

Standard Switches with Wire Leads
Product Training Module

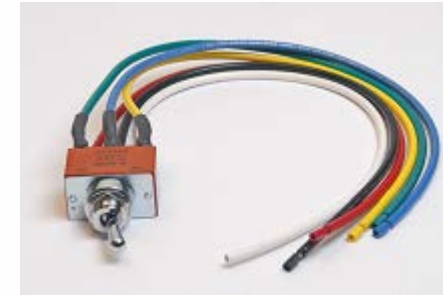
Introduction

Purpose:

- To introduce NKK's new Standard Switches with Wire Leads

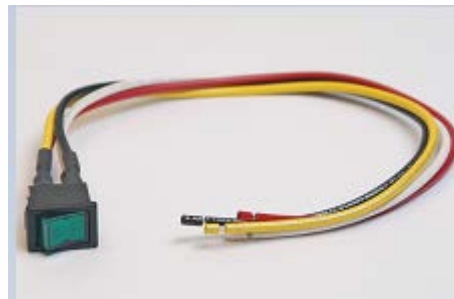
Objective:

- Present features and benefits
- Discuss part offerings available



Contents

- 11 pages

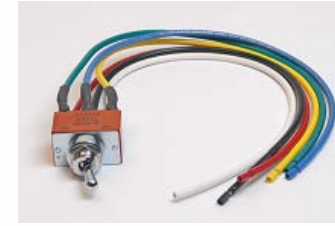


New Standard Switches with Wire Leads

- Available in 5 different options from 3 standard NKK Series:
 - S Series Toggle
 - JW Series Rocker
 - CWSB Series Illuminated Rocker
- Switches come standard with preassembled, UL-rated, 14–16 AWG wire lead



S Series Toggle
S1AW-WL



S Series Toggle
S6AW-WL



JW Series Rocker
JWL11RA2A/UCV-WL



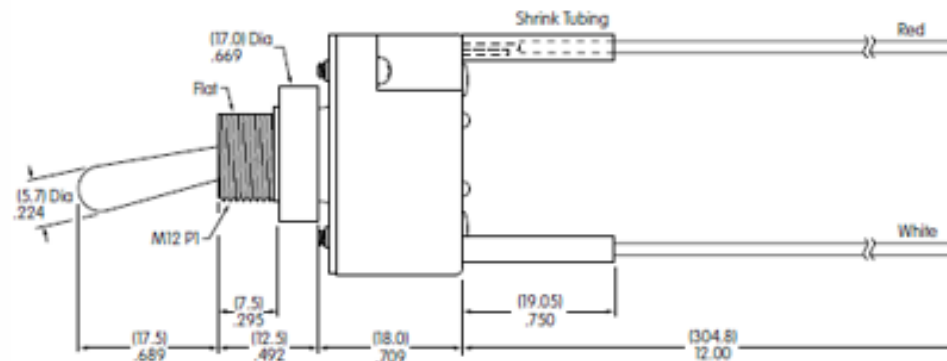
CWSB Series Rocker
CWSB21CACF-WL



CWSB Series Rocker
CWSB21FAFF-WL

Features and Benefits

- Convenient preassembled wire lead attached to base
- 12" UL1015 certified wire leads rated at 600V
- Temperature rating for wire assembly is -40 degrees Celsius to +105 degrees Celsius.
- Ease of use, ready for installation into application



Part Numbers and Product Description

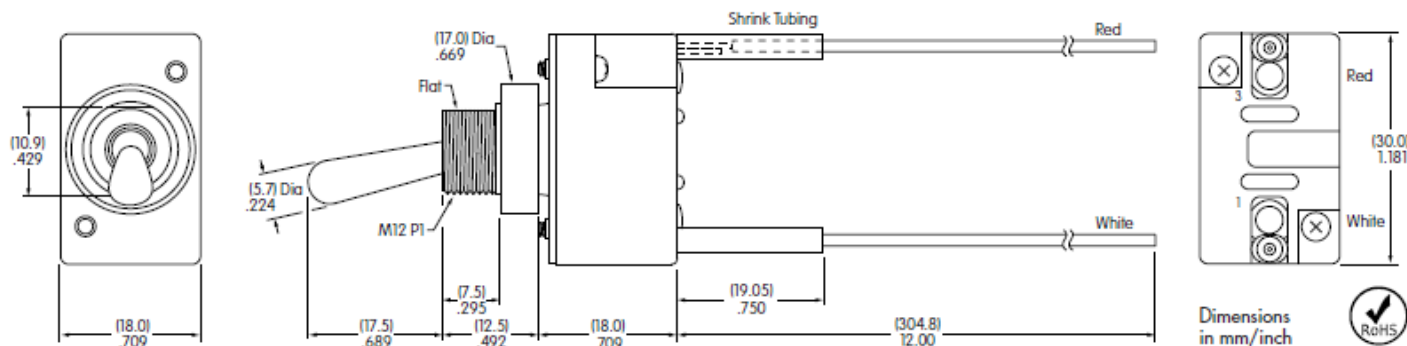
Base Part Description	New Part Number for Switch with Wire Lead
S Series Medium Capacity Standard Size Toggle, Single Pole Solder Lug Panel Seal (Meets IP67)	S1AW-WL
S Series Medium Capacity Standard Size Toggle, Double Pole Solder Lug Panel Seal (Meets IP67)	S6AW-WL
JW Series High Inrush 16 Amp Rocker with ON-OFF Symbol and UL, CSA, VDE Rating	JWL11RA2A/UCV-WL
CWSB Series Double Pole, Red Neon Illuminated Miniature Power Rocker with UL, CSA Rating	CWSB21CACF-WL
CWSB Series Double Pole, Green Neon Illuminated Miniature Power Rocker with UL, CSA Rating	CWSB21FAFF-WL

S Series Medium Capacity, Single Pole, Standard Size Toggle with Wire Lead Specifications

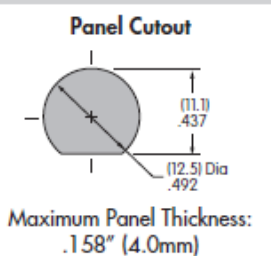



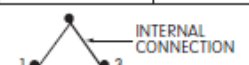
Medium Capacity Standard Size Toggle with Wire Leads

Series S

STAW-WL



SINGLE POLE SOLDER LUG WITH PANEL SEAL

Base Switch	Pole & Throw	Toggle Position/Connected Terminals			Electrical Capacity			Panel Cutout 
		Down 	Center 	Up 	Resistive			
					AC 125V	AC 250V	DC 30V	
STAW	SPST	ON 1-3	NONE	OFF —	15A	6A	20A	
Throw & Schematics:		SPST  INTERNAL CONNECTION			Note: Terminal numbers are actually on the switch			

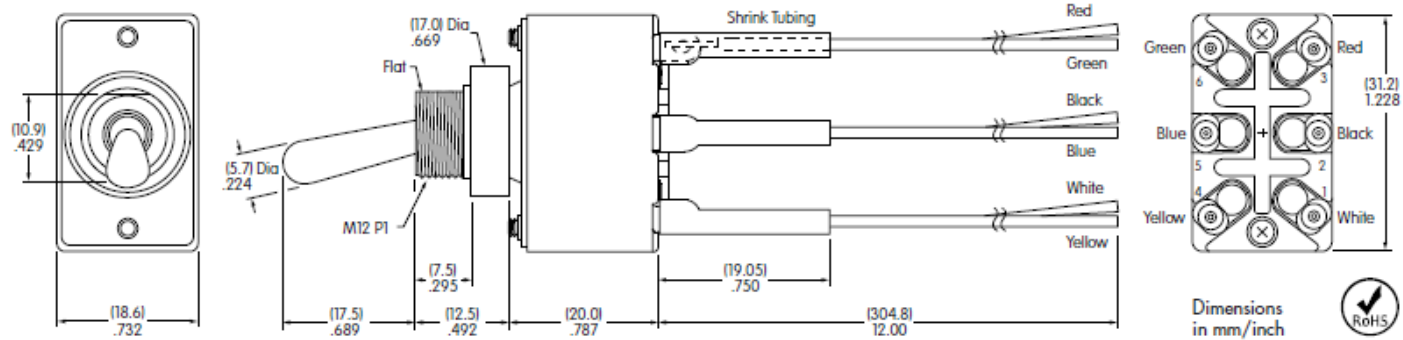
Wiring				Wire Specifications		Standard Hardware
No. of Wires	Terminal 1	Terminal 2	Terminal 3	UL1015	Temperature Range: -40°C ~ +105°C (-40°F ~ +221°F)	AT503M Hex Face Nut
2	White	—	Red	600V		AT508 Lockwasher
				14 AWG	Stripped Wire Ends 1/4"	AT537 O-ring

S Series Medium Capacity, Double Pole, Standard Size Toggle with Wire Lead Specifications

Medium Capacity Standard Size Toggle with Wire Leads

Series S

S6AW-WL



DOUBLE POLE SOLDER LUG WITH PANEL SEAL

Base Switch	Pole & Throw	Toggle Position/Connected Terminals			Electrical Capacity			Panel Cutout
		Down 	Center 	Up 	Resistive			
S6AW	DPDT	ON 2-3 5-6	NONE	ON 2-1 5-4	AC 125V	AC 250V	DC 30V	<p>Maximum Panel Thickness: .158" (4.0mm)</p>
Throw & Schematics: DPDT 					Note: Terminal numbers are actually on the switch.			

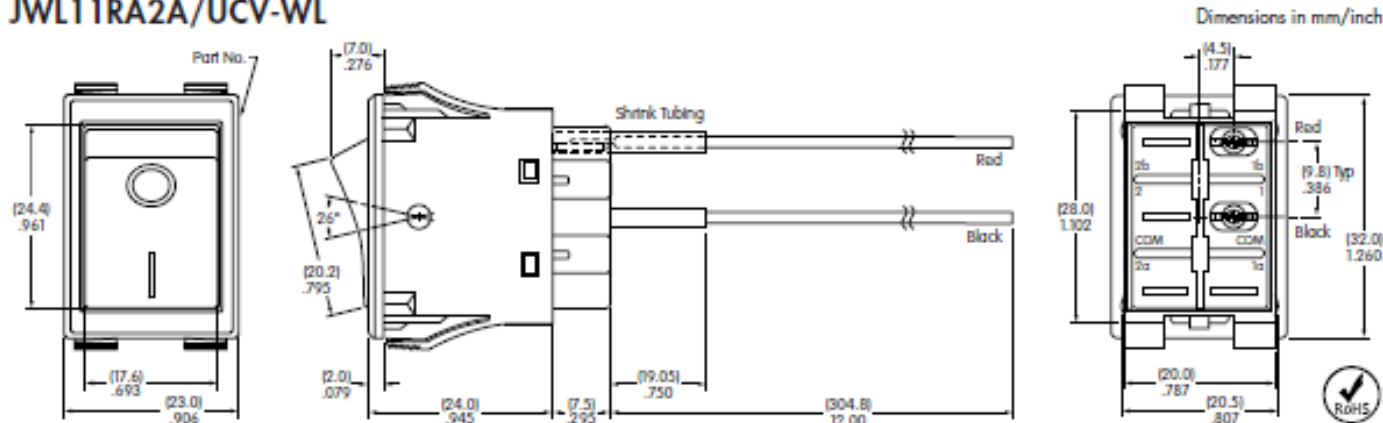
Wiring							Wire Specifications		Standard Hardware
No. of Wires	Terminal 1	Terminal 2	Terminal 3	Terminal 4	Terminal 5	Terminal 6	UL1015	Temperature Range:	AT503M Hex Face Nut
6	White	Black	Red	Yellow	Blue	Green	600V	-40°C ~ +105°C (-40°F ~ +221°F)	AT508 Lockwasher
							14 AWG	Stripped Wire Ends 1/4"	AT537 O-ring

JW Series High Inrush 16 Amp Rocker with Wire Lead Specifications

High Inrush 16 Amp Rocker with Wire Leads

Series JW

JWL11RA2A/UCV-WL



SINGLE POLE WITH SOLDER LUG

Base Switch	Pole	Rocker Position			Connected Terminals			Throw & Schematics
		Down	Center	Up	Down	Center	Up	
JWL11RA2A/UCV	SP	ON	NONE	OFF	1-1b	OPEN	OPEN	SPST

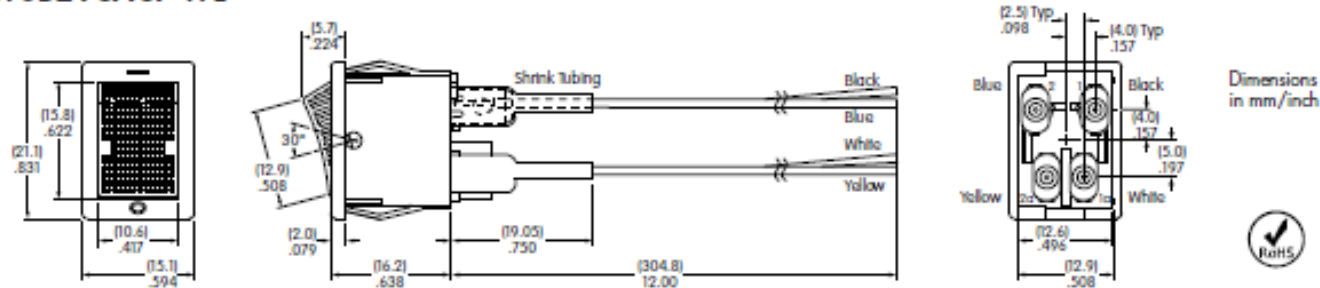
Wiring				Wire Specifications		Panel Cutout
No. of Wires	Terminal 1b	Terminal COMMON	Terminal 1a, 2a, COM, 2b	UL1015	Temperature Range: -40°C ~ +105°C (-40°F ~ +221°F)	
2	Red	Black	---	600V	Stripped Wire Ends 1/4"	
				14 AWG		Panel Thickness Range: .039" ~ .157" (1.0mm ~ 4.0mm)

CWSB Series Double Pole, Red Neon Miniature Power Rocker with Wire Lead Specifications

Neon Miniature Power Rocker with Wire Leads

Series CWSB

CWSB21CACF-WL



DOUBLE POLE WITH SOLDER LUG

Base Switch	Pole	Rocker Position			Connected Terminals			Throw & Switch/Lamp Schematic
		Down	Center	Up	Down	Center	Up	
CWSB21CACF	DP	ON	NONE	OFF	1-1a 2-2a	OPEN	OPEN	DPST

Note: Terminal numbers are actually on the switch.

Wiring					Wire Specifications		Panel Cutout
No. of Wires	Terminal 1	Terminal 1a	Terminal 2	Terminal 2a	UL1015	Temperature Range: -40°C ~ +105°C (-40°F ~ +221°F)	
4	Black	White	Blue	Yellow	600V	Stripped Wire Ends 1/4"	

Panel Thickness Range: .030" ~ .079" (0.75mm ~ 2.0mm)

Neon Lamp Color & Specifications

The Neon lamp is factory assembled and not available separately. The lamp circuit is synchronous to the switching circuit. Electrical specifications are determined at a basic temperature of 25°C.

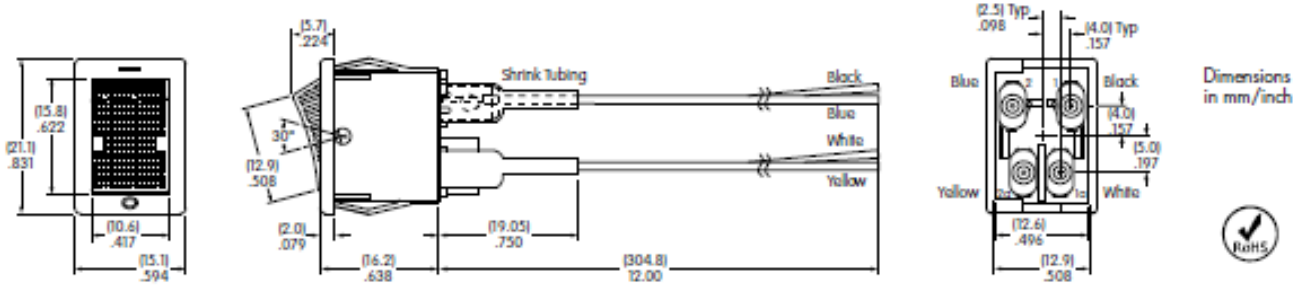
Red Illumination	Voltage (V)	125V AC
	Internal Series Resistance	33K ohms
	Current (I)	1.4mA
	Endurance (Hours)	15,000

CWSB Series Double Pole, Green Neon Miniature Power Rocker with Wire Lead Specifications

Neon Miniature Power Rocker with Wire Leads

Series CWSB

CWSB21FAFF-WL



DOUBLE POLE WITH SOLDER LUG

Base Switch	Pole	Rocker Position			Connected Terminals			Throw & Switch/Lamp Schematic
		Down	Center	Up	Down	Center	Up	
CWSB21FAFF	DP	ON	NONE	OFF	1-1a 2-2a	OPEN	OPEN	DPST

Note: Terminal numbers are actually on the switch.

Wiring					Wire Specifications		Panel Cutout
No. of Wires	Terminal 1	Terminal 1a	Terminal 2	Terminal 2a	UL1015	Temperature Range: -40°C ~ +105°C (-40°F ~ +221°F)	
4	Black	White	Blue	Yellow	600V	16 AWG Stripped Wire Ends 1/4"	

Panel Thickness Range: .030" ~ .079" (0.75mm ~ 2.0mm)

Neon Lamp Color & Specifications

The Neon lamp is factory assembled and not available separately. The lamp circuit is synchronous to the switching circuit. Electrical specifications are determined at a basic temperature of 25°C.

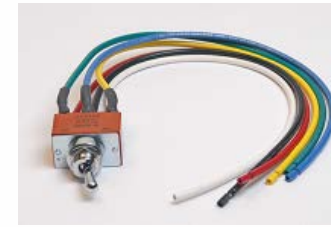
Green Illumination	Voltage (V)	125V AC
	Internal Series Resistance	68K ohms
	Current (I)	0.6mA
	Endurance (Hours)	8,000

Summary

- Introduced the Standard Switches with Wire Leads
- Available in 5 different options from 3 standard Series:
 - S Series Toggle
 - JW Series Rocker
 - CWSB Series Illuminated Rocker
- Reviewed features and benefits
- Ready to go – preassembled for ease of ordering and ease of installation
- New part numbers: S1AW-WL, S6AW-WL, JWL11RA2A/UCV-WL, CWSB21CACF-WL, CWSB21FAFF-WL



S Series Toggle
S1AW-WL



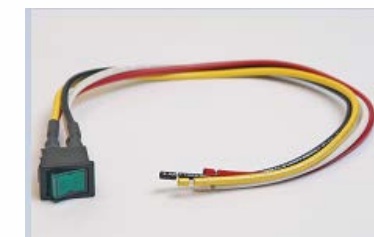
S Series Toggle
S6AW-WL



JW Series Rocker
JWL11RA2A/UCV-WL



CWSB Series Rocker
CWSB21CACF-WL



CWSB Series Rocker
CWSB21FAFF-WL

Additional Resources

With over half of a century of passion for innovation, NKK has continued to elevate the standard for switch solutions while maintaining an unwavering emphasis on quality, stability and reliability.

For additional information visit the NKK Switches website:

www.nkkswitches.com

