

# DG SUB-SUBMINIATURE SWITCH

## DG sub-subminiature switch

Extremely small dimensions – only 12.8 × 5.8 × 6.5 mm.

Breaking capacity ranges from small switching currents and voltages to low-voltage applications up to 3 A 125 V AC.

- Available with or without auxiliary actuator
- Use on circuit boards with connections to the left or right and standing
- High mechanical operating life, depending on model > 1,000,000 operations



## Technical specifications

<b>Series</b>	DG ①
<b>Contact configuration</b>	S.P.D.T.
<b>Contact gap</b>	< 3 mm
<b>Switching voltage max.</b>	125 VAC
<b>Switching current max.</b>	3 A AC
<b>Operating voltage max.</b>	75 cN oder 140 cN without auxiliary actuator
<b>Total travel</b>	0.7 mm without auxiliary actuator
<b>Mechanical life</b>	> 1 × 10 <sup>6</sup> operations
<b>Electrical life (max. load)</b>	see table on page 35
<b>Ambient temperature</b>	-25°C to +85°C

## Materials

<b>Base</b>	PPS (UL 94V-0)
<b>Cover</b>	PBT (UL 94V-0)
<b>Actuator</b>	PBT (UL 94V-0)
<b>Auxiliary actuator</b>	Stainless steel
<b>Terminals</b>	CuZn striped silver-plated
<b>Contacts DG 1</b>	AgNi
<b>DG 2</b>	AgNi, gal. Au
<b>Approvals</b>	us
<b>Degree of protection</b>	IP40
<b>Switch interior</b>	

## Circuitry ③

<b>Model</b>		<b>Code</b>
S.P.D.T.		3

## Terminal type ⑤

<b>Model</b>		<b>Code</b>
Solder terminal, straight		B1
PCB terminal, RH side		B2
PCB terminal, LH side		B3

Generation of order code (example)  
The order code consists of 5 parameters:

①	②	③	④	⑤
Series	Electrical rating	Circuitry	Terminal type	Auxiliary actuator
DG = sub-sub-miniature switch	1 = 3 A, 125 VAC 2 A, 30 VDC	3 = S.P.D.T.	B1 = PCB terminal, straight	AA = without auxiliary actuator

- Not every configurable variant is available for order. Please contact us.
- The final two digits of article numbers on commercial documents refer to the index of the respective drawing.

## Electrical rating and operating life ②

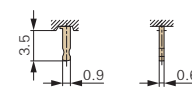
Electrical rating according to UL and CSA	Operating life		
	Nominal load UL and CSA	mechanical	Code
3 A, 125 VAC 2 A, 30 VDC	6,000	1 × 10 <sup>6</sup>	1
0.05 A, 30 VDC	6,000	1 × 10 <sup>6</sup>	2

## Auxiliary actuator ④

Model	Type	Operating force max.(cN)	Max. pretravel (mm)	Min. overtravel (mm)	Differential travel max. (mm)	Max. rest position (mm)	Operating point (mm)	Code
Without auxiliary actuator	DG 1.2 B	140	0.5	0.2	0.1	5.9	5.4 ± 0.2	AA
actuator	DG 2 C	75	0.5	0.2	0.1	5.9	5.4 ± 0.2	
Auxiliary actuator, straight	DG 1.2 B	45	1.8	0.55	0.5	9.4	6.8 + 0.8/-0.4	LA
	DG 2 C	30	1.8	0.55	0.5	9.4	6.8 + 0.8/-0.4	
Auxiliary actuator roller	DG 1.2 B	60	1.5	0.55	0.5	13.9	12.4 ± 0.5	RA
	DG 2 C	35	1.5	0.55	0.5	13.9	12.4 ± 0.5	

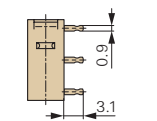
## Terminals

### Solder terminal

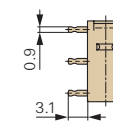


Dimensions in mm

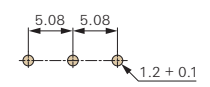
### PCB terminal RH side



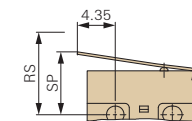
### PCB terminal LH side



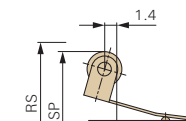
### Drilling pattern



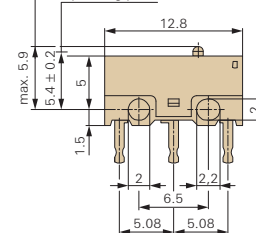
## Auxiliary actuator



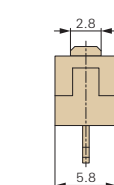
Dimensions in mm



### Rest position



### Operating point



Dimensions in mm