



NKK

SWITCHES

SWITCHES FOR TOUGH ENVIRONMENTS

Industrial &
IP-Rated Switches



NKK Authorized Distributor

Contact us for quotes or additional product info:

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Switches for Your Toughest Applications

NKK Switches provides proven and reliable switch solutions to withstand even the toughest environments.

Our switches come in a variety of types and range from 3A to 50A with IP ratings from IP50 to IP67.

We also feature a vast selection of switch accessories.



TOGGLE



ROCKER



PUSHBUTTON



KEYLOCK



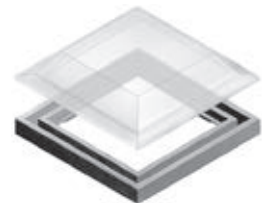
ROTARY



KNOB



BOOT



GUARD

3D CAD Models

Our website, www.nkkswitches.com, features 500,000+ downloadable CAD models in over 150 file formats.



Custom Switches and Value-Added Capabilities

NKK Switches offers a full suite of customizable solutions and value-added services.

Our expert team of engineers can assist in designing the perfect solution.

Services include Laser Etching, Screen and Pad Printing, Custom Cable and Wire Assembly.



Laser Etching



Custom Printing



Custom Assembly

IP Code for Degrees of Protection

The IP code is part of the IEC 60529 (EN 60529) standard specifying the degree of protection.

The first number designates protection against solid objects or materials (e.g., fingers and dust) and the second number indicates the level of liquid (water) protection.



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



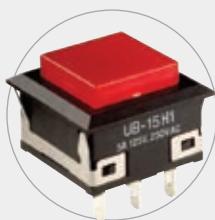
IP67

Dust tight and protected against effects of temporary immersion

Over 65 Years of Engineering and Manufacturing Excellence

- > Design and Manufacturing of All Products
- > Widest Selection of Electromechanical Switches in the Industry
- > Free Online 3D CAD Models with over 500,000 Product Variations
- > Custom Products for Specific Applications
- > High Quality and Environmentally Safe Products (RoHS, REACH)
- > ISO Certified Facilities
- > Value-Added Services
 - Screen, Pad and Laser Printing
 - Wire Harness Assembly

MILITARY APPLICATIONS



UB PUSHBUTTON



S TOGGLE



SCB PUSHBUTTON



MEDICAL APPLICATIONS



LB PUSHBUTTON



MB2000 PUSHBUTTON



YB2 PUSHBUTTON



JWM ROCKER

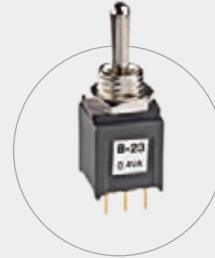




INDUSTRIAL APPLICATIONS



LB PUSHBUTTON



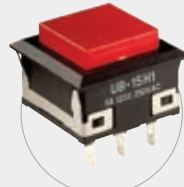
B TOGGLE



CW ROCKER



TRANSPORTATION APPLICATIONS



UB PUSHBUTTON



M TOGGLE



SCB PUSHBUTTON



MR ROTARY



CONSTRUCTION APPLICATIONS














CK KEYLOCK











M TOGGLE DUAL SEAL









S TOGGLE SWITCH

Toggles	IP Rating	Electrical Rating	Operating Temperature	Terminal Options	Mounting Type & Panel Cutout	Size/Features
Series B 	IP65 Panel Seal Models with A1 Bushing	Logic Level: 0.4VA Max @ 28V AC/DC Max	-30 ~ +85°C -22 ~ +185°F	PC	6mm Bushing Cutout: 6mm with Double Flat	Subminiature Antistatic
Series M Dual Seal 	Waterproof Dual Seal IP67	Power Level: 6A @ 125V AC; 3A @ 250V AC; 3 ~ 4A @ 30V DC Logic Level: 0.4VA Max @ 28V AC/DC Max	-30 ~ +85°C -22 ~ +185°F	Solder Lug	12mm Bushing with D Flat Cutout: 12.5mm with D Flat	Miniature Wire Assembly Available 
Series M  	IP67 with Bushings D3 D8 B3 L3 L8	Power Level: 6A @ 125V AC; 3A @ 250V AC; 3 ~ 4A @ 30V DC Logic Level: 0.4VA Max @ 28V AC/DC Max	-30 ~ +85°C -22 ~ +185°F	Quick Connect PC Wirewrap Solder Lug	6mm, 1/4-40 Thd or 12mm Bushing Cutouts: 6.5mm with D Flat 12.5mm with D Flat	Miniature Wire Assembly Available 
Series M2100 LED TIPPED Illuminated 	—	Power Level: 6A @ 125V AC; 3A @ 250V AC; 3A @ 30V DC Logic Level: 0.4VA Max @ 28V AC/DC Max	-10 ~ +55°C +14 ~ +131°F	Quick Connect PC Solder Lug	6mm, 1/4-40 Thd 6.5mm with Keyway or Locking Ring	Miniature Wire Assembly Available 
Series P  	IP65 12mm Bushing with Boots AT401 AT402 AT4181	Power Level: 10A @ 125V AC; 6A @ 250V AC Motor Load: 400W @ 125V AC Lamp Load: 2 ~ 3A @ 125V AC	-10 ~ +85°C +14 ~ +185°F	Quick Connect PC Solder Lug	6mm or 12mm Bushing Cutouts: 6.35mm with Keyway or Locking Ring 12.5mm with Keyway or Locking Ring	Standard Wire Assembly Available 

Toggles	IP Rating	Electrical Rating	Operating Temperature	Terminal Options	Mounting Type & Panel Cutout	Size/Features
S821D and S822D 	–	4 ~ 30A DC High Capacity Power Level: 20A @ 125V DC; 15A @ 250V DC; 30A @ 30V or 48V DC; 4A @ 400V DC; (10A @ 400V DC) () Capacity Due to Series Wiring	–10 ~ +70°C +14 ~ +158°F	Screw Lug	12mm Bushing Cutout: 12.5mm Dia, 12.5mm Dia with Locking Ring or Keyway	Standard  30A @ 30V DC; 15A @ 125V DC
Series S   AT401 AT402 AT4181	IP65 with Boots AT401 AT402 AT4181	2 ~ 5A Low Capacity Power Level: 5A @ 125V AC; 2A @ 250V AC; 5A @ 30V DC	–10 ~ +70°C +14 ~ +158°F	Solder Lug	12mm Bushing Cutout: 12.5mm with Keyway	Standard Wire Assembly Available 
Series S   AT401 AT402 AT4181	IP67 Panel Seal Models with AW or AL Bushing for Locking Lever	6 ~ 25A Medium/Medium High Capacity Power Level: 15 ~ 25A @ 125V AC or 30V DC; 6 ~ 25A @ 250V AC Motor Load: 750W @ 125V AC	–10 ~ +70°C +14 ~ +158°F IP-Rated Models: –30 ~ +70°C –22 ~ +158°F	Screw Lug Quick Connect Solder Lug	12mm Bushing Cutout: 12.5mm with D Flat	Standard Wire Assembly Available 
Series S   AT401	IP65 with AT401 Boot 15 ~ 30A Models Only	15 ~ 50A High Capacity Power Level: 30 ~ 50A @ 125V AC or 30V DC; 15 ~ 30A @ 250V AC; 30A @ 48V DC Motor Load: 400 ~ 750W @ 125V AC	–10 ~ +70°C +14 ~ +158°F	Screw Lug	12mm Bushing Cutout: 12.5mm with or without Keyway	Standard 










Toggles	IP Rating	Electrical Rating	Operating Temperature	Terminal Options	Mounting Type & Panel Cutout	Size/Features
Series TL Illuminated 	IP65 with AT401P O-ring	Power Level: 6A @ 125V AC; 3A @ 250V AC; 6A @ 12V DC	-10 ~ +55°C +14 ~ +131°F	Solder Lug	12mm Bushing Cutout: 12.5mm with Keyway	Miniature Fully Illuminated Wire Assembly Available
Series WT   AT401 AT4181	Front Panel IP67 Behind Panel IP60 for Screw Lug and Solder Lug Behind Panel IP67 for Wire Lead	Power Level: 10A @ 125V AC; 6A @ 250V AC; 10A @ 30V DC	-30 ~ +70°C -22 ~ +158°F	Screw Lug Wire Lead Solder Lug	12mm Bushing Cutout: 12.5mm with D Flat	Standard Wire Assembly Available



Rockers	IP Rating	Electrical Rating	Operating Temperature	Terminal Options	Mounting Type & Panel Cutout	Size/Features
Series CWS 	—	Power Level: 6A @ 250V AC	-10 ~ +70°C +14 ~ +158°F	Quick Connect PC Solder Lug	Snap-in Cutout: 19.2 x 12.9mm	Miniature Wire Assembly Available 
Series CWSB and CWSC Illuminated 	—	Power Level: 9A @ 125V AC 6A @ 250V AC for CWSC Only	CWSB: -20 ~ +85°C -4 ~ +185°F CWSC: -10 ~ +50°C +14 ~ +122°F	CWSB: Solder Lug .187" (4.75mm) Quick Connect CWSC: Solder Lug .110" (2.79mm) Quick Connect	Snap-in Cutout: CWSB or CWSC: 19.2 x 12.9mm	Miniature CWSB: Full Face Neon CWSC: Full Face LED Wire Assembly Available   

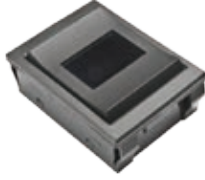
Rockers	IP Rating	Electrical Rating	Operating Temperature	Terminal Options	Mounting Type & Panel Cutout	Size/Features
Series CWT 	—	Power Level: 6A @ 125V AC; 3A @ 250V AC; 4A @ 30V DC	-25 ~ +70°C -13 ~ +158°F	Solder Lug	Snap-in Cutout: 19.2 x 6.8mm	Miniature Wire Assembly Available 
Series JWS Illuminated 	—	Power Level: 5 ~ 10A @ 125/250V AC	Nonilluminated: -25 ~ +70°C -13 ~ +158°F Illuminated: -25 ~ +50°C -13 ~ +122°F	Solder Lug .187" (4.75mm) Quick Connect	Snap-in Cutout: 19.2 x 12.9mm	Miniature LED Spot Illumination Wire Assembly Available    
Series JWL and JWLW 	JWL: IP50 with AT4126 Dust Cover JWLW: IP67	Power Level: 16A @ 125/250V AC; 5A @ 72V DC JWL: TV-8 Rated High Inrush (117A)	JWL: -25 ~ +70°C -13 ~ +158°F JWLW: -25 ~ +85°C -13 ~ +185°F	Solder Lug .187" (4.75mm) Quick Connect	Snap-in Cutout JWL: 29.5 x 20.5mm Cutout JWLW: 30.7 x 20.5mm	Standard Wire Assembly Available    
Series JMW 	IP67	Power Level: 10A @ 125/250V AC; 10A @ 30V DC	-25 ~ +85°C -13 ~ +185°F	Solder Lug .110" (2.8mm) Quick Connect	Snap-in Cutout: 25.0 x 15.4mm	Standard Wire Assembly Available    
Series LW Illuminated 	—	Power Level: 10A @ 125V AC; 6A @ 250V AC or 12V DC	-20 ~ +50°C -4 ~ +122°F	Solder Lug	Snap-in Cutout: 32.0 x 19.8mm	Standard/High Capacity Incandescent or Neon Illumination Wire Assembly Available  
LW3021A Illuminated 	—	Power Level: 20A @ 110V AC	-10 ~ +50°C +14 ~ +122°F	Solder Lug	2-screw Panel or Subpanel Mount Cutout: 28.0 x 14.0mm	Standard/High Capacity Neon Spot Illumination Wire Assembly Available




Rockers	IP Rating	Electrical Rating	Operating Temperature	Terminal Options	Mounting Type & Panel Cutout	Size/Features
Series P 	—	Power Level: 10A @ 125V AC; 6A @ 250V AC Motor Load: 400W @ 125V AC Lamp Load: 2 ~ 3A @ 125V AC	-10 ~ +85°C +14 ~ +185°F	Quick Connect PC Solder Lug	Frame Mount Cutouts: Small Actuator: 17.8 x 10.1mm Large Actuator: 28.5 x 16.0mm	Standard Wire Assembly Available 
Series SW 	—	Medium Capacity Power Level: 15 ~ 20A @ 125V AC or 30V DC 6 ~ 10A @ 250V AC	-10 ~ +70°C +14 ~ +158°F	Solder Lug	2-screw Panel or Subpanel Mount Cutout: 28.0 x 14.5mm	Standard Wire Assembly Available 
Series SW 	—	High Capacity Power Level: 30A @ 125/250V AC or 30V DC	-10 ~ +70°C +14 ~ +158°F	Screw Lug	2-screw Panel or Subpanel Mount Cutout: 37.0 x 23.0mm	Standard 
SW3821D SW3822D 	—	DC High Capacity Power Level: 20A @ 125V DC; 15A @ 250V DC; 30A @ 30V or 48V DC 4A @ 400V DC; (10A @ 400V DC) () Capacity Due to Series Wiring	-10 ~ +70°C +14 ~ +158°F	Screw Lug	2-screw Panel or Subpanel Mount Cutout: 37.0 x 23.0mm	Standard  30A @ 125/250V AC or 30V DC
Series WR 	Front Panel IP67 Behind Panel IP60 for Screw Lug, Quick Connect and Solder Lug Behind Panel IP67 for Wire Lead	Power Level: 15A @ 125/250V AC or 30V DC	-25 ~ +85°C -13 ~ +185°F	Screw Lug Quick Connect Wire Lead Solder Lug	Snap-in Cutout: 34.2 x 17.2mm	Standard Wire Assembly Available 






Pushbuttons	IP Rating	Electrical Rating	Operating Temperature	Terminal Options	Mounting Type & Panel Cutout	Size/Features
Series JPL 	—	Power Level: 16A @ 125/250V AC TV-8 Rated High Inrush (117A)	-10 ~ +70°C +14 ~ +158°F	Solder Lug .187" (4.75mm) Quick Connect	Snap-in Cutout: 28.0 x 21.2mm	Standard Wire Assembly Available 
Series JPM 	—	Power Level: 10A @ 125/250V AC TV-5 Rated High Inrush (78A)	-10 ~ +70°C +14 ~ +158°F	Solder Lug .187" (4.75mm) Quick Connect	Snap-in Cutout: 28.0 x 21.2mm	Standard Wire Assembly Available 
Series LB Illuminated 	IP65 Panel Seal Models IP60 with Dust Covers AT4001 AT4002 AT4011	Power Level: 3A @ 125/250V AC or 30V DC Logic Level: 0.4VA max @ 28V AC/DC max	Nonilluminated: -25 ~ +70°C -13 ~ +158°F Illuminated: -25 ~ +50°C -13 ~ +122°F	Solder Lug .110" (2.8mm) Quick Connect PCB Adaptors Available	Bushing Cutouts Panel Seal: 22.0mm with Keyway Square: 16.2mm Round: 22.0mm Rectangular: 22.4 x 16.2mm with Dust Cover	Standard Incandescent, Neon, LED; LED Spot Illumination Wire Assembly Available 
Series MB2000   AT4041 AT4042 AT4043	IP67 with Bushings B3 D3 IP65 with Boots AT4041 AT4042 AT4043	Power Level: 6A @ 125V AC; 3A @ 250V AC or 30V DC Logic Level: 0.4VA max @ 28V AC/DC max	-30 ~ +85°C -22 ~ +185°F	Quick Connect PC Wirewrap Solder Lug	Bushing Cutouts: 6.5mm without Keyway 12.5mm without Keyway	Miniature Wire Assembly Available 
Series SB 	—	Power Level: 3 ~ 15A @ 125V; 1.5 ~ 9A @ 250V AC	-10 ~ +70°C +14 ~ +158°F	Solder Lug	12mm Bushing Cutout: 12.5mm with Keyway	Standard Wire Assembly Available 

Pushbuttons	IP Rating	Electrical Rating	Operating Temperature	Terminal Options	Mounting Type & Panel Cutout	Size/Features
Series SCB 	—	Power Level: 15A and 0.5HP @ 125/250V AC Lamp Load: 5A @125V AC	-40 ~ +85°C -40 ~ +185°F	Quick Connect	12mm Bushing Cutout: 12.5mm with Keyway	Standard 
Series UB Illuminated 	—	Power Level: 5A @ 125/250V AC; 5A @ 30V DC Logic Level: 0.4VA Max @ 28V AC/DC Max	Nonilluminated: -20 ~ +70°C -4 ~ +158°F Illuminated: -25 ~ +50°C -13 ~ +122°F	PC Solder Lug	Snap-in Cutouts: Square: 16.2mm Rectangular: 22.4 x 16.2mm	Miniature LED Illumination Wire Assembly Available 
Series UB2 Illuminated 	—	Power Level: 5A @ 125/250V AC or 30V DC Logic Level: 0.4VA max @ 28V AC/DC max	Nonilluminated: -25 ~ +70°C -13 ~ +158°F Illuminated: -25 ~ +50°C -13 ~ +122°F	PC Solder Lug	Snap-in Cutout: 17.4mm Square	Miniature LED Illumination Wire Assembly Available 
Series WB  AT4043	Front Panel IP67 Behind Panel IP60 for Screw Lug and Solder Lug Behind Panel IP67 for Wire Lead	Power Level: 6A @ 125V AC or 30V DC; 3A @ 250V AC	-30 ~ +70°C -22 ~ +158°F	Screw Lug Wire Lead Solder Lug	12mm Bushing Cutout: 12.5mm with D Flat	Standard Wire Assembly Available
Series YB Illuminated 	IP65 with Panel Seal Bushing Mount IP60 with AT4115 Dust Cover	Power Level: 3A @ 125/250V AC or 30V DC Logic Level: 0.4VA max @ 28V AC/DC max	Nonilluminated: -25 ~ +70°C -13 ~ +158°F Illuminated: -25 ~ +50°C -13 ~ +122°F	Solder Lug .110" (2.8mm) Quick Connect	Bushing Snap-in Cutout: 16.0mm without Keyway	Miniature Round, Square and Rectangular Models LED Illumination Wire Assembly Available 

Pushbuttons	IP Rating	Electrical Rating	Operating Temperature	Terminal Options	Mounting Type & Panel Cutout	Size/Features
Series YB2 Illuminated 	IP65 Panel Seal Flush Mount	Power Level: 3A @ 125/250V AC or 30V DC Logic Level: 0.4VA max @ 28V AC/DC max	Nonilluminated: -25 ~ +70°C -13 ~ +158°F Illuminated: -25 ~ +50°C -13 ~ +122°F	Solder Lug .110" (2.8mm) Quick Connect	Bushing Cutouts: Round: 22.0mm with Keyway Square: 21.0mm	Standard Round and Square Models LED Illumination Wire Assembly Available 






Programmable	IP Rating	Electrical Rating	Operating Temperature	Terminal Options	Mounting Type & Panel Cutout	Size/Features
Series IS OLED Rocker 	Front Panel IP64	Switch: 3VA Max DC Logic Voltage: +2.7 ~ +3.3V Max Current: 0.72mA Supply Voltage for OLED: 14.5 ~ 15.5V Max Max Current: 13.2mA	-20 ~ +70°C -4 ~ +158°F	Connector	Snap-in 14.6mm Behind Panel Cutout: 48.6 x 35.4mm	Standard 50.7 x 37.9mm 96 x 64 Pixels Monochrome White 3 Switches (Top, Middle, Bottom)

Keylocks	IP Rating	Electrical Rating	Operating Temperature	Terminal Options	Mounting Type & Panel Cutout	Size/Features
Series CK 	—	High Security Power Level: 3A @ 250V AC	-25 ~ +70°C -13 ~ +158°F	Solder Lug	Bushing Cutout CKM: 16.0mm with Double Flat Cutout CKL: 19.0mm with Double Flat	Standard Wire Assembly Available
Series SK 	—	Low and Medium Security Power Level: 1 ~ 3A @ 250V AC	-25 ~ +70°C -13 ~ +158°F	Solder Lug	12mm Bushing Cutout: 12.0mm with Double Flat	Miniature Wire Assembly Available 

Rotaries	IP Rating	Electrical Rating	Operating Temperature	Terminal Options	Mounting Type & Panel Cutout	Size/Features
Series HS 	—	HS13 Power Level: 6A @ 125V AC; 3A @ 250V AC; 5A @ 30V DC HS16 Power Level: 12A @ 125V AC; 6A @ 250V AC	-10 ~ +70°C +14 ~ +158°F	Solder Lug	10mm Bushing Cutouts: 10.3mm Dia with Keyway 10.5mm Dia with Locking Ring	Standard Wire Assembly Available HS16: 
Series MRB and MRK 	MRB: IP67 with AT535 O-ring MRK: IP67	Logic Level: 0.4VA max @ 28V AC/DC max	-10 ~ +70°C +14 ~ +158°F	PC	6mm Bushing Cutout: 6.2mm with Double Flat	Miniature
Series PS 	—	Power Level: 30A @ 125/250V AC	-10 ~ +70°C +14 ~ +158°F	Screw Lug	10mm Bushing Cutout: 10.5mm Dia 20.0mm R Screw Layout without Locking Ring	Standard
Series TS 	—	Power Level: 6A @ 125/250V AC	-10 ~ +70°C +14 ~ +158°F	Screw Lug	10mm Bushing Cutouts: 10.3mm Dia with Keyway 10.5mm Dia with Locking Ring	Standard

Accessories

Knobs

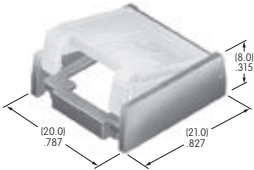
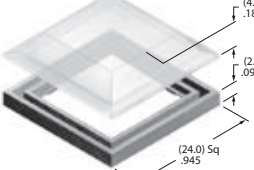
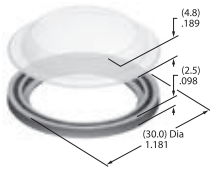
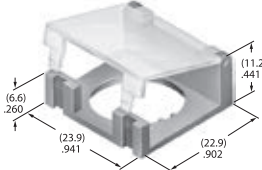
Optional Knobs for Rotary Switches (Only Models with D-flat Shaft)				
				
AT433 Plain Black Knob Black with white indicator line Series: FR01, MR	AT4103 Small Color Tipped Knob Black with white indicator line Series: FR01, MR	AT4104 Large Color Tipped Knob Black with white indicator line Series: FR01, MR	AT431 Large Rotary Knob Black with white indicator line Series: HS, PS, TS	AT432 Small Rotary Knob Black with white indicator line Series: HS, PS, TS

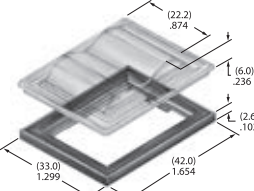
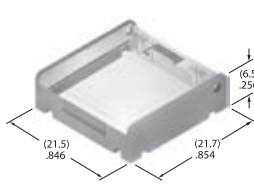
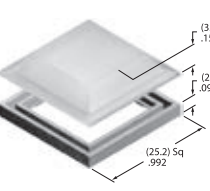
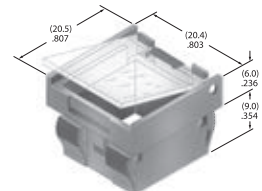
Panel Seal Boots

NKK offers a variety of boots compatible with toggles and pushbuttons. These boots seal switches to achieve IP65 rating or higher at the front panel.

PN	AT401 Half Boot	AT402, AT402S Full Boots	AT428 Full Boot	AT4041, AT4042 Full Boots	AT4043 Full Boot	AT4181 Full Boot
						
Material	AT401A: Nitrile butadiene rubber AT401H: Ethylene propylene rubber AT401S: Silicone rubber	Silicone rubber	Silicone rubber	Silicone rubber	Silicone rubber	Silicone rubber
Color	Black for AT401A Gray for AT401H Black for AT401S	Black, Red, Yellow, Green, and Gray	Black	Black	Black	Black
Bushing	12mm	12mm	M6 or 1/4-40 Thd	M6 or 1/4-40 Thd	12mm	12mm

Protective Guards & Covers

PN	AT499	AT4001	AT4002	AT4072
				
Cover / Lid	Polycarbonate	Polyvinyl chloride	Polyvinyl chloride	Polycarbonate
Base / Gasket	Polyamide	Polyethylene	Polyethylene	Glass fiber reinforced polycarbonate
Series	LB	LB, UB	LB	YB

PN	AT4126	AT4142	AT4145	AT4173
				
Lid	Polyvinyl chloride	Polycarbonate	PVC	Polycarbonate
Base / Gasket	Polyamide	GFR polyamide	Polyethylene	Polyamide
Series	JWL	UB2	UB2	UB



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