

**Re: New Product Announcement:
S Series Toggles with Long Levers and IP67 Rating**

NKK is pleased to announce new ready-to-order offerings from our standard size S Series toggles and featuring 30mm or 45mm levers. The double pole switches combine with 12mm threaded bushings and solder lug terminals, and meet IP67 of IEC 60529 Standards by providing front panel protection against entry of dust and from water during temporary immersion.

These slender levers not only deliver crisp, robust actuation, but will enhance any board design with the luster of polished chrome. See the following for descriptions, specifications and part numbers.

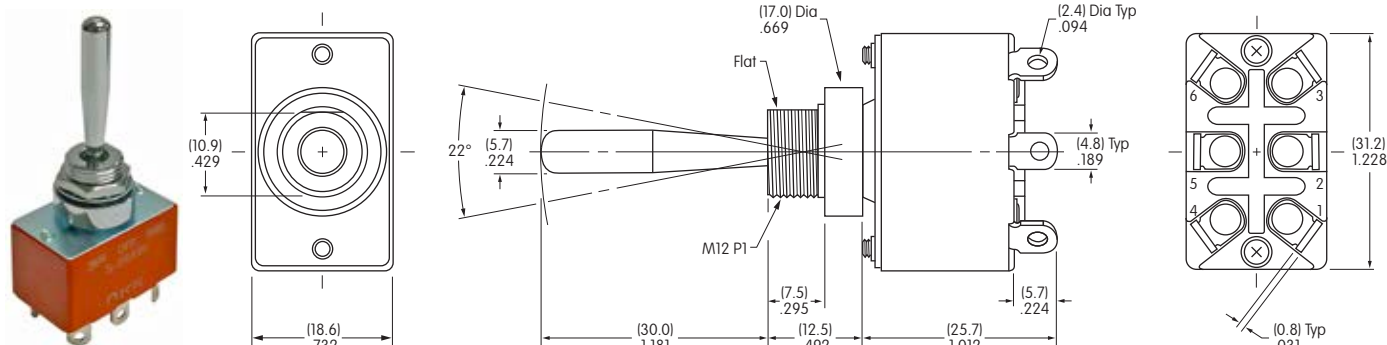
Base Part Descriptions	Levers, Standard Hardware & Panel Cutouts	Part Numbers
Power Level: 15A @ 125V AC & 6A @ 250V AC Silver Contacts & Solder Lug Terminals Pole & Circuit: DPDT (ON) OFF (ON) Mechanical Life: 30,000 Operations Minimum Electrical Life: 25,000 Operations Minimum 12mm Threaded, Flatted Bushing	30mm (1.181") Long Chrome Plated Bat Toggle Hexagon Face Nut Internal Tooth Lockwasher AT537 O-ring Panel Cutout: .492" (12.5mm) Diameter with Flat Panel Thickness: .158" (4.0mm) Maximum	S28AW30
Power Level: 15A @ 125V AC & 6A @ 250V AC Silver Contacts & Solder Lug Terminals Pole & Circuit: DPDT (ON) OFF (ON) Mechanical Life: 30,000 Operations Minimum Electrical Life: 25,000 Operations Minimum 12mm Threaded, Flatted Bushing	45mm (1.772") Long Chrome Plated Bat Toggle Hexagon Face Nut Internal Tooth Lockwasher AT537 O-ring Panel Cutout: .492" (12.5mm) Diameter with Flat Panel Thickness: .158" (4.0mm) Maximum	S28AW45



S28AW30

Bushing Mount • Double Pole • Solder Lug

Dimensions in mm/inch

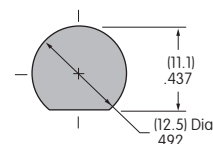


BASE SWITCH

PANEL CUTOUT

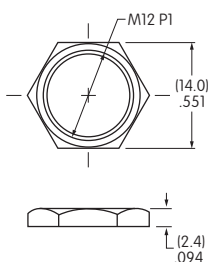
Part Number
S28AW

Maximum Panel Thickness:
.158" (4.0mm) Maximum



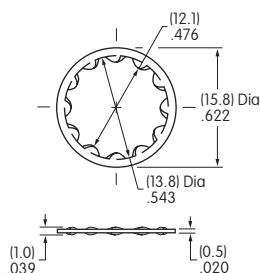
STANDARD HARDWARE

Hexagon
Face Nut



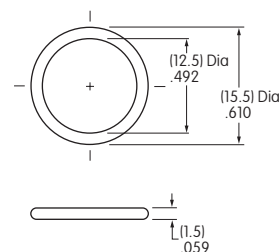
1 included with each switch
Material: Brass with tin-cobalt alloy plating

Internal
Tooth Lockwasher






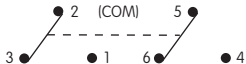
1 included with each switch
Material: Phosphor bronze with chrome plating

AT537
O-ring



1 included with each switch
Material: Nitrile butadiene rubber

POLE & CIRCUIT

		Toggle Position/ Connected Terminals () = Momentary				Throw & Schematics
Pole	Model	Down 	Center 	Up 		
DP	S28AW	(ON) 2-3 5-6	OFF	(ON) 2-1 5-4	Note: Terminal numbers are actually on the switch. 	

CONTACT MATERIALS & RATINGS

Silver over Silver

Power Level

15A @ 125V AC & 6A @ 250V AC

Base Switch Specifications

Electrical Capacity (Resistive & Inductive Load)

Power Level: 15A @ 125V AC & 6A @ 250V AC; 20A @ 30V DC

Other Ratings

Contact Resistance: 10 milliohms maximum
Insulation Resistance: 1,000 megohms minimum @ 500V DC
Dielectric Strength: 2,000V AC minimum for 1 minute minimum
Mechanical Life: 30,000 operations minimum
Electrical Life: 25,000 operations minimum
Angle of Throw: 22°

Materials & Finishes

Toggle: Brass with chrome plating
Bushing: Brass with chrome plating
Case: Phenolic resin
Case Cover: Steel with zinc plating
Movable Contactor: Copper with silver plating
Movable Contacts: Silver alloy capped on copper with silver plating
Stationary Contacts: Silver alloy capped on copper with silver plating
Terminals: Brass with tin plating

Environmental Data

Operating Temperature Range: -30°C through +70°C (-22°F through +158°F)
Front Panel Sealing: IP67 of IEC 60529, dust tight & water protected during temporary immersion

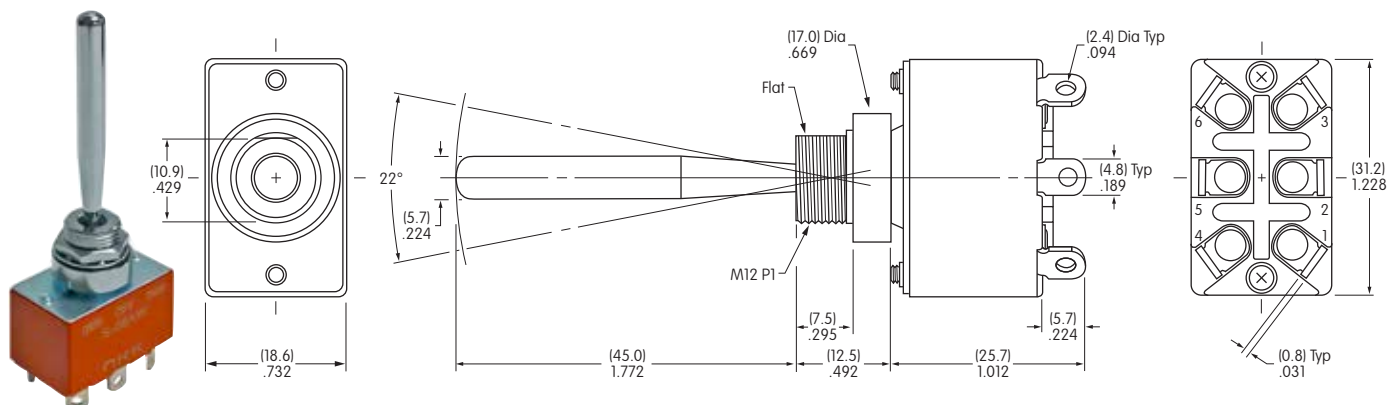
Installation

Mounting Torque: 1.47Nm (13 lb•in) for single nut
Soldering Time & Temperature: Manual Soldering: 390°C maximum for 4 seconds maximum, 2 cycles

S28AW45

Bushing Mount • Double Pole • Solder Lug

Dimensions in mm/inch

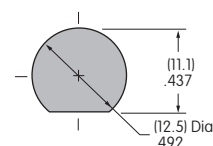


BASE SWITCH

PANEL CUTOUT

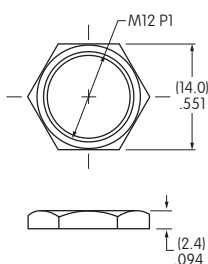
Part Number
S28AW

Maximum Panel Thickness:
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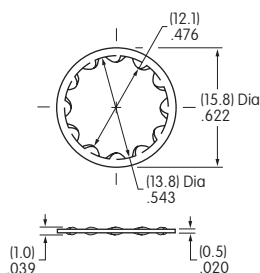
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Hexagon
Face Nut



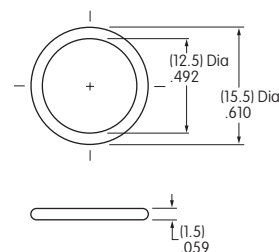
1 included with each switch
Material: Brass with tin-cobalt alloy plating

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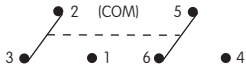
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