

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: 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. 113494 - 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. 097579

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.

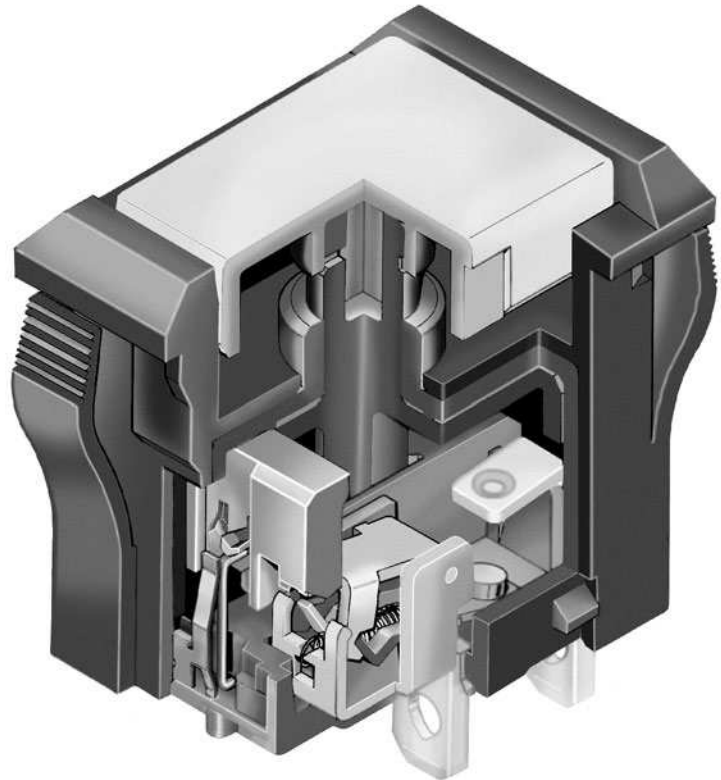
Constructed for dust resistance with interior seal of polyphenylene sulfide (PPS) between actuator and contact area.

Specially designed to break light contact welds.

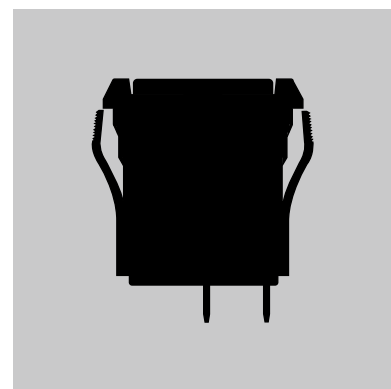
Snap-action contact mechanism.

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

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

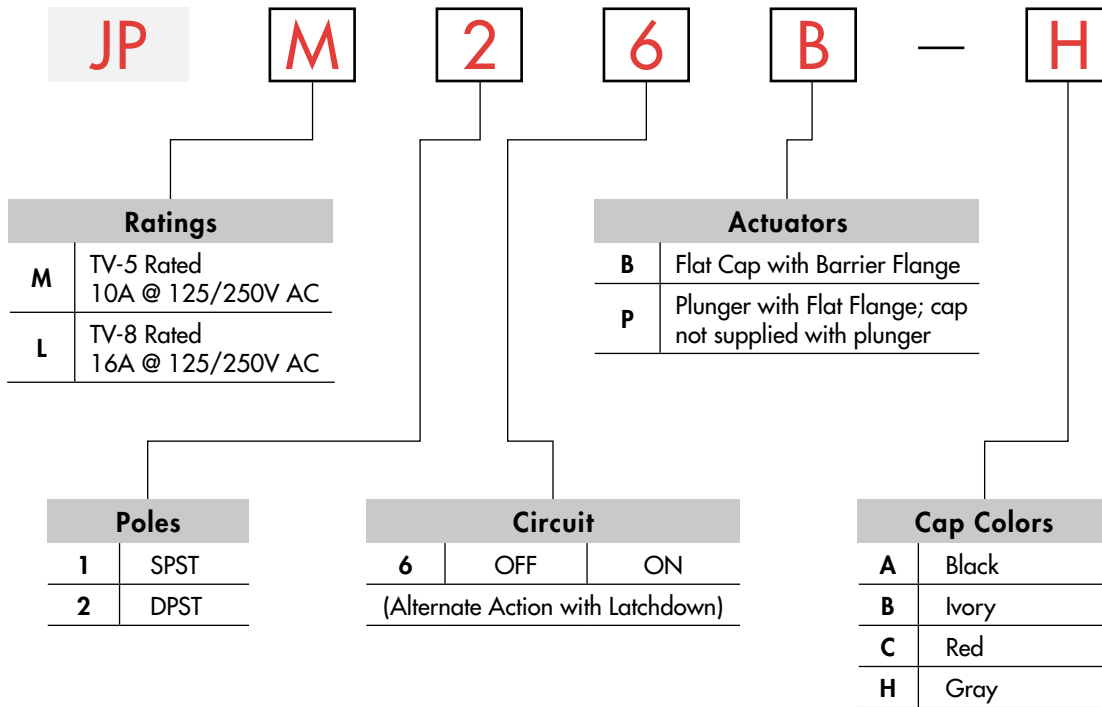


Actual Size JPM



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

TYPICAL SWITCH ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

JPM26B-H

Gray Flat Cap with Barrier Flange



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

DPST
OFF-ON Circuit

IMPORTANT:



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

Note: Wire harness & cable assemblies offered only in Americas

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	Down	Normal	Down	
						Note: Terminal numbers are actually on the switch.
SP	JPM16 JPL16	OFF	ON	OPEN	1-1a	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.

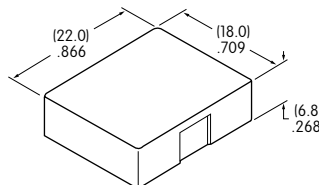


CAP COLORS

AT3021 Flat Cap for Actuator Type B with Barrier Flange

Cap Material:
Polyphenylene Oxide

Finish: Matte



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

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

Cap Colors Available:



Black



Ivory



Red

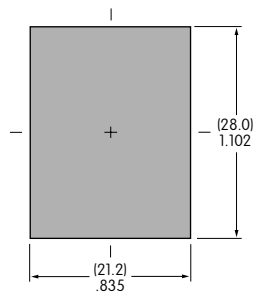


Gray

PANEL CUTOUT & TERMINALS

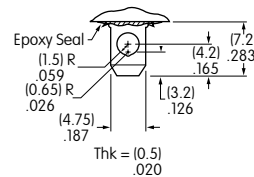
Panel Thickness Range applies to both JPM & JPL models.

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



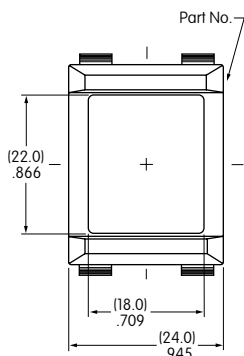
**JPM & JPL Solder Lug/
.187"(4.75mm) Quick Connect Terminals**

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



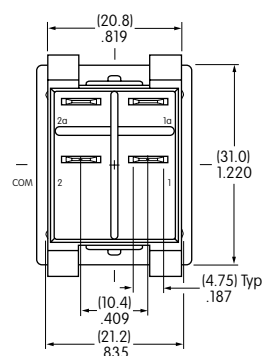
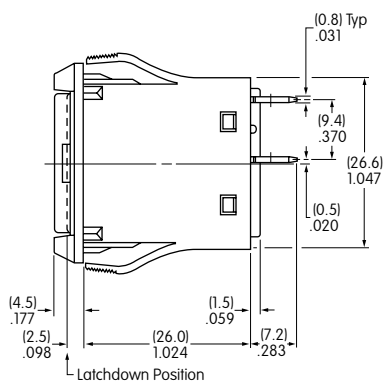
TYPICAL SWITCH DIMENSIONS

Flat Cap with Barrier Flange



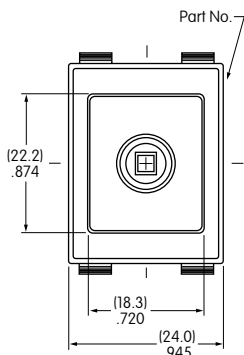
JPM26B-H

JPM & JPL Single & Double Pole



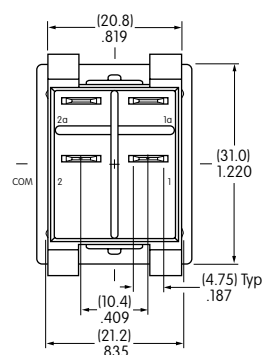
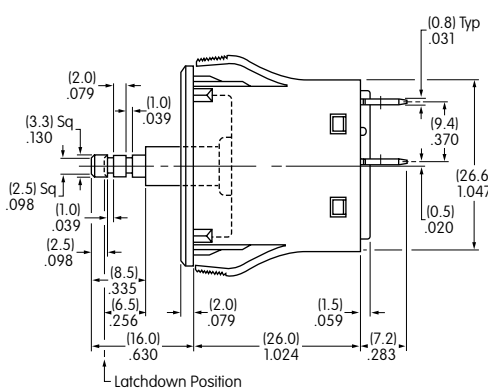
Single pole model does not have terminals 2 & 2a.

Plunger with Flat Flange



JPL16P

JPM & JPL Single & Double Pole



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