












Ingress Protection Rating





The IP code, IEC 60529 Standard (EN 60529), rates the degree of protection against solid objects or materials (e.g., fingers and dust) and is designated by the first number. The second number indicates the level of liquid (water) protection.


IP Ratings	
IP50	Dust protected but not against water
IP60	Dust tight but not protected against water
IP64	Dust tight and protected against splashing water from any direction
IP65	Dust tight and protected against water jets from any direction
IP67	Dust tight and protected against effects of temporary immersion
IP68	Dust tight and protected against effects of immersion in water under pressure for long periods







Coarse environments and their elements can present a challenge to electromechanical switches, and NKK's switches are the best defense. Designed specifically for the hazards of heat, cold, humidity and exposure to elements, NKK has an extensive selection of environmentally sealed switches. When applications demand fierce quality and reliability, look to NKK as the dependable source. Toggles, rockers, pushbuttons (including emergency stop devices), programmables, and rotaries are included in the IP rated group, many of which have accessory options to further enhance performance.


Toggles				
	Series	Size / Specifications	Features	Rating
	B Series Process Sealed Antistatic	Subminiature 0.4VA @ 28V AC/DC	6mm diameter threaded bushing for panel seal mounting. Straight PC terminals Totally sealed body construction Operating temperature -30°C ~ +85°C	IP65 front panel
	M Series Dual Seal	Miniature 6A @ 125V AC 3A @ 250V AC 0.4VA @ 28V AC/DC	12mm diameter threaded D-flat bushing Internal o-ring & external rubber washer Waterproof boot at base of toggle Operating temperature -30°C ~ +85°C	IP68 front panel
	M Series Splashproof Boots	Miniature 6A @ 125V AC 3A @ 250V AC 0.4VA @ 28V AC/DC	Small bushings ¼-40 or 6mm; large bushing 12mm; locking levers ¼-40 or 6mm (all threaded splashproof with D flat) Operating temperature -30°C ~ +85°C	IP67 front panel with boots AT401, AT402S, AT428 or AT4181
	S Series Quick Connect Terminals	Standard 15 ~ 20A @ 125V AC 6 ~ 20A @ 250V AC	Medium capacity; quick connect terminals 12mm diameter threaded bushing Optional splashproof boot assemblies Operating temperature -10°C ~ +70°C	IP65 front panel with boots AT401 or AT402
	S Series Panel Seal with AW Bushing	Standard 15 ~ 20A @ 125V AC 6 ~ 15A @ 250V AC	Medium capacity; solder lug terminals 12mm diameter threaded D-flat bushing Optional splashproof boot assemblies Operating temperature -30°C ~ +70°C	IP67 front panel with boots AT401 or AT4181
	S Series Locking Lever & Panel Seal	Standard 15 ~ 20A @ 125V AC 6 ~ 15A @ 250V AC	Medium capacity; solder lug terminals 12mm diameter threaded D-flat bushing Includes AT537 o-ring Operating temperature -30°C ~ +70°C	IP67 front panel



Toggles			
Series	Size / Specifications	Features	Rating
 S Series Dual Seal	Standard 15A @ 125V AC 6A ~ 15A @ 250V AC 15 ~ 20A @ 30V DC	12mm diameter threaded D-flat bushing Internal o-ring & external rubber washer Waterproof boot at base of toggle Operating temperature -30°C ~ +70°C	IP68 front panel
 S Series High Capacity	Standard 30A @ 125V AC 30A @ 250V AC	12mm diameter threaded bushing Screw lug terminals Optional splashproof boot assembly Operating temperature -10°C ~ +70°C	IP65 front panel with boot AT401
 TL Series Fully Illuminated Lever	Miniature 6A @ 125V AC 3A @ 250V AC 0.4VA @ 28V AC/DC	Antistatic toggles in two length options Internal o-ring, optional external o-ring 12mm diameter threaded bushing Operating temperature -10°C ~ +55°C	IP65 front panel with o-ring AT401P
 WT Series Solder Lug & Screw Lug Terminals	Standard 10A @ 125V AC 6A @ 250V AC 10A @ 30V DC	Environmentally sealed 12mm diameter D-flat threaded bushing Includes AT401P o-ring Operating temperature -30°C ~ +70°C	IP67 front panel IP60 back panel
 WT Series Wire Leads	Standard 10A @ 125V AC 6A @ 250V AC 10A @ 30V DC	Environmentally sealed 12mm diameter D-flat threaded bushing Includes AT401P o-ring Operating temperature -30°C ~ +70°C	IP67 front & back panel

Rockers			
Series	Size / Specifications	Features	Rating
 JW Series High Inrush 10A	Standard JMMW Model 10A @ 125/250V AC 10A @ 30V DC	Panel seal; handles large inrush current Increased electrical life; less contact bounce Solder lug/quick connect terminals Operating temperature -25°C ~ +85°C	IP67 front panel
 JW Series High Inrush 16A	Standard JWLW Model 16A @ 125/250V AC 5A @ 72V DC	Panel seal; handles large inrush current Increased electrical life; less contact bounce Solder lug/quick connect terminals Operating temperature -25°C ~ +85°C	IP67 front panel
 WR Series Solder Lug, Screw Lug, Quick Connect Terminals	Standard 15A @ 125/250V AC 15A @ 30V DC	Environmentally sealed; high arc resistant Minimal contact bounce UL94-V0 flammability standard for housing Operating temperature -25°C ~ +85°C	IP67 front panel IP60 back panel
 WR Series Wire Leads	Standard 15A @ 125/250V AC 15A @ 30V DC	Environmentally sealed; high arc resistant Minimal contact bounce UL94-V0 flammability standard for housing Operating temperature -25°C ~ +85°C	IP67 front & back panel

Emergency Stop Pushbuttons			
Series	Size / Specifications	Features	Rating
 <p>FF01 Series Emergency Stop</p>	Standard 0.5A @ 24V DC	Low profile, shortest behind panel depth 16mm bushing. Accessories with legends Insert-molded solder lug terminals Operating temperature $-25^{\circ}\text{C} \sim +60^{\circ}\text{C}$	<p>IP65 front panel</p> <p><i>(Designed for indoor use)</i></p>

Pushbuttons			
Series	Size / Specifications	Features	Rating
 <p>LB Series Front Panel Relamping</p>	Standard 3A @ 125/250V AC 3A @ 30V DC	Panel seal; Illumination in several options 22mm diameter threaded bushing Solder lug/quick connect terminals Operating temperature $-25^{\circ}\text{C} \sim +50^{\circ}\text{C}$	<p>IP65 front panel</p>
 <p>MB2000 Series Splashproof Bushings</p>	Miniature 6A @ 125V AC 3A @ 250V AC 0.4VA @ 28V AC/DC	Small (D3, 1/4-40 thread) or large (B3, 12mm thread) splashproof bushings AT516 or AT401P o-rings included Operating temperature $-30^{\circ}\text{C} \sim +85^{\circ}\text{C}$	<p>IP67 front panel</p>
 <p>MB2000 Series Splashproof Boot</p>	Miniature 6A @ 125V AC 3A @ 250V AC 0.4VA @ 28V AC/DC	12mm diameter threaded bushing B1 No cap needed with optional splashproof boot Several terminal options Operating temperature $-30^{\circ}\text{C} \sim +85^{\circ}\text{C}$	<p>IP65 front panel with boot AT4043</p>
 <p>WB Series Solder Lug & Screw Lug Terminals</p>	Standard 6A @ 125V AC 3A @ 250V AC 6A @ 30V DC	Environmentally sealed 12mm diameter D-flat threaded bushing Housing meets UL94V-0 standards Operating temperature $-30^{\circ}\text{C} \sim +70^{\circ}\text{C}$	<p>IP67 front panel IP60 back panel</p>
 <p>WB Series Wire Leads</p>	Standard 6A @ 125V AC 3A @ 250V AC 6A @ 30V DC	Environmentally sealed 12mm diameter D-flat threaded bushing Housing meets UL94V-0 standards Operating temperature $-30^{\circ}\text{C} \sim +70^{\circ}\text{C}$	<p>IP67 front & back panel</p>
 <p>YB Series Full Face Illumination</p>	Miniature 3A @ 125V AC 3A @ 250V AC 0.4VA @ 28V AC/DC	Panel seal, illuminated, 16mm diameter threaded bushing; solder lug/quick connect Includes mounting nut & AT089 o-ring Operating temperature $-25^{\circ}\text{C} \sim +50^{\circ}\text{C}$	<p>IP65 front panel</p>
 <p>YB2 Series Tamper Resistant Actuators</p>	Standard 3A @ 125V AC 3A @ 250V AC 0.4VA @ 28V AC/DC	Panel seal, illuminated, 16mm diameter threaded bushing; solder lug/quick connect Includes 2 o-rings Operating temperature $-25^{\circ}\text{C} \sim +50^{\circ}\text{C}$	<p>IP65 front panel</p>

Programmable			
Series	Size / Specifications	Features	Rating
 <p>IS Series SmartDisplay OLED Rocker</p>	<p>Standard 3VA @ 24V DC Applicable Range 10mA ~125mA@0.1V~24V DC</p>	<p>Snap-in panel mount rocker/pushbutton Three-switch functionality; monochrome 96 x 64 pixel format. Low profile Operating temperature -20°C ~ +70°C</p>	<p>IP64 front panel</p>

Rotaries			
Series	Size / Specifications	Features	Rating
 <p>MR Series Metal Bushing & Housing</p>	<p>Miniature MRK Model 0.4VA @ 28V AC/DC</p>	<p>6mm diameter double flat threaded bushing Shaft actuated. Includes AT535 o- ring Process sealed; PC terminals; 30° step size Operating temperature -10°C ~ +70°C</p>	<p>IP67 front panel</p>
 <p>MRB Series Sealed Construction</p>	<p>Miniature 0.4VA @ 28V AC/DC</p>	<p>6mm diameter double flat threaded bushing Panel seal with optional AT535 o-ring Bracket, PC terminals; 45° & 90° step sizes Operating temperature -10°C ~ +70°C</p>	<p>IP67 front panel</p>