

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)

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

Mechanical

OPERATING LIFE: 1,000,000 cycles
 TOTAL TRAVEL: 2 mm max.
 OPERATING POINT 0.9 \pm 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

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

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)

Operating Environment

OPERATING TEMPERATURE: -40°C to +85°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.

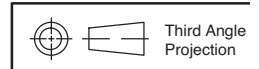
Build-A-Switch

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



<p>Designation</p> <p>PNP PNP Series</p> <p>Operating Force</p> <p>3 3 Newtons</p> <p>8 8 Newtons</p> <p>Actuator Style</p> <p>S Standard</p> <p>E Extended (D housing style only)</p> <p>N None</p> <p>Actuator Color *</p> <p>0 No Cap</p> <p>1 White</p> <p>2 Black (STD)</p> <p>3 Red</p> <p>4 Orange</p> <p>5 Yellow</p> <p>6 Green</p> <p>7 Blue</p> <p>9 Gray</p>	<p>Housing Style</p> <p>T Standard threaded mount</p> <p>D Dome bezel</p> <p>Housing Color</p> <p>2 Black (STD)</p>	<p>Terminal Seal</p> <p>E Epoxy</p> <p>All models are epoxy sealed</p> <p>Contact Material</p> <p>Q Silver (STD)</p> <p>G Gold over silver</p> <p>Termination</p> <p>02 PC Pin (G contact material only)</p> <p>03 Solder Lug (STD)</p> <p>W2 2 x 12" 22 AWG UL1569 wire (overmolded)</p> <p>W3 3 x 12" 22 AWG UL1569 wire (overmolded)</p> <p>W4 4 x 12" 22 AWG UL1569 wire (overmolded)</p> <p>Circuit</p> <p>C SPDT - Double Break</p> <p>W SPST NC - Double Break</p> <p>Y SPST NO - Double Break</p>
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* Additional colors available, please contact Customer Service



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



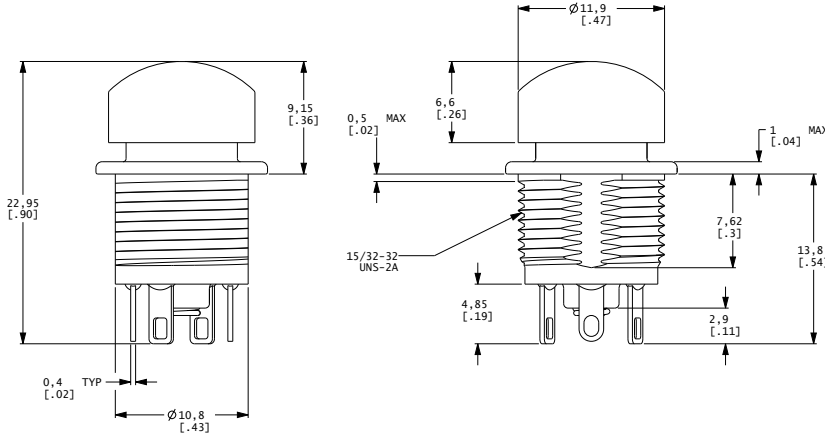


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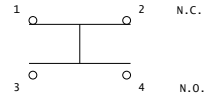
Pushbutton

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STANDARD VIEW



ELECTRICAL SCHEMATIC



OPERATING FORCE

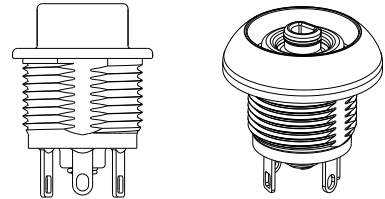
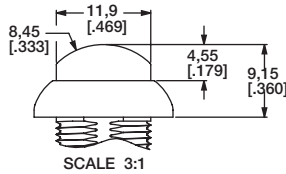
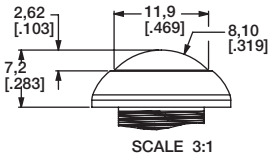
OPTION CODE	OPERATING FORCE
3	3 N
8	8 N

ACTUATOR STYLE

S STANDARD

E EXTENDED (D HOUSING STYLE ONLY)

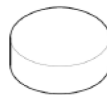
N NO CAP



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

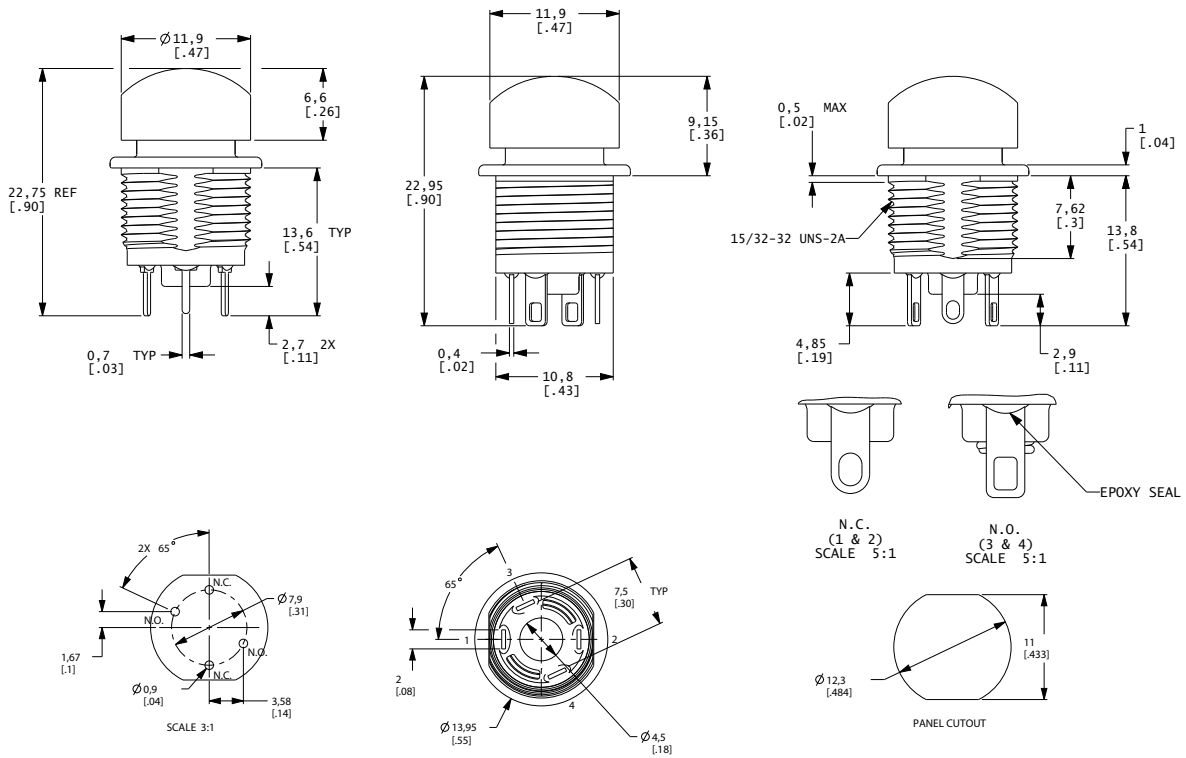
285E01000	White
285E02000	Black
285E03000	Red
285E04000	Orange
285E05000	Yellow
285E06000	Green
285E07000	Blue
285E09000	Gray
824D01000	White
824D02000	Black
824D03000	Red
824D04000	Orange
824D05000	Yellow
824D06000	Green
824D07000	Blue
824D09000	Gray



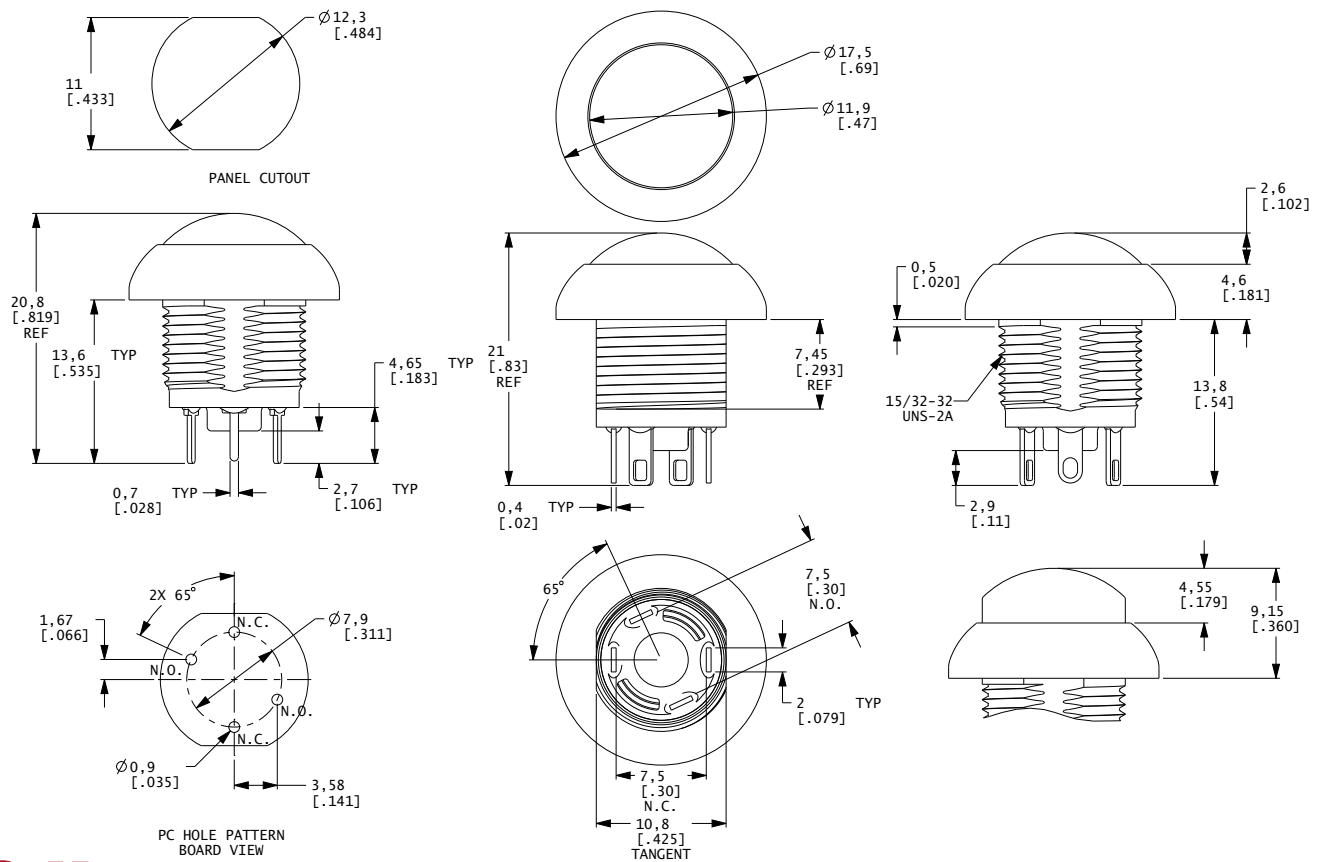


HOUSING STYLE

T STANDARD THREADED MOUNT



D DOME BEZEL





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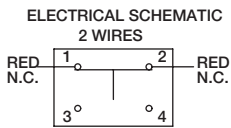
Pushbutton
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HOUSING COLOR

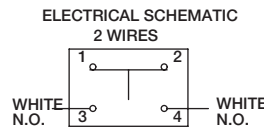
OPTION CODE	COLOR
2	Black (STD)

CIRCUIT

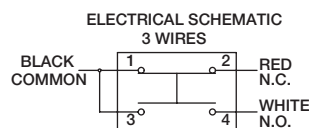
W SPST NC - Double Break



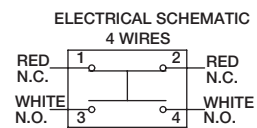
Y SPST NO - Double Break



C SPDT - Double Break

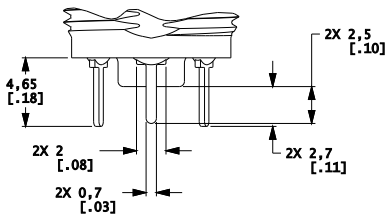


C SPDT - Double Break

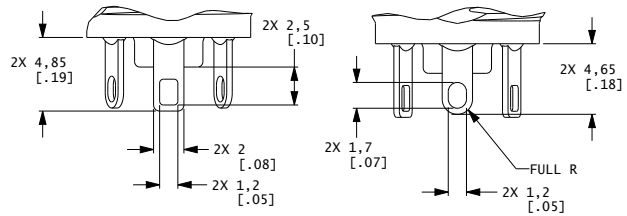


TERMINATION

02 PC PIN



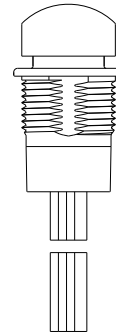
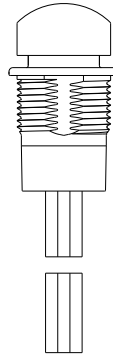
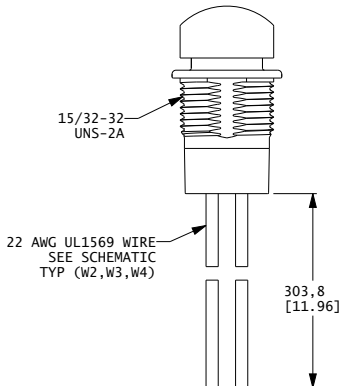
03 SOLDER LUG (STD)



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)



CONTACT MATERIAL

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

TERMINAL SEAL

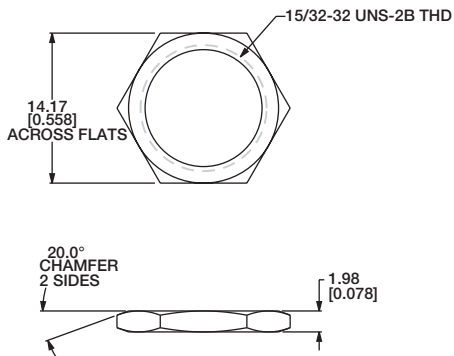
E EPOXY

All models are epoxy sealed

HARDWARE

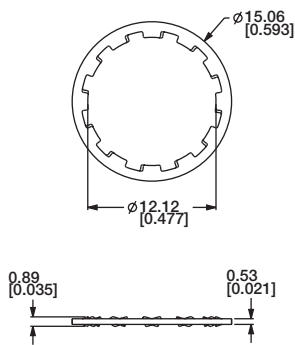
HEX NUT

707100201 Nickel-plated



LOCKWASHER

700302202



PANEL GASKET

851D02000

