

## V4 8318 Sealed Standard 83186 Part number 83186003



- IP 67 protection
- Nominal ratings 0.1 A to 10 A / 250 VAC
- Minimum rating 1 mA / 4 VDC
- Operating temperature -40 °C to +125 °C
- Choice of actuators with 2 possible fixing positions

### Part numbers

Type	Function	Connections
83186003 Standard 83186	I (changeover)	FDO

### Specifications

#### Electrical characteristics

Rating nominal / 250 VAC (A)	6
Rating thermal / 250 VAC (A)	7,5

#### Mechanical characteristics

Maximum operating force (N)	2,5
Min. Release force (N)	0,8
Maximum total travel force (N)	4,2
Max. permitted overtravel force (N)	10
Maximum rest position (mm)	9,3
Operating position (mm)	8,4 ±0,3
Maximum differential travel (mm)	0,1
Min. overtravel (mm)	0,6
Ambient operating temperature for blade version (°C)	-40 → +125
Ambient operating temperature for wires/cable version (°C)	-40 → +105
Mechanical life (operations)	2x10 <sup>6</sup>
Contact gap (mm)	0,4
Weight (g) (tags version)	2

#### \* Création \*

\* Please consult us for X1 / X2 / X3 connections

\*\* Cable version for types 83181, 83183 and 83186

### Additional specifications

#### Components

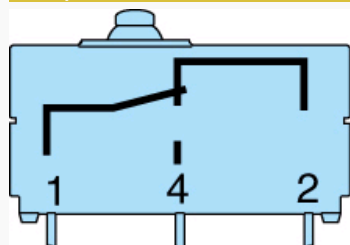
##### Material

- Case : polyester UL 94VO
- Button : polyester
- Membrane : silicon
- Contacts : AgCdO or AgSnO<sub>2</sub> gold-plated AgNi (dual-current)
- Terminals : silver-plated, tinned brass
- Cable/Lead : PVC

##### Levers

- Flat : stainless steel
- Roller : stainless steel, polyamide roller

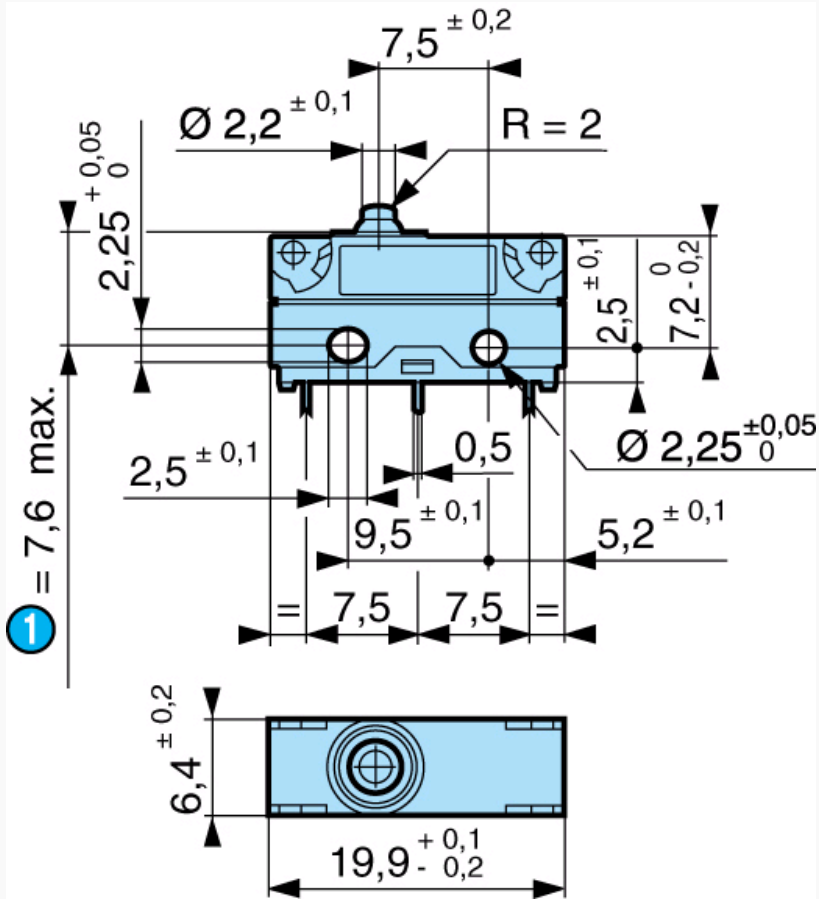
### Principles



## Dimensions (mm)

## Product

Symmetrical version  
types 83180 / 181 / 183 / 186

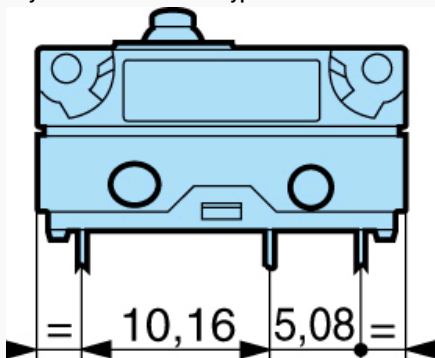


N°	Legend
①	OL = 7.6 max.

## Dimensions (mm)

## Product

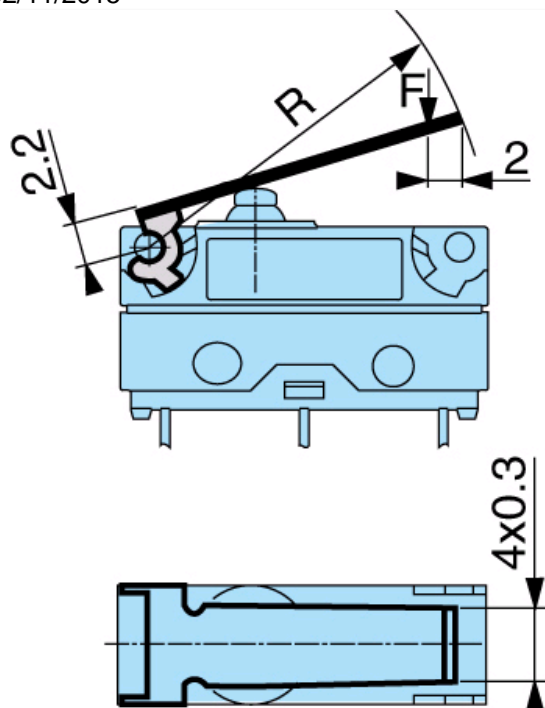
Asymmetrical version for types 83180 / 181 / 183 / 186



## Dimensions (mm)

## Actuators

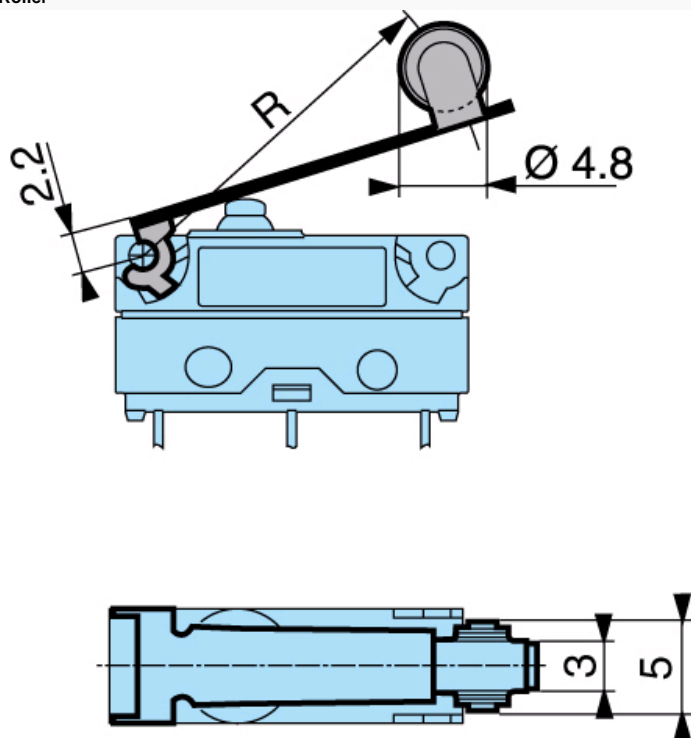
170A  
Flat



#### Dimensions (mm)

##### Actuators

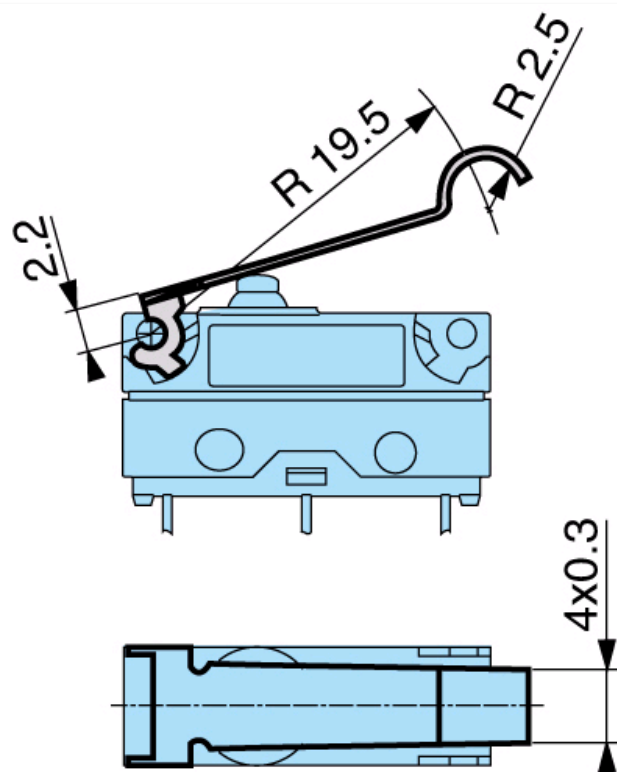
170E  
Roller



#### Dimensions (mm)

##### Actuators

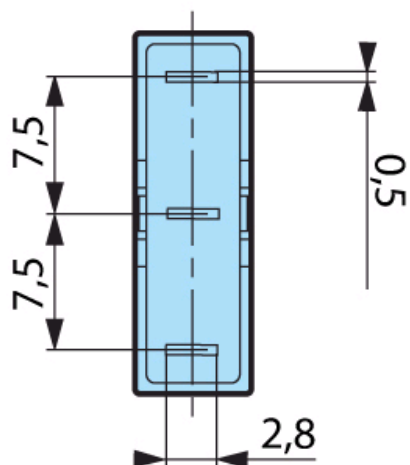
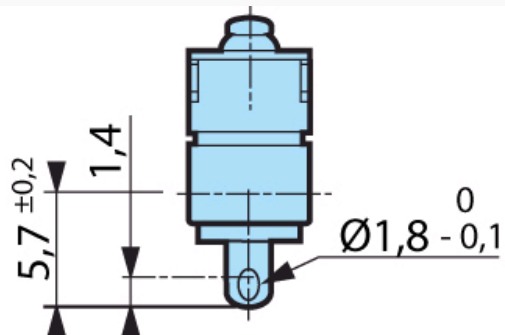
170 F  
Dummy roller



#### Dimensions (mm)

#### Connections

W2S  
Solder

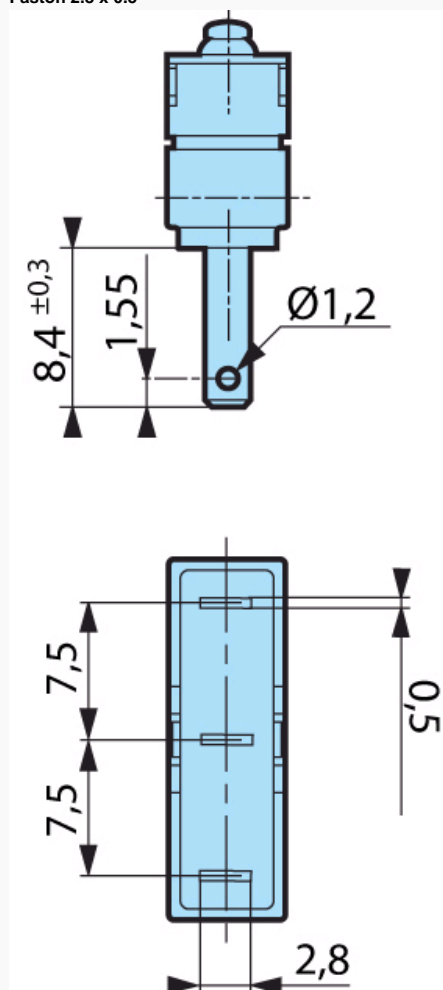


#### Dimensions (mm)

## Connections

W7S

Faston 2.8 x 0.5

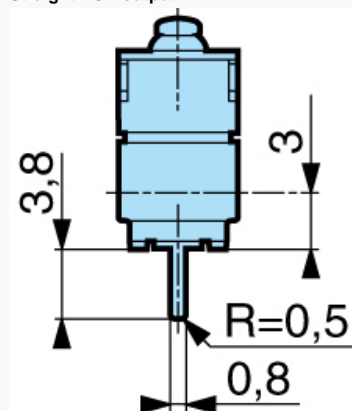


## Dimensions (mm)

## Connections

X1A

Straight PCB output

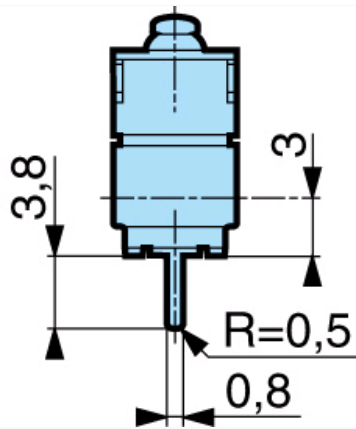


## Dimensions (mm)

## Connections

X1S

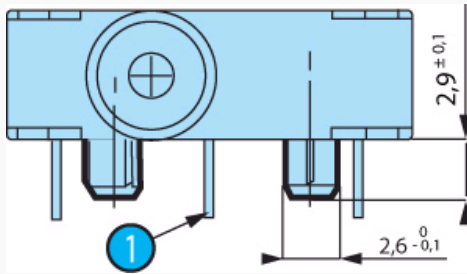
Straight PCB output



#### Dimensions (mm)

#### Mounting accessories

#### Fixing pins

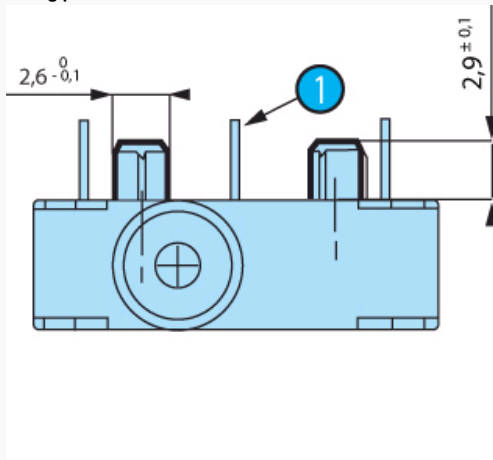


N°	Legend
1	X3 output

#### Dimensions (mm)

#### Mounting accessories

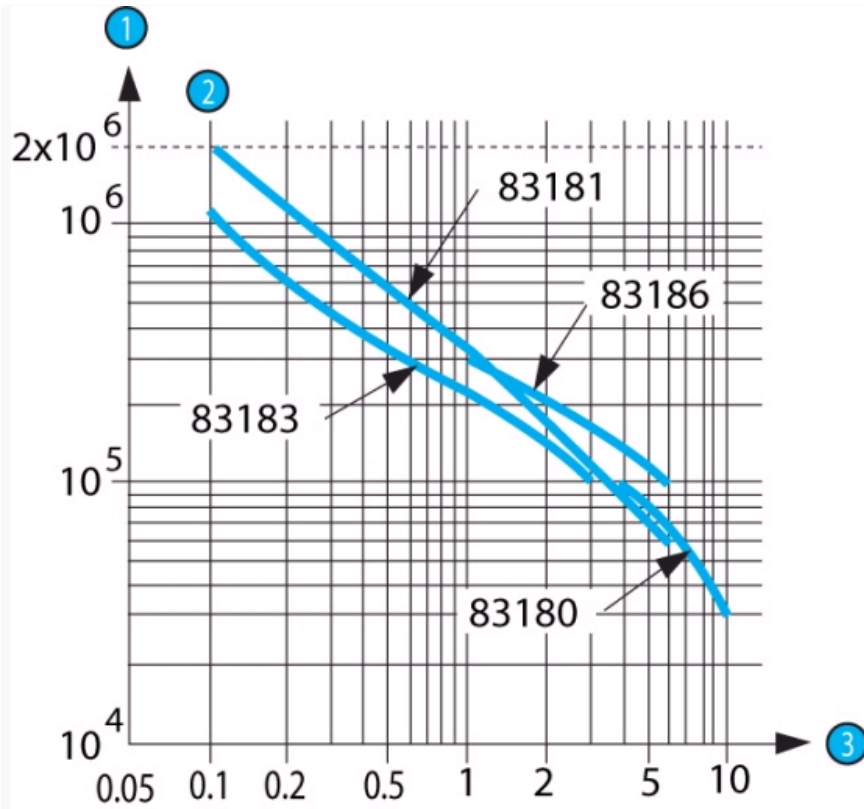
#### Fixing pins



N°	Legend
1	X2 output

#### Curves

#### Operating curve 250 VAC



Model 83181 is designed to operate equally well on dual-current (1 mA 4 V minimum) or medium-current (6 A maximum) circuits. However, a given product should only be used to switch one type of circuit during its working life.

N°	Legend
①	Number of cycles
②	Resistive circuit
③	Current in Amps

### Curves








#### Switch rating with DC supply

		83180	83181	83183	83186
12 V	Resistive	10 A	6 A	3 A	6 A
	Inductive L/R 5 ms	10 A	6 A	3 A	6 A
24 V	Resistive	10 A	6 A	3 A	6 A
	Inductive L/R 5 ms	5 A	5 A	3 A	5 A

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### Connections

#### Actuators and fixing positions

Part numbers for standard actuators	79253327		79253326		79218454			
Actuators	Flat 170A R18.3		Flat 170A R24		Flat 170A R41		Roller 170E R20	
								
Mounting position	A	B	A	B	A	B	A	B
Coefficient	3	1.5	4	2	7	3.5	3	1.5
Tripping point	10 <sup>+1.4</sup>	9.2 <sup>+0.9</sup>	10.7 <sup>+1.7</sup>	9.6 <sup>+1.1</sup>	12.7 <sup>+3.3</sup>	10.6 <sup>+3.8</sup>	15.5 <sup>+1.4</sup>	14.5 <sup>+1.9</sup>
83180					11 <sup>+3</sup>	8.8 <sup>+1.8</sup>		
83181 / 183 / 186					11.4 <sup>+3</sup>	9.3 <sup>+1.8</sup>		
Part numbers for standard actuators	79253329							
Actuators	Dummy roller 170F R19.5		Screw 170D *		Transverse roller 170 EL *			
								
Mounting position	A	B						
Coefficient	3	1.5						
Tripping point	12.9 <sup>+1.8</sup>	11.9 <sup>+1.7</sup>						

Except where otherwise indicated, levers are supplied unmounted.  
For factory mounting, specify fixing position A or B.  
\* To special order

### Other information

#### Mounting - Operation

See basic technical concepts

#### Degree of protection

- Tag version :

→ casing = IP67

→ terminals = IP00

- Lead/cable version :

→ output/casing = IP67

**To calculate force** : divide the switch force by the coefficient in the table.

**To calculate travel** : multiply the switch travel by the same coefficient.

### Product adaptations



- Special levers
- Specific fixings
- Special leads, cables, cable harnesses
- NF - UL - cUL approvals