

Subminiature Snap Switch

Single Pole

DB Series



Features

- Precise snap action switch
- Long life coil spring mechanism
- Switching current 0.1 to 10 A at 250 VAC
- Versions up to 3 A 30 VDC possible
- Temperature range: -40 °C to 85 °C/120 °C
- Protection class: IP50
- Different mounting options (location posts, mounting holes)
- Various aux actuators (also for retrofitting, two mounting points)
- Various terminal types
- PFAS free

Standard Parts¹

DB1C-A1LC	DB1C-A1RB	DB1C-B1LB	DB1C-B1LC	DB1C-B1RC	DB1C-C1LB	DB1C-C1AA
DB1C-B1AA	DB1C-A1RC	DB1C-A1LB	DB1C-A1AA	DB2C-B1AA	DB2C-A1RC	DB2C-A1LC
DB2C-A1LB	DB2C-A1AA	DB2C-B1RC	DB2C-B1LC	DB2C-C1AA	DB3C-C1AA	DB3C-B1RC
DB3C-B1LC	DB3C-B1LB	DB3C-B1AA	DB3C-A1RC	DB3C-A1RB	DB3C-A1LC	DB3C-A1LB

¹The 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:
switches-sensors@zf.com

Order Code Matrix

Numbering Matrix Switch Series DB

D		B		1		C		-		A		1		L		C			
Code	Electrical Rating according to IEC 61058-1	Code	Contact Configuration	Temperature Rating	Code	Terminal Type	Code	Terminal Configuration / Type of Mounting	Code	Auxiliary Actuator									
										Code	Length in mm			Pivot Position	Auxiliary actuator version				
											B	C	D						
1	6(2) A, 125/250 VAC	A	SPST-NO	40T/20	A	Solder short	1	 with mounting holes	AA							without, button with spherical head			
2	10(1.5) A, 125/250 VAC	B	SPST-NC		B	Tab 2.8x0.5	2	 with fixation pins right	BA								without, button with radial head		
3	0.1 A, 125/250 VAC	C	SPDT	T85 / 40T85	C	PCB 1.3x0.5	3	 with fixation pins left	M	51	7,3	38,8	VE			straight			
5	1 A, 125/250 VAC	E	SPST-NO		D	PCB 0.6x0.5	4	 w/o fixation pins right	L	4	6,4	40,7	HE				straight		
7	10(1.5) A, 125/250 VAC	F	SPST-NC		E	Welding	5	 w/o fixation pins left	T	2,5	4,7	36,2	VE				with roller		
L	10(3) A, 125/250 VAC	G	SPDT	Standard Terminal Combinations	A1, B1, C1, C7, D1, D2, D3, D4, D5, D7, E1		7	 w/o mounting holes	R	1,8	4,2	38,4	HE				with roller		
O	6(2) A, 125/250 VAC									G	Special designs	U	2,4	4,6		VE			with simulated roller
												S	1,8	4,2		HE			with simulated roller
									G	7,2			VE				plastic auxiliary actuator		
									W	6,4			HE				plastic auxiliary actuator		
Special designs G: The last two digits are identified from AA, AB, etc. to ZZ.																			



Electrical Specifications – Contact Ratings

Switch Series	EN IEC 61058-1	Electrical life 40T85/40T120
DB1	6(2) A, 125/250 VAC	10,000
DB2	10(1,5) A, 125/250 VAC	10,000
DB3	0.1 A, 125/250 VAC	100,000
DB5	1 A, 125/250 VAC	50,000
DBL	10(3) A, 125/250 VAC	10,000
DBO	6(2) A, 125/250 VAC	50,000

Switch Series	UL 61058-1	Electrical life 40T85	Electrical life 40T120
DB1	6(2) A, 125/250 VAC	10,000	10,000
DB2	10(1,5) A, 125/250 VAC	10,000	
DB3	0.1 A, 125/250 VAC	100,000	100,000
DB5	1 A, 125/250 VAC	50,000	50,000
DBL	10(3) A, 125/250 VAC	10,000	
DBO	6(2) A, 125/250 VAC	50,000	50,000

Switch Series	UL 1054	Electrical life T85 T120
DB1	5 A, 125/250 VAC	6,000
DB2	10.1 A, 125/250 VAC	6,000
DB3	0.1 A, 125/250 VAC	100,000
DB5	1 A, 125/250 VAC	6,000
DBL	10.1 A, 125-250 VAC	6,000
DBO	5 A, 125-250 VAC	6,000

UL file number E314201

Environmental and Mechanical Specifications

Operating force	70 – 280 cN (model dependent, without actuator)
Mechanical life	up to 1.5×10^7 depending on variant
Temperature range	-40 °C to 85 °C/120 °C
Protection class	IP50

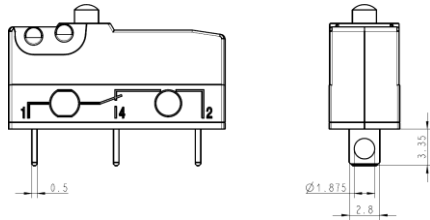
Material Specifications

Base	PET (UL 94 V-0)
Cover	PBT (UL 94 V-0); PET (UL 94 V-0)
Actuator	POM (UL 94 HB) 85 °C, PBT (UL 94 V-0) 120
Contacts	Ag, AgNi, AuAgPt (Crosspoint)
Terminals	CuZn (silver-plated)
Auxiliary Actuator	Stainless steel or plastic

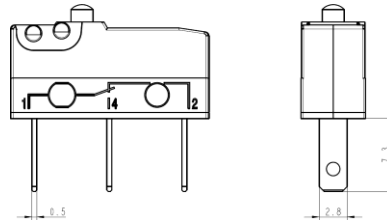
Dimensions (mm) and terminal configurations

Terminals

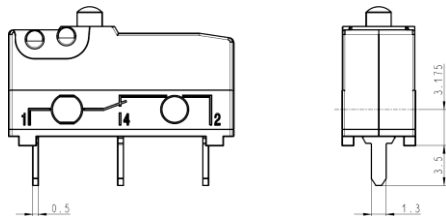
Solder terminals, short



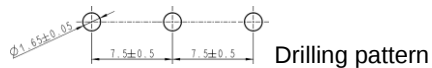
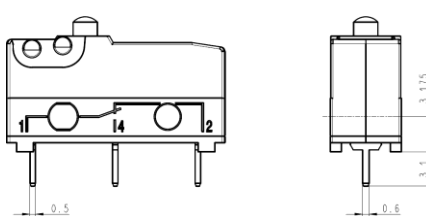
Q.C. terminals 2.8x0.5



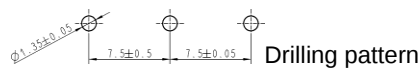
PCB terminals 1.3x0.5, straight



PCB terminals 0.6x0.5, straight

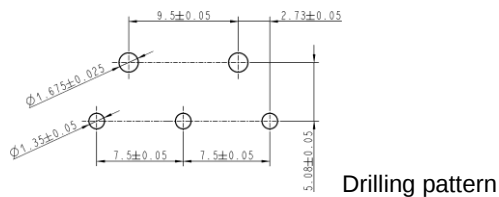
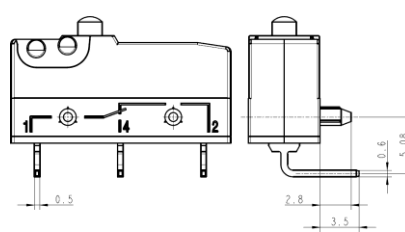
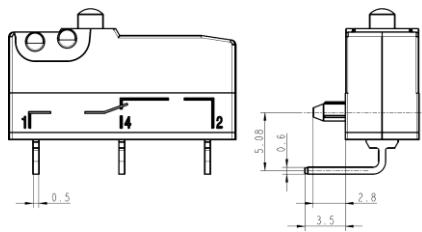


Drilling pattern

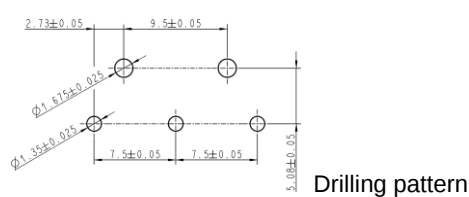


Drilling pattern

PCB terminals 0.6x0.5 LH-side with location posts

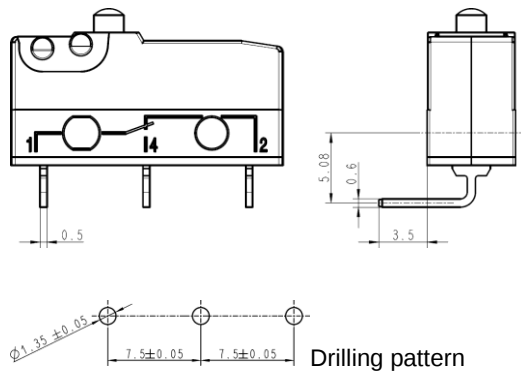


Drilling pattern

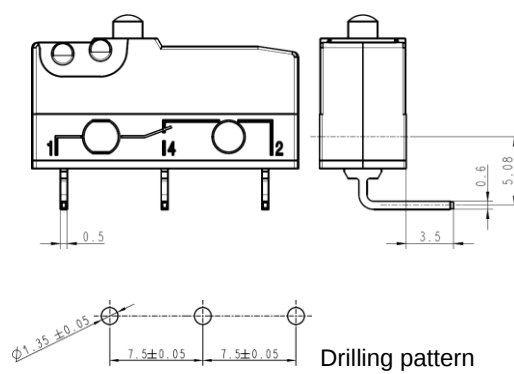


Drilling pattern

PCB terminals 0.6x0.5 LH-side without location posts

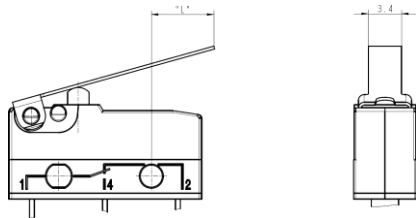


PCB terminals 0.6x0.5 RH-side without location posts

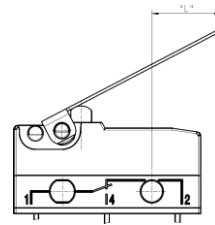


Auxiliary Actuators

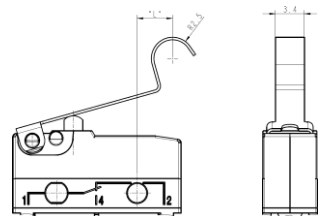
Auxiliary actuator rear mounting pivots straight



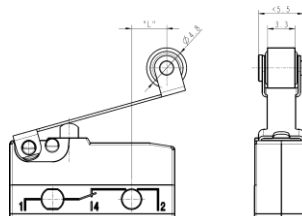
Auxiliary actuator front mounting pivots



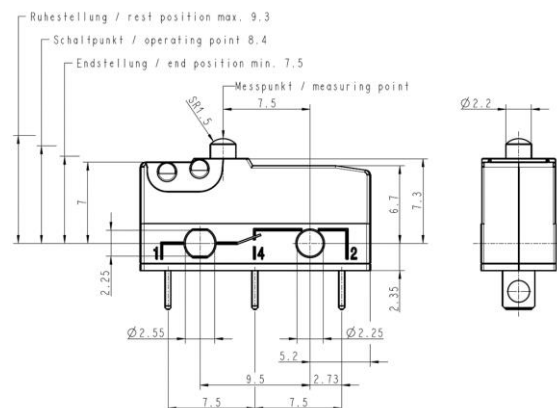
Simulated Roller



Roller



Dimensions



<https://switches-sensors.zf.com/>

Page 4 of 4, Last update 2024-11-05, Specifications subject to change without notice. In case there are any deviations, the drawing details have priority.

