



A Subminiature microswitch of standardized small dimensions. The MP500 series stands out from other products on the market in terms of its mechanical service life and the choice of materials, which enable it to resist temperatures up to 105 °C (221 °F).

For applications with light forces of actuations as in pressostat, the microswitch can be delivered with a modified spring. The dimensional, electrical and IP protection parameters remain unchanged.

A variant without a protective membrane is available for use when the need for environmental protection (moisture and dust) is not necessary.

Descriptions

Approvals	EN 61058-1 UL 61058-1
Housing	Glass fiber reinforced
Plunger	PES
Membrane	Fluorsilicone elastomer
Mechanism Contacts	Change-over, Snap action coil spring mechanism with stainless steel spring
Contact material	Fine Silver, Gold contact upon request
Termination	Cable PVC -20°C to 105°C (-4°F to 221°F) Solder terminal -40°C to 105°C (-4°F to 221°F) PCB -40°C to 105°C (-4°F to 221°F)
Actuator	Overall dimensions in stainless steel, flat lever , roller, simulated roller
Degree of protection	IP67
Class of protection	I 250V II / III 24V
Pollution degree	3
Proof tracking index PTI	250V
Glow-wire temp.	850°C
Micro-disconnection	μ
Contact-gap	0.40 mm
Dimensions	DIN 41 635, form B 20 x 16 x 6.5 mm (0.7874 x 0.6299 x 0.2559 in)
Power rating UL / EN 61058 (R: Resistive Load)	5RA 250VAC 25'000 cycles 2RA 250VAC 50'000 cycles 0.1RA 24VDC 50'000 cycles
Operating range force	0.5 to 2.5 N, depending actuator
Operating temperature range	-40°C to 105°C (-40°F to 221°F)
Mechanical life	10 x 10 ⁶

Casing

IP67

IP40



Actuating Force **Fa** max 2.5 (N)
standard

MP500

MP550

Actuating Force **Fa** max 1.2 (N)

MP520

MP570

Actuators

L70/71

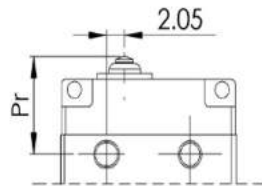
L80/81

L85/86



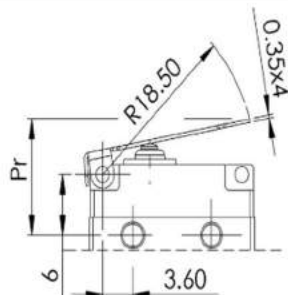
Characteristic

Type **L00** : Pin plunger - without lever



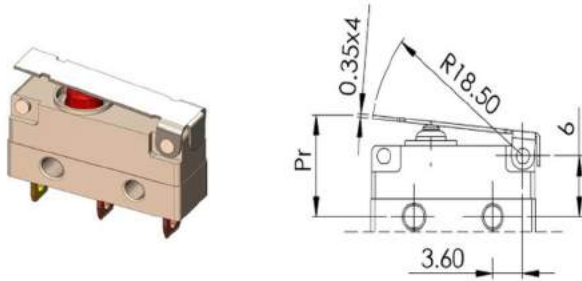
	MP500 - MP550	MP520 - MP570
Actuating Force Fa max. (N)	2.5	1.2
Release Force Fr min (N)	0.5	0.2
Free Position Pr (mm)	9.3 ± 0.2	9.3 ± 0.2
Operating Position Pa (mm)	9.0 ± 0.2	9.0 ± 0.2
Over-travel sr min. (mm)	0.6	0.6
Differential movement sd max. (mm)	0.05	0.05

Type **L70** : Flat lever - position A



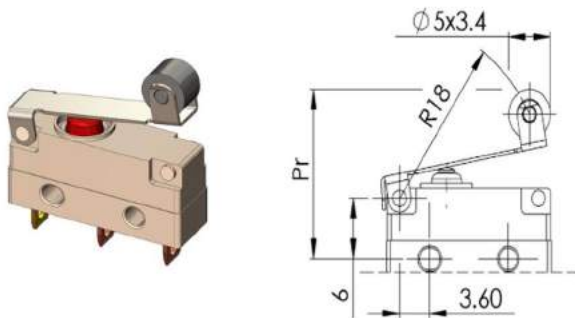
	MP500 - MP550	MP520 - MP570
Actuating Force Fa max. (N)	1.0	0.6
Release Force Fr min (N)	0.15	0.1
Free Position Pr (mm)	12.0 ± 0.4	12.0 ± 0.4
Operating Position Pa (mm)	10.6 ± 0.4	10.6 ± 0.4
Over-travel sr min. (mm)	1.2	1.2
Differential movement sd max. (mm)	0.40	0.40

Type L71 : Flat lever - position B



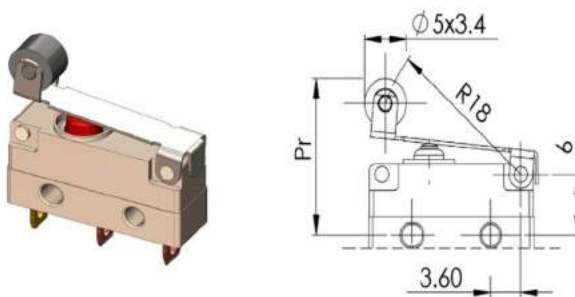
	MP500 - MP550	MP520 - MP570
Actuating Force Fa max. (N)	2.0	1.0
Release Force Fr min (N)	0.3	0.2
Free Position Pr (mm)	10.3 ± 0.4	10.3 ± 0.4
Operating Position Pa (mm)	9.7 ± 0.4	9.7 ± 0.4
Over-travel sr min. (mm)	0.6	0.6
Differential movement sd max. (mm)	0.30	0.30

Type L80 : Roller - position A



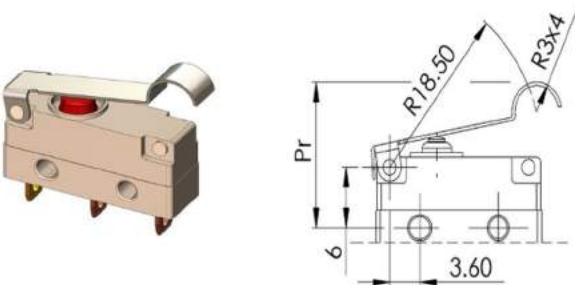
	MP500 - MP550	MP520 - MP570
Actuating Force Fa max. (N)	1.0	0.6
Release Force Fr min (N)	0.15	0.1
Free Position Pr (mm)	17.2 ± 0.4	17.2 ± 0.4
Operating Position Pa (mm)	16.0 ± 0.4	16.0 ± 0.4
Over-travel sr min. (mm)	1.2	1.2
Differential movement sd max. (mm)	0.40	0.40

Type L81 : Roller - position B



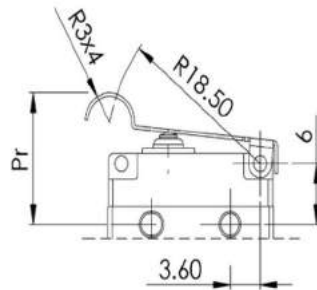
	MP500 - MP550	MP520 - MP570
Actuating Force Fa max. (N)	2.0	1.0
Release Force Fr min (N)	0.3	0.2
Free Position Pr (mm)	15.7 ± 0.4	15.7 ± 0.4
Operating Position Pa (mm)	15.1 ± 0.4	15.1 ± 0.4
Over-travel sr min. (mm)	0.6	0.6
Differential movement sd max. (mm)	0.30	0.30

Type L85 : Simulated roller - position A



	MP500 - MP550	MP520 - MP570
Actuating Force Fa max. (N)	1.0	0.5
Release Force Fr min (N)	0.15	0.1
Free Position Pr (mm)	14.7 ± 0.4	14.7 ± 0.4
Operating Position Pa (mm)	13.5 ± 0.4	13.5 ± 0.4
Over-travel sr min. (mm)	1.2	1.2
Differential movement sd max. (mm)	0.40	0.40

Type L86 : Simulated roller - position B



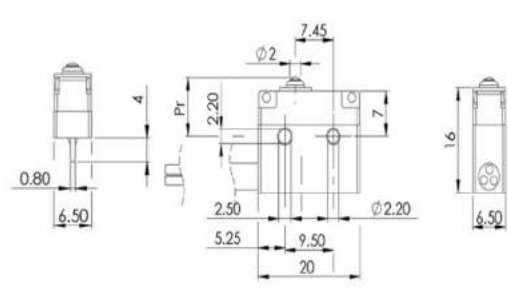
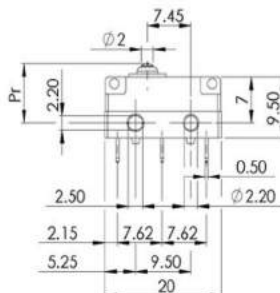
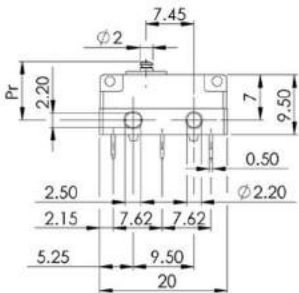
	MP500 - MP550	MP520 - MP570
Actuating Force Fa max. (N)	2.0	0.6
Release Force Fr min (N)	0.3	0.2
Free Position Pr (mm)	13.2 ± 0.4	13.2 ± 0.4
Operating Position Pa (mm)	12.6 ± 0.4	12.6 ± 0.4
Over-travel sr min. (mm)	0.6	0.6
Differential movement sd max. (mm)	0.30	0.30

Terminations

C000
Solder terminals

C001
PCB terminals

C100/C200
PVC cable overmould



Flexible conductors to be used.
With provisions for securing the conductor by mechanical means and providing circuit continuity by soldering.
Soldering by hand with a soldering iron.

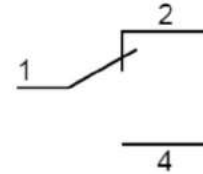
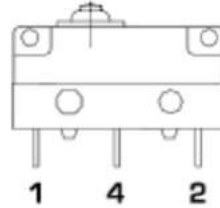
Remark : Avoid overheating as this may damage the switch.

Recommendation: Avoid overheating as this may damage the switch. Temperature of soldering iron max. 340 ° C for 4 seconds, using a welding wire preferably without Chlore.

Standard wiring diagram

Solder terminals
PCB

C000
C001



PVC cable

C10. / C20.

1 - Black
2 - Grey
4 - Blue

Ordering information

MP5 0 0 : L70 : C100

Housing

- 0 : IP67 with membrane
- 2 : IP67 with membrane - Light Force
- 5 : IP40 without membrane
- 7 : IP40 without membrane - Light Force

Contact material

- 0 : Silver contact
- 1 : Gold contact

Actuator

- 0 : Basic switch - pin plunger
- L70 : Flat lever - A position
- L71 : Flat lever - B position
- L80 : Roller - A position
- L81 : Roller - B position
- L85 : Simulated Roller - A position
- L86 : Simulated Roller - B position

Terminals

- C000 : Solder
- C001 : PCB
- C100 : Cable PVC, 3x0.25 mm², 250VAC 2A 0.5 (m)
- C101 : Cable PVC, 3x0.25 mm², 250VAC 2A 1 (m)
- C102 : Cable PVC, 3x0.25 mm², 250VAC 2A 2 (m)
- C200 : Cable PVC, 3x0.50 mm², 250VAC 5A 0.5 (m)
- C201 : Cable PVC, 3x0.50 mm², 250VAC 5A 1 (m)
- C202 : Cable PVC, 3x0.50 mm², 250VAC 5A 2 (m)