General Specifications

Electrical Capacity (Resistive Load)

Power Level (silver): 3A @ 125V AC
Logic Level (gold): 0.4VA maximum @ 28V AC/DC maximum (Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)
Logic/Power Level: Combines silver & gold ratings
(gold over silver) Note: Find additional explanation of dual rating & operating range in Supplement section.

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 for 1 minute minimum;
1,500V AC minimum between contacts & case for 1 minute minimum
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 2.45N; double pole 3.92N
Travel Pretravel .024" (0.6mm); Overtravel .016" (0.4mm); Total Travel .039" (1.0mm)

Materials & Finishes

Plunger: Brass with nickel plating
Bushing: Brass with nickel plating
Frame: Stainless steel
Case: Polybutylene terephthalate (PBT) (UL94V-0)
Base: Diallyl phthalate resin (UL94V-0)
Movable Contactor: Phosphor bronze with silver or gold plating
Movable Contacts: Silver alloy (code W); copper with gold plating (code G); or silver alloy with gold plating (code A)
Stationary Contacts: Silver alloy with silver plating (code W); copper or brass with gold plating (code G); or silver with gold plating (code A)
Terminals: Copper or brass with silver plating; copper or brass with gold plating

Environmental Data

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 (490m/s^2) acceleration (tested in 6 right angled directions, with 3 shocks in each direction)

Installation

Mounting Torque: 1.5Nm (13.0 lb•in) for double nut; 0.7Nm (6.0 lb•in) for single nut
Cap Installation Force: 80.0N (18.0 lbf) maximum downward force on actuator
Soldering: Wave Soldering (PC version): 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.
See Cleaning Specifications in Supplement section.

Standards & Certifications

Flammability Standards: UL94V-0 case & base
UL: **File No. E44145 - Recognized only when ordered with marking on switch.**
Add "/U" or "/CUL" before dash in part number to order UL recognized switch.
All single and double pole models recognized at 3A @ 125V AC or 0.4VA max. @ 28V DC max.
CSA: **File No. 023535_0_000 - Certified only when ordered with marking on switch.**
Add "/C" before dash in part number to order CSA certified switch.
Single pole models with PC, solder lug, or Wirewrap terminals & double pole with PC or Wirewrap terminals certified at 3A @ 125V AC or 0.4VA @ 28V maximum.

Distinctive Characteristics

Snap-acting mechanism gives smooth actuation, short stroke, light touch, and audible feedback. This mechanism also provides long mechanical life.

High torque bushing construction prevents rotation or separation from frame during installation.

Antijamming design protects contacts from damage due to excessive downward force on the actuator.

Compatible companions with M series toggles. Body, bushing, and footprint dimensions ideal for mounting MB2400 pushbuttons and M toggles next to one another.

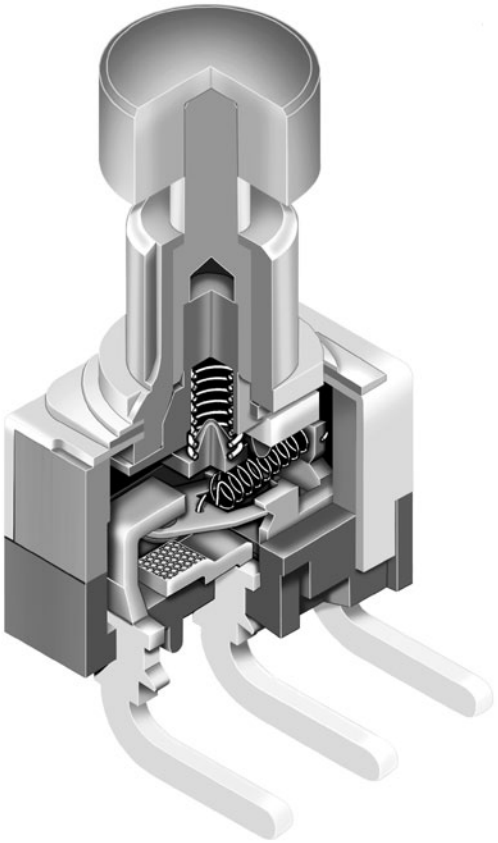
Stainless steel frame resists corrosion.

Longer center solder lug terminal simplifies wiring and soldering.

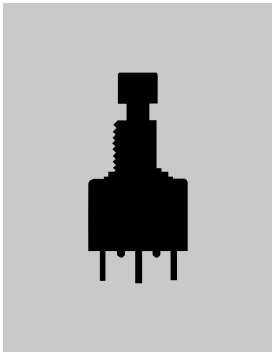
Silver contacts of specially composed alloy for hardness.

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

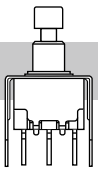
Prominent external insulating barriers increase insulation resistance and dielectric strength.



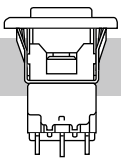
Actual Size



Bushing Mount Page C98



Bracket PC Mount Page C102



Snap-in Mount Page C108

TYPICAL SWITCH ORDERING EXAMPLE

MB24 [11] [E1] [W] [01] — [F] [A]

Poles & Circuits

11	SPDT	ON	(ON)
61	DPDT	ON	(ON)

( ) = Momentary

Bushings

E1	.285″ (7.24mm) Threaded with D Flat
E2	.285″ (7.24mm) Smooth with D Flat
A1	.280″ (7.1mm) Threaded with Keyway
A2	.280″ (7.1mm) Smooth with Keyway
S1	.350″ (8.9mm) Threaded with Keyway
S2	.350″ (8.9mm) Smooth with Keyway

Contact Materials & Ratings

W	Silver Rated 3A @ 125V AC
G	Gold Rated 0.4VA max @ 28V AC/DC max
A	Gold over Silver Rated 3A @ 125V AC & 0.4VA max @ 28V AC/DC max

Terminals

01	Solder Lug *
03	.250″ (6.35mm) Straight PC
05	.425″ (10.8mm) Wirewrap
06	.750″ (19.05mm) Wirewrap
07	.964″ (24.5mm) Wirewrap

Caps

F	.201″ (5.1mm) Diameter
H	.295″ (7.5mm) Diameter

Cap Colors

A	Black
B	White
C	Red

* Wire harness & cable assemblies offered only in Americas

IMPORTANT:

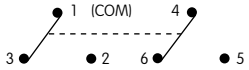
Switches are supplied without UL, cULus & CSA marking unless specified. **UL, cULus & CSA recognized only when ordered with marking on the switch.** Specific models, ratings, & ordering instructions are noted on General Specifications page.

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

MB2411E1W01-FA

Series MB2400

POLES & CIRCUITS

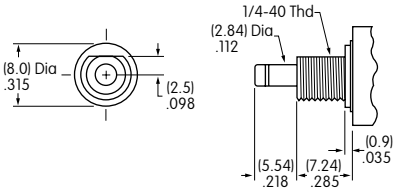
Pole	Model	Plunger Position ( ) = Momentary: Normal (Keyway)	Plunger Position: Down	Connected Terminals: Normal (Keyway)	Connected Terminals: Down	Throw & Switch Schematics
SP	**MB2411**	ON	(ON)	1-3	1-2	SPDT 
DP	**MB2461**	ON	(ON)	1-3 4-6	1-2 4-5	DPDT 

Note: Terminal numbers are not actually on the switch.

BUSHINGS

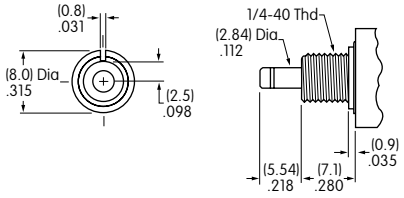
Note: Plunger selection is not required for MB2400 pushbuttons. The plunger can be used with or without a cap.

E1 .285" (7.24mm) Threaded with D Flat



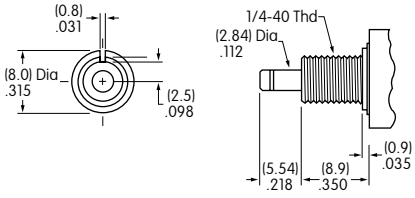
Maximum Panel Thickness with Standard Hardware: .068" (1.74mm)

A1 .280" (7.1mm) Threaded with Keyway



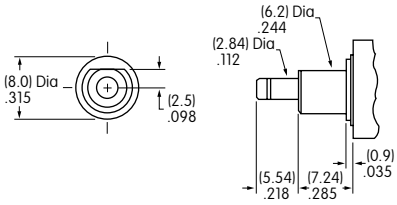
Maximum Panel Thickness with Standard Hardware: .068" (1.74mm)

S1 .350" (8.9mm) Threaded with Keyway

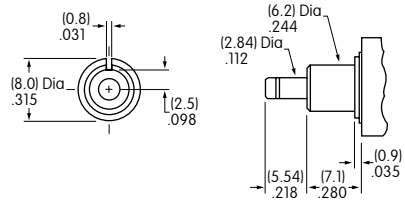


Maximum Panel Thickness with Standard Hardware: .134" (3.40mm)

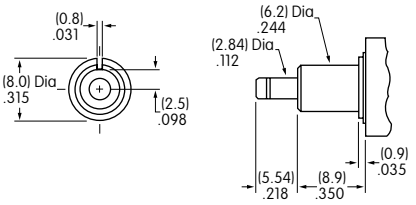
E2 .285" (7.24mm) Smooth with D Flat



A2 .280" (7.1mm) Smooth with Keyway

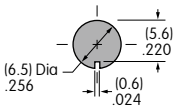


S2 .350" (8.9mm) Smooth with Keyway

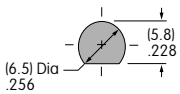


Panel Cutouts

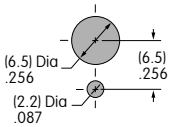
For A1, A2, S1, or S2 Bushing with Keyway



For E1 or E2 Bushing with D Flat



With Optional Locking Ring



Standard hardware includes 2 hex nuts & 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

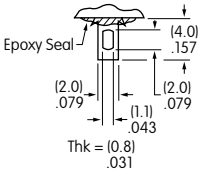
Note: Complete explanation of operating range in Supplement section.

A	Gold over Silver	Power Level or Logic Level	3A @ 125V AC or 0.4VA maximum @ 28V AC/DC maximum

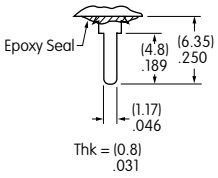
Note: This dual rated option is suitable when two or more identical switches are used in logic and in power circuits within the same application. See Supplement section for complete explanation of dual rating and operating range.

TERMINALS

01 Solder Lug



03 .250" (6.35mm) Straight PC

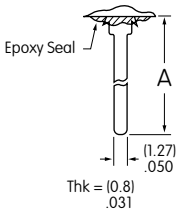


Wirewrap or Extended PC

05 .425" (10.8mm)

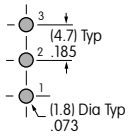
06 .750" (19.05mm)

07 .964" (24.5mm)

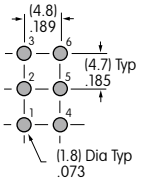


Refer to footprints if using as extended PC terminal.

Dimension A = terminal lengths as shown beside the code boxes at left.



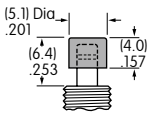
Single Pole



Double Pole

CAPS & CAP COLORS

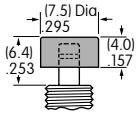
F AT475 .201" (5.1mm) Diameter Cap



Material: Polyamide

Finish: Glossy

H AT496 .295" (7.5mm) Diameter Cap



Material: Polyamide

Finish: Glossy

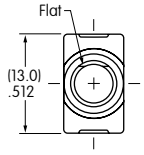
Cap Colors Available: A Black B White C Red

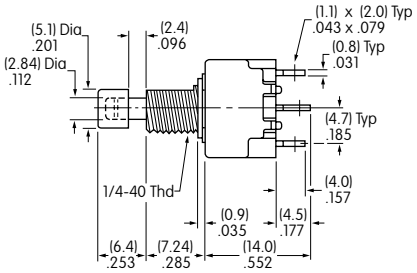
Series MB2400

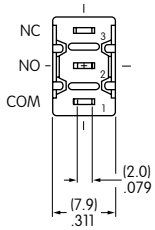
TYPICAL SWITCH DIMENSIONS

Single Pole

Solder Lug



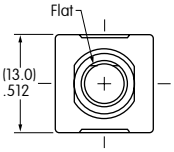


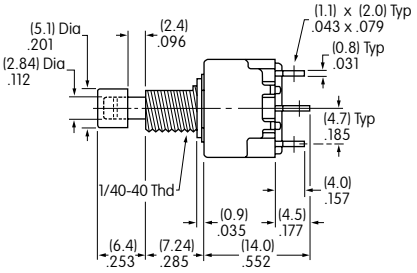


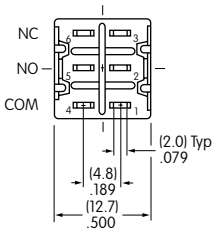
MB2411E1W01-FA

Double Pole

Solder Lug







MB2461E1W01-FA

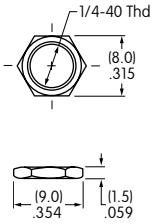
HARDWARE

Standard Hardware

AT513H Inch Threaded Hexagon Nut

2 included with each switch

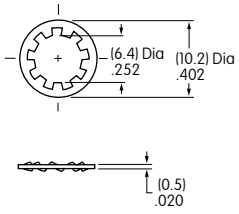
Material:
Brass with Nickel Plating



AT509 Lockwasher

1 included with each switch

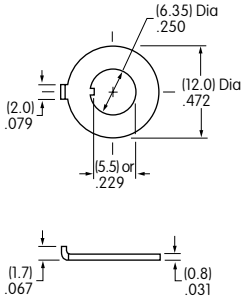
Material:
Steel with Zinc/Chromate



Optional Hardware

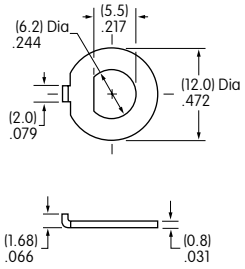
AT507H Locking Ring for A1 or S1 Bushing

Material:
Steel with Zinc/Chromate



AT515 Locking Ring for E1 Bushing

Material:
Steel with Zinc/Chromate



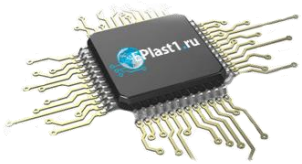
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.