

New Product

CN-0295

High Visibility Spot Illumination



LP01 Series

New Addition to Compact Body
Illuminated Pushbutton Switches

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 (DC2 ~ 4V 100mA)

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 @ 125/250V AC & 3A @ 30V DC;
100,000 operations minimum for 1A @ 125/250V AC & 1A @ 30V DC

Nominal Operating Force: 1.5 ± 0.7N for Single Pole; 3.0 ± 1.2N for Double Pole

Travel: 3.0mm (.118")

Environmental Data

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

Processing

Soldering: Manual Soldering: 390°C maximum @ 4 seconds maximum, 2 cycles

Distinctive Characteristics

Vivid, super bright LED spot illumination in red, amber or green provides easy status recognition.

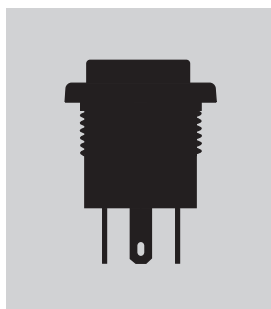
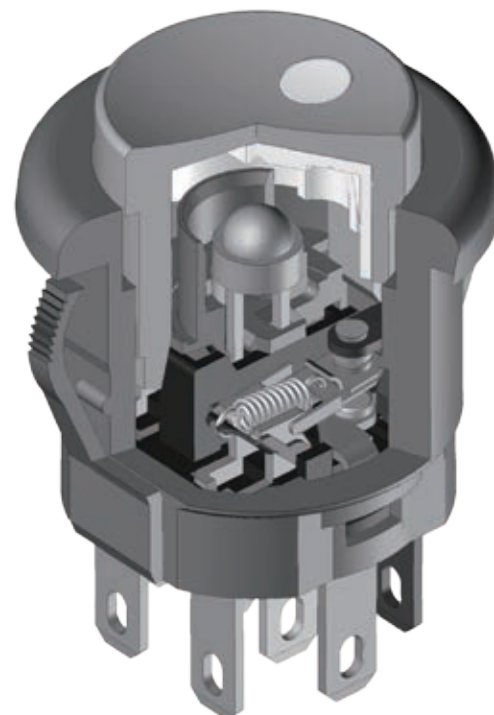
Smooth, slightly concave surface of cap designed to fit fingertip. Unique design and construction of cap prevents its removal and limits tampering.

Installation options include 16mm bushing mount or 17.3mm snap-in mount.

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

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

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



Actual Size

Applications

- Communication Equipment
- Test Instruments
- Automation Equipment
- Wireless Devices
- Office Equipment
- Household Appliances

TYPICAL SWITCH ORDERING EXAMPLE

LP01

1

5

C

C

K

W01

5F

A

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

LEDs

5C	Red
5D	Amber
5F	Green

Circuit

5	ON	(ON)
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() = Momentary

Housing

K	Black
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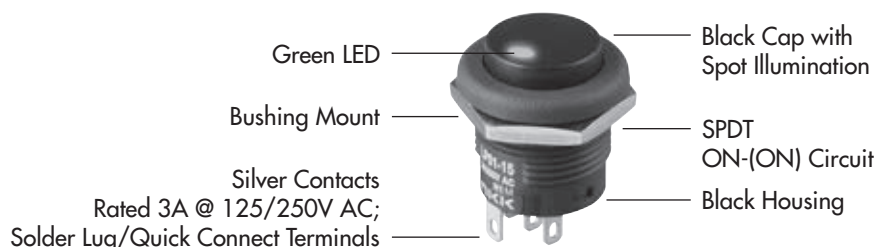
Cap Colors

A	Black with Spot Illumination
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DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

LP0115CCKW015FA



POLES & CIRCUIT

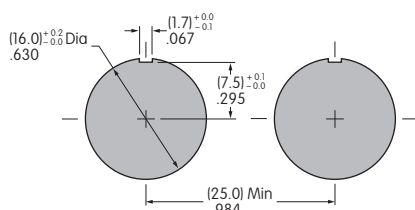
Pole	Model	Plunger Position () = Momentary		Connected Terminals		Throw & Power/Lamp Schematics
		Normal	Down	Normal	Down	
SP	LP0115	ON	(ON)	1-3	1-2	SPDT Note: Terminal markings "COM, NO, NC, L, + and -" are actually on the switch; terminal numbers are not on the switch. Schematic: 1 (COM) to 2 and 3;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

MOUNTING TYPES

C

Bushing

.630" (16.0mm) Diameter



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

Supplied with a steel hexagon nut with nickel plating.

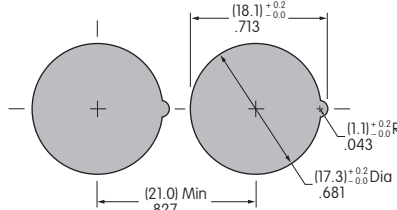


Recommended Panel Thickness:
.079" ~ .256"
(2.0mm ~ 6.5mm)

M

Snap-in

.669" (17.0mm) Diameter



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

Cut hole in panel with nub as shown to prevent rotation.
Position switch vertically in cutout.



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

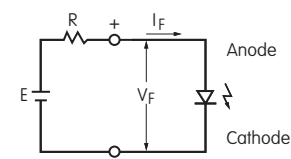
LED COLORS & SPECIFICATIONS

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

Single Color LED with 1 Element 	Colors	Red 5C	Amber 5D	Green 5F
Maximum Forward Current	I_{FM}	30mA	30mA	30mA
Typical Forward Current	I_F	20mA	20mA	20mA
Forward Voltage	V_F	1.95V	2.0V	2.1V
Maximum Reverse 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		

$$R = \frac{E - V_F}{I_F}$$

Where: R = Resistor Value (Ohms)
E = Source Voltage (V)
 V_F = Forward Voltage (V)
 I_F = Forward Current (A)



CAP COLORS

Cap Color Available:

A Black with Spot Illumination

Spot Illuminated Cap



Material: Polycarbonate Finish: Matte

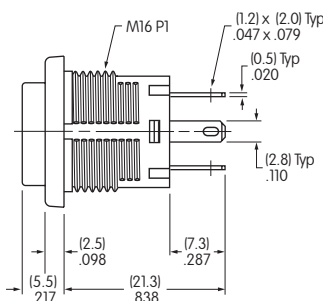
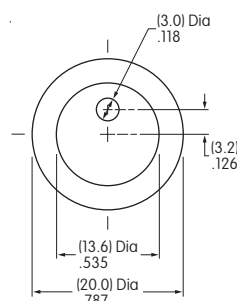
The cap is an integral part of the switch and is not available separately.

TYPICAL SWITCH DIMENSIONS

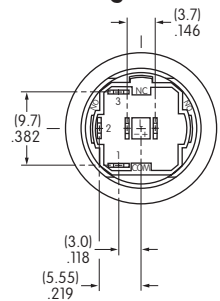
Bushing Mount



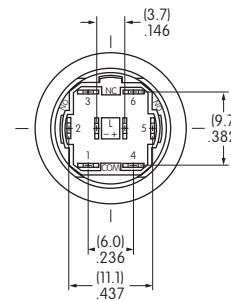
LP0115CCKW015CA



Single Pole



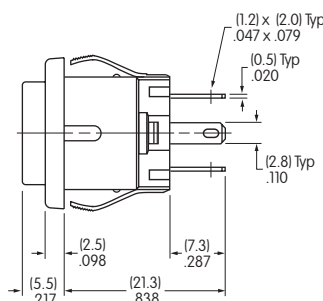
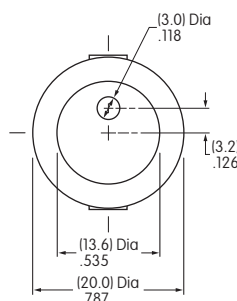
Double Pole



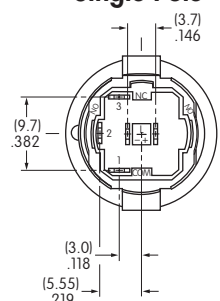
Snap-in Mount



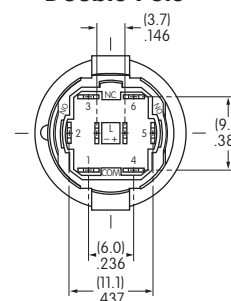
LP0115CMKW015CA



Single Pole



Double Pole



Effective Date October 2016

NIKK
SWITCHES

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