



A

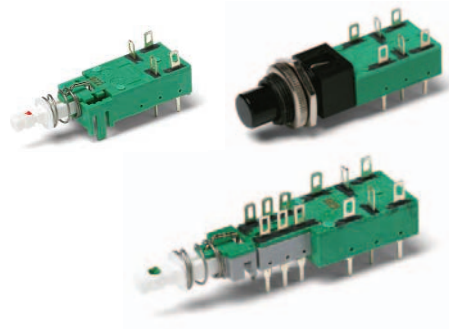
Pushbutton

Features/Benefits

- Chassis or panel mount
- Various buttons and illumination
- Various contact configurations

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: $6 A^2/4/1 A$, NE18CTII: $4 A^2/1 A$
 INRUSH CURRENT MAX. AC¹): NE18: 36 A, NE18CTII: 64 A
 DIELECTRIC STRENGTH (50 Hz, 1 min.): 2000 V
 OPERATING LIFE AT MAX. LOAD AND AT MAX. INRUSH
 CURRENT: $\sim 10^4$ operations⁵
 CONTACT RESISTANCE: Initial: 50m Ω ; After 10^4 operations: 70m Ω .
 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

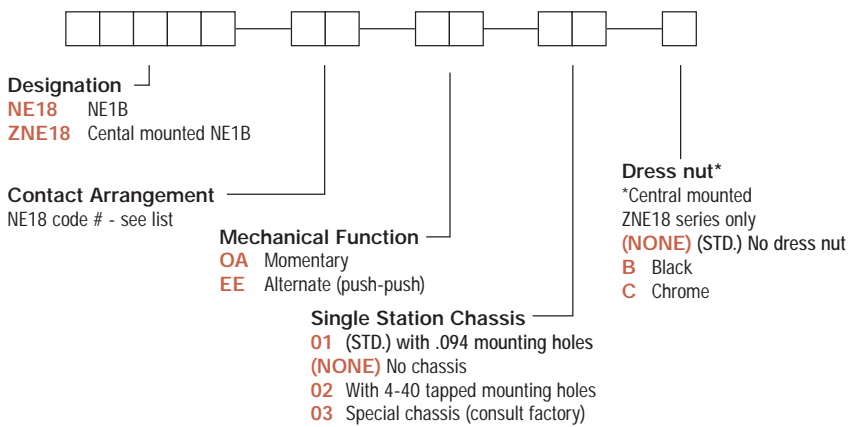
HOUSING, ACTUATOR & TERMINAL BOARD: Thermoplastic polyester (UL 94V-0).
 MOVABLE CONTACT: Silver nickel alloy, silver plated.
 FIXED CONTACTS: Silver nickel alloy, silver plated.
 COMMON CONTACTS & TERMINALS: Copper alloy, silver plated.
 RETURN SPRING: Music wire.

NOTE: 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-79 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.



C&K NE-18 Series Mains / Power Switches

Pushbutton

A

Order Code - Buttons

Solid Buttons



Style

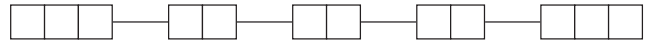
- F01 FMR
- F02 FG*
- F03 F1.12-H-5
- F06 F1.12-H-4
- F07 F1.15-H-4
- F12 FSC
- F13 FSD
- F14 FU12
- F15 FSB
- F16 FE
- F19 FA
- F21 F001

Button Color

- 01 (STD.) Black
- 02 White
- 03 Red
- 04 Light gray
- 09 Chrome, standard for F03 only

*Black/chrome, standard for F06 & F07 only

Illuminated Buttons with Chassis



Style

- F21 FRV
- F22 FSR

Shell Color

- 01 (STD.) Black
- 02 White
- 03 Red
- 06 Yellow
- 08 Green
- 12 Orange
- 16 Clear / White

North American Lamp

- 01 6V / 30ma
- 02 12V / 30ma
- 03 24V / 30ma

European Lamp

- 04 5V / 60ma
- 05 6V / 40ma
- 06 12V / 40ma
- 07 24V / 20ma

Lamp Holder

- FL1
- FL2

Mechanical Indicator Buttons



Style

- F01 FA100
- F02 FA101
- F05 FA110
- F07 FA120
- F08 FA201
- F11 FA200*

Shell Color

- 01 (STD.) Black

Out Position Color

- 01 (STD.) Black

In Position Color

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

Central Mounted Illuminated Buttons



Style

- F24 FLB* (F200)
- F25 FLC*

Shell Color

- 01 (STD.) Black
- 02 White
- 05 Gray

Lens Color

- 03 Red
- 06 Yellow
- 07 Blue
- 08 Green
- 12 Orange
- 16 Clear / White

Light Type

- 01 Lamp, 6V
- 02 Lamp, 12V
- 03 Lamp, 28V
- 04 LED, green
- 05 LED, red
- 06 LED, yellow
- 07 Neon, 110-220AC

Lamp Holder

- LZ1
- LZ2

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

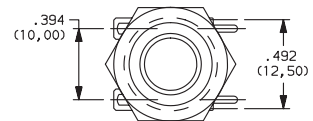
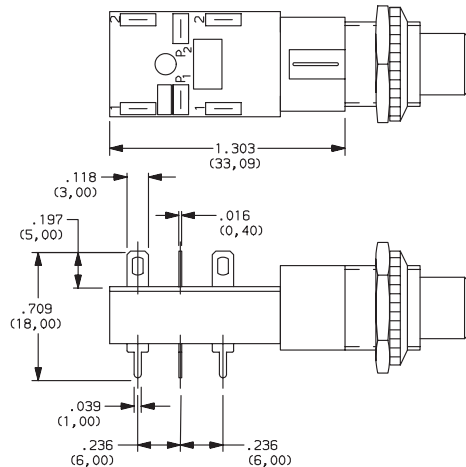
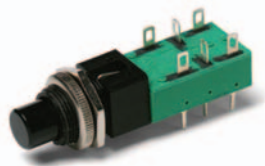
BUTTON REMOVAL

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

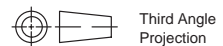
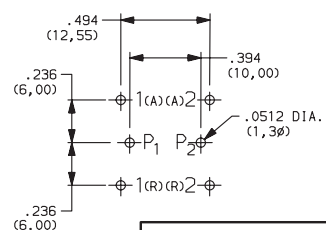
DESIGNATION & SWITCHES WITH STANDARD OPTIONS



ZNE1838EECF0201



PC MOUNTING



Dimensions are shown: IN (mm)
Dimensions subject to change

C&K NE-18 Series Mains / Power Switches

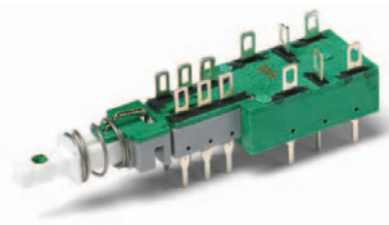
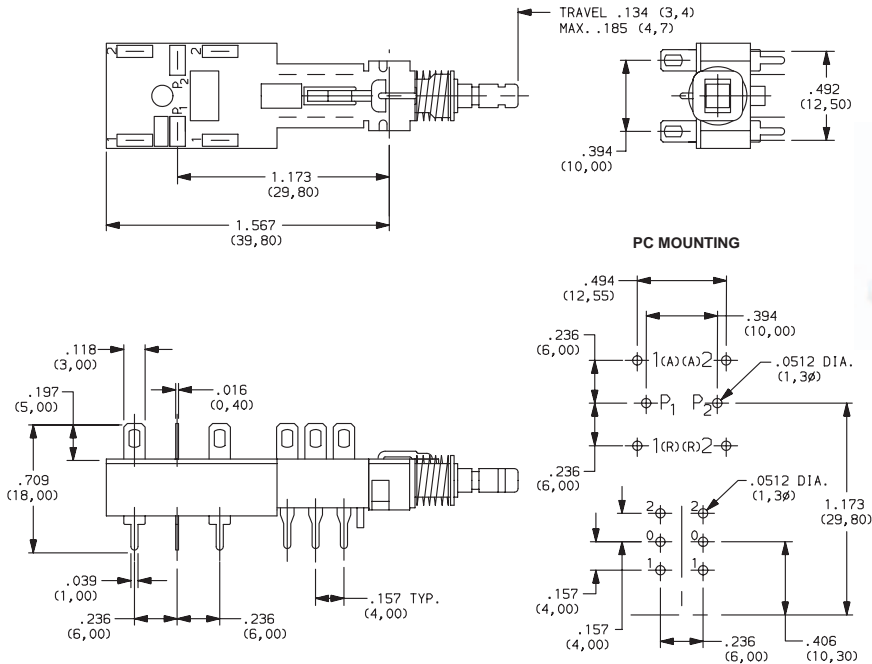
DESIGNATION & SWITCHES WITH STANDARD OPTIONS



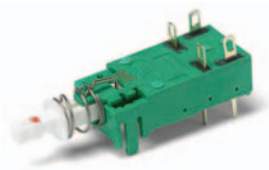
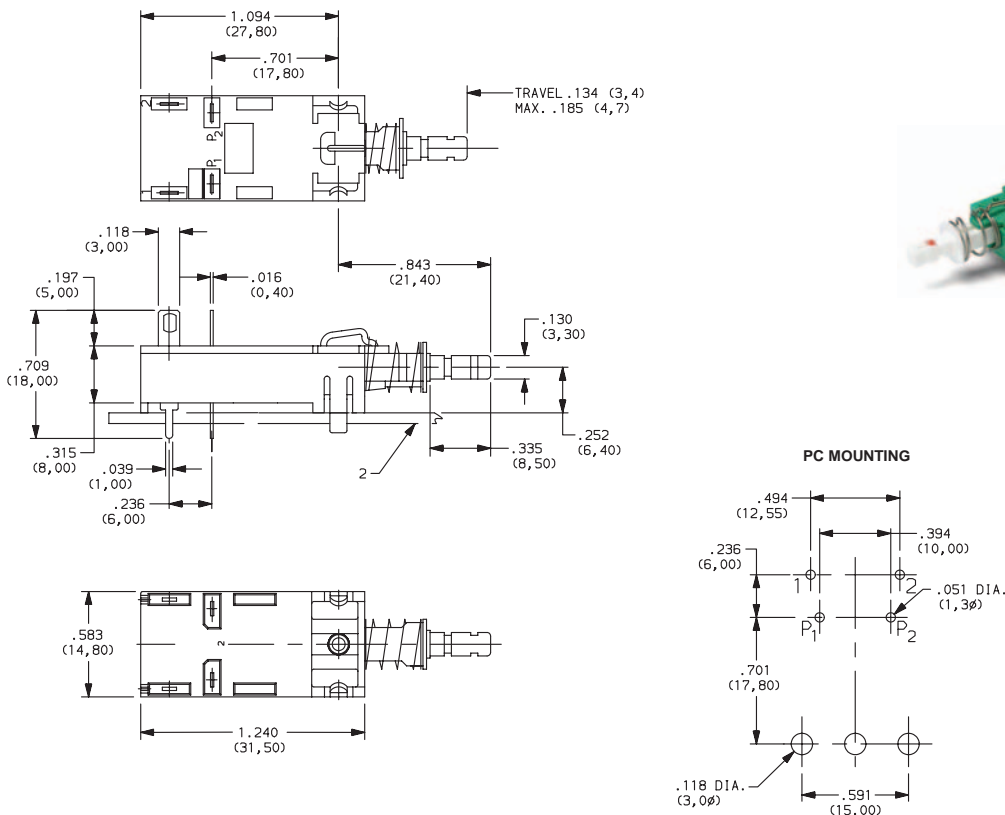
A

Pushbutton

NE1839EE



NE1845EE



C&K NE-18 Series Mains / Power Switches



A
Pushbutton

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, BSI, DEMKO, NEMKO, SEMKO, SEV, CSA, UL
NE18	2A ²⁾ 2R 2U	2U	> 3mm (m) (.118 inch)	I	VDE, MEEI, BSI ³⁾ , DEMKO, NEMKO, SEMKO, SEV, CSA, UL
NE18CTII	2A ²⁾	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

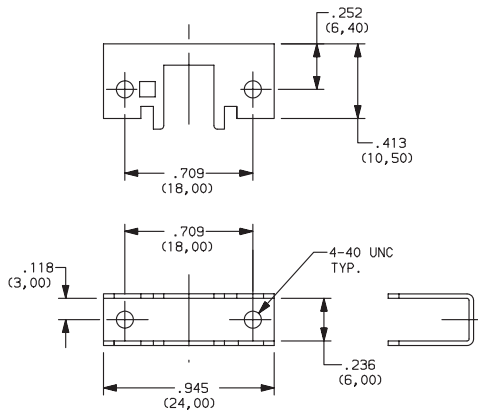
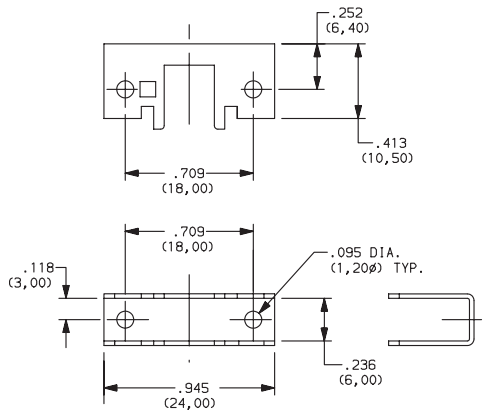
OPTION CODE	FUNCTION
OA	Momentary
EE	Alternate (push-push)

SINGLE STATION CHASSIS

01 (STD.) WITH .094 MOUNTING HOLES

(NONE) NO CHASSIS

02 WITH 4-40 TAPPED MOUNTING HOLES



03 SPECIAL CHASSIS (CONSULT FACTORY)



A

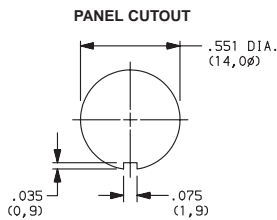
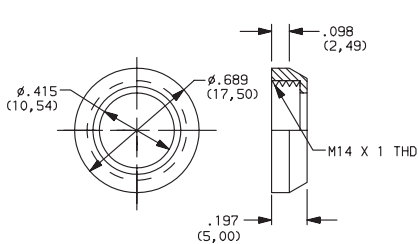
Pushbutton

DRESS NUT

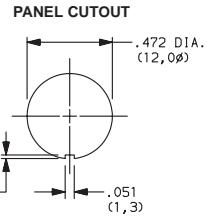
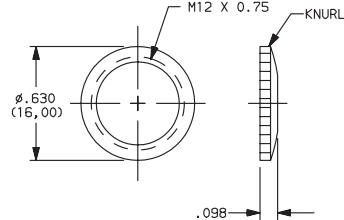
(NONE) (STD.) NO DRESS NUT

B BLACK

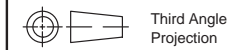
C CHROME



NOTE: Available with ZNE18 designation and FA200, FLB or FLC buttons.



NOTE: Available with ZNE18 designation and FG button.



Dimensions are shown: IN (mm)
Dimensions subject to change

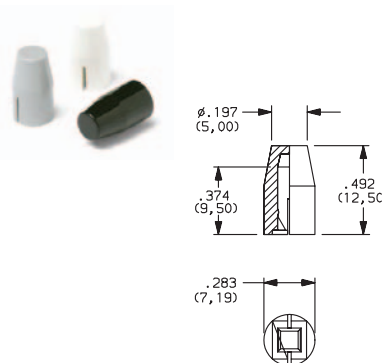
C&K NE-18 Series Mains / Power Switches

SOLID BUTTON

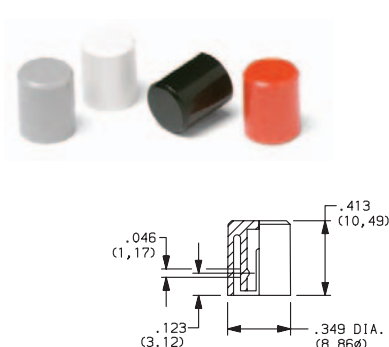
STYLE

Pushbutton

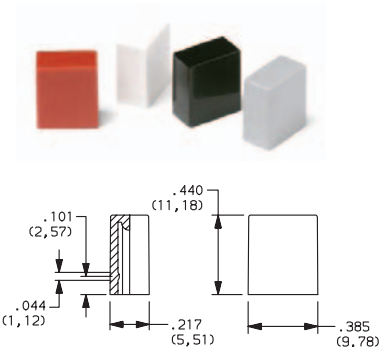
F01 FMR



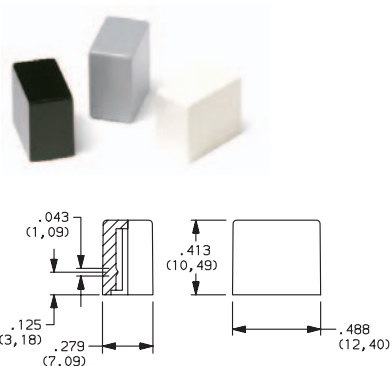
F02 FG



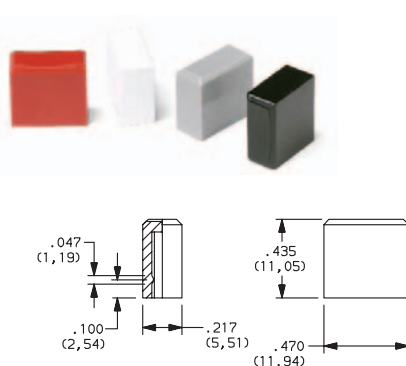
F12 FSC



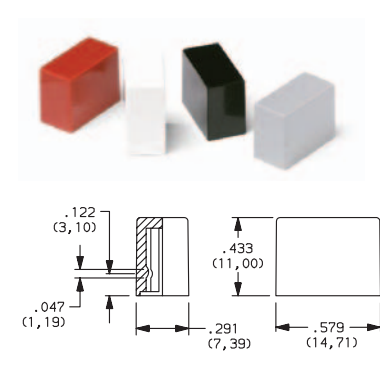
F13 FSD



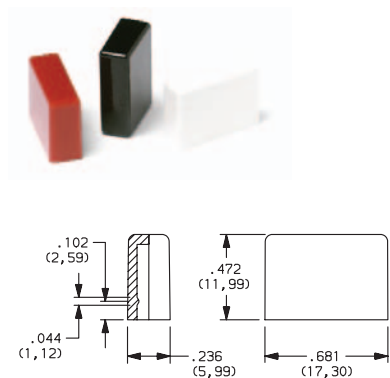
F14 FU12



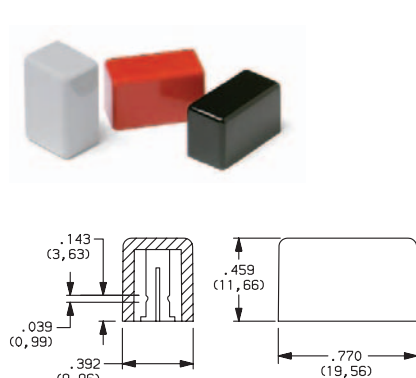
F15 FSB



F16 FE



F19 FA



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



Third Angle Projection

Dimensions are shown: IN (mm)
Dimensions subject to change

C&K NE-18 Series Mains / Power Switches

SOLID BUTTON

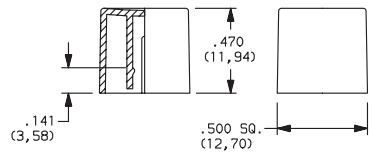


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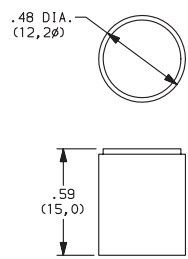
Pushbutton

STYLE

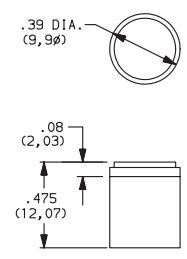
F21 F001



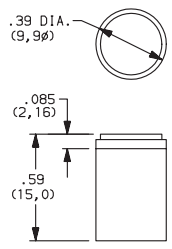
F03 F1.12-H-5



F06 F1.12-H-4

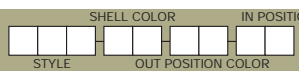


F07 F1.15-H-4



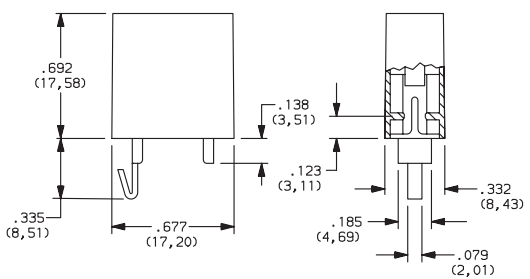
OPTION CODE	COLOR
01	(STD.) BLACK
02	WHITE
03	RED
04	LT. GRAY
09	BLACK/CHROME (F03, F06 & F07 buttons only)

MECHANICAL BUTTON

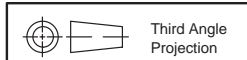
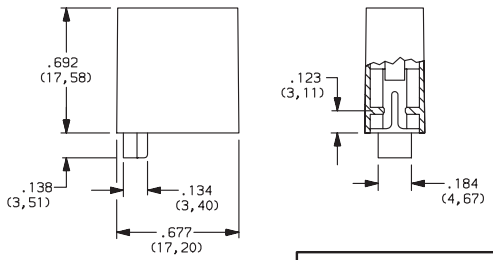


STYLE

F01 FA100



F02 FA101



Dimensions are shown: IN (mm)
Dimensions subject to change



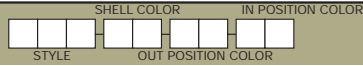
Cannon

C&K NE-18 Series Mains / Power Switches



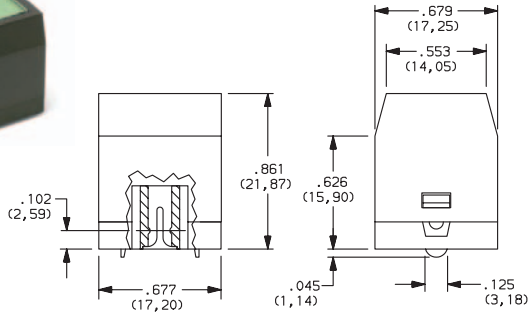
Pushbutton

MECHANICAL BUTTON

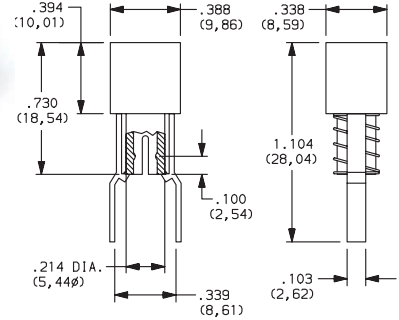


STYLE

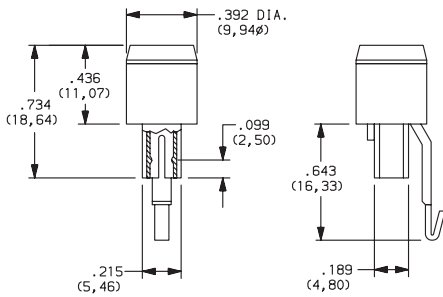
F05 FA110



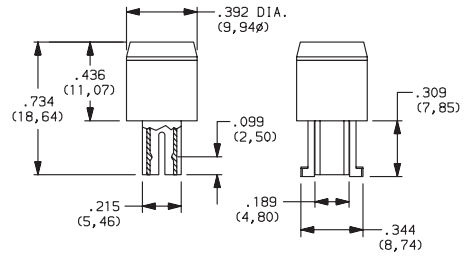
F07 FA120



F08 FA201



F11 FA200



SHELL COLOR

01 (STD.) BLACK

IN POSITION COLOR

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

OUT POSITION COLOR

01 (STD.) BLACK



Third Angle Projection
Dimensions are shown: IN (mm)
Dimensions subject to change

C&K NE-18 Series Mains / Power Switches

ILLUMINATED BUTTON WITH CHASSIS

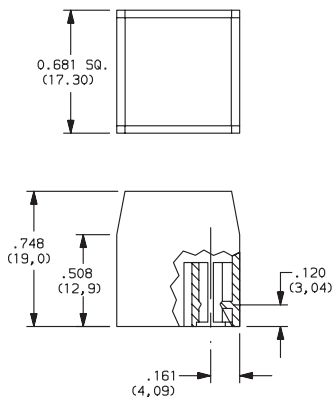


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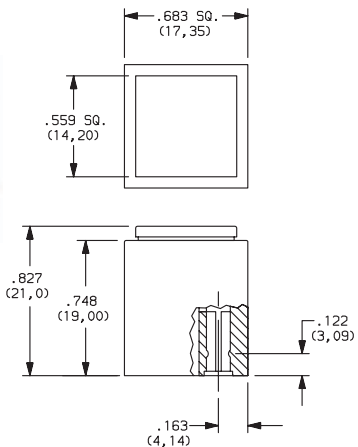
Pushbutton

STYLE

F21 FRV



F22 FSR



SHELL COLOR

01 (STD.) BLACK

LENS COLOR

OPTION CODE	COLOR
02	WHITE
03	RED
06	YELLOW
08	GREEN
12	ORANGE
16	CLEAR / WT.

LAMP

North America

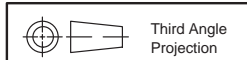
OPTION CODE	LAMP
01	6V / 30mA
02	12V / 30mA
03	24V / 30mA

Europe

OPTION CODE	LAMP
04	5V / 60mA
05	6V / 40mA
06	12V / 40mA
07	24V / 20mA

LAMP HOLDER

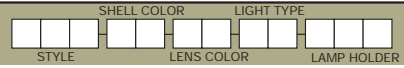
OPTION CODE	DESCRIPTION
FL1	Standard version. No electrical connection to module. Lamps are illuminated by applying voltage to the solder lugs of the lampholder contacts.
FL2	For use only on modules with solder lugs on top face. One of the lampholder contacts is electrically linked with the module by means of a blade spring connecting the normally closed contact of the left side front changeover.



Dimensions are shown: IN (mm)
 Dimensions subject to change

C&K NE-18 Series Mains / Power Switches

CENTRAL MOUNTED ILLUMINATED BUTTON

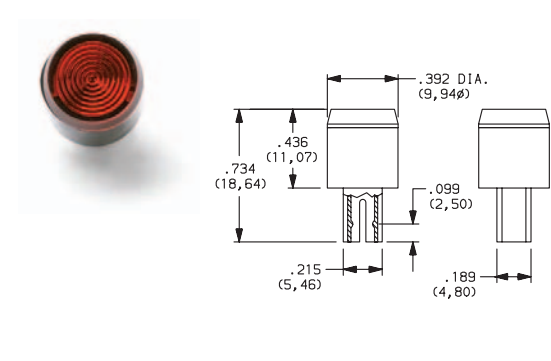
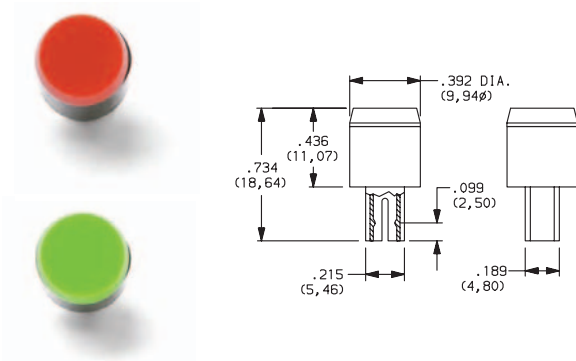


STYLE

F24 FLB (F200)

F25 FLC

Pushbutton



SHELL COLOR

OPTION CODE	COLOR
01	(STD.) BLACK
02	WHITE
05	GRAY

LENS COLOR

OPTION CODE	COLOR
03	RED
06	YELLOW
07	BLUE
08	GREEN
12	ORANGE
16	CLEAR / WT.

LIGHT TYPE

OPTION CODE	DESCRIPTION
01	Lamp, 6V
02	Lamp, 12V
03	Lamp, 28V
04	LED, green
05	LED, red
06	LED, yellow
07	Neon, 110-220AC

LAMP HOLDER

OPTION CODE	DESCRIPTION
LZ1	Illumination dependent on button position. Button depressed, lamp on.
LZ2	Illumination independent of button position.



Dimensions are shown: IN (mm)
 Dimensions subject to change