

# Distinctive Characteristics

Compact front panel design with 9mm square or round bezel.

Rear panel threaded mounting. Behind panel depth of less than one inch. 8mm body diameter fits common size panel cutout.

Latchdown feature gives indication of circuit status. Audible and tactile feedback with smooth and responsive operation.

Dual, sliding contacts with self-cleaning action provide contact stability, high reliability, and increased operating life.

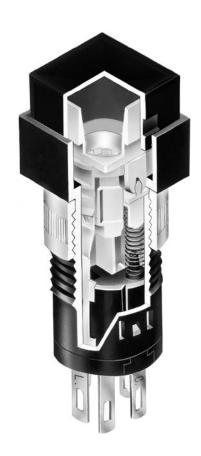
Solder lug terminals have spacing of .100" (2.54mm) for choice of mounting.

Longer normally closed terminal facilitates wiring and soldering.

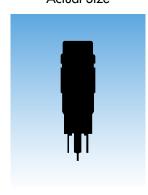
Molded-in terminals lock out flux, dust, and other contaminants.

Illuminated models available and shown in the Illuminated Pushbutton section.

Matching indicators available and shown at the end of Section M.



Actual Size





# General Specifications

# **Electrical Capacity (Resistive Load)**

Power Level (code W): 0.1A maximum @ 30V AC/DC

Other Ratings

50 milliohms maximum **Contact Resistance:** 

100 megohms minimum @ 500V DC Insulation Resistance: 500V AC minimum for 1 minute minimum **Dielectric Strength:** 

**Mechanical Life:** 100,000 operations minimum **Electrical Life:** 50,000 operations minimum

**Nominal Operating Force:** 3.43N

> **Contact Timing:** Nonshorting (break before make)

> > Travel: Pretravel .087" (2.2mm); Overtravel .031" (0.8mm); Total Travel .118" (3.0mm)

**Materials & Finishes** 

Glass fiber reinforced polyamide Housing: Base:

Glass fiber reinforced polyamide **Movable Contact:** Phosphor bronze with silver plating Phosphor bronze with silver plating **Stationary Contacts:** Terminals: Phosphor bronze with silver plating

**Environmental Data** 

-25°C through +70°C (-13°F through +158°F) **Operating Temp Range:** 

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

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

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

Installation

**Mounting Torque:** 0.49Nm (4.34 lb·in) maximum for round mounting nut 9.8N (2.2 lbf) maximum downward force on cap

Cap Installation Force: **Soldering Time & Temperature:** Manual Soldering: See Profile A in Supplement section.

**Standards & Certifications** 

UL & C-UL All models recognized at 0.1A @ 30V AC/DC;

UL File No. WOYR2.E44145; Recognized:

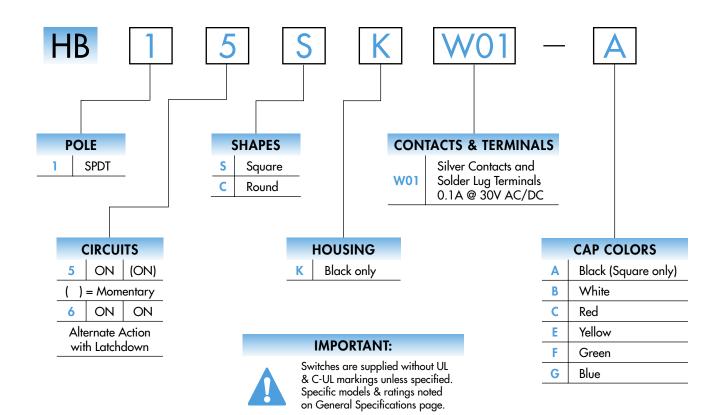
add "/U" to end of part number to order UL mark on switch.

C-UL File No. WOYR8.E44145;

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



# TYPICAL SWITCH ORDERING EXAMPLE



## **DESCRIPTION FOR TYPICAL ORDERING EXAMPLE**

# **HB15SKW01-A**



POLES & CIRCUITS						
		Plunger Position ( ) = Momentary		Connected Terminals		Throw & Schematic
Pole	Model	Normal	Down	Normal	Down	Note: Switch is marked with NO, NC, C, L.
SP	HB15 *HB16	ON ON	(ON) ON	1-3	1-2	SPDT 3

<sup>\*</sup> When in latchdown position for the alternate circuit, cap position is .051" (1.3mm) above the built-in bezel.

# **SHAPES & PANEL CUTOUT**



.354" (9.0mm) Square



.354" (9.0mm) Round



Recommended Panel Thickness: .020 ~ .197"  $(0.5 \sim 5.0 \text{mm})$ 



Socket wrench AT110 may be used for mounting. Overtightening the mounting nut The bezel is an integral part of the switch body. AT073 may damage the switch housing.

# **HOUSING**

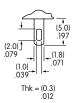


Housing available in black only.

# **CONTACT MATERIALS, RATINGS, & TERMINALS**

W01

**Silver Contacts** 



**Power Level** 

0.1A maximum @ 30V AC/DC

#### **PCB Mounting**

Solder lug terminals are spaced .100" x .200" (2.54mm x 5.08mm). This enables PCB mounting which can be accomplished by elongating PC board holes to .080" (2.03mm).

# **CAP TYPES & COLORS**

AT4035

Square

**Cap Colors Available:** 

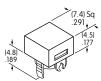


Black (Square only)

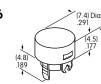


Red

Green



AT4036 Round



White



Yellow

Blue

Material: Polycarbonate

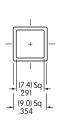
Finish: Glossy

# TYPICAL SWITCH DIMENSIONS

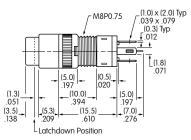
## Square

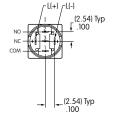


HB15SKW01-C



Single Pole





#### Round



HB16CKW01-C

Single Pole

