobble.

The DC-60 keyswitch is the answer when performance demands are high and price is important.

GENERAL SPECIFICATIONS

ELECTRICAL

Contact Ratings (resistive load)

Volt Amp Range5 to 200 millivolt amp

Current Range0.05 to 100 ma

Voltage Range0.5 to 300 volts DC

Contact Resistance 1 ohm max. (.1 ohm typ.)

Contact Bounce2 milliseconds max.
(0.5 milliseconds typical)

Contact ConfigurationSingle Pole
single throw - normally open

Insulation Resistance100 meg ohms
min. at 100V (1000 meg ohms typ.)

MECHANICAL

Operating Force2.5 oz. \pm .5 oz. (70 GR)

Pretravel0.070 inch \pm 0.015 inch
(1.78 mm \pm 0.38 mm)

Total Travel0.125 inch \pm 0.010 inch
(3.18 mm \pm 0.25 mm)

MountingSnap-in, solder, or heat stake

Minimum Spacing5/8 inch (15.87 mm)

Operating LifeExceeds 10,000,000 cycles

MATERIALS

Key StemSelf-lubricating DELRIN™

HousingMineral filled nylon

ContactsGold-inlaid, stainless steel

TerminalsSolder Alloy Inlaid
Stainless Steel

Keycaps(optional)Two color molded ABS

ENVIRONMENTAL

Operating Temperature . . . +32° to +140°F
(0° to +60°C)

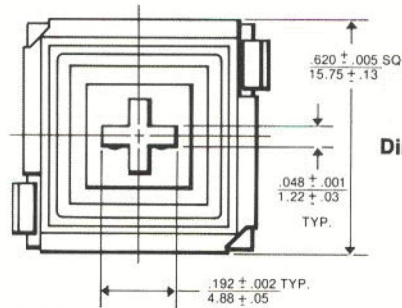
Storage Temperature-40° to +160°F
(-40°C to +71°C)

Rel Humidity5% to 95% non-condensing

VibrationRemains open while subjected to
10-55 Hz at 0.06 in. (1.5 mm) displacement

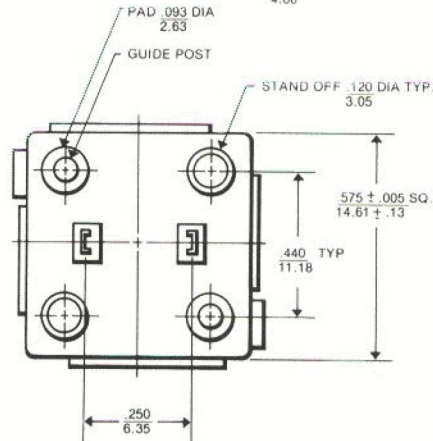
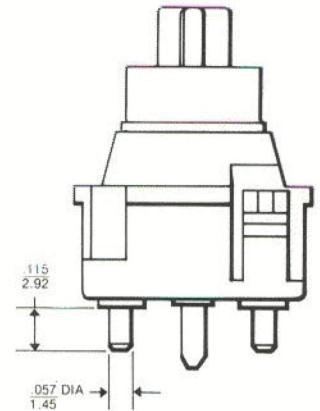
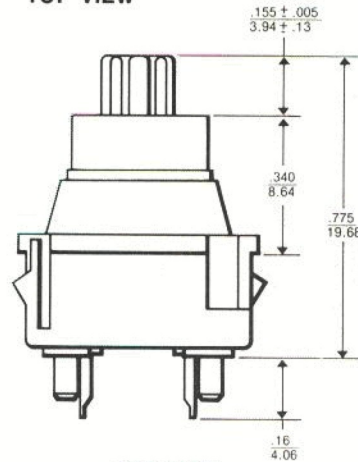
ShockRemains open and operable under
50 G's for 11 milliseconds

DIMENSIONS



Dimensions shown in inches
millimeters

TOP VIEW



BOTTOM VIEW

STANDARD PROFILE

OPTIONS

Higher Operating Force

Omission of heat stakeable guide posts

Custom key stem configurations

Special keytops and colors

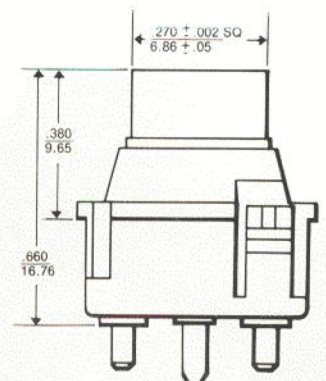
AVAILABLE CONFIGURATIONS

DC-61-01 . . . Single Pole, Momentary Action,
Low Profile with Guide Posts

DC-61-02 . . . Single Pole, Momentary Action,
Low Profile without Guide Posts

DC-61-03 . . . Single Pole, Momentary Action,
Standard Profile with Guide Posts

DC-61-04 . . . Single Pole, Momentary Action,
Standard Profile without Guide Posts

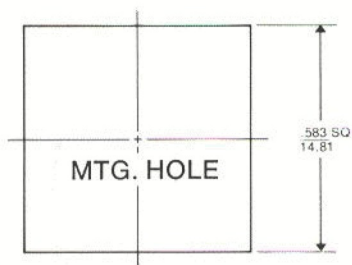
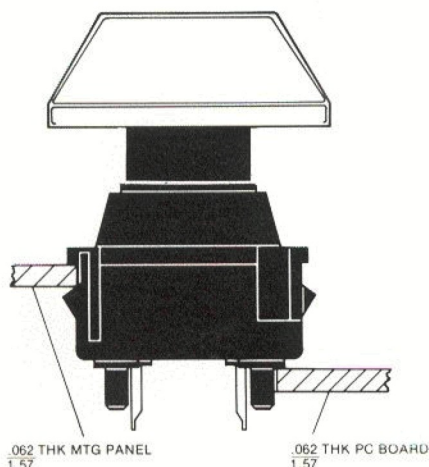


LOW PROFILE

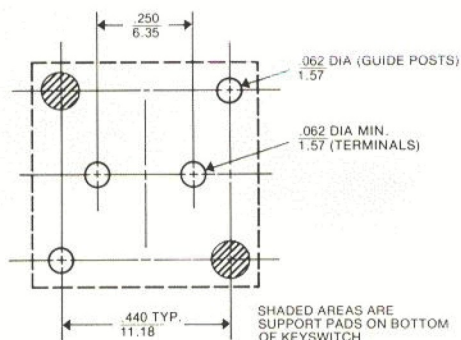
APPLICATION AND ADDITIONAL INFORMATION

RECOMMENDED MOUNTING DIMENSIONS

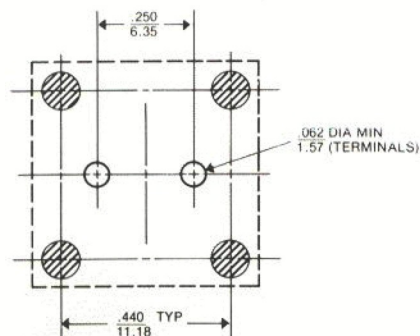
DIMENSIONS NOM. $\frac{\text{inches}}{\text{millimeters}}$



SNAP-IN APPLICATION



TOP VIEW OF CIRCUIT BOARD
PC MOUNTING WITH GUIDE POSTS



TOP VIEW OF CIRCUIT BOARD
PC MOUNTING WITH TERMINALS

WARRANTY

The DC-60 Series Key Switches are guaranteed by Datanetics to perform in accordance with all applicable specifications for a period of three years from date of delivery or 10,000,000 cycles of operation, whichever occurs first. Datanetics will replace, F.O.B. Fountain Valley, at no cost to the user, any switch that fails to meet these criteria unless physical or electrical abuse is evident.

SWITCH MOUNTING

There are three options available for securing the DC-60 into the keyboard.

1. It may be secured to the printed circuit board directly by its solder terminals, utilizing the optional guide posts to orient the switch properly.

2. In addition, it may be heat-staked to the printed circuit board by the optional guide posts for increased holding force.

3. It may be snapped into 0.583 square hole of a 0.62 in. (1.57 mm) thick metal bezel and retained by the molded in mounting clips. (With this mounting, the guide posts should be omitted.)

The drawings on this page provide dimensional information for each of these mounting options.

SOLDERING

High-temperature materials allow flow soldering at a temperature of 530°F (287°C) for 5 seconds

CLEANING

If a cleaning solvent is required, it is recommended that water, Isopropyl Alcohol, or trichlorotrifluoroethane (Freon) be used. Since many solvents are harmful to plastics, any variation from the recommended cleaning solvents should be used with extreme caution.