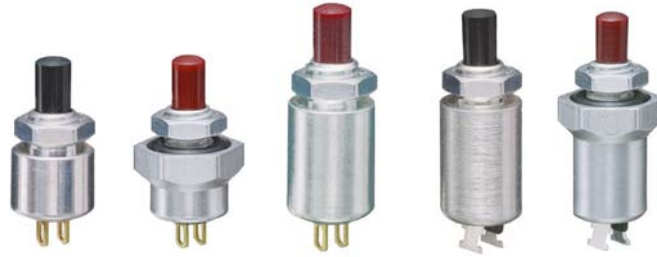


SERIES 39
SPST, 150 mA to 1/2 Amp

FEATURES

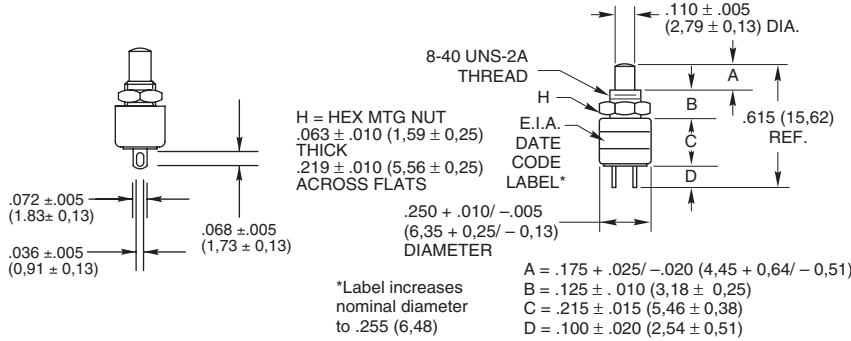
- Requires an Absolute Minimum of Space
- Molded-In Terminals in SPST-N.O.
- Solder Lug Terminals



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.

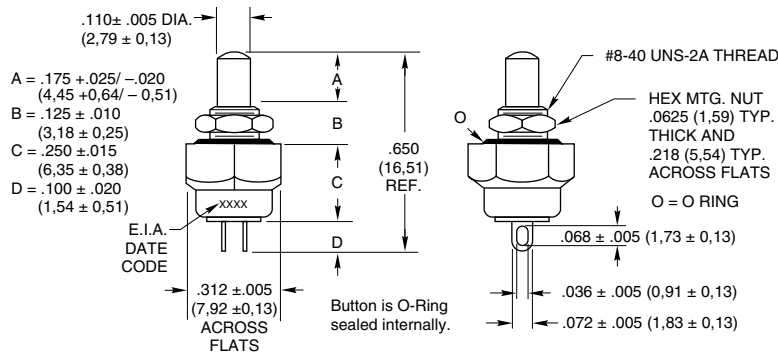
Standard

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*

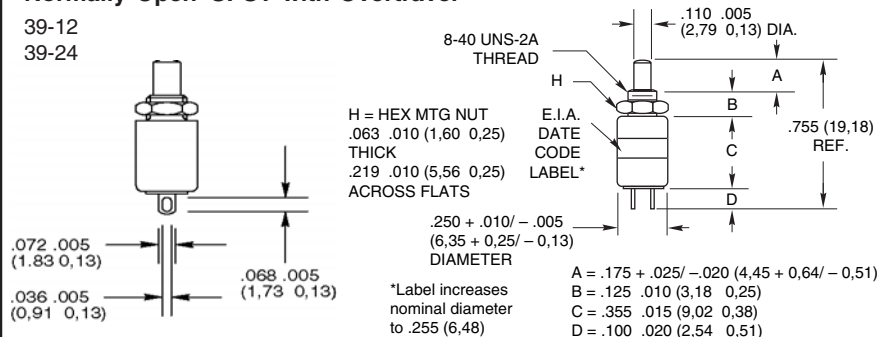


Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	*Complete Part Number	Button Color
1/2 Amp	1/4 Amp	250,000	39-351 RED 39-351 BLK	Red Black

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.

Pushbutton Switches

DIMENSIONS In Inches (and millimeters)

Normally Closed-SPST

39-2

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

E.I.A. DATE CODE LABEL*

.105 ± .005 (2,67 ± 0,13) DIA.

.100 ± .010 (2,54 ± 0,25)

.060 ± .010 (1,52 ± 0,25)

8-40 UNS-2A THREAD

.250 ± .010 / - .005 (6,35 ± 0,25 / - 0,13) DIAMETER

.780 (19,81) REF.

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.

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

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 4 - 2	.172 (4,37) DIA.

Normally Closed-SPST with Sealed Bushing and Button

39-352*

.110 ± .005 DIA. (2,79 ± 0,13)

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.

.819 (20,80) REF.

#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*

.100 (2,54) MAX.

.250 ± .010 / - .005 (6,35 ± 0,25 / - 0,13)

.312 ± .005 (7,92 ± 0,13) ACROSS FLATS

.100 ± .010 (2,54 ± 0,25)

.060 ± .010 (1,52 ± 0,25)

Button is o-ring sealed internally.

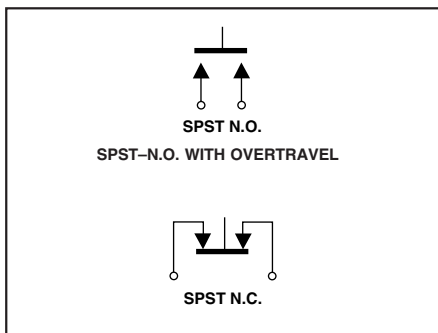
*Label increases nominal diameter to .255 (6,48)

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

Pushbutton Switches

CIRCUITRY



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'

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.

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

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.

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.