## SERIES 30 and 46

## Snap-in Panel Mount

## FEATURES

- Sleek Black Matte Bezel
- Convenient Snap-In Front Mount
- Choice of 6 Button Colors
- SPST, SPDT or DPDT Circuitry
- Alternate Action, Positive Feel and Overtravel Versions
- Printed Button Option


DIMENSIONS In Inches (and millimeters)


## CIRCUITRY

Switches have momentary action unless otherwise indicated in the chart below.


## ADDITIONAL DIMENSIONS AND PART NUMBERS

| Circuitry and Features | Dim. A: Button Height ( $\pm$.015) | Dim. B: Behind Panel Length ( $\pm .040$ ) | Total Travel | Actuating Force | Partial Part No.* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Butt Contact Switches - Series 30 |  |  |  |  |  |
| SPST-N.O. | . 205 (5,21) | $1.119(28,42)$ | . $062 \pm .010(1,57 \pm 0,25)$ | $10 \pm 4 \mathrm{oz}$. | 30-001-A-* |
| SPST-N.O., Overtravel | . 205 (5,21) | $1.204(30,58)$ | . $125 \pm .020(3,18 \pm 0,51)$ | $8 \pm 4 \mathrm{oz}$. | 30-015-A-* |
| SPST-N.O., Overtravel \& Positive Feel | Adjustable** | Adjustable** | . $156 \pm .015(3,96 \pm 0,38)$ | $18 \pm 4 \mathrm{oz}$. | 30-017-A-* |
| SPST-N.O., Economical | . $205(5,21)$ | $1.119(28,42)$ | . $062 \pm .010(1,57 \pm 0,25)$ | $10 \pm 4 \mathrm{oz}$. | 30-601-A-* |
| SPST-N.C. | . 205 (5,21) | $1.132(28,75)$ | . $065 \pm .015(1,65 \pm 0,38)$ | $8 \pm 4 \mathrm{oz}$. | 30-002-A-* |
| Wiping Contact Switches - Series 46 |  |  |  |  |  |
| SPDT, BBM | . 205 (5,21) | 1.417 (35,99) | . $180(4,57) \mathrm{min}$. | $1.1 \pm .25 \mathrm{lbs}$. | 46-102-A-* |
| SPDT, MBB | . 205 (5,21) | 1.417 (35,99) | . $180(4,57) \mathrm{min}$. | $1.1 \pm .25 \mathrm{lbs}$. | 46-111-A-* |
| SPDT, BBM, Alternate Action | . $293(7,44)$ | $1.448(36,78)$ | . $180(4,57) \mathrm{min}$. | $1.5 \pm .25 \mathrm{lbs}$. | 46-502-A-* |
| DPDT, BBM | . 205 (5,21) | $1.448(36,78)$ | . $180(4,57) \mathrm{min}$. | $2.2 \pm .5 \mathrm{lbs}$. | 46-200-A-* |
| DPDT, MBB | . 205 (5,21) | $1.448(36,78)$ | . $180(4,57) \mathrm{min}$. | $2.2 \pm .5 \mathrm{lbs}$. | 46-201-A-* |
| DPDT, BBM, Alternate Action | . $293(7,44)$ | $1.448(36,78)$ | . $180(4,57) \mathrm{min}$. | $1.8 \pm .5 \mathrm{lbs}$. | 46-402-A-* |

*Partial part number, complete part number by adding a dash for button color: white -01; red -03; green -04; blue -05; yellow -06 or black -07, see Ordering Information.
${ }^{* *}$ Adjustable from Dim. A $170(4,32)$ minimum, Dim. B $1.285(32,64)$ maximum to Dim. A . $290(7,37)$ maximum, Dim. B $1.165(29,59)$ minimum with hex nut below bezel.

## MOUNTING

## Easy Snap-In Mounting



## PANEL CUTOUT

## Recommended Panel Cut

Switch will fit panels .049" $(1,24)$ to .125 " $(3,18)$ thick. Recommended panel thickness is 18 gauge.


## SPECIFICATIONS

Life Limiting Criteria-Series 30 \& 46
Contact Resistance: Less than 25 milliohms on a new switch
Voltage Breakdown: 1,000 Vac between mutually insulated parts
Insulation Resistance: 1,000 megohms minimum

## Ratings-Series 30

Current Rating:
30-601 $150 \mathrm{~mA}, 5 \mathrm{Vdc}$ resistive and $20 \mathrm{~mA}, 20 \mathrm{Vdc}$ resistive
All others $1 \mathrm{~A}, 115 \mathrm{Vac}$ resistive, or 0.5 A , 220 Vac resistive
Life Expectancy:
30-015 500,000 operations
30-017 200,000 operations
All others $1,000,000$ operations

## Ratings-Series 46

Current Rating: $250 \mathrm{~mA}, 115 \mathrm{Vac}$ resistive or $125 \mathrm{~mA}, 220$ Vac resistive
Life Expectancy: 250,000 operations

## Materials and Finishes-Series 30

Bezel: Nylon
Button Cap: ABS plastic
Switch Bushing: Brass, cadmium-plated
Base: Thermoset plastic
Spring: Tinned music wire
Plunger: Polycarbonate

## Shorting Bar:

30-601 Brass, gold-plated over nickel
All Others Brass with fine silver contact area
Base Contacts:
30-601 Brass, gold-plated over nickel
30-002 Brass with fine silver contact area All Others Bronze with fine silver contact area

## Terminals:

30-002 Brass, silver-plated
30-601 Bronze, gold-plated over nickel All Others Bronze, silver-plated
Nut: Provided only on 30-017; allows button height adjustment. Brass, cadmium-plated.

## Materials and Finishes-Series 46

Bezel: Nylon
Button Cap: ABS plastic
Switch Bushing: Brass, cadmium-plated.
Base: Thermoset plastic
Spring: Tinned music wire
Plunger: 46-402/502 Nickel-plated brass All Others Polycarbonate
Shorting Bar: Phosphor bronze, silver-plated
Base Contacts: Phosphor bronze with silver

## contact area

Terminals: Phosphor bronze, solder clad
Covers (46-200/201): Brass, cadmium-plated

## STANDARD OPTIONS

Epoxy-sealed terminals and wire leads, see page D-32.

## LEGENDING OPTION

## Contact Grayhill

A button legend can be printed in epoxy ink which bonds to the surface of the button cap. Any type style or design which can be photographed can be used to produce the legend.

There is a per-button printing charge. A nominal set up charge per legend applies to orders of 1 to 99 pieces. Non-standard legends are subject to one time artwork and tooling charges. Consult Office In CHINA(Beijing): Phone:(010)6851-9097.

## ORDERING INFORMATION

Use the partial part number you have selected from the Dimensions and Part Number chart, and add the button color suffix. Example:

$$
\begin{array}{|c}
\square \\
\text { Color: } 01,03,04, \\
05,06,07
\end{array}
$$

46-200-A-03

| $01=$ White | $03=$ Red | $04=$ Green |
| :--- | :--- | :--- |
| $05=$ Blue | $06=$ Yellow | $07=$ Black |

