



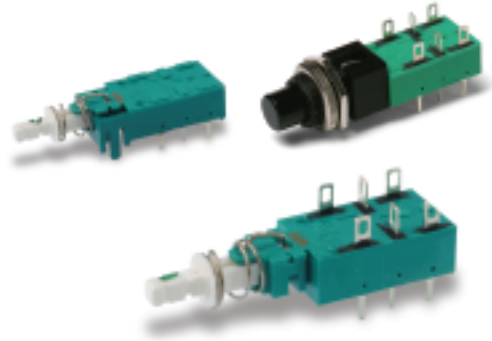
# NE-18 Series Mains / Power Switches

### 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 w =0.6): NE18: 900W,  
NE18CTII: 600W.

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

#### SWITCHING CURRENT MAX. AC/DC

AC (Inductive cos w =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:  $10^4$  operations<sup>5</sup>)

CONTACT RESISTANCE: Initial: 50mΩ; After  $10^4$  operations: 70mΩ.

INSULATION RESISTANCE:  $10^{12}$  Ωchassis – nearest contact;  
 $10^{12}$  Ωmains contact – mains contact;  $10^{12}$  Ωmains 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.

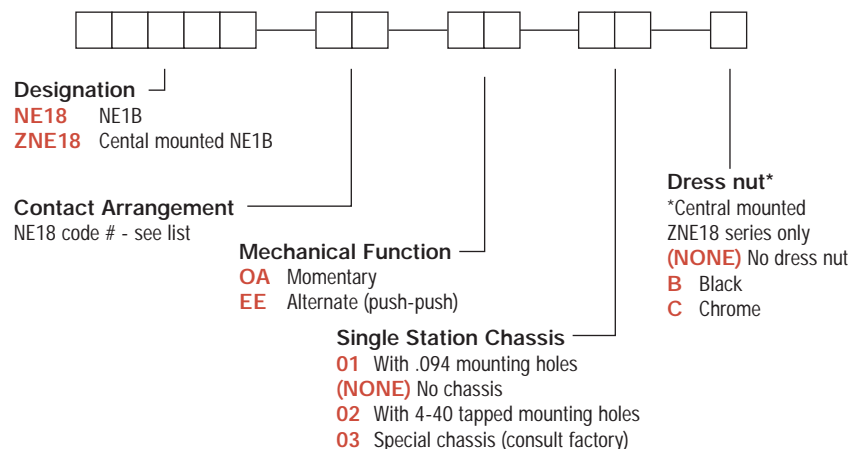
**NOTE:** All models are RoHS compliant and compatible.

**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-102 thru A-109. 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

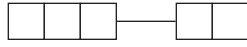


A

Pushbutton

## Order Code - Buttons

### Solid Buttons



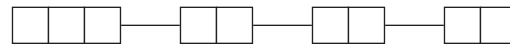
#### Style

- F01 FMR
- F02 FG\*
- F12 FSC
- F13 FSD
- F14 FU12
- F15 FSB
- F16 FE
- F19 FA
- F21 F001

#### Button Color

- 01 Black
- 02 White
- 03 Red
- 04 Light gray

### Mechanical Indicator Buttons



#### Style

- F01 FA100
- F02 FA101
- F07 FA120
- F08 FA201
- F11 FA200\*

#### Shell Color

- 01 Black

#### Out Position Color

- 01 Black

#### In Position Color

- 02 White
- 06 Yellow
- 07 Blue
- 08 Green
- 12 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.

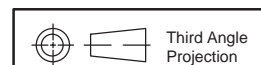
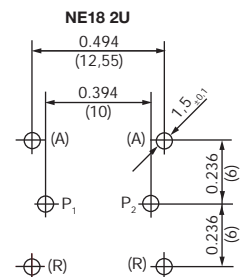
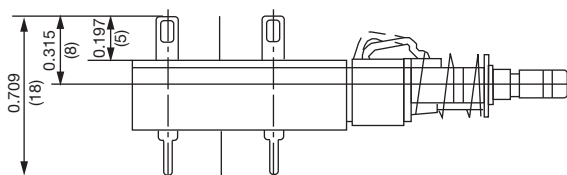
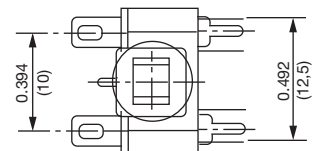
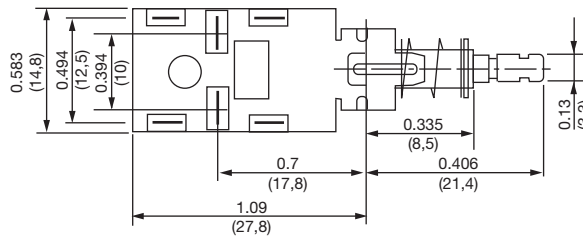
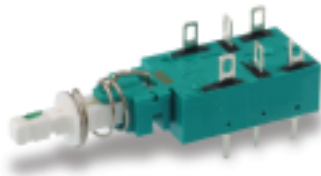
## BUTTON REMOVAL

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)  
Specifications and dimensions subject to change



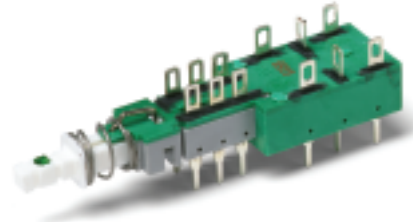
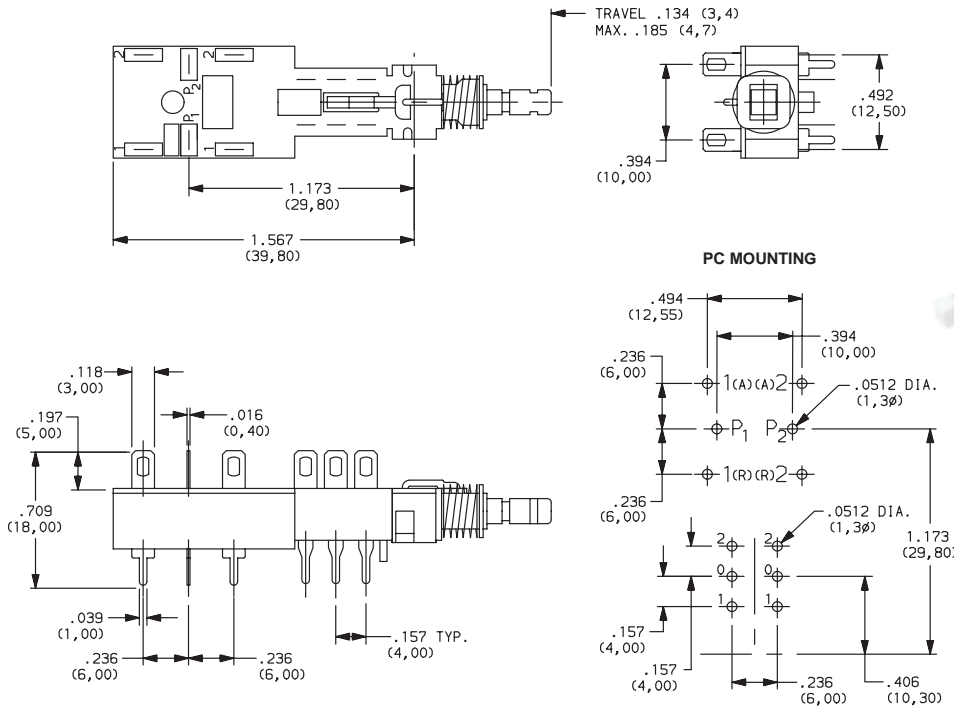
Pushbutton  
A

# NE-18 Series Mains / Power Switches

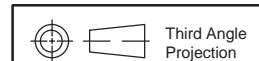
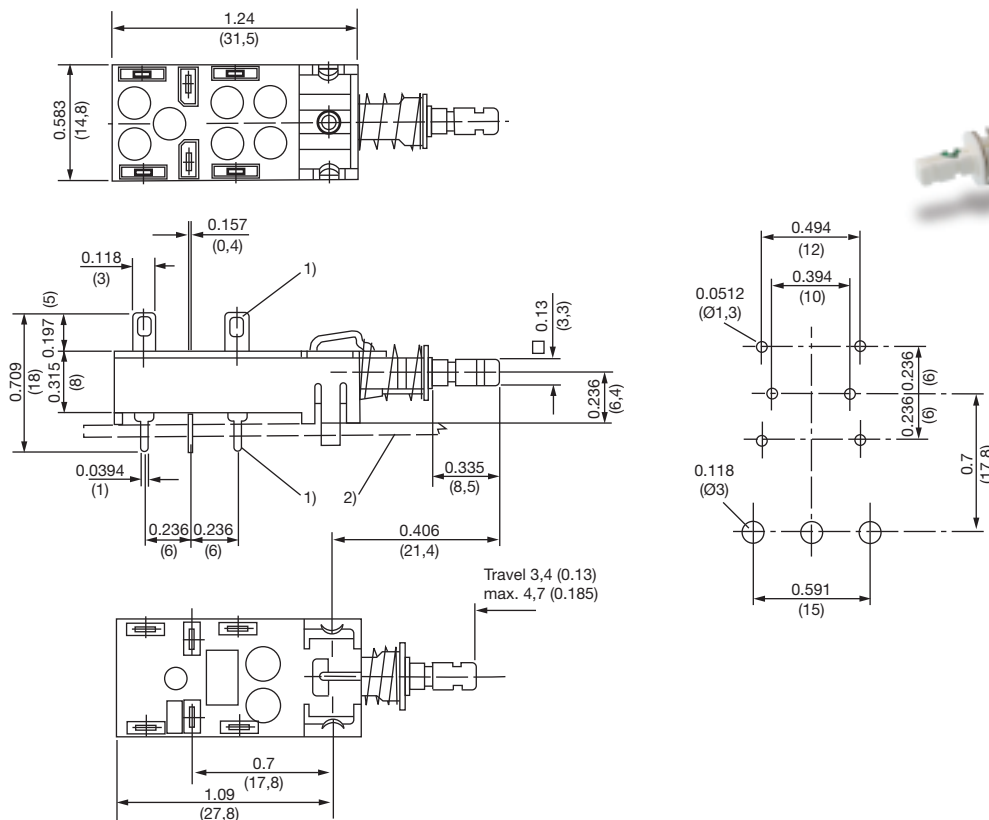
DESIGNATION & SWITCHES WITH STANDARD OPTIONS



NE1839EE



NE1848EE



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

# NE-18 Series Mains / Power Switches

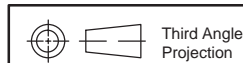
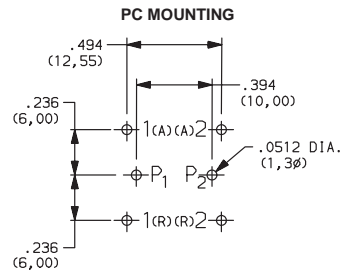
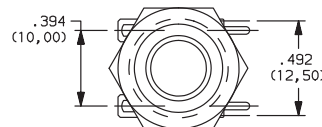
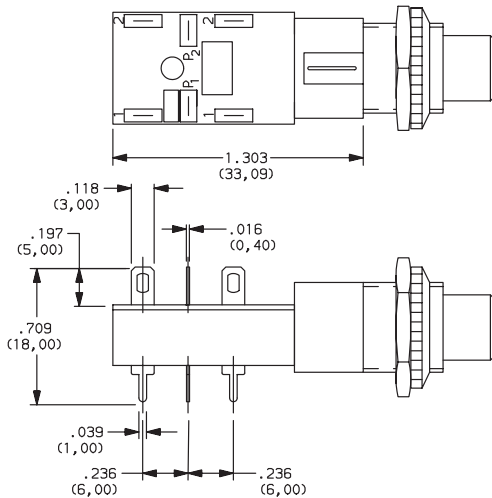
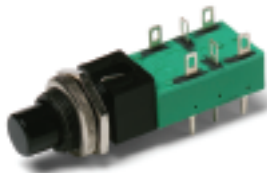


Pushbutton

DESIGNATION & SWITCHES WITH STANDARD OPTIONS



ZNE1838EECF0201



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



# NE-18 Series Mains / Power Switches

Pushbutton  
A

## CONTACT ARRANGEMENT



OPTION CODE Contact capacity and availability	STYLE	ELECTRICAL 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

OPTION CODE Contact capacity and availability	STYLE	ELECTRICAL 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

- \* 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

### NOTES

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

TYPE	POSSIBLE CONTACT ARRANGEMENT		CONTACT SPACING	PROTECTION CLASS (CEE 24)	APPROVALS
	POWER CONTACTS <sup>1</sup>	AUXILIARY CONTACTS			
NE18	2A <sup>2</sup>	2U	> 3mm (.118 inch)	II	VDE, BSI, DEMKO, NEMKO, SEMKO, SEV, CSA, UL
NE18	2A <sup>2</sup> 2U	2U	> 3mm (m) (.118 inch)	I	VDE, MEEI, BSI <sup>3</sup> , DEMKO, NEMKO, SEMKO, SEV, CSA, UL
NE18CTII	2A <sup>2</sup>	2U	> 3mm (.118 inch)	II	VDE, BSI, DEMKO, CSA, SEMKO, SEV, UL, NEMKO

- 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)



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

# NE-18 Series Mains / Power Switches



A

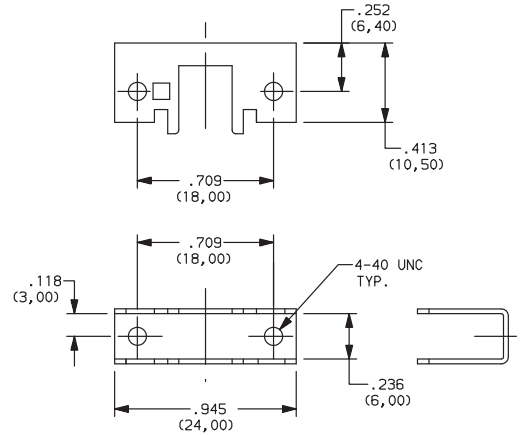
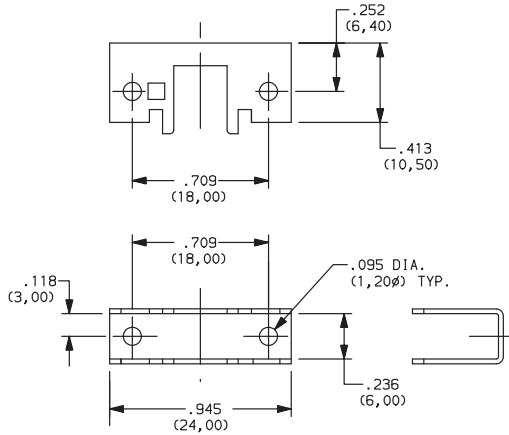
Pushbutton

## SINGLE STATION CHASSIS

01 WITH .094 MOUNTING HOLES

(NONE) NO CHASSIS

02 WITH 4-40 TAPPED MOUNTING HOLES



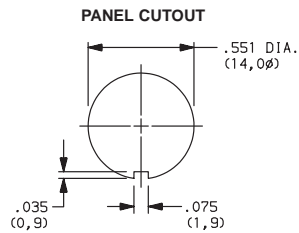
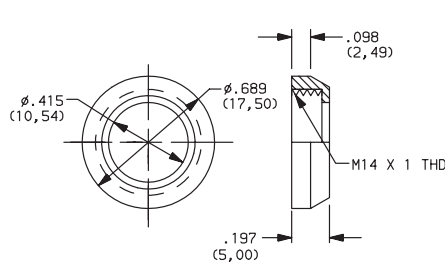
03 SPECIAL CHASSIS (CONSULT FACTORY)

## DRESS NUT

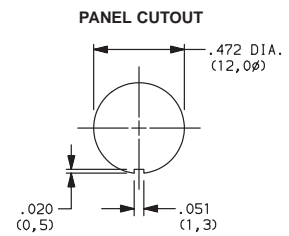
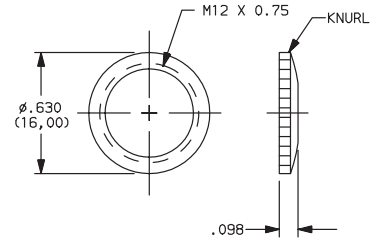
(NONE) NO DRESS NUT

B BLACK

C CHROME



NOTE: Available with ZNE18 designation and FA200 buttons.



NOTE: Available with ZNE18 designation and FG button.



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



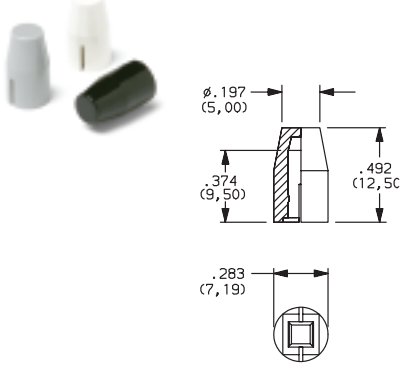
# NE-18 Series Mains / Power Switches

SOLID BUTTON

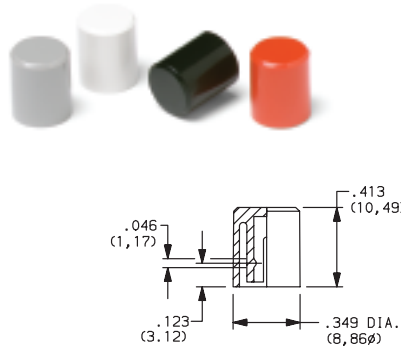
Pushbutton  
A

## STYLE

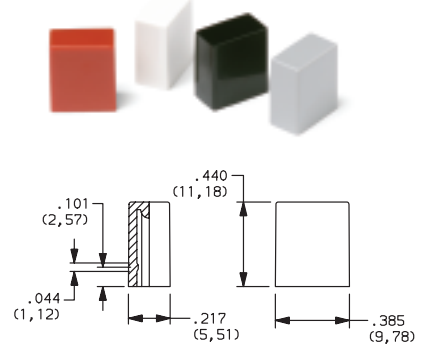
**F01** FMR



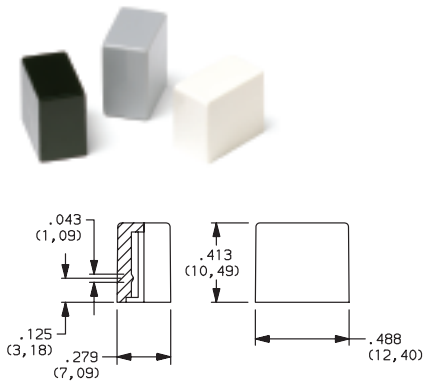
**F02** FG



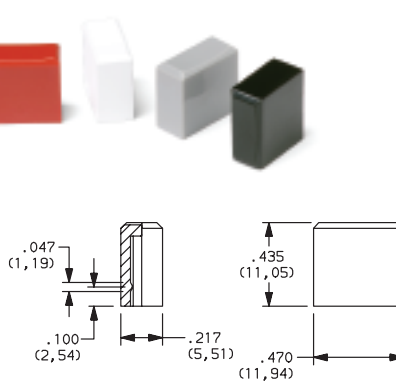
**F12** FSC



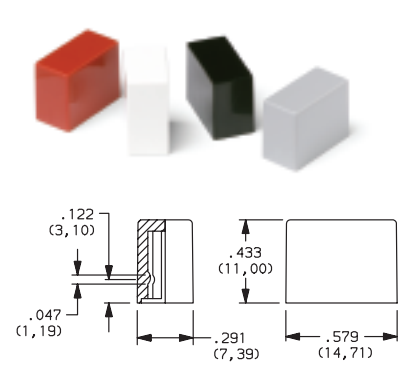
**F13** FSD



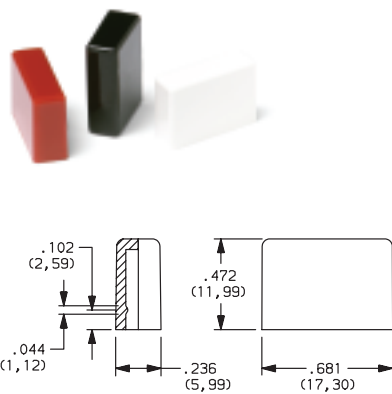
**F14** FU12



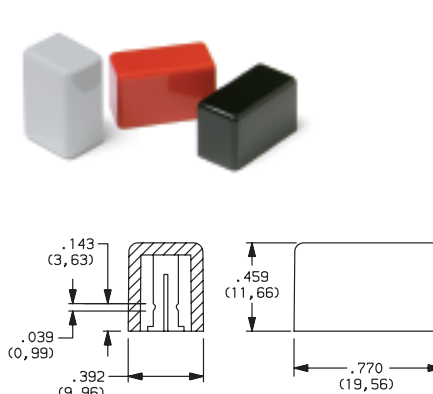
**F15** FSB



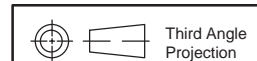
**F16** FE



**F19** FA



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



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



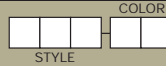
# NE-18 Series Mains / Power Switches



A

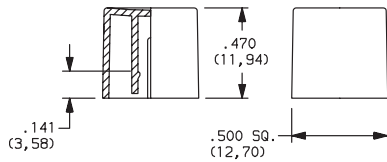
Pushbutton

## SOLID BUTTON



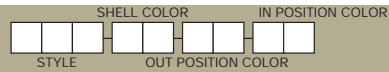
### STYLE

**F21** F001



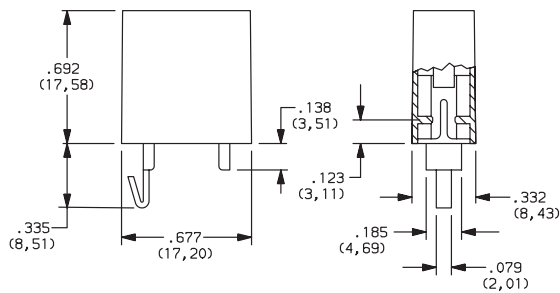
OPTION CODE	COLOR
<b>01</b>	BLACK
<b>02</b>	WHITE
<b>03</b>	RED
<b>04</b>	LT. GRAY
<b>09</b>	BLACK/CHROME (F03, F06 & F07 buttons only)

## MECHANICAL BUTTON

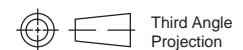
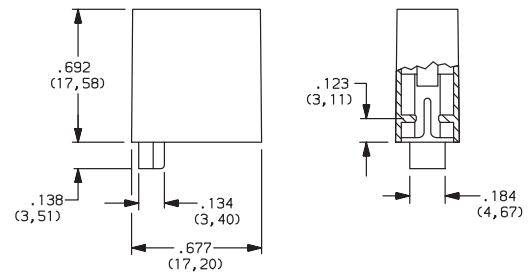


### STYLE

**F01** FA100



**F02** FA101



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

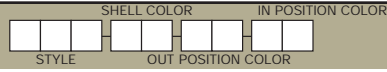




# NE-18 Series Mains / Power Switches

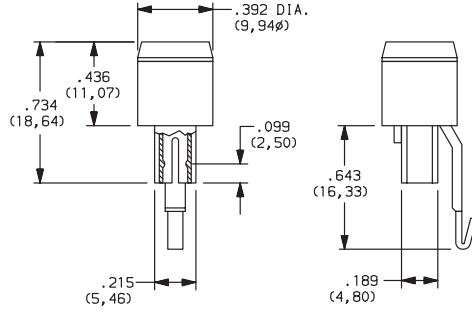
A  
Pushbutton

## MECHANICAL BUTTON

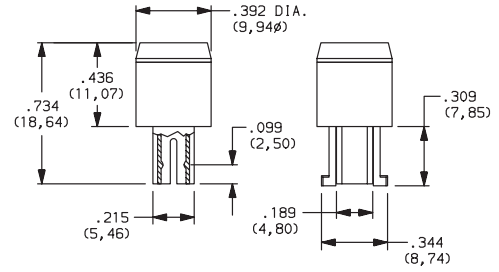


### STYLE

**F08** FA201



**F11** FA200



### SHELL COLOR

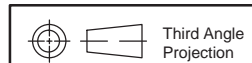
**01** BLACK

### 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