

# Distinctive Characteristics

Industry's first molded pushbutton with TV rating. Designed to handle large inrush current. JPM models certified for TV-5 rating and JPL models for TV-8 rating.

Prominent external insulating barriers increase insulation resistance and dielectric strength.

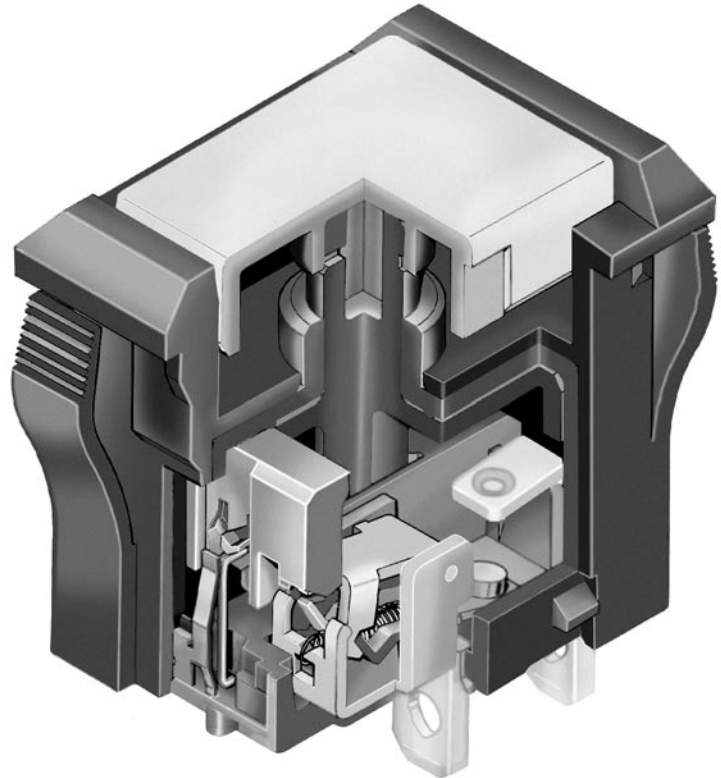
Constructed for dust resistance with interior seal of polyphenylene sulfide (PPS) between actuator and contact area.

Specially designed to break light contact welds.

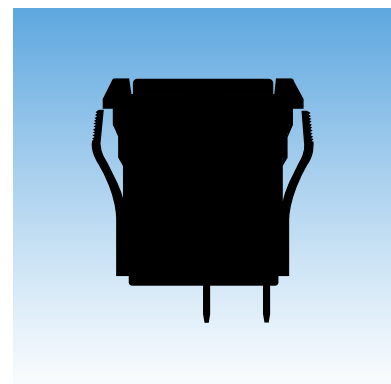
Snap-action contact mechanism.

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

Outer case of heat resistant resin meet UL's 94V-0 flammability standard.



Actual Size JPM



# General Specifications

### Electrical Capacity (Resistive Load)

**Power Level:** 10A @ 125/250V AC for JPM models & 16A @ 125/250V AC for JPL models

### 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:** JPM Single Pole 3.53N & Double Pole 6.47N  
JPL Single Pole 4.51N & Double Pole 9.02 N

**Contact Timing:** Nonshorting (break before make)

**Latchdown:** Normal position - flush with barrier; latchdown position - .079" (2.0mm) below normal

**Travel:** Pretravel .059" (1.5mm); Overtravel .071" (1.8mm); Total Travel .130" (3.3mm)

### Materials & Finishes

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

**Interior Seal:** Polyphenylene sulfide (UL94V-0)

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

**Movable Contacts:** Silver alloy

**Stationary Contacts:** Silver alloy

**Terminals:** Brass with silver plating

### Environmental Data

**Operating Temp Range:** -10°C through +70°C (+14°F through +158°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/s²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

**Process Seal:** Dust resistant inner seal

### Installation

**Soldering Time & Temp:** Manual Soldering: See Profile A in Supplement section.

### Standards & Certifications

**Flammability Standards:** UL94V-0 for housing/frame, barrier, interior seal, & case/base

**TV Ratings for UL & CSA:** JPM (TV-5) Overload Test @ 125V AC for 50 operations:

Steady State Current (rms) 7.5A; Minimum Inrush Current (peak) 111A

UL File No. WOYR2.E44145  
C-UL File No. WOYR8.E44145

JPM (TV-5) Endurance Test @ 125V AC for 25,000 operations:

Steady State Current (rms) 5A; Minimum Inrush Current (peak) 78A

JPL (TV-8) Overload Test @ 125V AC for 50 operations:

Steady State Current (rms) 12A; Minimum Inrush Current (peak) 163A

JPL (TV-8) Endurance Test @ 125V AC for 25,000 operations:

Steady State Current (rms) 8A; Minimum Inrush Current (peak) 117A

**UL Recognized:** All JPM models certified at 10A @ 125V AC, TV5 & JPL models at 16A @ 125V AC, TV8; add "/U" after part number to request marking on case; C-UL File No. WOYR2.E44145.

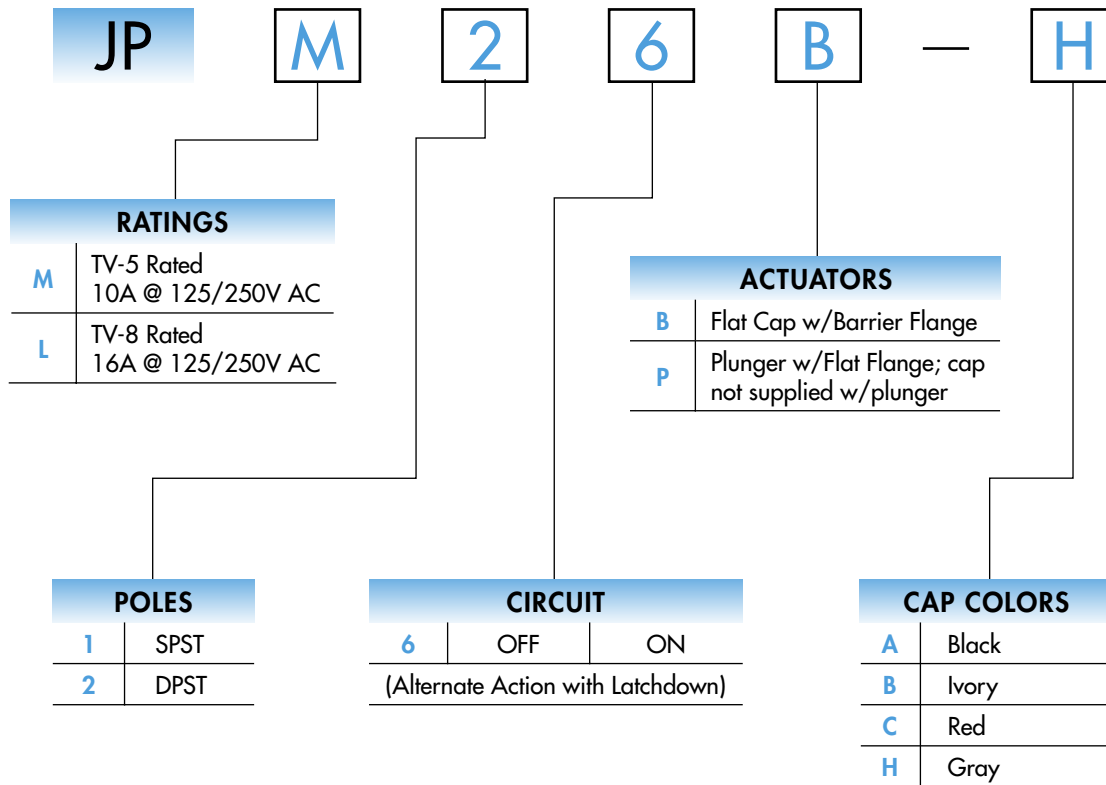
**C-UL Certified:** All JPM models certified at 10A @ 125V AC, TV5 & JPL models at 16A @ 125V AC, TV8; add "/C-UL" after part number to request marking on case; C-UL File No. WOYR8.E44145.

**VDE Approved:** All JPM models approved at steady state 5A, inrush 80A, resistive 10A, & motor load 6A all at 250V AC; add "/V" after part number to request marking on case; VDE License No. 113494.

All JPL models approved at steady state 8A, inrush 128A, resistive 16A, & motor load 8A all at 250V AC; add "/V" after part number to request marking on case; VDE License No. 097579.

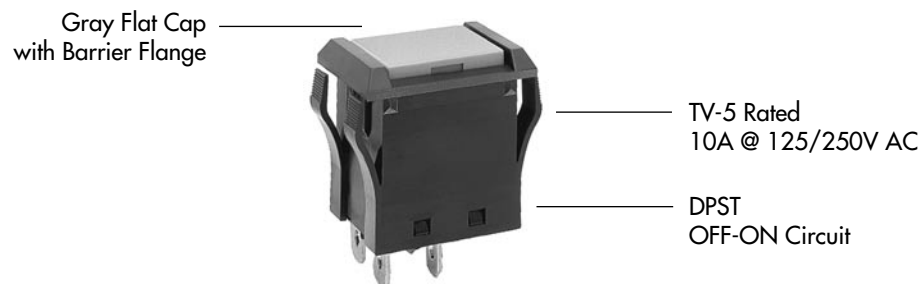


### TYPICAL SWITCH ORDERING EXAMPLE



### DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

#### JPM26B-H



### IMPORTANT:



Specific models & ratings for international approvals noted on General Specifications page.

### RATINGS



TV-5 Rated

Power Level

10A @ 125/250V AC







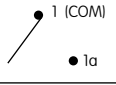
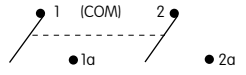
TV-8 Rated

Power Level

16A @ 125/250V AC

Note: See General Specifications page to find complete explanation of TV ratings.

### POLES & CIRCUIT

|      |                | Plunger Position  |   | Connected Terminals   |  | Throw & Schematics  |
|------|----------------|---|---|---|--|---|
| Pole | Model          | Normal<br> | Down<br> | Normal<br> | Down<br> | Note: Terminal numbers are actually on the switch.  |
| SP   | JPM16<br>JPL16 | OFF   | ON  | OPEN  | 1-1a   | SPST<br> |
| DP   | JPM26<br>JPL26 | OFF   | ON  | OPEN  | 1-1a 2-2a  | DPST<br> |

### ACTUATORS



**Flat Cap  
with Barrier Flange**

The barrier is an integral part of the switch. This housing is black, molded polyamide matte finish material.

Cap details below.



**Plunger  
with Flat Flange**

The flange is an integral part of the switch. This housing is black, molded polyamide matte finish material.

No cap supplied.

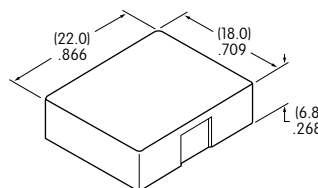


### CAP COLORS

**AT3021 Flat Cap  
for Actuator Type B with Barrier Flange**

Cap Material:  
Polyphenylene Oxide

Finish: Matte



The cap is flush with the barrier in normal position and .079" (2.0mm) below that in latchdown position.

The latchdown feature on this alternate action device provides visible, audible, and tactile feedback. This design gives smooth, responsive operation.

**Cap Colors Available:**



Black



Ivory



Red

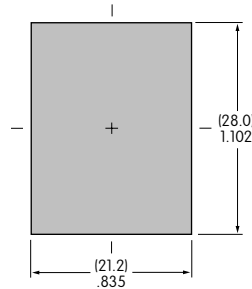


Gray

### PANEL CUTOUT & TERMINALS

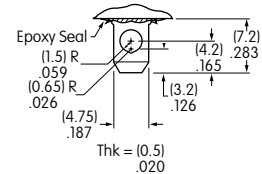
Panel Thickness Range  
applies to both  
JPM & JPL models.

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



JPM & JPL Solder Lug/  
.187" (4.75mm) Quick Connect Terminals

This switch assembly,  
when used with connectors,  
is not CSA approved.

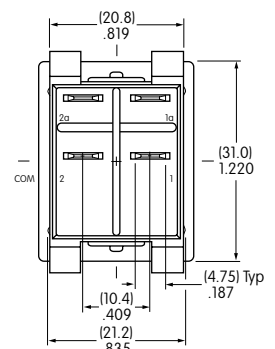
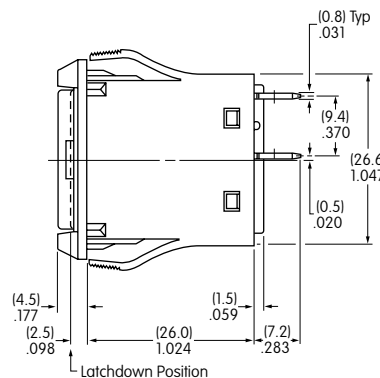
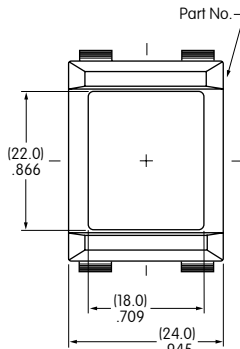
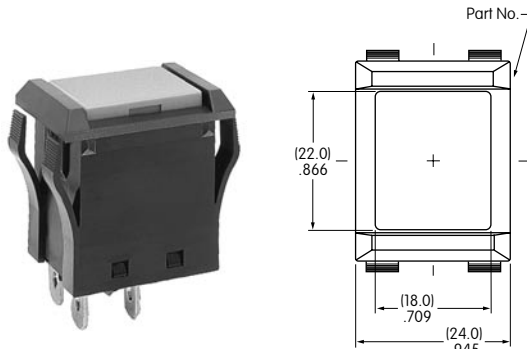


### TYPICAL SWITCH DIMENSIONS

**B**

Flat Cap with Barrier Flange

JPM & JPL Single & Double Pole



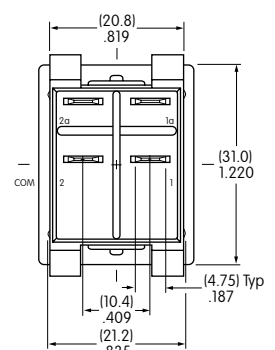
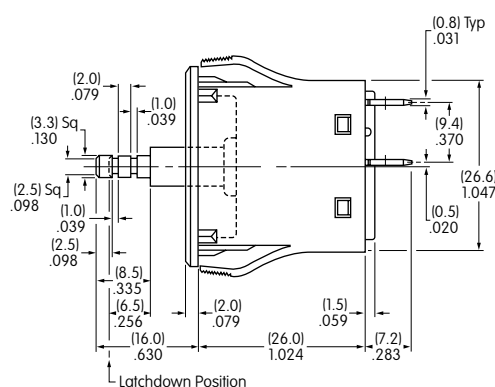
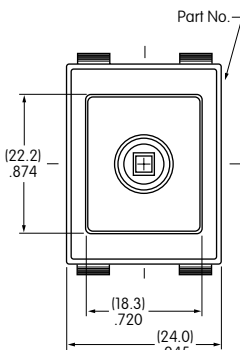
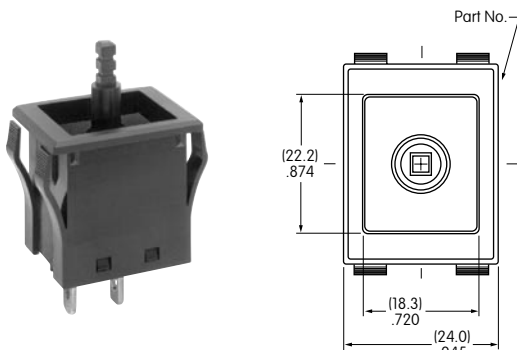
JPM26B-H

Single pole model does not have terminals 2 & 2a.

**P**

Plunger with Flat Flange

JPM & JPL Single & Double Pole



JPL16P

Single pole model does not have terminals 2 & 2a.