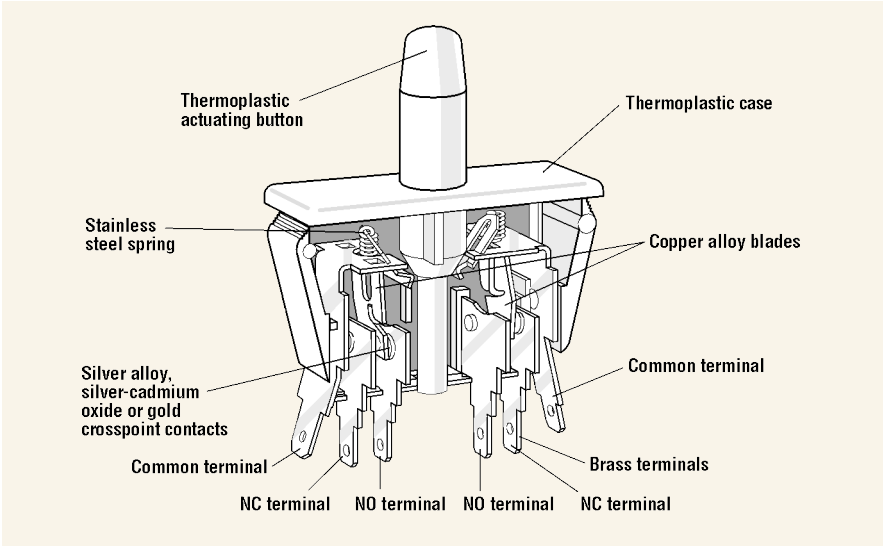
PANEL MOUNT PUSHBUTTON — SINGLE & DOUBLE POLE

E Series

Features

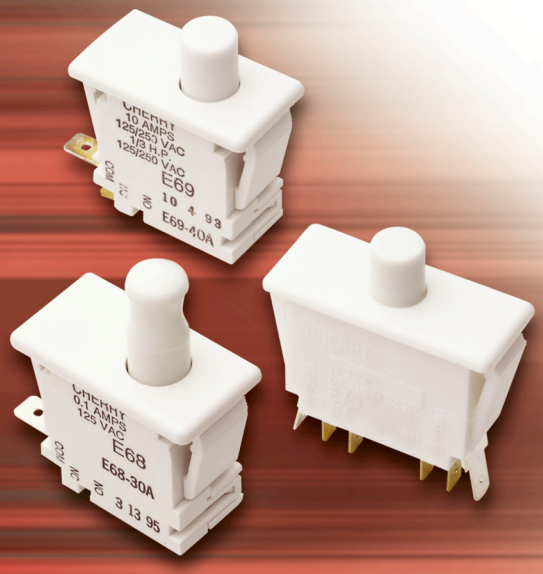
- Choice of Momentary, Push-Pull (reset) and Cheat Interlock switches
- Snap-in panel mounting
- Long-life coil spring, snap-action mechanism
- Agency approved extended-life versions available
- VDE approval available on select models (F Series)
- Various terminal forms available (consult factory)



Electrical Ratings

Switch Series	EN61058 Rating	UL1054 Rating	Electrical Life at Rated Load According to VDE (Min. Operations)	Electrical Life at Rated Load According to UL (Min. Operations)
E65	N/A	16A, 125/250VAC; 1/3HP, 125/250VAC	N/A	6,000
E/F68	0.1(0.05)A, 125VAC	0.1A, 125VAC	50,000	6,000*
E/F69	10(4)A, 250VAC	10A, 125/250VAC; 1/3HP, 125/250VAC	50,000	6,000*
E/F77	0.1(0.05)A, 125VAC 10(4)A, 250VAC	0.1A, 125VAC; 10A, 1/3HP, 125/250VAC	50,000	6,000*
E/F78	0.1(0.05)A, 125VAC	0.1A, 125VAC	50,000	6,000*
E/F79	10(4)A, 250VAC	10A, 125/250VAC; 1/3HP, 125/250VAC	50,000	6,000*
E75	N/A	16A, 125/250VAC; 1/3HP, 125/250VAC 0.1A VAC, 0.1A VDC *(optional)* *mixed ratings available upon request*	N/A	6,000*

*Indicates 100K life available.



Specifications

Electrical

Temperature Rating:	-40° to +85°C
Flammability Rating:	UL94V-O

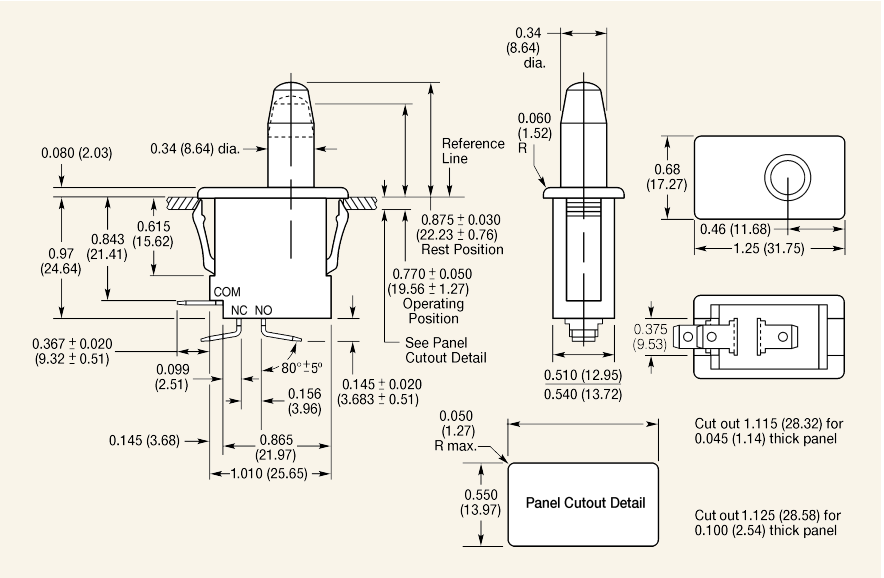
Materials

Case:	Thermoplastic Polyester *(Single Pole Valox and Vandar Double Pole)*
Actuating Button:	Thermoplastic Acetal *(Valox used on International versions)*
Terminals*:	Brass
Moving Blade:	Beryllium Copper
Spring:	Stainless Steel
Contacts:	Silver-Cadmium Oxide *(E65, E/F69, E75, E/F77, E/F79)* Gold Crosspoint *(E/F68, E/F77)*

*Common terminals are plated — the remaining two terminals are not plated.

c US (optional)

Dimensions — Single Pole inches (mm)



Actuator Specifications — Single Pole

Actuator Type	Switch Type	Rest Position inches (mm)	Maximum Pre-Travel inches (mm)	Operating Point* inches (mm)	Minimum Over-Travel inches (mm)	Max. Movement Differential inches (mm)	Maximum Operating Force** (g)	Maximum Full Overtravel Position inches (mm)
		Basic Momentary Action						
–00A		0.845–0.905 (21.46–22.99)	0.125 (3.18)	0.720–0.820 (18.29–20.83)	0.375 (9.53)	0.045 (1.14)	425	0.400 (10.16)
		Push-Pull (Reset)						
–20A		0.920–0.980 (22.37–24.89)	0.150 (3.81)	0.800–0.900 (20.32–22.86)	0.300 (7.62)	0.045 (1.14)	285	0.500 (12.70)
		Momentary						
–30A†		0.730–0.790 (18.54–20.07)	0.125 (3.18)	0.610–0.710 (15.49–18.03)	0.100 (2.54)	0.045 (1.14)	425	0.520 (13.21)
		"Cheat Interlock" (Pull out to lock)						
		0.730–0.790 (18.54–20.07)	0.125 (3.18)	0.800–0.900 (20.32–22.86)	0.050 (1.27)	0.060 (1.52)	585	0.980 (24.89)
		Short Button Momentary						
–40A		0.420–0.480 (10.67–12.19)	0.125 (3.18)	0.300–0.400 (7.62–10.16)	0.175 (4.45)	0.045 (1.14)	425	0.125 (3.18)
		For Auxiliary Push Button						
–50A		0.420–0.480 (10.67–12.19)	0.125 (3.18)	0.300–0.400 (7.62–10.16)	0.175 (4.45)	0.045 (1.14)	425	0.125 (3.18)

*Measured above reference line. Refer to dimensional drawing above.
**Operating Forces listed above are for E68/E69 switches only. E65 Operating Force: 708 grams max. for momentary switches.
†Dual function switch: Push in to operate in normal momentary mode and pull out for maintained action.

Ordering Information

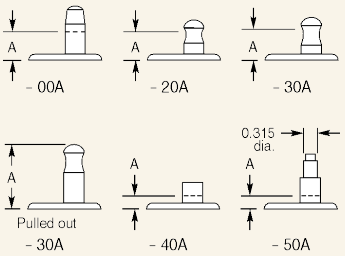
Select the current rating you need. Combine the corresponding Series/Prefix number with the appropriate suffix number for the switch type, circuitry and terminals you require. Example: SPDT: E68–30A, SPST NO: E68–31A, SPST NC: E68–32A.

Auxiliary Buttons — Single Pole

–50A has button with special shaft to accept auxiliary push buttons for manual actuation.

Button Detail — Single Pole

"A" dimension (full overtravel position)



Circuitry — Single Pole

Double throw or single throw versions available.

Single Pole Series:
E65, E68/F68, E69/F69

Terminals — Single Pole

This switch series has 0.187″ x 0.020″ (4.75mm x 0.51mm) as standard for up to 10 amps and 0.250″ x 0.032″ (6.35mm x 0.81mm) for 16 amps.

Consult factory for non-standard terminal options.

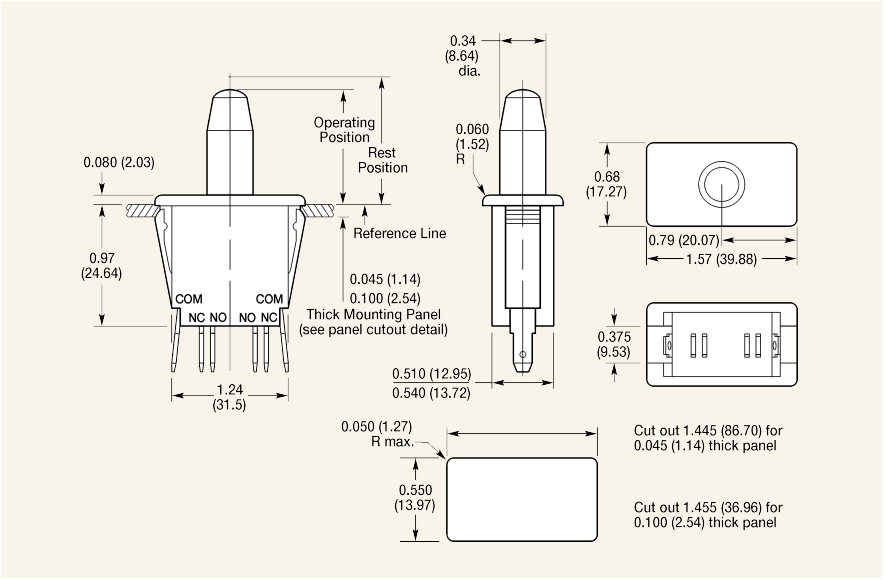
International Versions — Single Pole

For VDE applications, standard terminals are 0.187″ x 0.032″ (4.75mm x 0.81mm).

Switch prefix must be "F" for VDE approved switches. Example: F68–30A was E68–30A.

Specifications subject to change without notice.

Dimensions — Double Pole inches (mm)



Actuator Specifications — Double Pole

Actuator Type	Switch Type	Rest Position inches (mm)	Maximum Pre-Travel inches (mm)	Operating Point* inches (mm)	Minimum Overtravel inches (mm)	Max. Movement Differential inches (mm)	Maximum Operating Force** (g)	Max. Full Over-Travel Position inches (mm)
		Basic Momentary Action						
–00A		0.845–0.905 (21.46–22.99)	0.125 (3.18)	0.720–0.820 (18.29–20.83)	0.375 (9.53)	0.075 (1.91)	680	0.400 (10.16)
		Push-Pull (Reset)						
–20A		0.920–0.980 (23.37–24.89)	0.155 (3.81)	0.800–0.900 (20.32–22.86)	0.300 (7.62)	0.075 (1.91)	510	0.500 (12.70)
		Momentary						
–30A†		0.730–0.790 (18.54–20.07)	0.125 (3.18)	0.610–0.710 (15.49–18.03)	0.100 (2.54)	0.075 (1.91)	757	0.520 (13.21)
		"Cheat Interlock" (Pull out to lock)						
		0.730–0.790 (18.54–20.07)	0.155 (3.94)	0.800–0.900 (20.32–22.86)	0.030 (0.76)	0.090 (2.29)	800	0.980 (24.89)
		Short Button Momentary						
–40A		0.420–0.480 (10.67–12.19)	0.125 (3.18)	0.300–0.400 (7.62–10.16)	0.175 (4.45)	0.075 (1.91)	680	0.125 (3.18)
		For Auxiliary Push Button						
–50A		0.420–0.480 (10.67–12.19)	0.125 (3.18)	0.300–0.400 (7.62–10.16)	0.175 (4.45)	0.075 (1.91)	680	0.125 (3.18)

*Measured above reference line. Refer to dimensional drawing above.
**Operating Forces listed above are for E78/E79 switches only. E75 Operating Force: 921 grams max. for momentary switches.
†Dual function switch: Push in to operate in normal momentary mode and pull out for maintained action.

Ordering Information

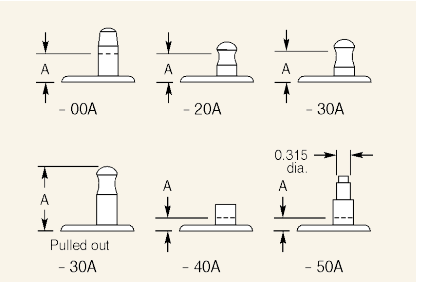
Select the current rating you need. Combine the corresponding Series/Prefix number with the appropriate suffix number for the switch type, circuitry and terminals you require. Example: DPDT: E78–30A, DPST NO: E78–31A, DPST NC: E78–32A.

Auxiliary Buttons — Double Pole

–50A has button with special shaft to accept auxiliary push buttons for manual actuation.

Button Detail — Double Pole

"A" dimension (full overtravel position)



Circuitry — Double Pole

Double throw or single throw versions available.

Double Pole Series:
E77/F77, E78/F78, E79/F79, E75

Terminals — Double Pole

This switch series has 0.187″ x 0.020″ (4.75mm x 0.51mm) as standard for up to 10 amps and 0.250″ x 0.032″ (6.35mm x 0.81mm) for 16 amps.

Consult factory for non-standard terminal options.

International Versions — Double Pole

For VDE applications, standard terminals are 0.187″ x 0.032″ (4.75mm x 0.81mm).

Switch prefix must be "F" for VDE approved switches. Example: F78–30A was E68–30A.