

SEALED TERMINAL AND WIRE LEAD OPTIONS OPTION -E AND -EW

FEATURES

- 1/4, 1/2, and 1 Amp
- Limit, Overtravel, or Panel Seal
- Butt or Wiping Contact
- Normally Open or Normally Closed
- Momentary or Push/Pull
- Series 23, 30, 39 and 46



Option -E
Epoxy-Sealed
Terminals

Option -EW,
Potted Base & 6"
Wire Leads



SPECIFICATIONS

Rating Criteria

Make and Break Current Rating: See page for standard part number

Contact Resistance: 25 milliohms maximum on a new switch. Less than 4 milliohms per inch of wire for wire lead option styles.

Insulation Resistance: 1,000 megohms minimum between mutually insulated parts

Voltage Breakdown: 1,000 Vac minimum between mutually insulated parts

Materials and Finishes

Potting Sleeve (Series 39): Thermoset Plastic

Wire Leads: #26AWG, (.99mm diameter) insulated Teflon, Copper stranded wire, per MIL-W-16878, Type E. Ends are stripped 0.250" (6.35) and solder dipped. For other specifications, see Page References.

| Standard Part Number Red Button | Standard Part Number Black Button | Choices of Suffix | Length Behind Panel In inches (and millimeters) | |
|------------------------------------|--------------------------------------|----------------------|--|-------------------|
| | | | Standard Switch & Terminals | -EW Style Body |
| 23-1 | 23-4 | -E | 0.665 (16,89) | — |
| 30-1 | 30-3 | -E, -EW | 0.592 (15,04) | 0.645 (16,38) |
| 30-15 | 30-37 | -E, -EW | 0.679 (17,25) | 0.728 (18,49) |
| 30-17 RED | 30-17 BLK | -E, -EW | 0.958 (24,33) | 1.007 (25,58) |
| 30-16 RED | 30-16 BLK | -E, -EW | 0.958 (24,33) | 1.007 (25,58) |
| 30-251 RED | 30-251 BLK | -E, -EW | 0.632 (16,05) | 0.685 (17,40) |
| 30-252 RED | 30-252 BLK | -E, -EW | 0.645 (16,38) | 0.700 (17,78) |
| 30-32 RED | 30-32 BLK | -E, -EW | 0.867 (22,02) | 0.896 (22,76) |
| 30-6 | 30-2 | -E, -EW | 0.605 (15,37) | 0.640 (16,26) |
| 30-601 RED | 30-601 BLK | -E, -EW | 0.592 (15,04) | 0.645 (16,38) |
| 39-1* | 39-3* | -EW** | 0.315 (8,00) | 0.440 (11,18) |
| 39-12* | 39-2 | -E, -EW | 0.490 (12,45) | 0.575 (14,61) |
| 39-101 | 39-24* | -EW** | 0.455 (11,56) | 0.575 (14,61) |
| 39-351 RED | 39-351 BLK | -EW** | 0.650 (16,51) | 0.775 (19,69) |
| 39-352 RED* | 39-352 BLK* | -E, -EW | 0.350 (8,89) | 0.450 (11,43) |
| 39-601 RED | 39-601 BLK | -E, -EW | 0.529 (13,44) | 0.630 (16,00) |
| 39-701*** | — | -EW* | 0.315 (8,00) | 0.440 (11,18) |
| 39-702*** | — | -EW** | 0.800 (20,32) | 0.925 (23,50) |
| 46-101 RED | 46-101 BLK | -E, -EW | 0.510 (12,95) | 0.750 (19,05) |
| 46-102 RED | 46-102 BLK | -E, -EW | 0.890 (22,61) | 0.957 (24,31) |
| 46-110 RED | 46-110 BLK | -E, -EW | 0.890 (22,61) | 0.957 (24,31) |
| 46-111 RED | 46-111 BLK | -E, -EW | 0.890 (22,61) | 0.957 (24,31) |
| 46-150 RED | 46-150 BLK | -E, -EW | 0.890 (22,61) | 0.957 (24,31) |
| 46-151 RED | 46-151 BLK | -E, -EW | 0.957 (24,31) | 1.024 (26,01) |
| 46-200 RED | 46-200 BLK | -E | 0.957 (24,31) | 1.024 (26,01) |
| 46-201 RED | 46-201 BLK | -E | 0.921 (23,39) | — |
| 46-270 RED | 46-270 BLK | -E | 0.921 (23,39) | — |
| 46-271 RED | 46-271 BLK | -E | 0.957 (24,31) | — |
| | | -E | 0.957 (24,31) | — |

*Epoxy potting sleeve enlarges the diameter of the -EW style to 0.300 (7,62).

**Sealed terminal (-E) option is not necessary; terminals have sealed construction.

***Natural Color Button

†Adjustable from 1.214 (30,84) to 1.334 (33,88) dependent on button height, see switch pages.

ORDERING INFORMATION

Use the Selector Charts at the beginning of the section to select a series. Use the pages listed there or referenced here to select a switch.

To order epoxy sealed terminals, add the suffix -E to the selected part number as allowed in the chart. **Example:** 30-1-E.

To order the epoxy-potted version with 6-inch wire leads, use the suffix -EW as allowed in the chart. **Example:** 39-1-EW

Available From Your Local Grayhill Distributors. For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill.

CIRCUITRY: Series 46



| Standard Part Number Without Options Choice of Button Color (see switch pages) | Standard Part Number Choice of Button Color (see switch pages) | Choices of Options | Length Behind Panel In inches (and millimeters) | |
|--|---|--------------------|---|----------------|
| | | | Standard Switch & Terminals | -EW Style Body |
| --- | 30-001-A-XX | -E, -EW | 1.119 (28,42) | 1.172 (29,77) |
| --- | 30-002-A-XX | -E, -EW | 1.132 (28,75) | 1.167 (29,64) |
| --- | 30-015-A-XX | -E, -EW | 1.204 (30,58) | 1.253 (31,83) |
| --- | 30-017-A-XX | -E, -EW | Adjustable† | Adjustable† |
| 30-01-01-500-XX | 30-1-1-50-XX | -E, -EW | 1.100 (27,94) | 1.153 (29,29) |
| 30-01-04-500-XX | 30-1-4-50-XX | -E, -EW | 1.257 (31,93) | 1.310 (33,27) |
| 30-05-01-502-XX | 30-5-1-52-XX | -E, -EW | 0.930 (23,62) | 0.983 (24,97) |
| 30-05-04-502-XX | 30-5-4-52-XX | -E, -EW | 1.130 (28,70) | 1.183 (30,05) |
| --- | 30-601-A-XX | -E, -EW | 1.119 (28,42) | 1.172 (29,77) |
| 46-01-05-500-XX | 46-1-5-50-XX | -E, -EW | 1.361 (34,57) | 1.428 (36,27) |
| 46-01-07-500-XX | 46-1-7-50-XX | -E, -EW | 1.451 (36,86) | 1.518 (38,56) |
| 46-01-08-500-XX | 46-1-8-50-XX | -E | 1.381 (35,08) | --- |
| 46-01-09-500-XX | 46-1-9-50-XX | -E | 1.381 (35,08) | --- |
| 46-05-05-502-XX | 46-5-5-52-XX | -E, -EW | 1.179 (29,95) | 1.246 (31,65) |
| 46-05-07-502-XX | 46-5-7-52-XX | -E, -EW | 1.465 (37,21) | 1.532 (38,91) |
| 46-05-08-502-XX | 46-5-8-52-XX | -E | 1.188 (30,18) | --- |
| 46-05-09-502-XX | 46-5-9-52-XX | -E | 1.317 (33,45) | --- |
| --- | 46-102-A-XX | -E, -EW | 1.417 (35,99) | 1.484 (37,69) |
| --- | 46-111-A-XX | -E, -EW | 1.417 (35,99) | 1.484 (37,69) |
| --- | 46-200-A-XX | -E | 1.448 (36,78) | --- |
| --- | 46-201-A-XX | -E | 1.448 (36,78) | --- |

*Epoxy potting sleeve enlarges the diameter of the -EW style to 0.300 (7,62).
 **Sealed terminal (-E) option is not necessary; terminals have sealed construction.
 ***Natural Color Button
 †Adjustable from 1.214 (30,84) to 1.334 (33,88) dependent on button height, see switch pages.

Pushbutton Switches

ACCESSORIES

For Pushbutton Switches



Decorative Mounting Nuts



Button Caps

Button Guard



Pendant Housing

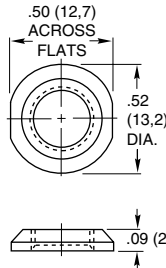
DIMENSIONS In Inches (and millimeters)

Decorative Mounting Nuts



30C1023-1

Brass, nickel-plated for 1/4" (6,35) bushing.



23C1024-1

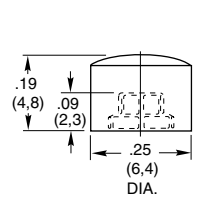
Brass, nickel-plated for 5/16" (7,93) bushing.



07C1040-1

Brass, nickel-plated for 15/32" (11,9) bushing.

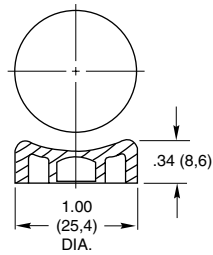
Button Caps and Guard



30B1012

Thermosetting plastic (Fasten to button with cyanoacrylate adhesive) black, red or white.

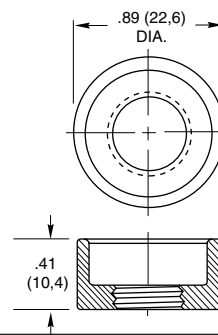
For use with all Series 30 and 39 switches except part number 39-101. See switch pages.



07Z1047

Thermoplastic, black or red color.

For use with Series 2000 and Series 7 switches. See switch pages.



10C1015-1

Brass, zinc trivalent chromate-plated for 15/32" (11,9) bushing.

Remote Switching Accessories Pendant Housing and Caps



07Z4950
07Z5051

Material: Thermoplastic
Specials: other colors available on special order.



Flat Cap

Application:

All Grayhill pushbutton switches with 15/32-32 bushings: catalog numbers 2201, 2202, 07-7, 07-8, 07-21, 07-22, 07-26, 4001, 4002, 10-9, 10-10, 10-100, 10-101, 30-16, 30-17 and 30-32. any other switch with 15/32-32 bushing if it fits housing.



Recessed Cap

ORDERING INFORMATION:

Mounting Nuts, Button Caps, and Guards

| Part Number | Color |
|---------------|------------------|
| 07C1040-1 | Decorative Nut |
| 23C1024 | Decorative Nut |
| 30C1023-1 | Decorative Nut |
| 07Z1047-1 BLK | Black Button Cap |
| 07Z1047-2 RED | Red Button Cap |
| 10C1015-1 | Button Guard |
| 30B1012-5 | Red Cap |
| 30B1012-8 | White Cap |
| 30B1012-9 | Black Cap |

Pendant Housing and Caps

| Part Number | Description |
|-------------|---------------------------|
| 07Z4950 RED | Red Flat Cap & Housing |
| 07Z4950 BLK | Black Flat Cap & Housing |
| 07Z5051 RED | Red Rcstd Cap & Housing |
| 07Z5051 BLK | Black Rcstd Cap & Housing |

Sold only as sets of one housing and one cap.

Available from your local Grayhill Distributor.

For prices and discounts, contact a local Sales Office, an authorized local Distributor, or Grayhill.

Mouser Electronics

Authorized Distributor

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Grayhill:

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