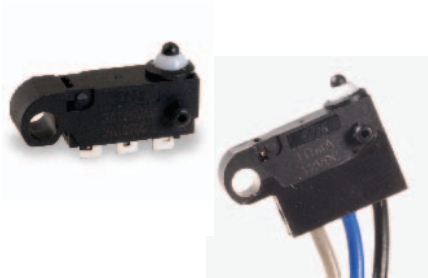


ZMSM Series with Mounting Hole

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 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: 3 Amp silver, 0.1 Amp gold
STATIONARY CONTACTS: 3 Amp silver, 0.1 Amp 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-65 and J-67. For additional options not shown in catalog, consult Customer Service Center.

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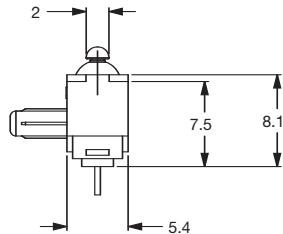
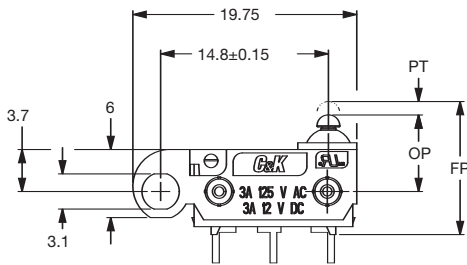


Dimensions are shown: mm
Specifications and dimensions subject to change

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

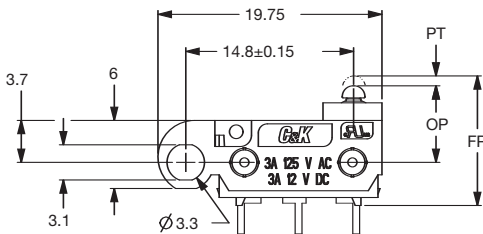
SERIES

ZMSMH HIGH OVER TRAVEL

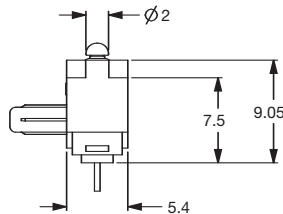


ZMSML LOW OVER TRAVEL

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	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



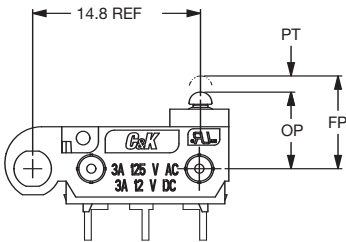
Dimensions are shown: mm
Specifications and dimensions subject to change

ZMSM Series with Mounting Hole

Subminiature Snap-acting Switches (IP65)

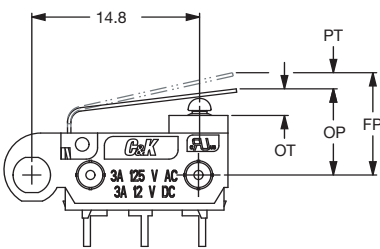
ACTUATOR

P00 PIN PLUNGER (IP65)



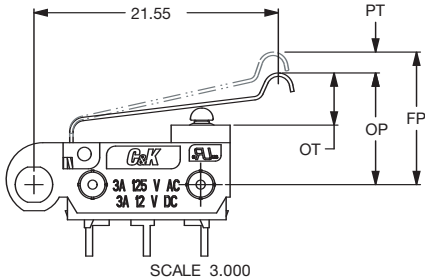
MODEL SHOWN: ZMSMLXXXXP00PLC

T10 .25 LEVER (IP65)



MODEL SHOWN: ZMSMLXXXXT10PLC

T11 LEVER (IP65)



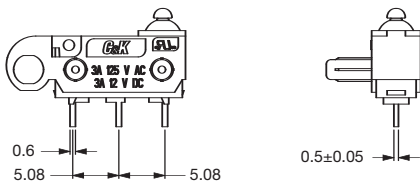
MODEL SHOWN: ZMSMLXXXXT11PLC

SWITCH CHARACTERISTICS

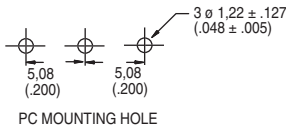
Actuator code	Maximum Operate Force (grams/oz.)	Minimum Release Force (grams/oz.)	Free Position Max (mm)	Maximum Pre-travel (mm)	Operate Position (mm)	Maximum Differential (mm)	Low Overtravel min. (mm)	High Overtravel min. (mm)
P00	130 4.59	13 0.45	7.35	0.8	6.75 ± 0.2	0.3	0.8	1.75
T10	195 6.88	55 1.93	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)

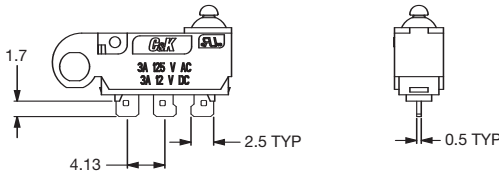


MODEL SHOWN: ZMSMHXXXXP00PLC



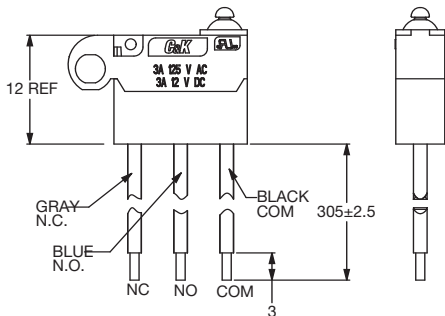
PC MOUNTING HOLE

S SOLDER TYPE (IP65)



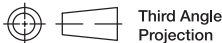
MODEL SHOWN: ZMSMHXXXXP00SMC

J WIRE LEADS BOTTOM (IP67)



Standard Wire: 20 AWG UL 1007

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



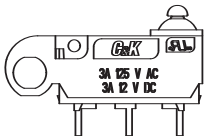
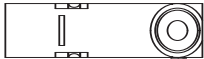
Dimensions are shown: mm
 Specifications and dimensions subject to change



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

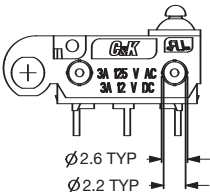
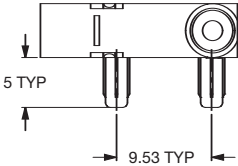
MOUNTING STYLES

M NO SUPPORT POSTS



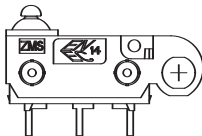
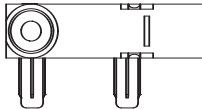
MODEL SHOWN:
ZMSMHXXXXP00PMC

L TWO SUPPORT POSTS LEFT



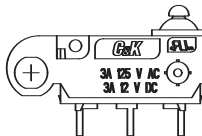
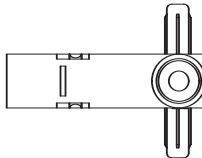
POSTS LEFT
MODEL SHOWN:
ZMSMHXXXXP00PLC

R TWO SUPPORT POSTS RIGHT



POSTS RIGHT
MODEL SHOWN:
ZMSMHXXXXP00PRC

T ONE SUPPORT POST
LEFT & RIGHT



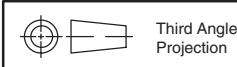
LEFT & RIGHT
MODEL SHOWN:
ZMSMHXXXXP00PTC

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



Dimensions are shown: mm
Specifications and dimensions subject to change