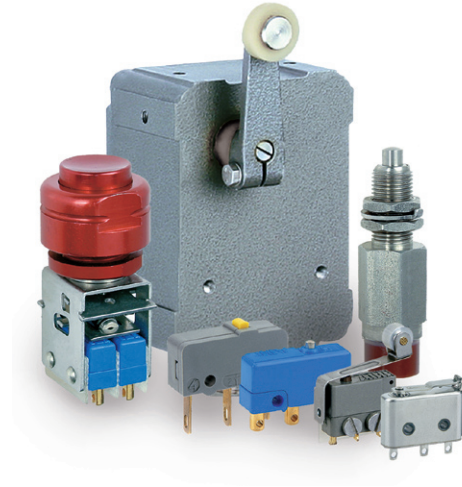


Snap-action Microswitches & Limit switches



Snap-action Microswitches & Limit Switches



Summary

Hermetically sealed Microswitches

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Protected Microswitches

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Application

Microswitch for industrial applications.

- Operating temperature: -25 °C ... +85 °C.
- 2 available product types according to pin actuator position:
 - low travel device "M",
 - low operating force device CM.
- Mechanical service life: 1 000 000 cycles.

Description

Snap action switch - unsealed.

- Plastic casing.
- Silver contacts.
- Mounting holes for M2 screws.
- Pin actuator or auxiliary actuator (accessory).
- Terminals: solder terminals.

Mechanical characteristics

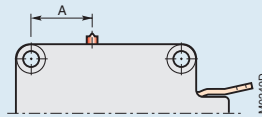
Characteristics according to the actuating point (arrow) indicated on dimension drawings.

M type - Low travel	M11A1	M11L26	M11L26G	M11L27G	
Max. operating force	N	1.90	0.50	0.50	0.90
Pretravel	mm	0.30 ... 0.80	2.50 ... 7.0	2.50 ... 7.0	0.80 ... 2.10
Differential movement	mm	0.08 ... 0.20	0.50 ... 2.0	0.75 ... 2.0	0.25 ... 0.60
Min. overtravel (1)	mm	0.50	1.50	1.50	0.60
Pin actuator position: "A" dimension	mm	12.7	12.7	12.7	12.7

(1) Do not exceed this value in use.

Pin actuator position

dimension A: 12.7 mm or 3.2 mm



Characteristics according to the actuating point (arrow) indicated on dimension drawings.

CM type - Low operating force	CM11A1	CM21A1	CM31L10G	CM31L25	CM11L41	CM11L43	
Max. operating force	N	0.35	0.50	2.0	0.07	0.04	
Pretravel	mm	0.40 ... 1.0	0.70 ... 1.20	0.60 ... 1.50	17.0 max.	10.0 ... 17.0	12.0 max.
Differential movement	mm	0.2 ... 0.60	0.3 ... 0.60	0.25 ... 0.80	11.50 max.	4.0 ... 12.0	7.0 max.
Min. overtravel (1)	mm	1.50	1.50	0.30	10.0	20.0	10.0
Pin actuator position: "A" dimension	mm	3.2	3.2	3.2	3.2	3.2	3.2

(1) Do not exceed this value in use

Electrical characteristics

Types	M		CM				
Ratings	30 ... 48Vd.c.	125Va.c.-50Hz	220V a.c.-50Hz	30 ... 48Vd.c.	125Va.c.-50Hz	220Va.c.-50Hz	
(electrical load on one throw only)							
– resistive load	A	4	10	5	2	5	3
– inductive load	A	2 (L/R ≤ 5 ms)	5 (cos φ ≥ 0.5)	3 (cos φ ≥ 0.5)	1 (L/R ≤ 5 ms)	2.5 (cos φ ≥ 0.5)	1.5 (cos φ ≥ 0.5)
Electrical service life	cycles	100 000					
Dielectric strength (50 Hz - 1 mn)							
– between terminals	V a.c.	500					
– between all terminals and earth (ground)	V a.c.	1500					

Specific Products - Contact us for more information ; data sheet on request.

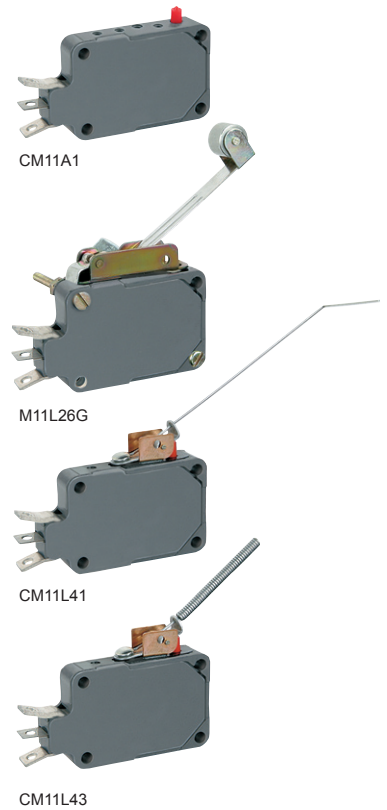
- Devices with quick connect 2.8 x 0.5 mm terminals are available.
- Product design according to local climatic stress.

M (Low travel) & CM (Low operating force) Microswitches

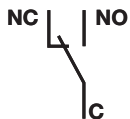
Ordering details

	Pin actuator position mm	P/N	Weight (1piece) kg
Microswitch with pin actuator			
Low travel	12.7	M11A1	0.006
Low operating force	3.2	CM11A1 CM21A1	0.006 10.006
Microswitch with flexible roller lever actuator			
Low operating force	3.2	CM31L10G	0.007
Microswitch with integral lever actuator			
Low operating force	3.2	CM31L25	0.008
Low travel	12.7	M11L26	0.008
Microswitch with integral roller lever actuator			
Low travel	12.7	M11L26G M11L27G	0.008 0.008
Microswitch with wire rod actuator			
Low operating force	3.2	CM11L41	0.007
Microswitch with spring lever actuator			
Low operating force	3.2	CM11L43	0.008

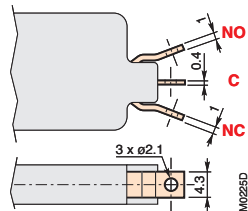
Note: Only above listed product types are available.



Circuit diagram



Connection



Dimensions

M type - Low travel

Mounting holes for M2 screws - Recommended tightening torque: 0.25 to 0.30 Nm

