

Distinctive Characteristics

Power and logic level capabilities available to suit varying applications.

Bushing and snap-in mount versions available; snap-in models offer many style and color choices to enhance front panel appearance.

Light touch actuation.

High torque bushing prevents rotation and separation from metal frame during installation.

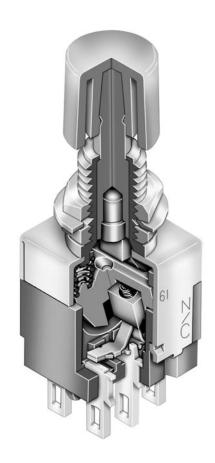
Stainless steel frame resists corrosion.

Case of heat resistant resin meets UL 94V-0 flammability rating.

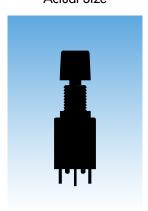
Higher insulating barriers protect against crossover in double pole devices.

1,500V dielectric strength between contacts and case is accomplished by clinching the frame away from the terminals.

Epoxy sealed terminals prevent entry of solder flux and other contaminants.



Actual Size





General Specifications

Electrical Capacity (Resistive Load)

Power Level (No code or P): 3A @ 125V AC for silver contacts

Logic Level (code G or PG): 0.4VA maximum @ 28V AC/DC maximum for gold contacts

(Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)

Note: Find additional explanation of operating range in Supplement section.

Other Ratings

Contact Resistance: 10 milliohms maximum for silver; 20 milliohms maximum for gold

Insulation Resistance: 1,000 megohms minimum @ 500V DC

1,000V AC minimum between contacts for 1 minute minimum; **Dielectric Strength:**

1,500V AC minimum between contacts and case for 1 minute minimum

Mechanical Life: 100,000 operations minimum

Electrical Life: 25,000 operations minimum for silver;

50,000 operations minimum for gold

Nominal Operating Force: Single Pole: 2.35N for Momentary and 2.65N for Alternate Action

Double Pole: 2.94N for Momentary and 3.63N for Alternate Action

Travel: Momentary: Pretravel .047" (1.2mm); Overtravel .016" (0.4mm); Total Travel .063" (1.6mm)

Alternate: Pretravel .071" (1.8mm); Overtravel .016" (0.4mm); Total Travel .087" (2.2mm)

Materials & Finishes

Plunger: Brass with chrome plating for Momentary; brass with nickel plating for Alternate

Bushing: Brass with nickel plating

Frame: Stainless steel

Melamine phenolic resin (UL94V-0) Case: Copper with silver or gold plating

Movable Contacts: Stationary Contacts: Silver with silver or gold plating

Terminals: Copper with silver or gold plating

Environmental Data

Operating Temp Range: -10°C through +70°C (+14°F through +158°F)

> **Humidity:** 90 ~ 95% humidity for 96 hours @ 40°C (104°F)

Vibration: 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range and returning

in 1 minute; 3 right angled directions for 2 hours

Shock: 50G (490m/s²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

Installation

1.47Nm (13.0 lb•in) for double nut; 0.68Nm (6.0 lb•in) for single nut **Mounting Torque:**

Cap Installation Force: 78.5N (17.65 lbf) maximum downward force on actuator **Soldering Time & Temp:** Wave Solder (Straight PC): See Profile B in Supplement section.

Manual Soldering: See Profile B in Supplement section.

Cleaning: These devices are not process sealed. Hand clean locally using alcohol based solution.

Standards & Certifications

Flammability Standards: UL94V-0 case

UL Recognized: All single and double pole models recognized at 3A @ 125V AC; UL File No. WOYR2.E44145;

add "/U" to end of part number to order UL mark on switch.

C-UL Recognized: All single and double pole models recognized at 3A @ 125V AC; UL File No. WOYR8.E44145;

add "/C-UL" to end of part number to order C-UL mark on switch.

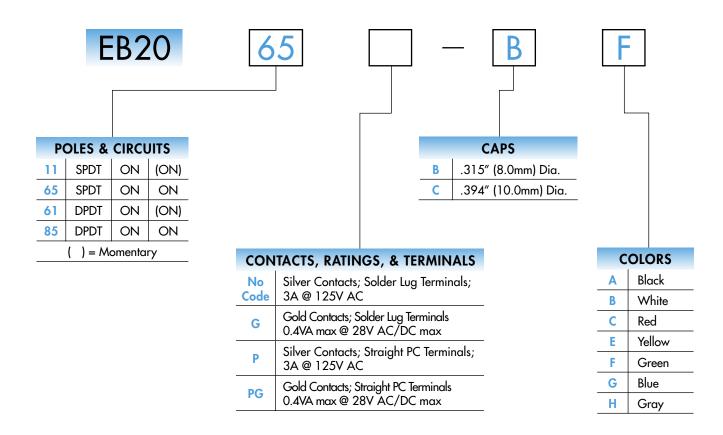
CSA Certified: Single pole solder lug and PC models certified at 3A @ 125V AC; double pole PC models certified

at 3A @ 125V AC; CSA File No. 023535-0-000;

add "/C" to end of part number to order CSA mark on switch.



TYPICAL SWITCH ORDERING EXAMPLE



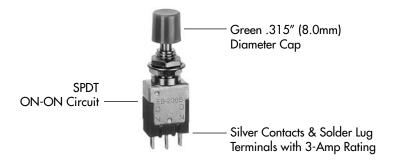
IMPORTANT:



Switches are supplied without UL, C-UL & CSA markings unless specified. Specific models & ratings noted on General Specifications page.

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

EB2065-BF



POLES & CIRCUITS								
		Plunger Position () = Momentary		Connected Terminals		Throw & Switch Schematics		
Pole	Model	Normal Keyway	Down	Normal	Down	Note: Terminal numbers are not actually on the switch.		
SP	EB2011 EB2065	ON ON	(ON) ON	2-3	2-1	SPDT		
DP	EB2061 EB2085	ON ON	(ON) ON	2-3 5-6	2-1 5-4	DPDT 2 (COM) 5 • 1 6 • 4		

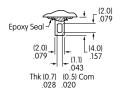
CONTACT MATERIALS, RATINGS, & TERMINALS

No Code	Solder Lug Silver Contacts	Power Level
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Solder Lug **Gold Contacts Logic Level** 0.4VA max @ 28V AC/DC max

Complete explanation of operating range in Supplement section.

3A @ 125V AC



Straight PC **Silver Contacts Power Level** 3A @ 125V AC

Straight PC Gold Contacts PG 0.4VA max @ 28V AC/DC max Logic Level

Complete explanation of operating range in Supplement section.





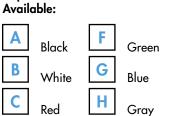


CAPS & COLORS





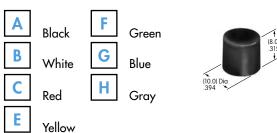
Cap Colors



Yellow







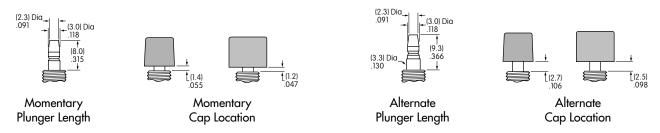


Finish: Glossy

Cap Material: Polycarbonate Finish: Glossy

Plunger Extension

Due to a difference in plunger lengths on the momentary and alternate action models, cap distance from top of bushing varies.

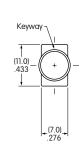


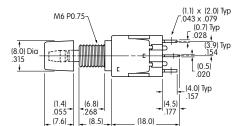
TYPICAL SWITCH DIMENSIONS

Single Pole

Solder Lug





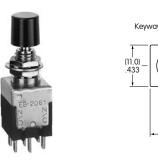


For Momentary Devices

(18.0)

EB2011-BA

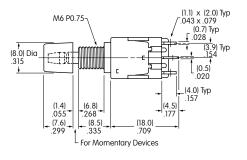
Solder Lug

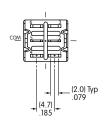


Double Pole

_ (8.5)

.335



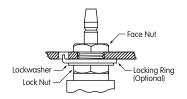


EB2061-BA

HARDWARE

Installation/Assembly

2 AT513M Metric Hexagon Nuts 1 AT509 Internal Tooth Lockwasher



Optional Hardware: AT507M Metric Locking Ring

Note: Cap must be snapped on after the switch is mounted into the panel.

Standard Hardware

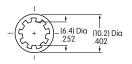
AT513M Metric Hexagon Nut

Material: Brass with Nickel Plating



AT509 Lockwasher

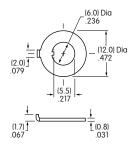
Material: Steel with Zinc/Chromate



Optional Hardware

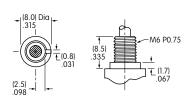
AT507M **Metric Locking Ring**

Material: Steel with Zinc/Chromate



Panel Thicknesses & Panel Cutouts

Metric Bushing



With Standard Hardware

Maximum Effective Panel Thickness: .118" (3.0mm)



With Standard Hardware & Optional Locking Ring

Maximum Effective Panel Thickness: .055" (1.4mm)



Without **Bottom Hex Nut**

Maximum Effective Panel Thickness: .185" (4.7mm)



See Accessories & Hardware section for optional Conical Nuts: AT512M used with cap AT443 and AT512CM used with cap AT442.