

General Specifications

Electrical Capacity (Resistive Load)

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

Other Ratings

Contact Resistance: 50 milliohms maximum
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 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)
Base: Diallyl phthalate (UL94V-0)
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
Lamp Terminals: Phosphor bronze with tin and copper plating

Environmental Data

Operating Temperature Range: -10°C through +50°C (+14°F through +122°F) for Illuminated
 -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.
Cleaning: Hand clean locally with alcohol based solution

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.

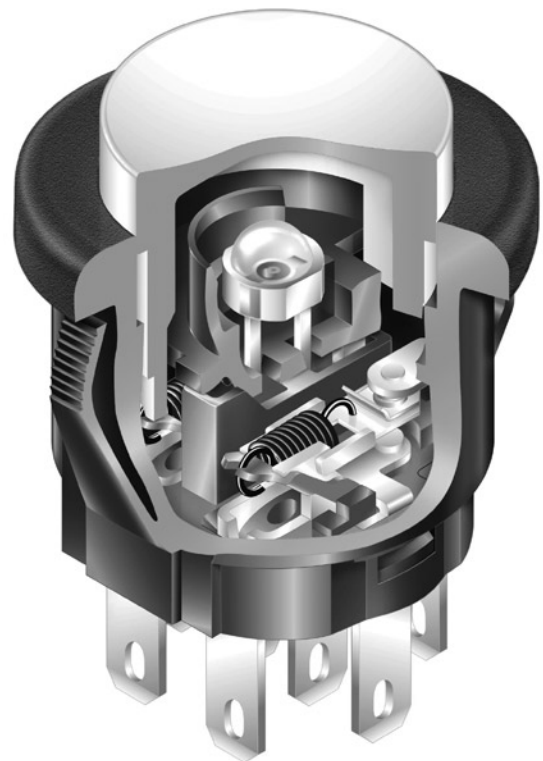
Smooth, slightly concave surface of cap designed to fit fingertip. Unique design and construction of cap prevents its removal and limits tampering.

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

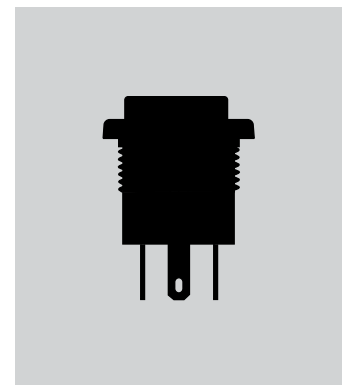
Short body of .551" (14.0mm) conserves behind-panel space.

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.



Actual Size



TYPICAL SWITCH ORDERING EXAMPLE

LP01 **1** **5** **C** **C** **K** **W01** **5C** **B**

Poles	
1	SPDT
2	DPDT

Mounting Types	
C	Bushing
M	Snap-in

Contacts & Terminals	
W01	Silver Rated 3A @ 125V AC/250V AC Solder Lug/ Quick Connect Terminals*

Circuit	
5	ON (ON)

() = Momentary

Housing	
K	Black

LEDs	
5C	Red
5D	Amber
5F	Green

Cap Color	
B	White

Nonilluminated	
No Code	Nonilluminated

Nonilluminated Cap Colors	
A	Black
C	Red
F	Green

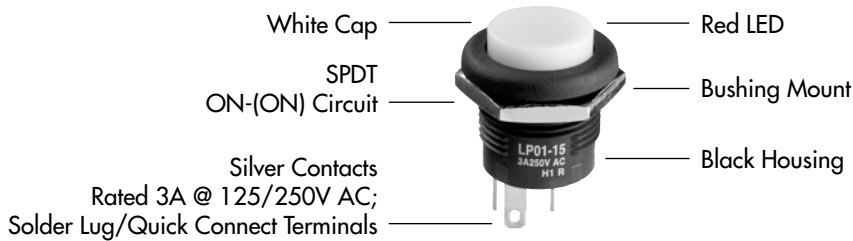
IMPORTANT:



Switches are supplied without UL & cULus markings unless specified. Specific models & ratings noted on General Specifications page.

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

LP0115CCKW015CB



* Wire harness & cable assemblies offered only in Americas

POLES & CIRCUIT

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

MOUNTING TYPES

C

Bushing

.630" (16.0mm) Diameter

This mounting option is supplied with a brass hexagon nut with nickel plating.



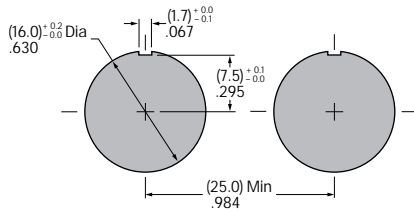
M

Snap-in

.669" (17.0mm) Diameter

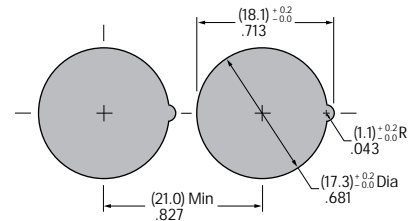


Recommended Panel Thickness:
.079" ~ .256"
(2.0mm ~ 6.5mm)



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

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



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

HOUSING

K

Black

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

CONTACT MATERIALS, RATINGS, & TERMINALS

W01

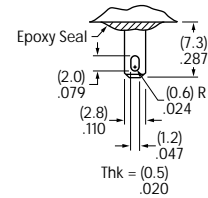
Silver

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
		Colors	Red	Amber	Green
	Forward Peak Current	I_{FM}	30mA	30mA	30mA
	Continuous Forward Current	I_F	20mA	20mA	20mA
	Forward Voltage	V_F	1.95V	2.0V	2.1V
	Reverse Peak Voltage	V_{RM}	5V	5V	5V
	Current Reduction Rate Above 25°C	ΔI_F	0.41mA/°C	0.29mA/°C	0.39mA/°C
Ambient Temperature Range		-10°C ~ +50°C			

No Code

No Lamp

Toggles

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement

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

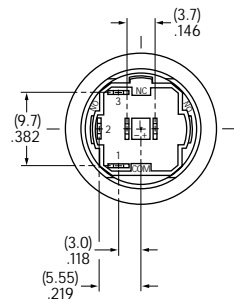
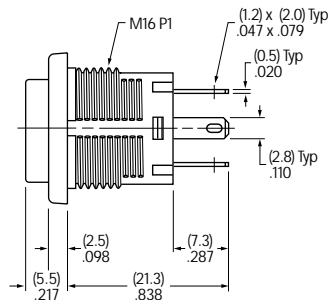
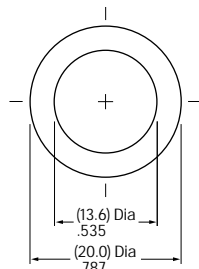
The cap is an integral part of the switch and is not available separately.

Material: Polycarbonate Finish: Matte



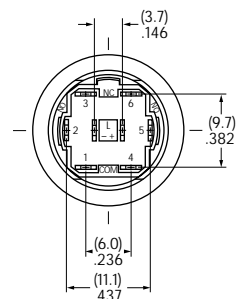
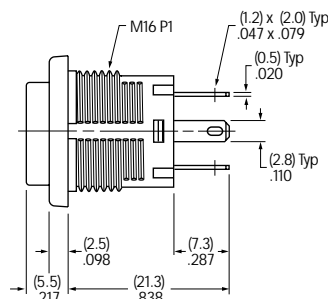
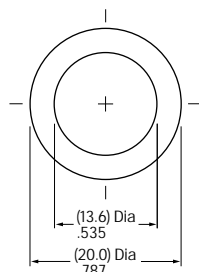
TYPICAL SWITCH DIMENSIONS

Bushing Mount • Single Pole



LP0115CCKW015CB

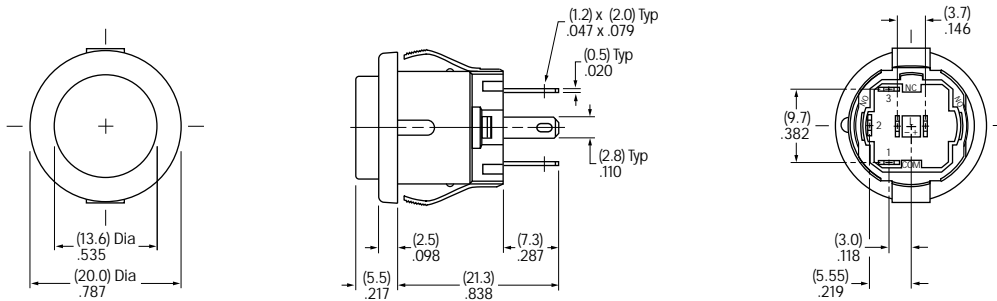
Bushing Mount • Double Pole



LP0125CCKW015CB

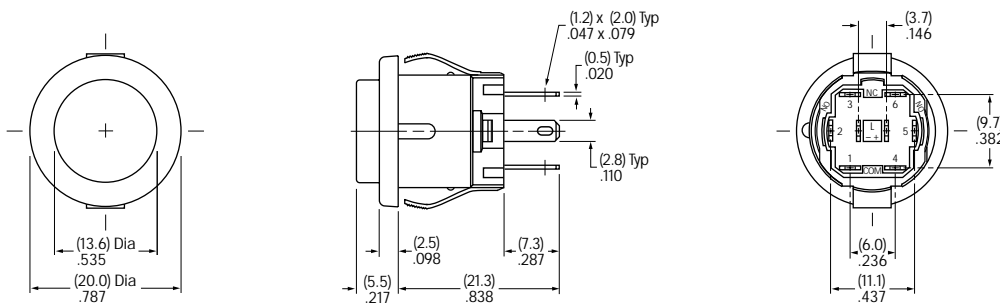
TYPICAL SWITCH DIMENSIONS

Snap-in • Single Pole



LP0115CMKW015CB

Snap-in • Double Pole



LP0125CMKW015DB

LEGENDS

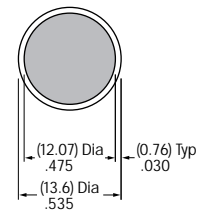
NKK Switches can provide custom legends for caps. Contact factory for more information.

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