



**THE DATASHEET OF
NP8S2D203QE**





NP Series Sealed Industrial Pushbutton Switch

Pushbutton
A

Features/Benefits

- IP68 sealed
- 1,000,000 life cycle
- Multiple housing styles
- Capable of up to 5A resistive load
- Wirelead options available
- RoHS compliant

Typical Applications

- Harsh environments
- Off-Road
- Industrial
- Transportation
- Military



Specifications

FUNCTION: SPDT Double Break (Form Z) Momentary
CONTACT ARRANGEMENT: N.O. and N.C.
MOUNTING TYPE: Threaded front or rear mount and slot mount
TORQUE SPEC FOR THREADED BODY: Do not exceed 50 in-lbs (5.65 N-m)

Mechanical

OPERATING LIFE: 1,000,000 cycles
TOTAL TRAVEL: 1.6 ± 0.15 mm
OPERATING POINT 0.9 ± 0.25 mm
OVER TRAVEL: 0.45 min.
OPERATING FORCE: 8N ± 1.5N
VIBRATION: 10-500 Hz 10g Max
SHOCK: 50g 11ms sawtooth wave

Electrical

CONTACT RATING:
Option G - Gold over Silver
10mA/5 VDC (1,000,000 cycles)
Option Q - Silver
1A/32 VDC resistive (100,000 cycles)
5A/32 VDC resistive (25,000 cycles)
3A/32 VDC resistive (25,000 cycles)

Electrical (cont.)

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

Materials

HOUSING: 6061-T6 Aluminum, black or clear anodized
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°C
ESD PROTECTION: 15KV min.

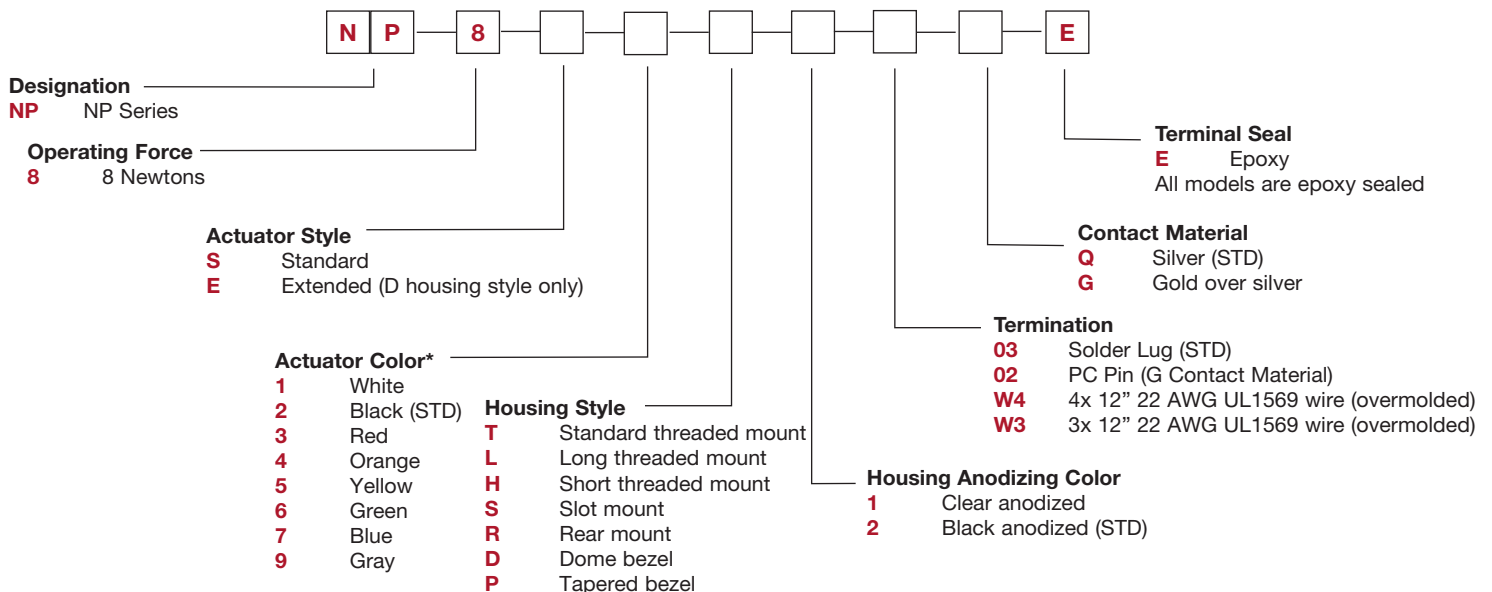
Process Environment

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.



* Please contact Customer Service for additional colors.



4 May 20

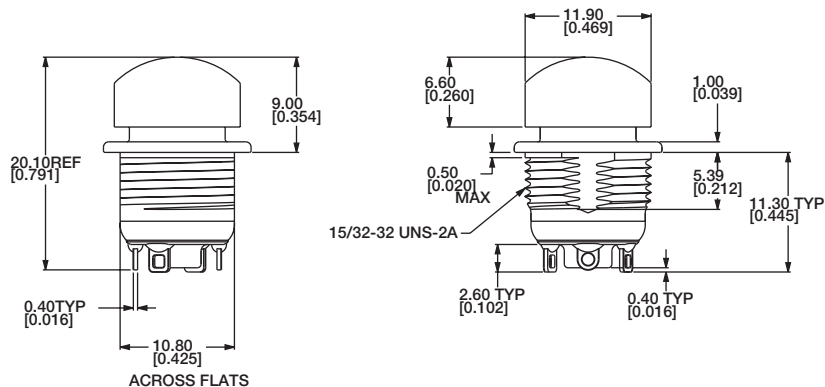
Specifications and dimensions subject to change

NP Series Sealed Industrial Pushbutton Switch

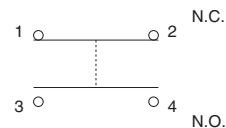


A
Pushbutton

STANDARD VIEW



ELECTRICAL SCHEMATIC



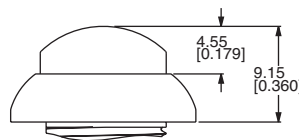
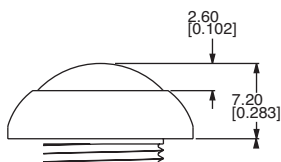
OPERATING FORCE

OPTION CODE	OPERATING FORCE
8	8 N

ACTUATOR STYLE

S STANDARD

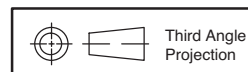
E EXTENDED (D HOUSING STYLE ONLY)



ACTUATOR COLOR

OPTION CODE	ACTUATOR COLOR
1	White
2	Black
3	Red
4	Orange
5	Yellow
6	Green
7	Blue
9	Gray

For additional colors please contact Customer Service.



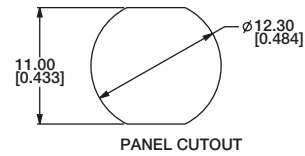
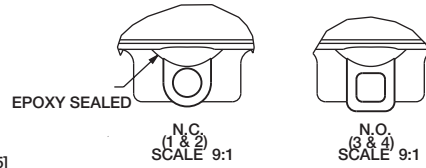
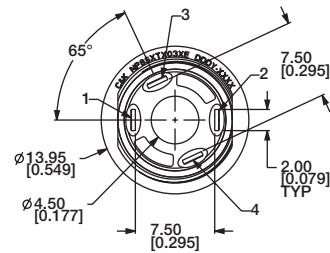
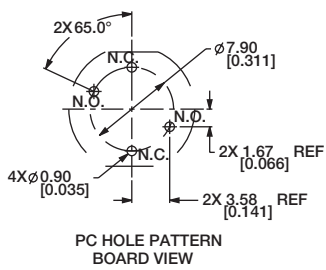
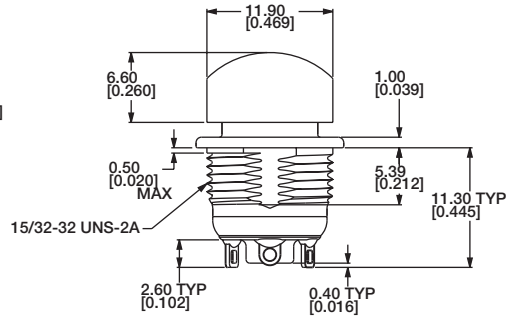
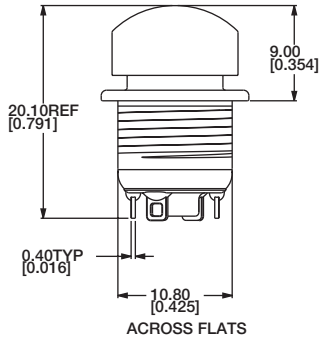
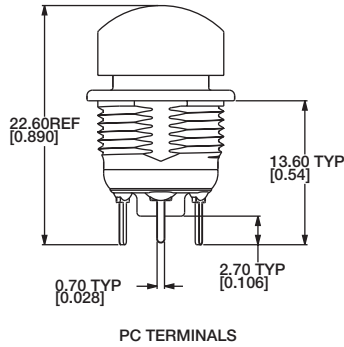


NP Series Sealed Industrial Pushbutton Switch

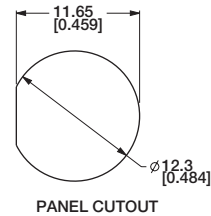
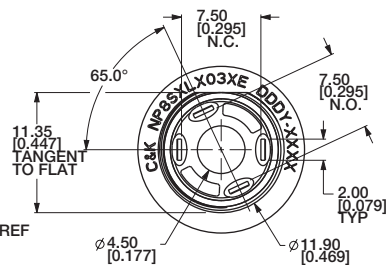
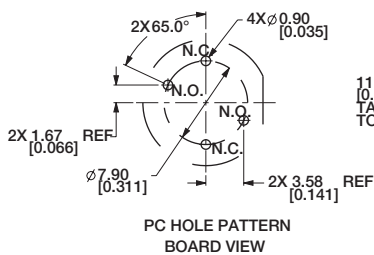
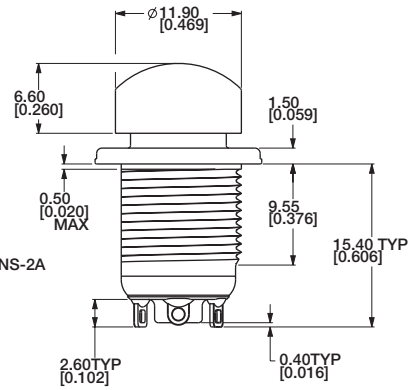
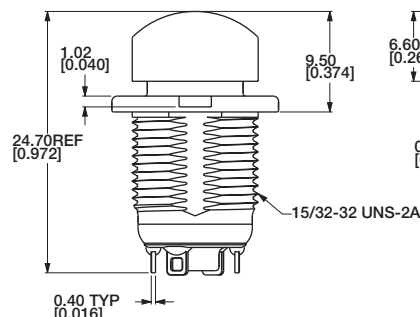
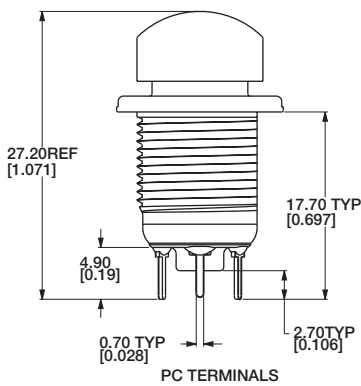
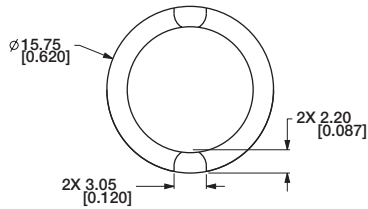
HOUSING STYLE

Pushbutton

T STANDARD THREADED MOUNT



L LONG THREADED MOUNT



4 May 20

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

NP Series Sealed Industrial Pushbutton Switch

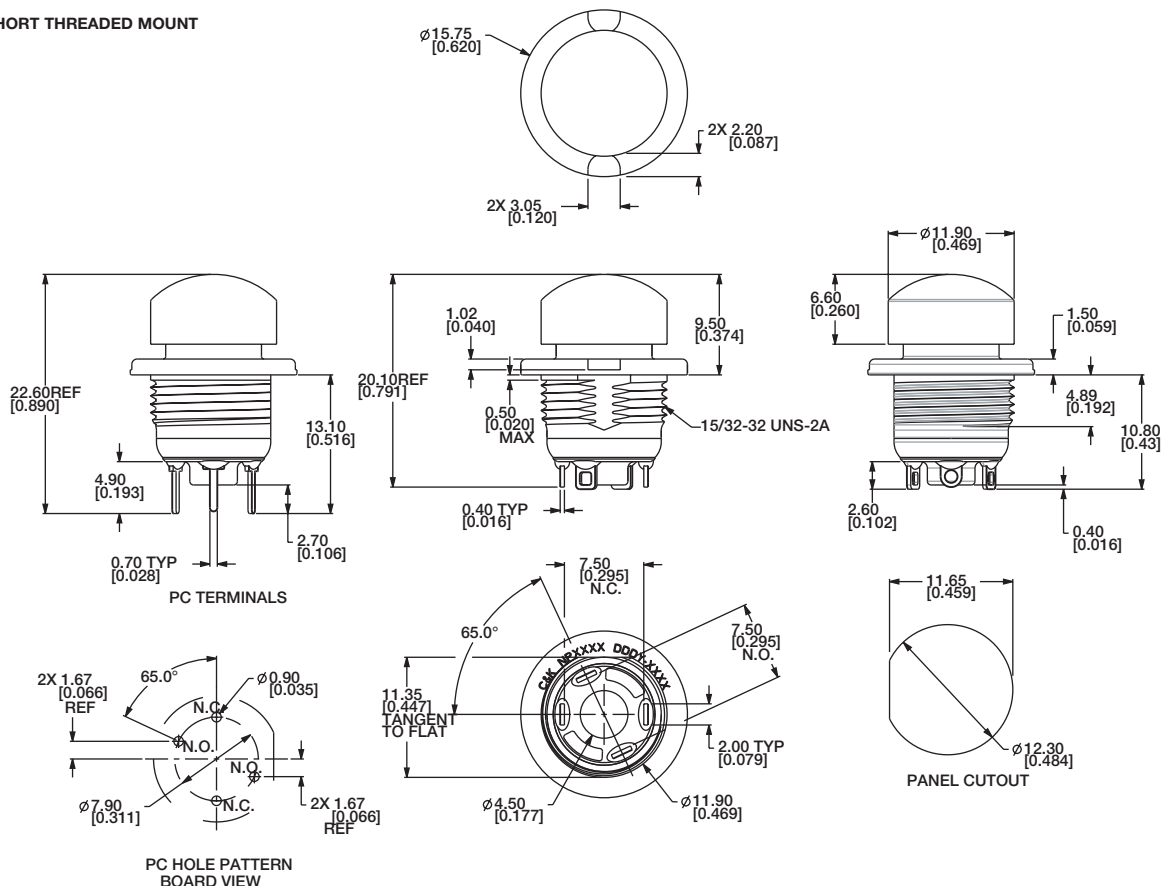


A

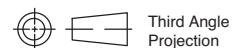
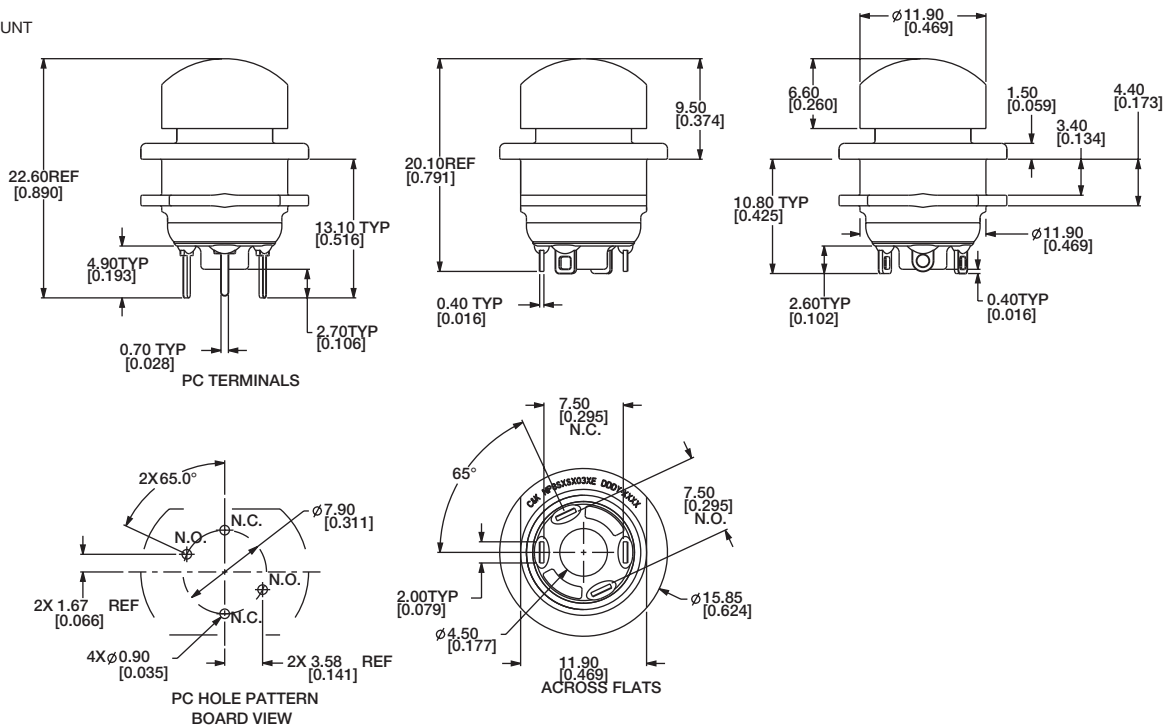
Pushbutton

HOUSING STYLE

H SHORT THREADED MOUNT



S SLOT MOUNT



Third Angle
Projection



4 May 20

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

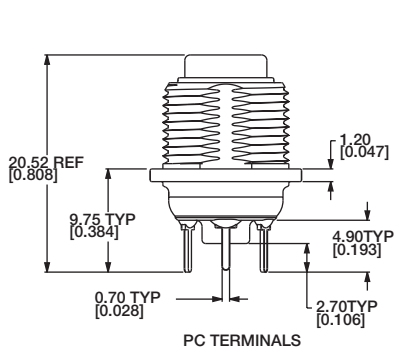
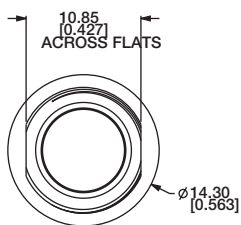


NP Series Sealed Industrial Pushbutton Switch

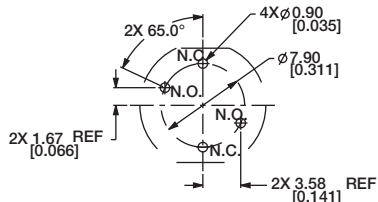
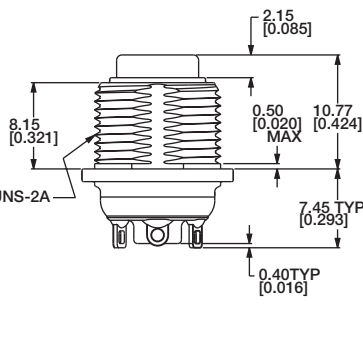
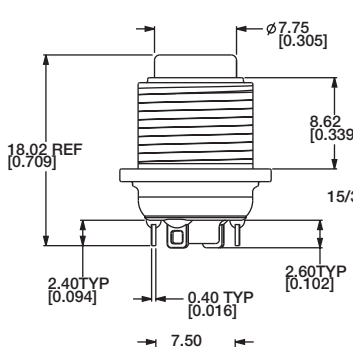
HOUSING STYLE

Pushbutton

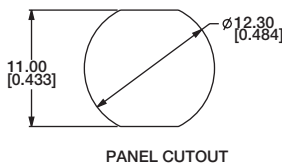
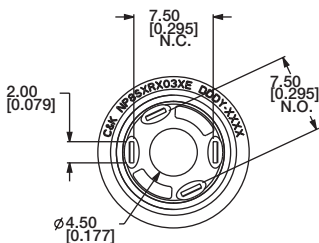
R REAR MOUNT



PC TERMINALS

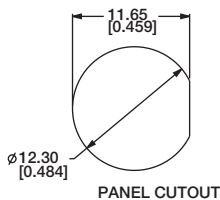


PC HOLE PATTERN
BOARD VIEW

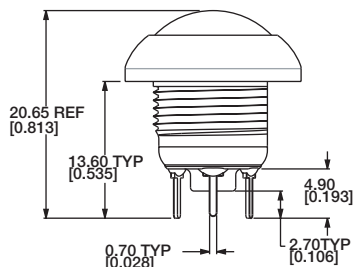
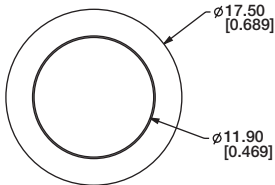


PANEL CUTOUT

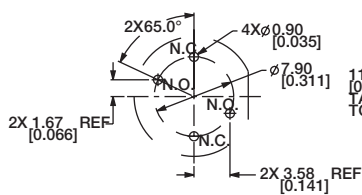
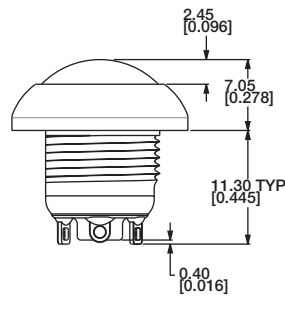
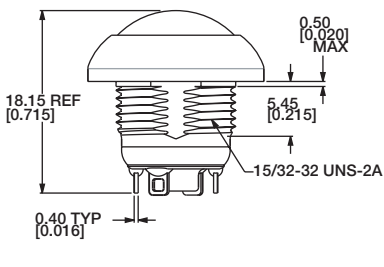
D DOME BEZEL



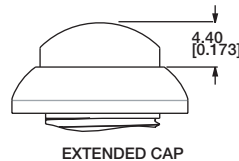
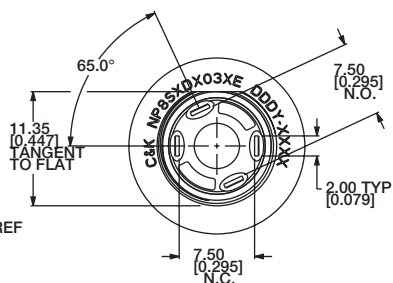
PANEL CUTOUT



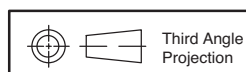
PC TERMINALS



PC HOLE PATTERN
BOARD VIEW



EXTENDED CAP



Third Angle
Projection



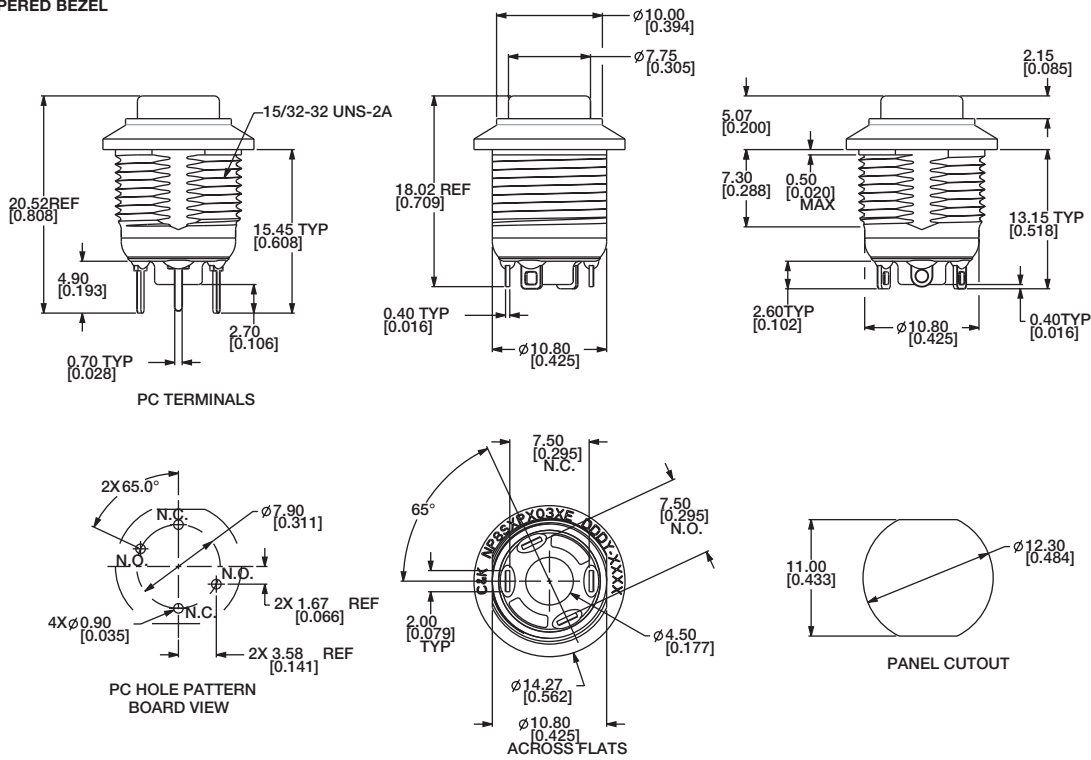
NP Series Sealed Industrial Pushbutton Switch



A
Pushbutton

HOUSING STYLE

P TAPERED BEZEL

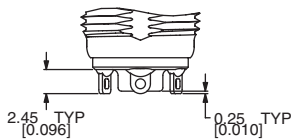


HOUSING ANODIZING COLOR

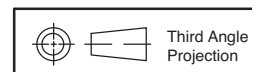
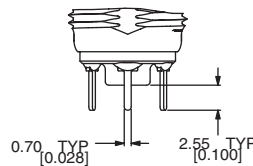
OPTION CODE	ANODIZING COLOR
1	Clear anodized
2	Black anodized (STD)

TERMINATION

03 SOLDER LUG (STD)



02 PC PIN (G CONTACT MATERIAL)

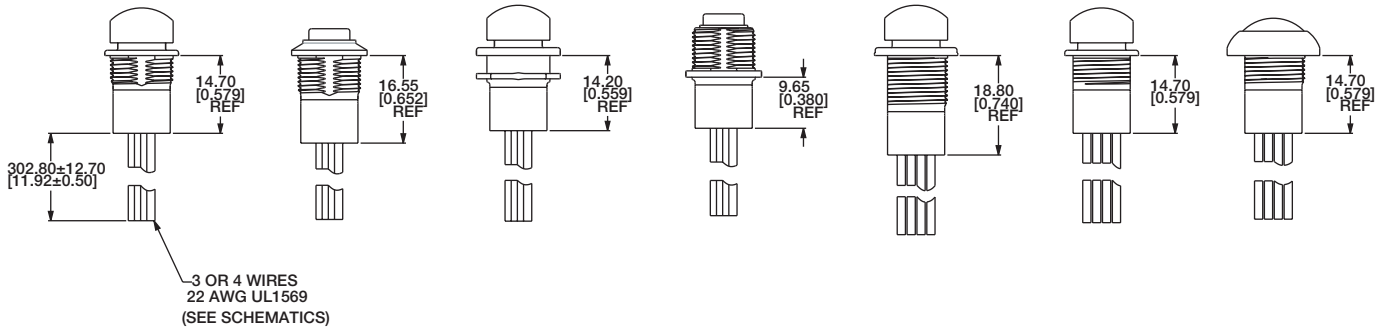




NP Series Sealed Industrial Pushbutton Switch

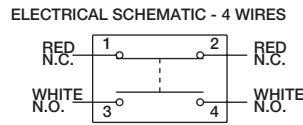
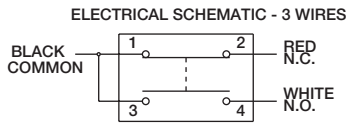
Pushbutton
A

TERMINATION



W3 3X 12" 22 AWG UL1569 WIRE (OVERMOLDED)

W4 4X 12" 22 AWG UL1569 WIRE (OVERMOLDED)



CONTACT MATERIAL

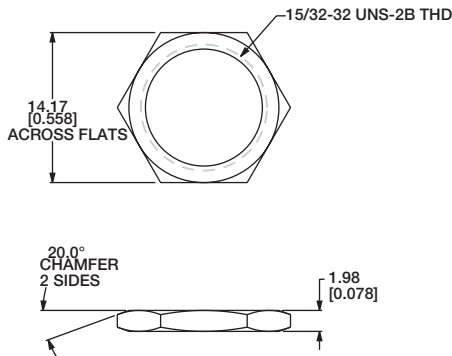
OPTION CODE	CONTACT MATERIAL
Q	Silver (STD)
G	Gold over Silver

TERMINAL SEAL

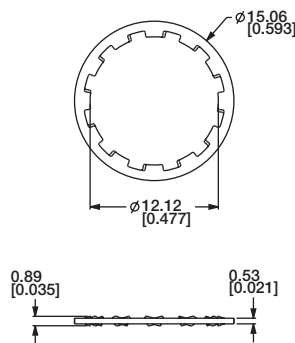
E EPOXY
All models are epoxy sealed

HARDWARE

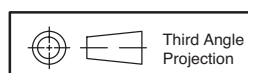
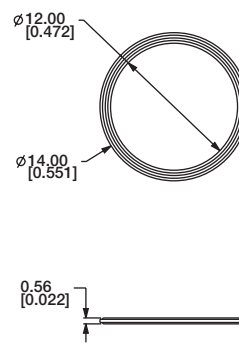
HEX NUT
707100201 Nickel-plated



LOCKWASHER
700302202



PANEL GASKET
851D02000



4 May 20

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

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- ⊖ [View NP8S2D203QE on WIN SOURCE](#)
- ⊖ [C&K Components Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management