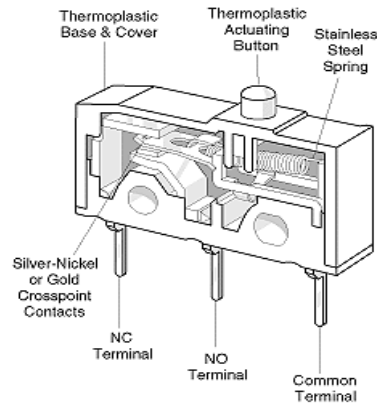


Subminiature Snap Action Switch DB Series



Features

- Precision switch with high repeat accuracy
- Models available for operating temperatures up to 120°C
- Rated for currents up to 10A @ 250VAC
- Range of snap-on auxiliary actuators, two mounting positions
- Wide variety of terminal options available
- International approvals standard
- Mechanical life up to 15×10^6
- RoHS Compliant

Electrical Ratings and Operating Life					
Switch Series	According to EN61058-1		According to UL1054		Mechanical Life
	Nominal Load	Operation cycles	Nominal Load	Operation cycles	
DB1	6A, 250V~	10,000	5A 125/250 VAC	6,000	15×10^6
	0.1A 80 VDC	10,000	1A 48 VDC	15,000	
DB2	10(1.5)A, 250 V~	10,000	10.1A 125/250 VAC	6,000	10×10^6
	0.1A 80 VDC	10,000	¼ HP 125 VAC		
DB3	0.1A 250 V~	50,000	0.1A 125/250 VAC	100,000	15×10^6
	0.1A 80 VDC	50,000			
DB5*	1A 250 V~	50,000	1A 125/250 VAC	6000	15×10^6
			1A 48VDC	15,000	
DB6*	6A 250 VAC~	50,000	5A 125/250 VAC	6,000	15×10^6
DB7*	10(1.5)A 250 V~	50,000	10.1A 125/250 VAC ¼ HP 125 VAC	6,000	10×10^6

*Only 85°C Rated

Technical Specifications		Material Specifications	
Temperature Rating:	-40°C to 85°C or -40°C to 120°C	Base:	PET (UL 94 V-0)
Degree of Protection:	IP50	Cover:	PBT (UL 94 V-0)
Contact Gap	< 3mm (μ)	Actuator button:	PBT (UL 94 V-0) 120°C POM (UL 94 HB) 85°C
Proof Tracking Index	PTI 175	Contacts:	AuAgPt (Crosspoint), AgNi,
UL File Number:	E314201	Terminals:	CuZn (silver plated)
		Auxiliary actuator:	Stainless steel or plastic

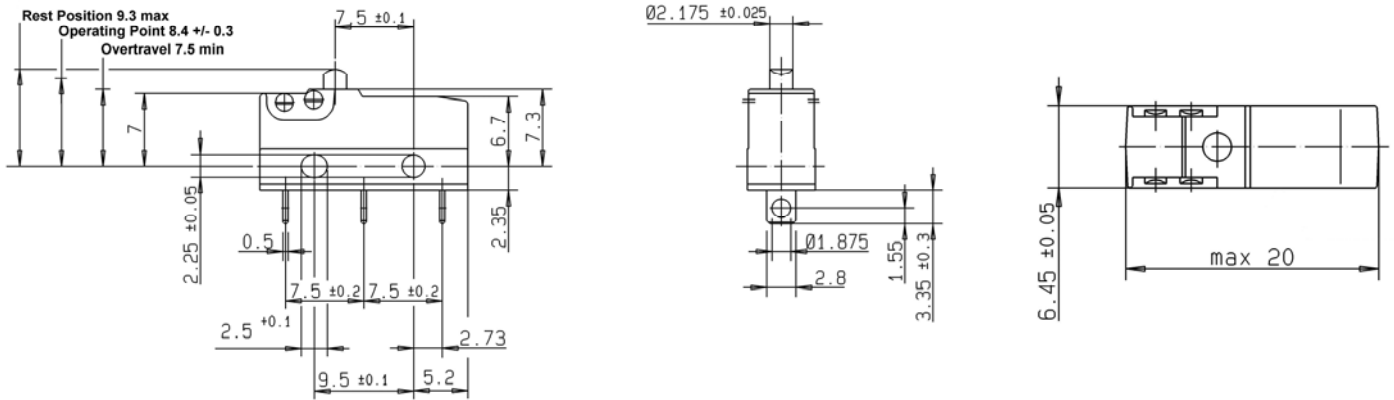
Specifications subject to change



Subminiature Snap Action Switch

DB Series

Dimensions - millimeter

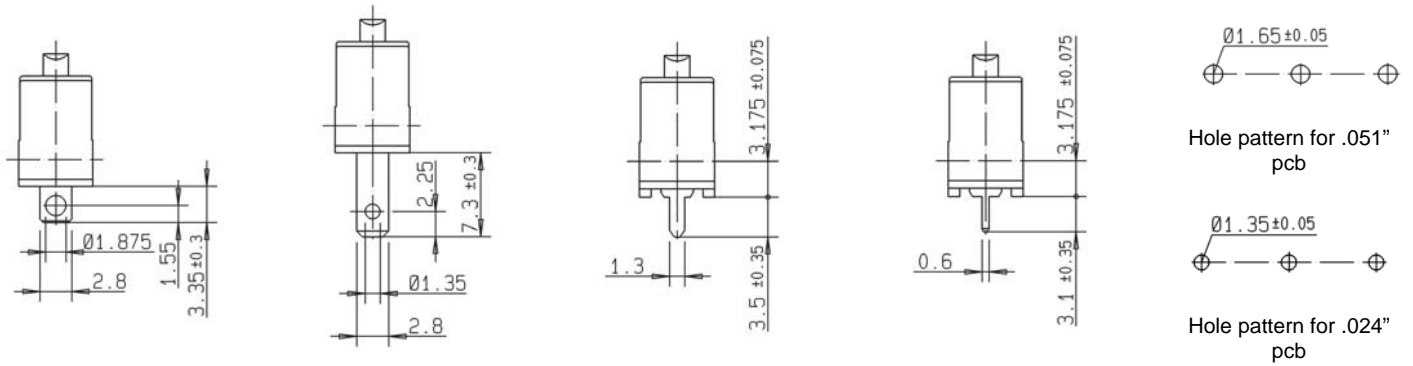


Commonly Stocked Distributor Items / Preferred Part Numbers

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)
DB1CA1AA	6A 250VAC	5A 125/250 VAC	Short Solder	150	.039 (1.0)	.319 / .343 (8.1 / 8.7)	.024 (0.6)	.004 (0.1)	--
DB1CA1LB	6A 250VAC	5A 125/250 VAC	Short Solder	60	.157 (4.0)	.370 / .472 (9.4 / 12.0)	.079 (2.0)	.02 (0.5)	0.189 (4.8)
DB1CA1RB	6A 250VAC	5A 125/250 VAC	Short Solder	65	.157 (4.0)	.571 / .673 (14.5 / 17.1)	.079 (2.0)	.02 (0.5)	0.088 (2.5)
DB1CB1AA	6A 250VAC	5A 125/250 VAC	2.8 x 0.5mm QC	150	.039 (1.0)	.319 / .343 (8.1 / 8.7)	.024 (0.6)	.004 (0.1)	--
DB1CB1LB	6A 250VAC	5A 125/250 VAC	2.8 x 0.5mm QC	60	.157 (4.0)	.370 / .472 (9.4 / 12.0)	.079 (2.0)	.02 (0.5)	0.189 (4.8)
DB1CB1RC	6A 250VAC	5A 125/250 VAC	2.8 x 0.5mm QC .110" x .020"	55	0.177 (4.5)	.579 / .697 (14.7 / 17.7)	.079 (2.0)	.024 (0.6)	0.185 (4.7)
DB1CC1AA	6A 250VAC	5A 125/250 VAC	1.3 x 0.5mm PCB	150	.039 (1.0)	.319 / .343 (8.1 / 8.7)	.024 (0.6)	.004 (0.1)	--
DB2CA1AA	10(1.5)A 250 VAC	10.1A 125/250 VAC 1/4HP 125VAC	Short Solder	250	.039 (1.0)	.319 / .343 (8.1 / 8.7)	.024 (0.6)	.004 (0.1)	--
DB2CA1LB	10(1.5)A 250 VAC	10.1A 125/250 VAC 1/4HP 125VAC	Short Solder	100	.178 (4.5)	.358 / .484 9.1 / 12.3	.059 (1.5)	.028 (0.7)	0.189 (4.8)
DB2CA1RC	10(1.5)A 250 VAC	10.1A 125/250 VAC 1/4HP 125VAC	Short Solder	95	0.197 (5.0)	.567 / .710 14.4 / 18.0	.059 (1.5)	.039 (1.0)	0.185 (4.7)
DB2CB1AA	10(1.5)A 250 VAC	10.1A 125/250 VAC 1/4HP 125VAC	2.8 x 0.5mm QC .110" x .020"	250	.039 (1.0)	.319 / .343 (8.1 / 8.7)	.024 (0.6)	.004 (0.1)	--
DB2CB1RC	10(1.5)A 250 VAC	10.1A 125/250 VAC 1/4HP 125VAC	2.8 x 0.5mm QC .110" x .020"	95	0.197 (5.0)	.567 / .710 14.4 / 18.0	.059 (1.5)	.039 (1.0)	0.185 (4.7)
DB2CC1AA	10(1.5)A 250 VAC	10.1A 125/250 VAC 1/4HP 125VAC	1.3 x 0.5mm PCB	250	.039 (1.0)	.319 / .343 (8.1 / 8.7)	.024 (0.6)	.004 (0.1)	--
DB3CA1AA	0.1A 250VAC	0.1A 125/250 VAC	Short Solder	150	.039 (1.0)	.319 / .343 (8.1 / 8.7)	.024 (0.6)	.004 (0.1)	--
DB3CA1LB	0.1A 250VAC	0.1A 125/250 VAC	Short Solder	60	.157 (4.0)	.370 / .472 (9.4 / 12.0)	.079 (2.0)	.02 (0.5)	0.189 (4.8)
DB3CB1AA	0.1A 250VAC	0.1A 125/250 VAC	2.8 x 0.5mm QC .110" x .020"	150	.039 (1.0)	.319 / .343 (8.1 / 8.7)	.024 (0.6)	.004 (0.1)	--
DB3CB1LB	0.1A 250VAC	0.1A 125/250 VAC	2.8 x 0.5mm QC .110" x .020"	60	.157 (4.0)	.370 / .472 (9.4 / 12.0)	.079 (2.0)	.02 (0.5)	0.189 (4.8)
DB3CC1AA	0.1A 250VAC	0.1A 125/250 VAC	1.3 x 0.5mm PCB	150	.039 (1.0)	.319 / .343 (8.1 / 8.7)	.024 (0.6)	.004 (0.1)	--

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

Terminal Options



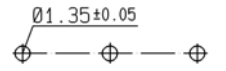
Short Solder Code A1

QC Code B1

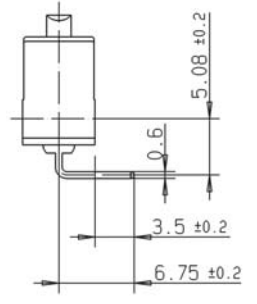
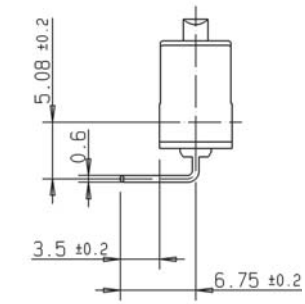
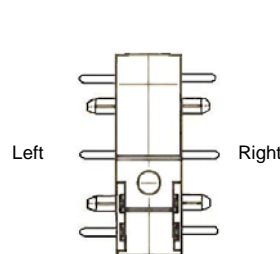
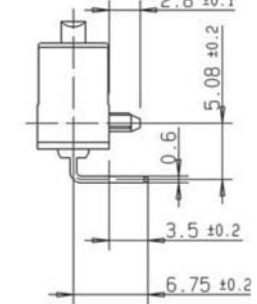
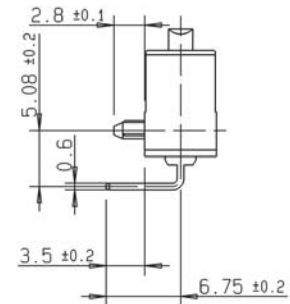
PCB .051" Code C1

PCB .024" Code D1

Hole pattern for .051" pcb



Hole pattern for .024" pcb



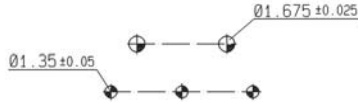
Left side pcb with location pins Code D3

Right side pcb with location pins Code D2

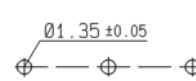
Top Down View of Lateral Terminals

Left side pcb terminals Code D5

Right side pcb terminals Code D4



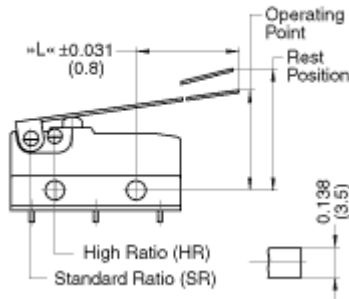
Hole pattern for pcb terminals with location pins



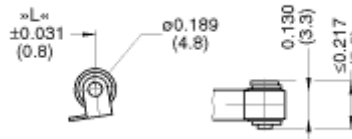
Hole pattern for pcb terminals without location pins

Auxiliary Actuators

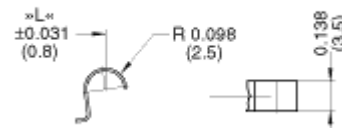
Straight Stainless Steel



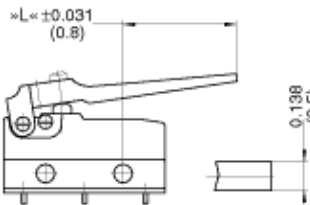
Roller Stainless Steel



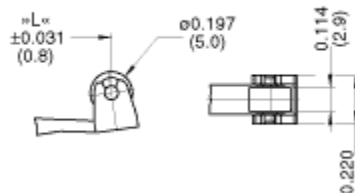
Simulated Roller Stainless Steel



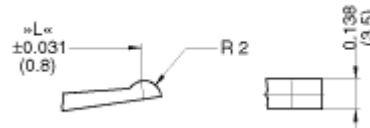
Straight Plastic



Roller Plastic



Simulated Roller Plastic



Ordering Information

DB	3	C
Series		
Code	Contact Configuration	
	+85C Operating Temperature	
E	SPST NO	
F	SPST NC	
G	SPDT	
	+120C Operating Temperature	
A	SPST NO	
B	SPST NC	
C	SPDT	

B1	
Code	Terminal Type
A1	Short Solder
B1	0.110 x 0.020 (2.8 x 0.5) QC Straight
C1	0.051 x 0.020 (1.3 x 0.5) PCB Straight
D1	0.024 x 0.020 (0.6 x 0.5) PCB Straight
D2	0.024 x 0.020 (0.6 x 0.5) PCB RH Side with location pins
D3	0.024 x 0.020 (0.6 x 0.5) PCB LH Side with location pins
D4	0.024 x 0.020 (0.6 x 0.5) PCB RH Side
D5	0.024 x 0.020 (0.6 x 0.5) PCB LH Side

AA	
Code	Actuator Type
AA	Spherical Head button
LB	Short straight lever SR 0.189 (4.8)
RB	Short roller lever SR 0.098 (2.5)
RC	Roller lever SR 0.185 (4.7)

Code	EN 61058 Rating	UL1054 Rating
1	6A 250VAC, 0.1A 80VDC	5A 125/250VAC, 1A 48VDC
2	10(1.5)A 250VAC, 0.1A 80VDC	10.1A 125/250VAC, 1/4HP 125VAC
3	0.1A 250VAC, 0.1A 80VDC	0.1A 125/250VAC
5*	1A 250VAC	1A 125/250VAC, 1A 48VDC
6*	6A 250VAC	5A 125/250VAC
7*	10(1.5)A 250VAC	10.1A 125/250VAC, 1/4HP 125VAC

* Only 85C rated

* For additional actuator options contact factory

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

Auxiliary Actuator Options

Actuator Code	Shape	Material	Actuator Part Number	Actuation Length (mm)	Actuator Code	Shape	Material	Actuator Part Number	Actuation Length (mm)
LB / -MB	Straight	Stainless	06141232	4.8 / 7.0	-RB / -TB	Roller	Stainless	07140260	2.5 / 4.7
LC / -MC	Straight	Stainless	06141233	7.0 / 9.4	-RC / -TC	Roller	Stainless	07140261	4.7 / 7.1
-LD / MD	Straight	Stainless	06141234	42 / 43.5	-RD / -TD	Roller	Stainless	07140262	39.7 / 41.2
-SB / -UB	Simulated Roller	Stainless	06141237	2.5 / 4.7	-WB / GB	Straight	Plastic	06141247	7.0 / 9.4
-SC / -UC	Simulated Roller	Stainless	06141238	4.7 / 7.1	-WC / -GC	Straight	Plastic	06141253	14.0 / 16.2
-SD / -UD	Simulated Roller	Stainless	06141239	39.7 / 41.2	-ZB / -QB	Roller	Plastic	07140299	5.2 / 7.3
					-VB / -HB	Simulated Roller	Plastic	06141249	5.6 / 7.9

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
Email: 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: 071112



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[ZF Electronics:](#)

[DB2C-A1LC](#) [DB1C-A1LC](#)