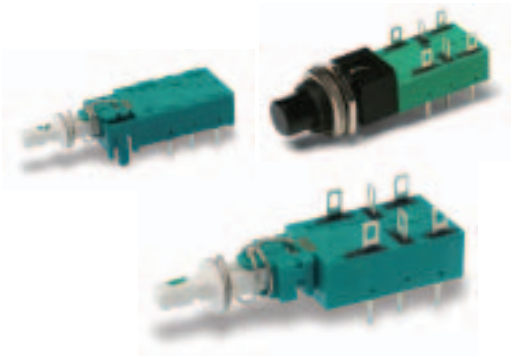
NE-18 Series
Mains / Power Switches

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})^{4})/1 A, NE18CTII: 4 A^{2})/1 A

INRUSH CURRENT MAX. AC^{1}): 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^{5})

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.

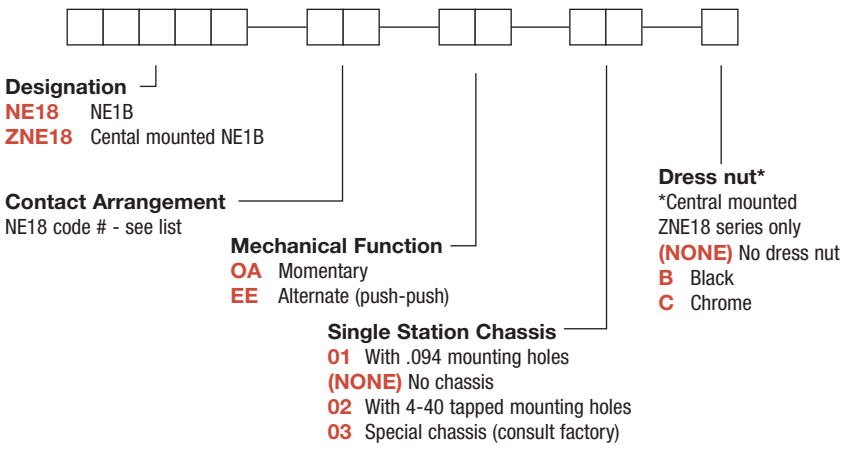
NOTE: All models arer RoHS compliant and compatible.

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.



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

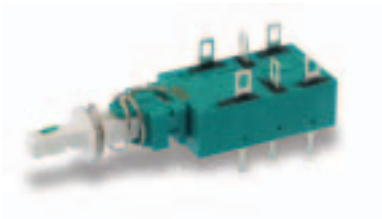
*Button options for central mounting configurations, use 'FG' for central mount with chrome dress nut, use 'FA200' for central mount with black dress nut.

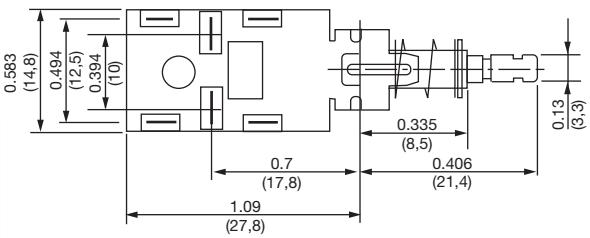
BUTTON REMOVAL

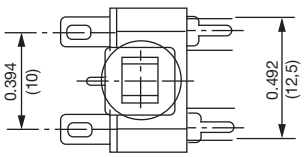
A button of a push-push switch should only be removed in the "OFF" non-latching position.

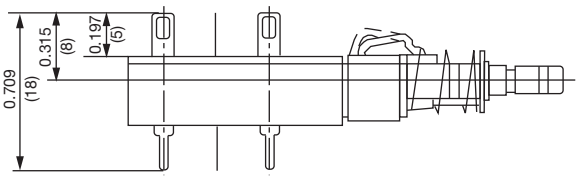
DESIGNATION & SWITCHES WITH STANDARD OPTIONS

NE1838EE

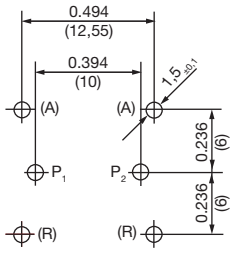








NE18 2U



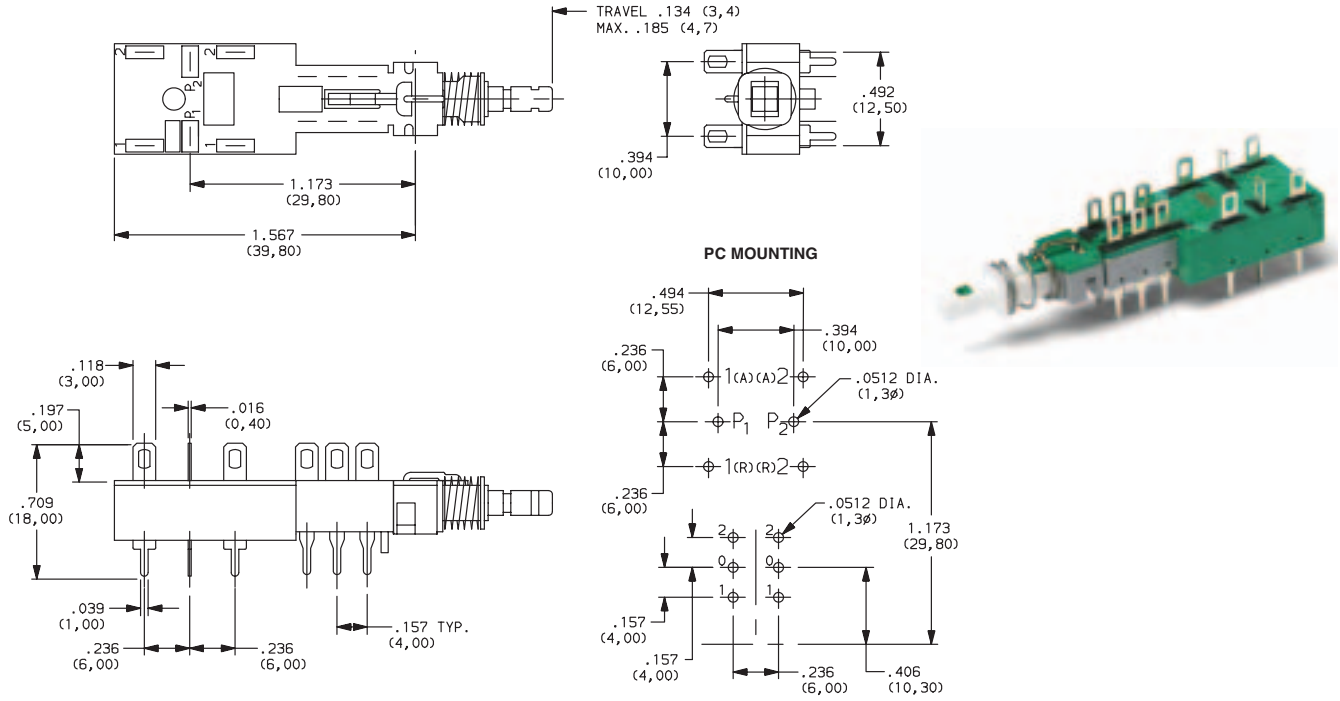
Third Angle Projection

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

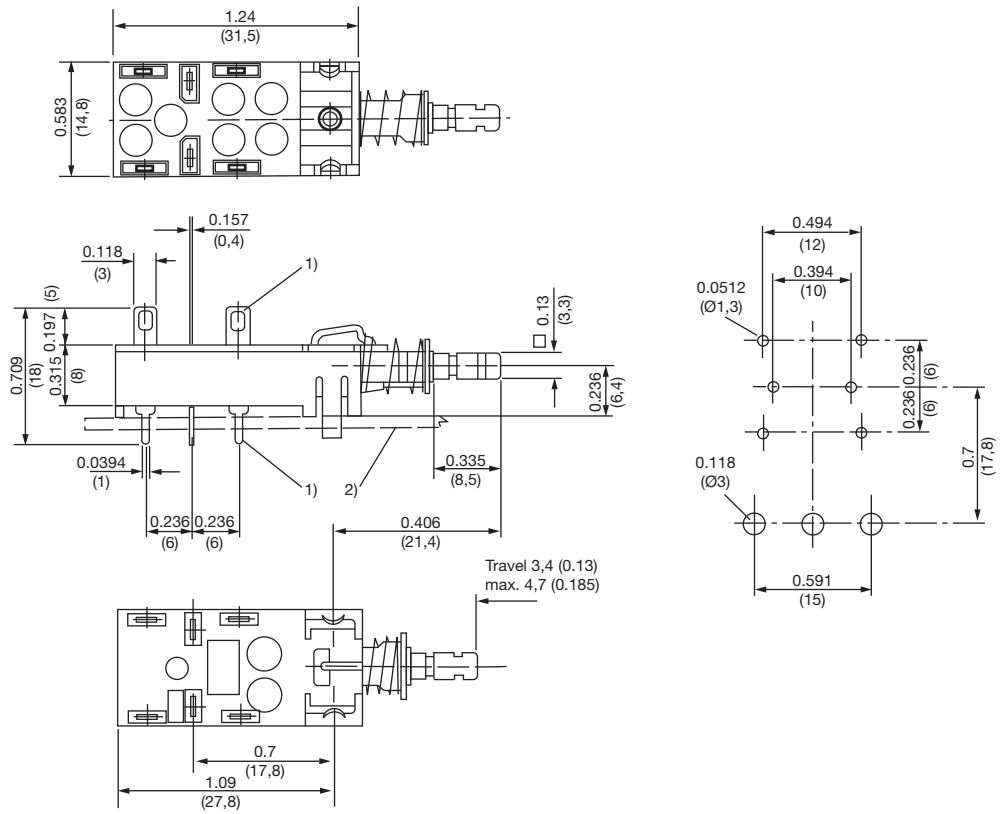
NE-18 Series
Mains / Power Switches

DESIGNATION & SWITCHES WITH STANDARD OPTIONS

NE1839EE



NE1848EE

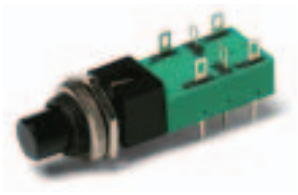


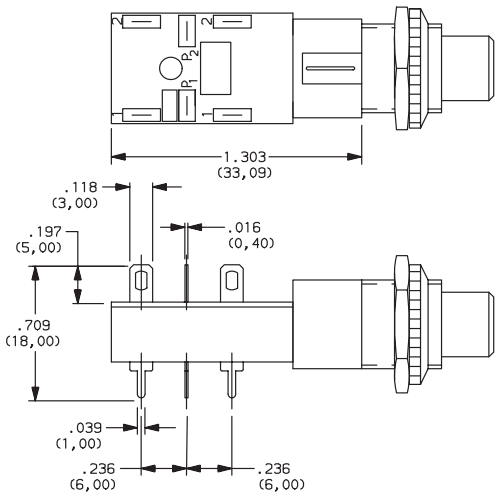
Third Angle Projection

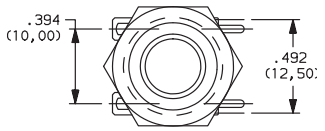
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

DESIGNATION & SWITCHES WITH STANDARD OPTIONS

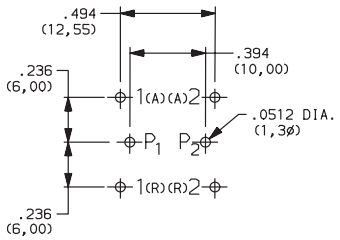
ZNE1838EECF0201







PC MOUNTING



Third Angle Projection

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

NE-18 Series
Mains / Power Switches

CONTACT ARRANGEMENT

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

OPTION CODE Contact capacity and availability	STYLE	ELECTRICAL CIRCUIT
46	NE18 — 2USX	DPDT
47	NE18 — 2ASP	DPST
48	NE18 — 2USP	DPDT
49	NE18 — 2ASW	DPST
50	NE18 — 2USW	DPDT
53 (4A/64)	2U + NE18CTII — 2AX	DPST
54	2U + NE18 — 2AW	DPST
55	2U + NE18 — 2AP	DPST
56	2U + NE18 — 2UW	DPDT
57	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
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 (CEE 24)	APPROVALS
	POWER CONTACTS[1]	AUXILIARY CONTACTS			
NE18	2A[2]	2U	> 3mm (.118 inch)	II	VDE, UL
NE18	2A[2] 2U	2U	> 3mm (m) (.118 inch)	I	VDE, UL
NE18CTII	2A[2]	2U	> 3mm (.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

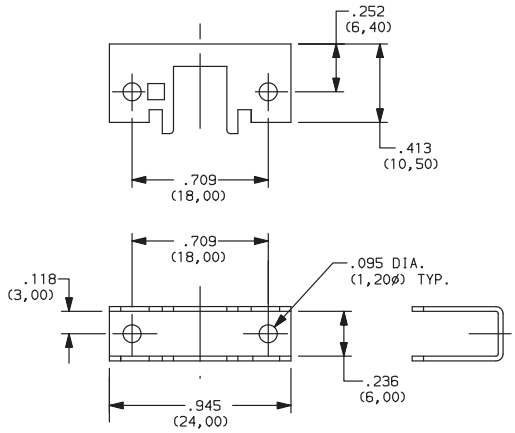
OPTION CODE	FUNCTION
OA	Momentary
EE	Alternate (push-push)

Third Angle Projection

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

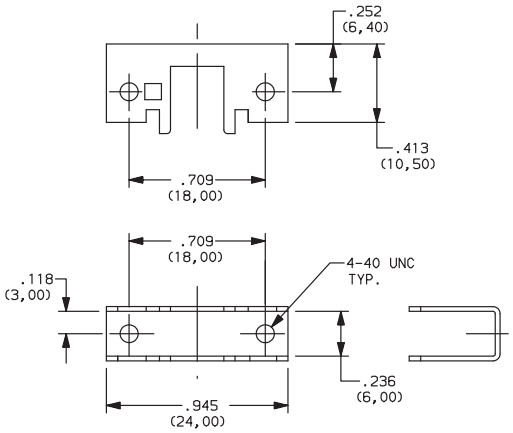
SINGLE STATION CHASSIS

01 WITH .094 MOUNTING HOLES



(NONE) NO CHASSIS

02 WITH 4-40 TAPPED MOUNTING HOLES

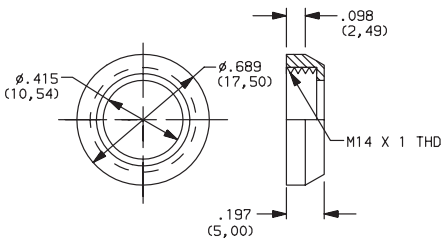


03 SPECIAL CHASSIS (CONSULT FACTORY)

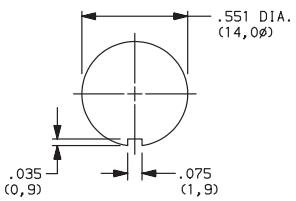
DRESS NUT

(NONE) NO DRESS NUT

B BLACK

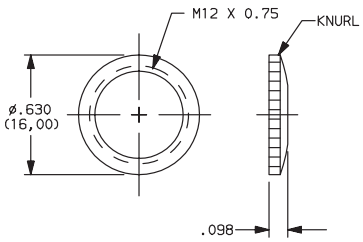


PANEL CUTOUT

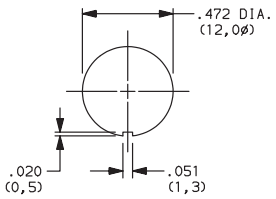


NOTE: Available with ZNE18 designation and FA200 buttons.

C CHROME



PANEL CUTOUT



NOTE: Available with ZNE18 designation and FG button.

Third Angle Projection

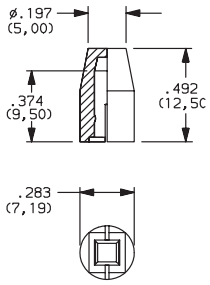
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

NE-18 Series
Mains / Power Switches

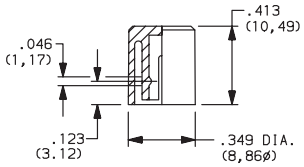
SOLID BUTTON □□□-□□

STYLE

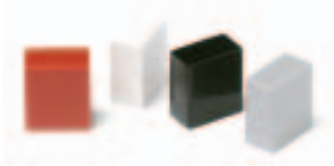
F01 FMR

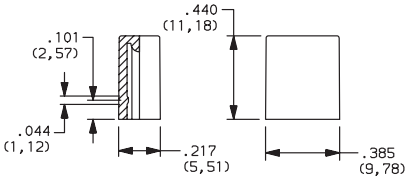


F02 FG

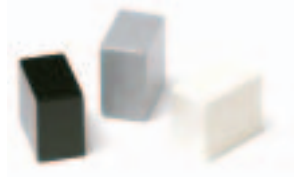


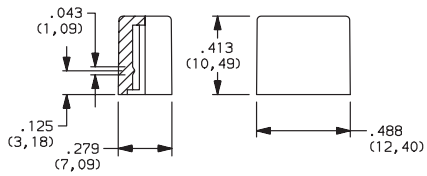
F12 FSC



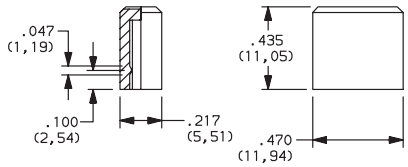


F13 FSD

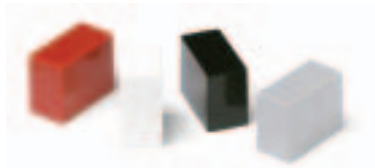


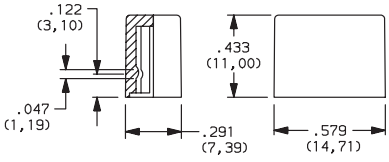


F14 FU12

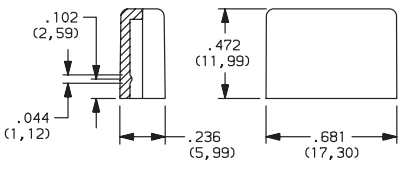


F15 FSB

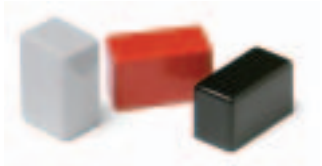


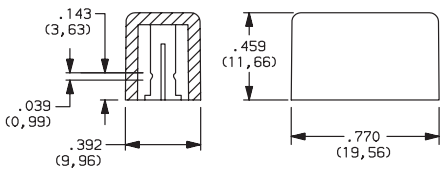


F16 FE



F19 FA





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

Third Angle Projection

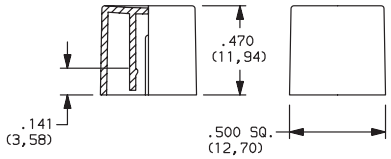
Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

SOLID BUTTON

COLOR
STYLE

STYLE

F21 F001



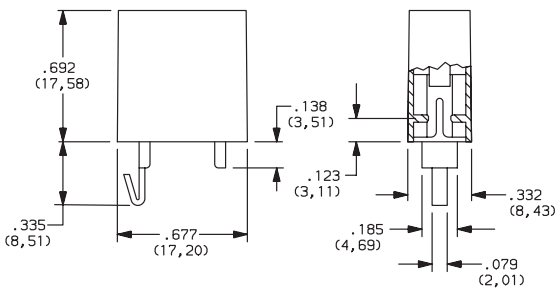
OPTION CODE	COLOR
01	BLACK
02	WHITE
03	RED
04	LT. GRAY
09	BLACK/CHROME (F03,F06 & F07 buttons only

MECHANICAL BUTTON

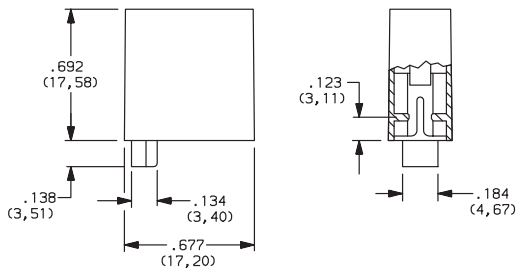
SHELL COLOR
IN POSITION COLOR
STYLE
OUT POSITION COLOR

STYLE

F01 FA100



F02 FA101



Third Angle Projection

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

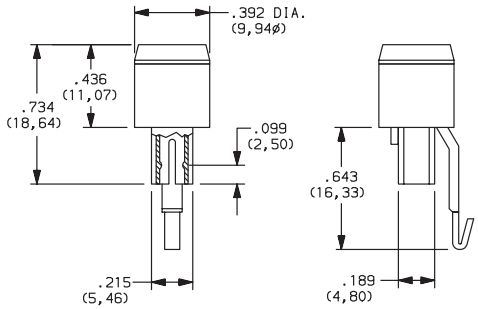
NE-18 Series
Mains / Power Switches

MECHANICAL BUTTON

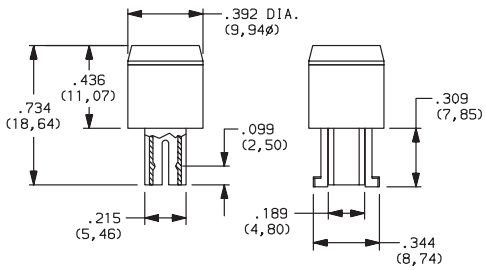
SHELL COLOR | IN POSITION COLOR
STYLE | OUT POSITION COLOR

STYLE

F08 FA201



F11 FA200



SHELL COLOR

01 BLACK

OUT POSITION COLOR

01 BLACK

IN POSITION COLOR

OPTION CODE	COLOR
02	WHITE
06	YELLOW
07	BLUE
08	GREEN
12	ORANGE

Third Angle Projection

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