

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, normally open 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 |

Type¹

| | |
|---|--------------------------------------|
| 0 | Standard ratio actuator or button |
| 5 | High ratio actuator |

Circuitry

| | |
|---|-----------------|
| 0 | Double Throw |
| 1 | Normally Open |
| 2 | Normally Closed |

Actuator¹

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

¹Actuator 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 A, 48 VDC |
| E14 ² | 6000 operations | 25 A, 125 / 250 VAC 1 HP, 125 VAC / 2 HP, 250 VAC 2 A, 48 VDC |
| G13 | 100,000 operations | 0.1 A, 125 VAC 0.1 A, 30 VDC |

²DC ratings to 105 °C (221 °F) only

Commonly Stocked Distributor Parts

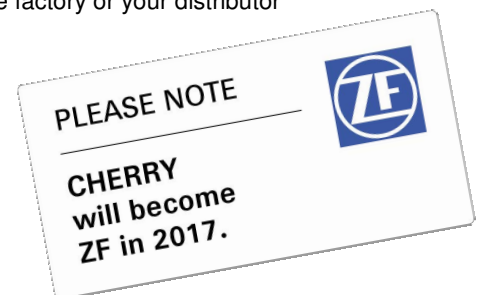
| | | | |
|----------|----------|----------|----------|
| E13-00E0 | E13-00M0 | E14-00A0 | E14-01M0 |
| E13-00H0 | E13-01E0 | E14-00H0 | E14-50H0 |
| E13-00J0 | E13-01H0 | E14-00K0 | G13-00M0 |
| E13-00K0 | E13-50H0 | E14-00M0 | G13-50H0 |

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 Specifications³

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 |

³Contact factory regarding combinations not shown

⁴Measured above reference line; refer to dimensional drawing below

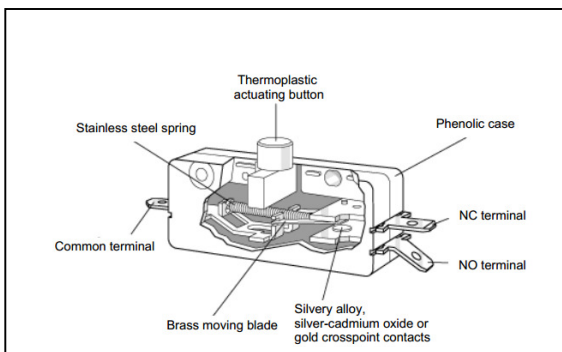
⁵Actuator tolerances ± 0.791 mm (0.031"); G13 has operating point tolerance of ± 7.62 (0.30); E14 H and K actuators are shorter and formed up 11° at the button

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 °C (221 °F) standard 150 °C (302 °F) available 200 °C (392 °F) available for E13 |
| Flammability Rating | UL94HB |



Dimensions – see page 3

www.cherryswitches.com

Page 2 of 3, Last update 2015-04-08, Specifications subject to change without notice.



Dimensions – mm (inches)

