

Distinctive Characteristics

Rocker caps and housing available in a variety of colors.

Protective barrier available to prevent accidental actuation.

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

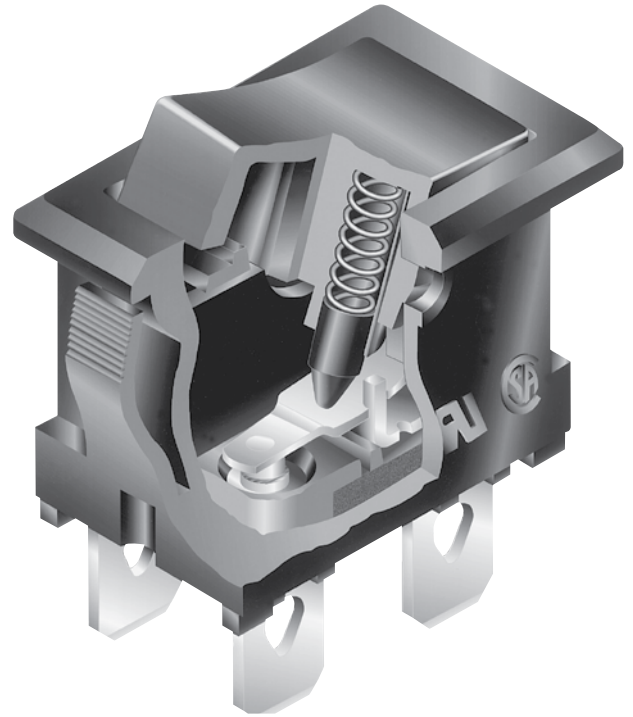
Easy, crisp actuation.

Small size well suited for telecommunication, measuring, automation, and consumer applications.

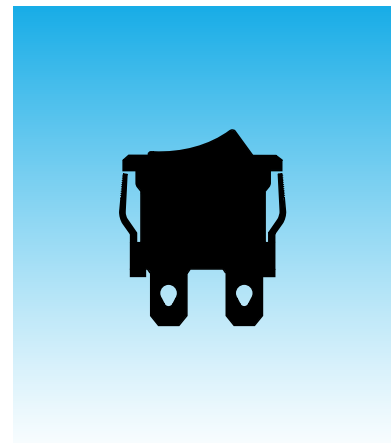
Terminals are molded in to lock out flux, dust, and other contaminants.

Outer case of heat resistant resin meets UL94V-0 flammability standard.

Spot illuminated rocker available.



Actual Size



General Specifications

Electrical Capacity (Resistive Load)

Power Level: 10A @ 125/250V AC

Other Ratings

Contact Resistance: 10 milliohms maximum
Insulation Resistance: 500 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: 30,000 operations minimum
Electrical Life: 10,000 operations minimum
Nominal Operating Force: Single Pole 3.92N & Double Pole 5.39N
Angle of Throw: 30°

Materials & Finishes

Rocker: Polyphenylene ether (UL94V-0)
Housing/Case: Polyamide (UL94V-0)
Movable Contactor: Copper with silver plating
Movable Contacts: Silver
Stationary Contacts: Silver
End Terminals: Brass with silver plating
Common Terminals: Copper with silver plating
Lamp Terminals: Phosphor bronze with tin plating (illuminated models only)





Environmental Data

Operating Temp Range: -25°C through +70°C (-13°F through +158°F) for nonilluminated models;
 -25°C through +50°C (-13°F through +122°F) for illuminated models
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 15 minutes; 3 right angled directions for 2 hours
Shock: 50G (490m/s²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)
Sealing: Dust resistant inner seal

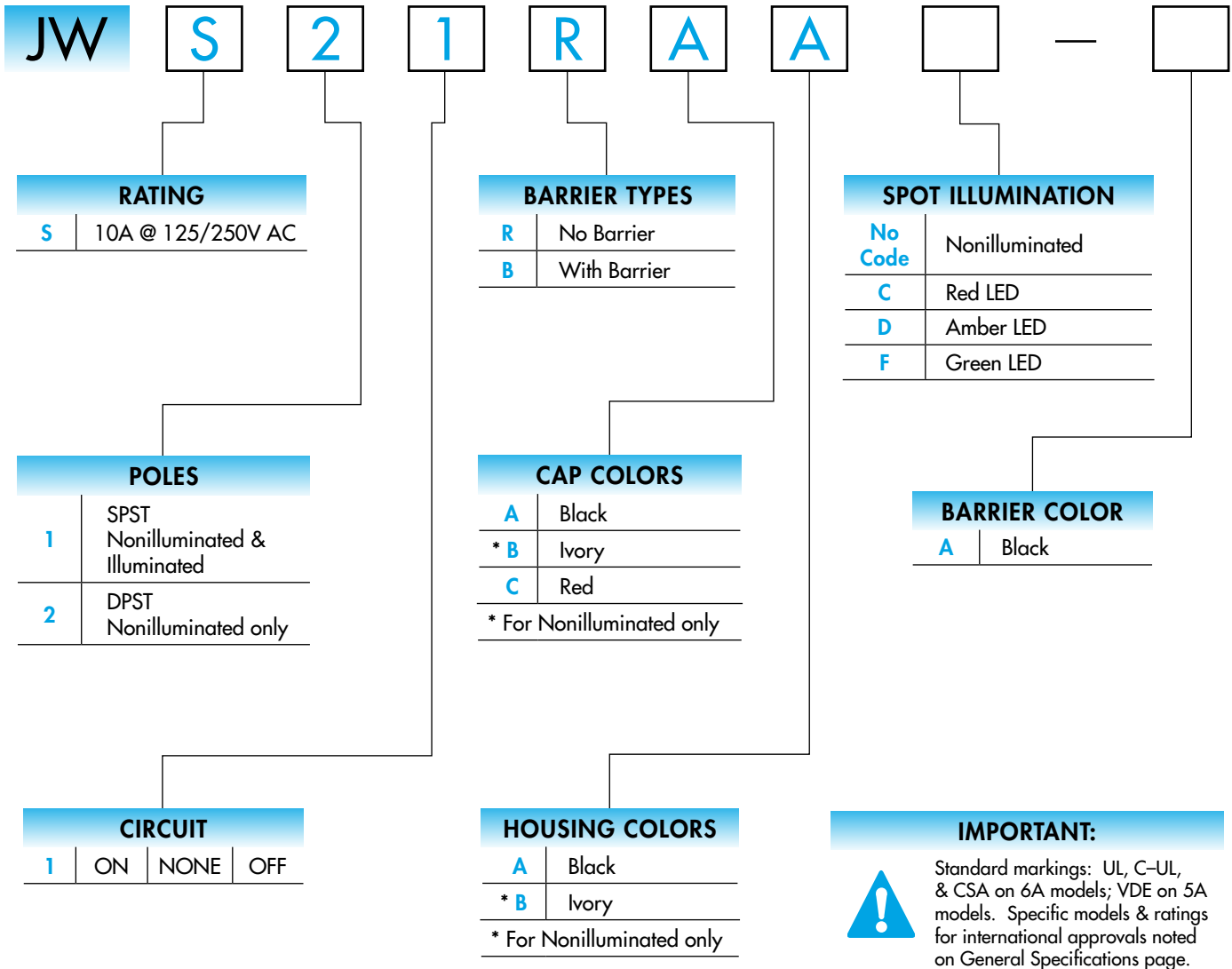
Installation

Soldering: Manual Soldering: See Profile A in Supplement section.
Cleaning: These devices are not process sealed. Hand cleaning locally using alcohol based solution.

Standards & Certifications

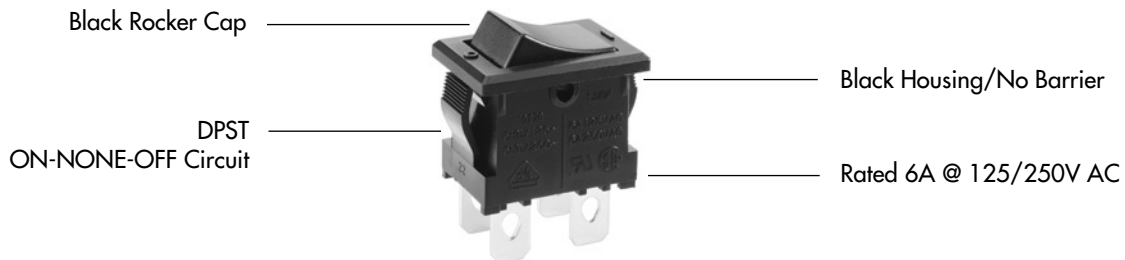
Flammability Standards: UL94V-0 for rocker & housing/case
 **UL Recognized:** All JWS models recognized at 6A @ 125/250V AC;
 UL File No. WOYR2.E44145
 **C-UL Recognized:** All JWS models recognized at 6A @ 125/250V AC;
 UL File No. WOYR8.E44145
 **CSA Certified:** All JWS models certified at 6A @ 125/250V AC;
 CSA File No. 023535-0-000
 **VDE Approved:** All JWS models approved at 5A (3A) @ 125/250V AC;
 VDE License No. 119153

TYPICAL SWITCH ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

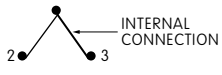

JWS21RAA



RATING

S Power Level **6A @ 125/250V AC**

POLES & CIRCUITS

| Pole | Model | Rocker Position | | | Connected Terminals | | | Throw & Schematics |
|------|-------|-----------------|--------|-----|---------------------|--------|------|--|
| | | Down | Center | Up | Down | Center | Up | |
| SP | JWS11 | ON | NONE | OFF | 2-3 | OPEN | OPEN | SPST  |
| DP | JWS21 | ON | NONE | OFF | 1-3 4-6 | OPEN | OPEN | DPST  |

Note: Terminal numbers are actually on the switch.

BARRIER TYPES & COLORS

R No Barrier

No-barrier type has a flat flange which is an integral part of the switch.



B With Barrier

Barrier Material: Polyamide
Finish: Matte

Barrier AT219 is factory assembled.
Dimensions for barrier are shown in the Accessories section.



Barrier Color Available: **A** Black

CAP COLORS



Cap Material:
Polyphenylene Oxide

Finish: Matte

Rocker cap is an integral part of the switch and not available separately.
* Ivory for nonilluminated models only.

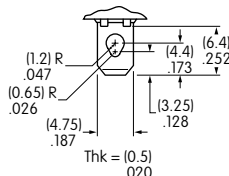
Cap Colors Available: **A** Black **B** * Ivory **C** Red

HOUSING

Material: Polyamide
Finish: Matte

Colors Available: **A** Black **B** Ivory (for nonilluminated models only)

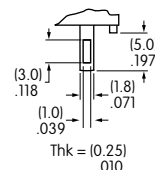
TERMINALS



Switch

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

Switch assembly with connectors is not UL, CSA, C-UL, or VDE approved.



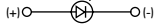
Lamp
(spot illuminated models only)

LED COLORS & SPECIFICATIONS FOR SPOT ILLUMINATED MODELS

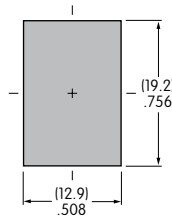
LEDs are supplied as an integral part of illuminated devices and are not available separately. LED polarity markings are on the bottom of the switch.

The electrical specifications shown here are determined at a basic temperature of 25°C.

If the source voltage exceeds the rated voltage, a ballast resistor is required. The resistor value can be calculated by using the formula in the Supplement section.

| | | C | D | F |
|-----------------------------------|---|---------------|-----------|-----------|
| |  | Red | Amber | Green |
| Forward Peak Current | I_{FM} | 25mA | 20mA | 20mA |
| Continuous Forward Current | I_F | 20mA | 15mA | 15mA |
| Forward Voltage | V_F | 2.0V | 1.9V | 1.95V |
| Reverse Peak Voltage | V_{RM} | 4V | 5V | 5V |
| Current Reduction Rate Above 25°C | ΔI_F | 0.42mA/°C | 0.27mA/°C | 0.27mA/°C |
| Ambient Temperature Range | | -25°C ~ +50°C | | |

PANEL CUTOUT & PANEL THICKNESS RANGES



Panel Thickness Ranges:

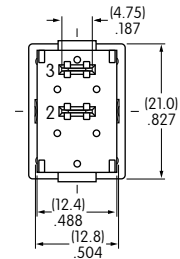
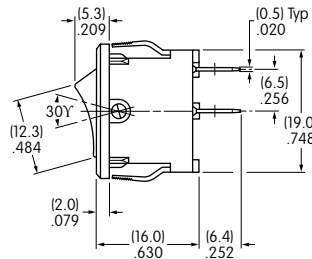
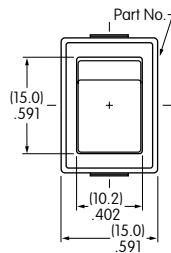
Without Barrier:
.030" ~ .079" (0.75mm ~ 2.0mm)

With Barrier:
.024" ~ .059" (0.6mm ~ 1.5mm)

TYPICAL SWITCH DIMENSIONS

Nonilluminated • No Barrier

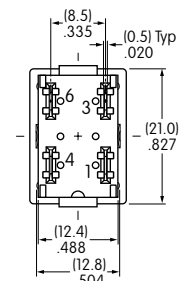
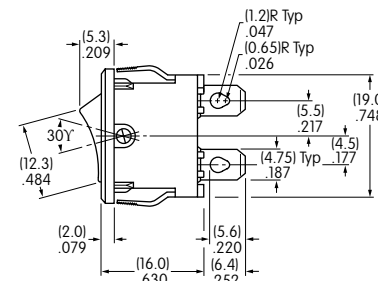
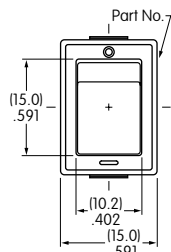
Single Pole



JWS11RCA

Nonilluminated • No Barrier

Double Pole



JWS21RAA

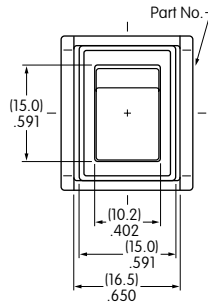
DPST models have IEC symbols for On-Off on the flange.

TYPICAL SWITCH DIMENSIONS

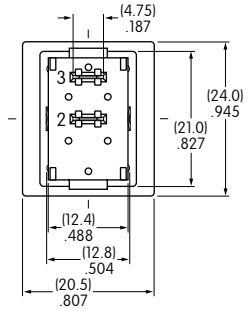
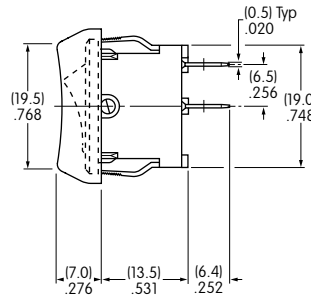
Nonilluminated • With Barrier



JWS11BBA-A



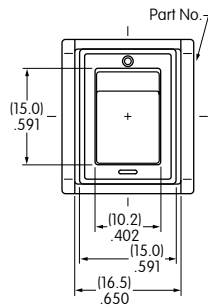
Single Pole



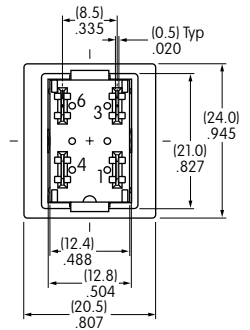
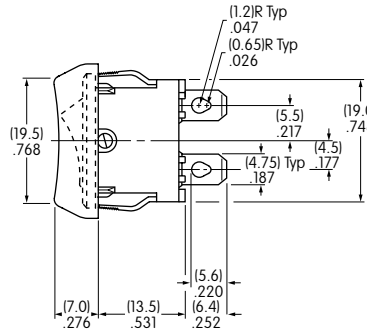
Nonilluminated • With Barrier



JWS21BAA-A



Double Pole

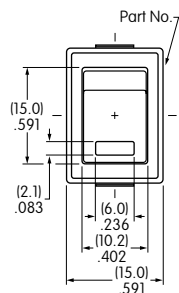


DPST models have IEC symbols for On-Off on the flange.

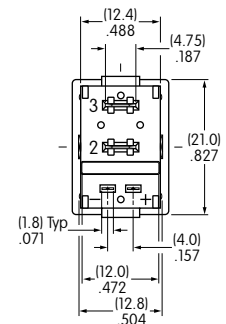
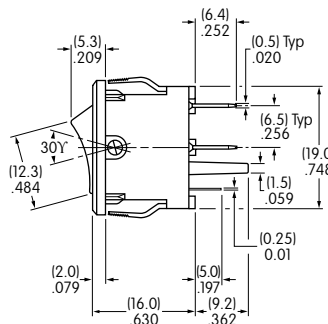
Spot Illuminated • No Barrier



JWS11RCAF



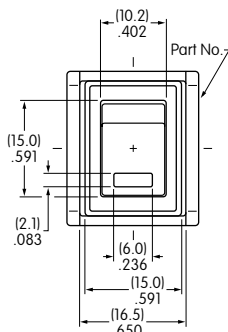
Single Pole



Spot Illuminated • With Barrier



JWS11BAAF-A



Single Pole

