

# NEW PRODUCTS

Contact No. 158

## JWLW Rockers

16 Amp Double Pole Circuit  
IP67 Panel Seal Molded Rocker



Available January 28, 2009

## General Specifications

### Electrical Capacity (Resistive Load)

**Power Level:** 16A @ 125/250V AC

### Other Ratings

**Contact Resistance:** 20 milliohms maximum

**Insulation Resistance:** 1,000 megohms minimum @ 500V DC

**Dielectric Strength:** 2,000V AC minimum between contacts for 1 minute minimum;  
4,000V AC minimum between contacts & case for 1 minute minimum

**Mechanical Life:** 25,000 operations minimum

**Electrical Life:** 25,000 operations minimum

**Nominal Operating Force:** 10.00N

**Angle of Throw:** 26°

### Materials & Finishes

**Rocker:** Polyphenylene ether (UL94V-0)

**Housing/Frame:** Polyamide (UL94V-0)

**Case/Base:** Melamine (UL94V-0)

**Movable Contacts:** Silver alloy with silver plating

**Stationary Contacts:** Silver alloy with silver plating

**Terminals:** Brass with silver plating

### Environmental Data

**Operating Temperature Range:** -25°C through +85°C (-13°F through +185°F)

**Humidity:** 90 ~ 95% humidity for 96 hours @ 40°C (104°F)

**Vibration:** 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours

**Shock:** 50G (490m/s<sup>2</sup>) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

**Sealing:** IP67 of IEC60529 standard for panel seal

### Installation

**Soldering Time & Temperature:** Manual Soldering: 390°C maximum for 4 seconds maximum.

### Standards & Certifications

**Flammability Standards:** UL94V-0



**cULus Recognized:**

Recognized at 16A @ 250V AC; UL File No. E44145

# Distinctive Characteristics

High electrical capacity of 16 Amps.

Conforms to IP67 of IEC60529 Standards for panel seal with snap-in installation.

Constructed for dust resistance with interior cover between actuator and contact area.

Prominent external insulating barriers between terminals increase insulation resistance and dielectric strength.

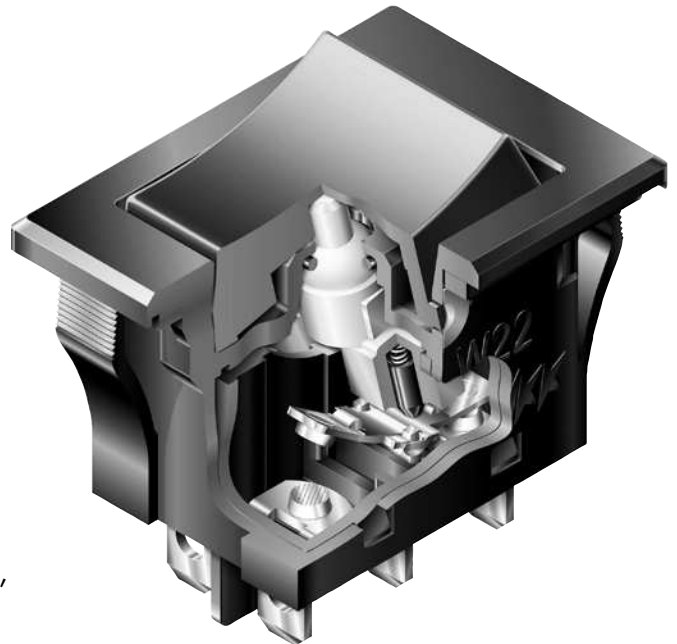
Specially designed to break light contact welds.

Increased electrical life with specially designed plate to minimize contact bounce.

Housing and case of heat resistant resin meet UL94V-0 standard.

Terminals are molded in and epoxy sealed to lock out flux, dust and other contaminants.

Solder lug/quick connect terminals can be used with connector.



## APPLICATIONS

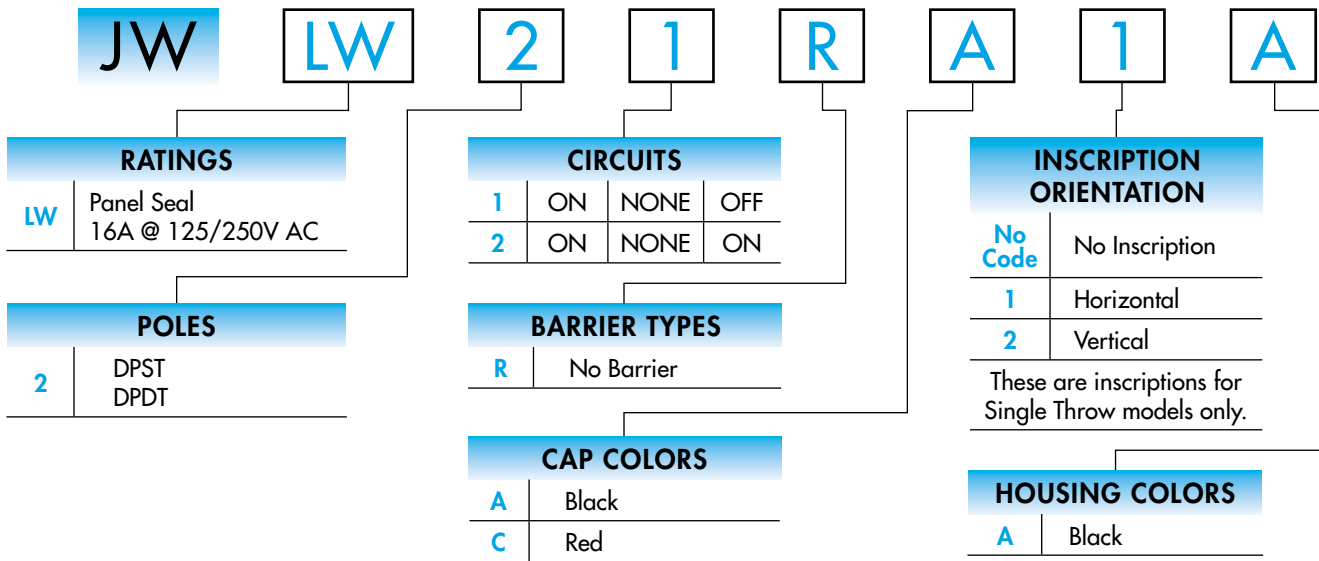
The JWLW Rockers complement multiple applications, including:

- Energy management
- Industrial equipment/machine tools
- Construction machinery
- Transportation
- Restaurant equipment
- Medical equipment
- Telecommunications

Actual Size

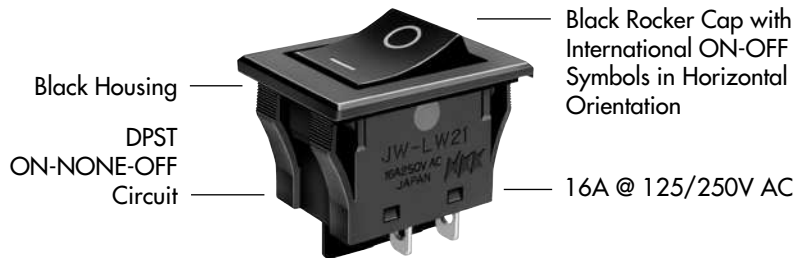


## TYPICAL SWITCH ORDERING EXAMPLE



### DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

#### JWLW21RA1A



### IMPORTANT:



All JWLW Rockers have cULus marking.

## RATINGS



Panel Seal

Power Level

16A @ 125/250V AC

## POLES & CIRCUITS

Pole	Model	Rocker Position			Connected Terminals			Throw & Schematics
		Down	Center	Up	Down	Center	Up	
DP	JWLW21	ON	NONE	OFF	1-1b 2-2b	OPEN	OPEN	DPST 
DP	JWLW22	ON	NONE	ON	1-1b 2-2b	OPEN	1-1a 2-2a	DPDT 

Note: Terminal numbers are actually on the switch. Actuator positions oriented with switch part number facing front.

## CAP COLORS



Cap Material:  
Polyphenylene Oxide

Finish: Matte

Rocker cap is an integral part of the switch and not available separately.

Cap Colors Available:

**A** Black

**C** Red

## INSCRIPTIONS

No Code

No Inscription



1

Inscription for Horizontal Mounting



2

Inscription for Vertical Mounting

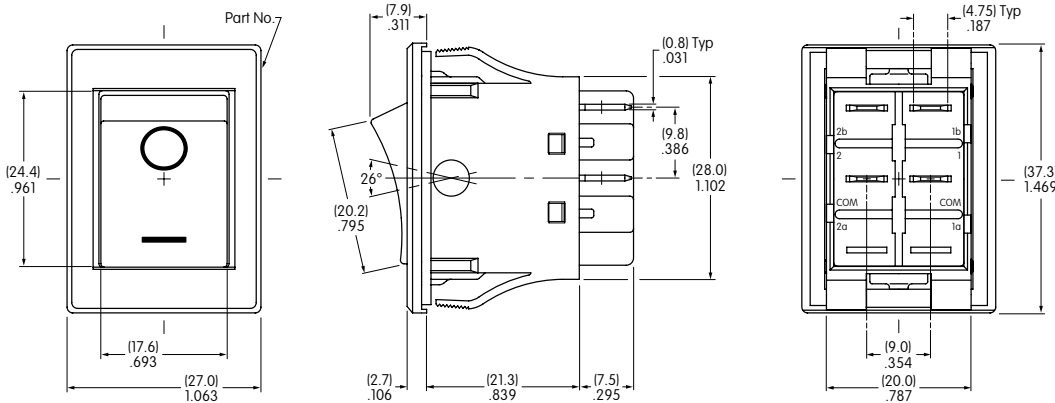


IEC symbols for On-Off are supplied with Single Throw models only. Orientation of inscription must be selected.  
Inscription Colors: White ink on Black or Red cap. Contact factory for other inscriptions.

## TYPICAL SWITCH DIMENSIONS

### Double Pole Single Throw

16 Amp • Inscription

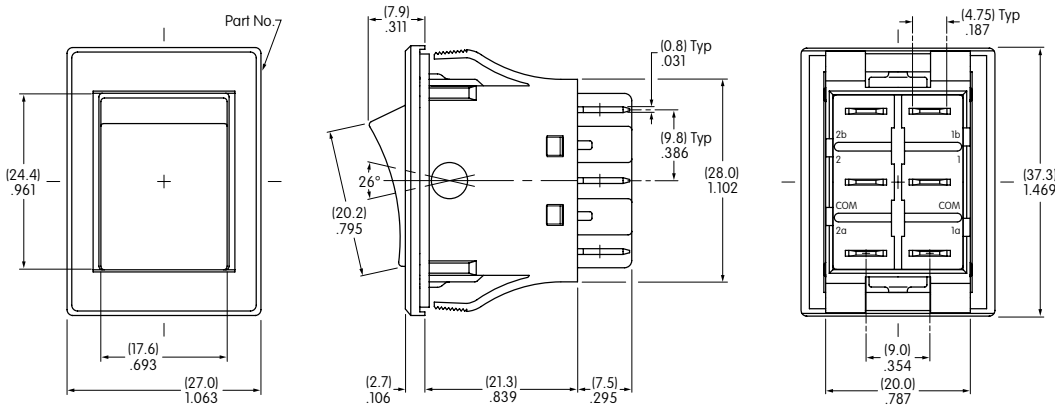


Single Throw models do not have terminals 1a and 2a.

JWLW21RA1A

### Double Pole Double Throw

16 Amp • No Inscription



JWLW22RAA

## HOUSING

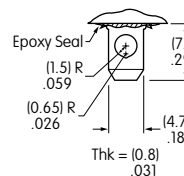
Color Available: **A** Black

Material: Polyamide

Finish: Matte

## TERMINALS

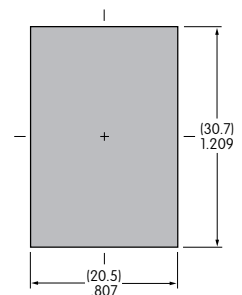
Solder Lug/  
.187"  
(4.75mm)  
Quick Connect



## PANEL CUTOUT

Panel Thickness Range

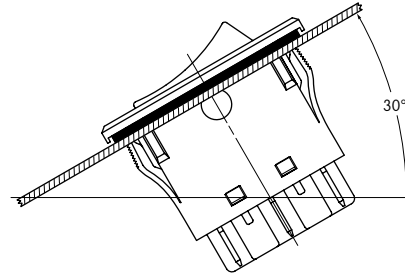
.039" ~ .157"  
(1.0mm ~ 4.0mm)



## PRECAUTIONS FOR HANDLING & STORAGE

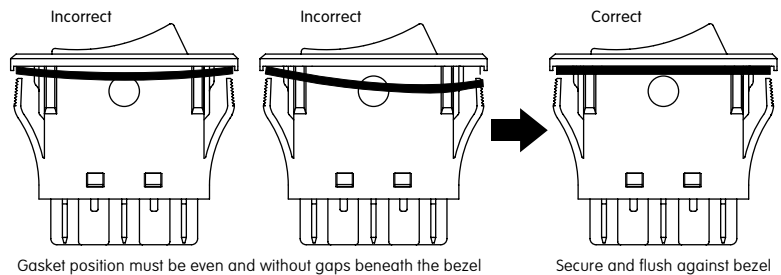
### Operating Environment

- Do not install switch where heavy dust collection occurs. Dust build-up under rocker may affect switch actuation.
- Do not actuate switch if submerged in water or oil.
- Installation is not recommended on horizontal surface in an environment where frequent splashing of water may occur. In such an environment, a minimum 30° angle installation is advisable. If there is a possibility of freezing, install vertically so no moisture will be retained within switch housing.

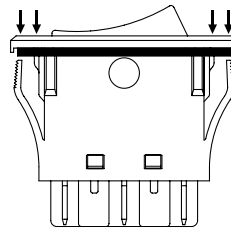


### Panel Mounting

- Before snapping a switch into the panel, align the gasket evenly under bezel of the switch.



- When mounting into a panel, apply equal pressure to sides of bezel and insert parallel to the panel.



- After mounting a switch, be sure there are no gaps between switch and panel. Lightly push into panel.
- After installing into panel, do not apply excessive force.
- After panel installation and wiring is completed, do not apply force horizontally or vertically from behind panel.
- Behind the panel, cut area should be squared. If front of panel is painted, do not allow any paint to collect in corners of cutout to prevent level mounting.
- Avoid reinstalling a switch once it has been mounted in a panel. This may cause deterioration of panel sealability.

