

ZMS Series

Subminiature Snap-acting Switches (Dust Proof)



Features/Benefits

- **Reliable snap-acting mechanism**
- **Long electrical and mechanical life**
- **Compact size—Ideal when space is limited**
- **Various PCB terminals and actuators**
- **RoHS compatible**
- **IP67 on some models**

Typical Applications

- **PCB detection switch**
- **Communication devices**
- **Testing equipment**
- **Security/Alarm systems**
- **Consumer electronics**



Models Available

Specifications

CONTACT RATING: 3A @ 125 V AC, 3A 12 V DC / 10 mA @ 12 V DC.
ELECTRICAL LIFE: 300,000 cycles @ 10mA / 100,000 cycles @ 3A, 12V DC, 6,000 cycles @ 3A, 125 VAC
INSULATION RESISTANCE: 100 M ohm min.
DIELECTRIC STRENGTH: 500 Vrms.
OPERATING TEMPERATURE: -40°C to 85°C.
OPERATING FORCE: 80 or 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 or gold plated.
STATIONARY CONTACTS: Silver or gold plated.
TERMINALS: Brass, tin plated.
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 K-40 and K-42. For additional options not shown in catalog, consult Customer Service Center.

Series ZMS SP, Mom.	Over Travel H High Travel L Low Travel	Electrical Rating 00 10 mA @ 12 V DC 03 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 L Left form, PC Thru-hole R Right form, PC Thru-hole S Solder type J Wire leads	Mounting Styles S Std (No support post) L Support post left R Support post right	Circuitry C SPDT
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Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change



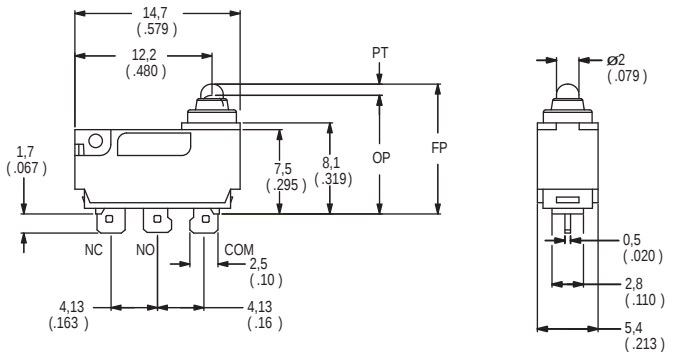
Snap-acting

ZMS Series

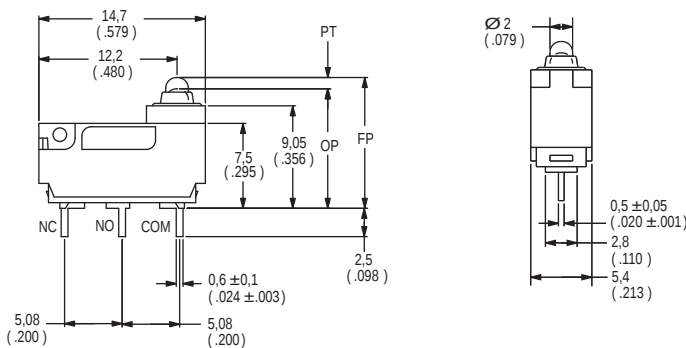
Subminiature Snap-acting Switches

SERIES **ZMS** ■ ■ ■ ■ ■ ■ ■ ■

ZMSH HIGH OVER TRAVEL



ZMSL LOW OVER TRAVEL



ELECTRICAL RATING ■ ■ ■ ■ ■ ■ ■ ■

OPTION CODE	RoHS COMPLIANT*	RoHS COMPATIBLE*	CONTACT MATERIAL		ELECTRICAL RATING	
			MOVABLE CONTACT	STATIONARY CONTACT		
00	Yes	Yes	Gold over fine silver	Gold over fine silver	0.1 AMP @ 30 V DC	
03	Yes	Yes	Fine Silver	Fine silver	3 AMPS @ 125 V AC 3 AMPS @ 12 V DC	

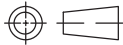
* Note: See Technical Data in section N of this catalog for RoHS compliant and compatible definition and specifications.

Model  with option "S" (solder type) only.
Consult Customer Service center for availability and delivery of nonstandard ratings.
*Electrical rating 03A is not available with Operating Force rating of 080.

OPERATING FORCE ■ ■ ■ ■ ■ ■ ■ ■

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

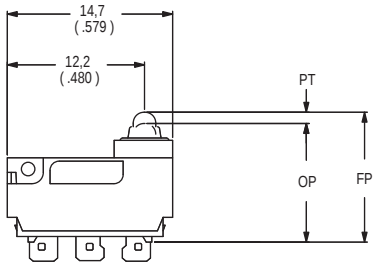


 Third Angle Projection
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

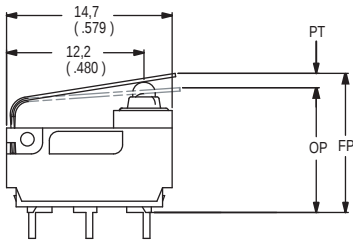
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ACTUATOR

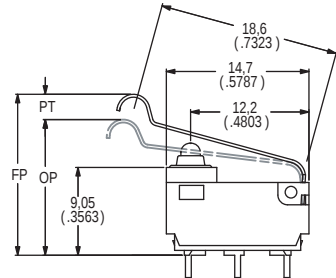
P00 PIN PLUNGER



T10 .25 LEVER



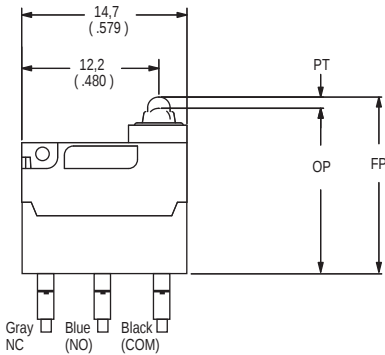
T11 LEVER



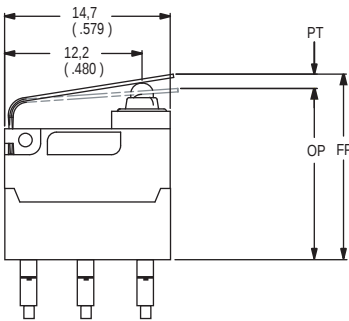
SWITCH CHARACTERISTICS

Actuator code	Maximum Operate Force (grams/oz.)	Minimum Release Force (grams/oz.)	Free Position Max	Maximum Pre-travel	Operate Position	Maximum Differential	Minimum Overtravel
P00	130 4.59	13 0.45	.439 (11.15)	0.032 (0,8)	.415+/- .008 (10.55+/- .2)	.008 (0,2)	0.031 (0,8)
T10	195 6.88	55 1.93	.570 (14.5)	0.152 (3,85)	.440+/- .020 (11.2+/- .5)	0.020 (0,5)	0.053 (1,35)
T11	160 5.64	45 1.58	.693 (17.6)	0.186 (4,8)	.539+/- .032 (13.7+/- .8)	0.030 (0,7)	0.062 (1,65)

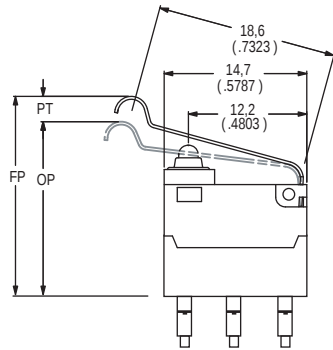
P00 PIN PLUNGER



T10 .25 LEVER

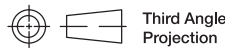


T11 .28 LEVER



SWITCH CHARACTERISTICS "J" TERMINATION ONLY

Actuator code	Maximum Operate Force (grams/oz.)	Minimum Release Force (grams/oz.)	Free Position Max	Maximum Pre-travel	Operate Position	Maximum Differential	Minimum Overtravel
P00	130 4.59	13 0.45	.616 (15.65)	0.032 (0,8)	.593+/- .008 (15.05+/- .2)	.008 (0,2)	0.031 (0,8)
T10	195 6.88	55 1.93	.747 (19.0)	0.152 (3,85)	.617+/- .020 (20.2+/- .5)	0.020 (0,5)	0.053 (1,35)
T11	160 5.64	45 1.58	.870 (22.1)	0.188 (4,8)	.716+/- .032 (18.2+/- .8)	0.030 (0,7)	0.062 (1,65)



Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

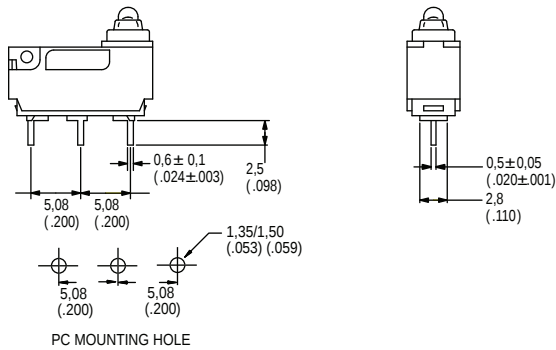


Snap-acting

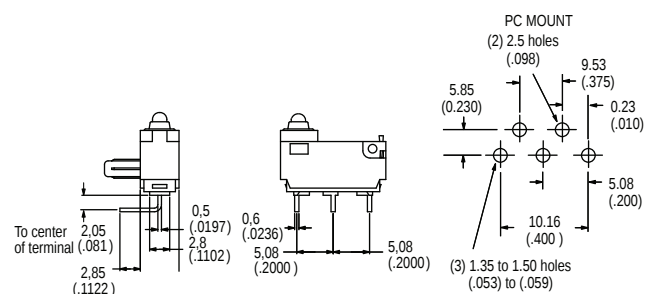
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TERMINATIONS

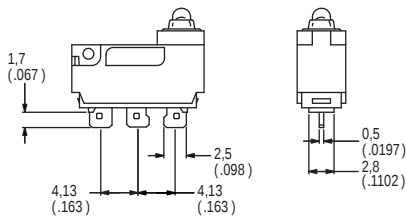
P PC THRU-HOLE



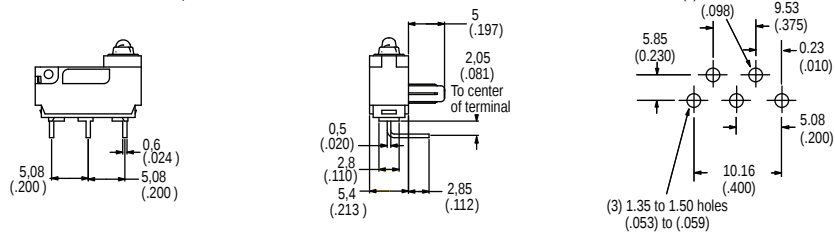
L LEFT FOOTED, PC THRU-HOLE



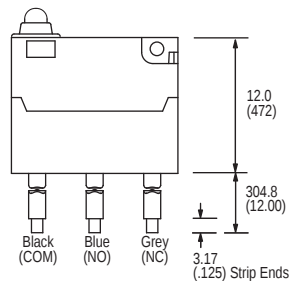
S SOLDER TYPE



R RIGHT FOOTED, PC THRU-HOLE

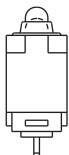


J WIRE LEADS (IP67) 20 AWG

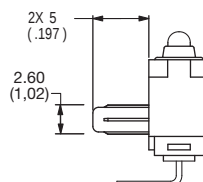


MOUNTING STYLES

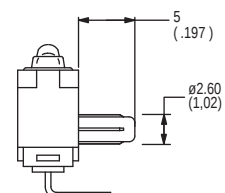
S STD (NO SUPPORT POST)



L SUPPORT POST LEFT



R SUPPORT POST RIGHT



CIRCUITRY

C SPDT (Single Pole, Double Throw)



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C&K