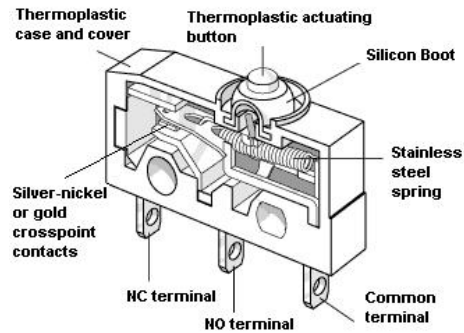


# Subminiature Sealed Snap Action Switch DC Series



## Features

- Enclosed switch complying with IP 6K7
- Silicon-free version available
- Models available for operating temperatures up to 120°C
- Rated for currents up to 10.1 amps at 250VAC
- Range of auxiliary actuators available (can also be retrofitted)
- Various contact materials available, depending on application
- Mechanical life: min.  $1 \times 10^6$  operations
- Wide variety of terminal options

## Electrical Ratings and Operating Life

Switch Series	According to EN61058-1		According to UL1054	
	Nominal Load	Operation cycles	Nominal Load	Operation cycles
DC1	6A, 250V~	10,000	5A 125/250 VAC, 1A 48VDC	6,000
DC2	10(1.5)A, 250 V~	10,000	10.1A 125/250 VAC 1/4HP 125VAC	6,000
DC3	0.1A 250 V~	50,000	0.1A 125/250 VAC	100,000

Technical Specifications		Material Specifications	
<b>Temperature Rating:</b>	-40° to +85°C / +120°C ( <i>without wire leads</i> ) -40° to +85°C / +105°C ( <i>with wire leads</i> )	<b>Case:</b>	PET / PBT
<b>Degree of Protection:</b>	IP67	<b>Actuator button:</b>	PBT (UL 94 V-0) 120°C POM (UL 94 HB) 85°C
<b>RoHS Compliant:</b>	Yes	<b>Contacts:</b>	AuAgPt (Crosspoint), AgNi,
<b>UL File Number:</b>	E314201	<b>Terminals:</b>	CuZn (silver plated)
		<b>Auxiliary actuator:</b>	Stainless steel or plastic

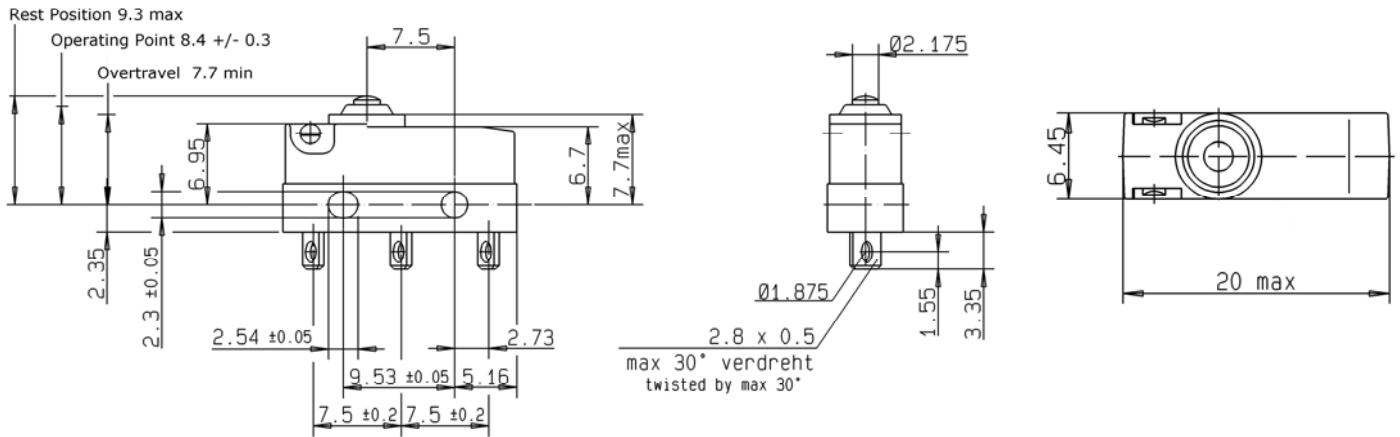


Specifications subject to change

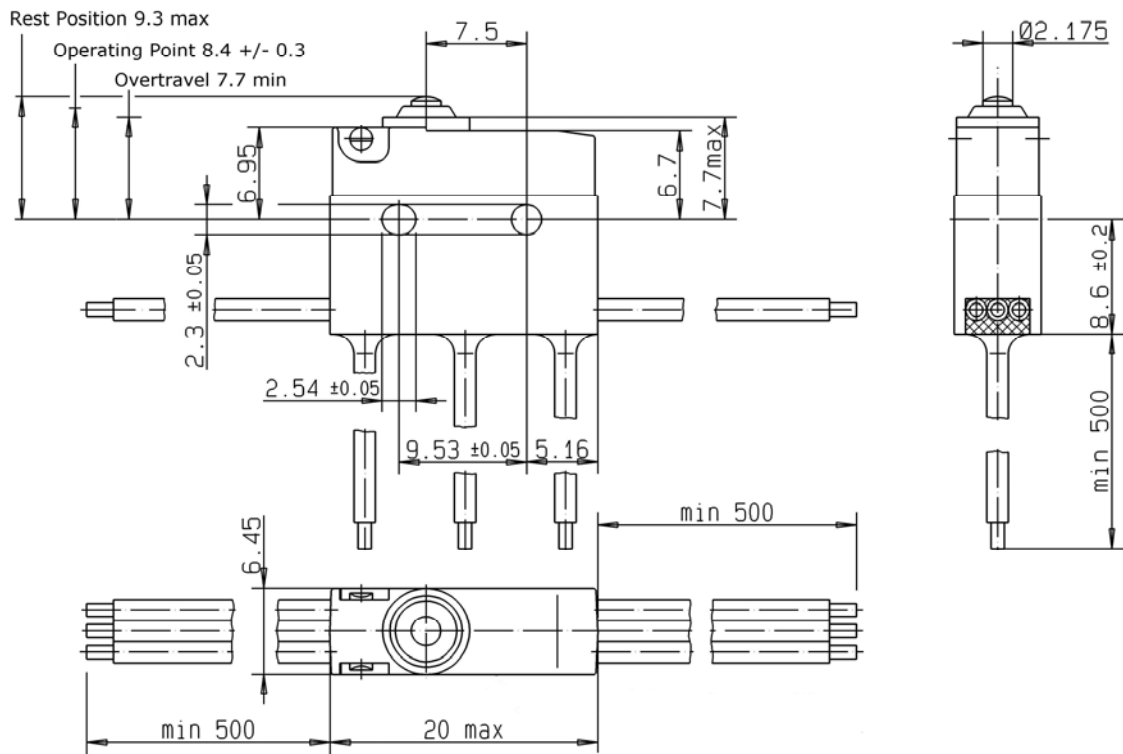
# Subminiature Sealed Snap Action Switch

## DC Series

### Dimensions - millimeter



### Models with Wire Leads



Wire Colors: Common: Black

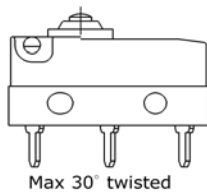
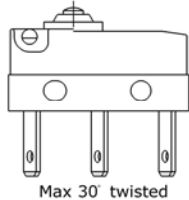
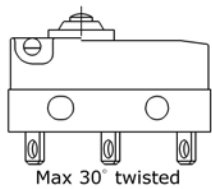
Normally Open: Blue

Normally Closed: Grey

# Subminiature Sealed Snap Action Switch

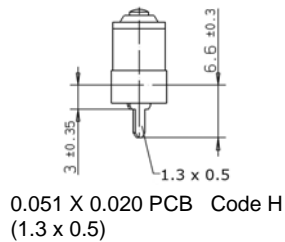
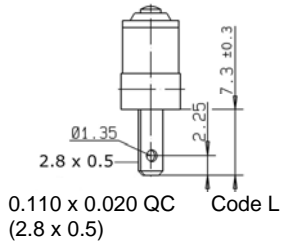
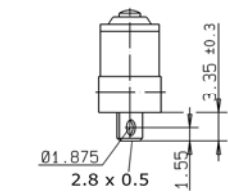
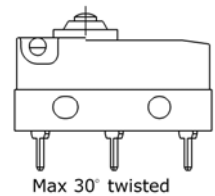
## DC Series

Terminal Options inches (mm)



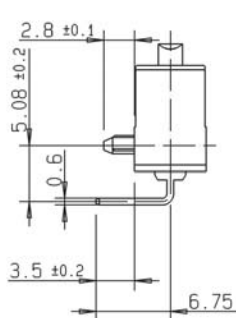
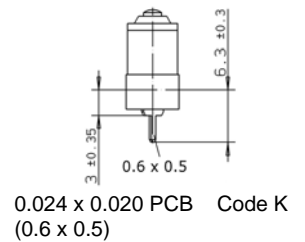
$\varnothing 0.065 \pm 0.002$   
(0.165 ± 0.05)

Hole pattern for .051" (1.3)  
pcb

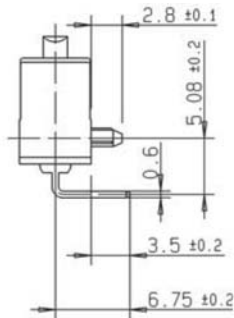


$\varnothing 0.053 \pm 0.002$   
(1.35 ± 0.05)

Hole pattern for .024" (0.6)  
pcb

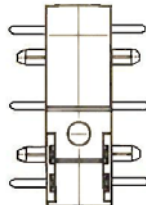


Left side pcb with location pins



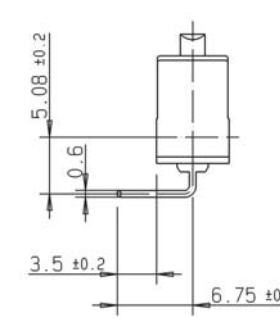
Right side pcb with location pins

L  
E  
F  
T

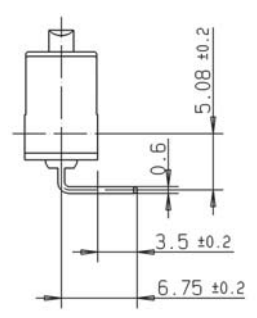


Top Down View of Lateral  
Terminals

R  
I  
G  
H  
T



Left side pcb terminals



Right side pcb terminals

$\varnothing 0.087 \pm 0.002$   
(2.2 ± 0.05)

$\varnothing 0.053 \pm 0.002$   
(1.35 ± 0.05)

Hole pattern for pcb terminals with location pins

$\varnothing 0.094 \pm 0.003$   
(2.385 ± 0.065)

$\varnothing 0.080 \pm 0.002$   
(2.05 ± 0.05)

(Post Dimensions)

(Post Dimensions)

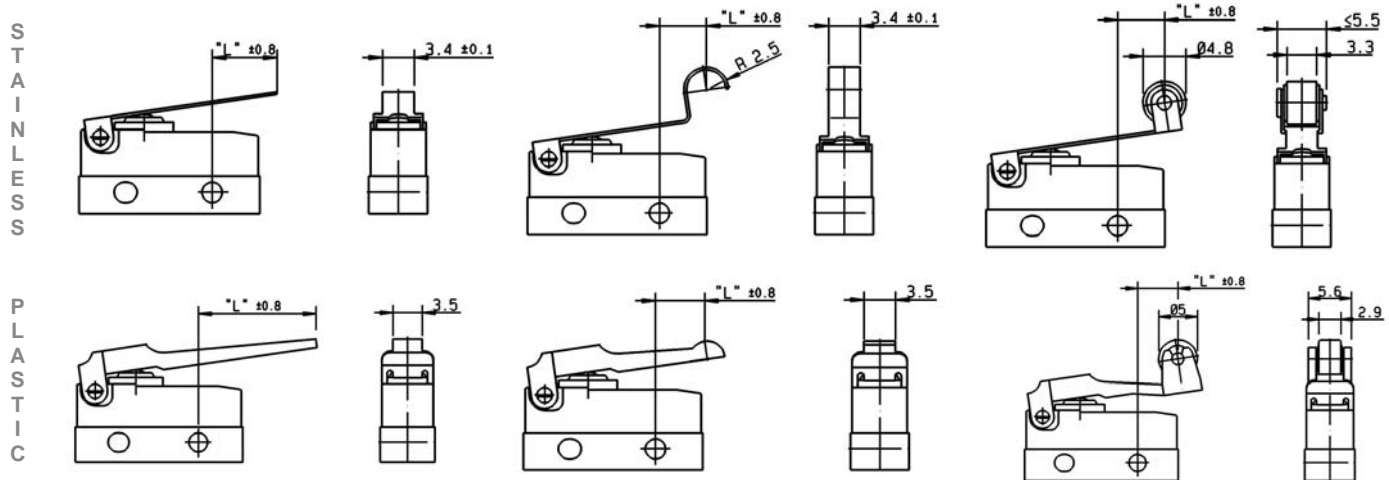
$\varnothing 0.053 \pm 0.002$   
(1.35 ± 0.05)

Hole pattern for pcb terminals without location pins

# Subminiature Sealed Snap Action Switch

## DC Series

Auxiliary Actuators Inches (mm)



### Auxiliary Actuator Options

Actuator Code	Material	Shape	Actuation Length (mm)	Actuator Part number
-LB	Stainless	Straight	4.8	06141232
-LC	Stainless	Straight	7.0	06141233
-LD	Stainless	Straight	42.0	06141234
-SB	Stainless	Simulated Roller	2.5	06141237
-SC	Stainless	Simulated Roller	4.7	06141238
-SD	Stainless	Simulated Roller	39.7	06141239

Actuator Code	Material	Shape	Actuation Length (mm)	Actuator Part number
-RB	Stainless	Roller	2.5	07140260
-RC	Stainless	Roller	4.7	07140261
-RD	Stainless	Roller	39.7	07140262
-WB	Plastic	Straight	7.0	06141247
-WC	Plastic	Straight	14.0	06141253
-ZB	Plastic	Roller	5.2	07140299
-VB	Plastic	Simulated Roller	5.6	06141249

### Commonly Stocked Distributor Items / Preferred Part Numbers

Item Number	EN Rating	UL Rating	Terminals	Maximum Operating Force (cN)	Maximum Pretravel inches (mm)	Operating Point inches (mm)	Minimum Overtravel inches (mm)	Max. Movement Differential inches (mm)	Actuation Length inches (mm)
DC1CA1AA	6A 260V ~	5A 125/250 VAC; 1A 48 VDC	Short Solder	200	0.039 / 1.0	0.330 +/- 0.012 8.4 +/- 0.3	0.024 / 0.6	.004 / 0.1	---
DC1CA1LB	6A 260V ~	5A 125/250 VAC; 1A 48 VDC	Short Solder	80	0.177 / 4.5	0.421 +/- 0.5 10.7 +/- 1.3	0.06 / 1.5	.02 / 0.5	0.189 (4.8)
DC1CA1RB	6A 260V ~	5A 125/250 VAC; 1A 48 VDC	Short Solder	90	0.177 / 4.5	0.622 +/- 0.050 15.8 +/- 1.3	0.06 / 1.5	.02 / 0.5	0.088 (2.5)
DC2CA1AA	10(1.5A) 250V ~	10.1A 125/250VAC; 1/4HP 125VAC	Short Solder	340	0.039 / 1.0	0.330 +/- 0.012 8.4 +/- 0.3	0.024 / 0.6	.004 / 0.1	---
DC2CA1LB	10(1.5A) 250V ~	10.1A 125/250VAC; 1/4HP 125VAC	Short Solder	150	0.197 / 5.0	0.421 +/- 0.50 10.7 +/- 1.3	0.06 / 1.5	0.03 / 0.7	0.189 (4.8)
DC2CA1RB	10(1.5A) 250V ~	10.1A 125/250VAC; 1/4HP 125VAC	Short Solder	160	0.197 / 5.0	0.622 +/- 0.050 15.8 +/- 1.3	0.06 / 1.5	0.03 / 0.7	0.088 (2.5)
DC3CA1AA	0.1A 250V ~	0.1A 125/250VAC, 0.1A 30VDC	Short Solder	200	0.039 / 1.0	0.330 +/- 0.012 8.4 +/- 0.3	0.024 / 0.6	.004 / 0.1	---
DC3CA1LB	0.1A 250V ~	0.1A 125/250VAC, 0.1A 30VDC	Short Solder	80	0.177 / 4.5	0.421 +/- 0.50 10.7 +/- 1.3	0.06 / 1.5	0.03 / 0.7	0.189 (4.8)
DC3CM5RB	0.1A 250V ~	0.1A 125/250VAC, 0.1A 30VDC	20 awg wire	90	0.180 / 4.6	0.600 +/- 0.030 15.24 +/- 0.8	0.06 / 1.5	.02 / 0.5	0.088 (2.5)

\*\* Additional part numbers available. Contact factory for minimums and availability



# Subminiature Sealed Snap Action Switch

# DC Series

## Ordering Information

DC Series		3	
<b>Code</b>			
<b>Contact Configuration</b>			
+85C Operating Temperature			
E	SPST NO		
F	SPST NC		
G	SPDT		
+120C Operating Temperature			
A	SPST NO		
B	SPST NC		
C	SPDT		

Code	EN 61058 Rating	UL1054 Rating
1	6A 250VAC	5A 125/250VAC, 1A 48VDC
2	10(1.5)A 250VAC	10.1A 125/250VAC, 1/4HP 125VAC
3	0.1A 250VAC	0.1A 125/250VAC 0.1A 30VDC

### Notes:

Wire leads 500 mm min. (approximately 20" long)

1. Only available with terminal configuration 1
2. +85C rated only
3. Only available with DC1 and DC3
4. Wire versions only rated to +105C
5. Only available with terminal configuration 3 or 4

A		1	
<b>Code</b>		<b>Terminal Type</b>	
		<b>Notes</b>	
A	Short Solder		1
B	0.02" (0.5) <sup>2</sup> Leads (No UL)		4,8
C	0.03" (0.75) <sup>2</sup> Leads (No UL)		4
H	0.05 x 0.02 (1.2 x 0.5) PCB		1
K	0.02 x 0.02 (0.5 x 0.5) PCB		1,6
L	0.11 x 0.02 (2.8 x 0.5) QC		1
N	Without Leads (Type B)		5
P	Without Leads (Type A)		5
Q	Without Leads (No Cut Out)		8
<b>Non-European Versions</b>			
D	Leads 18 awg (UL approved)		4, 7, 9
E	Leads 16 awg (UL approved)		4
M	Leads 20 awg (UL approved)		3, 4

6. Only available with terminal configuration 1, 6, 7, 8, 9
7. Only available with terminal configuration 5
8. Only available with DC3
9. Not available with DC2

1		AA	
<b>Code</b>		<b>Actuator Type</b>	
AA	Spherical Head button		
LB	Short straight lever 0.189 (4.8)		
RB	Short roller lever 0.098 (2.5)		
RC	Roller lever 0.185 (4.7)		

\* For additional actuator options contact factory

\*\* Do not use plastic levers with 120°C rated switches

1	30° Twisted
3	Leads on Actuator Side
4	Leads on Opposite Side from Actuator
5	Leads Attached to Underside
6	PCB Terminals Right Hand Side
7	PCB Terminals Left Hand Side
8	PCB Terminals Right Hand Side with Location Pins
9	PCB Terminals Left Hand Side with Location Pins

## Contact

Call, fax or visit our Website for more information.

**ZF Electronics Corporation**  
11200 88th Avenue  
Pleasant Prairie, WI 53158

Phone: 262.942.6500  
Web: [www.cherrycorp.com](http://www.cherrycorp.com)  
Email: [cep\\_sales@zf.com](mailto:cep_sales@zf.com)  
Fax: 262.942.6566

The manufacturer accepts no liability for errors or non-availability, and reserves the right to change specifications without prior notice.

Technical data relates to product specifications only. Features may differ from those described. Only drawings combined with product specifications shall be deemed binding.

© 2007 ZF Electronics Corporation

Last Updated: 071211

