

# 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.

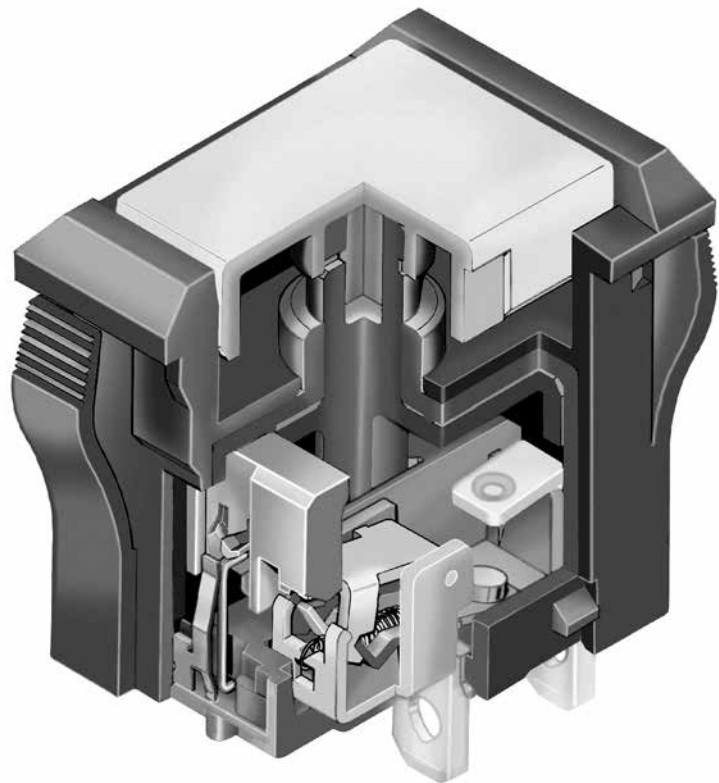
Constructed for dust resistance with interior seal of polyphenylene sulfide (PPS) between actuator and contact area.

Specially designed to break light contact welds.

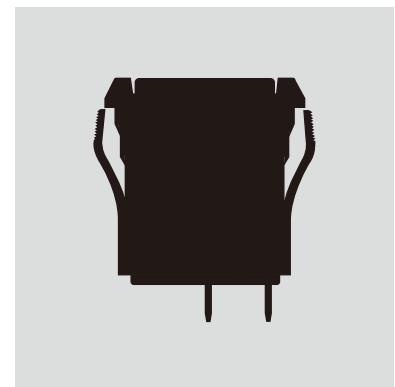
Snap-action contact mechanism.

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.

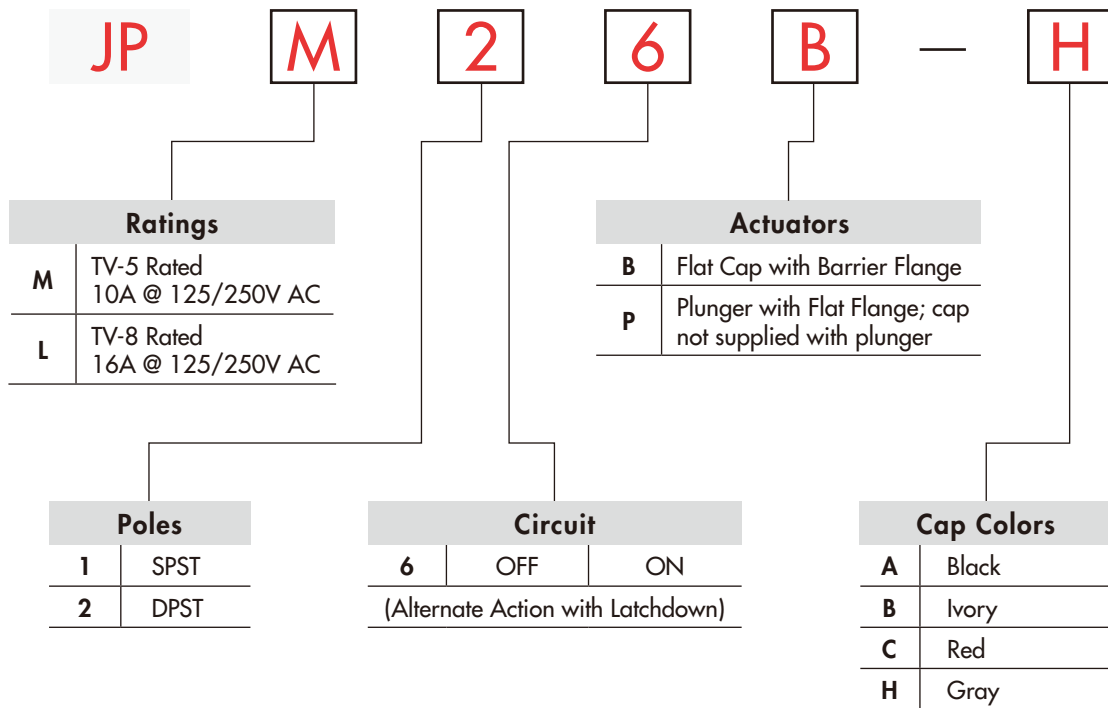


Actual Size JPM



Toggles  
Rocker  
Pushbuttons  
Illuminated PB  
Programmable  
Keylocks  
Rotaries  
Slides  
Tactiles  
Tilt  
Touch  
Indicators  
Accessories  
Supplement

### 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



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

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

## 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

Cap Colors Available:



Black



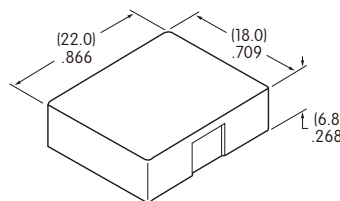
Ivory



Red



Gray



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

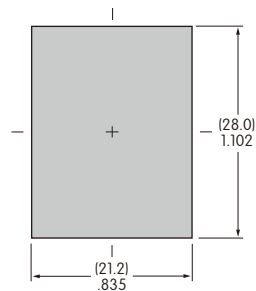
The latchdown feature on this alternate action device provides visible, audible, and tactile feedback. This design gives smooth, responsive operation.

Toggles  
 Rockers  
 Pushbuttons  
 Illuminated PB  
 Programmable  
 Keylocks  
 Rotaries  
 Slides  
 Tactiles  
 Tilt  
 Touch  
 Indicators  
 Accessories  
 Supplement

## PANEL CUTOUT & TERMINALS

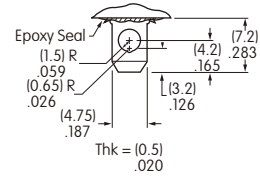
Panel Thickness Range applies to both JPM & JPL models.

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



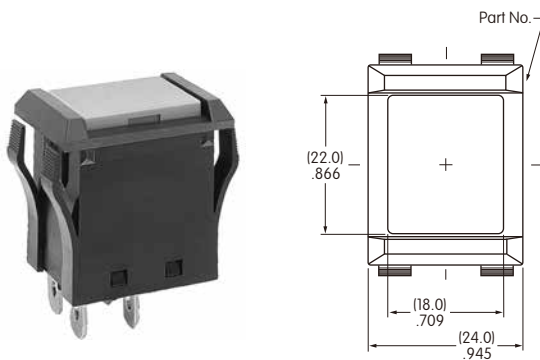
### JPM & JPL Solder Lug/ .187" (4.75mm) Quick Connect Terminals

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



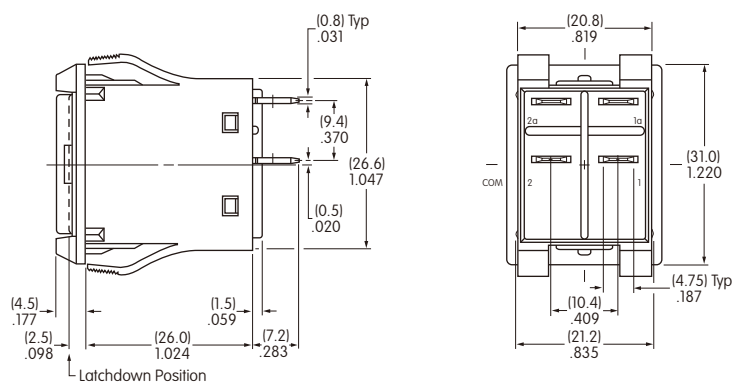
## TYPICAL SWITCH DIMENSIONS

### Flat Cap with Barrier Flange



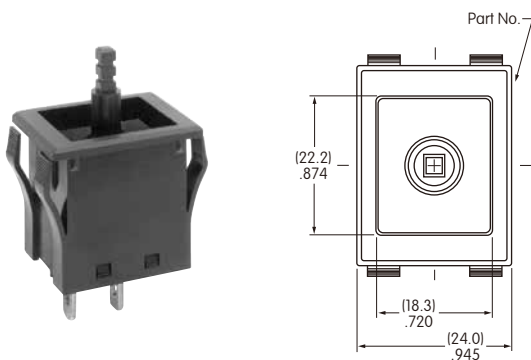
**JPM26B-H**

### JPM & JPL Single & Double Pole



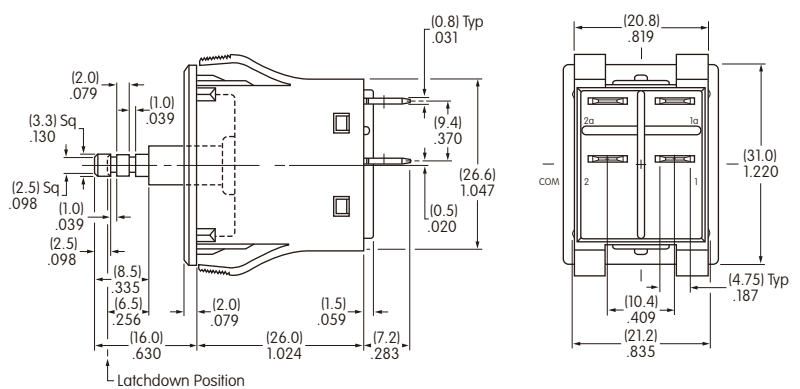
Single pole model does not have terminals 2 & 2a.

### Plunger with Flat Flange



**JPL16P**

### JPM & JPL Single & Double Pole



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

