



Bright or Super Bright LEDs
Full Face or Spot Illumination
Bushing or Snap-in Mount
Short Body Behind Panel
IP65 Panel Seal Models
Bezel-Barrier Combination
Square, Rectangular or Round
Long Life Models
Tactile, Responsive Actuation
Matching Indicators



Value Added Services

YB Series is an excellent candidate to benefit by partnering with NKK Switches' Value Added Services. A comprehensive menu of switch customization services is available that can complement any design. Consider wire harnesses, numerous types of assembly, soldering or crimping, connections and special materials, and more; or utilizing printing services to display legends for the YB lens or film insert. Choose from screen printing, pad printing or laser etching.

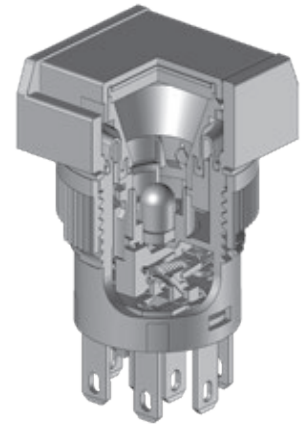


Provided at the Value Added facility with ISO:9001 certification are affordable enhancements that release the customer to manage other aspects of the project. NKK's team of proficient engineers and technicians can provide innovative solutions and support.

Series YB Illuminated Pushbuttons

A variety of options and benefits are available for this miniature size series of illuminated pushbutton switches. In addition to several single LED colors, red/green bicolor is offered. Further expanding panel design options, there are square, round and rectangular shapes in both bushing or snap-in mount, and solder lug or straight PC terminals. UL and CSA markings are available on specific models.

Regardless of which devices are selected to complement the design, all will showcase NKK Switches' superb quality and craftsmanship. Additionally, skilled engineers are available for assistance with innovation and support. While NKK provides solutions with flexibility and expertise, there is a solid commitment to each customer's success.



SHORT BODY PUSHBUTTONS

Characteristics & Specifications

YB Series Miniature Pushbuttons

- Choices of full face or spot illumination with multi-element LEDs, with or without resistors
- Super bright LEDs in white, green or blue; bright LEDs in red, amber or green
- Dust and oil tight as well as splashproof panel seal models qualify to IP65 of IEC 60529 Standards. Exterior o-ring furnished with panel seal switches.
- Additional protection for interior mechanism provided by unique thermoplastic elastomer seal inside caps, plus rolled sleeve of nitrile butadiene rubber at joining of housing and inner case
- High density design contributes to minimal behind panel depth of less than one inch
- Accidental actuation prohibited by combination bezel-barrier, an integral part of the switch
- Distinctive design of snap-action contacts for shock resistance, long life and sensitive actuation
- Audible, tactile feedback with smooth, responsive operation
- Epoxy sealed solder lug/quick connect or straight PC terminals prevent entry of flux, dust, solvents and other contaminants
- Value Added Services include legends, wire harnesses or assemblies – just a few options to enhance design and efficiency
- Matching indicators available that complement YB Series

Resistive Load

Power Level (silver): 3A @ 125V AC; 3A @ 250V AC; 3A @ 30V DC
Logic Level (gold): 0.4VA max @ 28V AC/DC max
(Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)

Contact Resistance: 50 milliohms max for silver
100 milliohms max for gold

Insulation Resistance: 200 megohms min @ 500V DC

Dielectric Strength: 1,000V AC min between contacts for 1 minute min; 1,500V AC min between contacts & case for 1 minute min

Mechanical Life: 1,000,000 operations min for momentary circuit
200,000 operations min for maintained circuit

Electrical Life: 100,000 operations min

Nominal Operating Force:

Single Pole: 1.47N for nonsealed; 1.67N for sealed
Double Pole: 2.75N for nonsealed; 2.94N for sealed

Contact Timing: Nonshorting (break-before-make)

Pretravel .059" (1.5mm); Overtravel .059" (1.5mm);
Total Travel .118" (3.0mm)

Operating Temperature Range:

Illuminated: -25°C ~ +50°C (-13°F ~ +122°F)
Nonilluminated: -25°C ~ +70°C (-13°F ~ +158°F)

APPLICATIONS

- Medical
- Food Industry
- Lighting/Staging
- Communications
- Automation
- Transportation
- Defense
- Electronics
- Industrial
- Entertainment
- Security



Bright or Super Bright LEDs

Square or Round

Bushing Mount

Resistant to Tampering

IP65 Panel Seal Compliance

Bezels in Black, Brushed Chrome

Short, Compact Body

Long Life Models

Crisp, Light Touch Actuation

Distinctive Long Stroke

Standard or Custom Legends

Value Added Services

NKK's Value Added Services provides multiple benefits for standard product offerings and coordinates seamlessly with customer specific requirements. Services include custom electronic or electromechanical assembly, soldering, crimping, heat shrink or epoxy. Printing services are an ideal fit for the YB2 Series, on the cap or film insert. Screen printing, pad printing or laser etching are offered to customize and add distinction to any panel configuration.

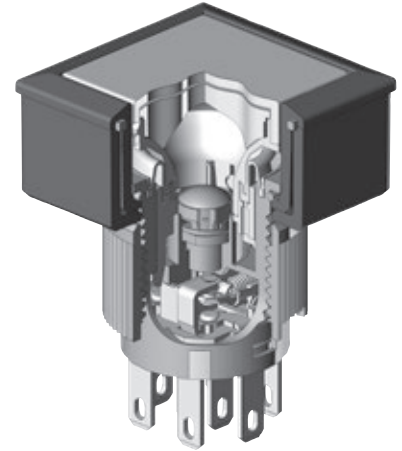


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Series YB2 Illuminated Pushbuttons

This standard size series of illuminated pushbutton switches presents a plethora of options to enhance panel appearance and applications. The series is rated IP65 at the front panel and offers choices in round or square actuator shapes and sizes, bezels, LED colors, and caps. Both silver and gold rated contacts are options, and the UL marking is available on specific models. A variety of standard legends is offered, or custom symbols or graphics are accessible through NKK's Value Added Services.

Be assured that regardless of the part number, the product will be a representation of NKK Switches' superior quality and commitment to excellence. Contact our engineers and switch specialists to discuss solutions and support.



PANEL SEAL PUSHBUTTONS

Characteristics & Specifications

YB2 Series Miniature Pushbuttons

- Round 25mm or square 24mm pushbuttons with minimal .071" (1.8mm) above-panel dimension
- Super bright LEDs in white, green or blue; bright LEDs in red, amber or green
- Dust tight and splashproof panel seal protection quality to IP65 of IEC 60529 Standards
- Tamper resistant actuators in 18mm square or 19mm diameter
- Short, compact body of .965" (24.5mm) conserves behind-panel space
- Light touch actuation and distinctive long stroke clearly indicate circuit status
- Multiple cap color options enhance panel design, including metallic silver cap with bright ring illumination (for round models)
- Choice of bezels in black or brushed chrome
- Available in momentary or alternate action with latched
- Combination solder lug and .110" quick connect terminals are epoxy sealed, prohibiting entry of flux, dust, solvents and other contaminants, plus improving contact stability
- Value Added Services includes legends on actuator or film insert; wire harnesses or various custom assemblies also available to enhance design and efficiency

Resistive Load

Power Level (silver): 3A @ 125V AC; 3A @ 250V AC; 3A @ 30V DC
Logic Level (gold): 0.4VA max @ 28V AC/DC max
(Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)

Contact Resistance: 50 milliohms max for silver
100 milliohms max for gold

Insulation Resistance: 200 megohms min @ 500V DC

Dielectric Strength: 1,000V AC min between contacts for 1 minute min; 1,500V AC min between contacts & case for 1 minute min

Mechanical Life: 1,000,000 operations min for momentary circuit
200,000 operations min for maintained circuit

Electrical Life: 100,000 operations min

Nominal Operating Force:

Single Pole: 1.5N; Double Pole: 3.0N

Contact Timing: Nonshorting (break-before-make)

Pretravel .059" (1.5mm); Overtravel .059" (1.5mm);
Total Travel .118" (3.0mm)

Operating Temperature Range:

Illuminated: -25°C ~ +50°C (-13°F ~ +122°F)

Nonilluminated: -25°C ~ +70°C (-13°F ~ +158°F)

APPLICATIONS

- Medical
- Food Industry
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