

Distinctive Characteristics

Carefully designed light diffusion and filtering system produces bright, full surface illumination with front panel relamping.

Spot illumination available in single and bicolor LEDs.

Choice of super bright LEDs in white, green, and blue in addition to standard or bright red, amber, and green LEDs.

Stainless steel clips provide secure mounting with a wide range of panel thicknesses.

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

Snap-action contact mechanism gives long electrical life and sensitivity of actuation.

Combination solder lug and .110" quick connect terminals are epoxy sealed to prevent entry of flux, dust, and other contaminants.

Panel sealed model meets IP65 of IEC60529 specifications (similar to NEMA 4 & 13).

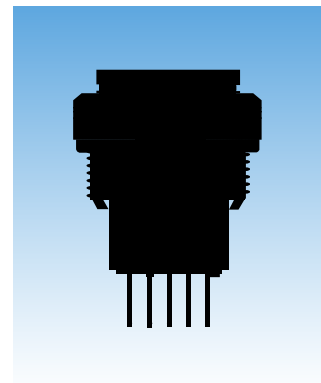
Compact switch design minimizes behind panel depth.

Nonilluminated models available and shown in the Pushbutton section.

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



Actual Size



General Specifications

Electrical Capacity (Resistive Load)

Power Level (silver): 3A @ 125V AC or 3A @ 250V AC or 3A @ 30V DC
Logic Level (gold): 0.4VA maximum @ 28V AC/DC maximum
 (Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)
 Note: Find additional explanation of operating range in Supplement section.

Other Ratings

Contact Resistance: 50 milliohms maximum for silver; 100 milliohms maximum for gold
Insulation Resistance: 200 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: 1,000,000 operations minimum for momentary circuit
 200,000 operations minimum for maintained circuit
Electrical Life: 100,000 operations minimum
Nominal Operating Force: 5.39N
Contact Timing: Nonshorting (break-before-make)
Travel: Momentary: Pretravel .059" (1.5mm); Overtravel .059" (1.5mm); Total Travel .118" (3.0mm)
 Maintained: Pretravel .087" (2.2mm); Overtravel .031" (0.8mm); Total Travel .118" (3.0mm)

Materials & Finishes

Housing: Glass fiber reinforced polyamide (UL94V-0)
O-ring: Nitrile butadiene rubber
Inner Seal: Silicone rubber
Movable Contact: Silver alloy or copper with gold plating
Stationary Contacts: Silver alloy or copper with gold plating
Base: Liquid crystal polymer (UL94V-0)
Switch Terminals: Phosphor bronze with silver or gold plating
Lamp Terminals: Brass with silver plating

Environmental Data

Operating Temp Range: -25°C through +50°C (-13°F through +122°F)
 Note: When used with a polyvinyl chloride splash cover, the lowest limit is 0°C (32°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)
Sealing: IP65 of IEC60529 standard (similar to NEMA 4 & 13)

Installation

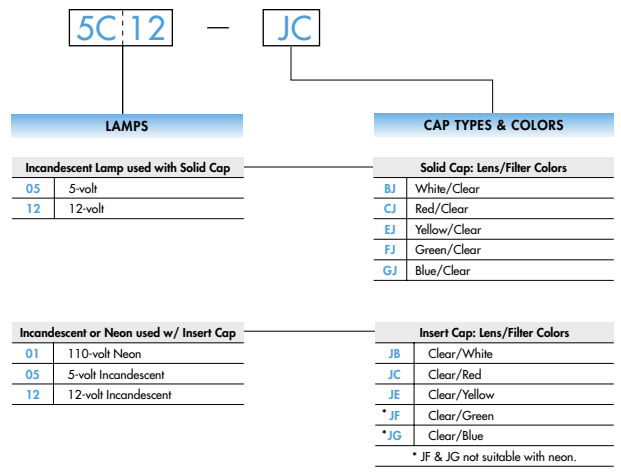
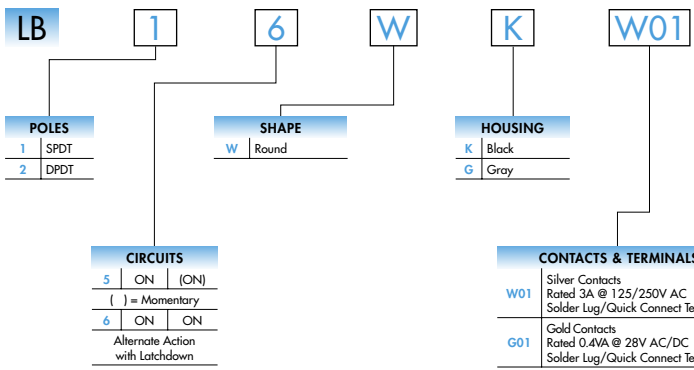
Mounting Torque: 1.96Nm (17.35 lb·in) maximum
Cap Installation Force: 3.92N maximum downward force on cap
Quick Connect Force: 52.95N maximum downward force on connector
Soldering Time & Temperature: Manual Soldering: See Profile A in Supplement section.

Standards & Certifications

Flammability Standards: UL94V-0 housing & base
UL & C-UL Recognized: All models recognized at 3A @ 125V or 250V AC or 0.4VA @ 28V AC/DC maximum;
 UL File No. WOYR2.E44145; 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.
CSA Certified: All models certified at 3A @ 125V or 250V AC or 0.4VA @ 28V AC/DC maximum;
 CSA File Nos. 023535-0-000; add "/C" to end of part number to order CSA mark on switch.



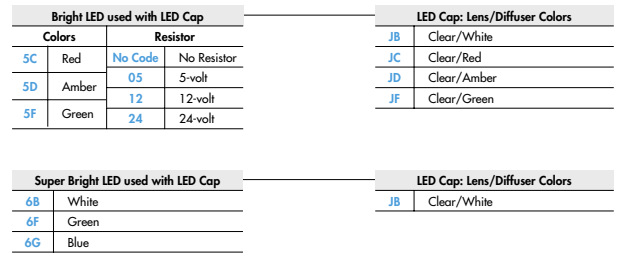
TYPICAL SWITCH ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE
LB16WKW01-5C12-JC



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



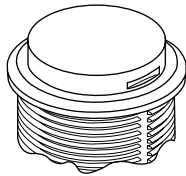
POLES & CIRCUITS

Pole	Model	Plunger Position () = Momentary		Connected Terminals		Throw & Switch/Lamp Schematics
		Normal	Down	Normal	Down	
SP	LB15 *LB16	ON ON	(ON) ON	1-3	1-2	Notes: Switch is marked with NC, NO, COM, L+, L-. Lamp circuit is isolated and requires external power source.
DP	LB25 *LB26	ON ON	(ON) ON	1-3 4-6	1-2 4-5	

* When in latchdown position for the alternate circuit, cap position is .039" (1.0mm) above the built-in bezel.

SHAPE & PANEL CUTOUT

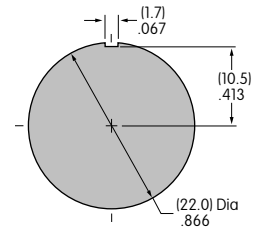
W .866" (22.0mm)
Round



Recommended Panel Thickness:
.039" ~ .157" (1.0mm ~ 4.0mm)

Recommended Panel Thickness with Splash Cover:
.039" ~ .138" (1.0mm ~ 3.5mm)

Overtightening the mounting nut AT074 may damage the switch housing.



HOUSING

Housing Colors Available:

K Black

G Gray

CONTACT MATERIALS, RATINGS & TERMINALS

W01 Silver Contacts

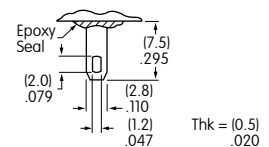
Power Level
3A @ 125V AC & 250V AC

Solder Lug/Quick Connect

G01 Gold Contacts

Logic Level
0.4VA max. @ 28V AC/DC max.

Optional PCB adaptors AT711 & AT712 available; illustrated in previous snap-in subsection.



Complete explanation of operating range in Supplement section.

INCANDESCENT & NEON LAMP CODES & SPECIFICATIONS

AT607 & AT607N



T-1 Bi-pin

		05	12	01 *
	AT607 Incandescent 5-volt or 12-volt; AT607N Neon 110-volt			
Voltage	V	5V AC	12V AC	110V AC
Current	I	115mA	60mA	1.5mA
Endurance	Avg. Hours	7,000		10,000
Ambient Temp. Range		-25°C ~ +50°C		

The electrical specifications shown are determined at a basic temperature of 25°C. Lamp circuit is isolated and requires external power source.

* Recommended Resistors for Neon:
33K ohms for 110V AC;
100K ohms for 220V AC

LED COLORS & SPECIFICATIONS


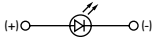
The electrical specifications shown are determined at a basic temperature of 25°C. LED circuit is isolated and requires external power source. Polarity marks are on the switch.

If the source voltage exceeds the rated voltage, a ballast resistor is required.


The resistor value can be calculated by using the formula in the Supplement section.

Additional lamp detail is shown in the Accessories & Hardware section.

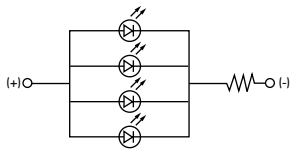
Bright LED without Resistor

AT635 LEDs are colored in OFF state.   T-1 1/2 Bi-pin	Red	Amber	Green	No Code No Resistor				
	Color Codes	5C	5D	5F	Red	Amber	Green	
	Forward Peak Current				I_{FM}	30mA	30mA	30mA
	Continuous Forward Current				I_F	20mA	20mA	20mA
	Forward Voltage				V_F	1.9V	2.0V	2.1V
	Reverse Peak Voltage				V_{RM}	5V	5V	5V
	Current Reduction Rate Above 25°C				ΔI_F	0.42mA/°C		
	Ambient Temperature Range				-25° ~ +50°C			

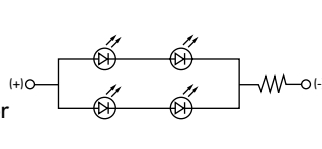
Bright LED with Resistor

AT627 with Resistor  T-1 Bi-pin	Red	Amber	Green	Resistor Codes				
	Color Codes:	5C	5D	5F	05	12	24	
	Forward Peak Current				I_{FM}	—	—	—
	Continuous Forward Current				I_F	52mA	26mA	13mA
	Forward Voltage				V_F	5V	12V	24V
	Reverse Peak Voltage				V_{RM}	4V	8V	16V
	Current Reduction Rate Above 25°C				ΔI_F	0.50mA/°C		
	Ambient Temperature Range				-25° ~ +50°C			

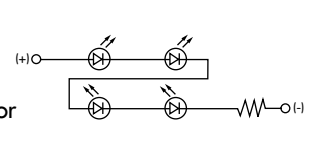
AT627
5-volt
4-element
with Resistor






AT627
12-volt
4-element
with Resistor



AT627
24-volt
4-element
with Resistor



Super Bright Single Element LED

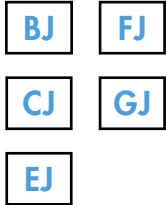
AT625G Blue AT631B White AT632F Green   T-1 Bi-pin				6B	6F	6G		
				Color	White	Green	Blue	
	Forward Peak Current				I_{FM}	30mA	30mA	30mA
	Continuous Forward Current				I_F	20mA	20mA	20mA
	Forward Voltage				V_F	3.6V	3.5V	3.6V
	Reverse Peak Voltage				V_{RM}	5V	5V	5V
	Current Reduction Rate Above 25°C				ΔI_F	0.50mA/°C		
	Ambient Temperature Range				-25° ~ +50°C			

CAP TYPES & COLOR COMBINATIONS

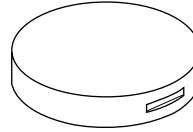
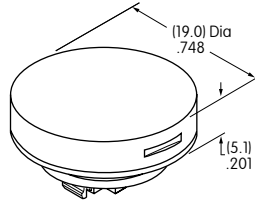
Color Codes: B White C Red D Amber E Yellow F Green G Blue J Clear

Solid Cap for Incandescent Lamp

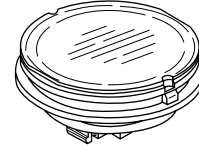
Lens/Filter
Colors Available:



AT4054



Translucent
Colored Lens



Transparent
Clear Filter

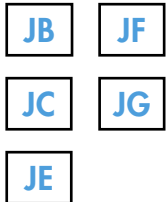


Lamp
AT607

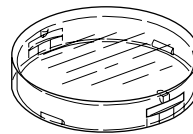
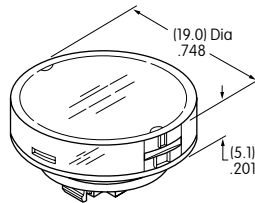
Material: Polycarbonate Finish: Glossy

Insert Cap for Incandescent or Neon Lamp

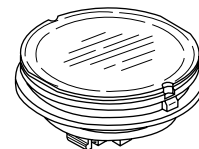
Lens/Filter
Colors Available:



AT4055



Transparent
Clear Lens



Translucent
Colored Filter



Lamp
AT607



Lamp
AT607N

JF and JG not suitable
with neon lamp.

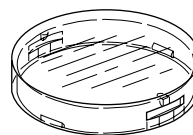
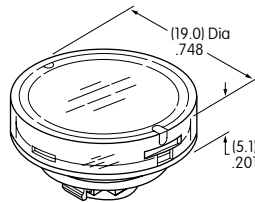
Material: Polycarbonate Finish: Glossy

Cap for Bright LED without Resistor

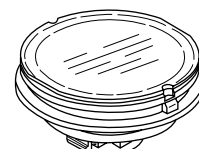
Lens/Diffuser
Colors Available:



AT4179



Transparent
Clear Lens



Translucent
Colored Diffuser



Bright LED
AT635

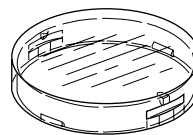
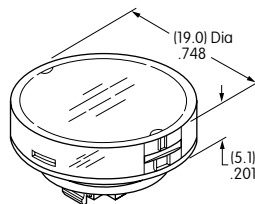
Material: Polycarbonate Finish: Glossy

Cap for Bright LED with Resistor

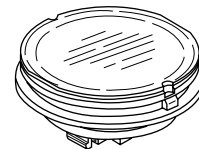
Lens/Diffuser
Colors Available:



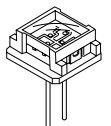
AT4165



Transparent
Clear Lens



Translucent
Colored Diffuser



Bright LED
AT627

Material: Polycarbonate Finish: Glossy

CAP TYPES & COLOR COMBINATIONS

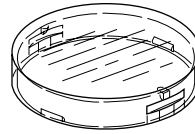
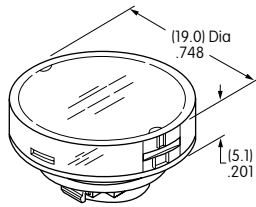
Cap for Super Bright LEDs

JB

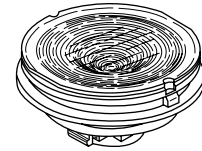
**Clear Lens
White Diffuser**

Material:
Polycarbonate
Finish: Glossy

AT4131



Transparent
Clear Lens



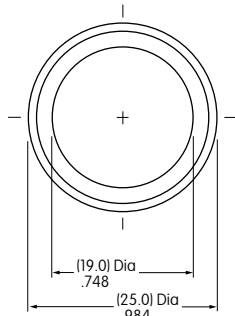
Translucent
Colored Diffuser



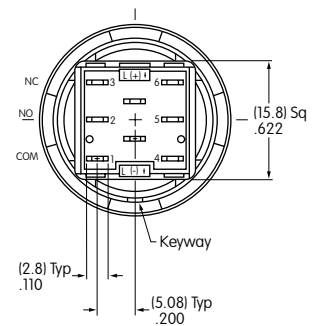
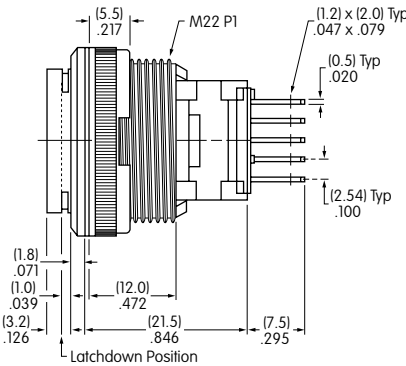
LEDs
AT625
AT631
AT632

TYPICAL SWITCH DIMENSIONS

Panel Seal



Single & Double Pole



LB25WKW01-12-JC

Single pole models do not have terminals 4, 5, & 6.

OPTIONAL ACCESSORIES

AT9410 Splash Cover for Panel Seal

Materials:

Lid: PVC (loses pliability below 0°C/32°F)

Base: Polyethylene

O-ring: NBR

Recommended Panel Thickness:

.039" ~ .138" (1.0mm ~ 3.5mm)

