

ZMSM Series with Mounting Hole

Mini Size Snap-acting Switches



Specifications

Contact Rating	3A@ 125 V AC/ 3A@ 12 V DC, 0.01A @ 12 V DC
Electrical Life	100,000 cycles @ 0.01A 12V DC 100,000 cycles @ 3A 12V DC 6,000 cycles @ 3A 125 V AC
Insulation Resistance	100 M ohm min.
Dielectric Strength	500 Vrms.
Operating Temperature	-40°C to 85°C
Operating Force	130 grams

Notes:

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

Agency	Agency File Number
	E42363
	ENEC-03316

Description

The ZMSM series is a mini size snap-acting switch, perfect for use in communication devices, testing equipment and security or alarm systems. Designers turn to the ZMSM series because of its reliable snap-acting mechanism, long electrical and mechanical life, various PCB terminals and actuators and its compliance with regulations such as RoHS and IP67 (IP67 for standalone switch except the metal terminal part; Full IP67 protection when potted with wire version).

Features & Benefits

- Reliable snap-acting mechanism
- Long electrical and mechanical life
- Various PCB terminals & actuators
- RoHS compatible
- IP67 for standalone switch except the metal terminal part; Full IP67 protection when potted with wire version

Applications

- Communication devices
- Testing equipment
- Security/Alarm systems
- Automotive: door latch, seat position detection, EV charging

Materials

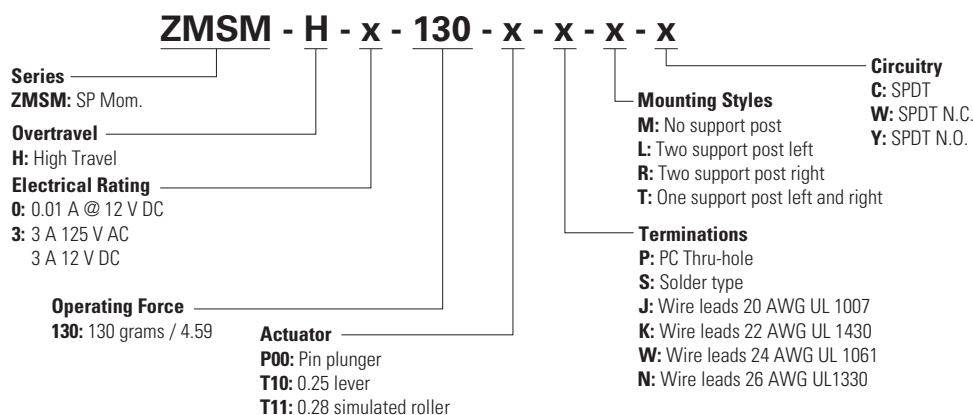
Case	Nylon
Cover/Actuator	PBT
Movable Contacts	3 amp silver, 0.01A gold
Stationary Contacts	
Terminals	Brass, pre-plated with silver
Lever	Stainless steel

Notes:

1. Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center. Sealing cap could possibly be damaged in case of contacts with oils or greases. Please try to avoid direct contact. If more support is needed, consult Customer Service Center.

Ordering Number

To order, simply select desired option from each category and place in the appropriate box. For additional options not shown in catalog, consult Customer Service Center.

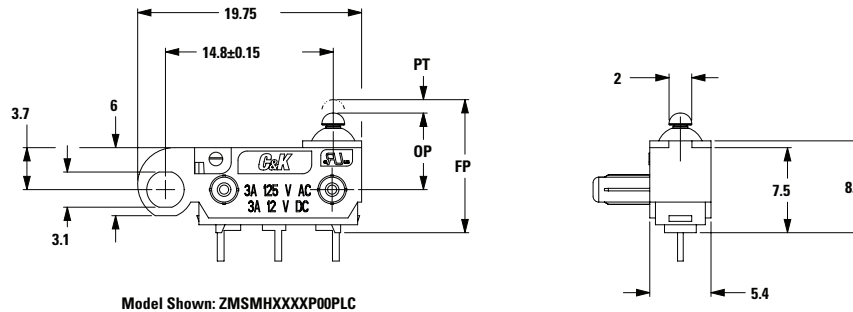


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Series (mm) ZMSMH High Over Travel



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

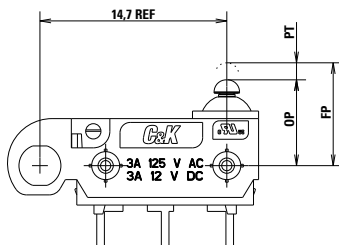
Notes:

1. Model c us with option "S" (solder type) only. Consult Customer Service center for availability and delivery of nonstandard ratings.

Operating Force

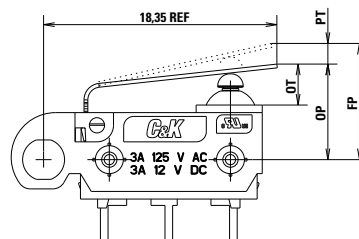
Option Code	Basic Switch Operating Force (Oz./Grams)
130	130, 4.59

P00 Pin Plunger (IP65)



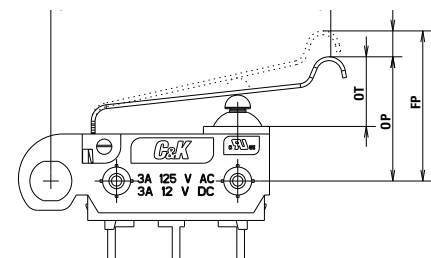
MODEL SHOWN: ZMSMHXXXXP00PLC

Actuator (mm) T10 0.25 Lever (IP65)



MODEL SHOWN: ZMSMHXXXXT10PLC

T11 Lever (IP65)



MODEL SHOWN: ZMSMHXXXXT11PLC

Switch Characteristics

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

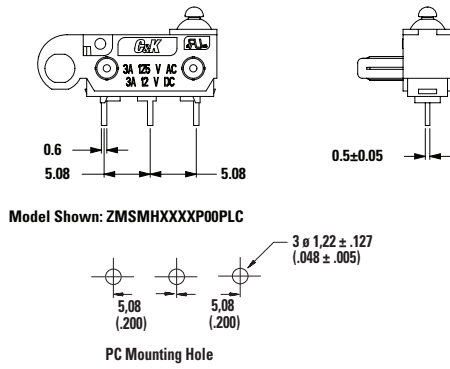
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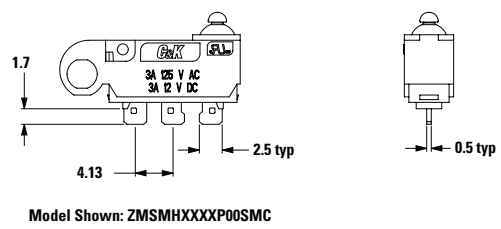


Terminations (mm)

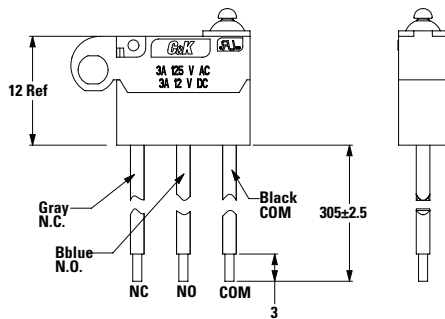
P PC Thru-hole (IP65)



S Solder Type (IP65)



J, K, W, N Wire Lead Bottom (IP67)



- Notes:**
Standard Wire: 20 AWG UL 1007
 Available options - must specify
J: 20AWG UL1007 (Standard)
K: 22AWG UL1430
W: 24AWG UL1061
N: 26AWG UL1330

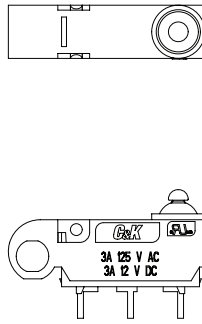
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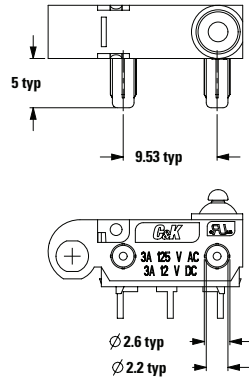
Mounting Styles (mm)

No Support Posts



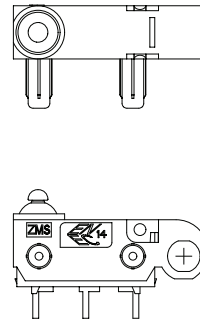
Model Shown:
ZMSMHXXXXP00PMC

L Two Support Posts Left



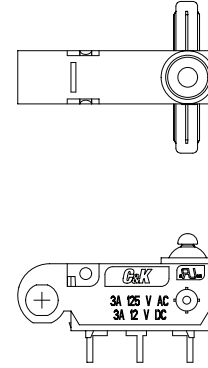
Posts Left
Model Shown:
ZMSMHXXXXP00PLC

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)

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