

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.

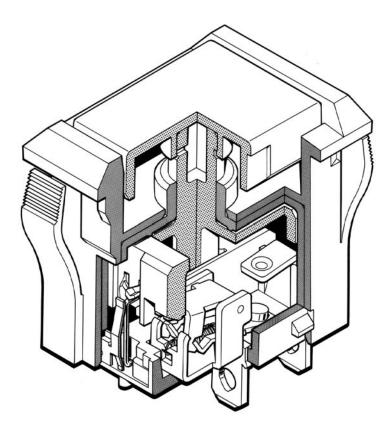
Constructed for dust resistance with interior seal of polyphenylene sulfide (PPS) between actuator and contact area.

Specially designed to break light contact welds.

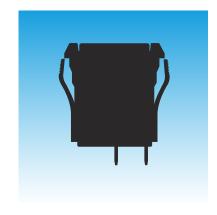
Snap-action contact mechanism.

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)

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

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) **Movable Contacts:** Silver alloy

Interior Seal: Polyphenylene sulfide (UL94V-0) **Stationary Contacts:** Silver alloy

Melamine (UL94V-0) Brass with silver plating Case/Base: Terminals:

Environmental Data

-10°C through +70°C (+14°F through +158°F) **Operating Temp Range:**

90 ~ 95% humidity for 96 hours @ 40°C (104°F) **Humidity:**

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: 4 seconds maximum @ 410°C maximum for manual soldering

Note: Find additional processing data in Supplement section.

Standards & Certifications

UL Recognized:

C-UL Certified:

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:

UL File No. WOYR2.E44145 Steady State Current (rms) 7.5A; Minimum Inrush Current (peak) 111A

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

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. 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.

All JPM models approved at steady state 5A, inrush 80A, resistive 10A, & **VDE Approved:**

motor load 6A all at 250V AC; add "/V" after part number to request marking on case;

VDE License No. 113494.

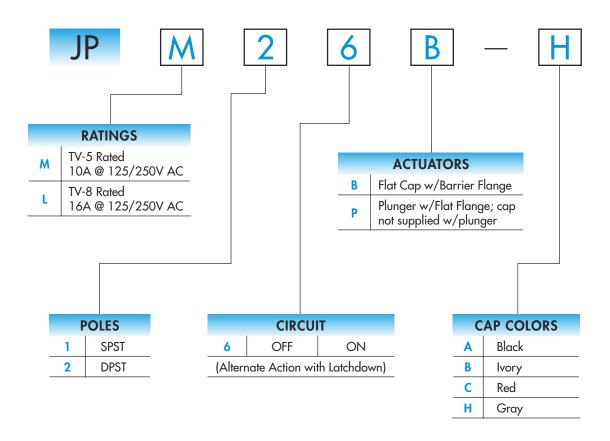
All JPL models approved at steady state 8A, inrush 128A, resistive 16A, &

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.



Internationally Approved Pushbuttons Series JP

RATINGS

M 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
		Normal	Down	Normal	Down	Note: Terminal numbers are
Pole	Model					actually on the switch.
SP	JPM16 JPL16	OFF	ON	OPEN	1-1a	SPST 1 (COM)
	JPM26					• 1 (COM) 2 •
DP	JPL26	OFF	ON	OPEN	1-1a 2-2a	DPST

ACTUATORS



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.

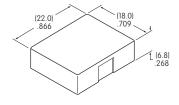


CAP COLORS

AT3021 Flat Cap for Actuator Type B with Barrier Flange

Cap Material: Polyphenelene 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:









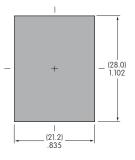




PANEL CUTOUT & TERMINALS

Panel Thickness Range applies to both JPM & JPL models.

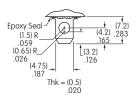
.039" ~ .157" $(1.0 \text{mm} \sim 4.0 \text{mm})$



Wiring for JPM & JPL Solder Lugs

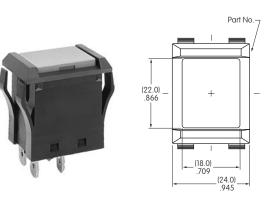
The pear shaped .118" (3.0mm) dia. terminal hole accommodates 1 solid 10-gauge wire or 2 stranded 18-gauge wires.

These solder lug terminals can be used with connectors; however, this switch assembly with connectors is not CSA approved.

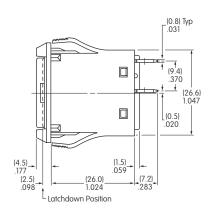


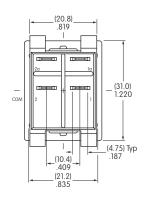
TYPICAL SWITCH DIMENSIONS

Flat Cap with Barrier Flange



JPM & JPL Single & Double Pole





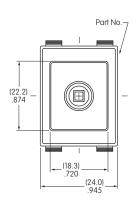
JPM26B-H

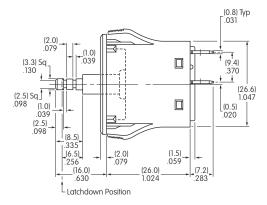
Single pole model does not have terminals 2 & 2a.

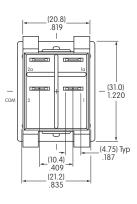
Plunger with Flat Flange

JPM & JPL Single & Double Pole









JPL16P

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