General Specifications

Electrical Capacity (Resistive Load)

Power Level (silver): 3A @ 125V AC or 3A @ 250V AC or 3A @ 30V DC

Other Ratings

50 milliohms maximum **Contact Resistance:**

Insulation Resistance: 200 megohms minimum @ 500V DC

1,000V AC minimum between contacts for 1 minute minimum **Dielectric Strength:**

1,500V AC minimum between contacts and case for 1 minute minimum

Mechanical Life: 500,000 operations minimum

Electrical Life: 50,000 operations minimum for 3A @ 125V/250V AC & 3A @ 30V DC

100,000 operations minimum for 1A @ 125V/250V AC & 1A @ 30V DC

Nominal Operating Force: 1.5N for Single Pole; 3.0N for Double Pole

Contact Timing: Nonshorting (break-before-make) Travel: Total Travel .118" (3.0mm)

Materials & Finishes

Actuator: **Polycarbonate**

Housing: Bushing mount: Glass fiber reinforced polyamide (UL94V-0);

Snap in mount: Polyphenylene ether (UL94V-0)

Diallyl phthalate (UL94V-0) Base:

Movable Contact: Phosphor bronze & silver with silver plating

Stationary Contacts: Common terminal: Phosphor bronze with silver plating;

Contact terminals: Phosphor bronze with tin & copper plating

Phospher bronze with tin and copper plating Lamp Terminals:

Environmental Data

-10°C through +50°C (+14°F through +122°F) for Illuminated **Operating Temperature Range:**

-25°C through +70°C (+13°F through +158°F) for Nonilluminated

Humidity: 90 ~ 95% humidity for 240 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: 0.8Nm (7.08 lb•in)

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

> Hand clean locally with alcohol based solution Cleaning:

Standards & Certifications

Flammability Standards: UL94V-0 housing & base

> UL: File No. E44145

> > All single & double pole models recognized at 3A @ 125V/250V AC or 3A @ 30V DC.

Add "/U" to end of part number to order UL mark on switch. Add "/CUL" to end of part number to order cULus mark on switch.



Distinctive Characteristics

Environmentally friendly components and packaging materials meet RoHS Directive restricting use of hazardous materials. Suited for lead-free soldering because of heat resistant resin materials.

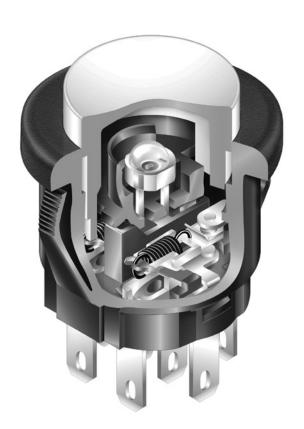
Smooth, slightly concave surface of cap designed to fit fingertip. Unique design and construction of cap prevents its removal and limits tampering.

Bright LED illumination in choice of red, green, or amber through translucent white cap.

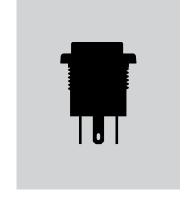
Short body of .551" (14.0mm) conserves behind-panel space.

Combination solder lug and .110" quick connect terminals.

Crisp actuation and clear circuit status provided by snap-action contact mechanism. Arc barrier between movable contacts protects against crossover.

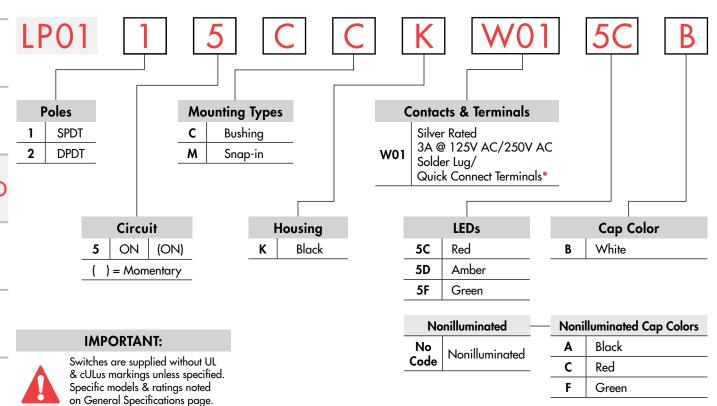








TYPICAL SWITCH ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

LP0115CCKW015CB

White Cap Red LED **SPDT Bushing Mount** ON-(ON) Circuit **Black Housing** Silver Contacts Rated 3A @ 125/250V AC; Solder Lug/Quick Connect Terminals

* Wire harness & cable assemblies offered only in Americas

POLES & CIRCUIT											
		Plunger Position () = Momentary		Connected Terminals		Throw & Power/Lamp Schematics					
Pole	Model	Normal	Down	Normal	Down	Note:	: Terminal markings "COM, NO, NC, L, + and -" are actually on the switch; terminal numbers are not on the switch.				
SP	LP0115	ON	(ON)	1-3	1-2	SPDT	1 (COM) 3 • 2	L (+) ● ── (-) L			
DP	LP0125	ON	(ON)	1-3 4-6	1-2 4-5	DPDT	1 (COM) 4 9 3 • 2 6 • 5	L (+) ●			

D69

MOUNTING TYPES



Bushing

.630" (16.0mm) Diameter

This mounting option is supplied

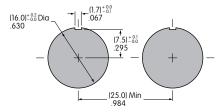
Snap-in

.669" (17.0mm) Diameter

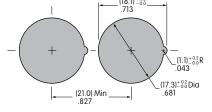


Recommended

Panel Thickness: .079" ~ .256" $(2.0 \text{mm} \sim 6.5 \text{mm})$



Recommended Panel Thickness: .039" ~ .126" $(1.0mm \sim 3.2mm)$



Allow .984" (25.0mm) distance from center-to-center between switches when mounted side-by-side.

with a brass hexagon nut with nickel plating.

Allow .827" (21.0mm) distance from center-to-center between switches when mounted side-by-side.

HOUSING



Black

Housing available in black only. The one-piece body and bezel have a matte finish.

CONTACT MATERIALS, RATINGS, & TERMINALS

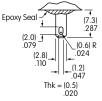


Silver

Power Level

Solder Lug/

.110" (2.8mm) Quick Connect



3A @ 125V AC/250V AC; 3A @ 30V DC

Note: If used at 1A @ 125V AC/250V AC or 1A @ 30V DC, electrical life will be 100,000 operations minimum.

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.

LEDs are an integral part of the switch and are not available separately.

Single Color LED with 1 Element		5C	5D	5F
(+)0	Colors	Red	Amber	Green
Forward Peak Current	I _{FM}	30mA	30mA	30mA
Continuous Forward Current	I _F	20mA	20mA	20mA
Forward Voltage	$V_{_{\rm F}}$	1.95V	2.0V	2.1V
Reverse Peak Voltage	$V_{_{\!RM}}$	5V	5V	5V
Current Reduction Rate Above 25°C	$\Delta I_{_{\rm F}}$	0.41mA/°C	0.29mA/°C	0.39mA/°C
Ambient Temperature Range			−10°C ~ +50°C	



No Lamp



Touch

Supplement | Accessories

CAP COLORS

Illuminated Cap

Cap Color Available:



White

The translucent cap is an integral part of the switch and is not available separately.

Material: Polycarbonate

Finish: Matte



Nonilluminated Caps

Cap Colors Available:



Black



Red



Green

The cap is an integral part of the switch and is not available separately.

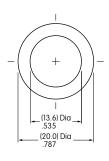
Material: Polycarbonate Finish: Matte

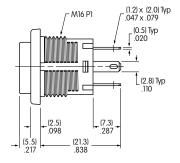


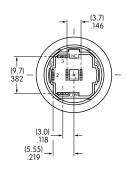
TYPICAL SWITCH DIMENSIONS

Bushing Mount • Single Pole





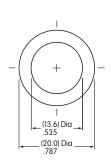


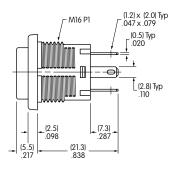


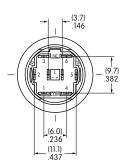
LP0115CCKW015CB

Bushing Mount • Double Pole









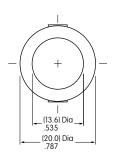
LP0125CCKW015CB

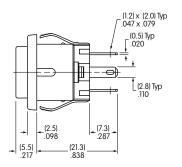


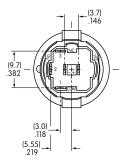
Supplement | Accessories

TYPICAL SWITCH DIMENSIONS

Snap-in • Single Pole



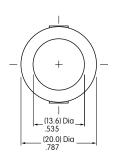


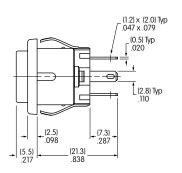


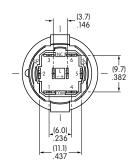


LP0115CMKW015CB

Snap-in • Double Pole









LP0125CMKW015DB

LEGENDS

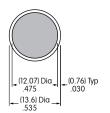
NKK Switches can provide custom legends for caps. Contact factory for more information.

Suggested Printable Area for LP01 Cap



Recommended Methods:

Pad Print or Laser Etch on cap. Epoxy based ink is recommended.



Shaded area is printable area