

SERIES 39

SPST, 150 mA to 1/2 Amp

FEATURES

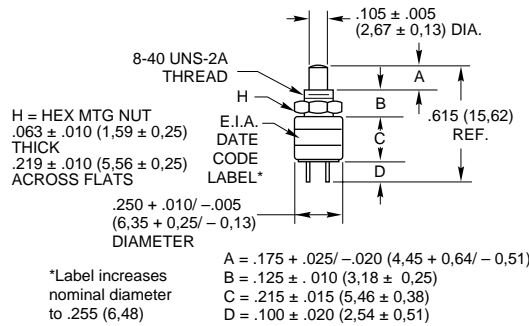
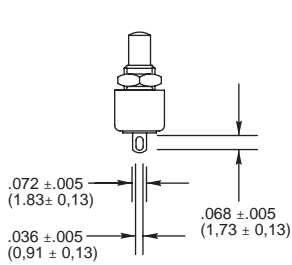
- Requires an Absolute Minimum of Space
- Molded-In Terminals in SPST-N.O.
- Solder Lug Terminals



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	Red Black

Action	Total Travel	Actuating Force (oz.)	Mtg. Hole
Momentary	.035 ± .015 (0.89 ± 0.38)	4 + 4 - 2	11/64" (4.37) DIA.

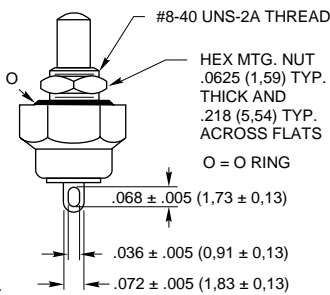
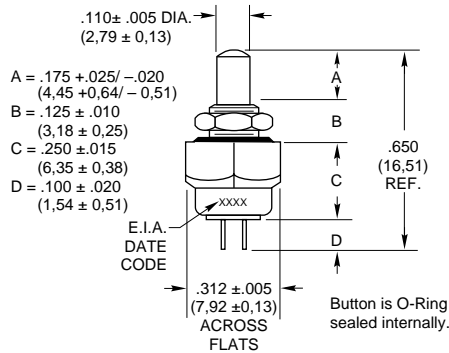
Standard

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	Red Black

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*

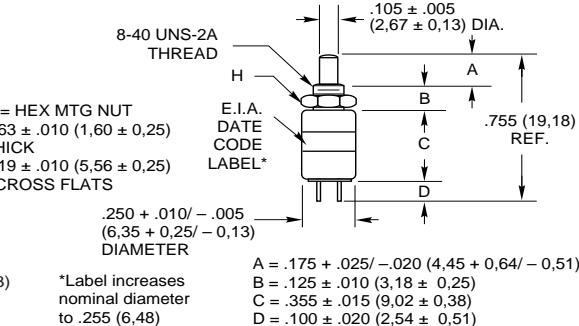
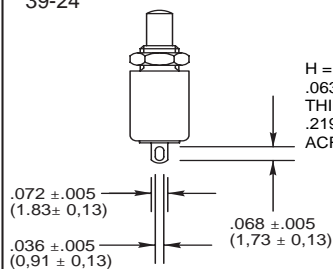


Rating at 115 Vac Resistive	Rating at 220 Vac Resistive	Operations at Rated Load	*Complete Part Number	Button Color
1/2 Amp	1/4 Amp	250,000	39-351 RED 39-351 BLK	Red Black

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 ± .010 (1,60 ± 0,25)
THICK
.219 ± .010 (5,56 ± 0,25)
ACROSS FLATS

8-40 UNS-2A
THREAD

E.I.A. DATE
CODE
LABEL*

.105 ± .005
(2,67 ± 0,13) DIA.

.780 (19,81)
REF.

.100 ± .010
(2,54 ± 0,25)

.060 ± .010
(1,52 ± 0,25)

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

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.

#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*

.819
(20,80)
REF.

.100 (2,54) MAX.

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

.100 ± .010 (2,54 ± 0,25)

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

.060 ± .010 (1,52 ± 0,25)

Button is o-ring sealed internally.

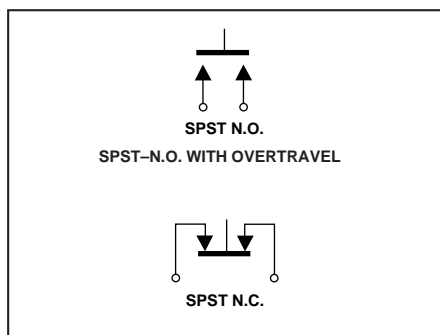
*Label increases nominal diameter to .255 (6,48)

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, cadmium-plated
- Housing:** Aluminum, clear anodized for 39-351 and 39-352; Brass, cadmium-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'

STANDARD OPTIONS

Epoxy sealed and wire leads, see page E-34.

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-36 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.