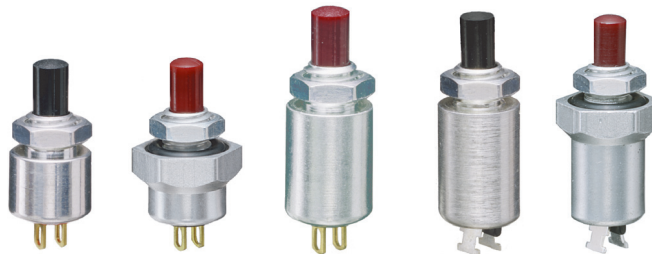


**SERIES 39**  
SPST, 150 mA to 1/2 Amp

**FEATURES**

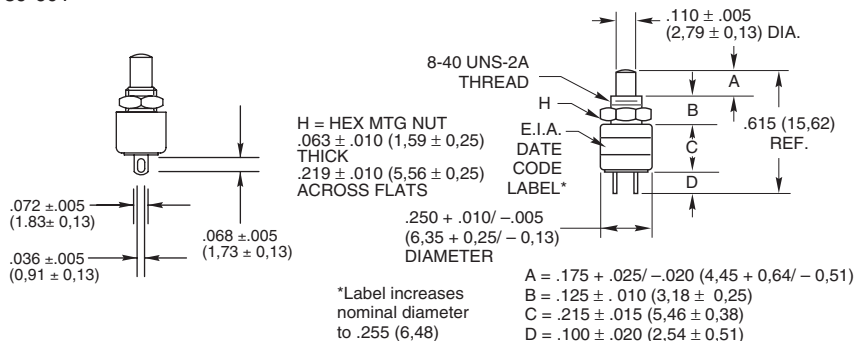
- Requires an Absolute Minimum of Space
- Molded-In Terminals in SPST–N.O.
- Solder Lug Terminals



**DIMENSIONS** In Inches (and millimeters)

**Normally Open–SPST Economy and Standard Version**

39-1  
39-3  
39-601\*



**Economy Version**

Electrical Ratings	Operations at Rated Load	*Complete Part Number	Button Color
At 5 Vdc 150 mA	At 20 Vdc 20 mA	1,000,000	39-601 RED 39-601 BLK

Action	Total Travel	Actuating Force (oz.)	Mtg. Hole
Momentary	.035 ± .015 (0,89 ± 0,38)	4 + 4 - 2	11/64" (4,37) DIA.

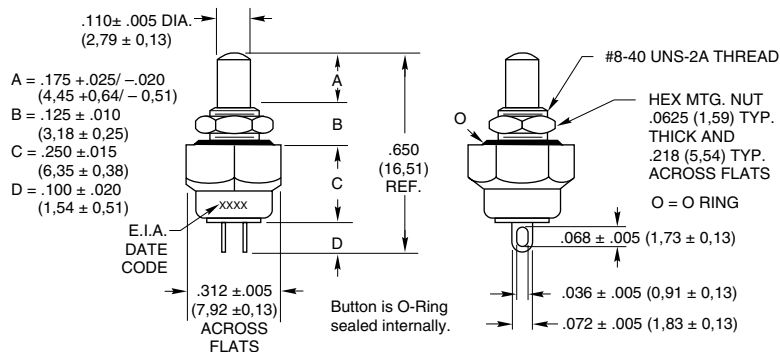
**Standard**

Electrical Ratings	Operations at Rated Load	Complete Part Number	Button Color
At 115 Vac 1/2 Amp Res.	At 220 Vac 1/4 Amp Res	1,000,000	39-1 39-3

Action	Total Travel	Actuating Force (oz.)	Mtg. Hole
Momentary	.035 ± .015 (0,89 ± 0,38)	4 + 4 - 2	11/64" (4,37) DIA.

**Normally Open–SPST with Sealed Bushing and Button**

39-351\*

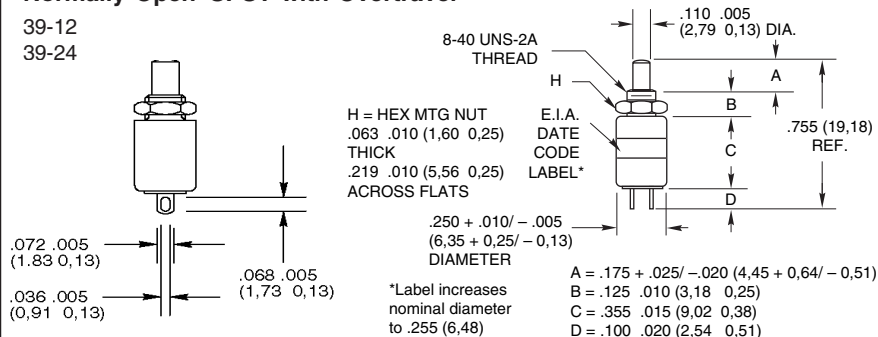


Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	*Complete Part Number	Button Color
1/2 Amp	1/4 Amp	250,000	39-351 RED 39-351 BLK	Red Black

Action	Total Travel	Actuating Force (oz.)
Momentary	.035 ± .015 (0,89 ± 0,38)	16 ± 8

**Normally Open–SPST with Overtravel**

39-12  
39-24



Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	Complete Part Number	Button Color
1/2 Amp	1/4 Amp	100,000	39-12 39-24	Red Black

Action	Total Travel	Over Travel	Actuating Force (oz.)	Mtg. Hole
Momentary	.130 ± .025 (3,30 ± 0,64)	.015 (0,38) Min.	5 ± 3	11/64" (4,37) DIA.

## DIMENSIONS In Inches (and millimeters)

### Normally Closed-SPST

39-2

**H = HEX MTG NUT**  
 $.063 \pm .010$  (1,60 ± 0,25) THICK  
 $.219 \pm .010$  (5,56 ± 0,25) ACROSS FLATS

**8-40 UNS-2A THREAD**

**E.I.A. DATE CODE LABEL\***

**DIAMETER**  
 $.250 + .010 / - .005$  (6,35 + 0,25 / - 0,13)

**A = .175 ± .025** (4,45 ± 0,64)  
**B = .125 ± .010** (3,18 ± 0,25)  
**C = .390 ± .010** (9,91 ± 0,25)  
**D = .100** (2,54) MAX.

Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	Part Number	Cap Color
1/4 Amp	1/8 Amp	250,000	39-2	Black

Action	Total Travel	Actuating Force (oz.)	Mtg. Hole
Momentary	.042 ± .010 (1,07 ± 0,25)	+ 4 - 2	.172 (4,37) DIA.

### Normally Closed-SPST with Sealed Bushing and Button

39-352\*

**A = .165 + .035 / - .015** (4,19 + 0,89 / - 0,38)  
**B = .125 ± .007** (3,18 ± 0,18)  
**C = .429 ± .015** (10,90 ± 0,38)  
**D = .100** (2,54) MAX.  
**E = 10° TO 40°** APPROX.

**#8-40 UNS-2A THREAD**

**H = HEX MTG. NUT**  
 $.0625$  (1,59) TYP. THICK AND  
 $.218$  (5,56) TYP. ACROSS FLATS

**O-RING**

**E.I.A. DATE CODE LABEL\***

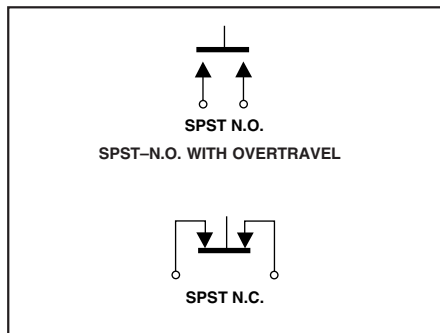
**Button is o-ring sealed internally.**

**\*Label increases nominal diameter to .255** (6,48)

Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	*Complete Part Number	Button Color
1/4 Amp	1/8 Amp	100,000	39-352 RED 39-352 BLK	Red Black

Action	Total Travel	Actuating Force (oz.)
Momentary	.042 ± .010 (0,17 ± 0,25)	8 ± 4

## CIRCUITRY



## SPECIFICATIONS

### Rating Criteria

**Contact Resistance:** 25 milliohms maximum on a new switch

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

**Insulation Resistance:** 1,000 megohms minimum

**Operating Temperature:** -40°C to +85°C

**Mounting Torque:** 2 inch-pounds

## Materials and Finishes

**Mounting Nut:** Brass, tin zinc

**Housing:** Aluminum, clear anodized for 39-351 and 39-352; Brass, zinc trivalent chromate-plated for others

**Button:** Thermoset plastic

**Base:** Thermoset plastic

**Shorting Bar:** Fine silver for 39-2 and 39-352; brass, gold-plated over nickel plate for 39-601; fine silver, gold-plated for others

**Terminals:** Fine silver for 39-2 and 39-352; commercial bronze with gold-plated fine silver contact surface for others

**Spring:** Tinned music wire

**O-Rings:** (39-351 and 39-352) Internal ring is silicone; external ring is buna 'N'

## ACCESSORY

**Button Cap**  
 Part No. 30B1012  
 For use with part numbers 39-351 and 39-352.  
 (Fasten to button with Cyanoacrylate Adhesive)  
 See page E-XX for dimensions.

## ORDERING INFORMATION

Part Number	Description
39-1	N.O., Red Button
39-2	N.C., Black Button
39-3	N.O., Black Button
39-12	N.O., Overtravel Red Button
39-24	N.O., Overtravel Black Button
39-351 RED	N.O., Sealed, Red Button
39-351 BLK	N.O., Sealed, Black Button
39-352 RED	N.C., Sealed, Red Button
39-352 BLK	N.C., Sealed, Black Button
39-601 RED	N.O., Economy, Red Button
39-601 BLK	N.O., Economy, Black Button

Accessory cap may be used with all switches shown except 39-2.

Accessory Part Number	Description
30B1012-5	Red Button Cap
30B1012-9	Black Button Cap
30B1012-8	White Button Cap

Available from your local Grayhill Distributor.

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