

PNP Series Sealed Pushbutton Switch



A
Pushbutton

Features/Benefits

- Snap-Action provides positive tactile feedback
- IP68 sealed to endure harsh environments
- 1,000,000 life cycle
- Up to 5A resistive load
- Multiple housing styles
- Various termination types and wirelead options are also available
- RoHS compliant

Typical Applications

- Control Grips
- Off-Road Panels
- Heavy Equipment
- Industrial Instruments
- Lifts
- Conveyor Controls



Specifications

FUNCTION: SPST, SPDT Double Break (Form Z) Momentary
CONTACT ARRANGEMENT: N.O. and N.C.
MOUNTING TYPE: Threaded front mount
TORQUE SPEC FOR THREADED BODY: Do not exceed 10 in-lbs (1.35 N-m)

Mechanical

OPERATING LIFE: 1,000,000 cycles
TOTAL TRAVEL: 2 mm max.
OPERATING POINT 0.9 ± 0.25 mm
OVER TRAVEL: 0.25 mm min.
OPERATING FORCE: $3N \pm 1.5N$
 $8N \pm 1.5N$
VIBRATION: 10-500 Hz 10g Max
SHOCK: 50g 11ms sawtooth wave

Electrical

CONTACT RATING:
Option "Q" Silver
5A/32 VDC resistive (25,000 cycles)
3A/32 VDC resistive (25,000 cycles)
Option "G" Gold over Silver
10mA/5 VDC resistive (1,000,000 cycles)

DIELECTRIC STRENGTH: 1000 V AC for 1 min.
INSULATION RESISTANCE: $1 \text{ G } \Omega$ @ 500 VDC
INITIAL CONTACT RESISTANCE $50 \text{ m}\Omega$ max (without wire leads)
BOUNCE TIME: <5 ms

Materials

HOUSING: PBT/PC
BASE: PBT
CAP: PBT
ACTUATOR: PBT
INTERNAL SEAL: Silicone rubber
TERMINALS: Copper with silver nickel inlay, silver plating
MOVABLE CONTACT: Copper alloy, gold over silver plating
TERMINAL SEAL: Epoxy

Operating Environment

OPERATING TEMPERATURE: -40°C to $+85^{\circ}\text{C}$
ESD PROTECTION: 15KV min.
SEALING: IP68

NOTE: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, please contact Customer Service.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box.



Designation
PNP PNP Series

Operating Force
3 3 Newtons
8 8 Newtons

Actuator Style
S Standard
E Extended (D housing style only)
N None

Actuator Color *
0 No Cap
1 White
2 Black (STD)
3 Red
4 Orange
5 Yellow
6 Green
7 Blue
9 Gray

Housing Style
T Standard threaded mount
D Dome bezel

Housing Color
2 Black (STD)

Terminal Seal
E Epoxy
All models are epoxy sealed

Contact Material
Q Silver (STD)
G Gold over silver

Termination
02 PC Pin (G contact material only)
03 Solder Lug (STD)
W2 2 x 12" 22 AWG UL1569 wire (overmolded)
W3 3 x 12" 22 AWG UL1569 wire (overmolded)
W4 4 x 12" 22 AWG UL1569 wire (overmolded)

Circuit
C SPDT - Double Break
W SPST NC - Double Break
Y SPST NO - Double Break

* Additional colors available, please contact Customer Service



Third Angle
Projection



3 Dec 20

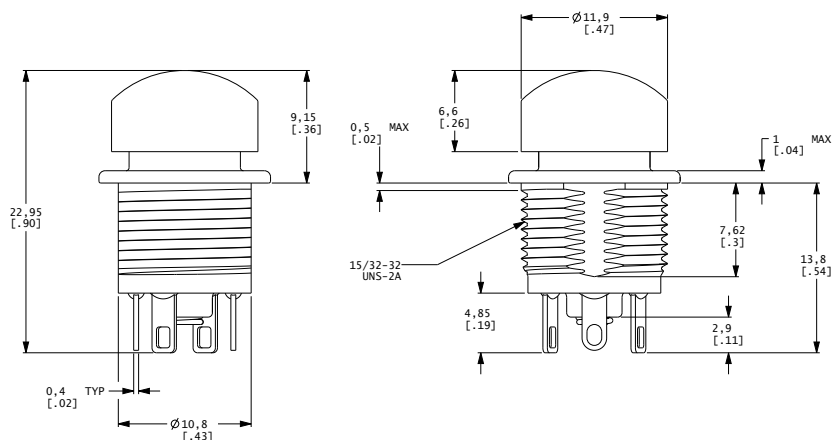
Dimensions are shown: mm (inches)
Specifications and dimensions subject to change



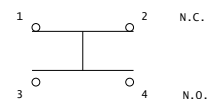
PNP Series Sealed Pushbutton Switch

Pushbutton
A

STANDARD VIEW



ELECTRICAL SCHEMATIC



OPERATING FORCE

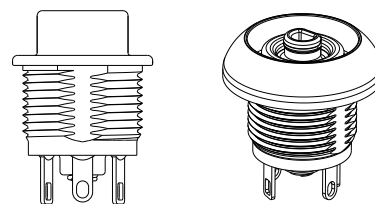
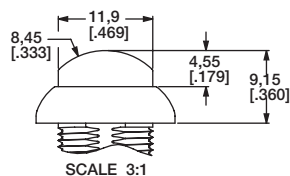
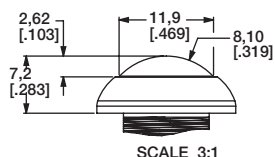
OPTION CODE	OPERATING FORCE
3	3 N
8	8 N

ACTUATOR STYLE

S STANDARD

E EXTENDED (D HOUSING STYLE ONLY)

N NO CAP



ACTUATOR COLOR

OPTION CODE	ACTUATOR COLOR
0	No color
1	White
2	Black
3	Red
4	Orange
5	Yellow
6	Green
7	Blue
9	Gray

* Cap may be ordered separately

PART NUMBER

285E01000
285E02000
285E03000
285E04000
285E05000
285E06000
285E07000
285E09000

COLOR

White
Black
Red
Orange
Yellow
Green
Blue
Gray

824D01000
824D02000
824D03000
824D04000
824D05000
824D06000
824D07000
824D09000

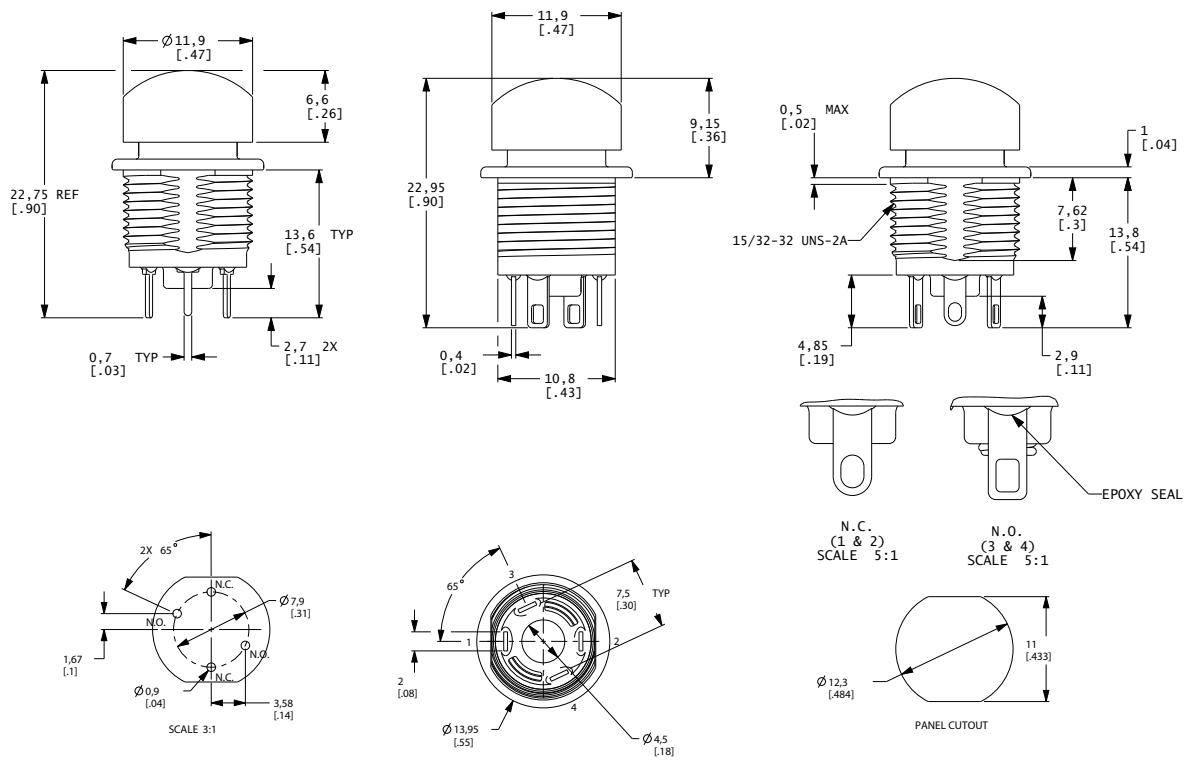
White
Black
Red
Orange
Yellow
Green
Blue
Gray



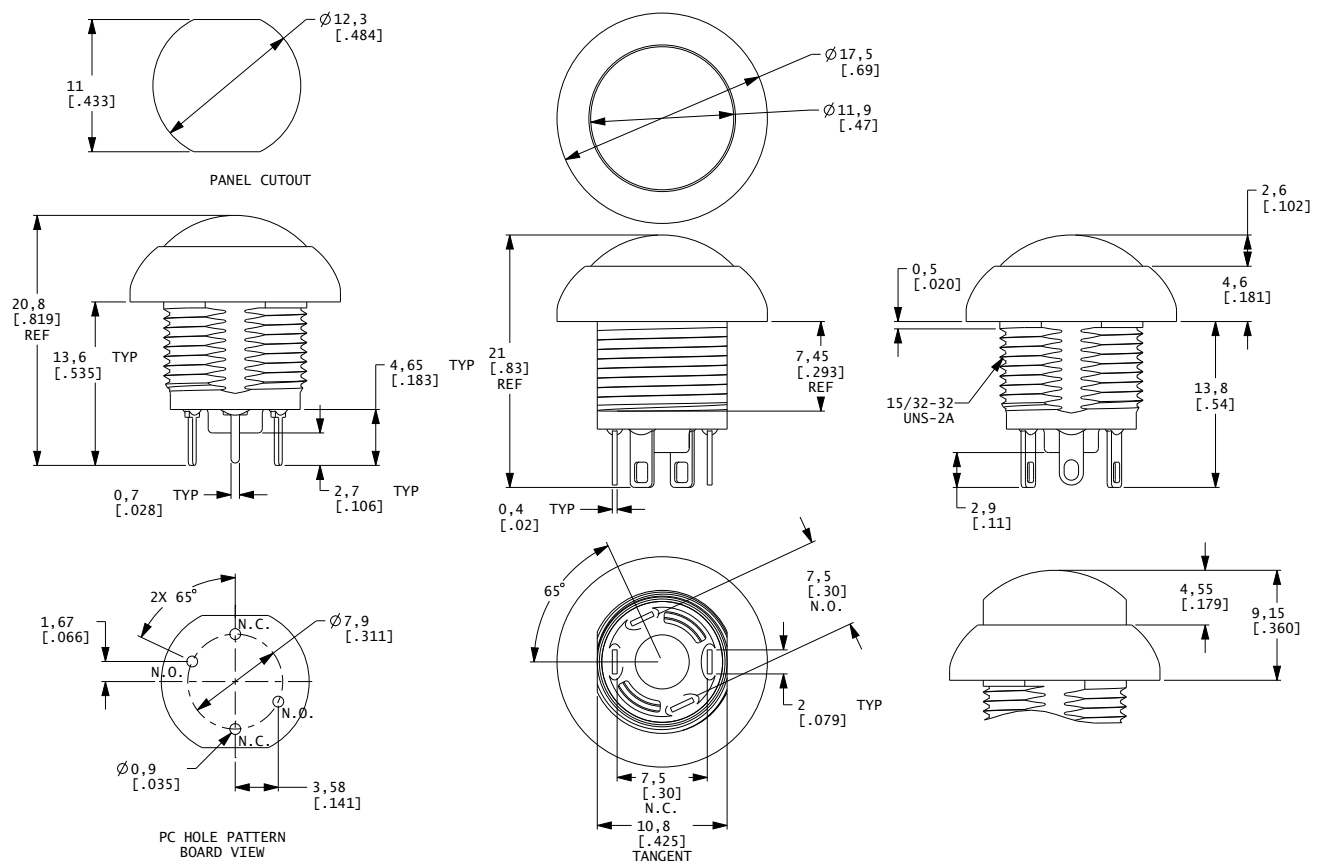


HOUSING STYLE

T STANDARD THREADED MOUNT



D DOME BEZEL





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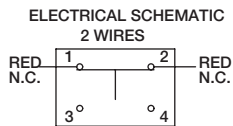
Pushbutton

HOUSING COLOR

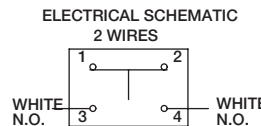
OPTION CODE	COLOR
2	Black (STD)

CIRCUIT

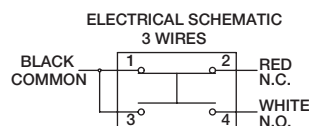
W SPST NC - Double Break



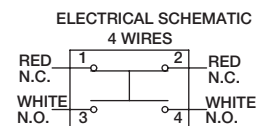
Y SPST NO - Double Break



C SPDT - Double Break

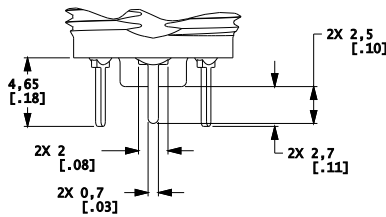


C SPDT - Double Break

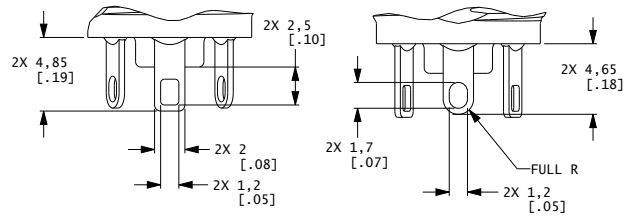


TERMINATION

02 PC PIN



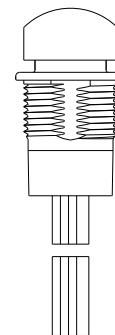
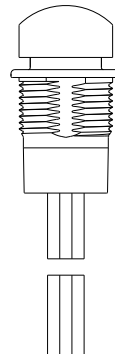
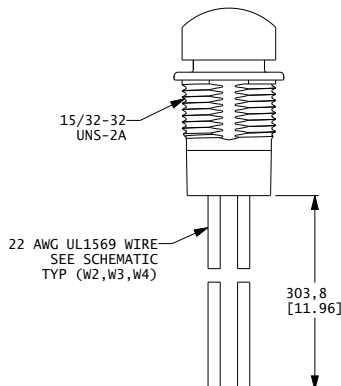
03 SOLDER LUG (STD)



W2 2 x 12" 22 AWG UL1569 wire (overmolded)

W3 3 x 12" 22 AWG UL1569 wire (overmolded)

W4 4 x 12" 22 AWG UL1569 wire (overmolded)



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CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL
Q	Silver (STD)
G	Gold over silver

TERMINAL SEAL

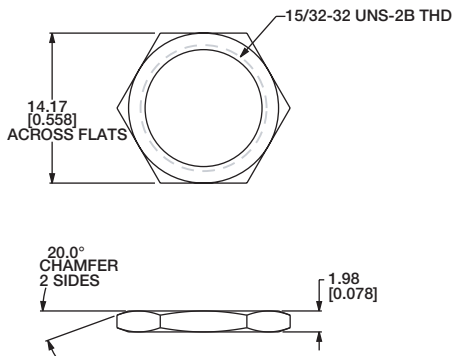
E EPOXY

All models are epoxy sealed

HARDWARE

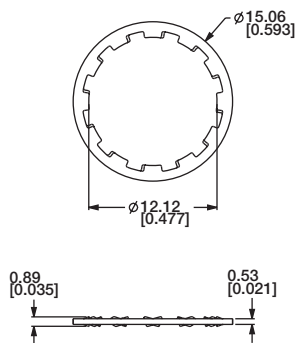
HEX NUT

707100201 Nickel-plated



LOCKWASHER

700302202



PANEL GASKET

851D02000

