SEALED DOME PUSHBUTTON SWITCHES

MOMENTARY ACTION, ATTRACTIVE & RUGGED FOR WET & DUSTY ENVIRONMENTS

The P9 Dome switches feature a contoured dome style pushbutton and share similar size and characteristics to the P7-D series. There are two button versions: flush button profile and raised button profile, and two bezel versions: standard and small.

The P9 comes with a threaded case for hex nut mounting or with a snap-in case. The switch series features short behind panel depth and offers excellent mechanical and electrical performance while operating under severe conditions.

The P9 Dome series is offered in dusttight and moistureproof sealed construction. Mechanical life is 1.25 million operations and the electrical life is 25,000 operations at full rated load.

Watertight sealing to IP68S and IP69K is available simply by adding a "W" suffix to the part number.

The P9 Dome series is available in standard and low-force double break snap-action. All are momentary action. Special contact variations are available. High contact pressure and unique contact design provide low contact resistance for logic level switching capability as well as full rated service. Solder, PC Pin, and 0.110" Quick Connect termination options are also available.

Positive tactile feedback signals the operator when the switch is actuated.

The P9 Dome series is a quality precision switch designed for use in panels, control grips, computers, instruments, heavy equipment and other demanding applications where attractive, rugged pushbutton switches are required.



Features:

- **Flush and raised dome button styles in gloss or matte finish**
- **Small bezel option**
- **Double break, momentary action**
- **All plastic housing & button construction**
- **Threaded body or snap-in panel mounting**
- **Withstands extreme shock & vibration**
- **Positive tactile feedback contact transfer on snap-action models**
- **Mechanical life is 1.25 million cycles**
- **Solder, PC Pin & 0.110" Quick Connect terminal styles**
- **Moistureproof & dusttight to IP64 or watertight to IP68S and IP69K**
- **RoHS compliant**

Standard Characteristics/Ratings:

ELECTRICAL RATINGS:

Load	N.O./N.C.	2 Circuit	Life
Resistive: 28VDC	5A	4A	25,000 cycles
Resistive: 115VAC, 60Hz	3A	1A	25,000 cycles
Inductive: 28VDC	2A	2A	25,000 cycles
DWV	1050Vrms		
Logic Level	10mA @ 5 VDC		1,250,000 cycles

Mechanical Life:	1,250,000 cycles
Seal:	IP64 or IP68S and IP69K
Operating Temp Range:	-40°C to +85°C
Operating Force:	Standard: 1.7 lbs. +/- 0.5 lb. Low Force: 12 oz +/- 4 oz
Total Travel:	0.080 inches max
Overtravel:	0.010 inches min

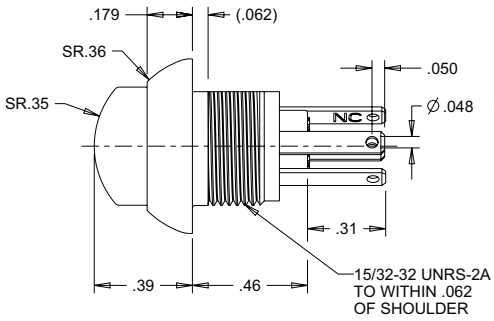
MATERIALS:

Case:	Thermoplastic
Button:	Thermoplastic
Terminals:	Brass with gold
Terminal Hardware:	None provided
Mounting Hardware:	Hex nut, lockwasher Panel gasket when applicable

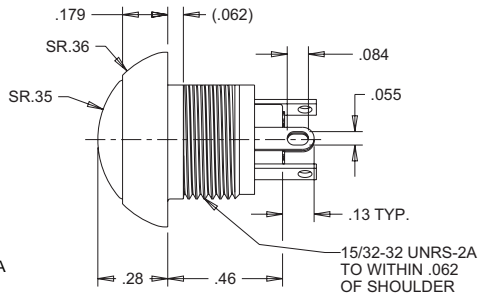
Specifications Subject To Change Without Notice

SEALED DOME PUSHBUTTON SWITCHES

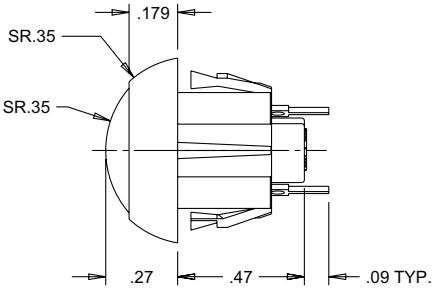
CHOICE OF SNAP-ACTION & SHORTING BAR ACTION



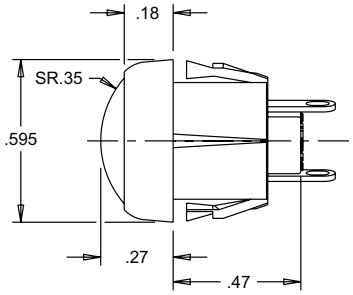
Raised Dome Button Style



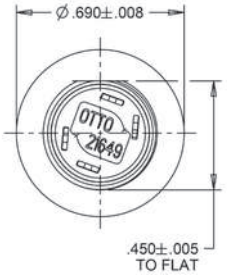
Flush Dome Button Style



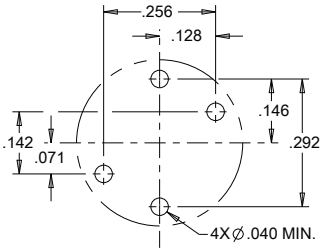
Snap-In Case
(PC Terminals Shown)



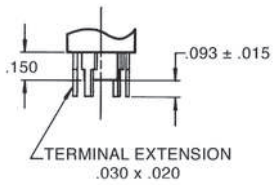
Flush Dome Small Bezel Style

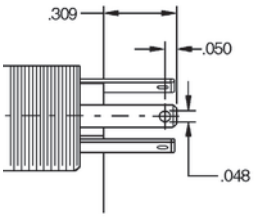


Threaded Case Terminal Detail

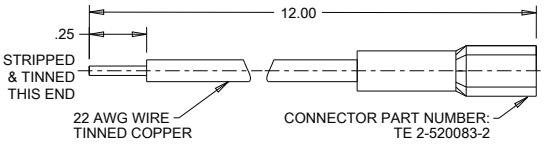


Component Side
P.C. Mounting Pattern
(As viewed from switch bottom)





0.110" Quick Connect Detail



Wire Leads with Quick Connect

Recommended Panel Openings		
*Panel Thickness	Recommended Ø	DIM. Across D-Flat
0.024*	Ø 0.505	0.460
0.031	Ø 0.505	0.460
0.118*	Ø 0.505	0.460
0.125	Ø 0.505	0.460

* Must use panel gasket C401669-000025 supplied with the switch.

- Snap-in case allows front panel mounting into 0.024" or 0.118" thick panels using panel gasket C401669-000025 (C807516-000025 for case styles 9 and A) or into 0.031" and 0.125" thick panels
- 0.110" Quick Connect terminals allow reliable, solderless wire connections
- Flush Neoprene Black Boot P/N C402339
- Raised Neoprene Black Boot P/N C402246
- Flush Silicone Translucent Boot P/N C402599-1
- Raised Silicone Translucent Boot P/N C402611-1

ORDERING INFORMATION:

Select the OTTO P9 series features that match your specific application. Standard and special features are shown at right. Specify your choice by building the OTTO Part Number code.

Example: P9-211121 specifies raised dome style button, threaded case, solder terminals, N.O. circuit form, standard snap-action, black case/bezel, red button.

P9 PART NUMBER CODE

P9 – X X X X X X *

Button & Case Style**
1. Flush Dome & Threaded Case, Std. Finish
2. Raised Dome & Threaded Case, Std. Finish
3. Flush Dome & Snap-In Case, Std. Finish
4. Raised Dome & Snap-In Case, Std. Finish
5. Flush Dome & Threaded Case, Matte Finish
6. Raised Dome & Threaded Case, Matte Finish
7. Flush Dome & Snap-In Case, Matte Finish
8. Raised Dome & Snap-In Case, Matte Finish
9. Flush Dome & Snap-In Case, Std. Finish, Small Bezel
A. Raised Dome & Snap-In Case, Std. Finish, Small Bezel

Terminal Style
1. Solder
2. PC Pin
3. 0.110" Quick Connect (QC)
4. 0.110" QC with 2 Wire Leads ①
5. 0.110" QC with 4 Wire Leads ②

Circuit Form
1. N.O.
2. N.C. ③
3. 2 Circuit ③

Switch Action
1. Standard Snap-Action
2. Low Force Snap-Action
3. Non-Snap Shorting Bar

Case/ Bezel Color
1. Red
2. Black
3. Orange***
4. Yellow***
5. Green***
6. Blue***
7. Violet***
8. Gray***
9. White

Button Color
1. Red
2. Black
3. Orange
4. Yellow
5. Green
6. Blue
7. Violet
8. Gray
9. White

① For Circuit Form 1 and 2. (1 black & 1 white lead)
② For Circuit Form 3. (2 black & 2 white leads)
③ Not available in Shorting Bar version.
* Add "W" suffix for watertight to IP68S and IP69K (will include panel gasket).
** Contact factory for std./matte button/case combination options.
*** Contact factory for minimum requirement.