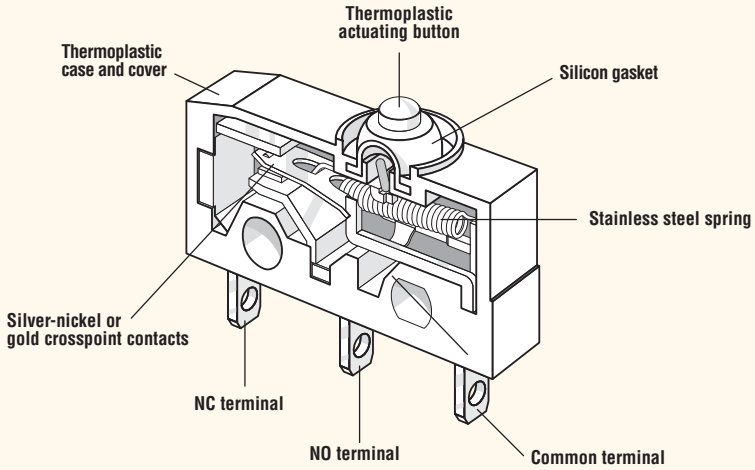
SUBMINIATURE — SEALED

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 amp at 250VAC
- Range of auxiliary actuators available (can also be retrofitted)
- Various contact materials available, depending on application
- Mechanical life: min. 1 x 10^6 operations
- Wide variety of connection options



Electrical Ratings

Switch Series	EN61058 Rating	UL1054 Rating	Electrical Life at Rated Load According to EN (Min. Operations)	According to UL (Min. Operations)
DC1	6A, 250V~	5A, 125/250VAC	10,000	6,000
DC2	10(1.5)A, 250V~	10.1A, 125/250VAC; 1/4HP, 125VAC	10,000	6,000
DC3	0.1A, 250V~	0.1A, 125/250VAC	50,000	6,000
DC4	3A, 250V~	3A, 125/250VAC	50,000	6,000



Specifications

Electrical

Temperature Rating:	-40° to +85°C /+120°C *(without wire leads)* -40° to +85C / +105°C *(with wire leads)*
Flammability Rating:	UL94V-O *(PET, PBT)* UL94HB *(POM)*

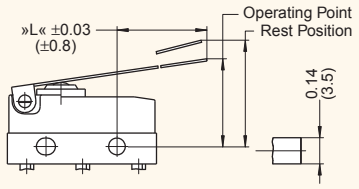
Materials

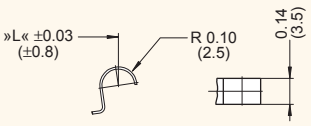
Case:	PET / PBT
Actuator:	POM *(T85)*, PBT *(T120)*
Auxiliary Actuator:	Stainless Steel or Plastic
Terminals:	Silver-Plated Copper-Zinc
Contacts:	Silver Alloy *(DC3 — Gold Crosspoint)*

PBT = Polybutyleneterephthalate • PET = Polyethyleneterephthalate • POM = Polyacetal

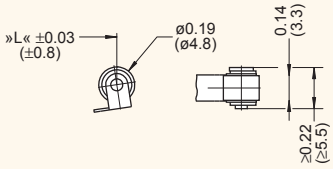
Auxiliary Actuators inches (mm)

Straight (120°C Rated)

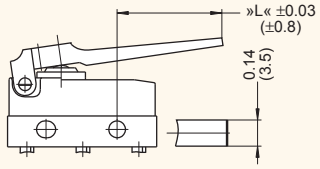




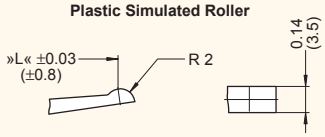
Roller



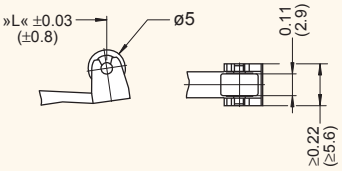
Plastic Straight (85°C Rated)



Plastic Simulated Roller



Plastic Roller

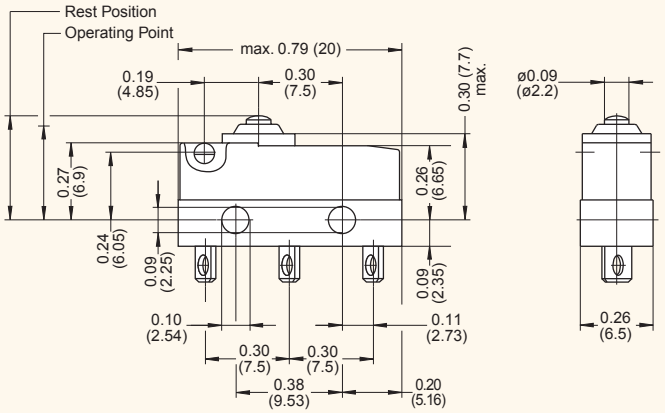


Actuator Specifications

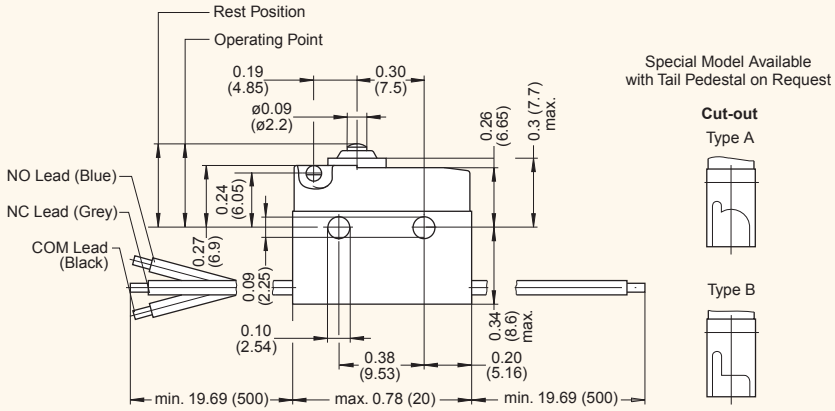
Actuator Code	Switch Type	Maximum Operating Force (cN) DC1, DC3, DC4	Maximum Operating Force (cN) DC2	Maximum Pre-Travel inches (mm) DC1, DC3, DC4	Maximum Pre-Travel inches (mm) DC2	Operating Point inches (mm) DC1, DC3, DC4	Operating Point inches (mm) DC2	Minimum Over-Travel inches (mm)	Max. Movement Differential inches (mm) DC1, DC3, DC4	Max. Movement Differential inches (mm) DC2	Max. Rest Position inches (mm)	Actuation Length inches (mm)
AA		200	340	0.04 (1.0)	0.04 (1.0)	0.33±0.01 (8.4±0.3)	0.33±0.01 (8.4±0.3)	0.02 (0.6)	0.004 (0.10)	0.004 (0.10)	0.37 (9.3)	— —
LB		80	150	0.18 (4.5)	0.20 (5.0)	0.42±0.05 (10.7±1.3)	0.42±0.06 (10.7±1.6)	0.06 (1.5)	0.02 (0.5)	0.03 (0.7)	0.55 (14.0)	0.189 (4.8)
LC		70	120	0.20 (5.0)	0.22 (5.5)	0.44±0.06 (11.1±1.5)	0.44±0.07 (11.1±1.8)	0.06 (1.5)	0.02 (0.6)	0.04 (1.0)	0.59 (15.0)	0.276 (7.0)
LD		*forces and travel available upon request*										1.654 (42.0)
SB		90	160	0.18 (4.5)	0.20 (5.0)	0.63±0.05 (16.0±1.3)	0.63±0.06 (16.0±1.6)	0.06 (1.5)	0.02 (0.5)	0.03 (0.7)	0.75 (19.0)	0.098 (2.5)
SC		80	130	0.20 (5.0)	0.22 (5.5)	0.65±0.06 (16.4±1.5)	0.65±0.07 (16.4±1.8)	0.06 (1.5)	0.02 (0.6)	0.04 (1.0)	0.79 (20.0)	0.185 (4.7)
SD		*forces and travel available upon request*										1.563 (39.7)
RB		90	160	0.18 (4.5)	0.20 (5.0)	0.62±0.05 (15.8±1.3)	0.62±0.06 (15.8±1.6)	0.06 (1.5)	0.02 (0.5)	0.03 (0.7)	0.75 (19.0)	0.098 (2.5)
RC		80	130	0.20 (5.0)	0.22 (5.5)	0.64±0.06 (16.2±1.5)	0.64±0.07 (16.2±1.8)	0.06 (1.5)	0.02 (0.6)	0.04 (1.0)	0.79 (20.0)	0.185 (4.7)
RD		*forces and travel available upon request*										1.563 (39.7)
WB		68	115	0.18 (4.5)	0.18 (4.5)	0.44±0.06 (11.1±1.5)	0.44±0.06 (11.1±1.5)	0.08 (2.0)	0.02 (0.6)	0.02 (0.6)	0.59 (15.0)	0.276 (7.0)
WC		50	85	0.24 (6.0)	0.24 (6.0)	0.48±0.07 (12.2±1.8)	0.48±0.07 (12.2±1.8)	0.12 (3.0)	0.03 (0.8)	0.03 (0.8)	0.67 (17.0)	0.551 (14.0)
VB		73	125	0.18 (4.5)	0.18 (4.5)	0.47±0.06 (11.9±1.4)	0.47±0.06 (11.9±1.4)	0.08 (2.0)	0.02 (0.6)	0.02 (0.6)	0.59 (15.0)	0.220 (5.6)
ZB		73	125	.018 (4.5)	0.18 (4.5)	0.63±0.06 (16.0±1.4)	0.63±0.06 (16.0±1.4)	0.06 (1.5)	0.02 (0.6)	0.02 (0.6)	0.75 (19.0)	0.205 (5.2)

Specifications subject to change without notice.

Dimensions inches (mm)



Model with Connecting Leads



Special Model Available with Tail Pedestal on Request

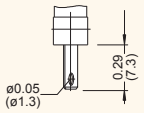
Cut-out

Type A

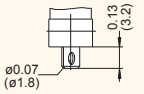
Type B

Terminal Options inches (mm)

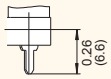
QC
0.11 x 0.02 (2.8 x 0.5)
Max. 30° Twisted



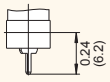
Solder
Short Max. 30° Twisted



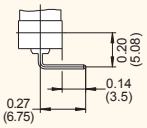
PCB
0.05 x 0.02 (1.3 x 0.5)
Max. 30° Twisted



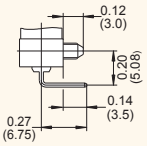
PCB
0.02 x 0.02 (0.6 x 0.5)
Max. 30° Twisted



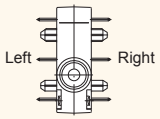
PCB
0.02 x 0.02 (0.6 x 0.5)
RH Side w/o Location Pins



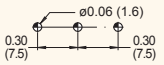
PCB
0.02 x 0.02 (0.6 x 0.5)
RH Side with Location Pins



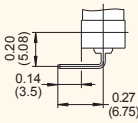
Top Down View of Lateral Termianls



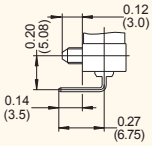
Drilling Pattern for PCB Terminals
0.05 x 0.02 (1.3 x 0.5)



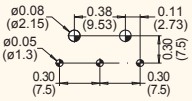
PCB
0.02 x 0.02 (.06 x 0.5)
LH Side w/o Location Pins



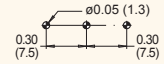
PCB
0.02 x 0.02 (0.6 x 0.5)
LH Side with Location Pins



Drilling Pattern for PCB Terminals with Location Pins
0.05 x 0.02 (0.6 x 0.5)



Drilling Pattern for Lateral/Underside PCB Terminals w/o Location Pins
0.05 x 0.02 (0.6 x 0.5)
Max. 30° Twisted



Ordering Information

DC 3 G B 3 L C

Series/Prefix

Code	UL Rating	EN 61058 Rating
1	5A,125/250VAC	6A, 250V~
2	10.1A, 125/250VAC 1/4HP, 125VAC	10(1.5)A, 250V~
3	0.1A, 125/250VAC	0.1A, 250V~
4[4]	3A, 250VAC	3A, 250V~

Contact Configuration			
+85°C Operating Temp		+105°/120°C Operating Temp	
Code		Code	
E	SPST NO	A	SPST NO
F	SPST NC	B	SPST NC
G	SPDT	C	SPDT

Code	Terminal Type inches (mm)	Notes
A	Short Solder	1
B	0.02² (0.5²) Leads *(No UL)*	5, 9
C	0.03² (0.75²) Leads *(No UL)*	5
H	0.05 x 0.02 (1.3 x 0.5) PCB	1
K	0.02 x 0.02 (0.6 x 0.5) PCB	1, 7
L	0.11 x 0.02 (2.8 x 0.5) QC	1
N	Without Leads *(Type B)*	6
P	Without Leads *(Type A)*	6
Q	Without Leads *(No Cut-Out)*	8
S	Welding	1
T	Leads, 20 AWG	3, 11
U	Leads, 22AWG	9, 11
Only Available in North America		
D	Leads 18 AWG *(UL Only)*	5, 8, 10
E	Leads 16 AWG *(UL Only)*	5
M	Leads 20 AWG *(UL Only)*	3, 5

Code	Actuator Type	Actuation Length inches (mm) A	B	C	D
AA	Button only	—	—	—	—
L	Lever	—	0.189 (4.8)	0.276 (7.0)	1.654 (42.0)
R	Roller	—	0.098 (2.5)	0.185 (4.7)	1.563 (39.7)
S	Simulated Roller	—	0.098 (2.5)	0.185 (4.7)	1.563 (39.7)
V[2]	Plastic Sim. Roller	—	0.220 (5.6)	—	—
W[2]	Plastic Straight	—	0.276 (7.0)	0.551 (14.0)	—
Z[2]	Plastic with Roller	—	0.205 (5.2)	—	—

Code	Terminal Configuration
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

Notes:
Wire leads 500mm min. (approximately 20" long)
1. Only available with terminal configuration 1.
2. +85°C rated only.
3. Only available with DC1, DC3 and DC4.
4. Rating code 4 only as lead-version — leads 0.5mm².
5. Wire versions only rated to +105°C.
6. Only available with terminal configuration 3 or 4.
7. Only available with terminal configuration 1, 6, 7, 8 or 9.
8. Only available with terminal configuration 5.
9. Only available with DC3 and DC4.
10. Not available with DC2.
11. Not available in North America.

Specifications subject to change without notice.