

ZMA Series

Mini Size Snap-acting Switches



Description

ZMA series mini size snap-acting switches are often found used in PCB detection switches, communication devices and various types of testing equipment. Featuring a compact size (which is ideal when space is limited) and a reliable snap-acting mechanism, the ZMA series give applications a long electrical and mechanical life, ensuring they stand up to repeated use.



Features & Benefits

- Reliable snap-acting mechanism
- Long electrical and mechanical life
- Compact size - ideal when space is limited
- Various PCB terminals & actuators
- RoHS compatible & compliant

Applications

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

Agency Approvals

Agency	Agency File Number
	E42363
	ENEC-03336

Specifications

Contact Rating	3A @ 125 V AC 24 V DC 1 A @125 / 250 V AC 24 V DC 0.1A @ 125 V AC 60 V DC
Electrical Life	300,000 cycles @ 0.1A 10,000 cycles @ 3A.
Mechanical Life	1,000,000 cycles
Insulation Resistance	100 M ohm min.
Dielectric Strength	500 Vrms.
Operating Temperature	-40°C to 85°C
Operating Force	80 to 150 grams

Notes:

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

Materials

Cover Case	PBT
Actuator Button	Nylon 6/6
Movable Contacts	Silver alloy or gold plated
Stationary Contacts	
Terminals	Brass, silver plated

Notes:

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

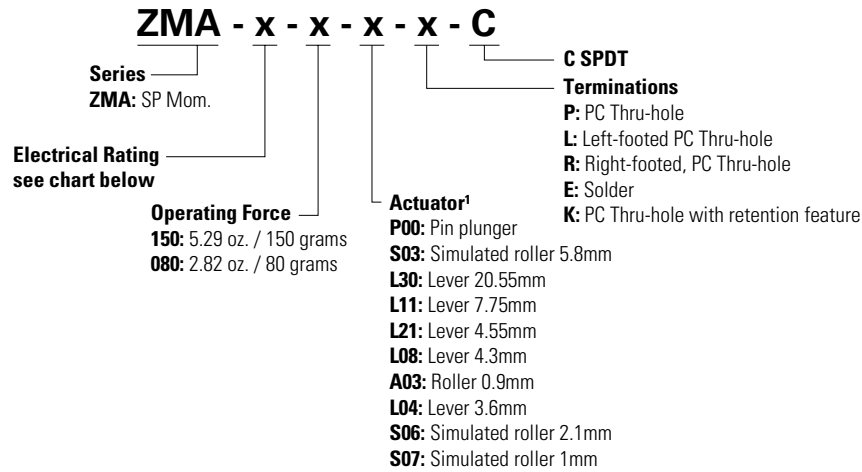
ZMA Series

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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.



Notes:
1. Dim. E See chart on following pages for detailed information

Silver Contacts

Option Code	UL 1054 C US	UL 61058-1 C US		
00A		0.1A 60 V DC 0.1A 125 V AC	0.1A 125 V AC	-
03A	3A 125 V AC	3A 125 V AC 3A 24 V DC	3A 125 V AC	-
01A	-	1A 24 V DC 1A 125 / 250 V AC	-	1A 24 V DC 1A 125 / 250 V AC

Gold Plated Contacts

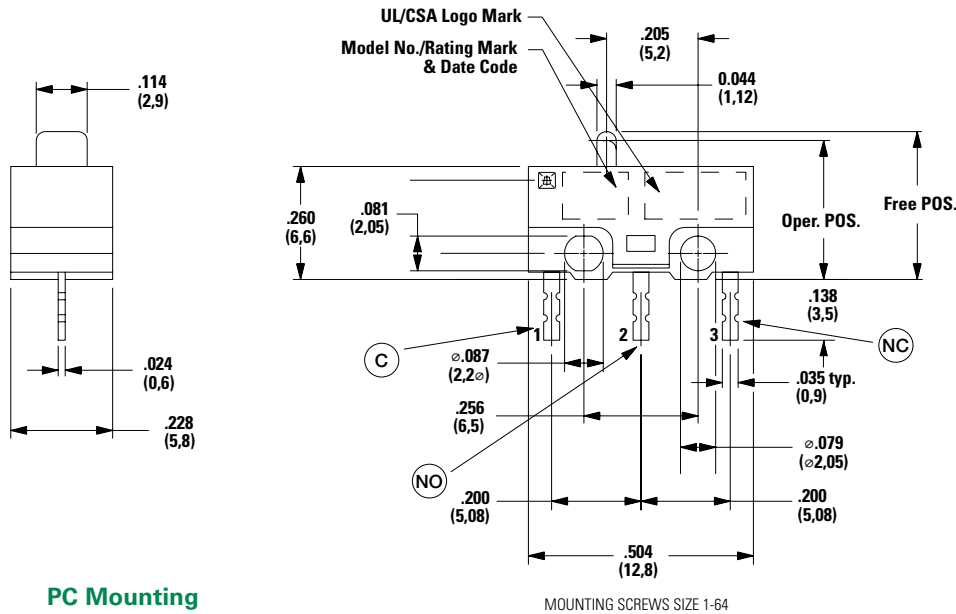
Option Code	UL 1054 C US	UL 61058-1 C US		
G00		0.1A 60 V DC 0.1A 125 V AC	0.1A 125 V AC	-
G03	3A 125 V AC	3A 125 V AC 3A 24 V DC	3A 125 V AC	-
G01	-	1 A 24 V DC 1 A 125 / 250 V AC	-	1 A 24 V DC 1 A 125 / 250 V AC

ZMA Series

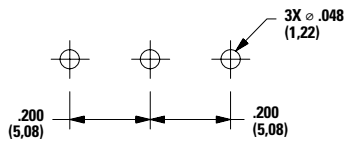
Mini Size Snap-acting Switches



Series inches (mm)
ZMA Mini Size Snap-Acting Switches – SP Momentary
ZMA03A150P00PC SPDT



PC Mounting



Electrical Rating

Option Code	UL 1054 c US	UL 61058-1 c US	14	15
00A	0.1A 60 V DC 0.1A 125 V AC		0.1A 125 V AC	-
03A	3A 125 V AC	3A 125 V AC 3A 24 V DC	3A 125 V AC	-
01A	-	1A 24 V DC 1A 125 / 250 V AC	-	1A 24 V DC 1A 125 / 250 V AC

Option Code	UL 1054 c US	UL 61058-1 c US	14	15
G00	0.1A 60 V DC 0.1A 125 V AC		0.1A 125 V AC	-
G03	3A 125 V AC	3A 125 V AC 3A 24 V DC	3A 125 V AC	-
G01	-	1 A 24 V DC 1 A 125 / 250 V AC	-	1 A 24 V DC 1 A 125 / 250 V AC

Notes:

1. See Technical Data section of this catalog for RoHS compliant and compatible definition and specifications. All models with all options. Consult Customer Service center for availability and delivery of nonstandard ratings.

Operating Force

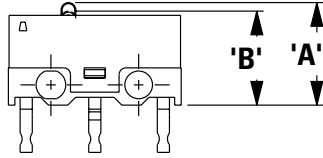
Option Code	Basic Switch Operating Force (Oz./Grams)
080	2.82, 80
150	5.29, 150

ZMA Series

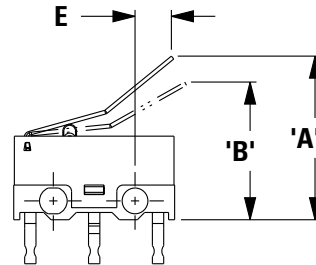
Mini Size Snap-acting Switches



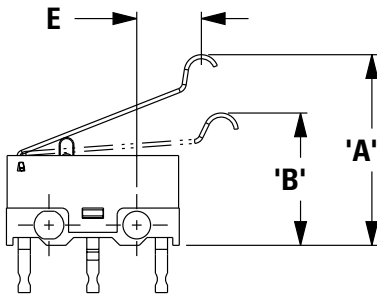
P00 Pin Plunger



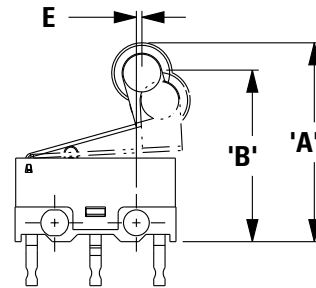
L08 Lever 4.3mm



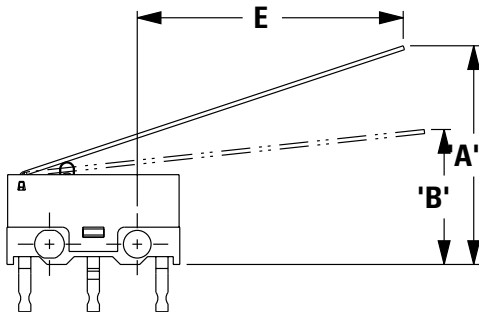
S03 Simulated Roller 5.8mm



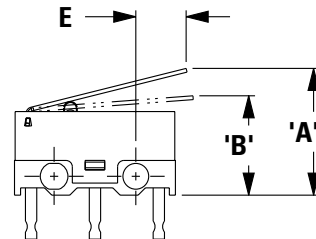
A03 Roller 0.9mm



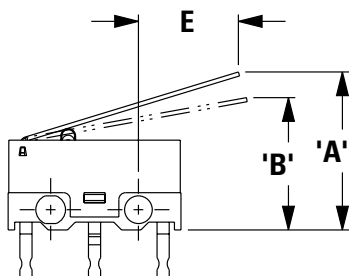
L30 Lever 20.55mm



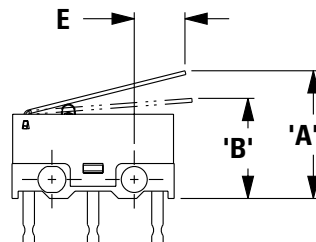
L04 Lever 3.6mm



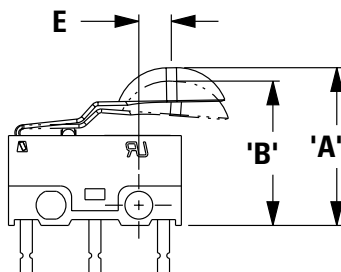
L11 Lever 7.75mm



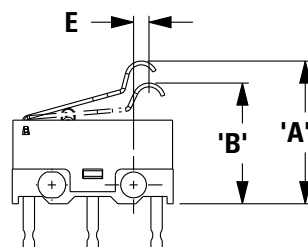
L21 Lever 4.55mm



S06 Simulated Roller 2.1mm



S07 Simulated Roller 1mm



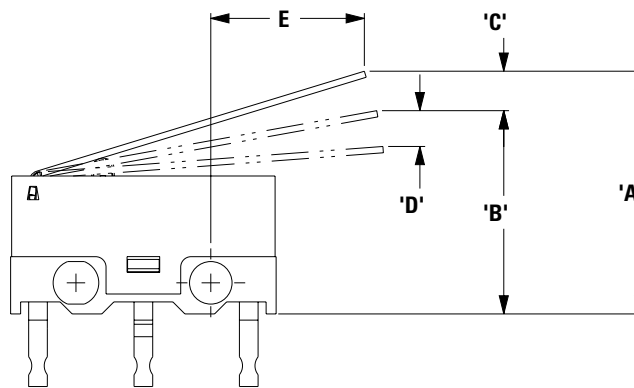
ZMA Series

Mini Size Snap-acting Switches

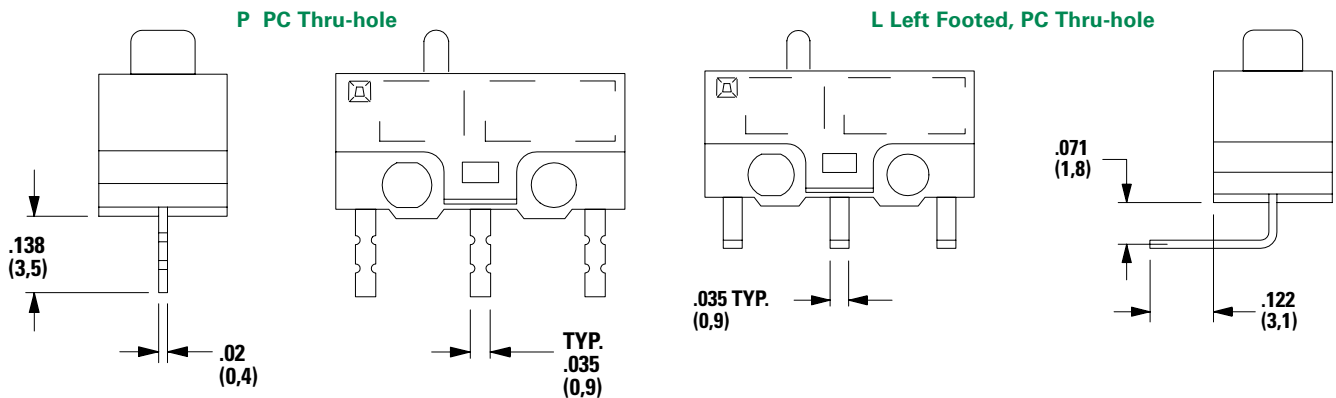


Switch Characteristics

Option Code	Oper. Force Max. (grams)		Rel. Force Min. (grams)		'A' FP Max. (MM)	'B' OP Max. (MM)	'C' PT Max. (MM)	'D' OT Min. (MM)	'E' Min. (MM)
P00	80	150	21	35	7.35	6.9 ± 0.3	0.62	0.2	-
S03	25	43	5	7	14.2	9.8 ± 0.9	3.5	0.7	5.8
L30 (80gf)	13	21	2	3	16.8	9.5 ± 1.9	6.9	0.55	20.55
L30 (150gf)						9.75 ± 1.9			
L11	25	39	4	6	11.7	8.68 ± 1	4.4	0.6	7.75
L21	30	47	2	7	10	8.35 ± 0.7	2.35	0.62	4.55
L08	27	48	3	8	13.5	10.75 ± 0.8	3.5	0.3	4.3
A03	34	65	6	10	16.55	13.65 ± 1	3.9	0.5	0.9
L04	30	50	5	8	10.1	7.9 ± 0.8	3.0	0.6	3.6
S06	33	49	5	11	12.43	10.7 ± 0.8	1.43	1.25	2.1
S07	40	65	2	5	13.0	9.7 ± 1	4.3	0.5	1



Terminations inches (mm)

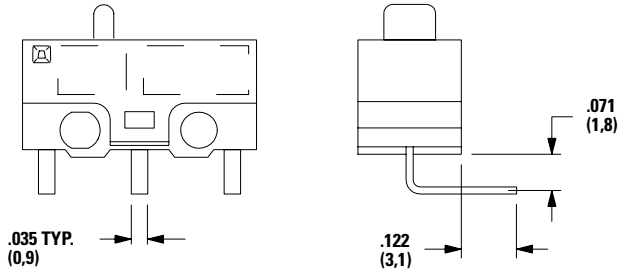


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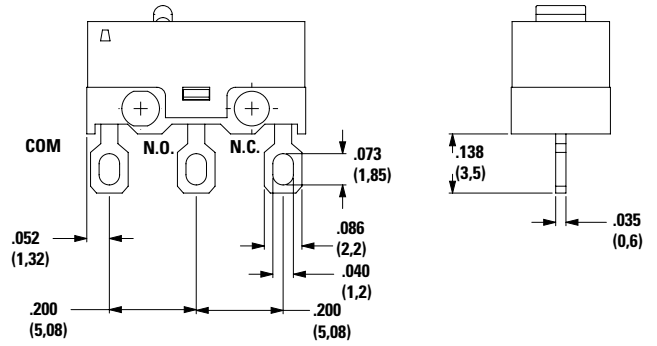
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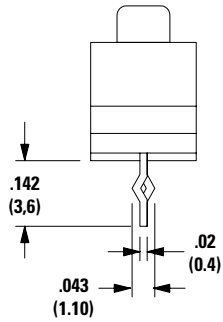
R Right Footed, PC Thru-hole



E Solder



K PC Thru-hole, With Retention Feature



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