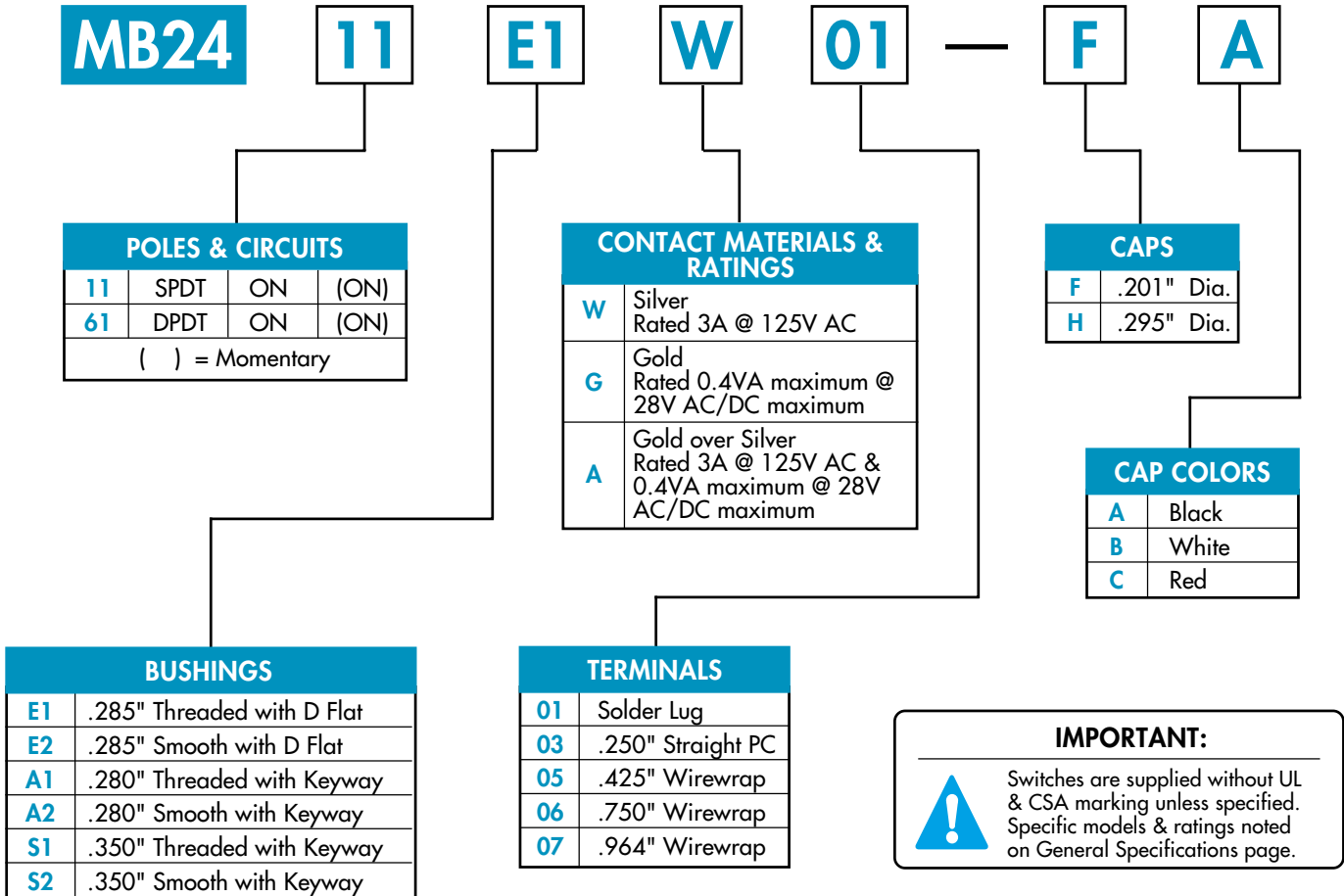
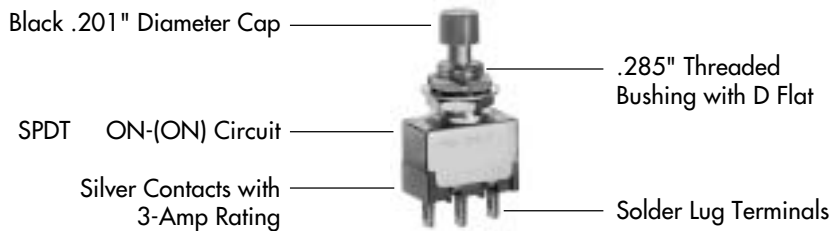


TYPICAL SWITCH ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

MB2411E1W01-FA



GENERAL SPECIFICATIONS

Electrical Capacity (Resistive Load)

- Power Level (code W):** 3A @ 125V AC
 - Logic Level (code G):** 0.4VA maximum @ 28V AC/DC maximum
 - Power/Logic Level (code A):** Combines W & G ratings
- Note: See Supplement Index (page Z1) to find explanation of dual rating & operating range.

Other Ratings

- Contact Resistance:** 20 milliohms maximum for silver; 30 milliohms maximum for gold
- Insulation Resistance:** 1,000 megohms minimum @ 500V DC
- Dielectric Strength:** 1,000V AC minimum between contacts; 1,500V AC minimum between contacts & case
- Mechanical Life:** 200,000 operations minimum
- Electrical Life:** 25,000 operations minimum for silver; 100,000 operations minimum for gold
- Nominal Operating Force:** Single pole 250 grams; double pole 400 grams
- Travel:** 0.6mm (.024") pretravel; 0.4mm (.016") overtravel; 1.0mm (.039") total travel

Materials & Finishes

- Plunger:** Brass with nickel plating
- Bushing:** Brass with nickel plating
- O-ring:** Nitrile butadiene rubber
- Frame:** Stainless steel
- Case:** Glassfiber reinforced polyester (PBT)
- Base:** Diallyl phthalate resin
- Movable Contactor:** Phosphor bronze with silver or gold plating
- Movable Contacts:** Silver alloy (code W); copper with gold plating over nickel plating (code G); or silver alloy with gold plating over nickel plating (code A)
- Stationary Contacts:** Silver with silver plating (code W); copper or brass with gold plating over nickel plating (code G); or silver with gold plating over nickel plating (code A)
- Terminals:** Copper or brass with silver plating; copper or brass with gold plating over nickel plating

Applicable Environment

- Operating Temp Range:** -30°C through +85°C (-22°F through +185°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 & returning in 1 minute; 3 right angled directions for 2 hours
- Shock:** 50g acceleration (tested in 6 right angled directions, with 3 shocks in each direction)
- Sealing:** Dustproof bushing

Installation

- Mounting Torque:** 15kgf/cm (13lb/in) for double nut; 7kgf/cm (6lb/in) for single nut
- Cap Installation Force:** 8.16 kg (18 lbs) maximum permissible
- Soldering Time & Temperature:** 3 seconds @ 350°C or 5 seconds @ 270°C
- Process Seal:** Not available

Standards & Certifications

- Flammability Standards:** UL94V-0 available
- UL Recognized:** All single & double pole models recognized at 3A @ 125V AC or 0.4A @ 28V DC; UL File No. E44145
- CSA Certified:** Single pole models with PC, solder lug, or Wirewrap terminals & double pole models with PC or Wirewrap terminals certified at 3A @ 125V AC or 0.4VA @ 28V AC/DC maximum; CSA File No. LR23535

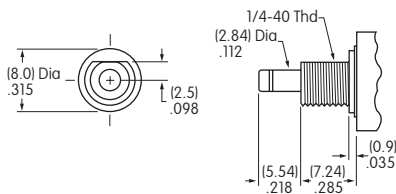
POLES & CIRCUITS

Pole	Model	Plunger Position () = Momentary		Connected Terminals		Throw & Schematics
		Normal	Down	Normal	Down	
						Note: Terminal numbers are not actually on the switch.
SP	MB2411	ON	(ON)	1-3	1-2	SPDT
DP	MB2461	ON	(ON)	1-3 4-6	1-2 4-5	DPDT

BUSHINGS

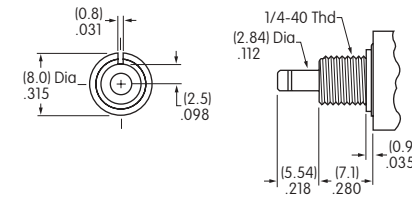
Note: Plunger selection is not required for MB2400 pushbuttons. The plunger can be used with or without a cap.

E1 .285" Threaded with D Flat



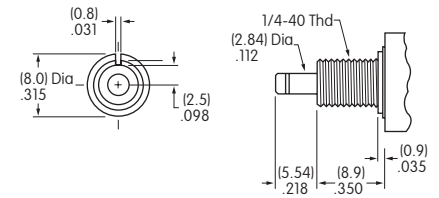
Max. panel thickness with standard hardware: 1.74mm (.068")

A1 .280" Threaded with Keyway



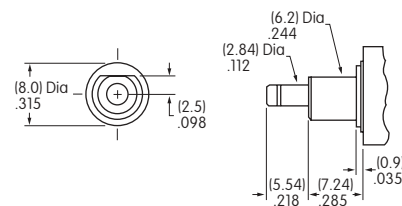
Max. panel thickness with standard hardware: 1.74mm (.068")

S1 .350" Threaded with Keyway

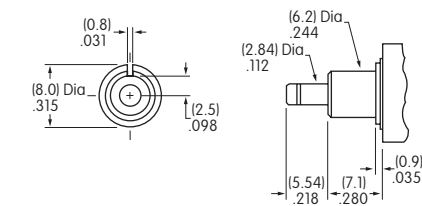


Max. panel thickness with standard hardware: 3.40mm (.134")

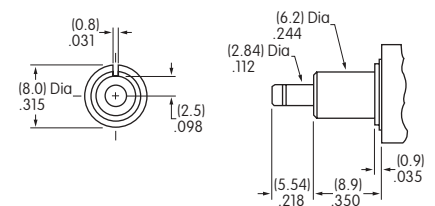
E2 .285" Smooth with D Flat



A2 .280" Smooth with Keyway



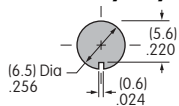
S2 .350" Smooth with Keyway



Panel Cutouts

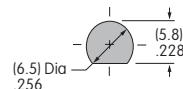
For A1, A2, S1, or S2 Bushing

with Keyway



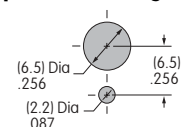
For E1 or E2 Bushing

with D Flat



With

Optional Locking Ring



Standard hardware includes 2 hex nuts and 1 lockwasher.
Hardware is illustrated following the Typical Switch Dimension drawings.

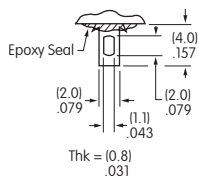
CONTACT MATERIALS & RATINGS

W	Silver over Silver	Power Level	3A @ 125V AC
G	Gold over Brass or Copper	Logic Level	0.4VA maximum @ 28V AC/DC maximum
Note: See Supplement Index (page Z1) to find complete explanation of operating range.			
A	Gold over Silver	Power Level or Logic Level	3A @ 125V AC or 0.4VA maximum @ 28V AC/DC maximum

Note: This dual rated option is suitable when two or more identical switches are used in logic and in power circuits within the same application. See Supplement Index (page Z1) to find complete explanation of dual rating and operating range.

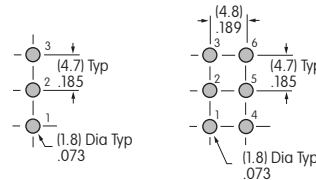
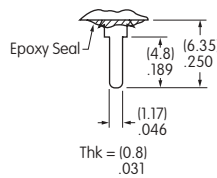
TERMINALS

01 Solder Lug



The .043" X .079" oblong hole accommodates 1 solid 18-gauge wire or 2 solid or stranded 20-gauge wires.

03 .250" Straight PC



Single Pole

Double Pole

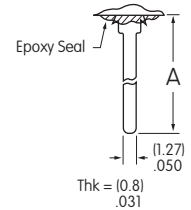
05 .425" (10.8mm) Wirewrap or Extended PC

06 .750" (19.05mm) Wirewrap or Extended PC

07 .964" (24.5mm) Wirewrap or Extended PC

If using as extended PC terminal, refer to the footprints at left.

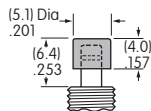
Dimension A = terminal lengths as shown beside code boxes.



CAPS & CAP COLORS

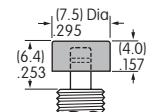
F AT475 .201" Diameter Cap

Material: Polycarbonate
Finish: Glossy



H AT496 .295" Diameter Cap

Material: Polycarbonate
Finish: Glossy



Colors Available:



Black



White



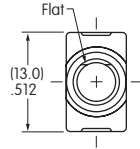
Red

TYPICAL SWITCH DIMENSIONS

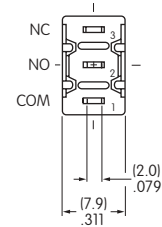
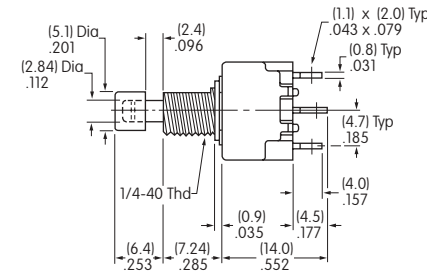
Solder Lug



MB2411E1W01-FA



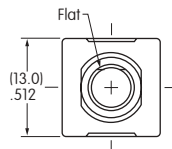
Single Pole



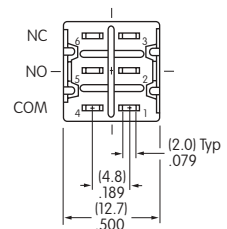
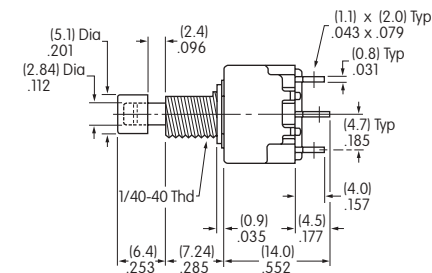
Solder Lug



MB2461E1W01-FA



Double Pole

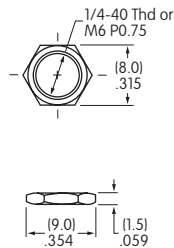


HARDWARE

Standard Hardware

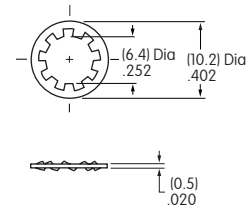
AT513H Inch Threaded Hex Nut
2 included with each switch

Brass, nickel plated



AT509 Lockwasher
1 included with each switch

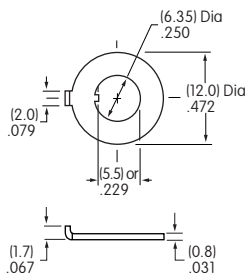
Steel, chromate over zinc plating



Optional Hardware

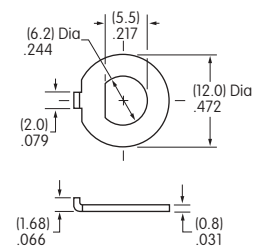
AT507H Locking Ring for A1 or S1 Bushing

Steel, chromate over zinc plating



AT515 Locking Ring for E1 Bushing

Steel, chromate over zinc plating



Decorative Hardware

Dimensioned illustrations of this hardware are in the Accessories & Hardware section; see page Y1.

AT512 Conical Nut



AT532 Dress Nut



AT533 Dress Nut



AT501 Knurled Face Nut

