

# Sealed Subminiature Snap Switch

## Single Pole

### DC Series



#### Features

- Enclosed switch complying with IP6K7
- Models available for operating temperature up to 120 °C
- Various contact materials available
- RoHS compliant
- Silicon-free version available
- Various aux actuators (can be retrofitted)
- Two mounting positions
- Mechanical life minimum 1,000,000 operations
- Rated for currents up to 10.1 A at 250 VAC

#### Standard Parts<sup>1</sup>

DC1C-A1AA  
DC1C-A1LB  
DC1C-A1RB

DC2C-A1AA  
DC2C-A1LB  
DC2C-A1RB

DC3C-A1AA  
DC3C-A1LB  
DC3C-A1RB

<sup>1</sup>The part number configuration matrix below provides details to the part numbers above.

For configurable part numbers that are not listed above, not listed in your region, or for custom part numbers, contact the factory or your distributor.

#### Part Number Breakdown

DC1C-A1AA

Series	Contact Rating <sup>2</sup>	Configuration	Terminal Type millimeters (inches)	Terminal Configuration
DC	1 5 Amp 2 10.1 Amp 3 0.1 Amp	120 °C A SPST NO B SPST NC C SPDT 85 °C E SPST NO F SPDT NC G SPDT	A Solder, short B 0.5 (0.02) leads, no UL C 0.75 (0.03) leads, no UL H 1.2 x 0.5 (0.05 x 0.02) PCB K 0.5 x 0.5 (0.02 x 0.02) PCB L 2.8 x 0.5 (0.11 x 0.02) QC N Without leads (Type B) P Without leads (Type A) Q Without leads (No cutout) Non-European versions D Leads, 18 AWG (UL) E Leads, 16 AWG (UL) M Leads, 20 AWG (UL)	Term config 1 only 105 °C, DC3 only 105 °C only Term configs 1 only Term configs 1, 6, 7, 9 only Term config 1 only Term configs 3, 4 only Term configs 3, 4 only DC 3 only 105 °C, term config 5, DC1, DC3 only 105 °C only 105 °C, DC1, DC3 only
				1 30° twisted 3 Leads on actuator side 4 Leads opposite actuator 5 Leads attached to underside 6 PCB terms – right hand side 7 PCB terms – left hand side 8 PCB terms – right hand side w/location pins 9 PCB terms – left hand side w/location pins
				Actuator Type AA Spherical-head, no auxiliary actuator For others, see actuator table at <a href="http://switches-sensors.zf.com/us/">http://switches-sensors.zf.com/us/</a>

<sup>2</sup>UL current rating; see table below for complete details

#### Electrical Specifications – Contact Ratings

Contact	EN61058	UL1054
1	6 A, 250 VAC	5 A, 125/250 VAC; 1 A, 48 VDC
2	10 (1.5) A, 250 VAC	10.1 A, 125/250 VAC; ¼ HP, 125 VAC
3	0.1 A, 250 VAC	0.1 A, 125/250 VAC; 0.1 A, 30 VDC; 0.3 A, 60 VDC
4	3 A, 250 VAC	3 A, 125/250 VAC; 1 A, 48 VDC

UL file number E314201



## Mechanical Specifications

Contact Gap	< 3 mm ( $\mu$ )		
Operating Force	50– 340 cN (model dependent, without actuator)		
Total Travel (without actuator)	1.6 mm		
Operating life			
	Operation Cycles		
	Contact	EN61058	UL1054
	1	10,000	6,000 (15,000 @ 48 VDC)
	2	10,000	6,000
	3	50,000	100,000 (6,000 @ 60 VDC)
	4	50,000	6,000 (15,000 @ 48 VDC)
			Mechanical Life
			15,000,000
			10,000,000
			15,000,000
			15,000,000

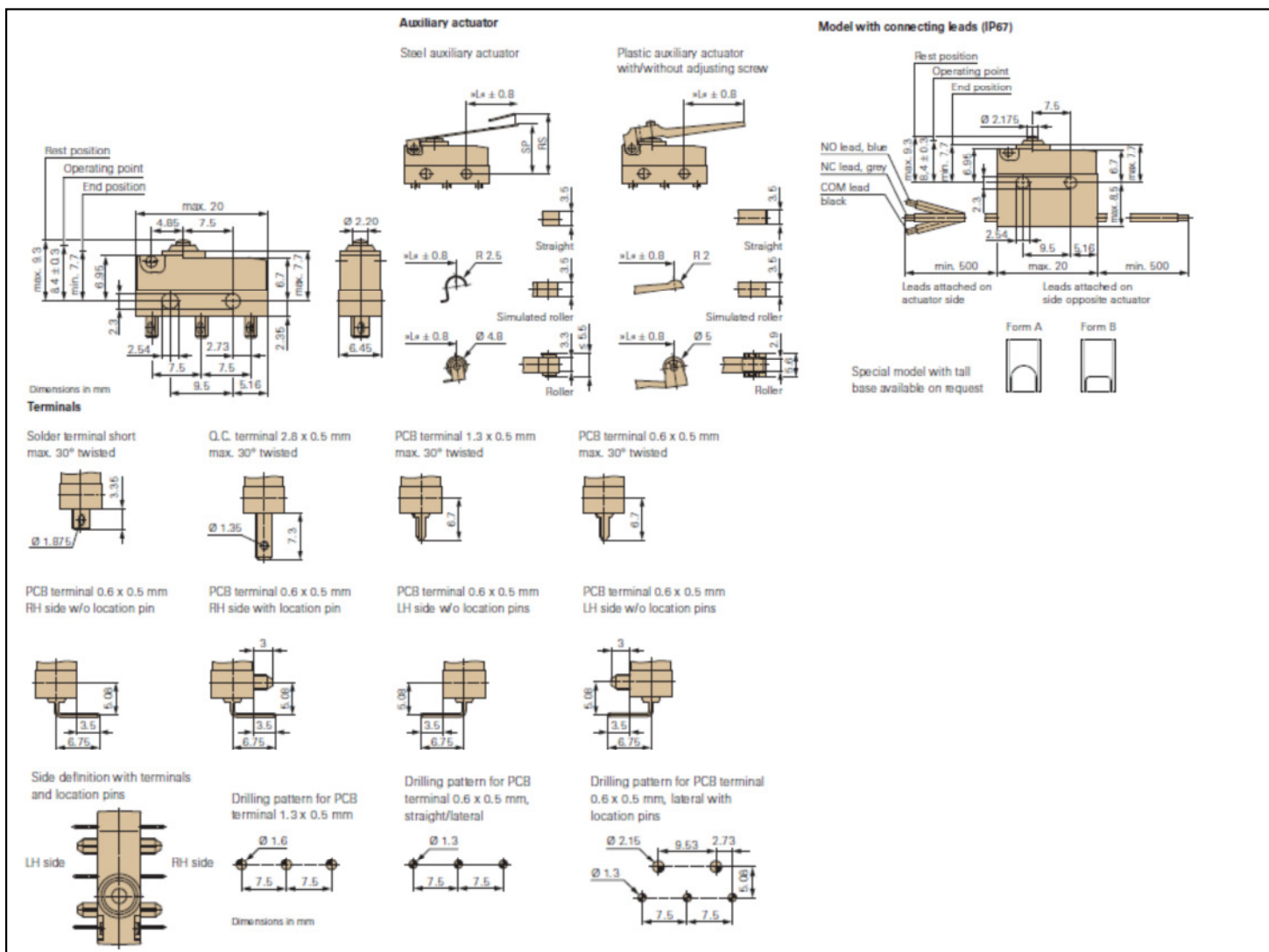
## Material Specifications

Base	PET (UL 94 V-0)
Cover	PBT (UL 94 V-0); PET (UL 94 V-0)
Actuator	PBT (UL 94 V-0) 120 °C, POM (UL 94 HB) 85 °C
Contacts	AgSnO <sub>2</sub> , AgNi, AuAgPt (Crosspoint)
Terminals	CuZn (silver-plated)
Auxiliary Actuator	Stainless Steel or plastic
Switching parameters	Complete chart available at <a href="http://switches-sensors.zf.com/us/">http://switches-sensors.zf.com/us/</a>

## Environmental Specifications

Ambient Temperature	-40 °C to 85 / 120 °C (-40 °F to 185 / 248 °F) without wire leads -40 °C to 85 / 105 °C (-40 °F to 185 / 221 °F) without wire leads
Ingress Protection	IP67

## Dimensions mm and Terminal Options



# Mouser Electronics

Authorized Distributor

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## ZF Electronics:

[DC1C-K6AA](#) [DC1C-L1LC](#) [DC2C-E5AA](#) [DC2C-E5LB](#) [DC1C-A1RB](#) [DC3C-A1LB](#) [DC2C-A1LB](#) [DC1C-A1LB](#) [DC2C-A1RB](#) [DC3C-M5RB](#) [DC2C-A1AA](#) [DC3C-A1AA](#) [DC1C-A1AA](#) [DC3C-D5AA](#) [DC1C-D5AA](#) [DC3C-A1RB](#)