NKK SWITCHES

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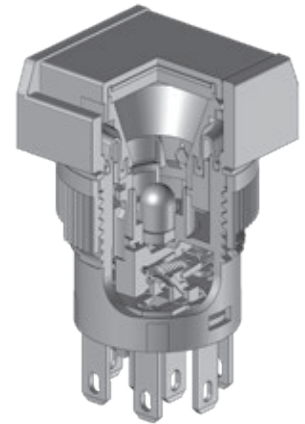
Provided at the Value Added facility with ISO:9001 certification are affordable enhancements that release the customer to manage other aspects of the project. NKK's team of proficient engineers and technicians can provide innovative solutions and support.

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
- Communications
- Defense
- Entertainment

- Food Industry
- Automation
- Electronics
- Security

- Lighting/Staging
- Transportation
- Industrial