

General Specifications

Electrical Capacity (Resistive Load)

Power Level: 6A @ 125V AC & 3A @ 250V AC or 6A @ 30V DC

Other Ratings

Contact Resistance: 10 milliohms maximum for solder lug & screw terminal models
30 milliohms maximum for wire lead terminal models

Insulation Resistance: 200 megohms minimum @ 500V DC

Dielectric Strength: 1,500V AC minimum for 1 minute minimum

Mechanical Life: 30,000 operations minimum

Electrical Life: 15,000 operations minimum

Contact Timing: Break before make

Total Travel: Alternate Action .177" (4.5mm); Momentary Action .110" (2.8mm)

Materials & Finishes

Plunger: Brass with nickel plating

Bushing & Outer Case: Fiberglass reinforced polyamide (UL94V-0 outer case)

Inner Case: Melamine

Inner Sealing Ring: Silicone rubber

Outer Sealing Ring: Nitrile butadiene rubber

Movable Contactor: Copper with silver plating

Movable Contacts: Silver alloy with silver plating

Stationary Contacts: Silver alloy with silver plating

Terminals: Brass with tin plating

Wire Lead Covers: Heat resistant polyvinyl chloride (Leads are AWG 16.)

Environmental Data

Operating Temp Range: -30°C through +70°C (-22°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 & 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

Mounting Torque: 1.5Nm (13 lb•in)

Soldering Time & Temp: Manual Soldering: See Profile A in Supplement section.

Standards & Certifications

Flammability Standards: UL94V-0 outer case

Wiring Material Standards: UL AWM 1015 Recognized at Flammability VW-1;
Temperature Range -20°C ~ +105°C; Maximum Load 600V; AWG 16
CSA TEW 105 Certified at Temperature Range -20°C ~ +105° C;
Maximum Load 600V

Distinctive Characteristics

Single unit construction of the bushing and case gives added protection from environmental elements.

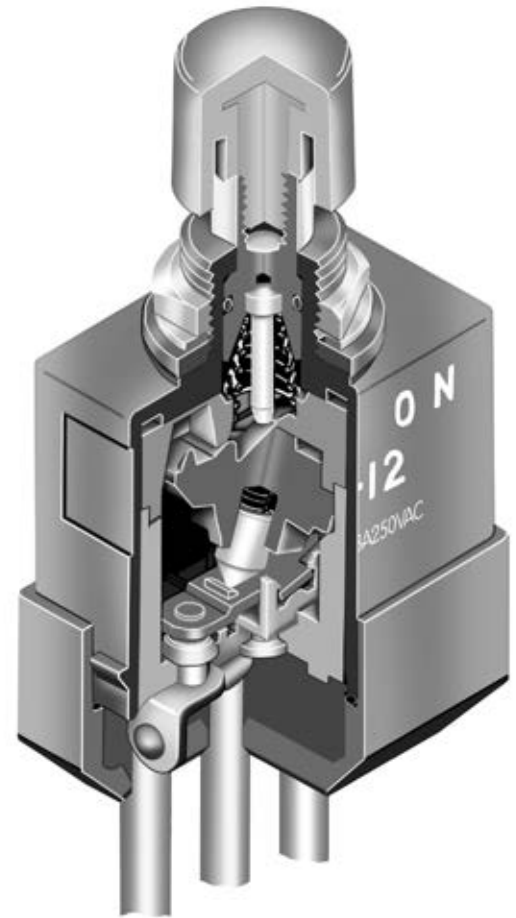
Specially designed contact mechanism for breaking light welds.

Minimal contact bounce is achieved with specially designed interlocked switching mechanism.

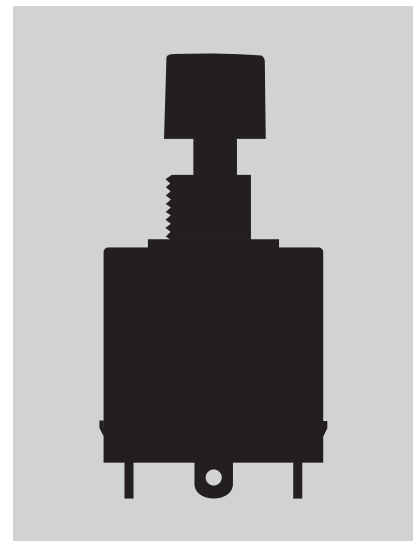
Outer housing of heat resistant resin meets UL 94V-0 flammability standard and provides high arc and tracking resistance.

Solder lug and screw terminal models meet IP67 of IEC60529 Standards at front panel (dust tight and water protected for temporary immersion). Behind panel standard is IP60 (dust tight but not water protected).

Wire lead models conform fully to IP67 of IEC60529 Standards at front and behind panel (dust tight and water protected for temporary immersion). These models are epoxy sealed at the switch base and covered by an outer case for further protection from dust and water (not operable under water).



Actual Size



- Supplement
- Accessories
- Indicators
- Touch
- Tilt
- Tactiles
- Slides
- Rotaries
- Keylocks
- Programmable
- Illuminated PB
- Pushbuttons
- Rockers
- Toggles

TYPICAL SWITCH ORDERING EXAMPLE

WB

1

2

S

D

A

Poles

1 SPDT

Circuits

2 ON ON
5 ON (ON)

() = Momentary

Terminals

S Solder Lug
T Screw Lug
L Wire Lead

Caps

D .520" (13.2mm) Dia.
E .748" (19.0mm) Dia.

Cap Colors

A Black
B White
C Red
***D** Amber
***E** Yellow
F Green
***G** Blue
***H** Gray

* Not available with cap code E

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

WB12S-DA

SPDT
ON-ON Circuit



Black .520" (13.2mm) Diameter Cap

Solder Lug Terminals

POLES & CIRCUITS

| | | Actuator Position () = Momentary | | Connected Terminals | | Throw & Schematics |
|------|-------------|-----------------------------------|----------|---------------------|----------|--|
| Pole | Model | Normal | Down | Normal | Down | Note: Terminal numbers are not actually on wire lead models. SPDT |
| SP | WB12 | ON | ON | 1-1b | 1-1a | |
| SP | WB15 | ON | ON (ON) | 1-1b | 1-1a | |

STANDARD WIRE COLOR SCHEME

Wire leads are covered with heat resistant vinyl in accordance to UL 1015 and CSA TEW 105 Standards for Appliance Wiring Material (AWM).

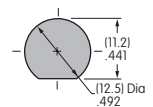
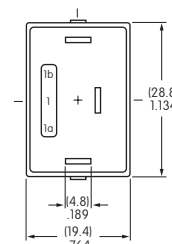
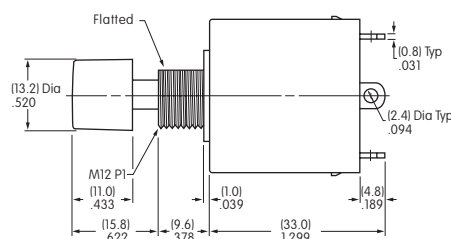
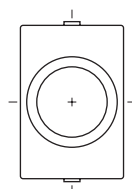
| Terminal Numbers & Wire Colors | | | |
|--------------------------------|-------|-------|-----|
| Models | 1a | 1 | 1b |
| WB12L, WB15L | White | Black | Red |

TYPICAL SWITCH DIMENSIONS

Solder Lug



WB15S-DA



Panel Thickness
.157" (4.0mm)

TYPICAL SWITCH DIMENSIONS

Screw Lug

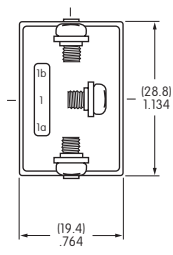
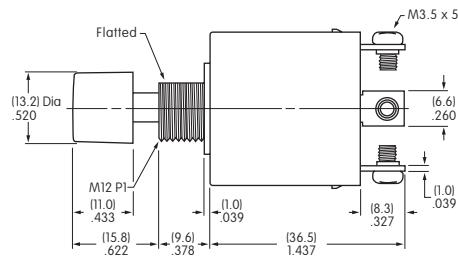
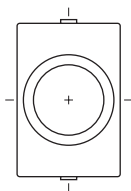


WB12T-DA

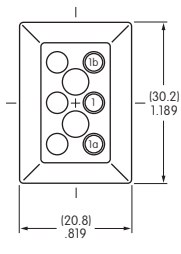
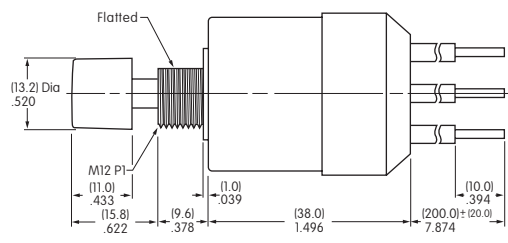
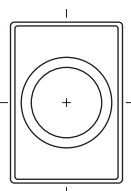
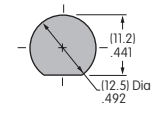
Wire Lead



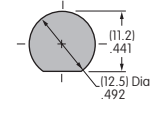
WB12L-DA



Panel Thickness
.157" (4.0mm)



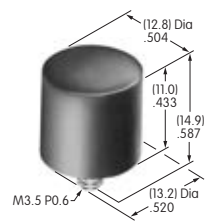
Panel Thickness
.157" (4.0mm)



CAPS & CAP COLORS

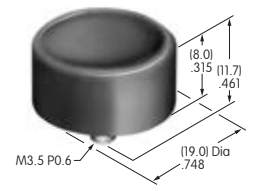
D AT414
.520" (13.2mm) Diameter

Colors Available:
A B C D E F G H
Material: PBT Finish: Glossy



E AT412
.748" (19.0mm) Diameter

Colors Available:
A B C F
Material: Polystyrene Finish: Glossy

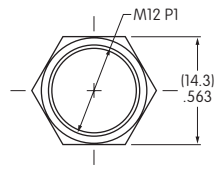


- Cap Color Codes: **A** Black **B** White **C** Red **D** Amber **E** Yellow **F** Green **G** Blue **H** Gray

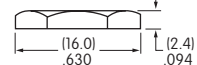
STANDARD HARDWARE

AT503M
Hex Face Nut

Material:
Brass with
chrome plating

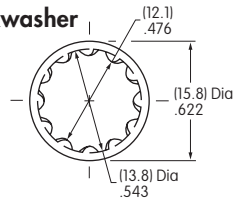


1 supplied
with each
switch



AT508
Internal Tooth Lockwasher

Material:
Steel with
zinc/chromate

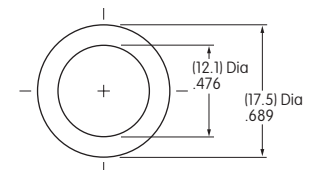


1 supplied
with each
switch

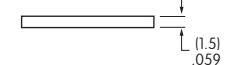


AT401P
O-ring

Material:
Nitrile
butadiene
rubber



1 supplied
with each
switch



Toggles
Rockers
Pushbuttons
Illuminated PB
Programmable
Keylocks
Rotaries
Slides
Tactiles
Tilt
Touch
Indicators
Accessories
Supplement

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

NKK Switches:

[WB12S-DC](#) [WB12S-DA](#) [WB12L-DA-RO](#) [WB12L-EC](#) [WB15T-EC](#) [WB15T-DC](#) [WB12L-EA](#) [WB12T-EA](#) [WB15L-EF](#)
[WB15S-DB](#) [WB15L-DC](#) [WB15L-EA](#) [WB12L-EF](#) [WB15S-EA](#) [WB12S-EC](#) [WB12L-DC](#) [WB15L-EC](#) [WB15L-DF](#)
[WB15T-DG](#) [WB12L-DA](#) [WB15T-EA](#) [WB12T-DA](#) [WB15T-DA](#) [WB15S-DC](#) [WB15S-EC](#) [WB15L-DA](#) [WB15T-EF](#)
[WB12T-DC](#) [WB15S-DA](#)