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.

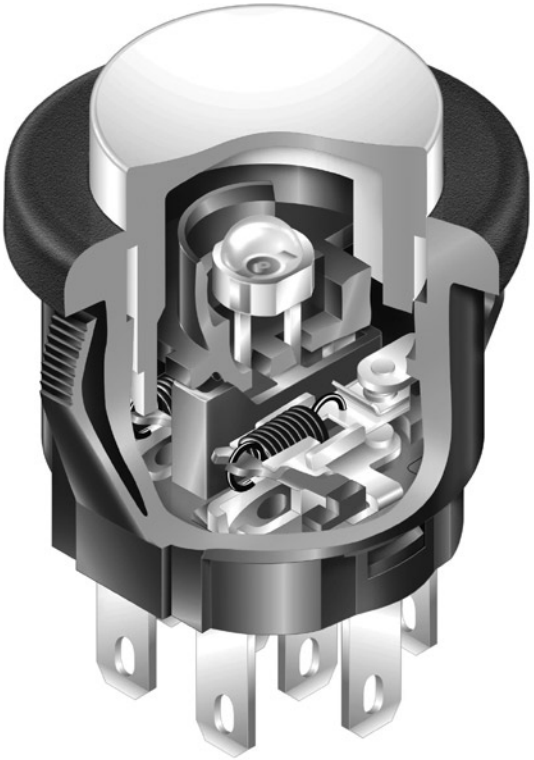
Bright LED illumination in choice of red, green, or amber through translucent white cap.

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

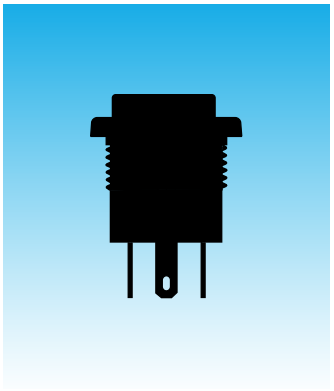
Combination solder lug and .110″ quick connect terminals.

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

Nonilluminated models available and shown in the Pushbutton section.



Actual Size



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
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: Phospher bronze with tin and copper plating

Environmental Data

Operating Temp Range: –10°C through +50°C (+14°F through +122°F)
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/s^2) 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 Recognition: All single & double pole models recognized at 3A @ 125V/250V AC or 3A @ 30V DC
UL File No. WOYR2.E44145; add "/U" to end of part number to order UL mark on switch
C-UL Recognition: All single & double pole models recognized at 3A @ 125V/250V AC or 3A @ 30V DC
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

LP01	1	5	C	C	K	W01	5C	B

POLES

1	SPDT
2	DPDT

CIRCUIT

5	ON	(ON)

( ) = Momentary

MOUNTING TYPES

C	Bushing
M	Snap-in

HOUSING

K	Black

CONTACTS & TERMINALS

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

LEDS

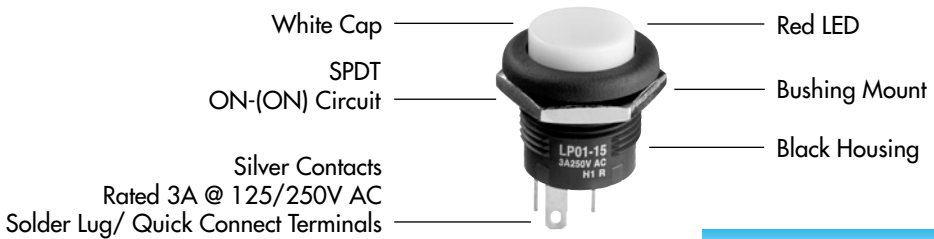
5C	Red
5D	Amber
5F	Green

CAP COLOR

B	White

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

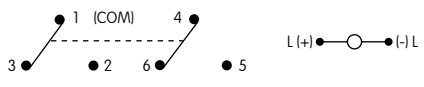
LP0115CCKW015CB



IMPORTANT:

Switches are supplied without UL & C-UL marking unless specified. Specific models & ratings noted on General Specifications page.

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 
DP	LP0125	ON	(ON)	1-3 4-6	1-2 4-5	DPDT 

MOUNTING TYPES

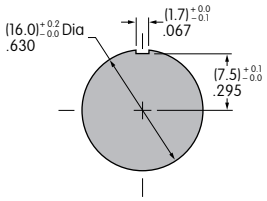
C **Bushing**

.630" (16.0mm) Diameter

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

Recommended Panel Thickness:

.079" ~ .256"
(2.0mm ~ 6.5mm)



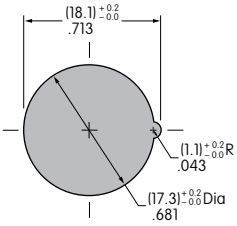
Allow .984" (25.0mm) distance between switches when mounted side-by-side.

M **Snap-in**

.669" (17.0mm) Diameter

Recommended Panel Thickness:

.039" ~ .126"
(1.0mm ~ 3.2mm)



Allow .827" (21.0mm) distance 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.

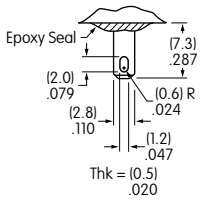
CONTACT MATERIALS, RATINGS, & TERMINALS

W01 **Silver** **Power Level**

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.

Solder Lug/
.110" (2.8mm) Quick Connect



CAP COLOR

B **White**

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

Material: Polycarbonate Finish: Matte

LED COLORS & SPECIFICATIONS

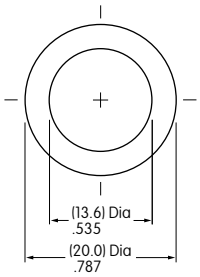
The electrical specifications shown are determined at a basic temperature of 25°C.
LED circuit is isolated and requires external power source. Polarity marks are on the switch.
If the source voltage exceeds the rated voltage, a ballast resistor is required.
The resistor value can be calculated by using the formula in the Supplement section.

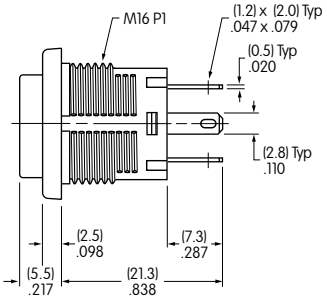
LEDs are an integral part of the switch and are not available separately.

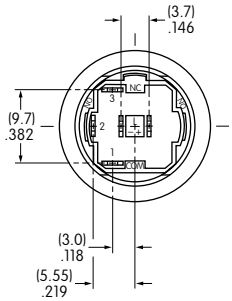
Single Color LED with 1 Element (+) (-)		5C	5D	5F
Colors		Red	Amber	Green
Forward Peak Current	I_{FM}	30mA	30mA	30mA
Continuous Forward Current	I_F	20mA	20mA	20mA
Forward Voltage	V_F	1.95V	2.0V	2.1V
Reverse Peak Voltage	V_{RM}	5V	5V	5V
Current Reduction Rate Above 25°C	ΔI_F	0.41mA/°C	0.29mA/°C	0.39mA/°C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

TYPICAL SWITCH DIMENSIONS

Bushing Mount • Single Pole







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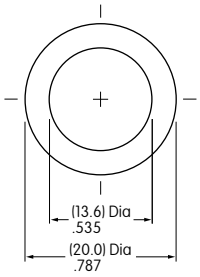
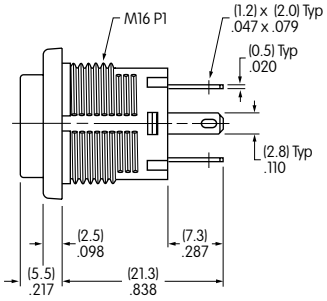
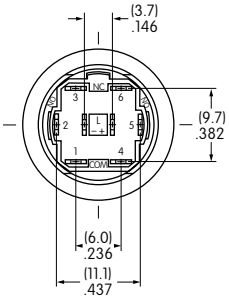
Bushing Mount • Double Pole







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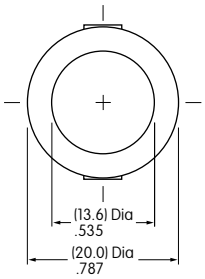
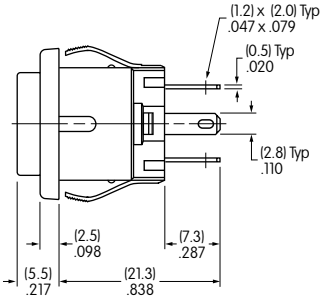
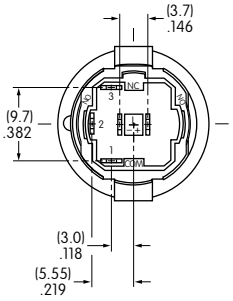
TYPICAL SWITCH DIMENSIONS

Snap-in • Single Pole







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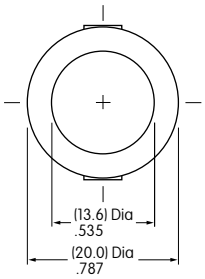
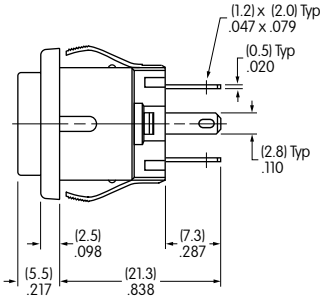
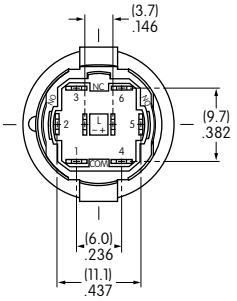
Snap-in • Double Pole







LP0125CMKW015DB

LEGENDS

Easily create and submit your own legends using our new on-line Legend Maker.

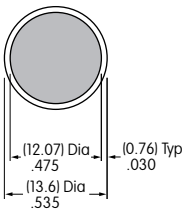
Visit www.nkkswitches.com

For other legend support options, customers may either contact the factory or utilize the general information and basic specifications presented below.

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