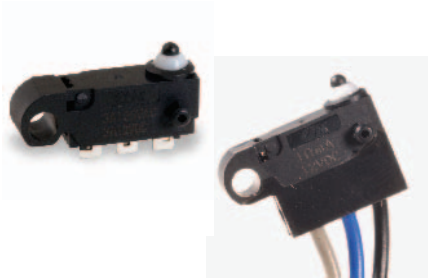


# ZMSM Series with Mounting Hole

## Subminiature Snap-acting Switches (IP40)



### Features/Benefits

- **Reliable snap-acting mechanism**
- **Long electrical and mechanical life**
- **Various PCB terminals and actuators**
- **RoHS compatible**
- **IP67 with potted wires only**

### Typical Applications

- **Communication devices**
- **Testing equipment**
- **Security/Alarm systems**

UL61058-1  
UL1054



### Specifications

CONTACT RATING: 3A@ 125 V AC/ 3A@ 12 V DC, 0.01 A@ 12 V DC.  
ELECTRICAL LIFE: 100,000 cycles @ 0.01 A, 12 V DC / 100,000 cycles @ 3A, 12 V DC, 6,000 cycles @ 3A, 125 V AC  
INSULATION RESISTANCE: 100 M ohm min.  
DIELECTRIC STRENGTH: 500 Vrms.  
OPERATING TEMPERATURE: see chart below.  
OPERATING FORCE: 130 grams.

\* Low Level=conditions where no arcing occurs during switching, i.e., 0.4 VA max.  
@ 20 V AC or DC max.

### Materials

CASE: Nylon  
COVER/ACTUATOR: PBT  
MOVABLE CONTACTS: Silver\*  
STATIONARY CONTACTS: Silver\*  
TERMINALS: Brass, Pre-plated with silver  
LEVER: Stainless steel

\* Gold plated terminals available contact Customer Service.

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

### Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages J-65 and J-67. For additional options not shown in catalog, consult Customer Service Center.

<b>Series</b> <b>ZMSM</b> SP, Mom.	<b>Over Travel</b> <b>H</b> High Travel <b>L</b> Low Travel	<b>Electrical Rating</b> <b>0</b> 0.1 A @ 12 V DC <b>3</b> 3A 125 V AC 3A 12 V DC	<b>Operating Force</b> <b>130</b> 130 grams / 4.59	<b>Actuator</b> <b>P00</b> Pin plunger <b>T10</b> .25 lever <b>T11</b> .28 simulated roller	<b>Terminations</b> <b>P</b> PC Thru-hole <b>S</b> Solder type <b>J</b> Wire leads 20 AWG UL 1007 <b>K</b> Wire leads 22 AWG UL1430 <b>W</b> Wire leads 24 AWG UL1061 <b>N</b> Wire leads 26 AWG UL1330	<b>Mounting Styles</b> <b>M</b> One support post <b>L</b> Two support post left <b>R</b> Two support post right <b>T</b> One support post left and right	<b>Circuitry</b> <b>C</b> SPDT <b>W</b> SPST N.C. <b>Y</b> SPST N.O.
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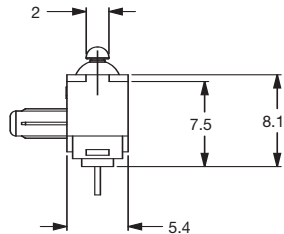
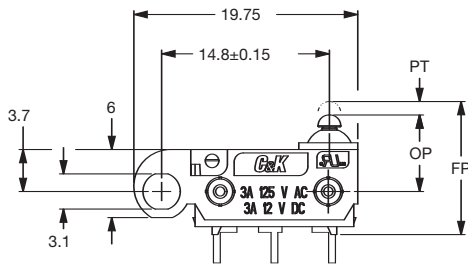


Dimensions are shown: mm  
Specifications and dimensions subject to change

# ZMSM Series with Mounting Hole Subminiature Snap-acting Switches (IP40)

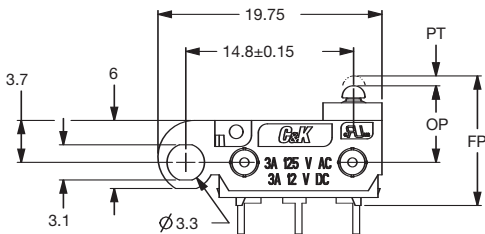
## SERIES

**ZMSMH** HIGH OVER TRAVEL

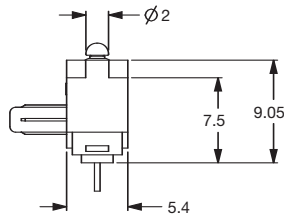


**ZMSML** LOW OVER TRAVEL

MODEL SHOWN: ZMSMHXXXP00PLC



MODEL SHOWN: ZMSMLXXXP00PLC



## ELECTRICAL RATING

OPTION CODE	RoHS COMPLIANT*	RoHS COMPATIBLE*	CONTACT MATERIAL		ELECTRICAL RATING
			MOVABLE CONTACT	STATIONARY CONTACT	
0	Yes	Yes	Fine silver	Fine silver	0.01 A @ 12 V DC
3	Yes	Yes	Fine Silver	Fine silver	3 AMPS @ 125 V AC 3 AMPS @ 12 V DC

Model **C&K** <sup>®</sup>us with option “S” (solder type) only.  
Consult Customer Service center for availability and delivery of nonstandard ratings.

## OPERATING FORCE

OPTION CODE	BASIC SWITCH OPERATING FORCE (OZ./GRAMS)
130	130 4.59



Dimensions are shown: mm  
Specifications and dimensions subject to change

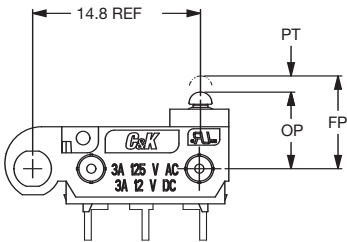
[www.ck-components.com](http://www.ck-components.com)

# ZMSM Series with Mounting Hole

## Subminiature Snap-acting Switches (IP40)

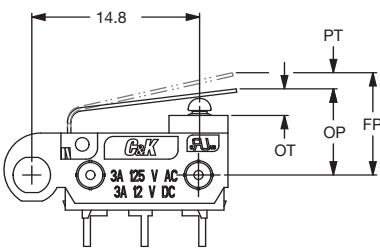
### ACTUATOR

**P00** PIN PLUNGER (IP65)



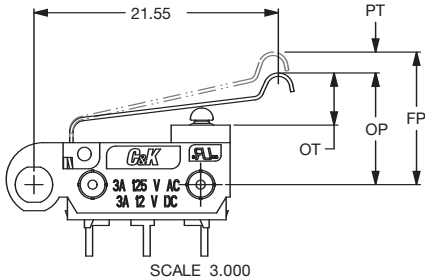
MODEL SHOWN: ZMSMLXXXXP00PLC

**T10** .25 LEVER (IP65)



MODEL SHOWN: ZMSMLXXXXT10PLC

**T11** LEVER (IP65)



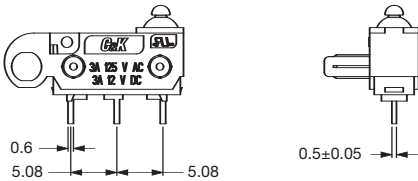
MODEL SHOWN: ZMSMLXXXXT11PLC

### SWITCH CHARACTERISTICS

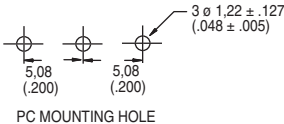
Actuator code	Maximum Operate Force (grams/oz.)	Minimum Release Force (grams/oz.)	Free Position Max (mm)	Maximum Pre-travel (mm)	Operate Position (mm) ±0.8	Maximum Differential (mm)	Low Overtravel min. (mm)	High Overtravel min. (mm)
P00	130 4.59	13 0.45	7.35	0.8	6.75 ± 0.2	0.3	0.8	1.75
T10	195 6.88	55 1.93	10.70	3.85	7.40 ± 0.5	0.5	1.35	2.3
T11	160 5.64	45 1.58	13.80	4.8	9.90 ± 0.8	0.7	1.65	2.6

### TERMINATIONS

**P** PC THRU-HOLE (IP65)

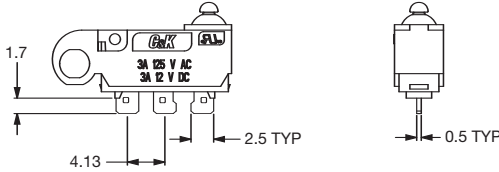


MODEL SHOWN: ZMSMHXXXXP00PLC



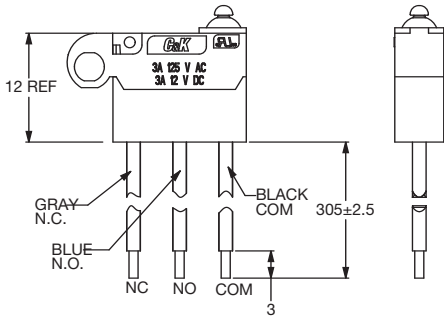
PC MOUNTING HOLE

**S** SOLDER TYPE (IP65)



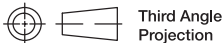
MODEL SHOWN: ZMSMHXXXXP00SMC

**J** WIRE LEADS BOTTOM (IP67)



Standard Wire: 20 AWG UL 1007

Available options - must specify  
22AWG UL1430  
24AWG UL1061  
26AWG UL1330



Dimensions are shown: mm  
Specifications and dimensions subject to change



# ZMSM Series with Mounting Hole Subminiature Snap-acting Switches (IP65)

## MOUNTING STYLES

M

NO SUPPORT POSTS

MODEL SHOWN:  
ZMSMHXXXXP00PMC

L

TWO SUPPORT POSTS LEFT

POSTS LEFT

MODEL SHOWN:  
ZMSMHXXXXP00PLC

R

TWO SUPPORT POSTS RIGHT

POSTS RIGHT

MODEL SHOWN:  
ZMSMHXXXXP00PRC

T

ONE SUPPORT POST LEFT & RIGHT

LEFT & RIGHT

MODEL SHOWN:  
ZMSMHXXXXP00PTC

## CIRCUITRY

- C

SPDT (Single Pole, Double Throw)
- W

SPST, NC (Single Pole, Single Throw, Normally Closed)
- Y

SPST, NO (Single Pole, Single Throw, Normally Open)

Snap-acting

