

# 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 plus copper

**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/s<sup>2</sup>) 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:** JPM (TV-5) Overload Test @ 125V AC for 50 operations:

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

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:** **File No. E44145 - Recognized only when ordered with marking on switch.**

Add "/U" or "/CUL" before dash in part number to order UL recognized switch.

All JPM models certified at 10A @ 125V AC, TV5 & JPL models at 16A @ 125V AC, TV8.

**VDE:** **License No. 40028887 - Approved only when ordered with marking on switch.**

Add "/V" before dash in part number to order VDE approved switch.

All JPM models approved at steady state 5A, inrush 80A, resistive 10A, & motor load 6A all at 250V AC.

**License No. 40039784**

All JPL models approved at steady state 8A, inrush 128A, resistive 16A, & motor load 8A all at 250V AC.

# 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.

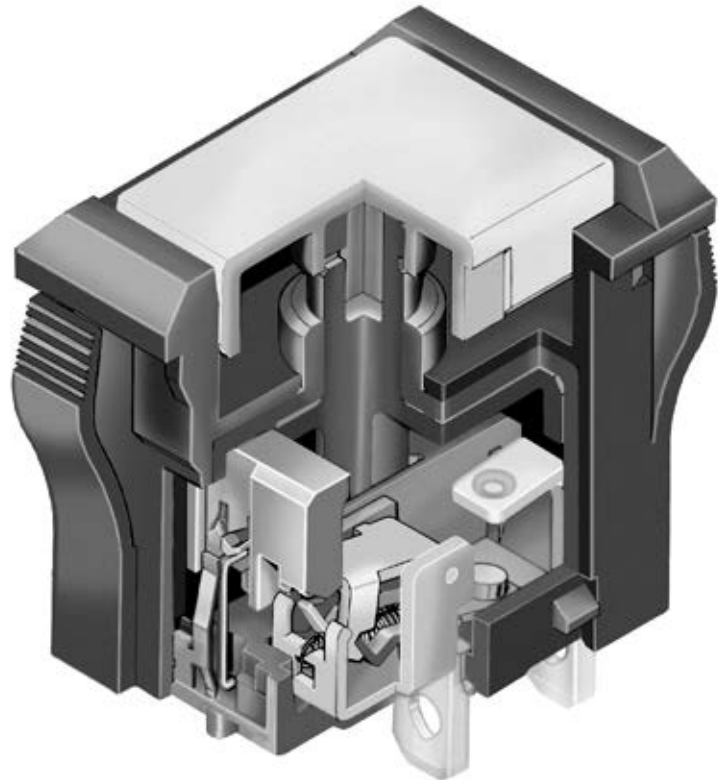
Constructed for dust resistance with interior seal of polyphenylene sulfide (PPS) between actuator and contact area.

Specially designed to break light contact welds.

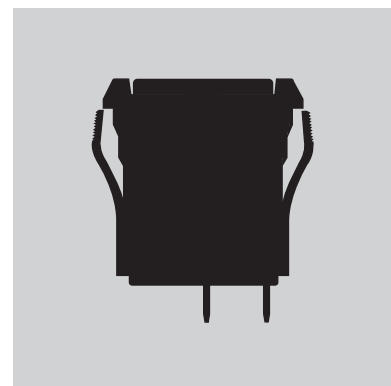
Snap-action contact mechanism.

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

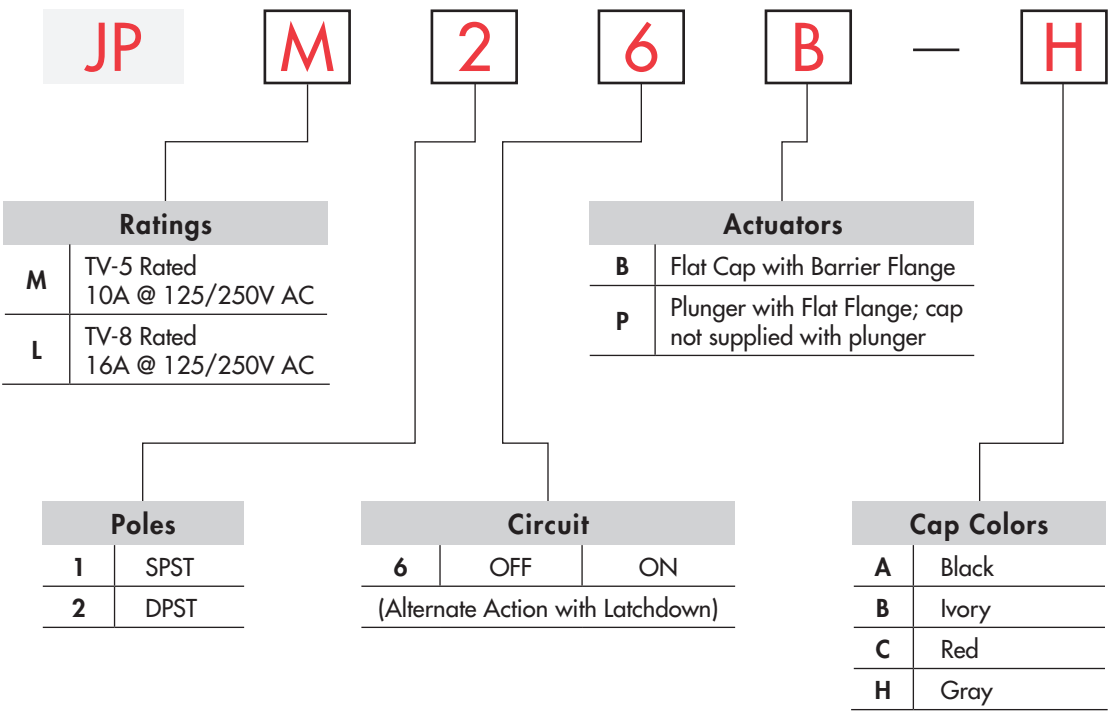
Outer case of heat resistant resin meets UL's 94V-0 flammability standard.



Actual Size JPM



TYPICAL SWITCH ORDERING EXAMPLE



IMPORTANT:



Switches are supplied without UL & VDE markings unless specified.  
**UL recognized only when ordered with marking on the switch.**  
**VDE approved only when ordered with marking on the switch.**  
Specific models, ratings, & ordering instructions are noted on the General Specifications page.

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

JPM26B-H

Gray Flat Cap  
with Barrier Flange



TV-5 Rated  
10A @ 125/250V AC

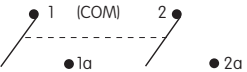
DPST  
OFF-ON Circuit

RATINGS

|          |            |             |                   |
|----------|------------|-------------|-------------------|
| <b>M</b> | TV-5 Rated | Power Level | 10A @ 125/250V AC |
| <b>L</b> | 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                                                                                   | Down                                                                                    | Normal                                                                                    | Down                                                                                            | Note: Terminal numbers are actually on the switch.                                          |
| SP   | JPM16<br>JPL16 | OFF<br> | ON<br> | OPEN<br> | 1-1a<br>      | SPST<br> |
| DP   | JPM26<br>JPL26 | OFF<br> | ON<br> | OPEN<br> | 1-1a 2-2a<br> | DPST<br> |

ACTUATORS

**B** 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.



**P** 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

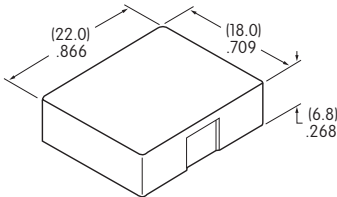
AT3021 Flat Cap for Actuator Type B with Barrier Flange

Cap Material: Polyphenylene Oxide

Finish: Matte

Cap Colors Available:

- A** Black
- B** Ivory
- C** Red
- H** Gray

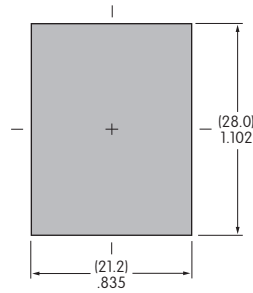


The cap is flush with the barrier in normal position and .079" (2.0mm) below that in latchdown position.

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

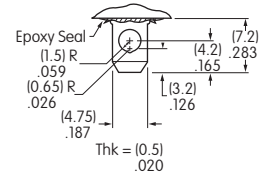
### PANEL CUTOUT & TERMINALS

Panel Thickness Range  
applies to both  
JPM & JPL models.  
  
.039" ~ .157"  
(1.0mm ~ 4.0mm)



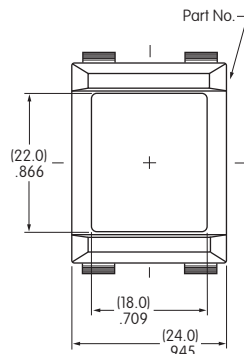
JPM & JPL Solder Lug/  
.187" (4.75mm) Quick Connect Terminals

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

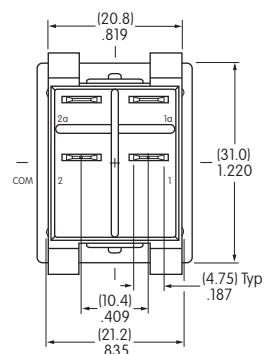
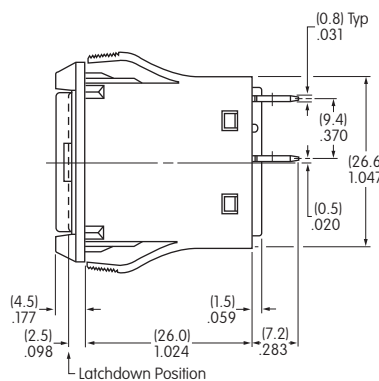


### TYPICAL SWITCH DIMENSIONS

#### Flat Cap with Barrier Flange



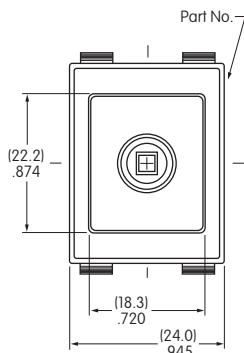
#### JPM & JPL Single & Double Pole



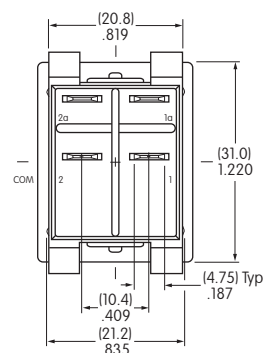
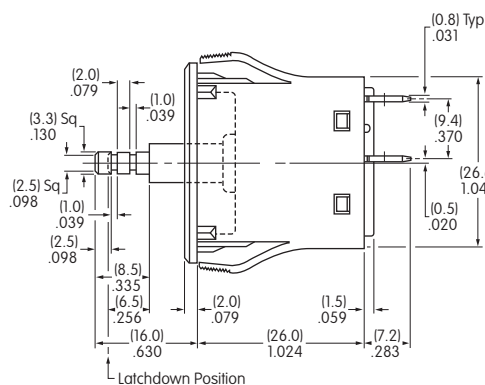
JPM26B-H

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

#### Plunger with Flat Flange



#### JPM & JPL Single & Double Pole



JPL16P

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