



A

Pushbutton

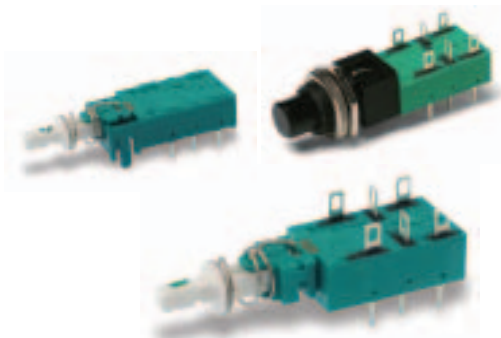
# NE-18 Series Mains / Power Switches

## Features/Benefits

- Chassis or panel mount
- Various buttons
- Various contact configurations
- RoHS compliant

## Typical Applications

- Mains/power switching
- Consumer electronics
- Audio equipment
- Digital products



## Specifications

### POWER CONTACT:

SWITCHING POWER MAX. AC/DC: NE18: 1500/100 W, NE18CTII: 1000/100 W; AC (Inductive  $\cos \phi = 0.6$ ): NE18: 900W, NE18CTII: 600W.

SWITCHING VOLTAGE MAX. AC/DC: 250/100V

### SWITCHING CURRENT MAX. AC/DC

AC (Inductive  $\cos \phi = 0.6$ ): NE18:  $6 A^2$ /1 A, NE18CTII:  $4 A^2$ /1 A

INRUSH CURRENT MAX. AC<sup>1</sup>): NE18: 36 A, NE18CTII: 64 A

DIELECTRIC STRENGTH (50 Hz, 1 min.): 2000 V

OPERATING LIFE AT MAX. LOAD AND AT MAX. INRUSH CURRENT:  $\sim 10^4$  operations<sup>5</sup>

CONTACT RESISTANCE: Initial: 50m $\Omega$ ; After  $10^4$  operations: 70m $\Omega$ .

INSULATION RESISTANCE:  $\sim 10^{12} \Omega$  chassis – nearest contact;

$\sim 10^{12} \Omega$  mains contact – mains contact;  $\sim 10^{12} \Omega$  mains contact – mains contact after  $10^4$  operations.

### LOW VOLTAGE CONTACT:

SWITCHING POWER MAX.: 12W

SWITCHING VOLTAGE MAX.: 24V

SWITCHING CURRENT MAX.: 0.5A

TOTAL TRAVEL: 4.7mm (.185 inch)

LATCHING TRAVEL: 3.3mm (.130 inch)

OPERATING FORCE: Without auxiliary low voltage contacts:

NE18: 7N (700 grams); NE18CTII: 9.5N (950 grams).

With auxiliary low voltage contacts: NE18: 8N (800 grams);

NE18CTII: 11N (1100 grams).

SEALING: Dust proof.

## Materials

HOUSING, ACTUATOR & TERMINAL BOARD: Thermoplastic polyester (UL 94V-0).

MOVABLE CONTACT: Silver nickel alloy, silver plated.

FIXED CONTACTS: Silver nickel alloy, silver plated.

COMMON CONTACTS & TERMINALS: Copper alloy, silver plated.

RETURN SPRING: Music wire.

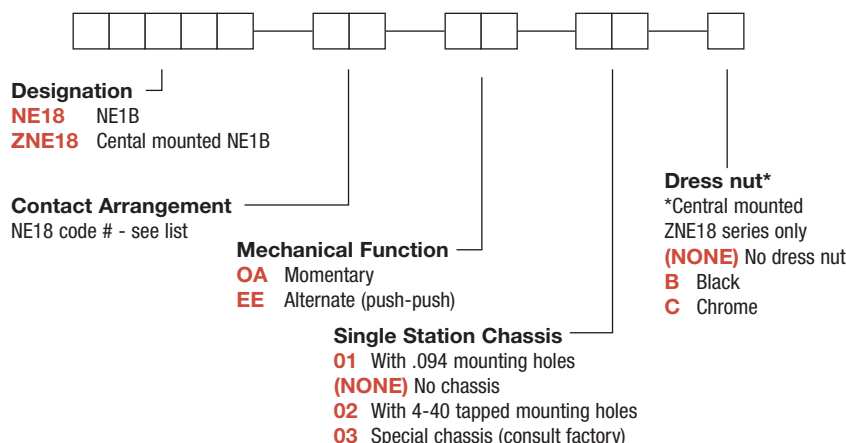
**NOTE:** All models are RoHS compliant and compatible.

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

## Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages A-99 thru A-106. For additional options not shown in catalog, consult Customer Service Center.

If requesting only a switch, select the switch as noted below. Buttons are sold separately.



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

# NE-18 Series Mains / Power Switches



A

Pushbutton

## Order Code - Buttons

### Solid Buttons

| Style           | Button Color         |
|-----------------|----------------------|
| <b>F01</b> FMR  | <b>01</b> Black      |
| <b>F02</b> FG*  | <b>02</b> White      |
| <b>F12</b> FSC  | <b>03</b> Red        |
| <b>F13</b> FSD  | <b>04</b> Light gray |
| <b>F14</b> FU12 |                      |
| <b>F15</b> FSB  |                      |
| <b>F16</b> FE   |                      |
| <b>F19</b> FA   |                      |
| <b>F21</b> F001 |                      |

### Mechanical Indicator Buttons

| Style             | Shell Color     | Out Position Color | In Position Color |
|-------------------|-----------------|--------------------|-------------------|
| <b>F01</b> FA100  | <b>01</b> Black | <b>01</b> Black    | <b>02</b> White   |
| <b>F02</b> FA101  |                 |                    | <b>06</b> Yellow  |
| <b>F07</b> FA120  |                 |                    | <b>07</b> Blue    |
| <b>F08</b> FA201  |                 |                    | <b>08</b> Green   |
| <b>F11</b> FA200* |                 |                    | <b>12</b> Orange  |

\*Button options for central mounting configurations, use 'FG' for central mount with chrome dress nut, use 'FA200' for central mount with black dress nut.

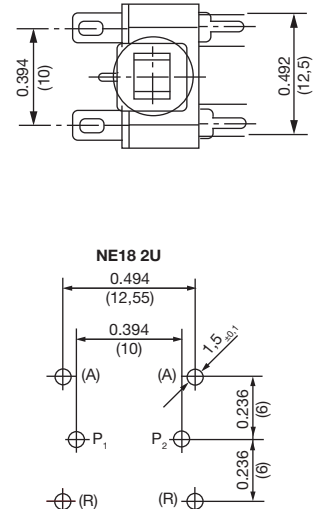
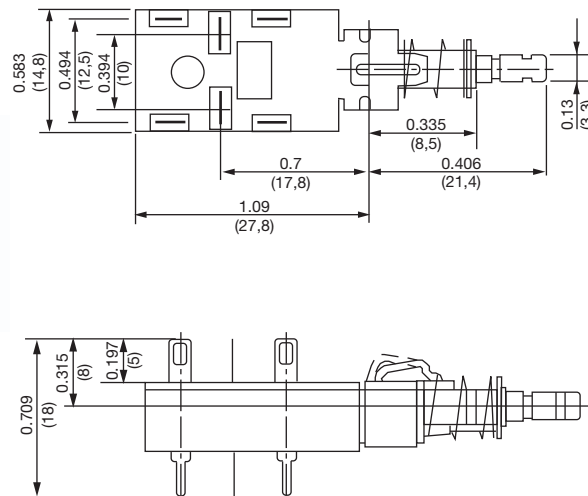
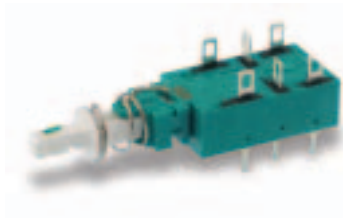
## BUTTON REMOVAL

A button of a push-push switch should only be removed in the "OFF" non-latching position.

## DESIGNATION & SWITCHES WITH STANDARD OPTIONS



### NE1838EE



Dimensions are shown: Inches (mm)  
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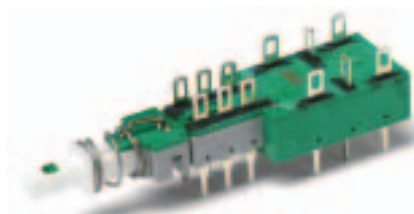
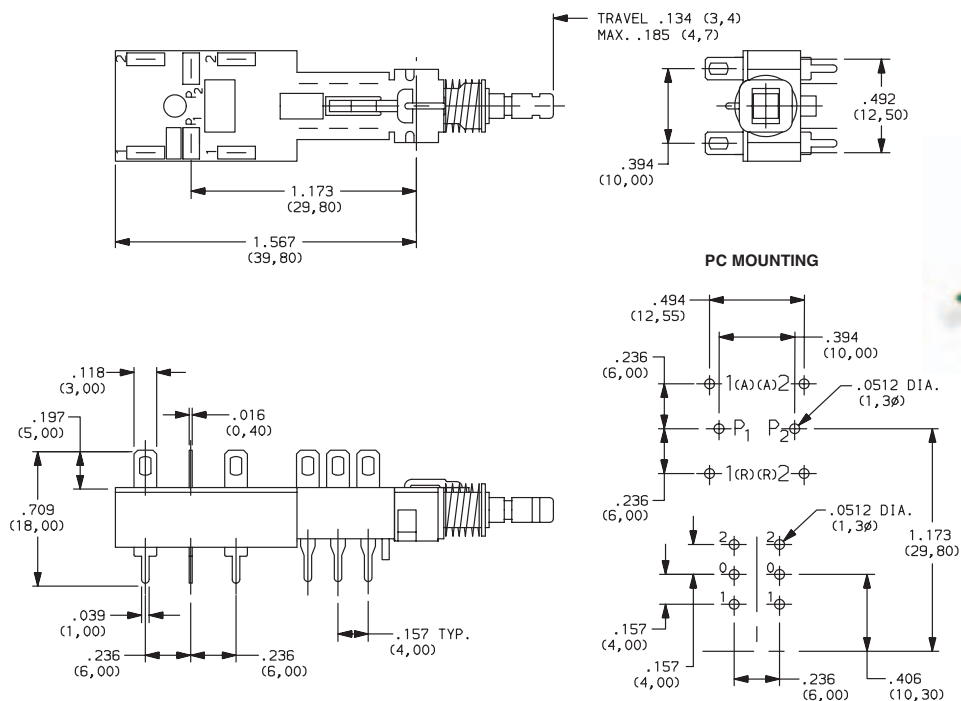


# NE-18 Series Mains / Power Switches

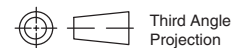
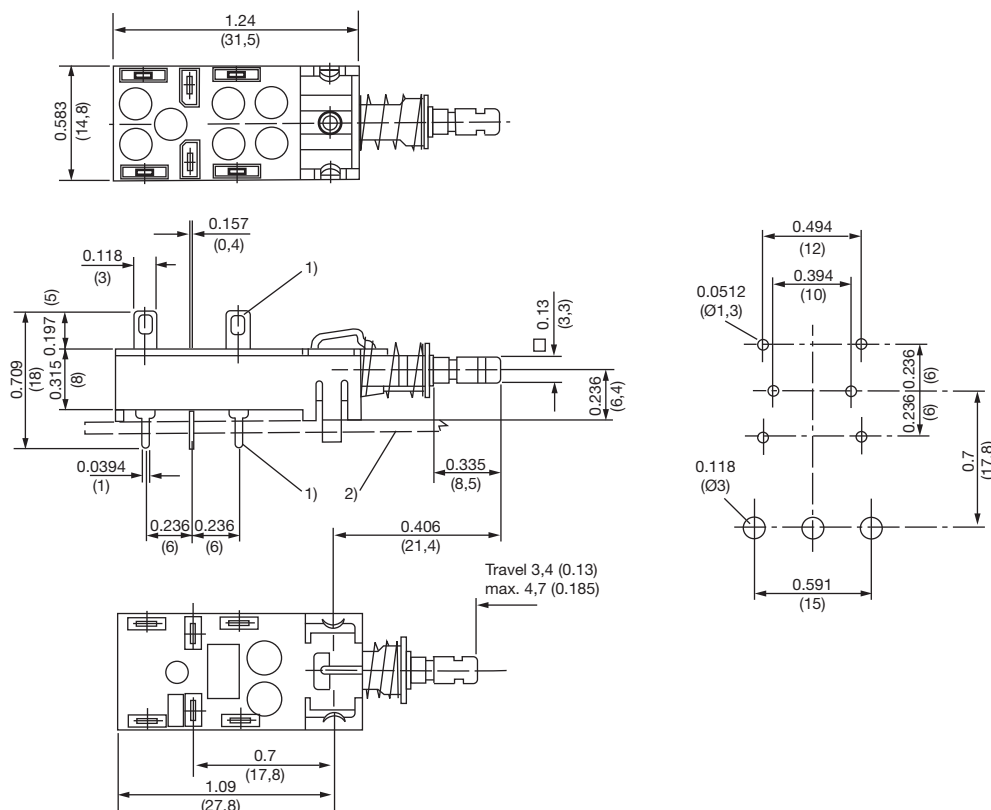
## DESIGNATION & SWITCHES WITH STANDARD OPTIONS



### NE1839EE



### NE1848EE



# NE-18 Series Mains / Power Switches



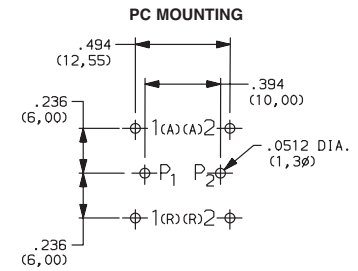
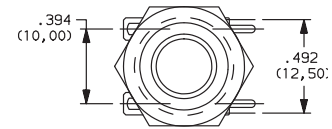
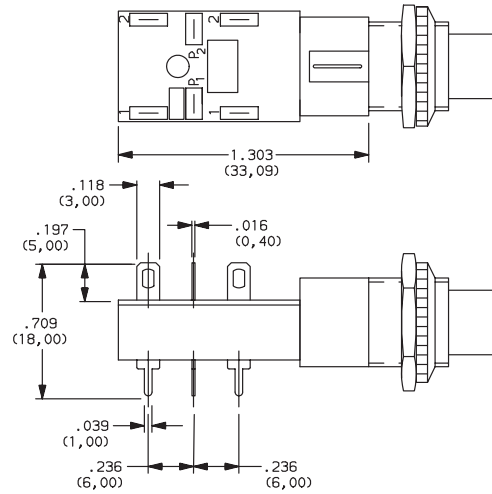
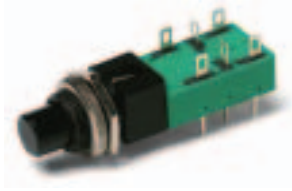
A

Pushbutton

## DESIGNATION & SWITCHES WITH STANDARD OPTIONS



ZNE1838EECF0201



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

**A**

Pushbutton

# NE-18 Series

## Mains / Power Switches

### CONTACT ARRANGEMENT



| OPTION CODE<br>Contact capacity<br>and availability | STYLE           | ELECTRICAL<br>CIRCUIT |
|-----------------------------------------------------|-----------------|-----------------------|
| <b>37</b>                                           | NE18 — 2AX      | DPST                  |
| <b>38</b>                                           | NE18 — 2UX      | DPDT                  |
| <b>51</b>                                           | 2U + NE18 — 2AX | DPST*                 |
| <b>52 (4A/64)</b>                                   | NE18CTII — 2AX  | DPST                  |
| <b>39</b>                                           | 2U + NE18 — 2UX | DPDT*                 |
| <b>41</b>                                           | NE18 — 2AP      | DPST                  |
| <b>42</b>                                           | NE18 — 2UP      | DPDT                  |
| <b>43</b>                                           | NE18 — 2AW      | DPST                  |
| <b>44</b>                                           | NE18 — 2UW      | DPDT                  |
| <b>45</b>                                           | NE18 — 2ASX     | DPST                  |

\* 2U + Denotes auxiliary set of low current contacts DPDT  
 2A = DPST  
 2U = DPDT  
 S = Snap-in mounting  
 X = Solder lug/PC pins  
 W = Solder lugs only  
 P = PC pins only

| OPTION CODE<br>Contact capacity<br>and availability | STYLE               | ELECTRICAL<br>CIRCUIT |
|-----------------------------------------------------|---------------------|-----------------------|
| <b>46</b>                                           | NE18 — 2USX         | DPDT                  |
| <b>47</b>                                           | NE18 — 2ASP         | DPST                  |
| <b>48</b>                                           | NE18 — 2USP         | DPDT                  |
| <b>49</b>                                           | NE18 — 2ASW         | DPST                  |
| <b>50</b>                                           | NE18 — 2USW         | DPDT                  |
| <b>53 (4A/64)</b>                                   | 2U + NE18CTII — 2AX | DPST                  |
| <b>54</b>                                           | 2U + NE18 — 2AW     | DPST                  |
| <b>55</b>                                           | 2U + NE18 — 2AP     | DPST                  |
| <b>56</b>                                           | 2U + NE18 — 2UW     | DPDT                  |
| <b>57</b>                                           | 2U + NE18 — 2UP     | DPDT                  |

#### NOTES

1. Contact plating is silver on all Power Switches.
2. The electrical function is Break Before Make (BBM) on all Power Switches.
3. The terminals will be epoxy sealed.

| TYPE     | POSSIBLE CONTACT ARRANGEMENT |                    | CONTACT SPACING          | PROTECTION CLASS<br>(CEE 24) | APPROVALS |
|----------|------------------------------|--------------------|--------------------------|------------------------------|-----------|
|          | POWER CONTACTS <sup>1</sup>  | AUXILIARY CONTACTS |                          |                              |           |
| NE18     | 2A <sup>2</sup>              | 2U                 | > 3mm<br>(.118 inch)     | II                           | VDE, UL   |
| NE18     | 2A <sup>2</sup><br>2U        | 2U                 | > 3mm (m)<br>(.118 inch) | I                            | VDE, UL   |
| NE18CTII | 2A <sup>2</sup>              | 2U                 | > 3mm<br>(.118 inch)     | II                           | VDE, UL   |

- 1) A = make contact, R = break contact, U = changeover contact, m = VDE sign for switches with a contact spacing (air gap) < 3mm (.118 inch) according to VDE 0630/CEE 24.  
 2) With 2A mains contacts: Mounting only by PC pins is not sufficient.  
 3) BSI only for 2U mains contacts.

### MECHANICAL FUNCTION



| OPTION CODE | FUNCTION              |
|-------------|-----------------------|
| <b>OA</b>   | Momentary             |
| <b>EE</b>   | Alternate (push-push) |



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[www.ck-components.com](http://www.ck-components.com)

# NE-18 Series Mains / Power Switches



A

Pushbutton

## SINGLE STATION CHASSIS

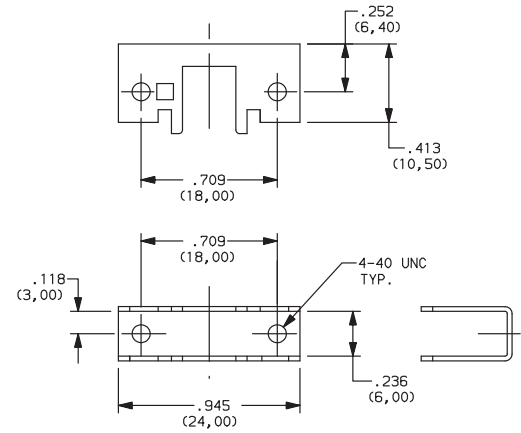
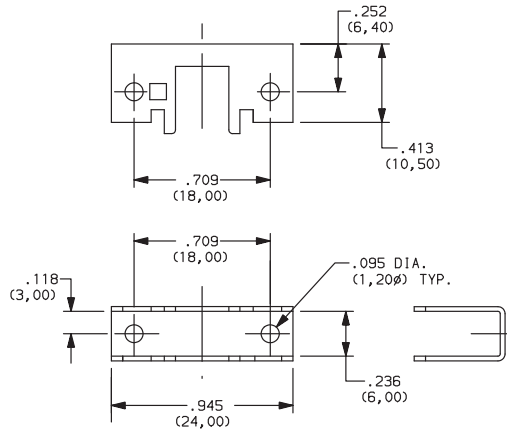


**01** WITH .094 MOUNTING HOLES

**(NONE)**

NO CHASSIS

**02** WITH 4-40 TAPPED MOUNTING HOLES



**03** SPECIAL CHASSIS (CONSULT FACTORY)

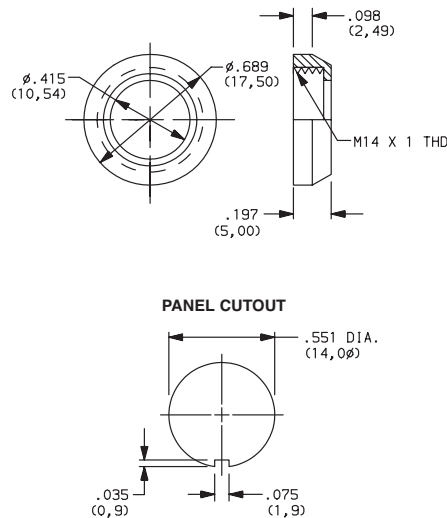
## DRESS NUT



**(NONE)**

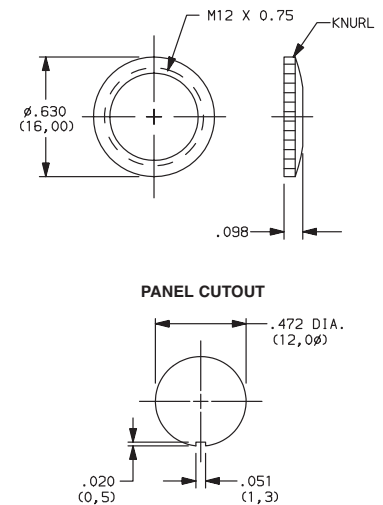
NO DRESS NUT

**B** BLACK



**NOTE:** Available with ZNE18 designation and FA200 buttons.

**C** CHROME



**NOTE:** Available with ZNE18 designation and FG button.



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change



Pushbutton  
A

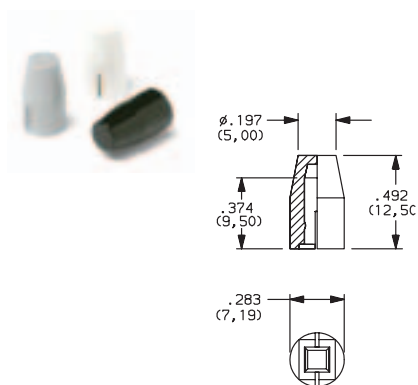
# NE-18 Series Mains / Power Switches

SOLID BUTTON

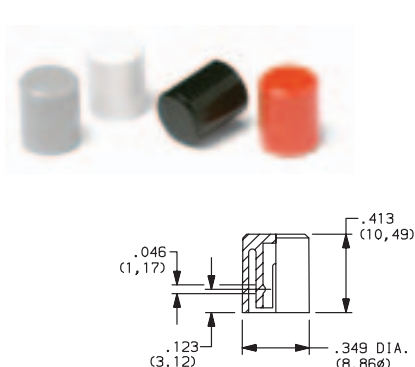


## STYLE

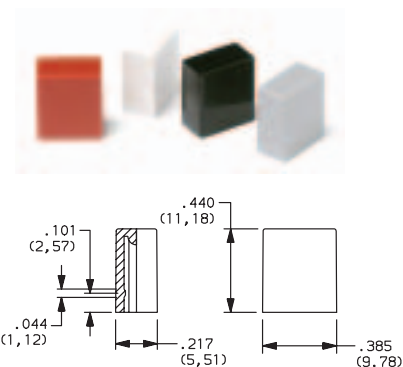
**F01** FMR



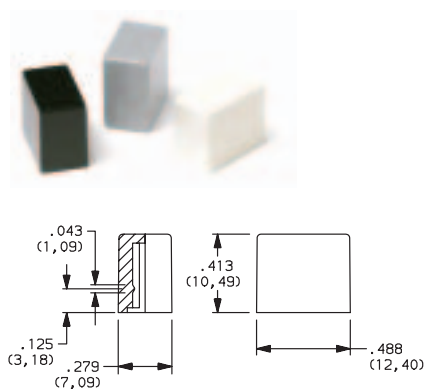
**F02** FG



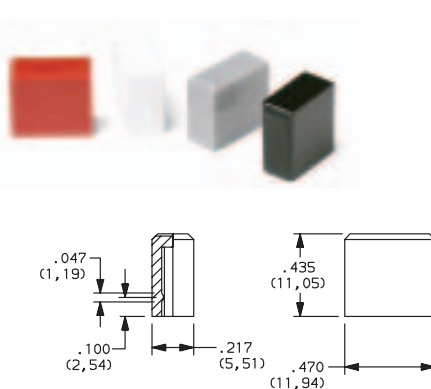
**F12** FSC



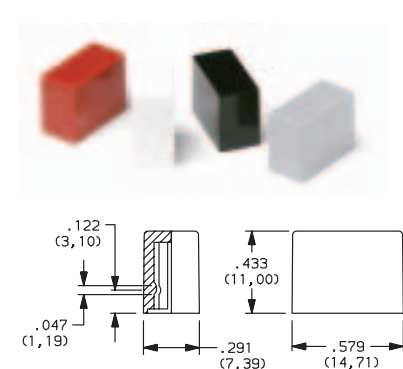
**F13** FSD



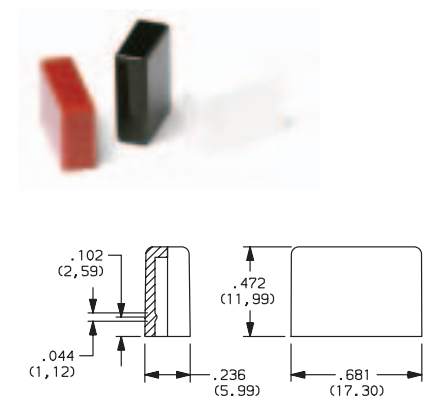
**F14** FU12



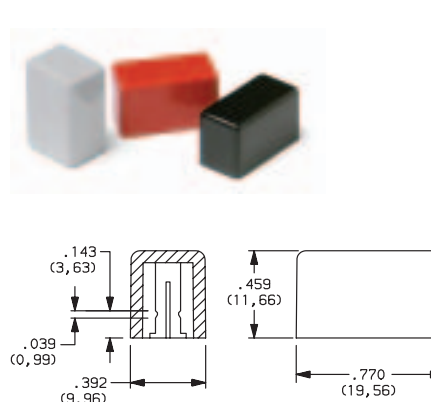
**F15** FSB



**F16** FE



**F19** FA



| OPTION CODE | COLOR    |
|-------------|----------|
| 01          | BLACK    |
| 02          | WHITE    |
| 03          | RED      |
| 04          | LT. GRAY |



Third Angle  
Projection

Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

**C&K**

# NE-18 Series Mains / Power Switches



A

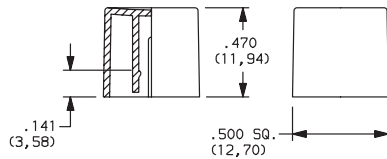
Pushbutton

## SOLID BUTTON



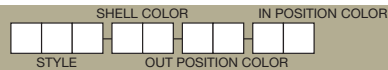
### STYLE

**F21** F001



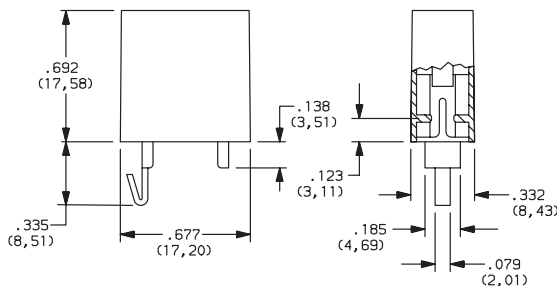
| OPTION CODE | COLOR                                         |
|-------------|-----------------------------------------------|
| <b>01</b>   | BLACK                                         |
| <b>02</b>   | WHITE                                         |
| <b>03</b>   | RED                                           |
| <b>04</b>   | LT. GRAY                                      |
| <b>09</b>   | BLACK/CHROME<br>(F03, F06 & F07 buttons only) |

## MECHANICAL BUTTON

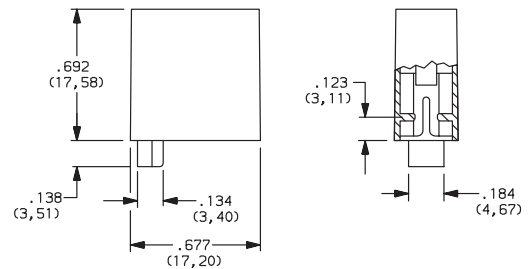


### STYLE

**F01** FA100



**F02** FA101



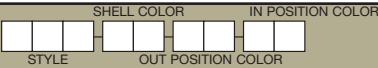
Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change



A  
Pushbutton

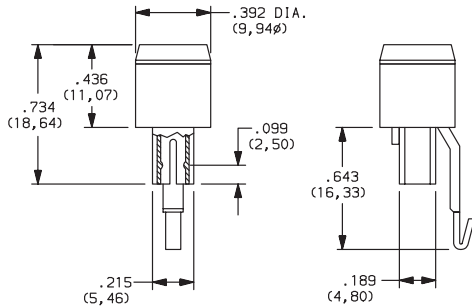
# NE-18 Series Mains / Power Switches

## MECHANICAL BUTTON

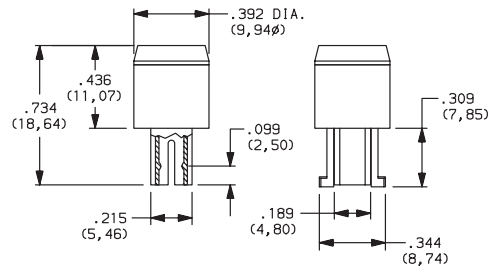


### STYLE

**F08** FA201



**F11** FA200



### SHELL COLOR

**01** BLACK

### OUT POSITION COLOR

**01** BLACK

### IN POSITION COLOR

| OPTION CODE | COLOR  |
|-------------|--------|
| <b>02</b>   | WHITE  |
| <b>06</b>   | YELLOW |
| <b>07</b>   | BLUE   |
| <b>08</b>   | GREEN  |
| <b>12</b>   | ORANGE |



Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change

[www.ck-components.com](http://www.ck-components.com)

## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

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