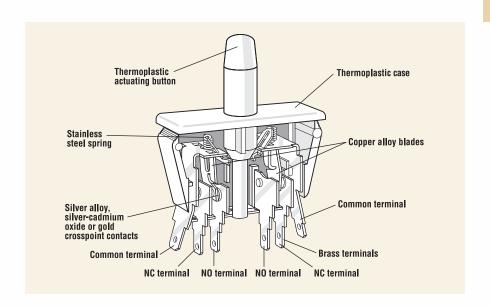


## PANEL MOUNT PUSHBUTTON - SINGLE & DOUBLE POLE

# **E Series**

#### **Features**

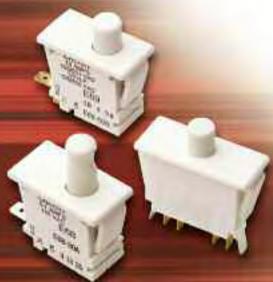
- Choice of Momentary, Push-Pull (reset) and Cheat Interlock switches
- Snap-in panel mounting
- · Long-life coil spring, snap-action mechanism
- Agency approved extended-life versions available
- VDE approval available on select models (F Series)
- · Various terminal forms available (consult factory)



### **Electrical Ratings**

Switch Series	EN61058 Rating	UL1054 Rating	Electrical Life a According to VDE (Min. Operations)	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*	





#### **Specifications**

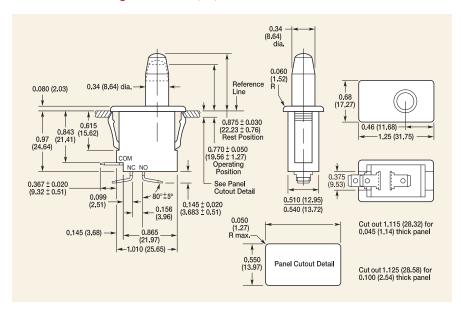
Electrical	
Temperature Rating:	-40° to +85°C
Flammability Rating:	UL94V-O
Materials	
Case:	Thermoplastic Polyester (Single Pole Valox and Vandar Double Pole)
Actuating Button:	Thermoplastic Acetal (Valox used on International versions)
Terminals*:	Brass
Moving Blade:	Beryllium Copper
Spring:	Stainless Steel
Contacts:	Silver-Cadmium Oxide (E65, E/F69, E75, E/F77, E/F79) Gold Crosspoint (E/F68, E/F77)

on terminals are plated — the remaining two terminals are not plated.





#### **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)	Full Overtravel Position inches (mm)
	0	Basic	Momentary	Action				
-00A		0.845-0.905 (21.46-22.99)	0.125 (3.18)	0.720-0.820 (18.29-20.83)		0.045 (1.14)	425	0.400 (10.16)
		Push-Pull (Reset)			(5.55)	(1.14)		(10.10)
-20A		0.920-0.980 (22.37-24.89)	0.150	0.800-0.900 (20.32-22.86)		0.045 (1.14)	285	0.500 (12.70)
Momentary								
–30A <sup>†</sup>	Â	0.730-0.790 (18.54-20.07)	0.125 (3.18)	0.610-0.710 (15.49-18.03)		0.045 (1.14)	425	0.520 (13.21)
		"Cheat I	nterlock" (F	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 Mome.			nentary					
-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)
	А	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)		0.045 (1.14)	425	0.125 (3.18)

#### **Ordering Information**

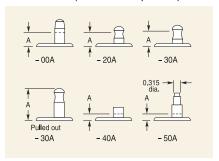
Select the current rating you need. Combine the corresponding Series/Prefix number with the appropriate suffix number for the switch type, circuitry and terminals you require. Example: SPDT: E68-30A, SPST NO: E68-31A, SPST NC: E68-32A.

#### **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

Mavimum

#### **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** — Sinale 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.

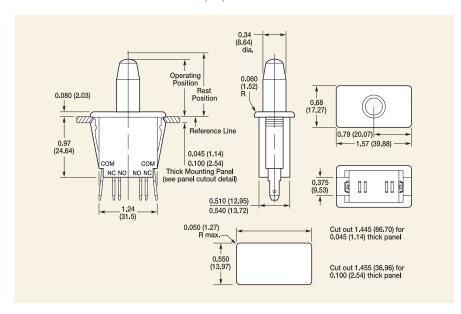
<sup>\*</sup>Measured above reference line. Refer to dimensional drawing above.

\*\*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.



#### **Dimensions** — Double Pole inches (mm)



#### **Actuator Specifications** — Double Pole

Actuator Type	Switch Type	Rest Position inches (mm)	Maximum Pre-Travel inches (mm)		Minimum Overtravel inches (mm)	Max. Movement Differential inches (mm)	Maximum Operating Force**	Max. Full Over-Travel Position inches (mm)
	A	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)
	0	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 <sup>†</sup>		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 I	nterlock" (F	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)
	А	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)

#### **Ordering Information**

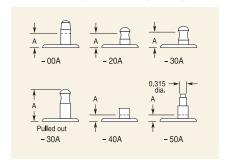
Select the current rating you need. Combine the corresponding Series/Prefix number with the appropriate suffix number for the switch type, circuitry and terminals you require. Example: DPDT: E78-30A, DPST NO: E78-31A, DPST NC: E78-32A.

#### **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.

53

Specifications subject to change without notice.

<sup>\*</sup>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.