

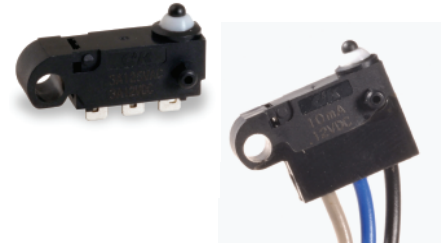
# ZMSM Series with Mounting Hole Subminiature Snap-acting Switches (IP65)


## 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 

## 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 VAC  
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: 3 Amp silver, 0.01A gold  
STATIONARY CONTACTS: 3 Amp silver, 0.01A gold  
TERMINALS: Brass, Pre-plated with silver  
LEVER: Stainless steel

**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-62 through J-64. For additional options not shown in catalog, consult Customer Service Center.

<div><div>Z</div><div>M</div><div>S</div><div>M</div></div>		<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
<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>	0.01 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>	No 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.									



Dimensions are shown: mm  
Specifications and dimensions subject to change

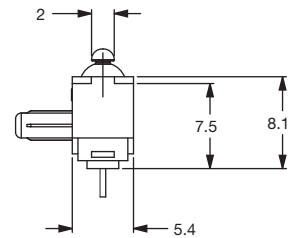
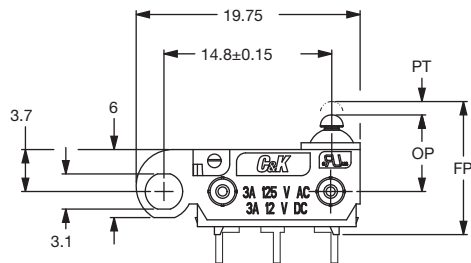
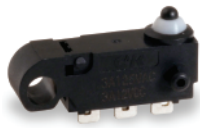


Snap-acting

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

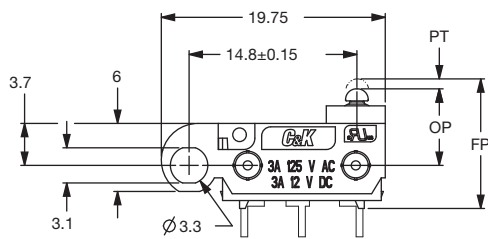
## SERIES

**ZMSMH** HIGH OVER TRAVEL

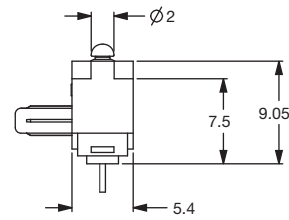


**ZMSML** LOW OVER TRAVEL

MODEL SHOWN: ZMSMHXXXP00PLC



MODEL SHOWN: ZMSMLXXXP00PLC



Snap-acting

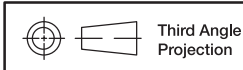
## ELECTRICAL RATING

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

Model **C&K** **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



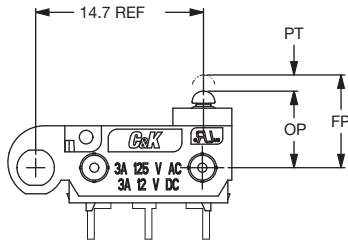
Dimensions are shown: mm  
Specifications and dimensions subject to change

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

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

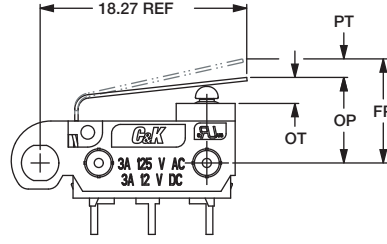
## ACTUATOR

### P00 PIN PLUNGER (IP65)



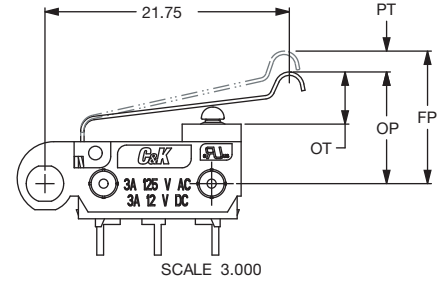
MODEL SHOWN: ZMSMLXXXXP00PLC

### T10 .25 LEVER (IP65)



MODEL SHOWN: ZMSMLXXXXT10PLC

### T11 LEVER (IP65)



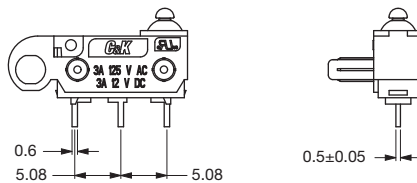
MODEL SHOWN: ZMSMLXXXXT11PLC

## SWITCH CHARACTERISTICS

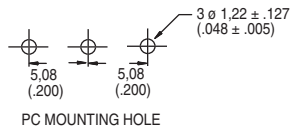
Actuator code	Maximum Operate Force (grams/oz.)	Minimum Release Force (grams/oz.)	Free Position Max (mm)	Maximum Pre-travel (mm)	Operate Position (mm)	Maximum Differential (mm)	Low Overtravel min. (mm)	High Overtravel min. (mm)
<b>P00</b>	130 4.59	13 0.45	7.35	0.8	6.75 ± 0.3	0.3	0.8	1.75
<b>T10</b>	195 6.88	55 1.93	10.70	3.85	7.40 ± 0.8	0.5	1.35	2.3
<b>T11</b>	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)

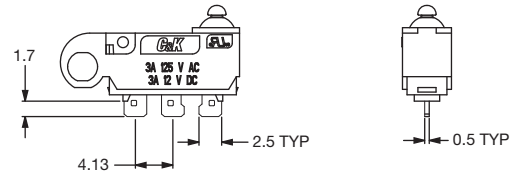


MODEL SHOWN: ZMSMHXXXXP00PLC



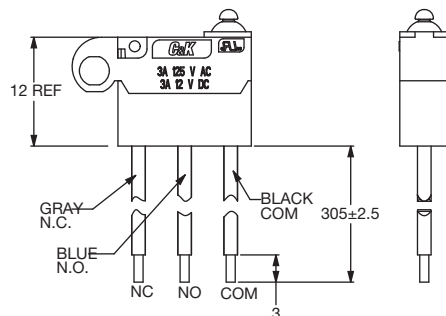
PC MOUNTING HOLE

### 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

**C&K**



# 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



Dimensions are shown: mm  
 Specifications and dimensions subject to change

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## C&K Switches:

[ZMSML3130T11SMC](#) [ZMSMH3130T11SLC](#) [ZMSMH0130T10KRY](#) [ZMSMH3130P00JMY](#) [ZMSMH3130T10PLW](#)  
[ZMSMH0130T10KRW](#)