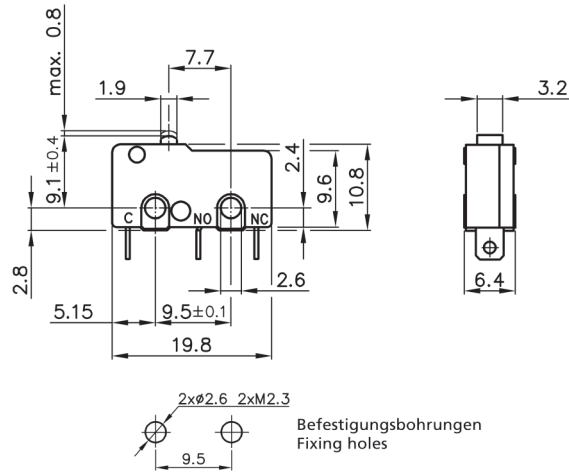
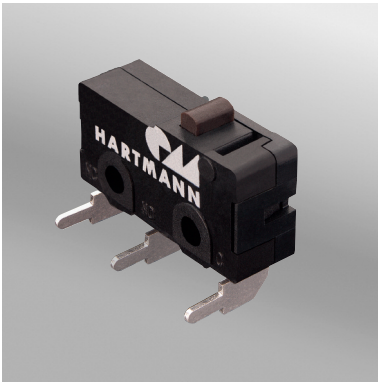


1 MBB1 Plunger



Leaf spring mechanism

- Micro switches design B acc. to DIN 41635
- functional final inspection and testing
- solid design
- high-quality materials
- very exact switching position
- Version 100mA 12VDC with Au plated contacts on request

Micro switches, also known as snap action switches, are primarily used as limit switches, but are also suitable for many other industry applications. The actual switching speed is completely independent from the speed of operation. ISO 9001:2000 approved production together with 100% functional final inspection and testing guarantee reliable operation. These products reflect our long standing experience in design and production of high quality switches.

MECHANICAL DATA

Mech. lifetime	1 000 000 actuations
Electrical lifetime	min. 10 000 actuations
depending on switching capacity	
Movement differential	≤ 0,2mm
Pretravel	≤ 0,8mm
Overtravel	min. 0,5mm
Operating position	9,1 ± 0,4mm
Contact opening	<3mm (μ)

OTHER DATA



Approvals	VDE, cULus
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MATERIAL





Housing	PBT
Cover	PBT
Actuator	PPS
Terminals	CuZn Ag plated
Contacts	AgNi
Contact spring	CuBe

MBB1 Plunger

2 RATING

		cULus							
5A 250VAC		5A 125VAC		Code: MBB1 01	3	4	5	6	7
10A 250VAC		10A 125VAC		Code: MBB1 02	3	4	5	6	7
100mA 12VDC				Code: MBB1 06	3	4	5	6	7
Further ratings on request									


3 OPERATING FORCE

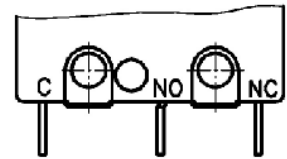
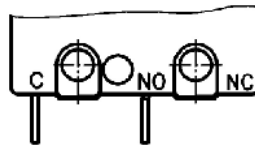
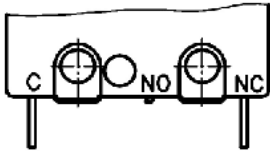
1,0N			Code: MBB1 2 A	4	5	6	7
1,5N			Code: MBB1 2 B	4	5	6	7
2,0N			Code: MBB1 2 C	4	5	6	7
2,5N			Code: MBB1 2 D	4	5	6	7
3,0N			Code: MBB1 2 E	4	5	6	7

4 AMBIENT TEMPERATURE

-10...+85°C		Code: MBB1 2 3 01	5	6	7
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5 CONTACT ARRANGEMENT

Normally closed	Normally open	Change-over
 Code: MBB1 2 3 4 A 6 7	 Code: MBB1 2 3 4 B 6 7	Code: MBB1 2 3 4 C 6 7

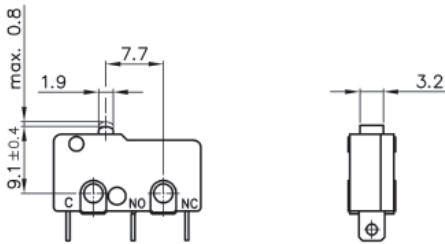


MBB1 Plunger

6 ACTUATOR

Plunger

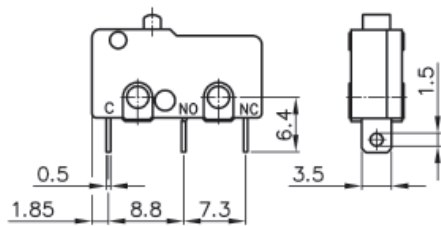
Code: MBB1 2 3 4 5 01 7



7 TERMINALS

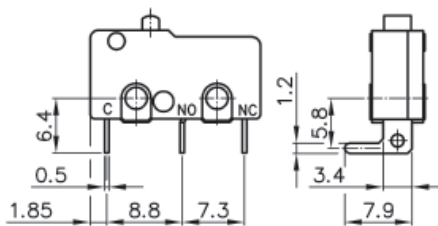
Solder terminal

Code: MBB1 2 3 4 5 6 A



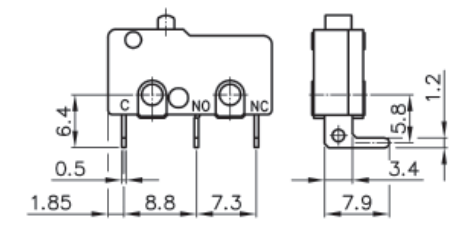
PCB terminal left

Code: MBB1 2 3 4 5 6 B



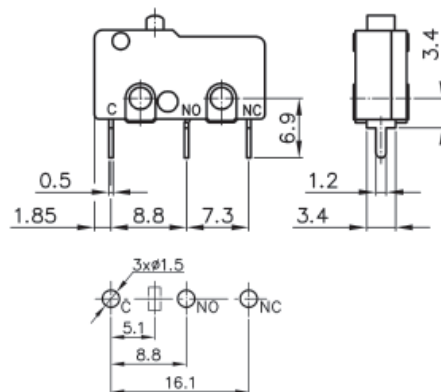
PCB terminal right

Code: MBB1 2 3 4 5 6 C



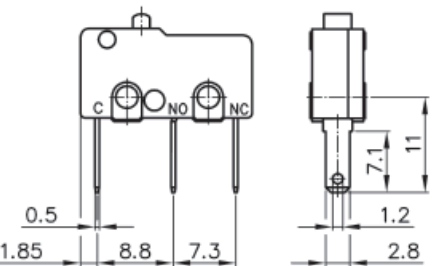
PCB terminal

Code: MBB1 2 3 4 5 6 D

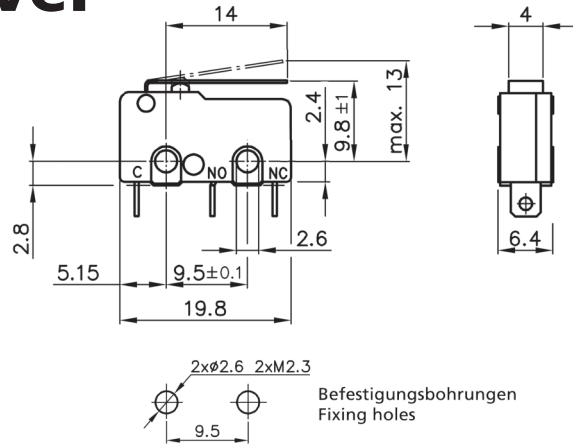
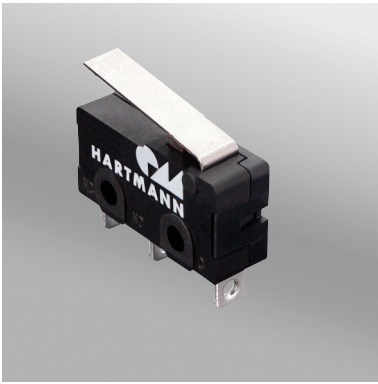


Plug connection

Code: MBB1 2 3 4 5 6 E



1 MBB1 Hinge lever



Leaf spring mechanism

- Micro switches design B acc. to DIN 41635
- functional final inspection and testing
- solid design
- high-quality materials
- very exact switching position
- Version 100mA 12VDC with Gold contacts on request

Micro switches, also known as snap action switches, are primarily used as limit switches, but are also suitable for many other industry applications. The actual switching speed is completely independent from the speed of operation. ISO 9001:2000 approved production together with 100% functional final inspection and testing guarantee reliable operation. These products reflect our long standing experience in design and production of high quality switches.

MECHANICAL DATA

Mech. lifetime	1 000 000 actuations
Electrical lifetime	min. 10 000 actuations
depending on switching capacity	
Movement differential	Please see overview next page
Pretravel	Please see overview next page
Overtravel	please see overview next page
Operating position	please see overview next page
Contact opening	<3mm (μ)

OTHER DATA

Approvals	VDE, cULus
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MATERIAL

Housing	PBT
Cover	PBT
Actuator	PPS
Terminals	CuZn Ag plated
Contacts	AgNi
Contact spring	CuBe

MBB1 Hinge lever

2 RATING

cULus

5A 250VAC	5A 125VAC		Code: MBB1 01	3	4	5	6	7
10A 250VAC		☎	Code: MBB1 02	3	4	5	6	7
100mA 12VDC		☎	Code: MBB1 06	3	4	5	6	7

Weitere Schaltleistungen auf Anfrage / Further ratings on request

3 OPERATING FORCE

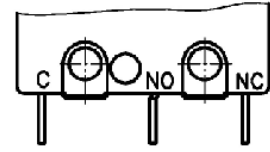
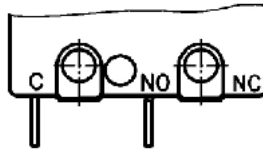
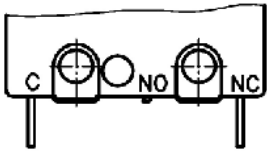
1,0N		☎	Code: MBB1 2 A	4	5	6	7
1,5N			Code: MBB1 2 B	4	5	6	7
2,0N		☎	Code: MBB1 2 C	4	5	6	7
2,5N		☎	Code: MBB1 2 D	4	5	6	7
3,0N		☎	Code: MBB1 2 E	4	5	6	7

4 AMBIENT TEMPERATURE

-10...+85°C			Code: MBB1 2 3 01	5	6	7
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5 CONTACT ARRANGEMENT

Normally closed	Normally open	Change-over
☎ Code: MBB1 2 3 4 A 6 7	☎ Code: MBB1 2 3 4 B 6 7	Code: MBB1 2 3 4 C 6 7

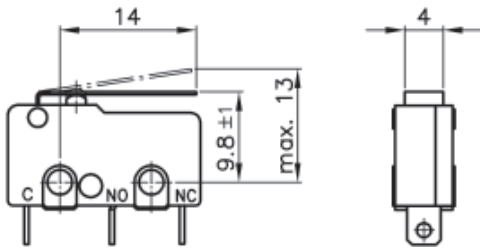


MBB1 Hinge lever

6 ACTUATOR

Hinge lever 14mm

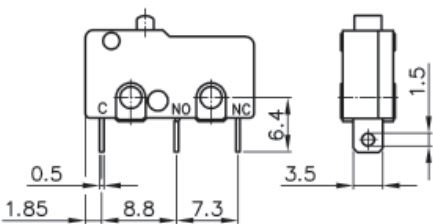
Code: MBB1 2 3 4 5 08 7



7 TERMINALS

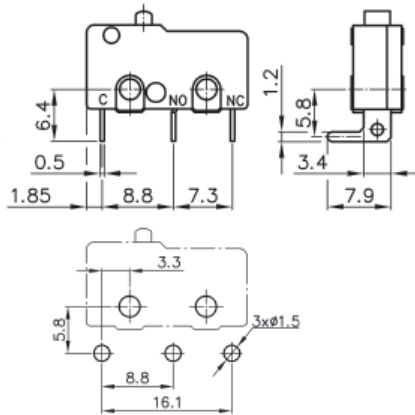
Solder terminal

Code: MBB1 2 3 4 5 6 A



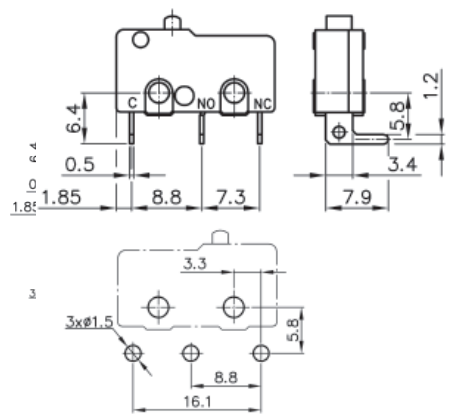
PCB terminal left

Code: MBB1 2 3 4 5 6 B



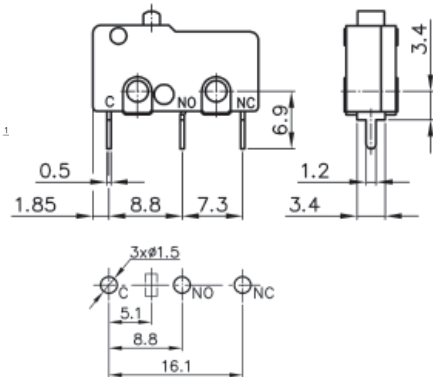
PCB terminal right

Code: MBB1 2 3 4 5 6 C



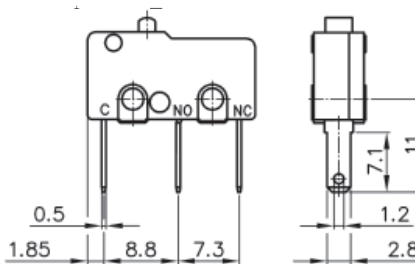
PCB terminal

Code: MBB1 2 3 4 5 6 D



Plug connection

Code: MBB1 2 3 4 5 6 E

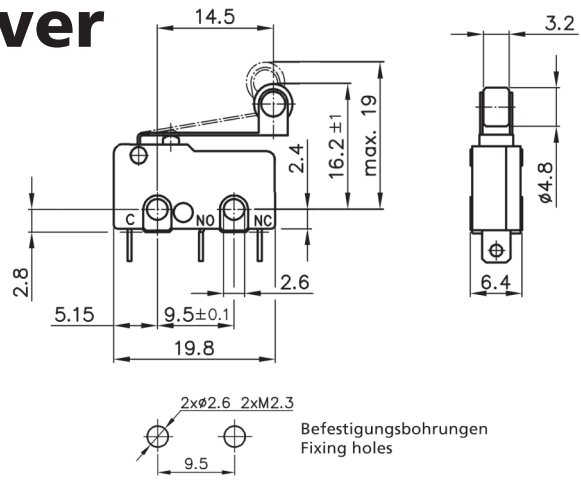


MBB1 Hinge lever

OVERVIEW ACTUATORS / TRAVEL / FORCES

	Code	Actuator length		Operating force on plunger		Operating force on lever		Pretravel	Overtravel	Movement differential	Free position	Operating position
		mm	≤ N	Code	≤ N	≤ mm	min. mm					
Hinge lever 14mm	08	14	1,0	A	0,30	4,2	1,0	0,8	13,0	9,8 ±1		
			1,5	B	0,45							
			2,0	C	0,60							
			2,5	D	0,75							
			3,0	E	0,90							

1 MBB1 Roller lever



Leaf spring mechanism

- Micro switches design B acc. to DIN 41635
- functional final inspection and testing
- solid design
- high-quality materials
- very exact switching position
- Version 100mA 12VDC with Gold contacts on request

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MECHANICAL DATA

Mech. lifetime	1 000 000 actuations
Electrical lifetime	min. 10 000 actuations
depending on switching capacity	
Movement differential	please see overview next page
Pretravel	please see overview next page
Overtravel	please see overview next page
Operating position	please see overview next page
Contact opening	<3mm (µ)

OTHER DATA

Approvals	VDE, cULus
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MATERIAL

Housing	PBT
Cover	PBT
Actuator	PPS
Terminals	CuZn Ag plated
Contacts	AgNi
Contact spring	CuBe

MBB1 Roller lever

2 RATING

		cULus					
5A 250VAC		5A 125VAC					Code: MBB1 01 3 4 5 6 7
10A 250VAC							Code: MBB1 02 3 4 5 6 7
100mA 12VDC							Code: MBB1 06 3 4 5 6 7
Further ratings on request							


3 OPERATING FORCE


1,0N							Code: MBB1 2 A 4 5 6 7
1,5N							Code: MBB1 2 B 4 5 6 7
2,0N							Code: MBB1 2 C 4 5 6 7
2,5N							Code: MBB1 2 D 4 5 6 7
3,0N							Code: MBB1 2 E 4 5 6 7

4 AMBIENT TEMPERATURE

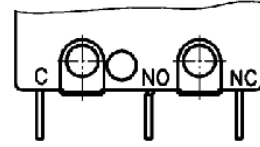
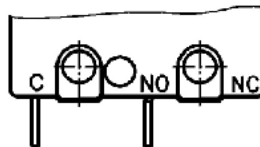
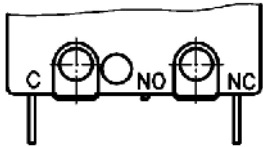
-10...+85°C							Code: MBB1 2 3 01 5 6 7
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5 CONTACT ARRANGEMENT

Normally closed
 Code: MBB1 2 3 4 **A** 6 7

Normally open
 Code: MBB1 2 3 4 **B** 6 7

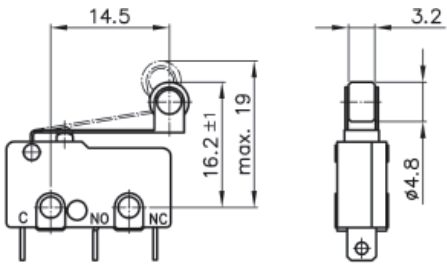
Change-over
 Code: MBB1 2 3 4 **C** 6 7



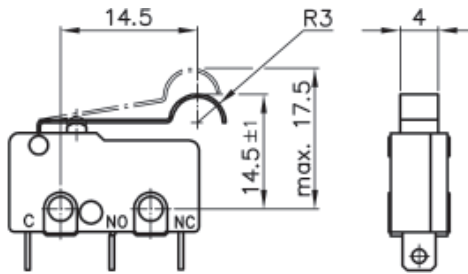
MBB1 Roller lever

6 ACTUATOR

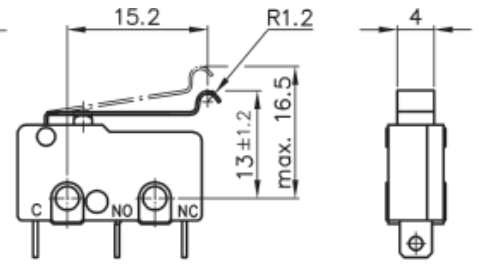
Roller lever 14,5mm
Code: MBB1 2 3 4 5 **09** 7



Simulated roller 14,5mm R3
Code: MBB1 2 3 4 5 **10** 7

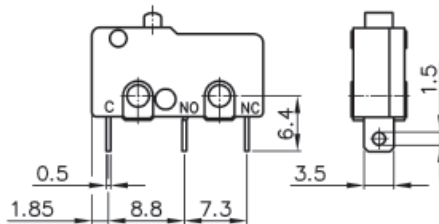


Simulated roller 15,2mm R1,2
Code: MBB1 2 3 4 5 **11** 7

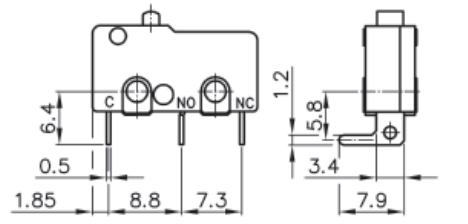


7 TERMINALS

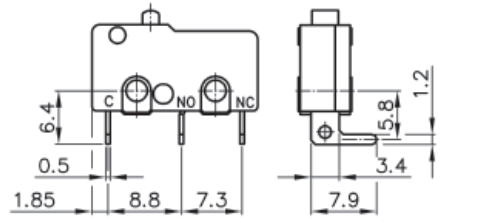
Solder terminal
Code: MBB1 2 3 4 5 6 **A**



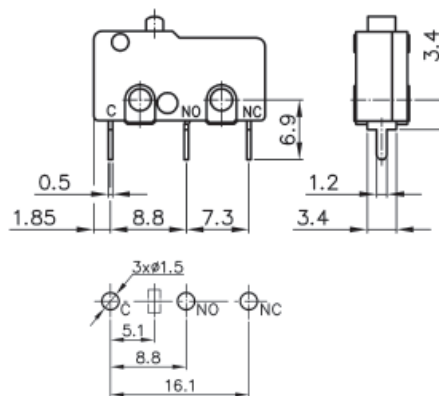
PCB terminal left
Code: MBB1 2 3 4 5 6 **B**



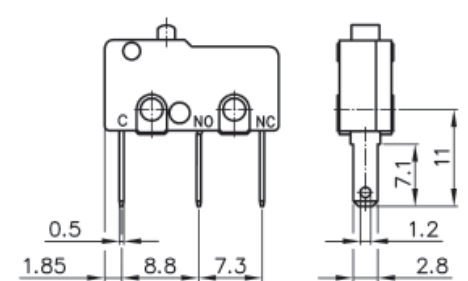
PCB terminal right
Code: MBB1 2 3 4 5 6 **C**



PCB terminal
Code: MBB1 2 3 4 5 6 **D**



Plug connection
Code: MBB1 2 3 4 5 6 **E**



MBB1 Roller lever

OVERVIEW ACTUATORS / TRAVEL / FORCES

	Code	Actuator length		Operating force on plunger		Operating force on lever		Pretravel	Overtravel	Movement differential	Free position	Operating position
		mm	≤ N	Code	≤ N	≤ mm	min. mm					
Roller lever 14,5mm	09	14,5	1,0	A	0,30	3,8	1,2	0,8	19,0	16,2 ±1		
			1,5	B	0,45							
			2,0	C	0,60							
			2,5	D	0,75							
			3,0	E	0,90							
Simulated roller lever 14,5mm	10	14,5	1,0	A	0,30	4,0	1,2	0,8	17,5	14,5 ±1		
			1,5	B	0,45							
			2,0	C	0,60							
			2,5	D	0,75							
			3,0	E	0,90							
Simulated roller lever 15,2mm	11	15,2	1,0	A	0,25	4,7	1,2	0,8	16,5	13 ±1,2		
			1,5	B	0,38							
			2,0	C	0,50							
			2,5	D	0,63							
			3,0	E	0,75							