Snap Action Switch

Single Pole General Purpose

E13, E14, G13

Features

- Choice of 3 current ratings
- Long life coil spring, snap action mechanism
- Agency approved extended life versions available
- RoHS compliant
- High temperature versions available – contact factory

Typical Applications

- Household appliances
- Automated assembly lines
- Brake switch on utility vehicles
- Industrial and accessible door openers
- Vending machines

Part Number Breakdown

E13-00E0

Example: E13-00E0 is a 15 A, SPDT pole switch with a standard ratio button actuator.

Series Type

E13	Single pole 15 A
E14	Single pole 25 A
G13	Single pole 0.1 A

Type[1]

0	Standard ratio actuator or button
5	High ratio actuator

Circuitry

0	Double Throw
1	Normally Open
2	Normally Closed

Actuator[1]

A	Button for E14
E	Button for E13
H	Lever
J	Button with ferrule
K	Roller
M	Button with extra over-travel and ferrule

[1]Actuator Type 5 only available with H and K actuators

Electrical Specifications per UL1054

E13[2]	6000 operations; 100,000 available – contact factory	15 A, 125 / 250 VAC ¾ HP, 125 VAC / 1 ½ HP, 250 VAC [2]2 A, 48 VDC
E14[2]	6000 operations	25 A, 125 / 250 VAC 1 HP, 125 VAC / 2 HP, 250 VAC [2]2 A, 48 VDC
G13	100,000 operations	0.1 A, 125 VAC 0.1 A, 30 VDC

[2]DC ratings to 105 ºC (221 ºF) only

Commonly Stocked Distributor Parts

E13-00E0	E13-00M0	E14-00A0	E14-01M0
E13-00H0	E13-01E0	E14-00H0	E14-50H0
E13-00J0	E13-01H0	E14-00K0	G13-00M0
E13-00K0	E13-50H0	E14-00M0	G13-50H0

Notes:
Part numbers with a leading 0 are functionally no different than without a leading 0 (ex.: 0E13-00E0 is the same switch as E13-00E0).
Quick-connect terminals are standard; for custom screw terminals, contact the factory or your distributor.
For configurable part numbers not listed above or for custom part numbers, contact the factory or your distributor

Actuator Specifications[3]

E13/G13 Series

Actuator		Max Operating Force g (lb)	Max Pre-Travel mm (in)	Operating Point[4] mm (in)	Min Over-Travel mm (in)	Max Movement Differential mm (in)	Actuation Length[5] mm (in)
E		425 (0.94)	1.27 (0.050)	7.24 ± 0.51 (0.285 ± 0.020)	2.54 (0.100)	0.38 (0.015)	N/A
H		100 (0.22)	6.35 (0.250)	7.93 ± 1.57 (0.312 ± 0.062)	4.75 (0.187)	2.36 (0.093)	38.10 (1.500)
H	High ratio	65 (0.14)	8.71 (0.343)	7.14 ± 1.57 (0.281 ± 0.062)	4.75 (0.187)	3.56 (0.14)	44.45 (1.750)
J		425 (0.94)	1.27 (0.050)	17.02 ± 0.76 (0.670 ± 0.030)	2.74 (0.108)	0.38 (0.015)	N/A
K		100 (0.22)	6.35 (0.250)	18.24 ± 1.57 (0.718 ± 0.062)	4.75 (0.187)	2.36 (0.093)	35.33 (1.391)
K	High ratio	63 (0.14)	10.24 (0.403)	17.45 ± 1.57 (0.687 ± 0.062)	4.75 (0.187)	2.36 (0.093)	41.28 (1.625)
M		425 (0.94)	1.27 (0.050)	20.63 ± 0.76 (0.812 ± 0.030)	5.54 (0.218)	0.38 (0.015)	N/A

E14 Series

Actuator		Max Operating Force g (lb)	Max Pre-Travel mm (in)	Operating Point[4] mm (in)	Min Over-Travel mm (in)	Max Movement Differential mm (in)	Actuation Length[5] mm (in)
A		850 (1.87)	2.54 (0.100)	6.30 ± 0.66 (0.248 ± 0.026)	1.27 (0.050)	0.38 (0.015)	N/A
H		280 (0.62)	7.93 (0.312)	11.89 ± 1.57 (0.468 ± 0.062)	2.67 (0.105)	1.27 (0.050)	20.85 (0.821)
H	High ratio	170 (0.37)	13.34 (0.525)	11.10 ± 1.57 (0.437 ± 0.062)	5.54 (0.218)	2.03 (0.080)	27.20 (1.071)
J		850 (1.87)	2.54 (0.100)	16.08 ± 0.76 (0.633 ± 0.030)	1.27 (0.050)	0.38 (0.015)	N/A
K		285 (0.63)	8.84 (0.348)	21.84 ± 1.57 (0.860 ± 0.062)	3.30 (0.130)	1.14 (0.045)	17.48 (0.688)
K	High ratio	211 (0.47)	12.27 (0.483)	21.03 ± 1.57 (0.828 ± 0.062)	5.54 (0.218)	1.85 (0.073)	23.95 (0.943)
M		850 (1.87)	2.54 (0.100)	19.69 ± 0.76 (0.775 ± 0.030)	4.27 (0.168)	0.38 (0.015)	N/A

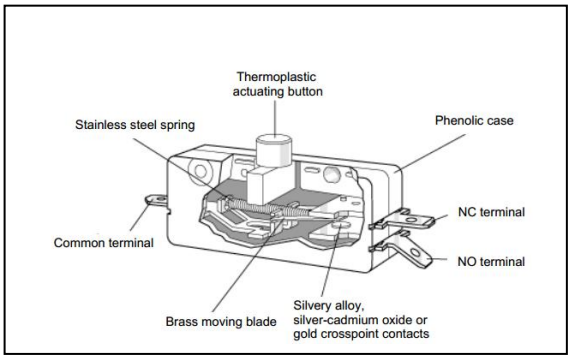
[3]Contact factory regarding combinations not shown
[4]Measured above reference line; refer to dimensional drawing below
[5]Actuator tolerances ± 0.791 mm (0.031”); G13 has operating point tolerance of ± 7.62 (0.30); E14 H and K actuators are shorter and formed up 11º at the button

Material Specifications

Case	General Purpose Phenolic
Actuating Button	Thermoplastic
Common Terminal	Copper Alloy
NO and NC Terminal	Copper Alloy (E13, G13) Copper (E14)
Moving Blade	Copper Alloy (E13, G13) Copper (E14)
Spring	Stainless Steel
Auxiliary Actuators	Cold-Rolled Steel (Nickel-Plated)
Roller	Sintered Stainless Steel
Contacts	Gold Crosspoint (G13) Silver Alloy (E13, E14)

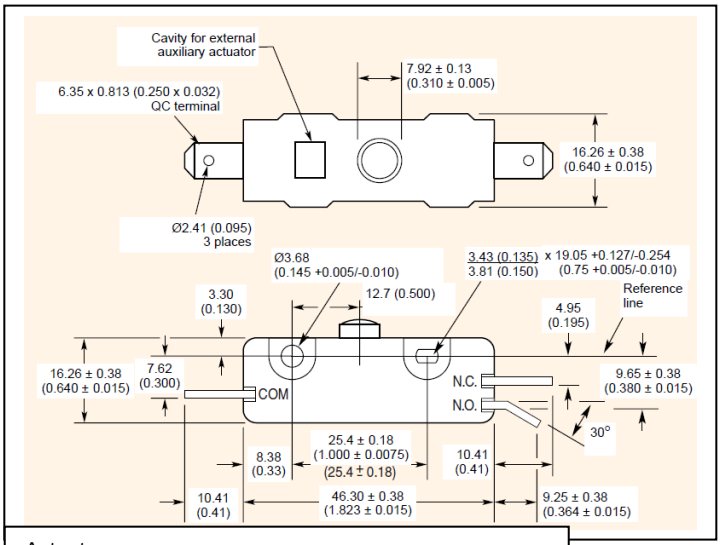
Environmental Specifications

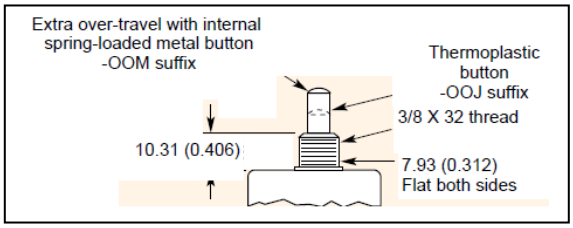
Temperature Rating	105 ºC (221 ºF) standard 150 ºC (302 ºF) available 200 ºC (392 ºF) available for E13
Flammability Rating	UL94HB



https://switches-sensors.zf.com/

Dimensions – see page 3
Dimensions – mm (inches)





Optional hardware
Brass hex nut : 00120023
Plated hex nut: 00120028

Actuators