

## V4 83170 Standard 831700 Part number 83170002



- Nominal ratings 0.1 A to 10 A / 250 VAC
- Minimum rating 1 mA / 4 VDC
- Operating temperature up to +125 °C
- Conforming to standards EN 61058 and UL 1054
- Choice of actuators with 2 possible fixing positions

### Part numbers

Type	Function	Connections
83170002 Standard 831700	I (changeover)	W2

### Specifications

#### Electrical characteristics

Rating nominal / 250 VAC (A)	10
Rating thermal / 250 VAC (A)	12,5

#### Mechanical characteristics

Maximum operating force (N)	1,5
Min. Release force (N)	0,3
Maximum total travel force (N)	1,8
Max. permitted overtravel force (N)	10
Maximum rest position (mm)	9,2
Operating position (mm)	8,4 $\pm$ 0,3
Maximum differential travel (mm)	0,15
Min. overtravel (mm)	0,5
Ambient operating temperature (°C)	-20 → +125
Mechanical life (operations)	10 <sup>7+</sup>
Contact gap (mm)	0,4
Weight (g)	1,7

### Comments

\* For 2/3 of the overtravel

### Additional specifications

#### Components

##### Material

- Case : polyester UL 94 VO
- Button : Glass-filled polyamide
- Contacts : AgNi, gold-plated AgNi (dual-current)
- Terminals : cupro-nickel (except W7A5 in brass)

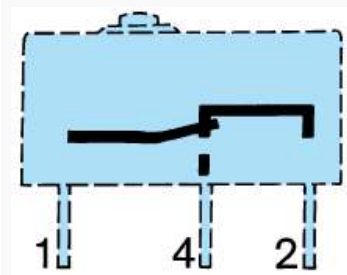
##### Levers

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

##### Approvals

NF - UL - cUL

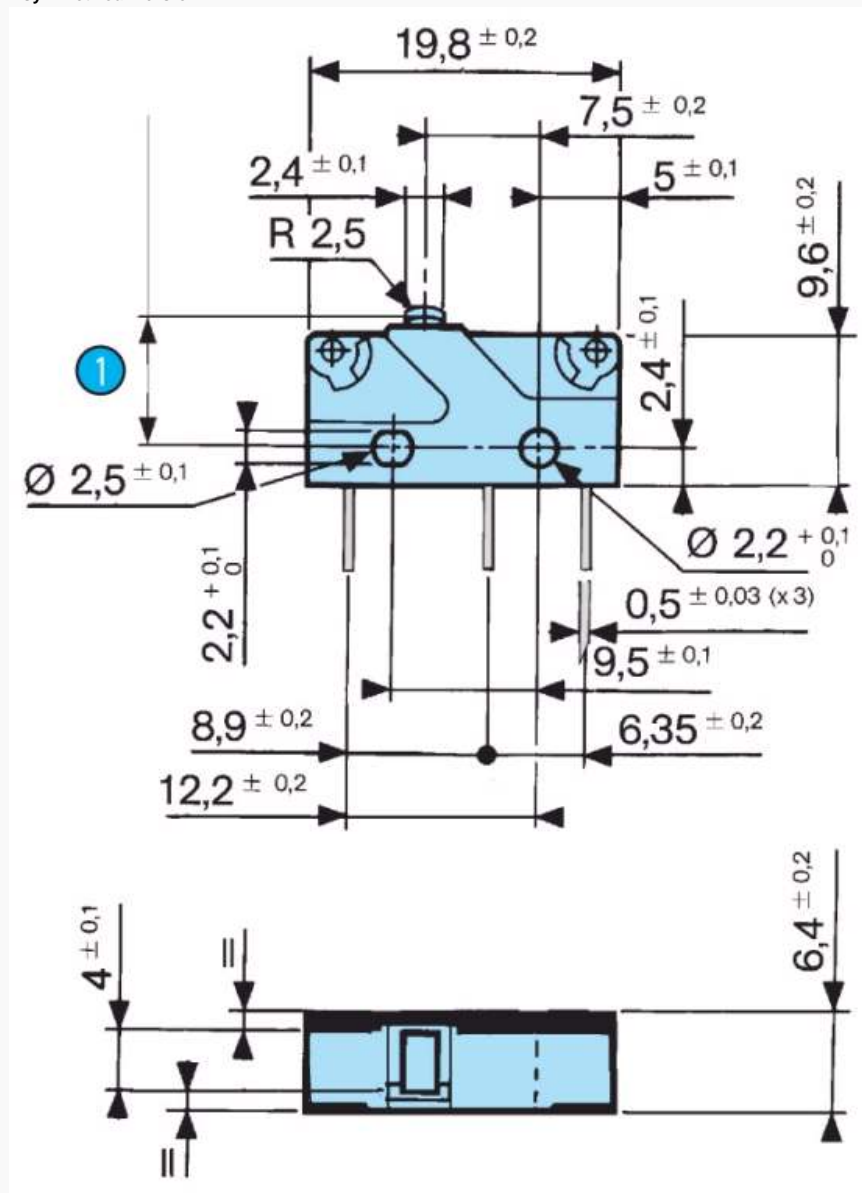
### Principles



### Dimensions (mm)

Product

83170  
Asymmetrical version



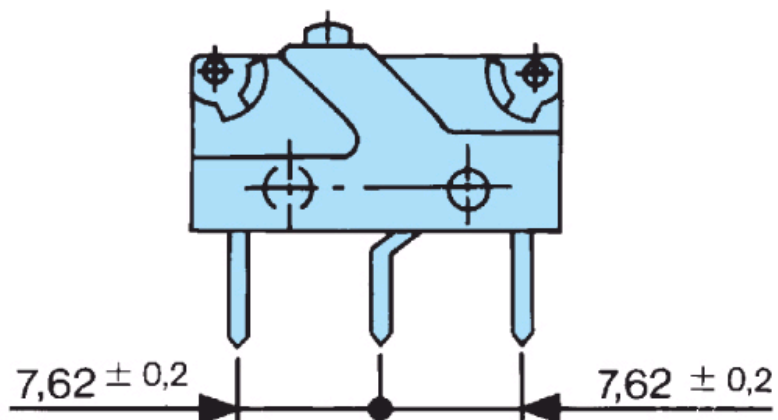
Fixing with M2 screws Recommended tightening torque : 2 cm daN

N°	Legend
1	OL = 7.6

Dimensions (mm)

Product

83170 Symmetrical version

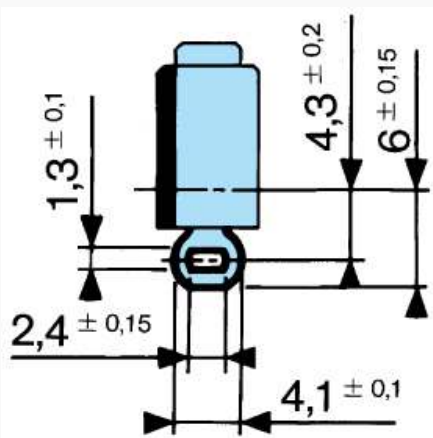


Fixing with M2 screws Recommended tightening torque : 2 cm daN

#### Dimensions (mm)

#### Connections

W2

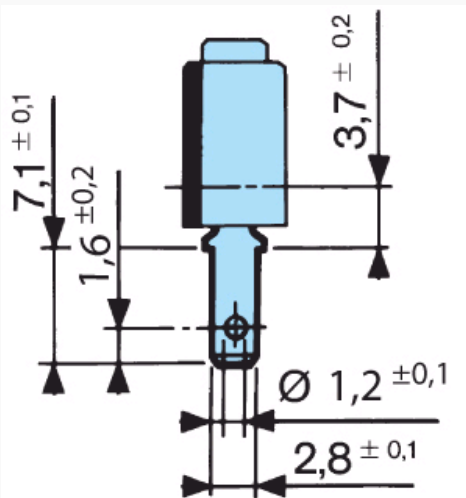


Fixing with M2 screws Recommended tightening torque : 2 cm daN

#### Dimensions (mm)

#### Connections

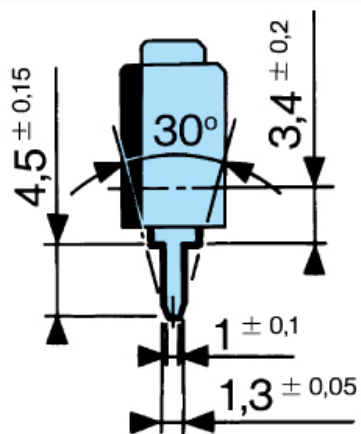
W7A5



Fixing with M2 screws Recommended tightening torque : 2 cm daN

#### Dimensions (mm)

#### Connections

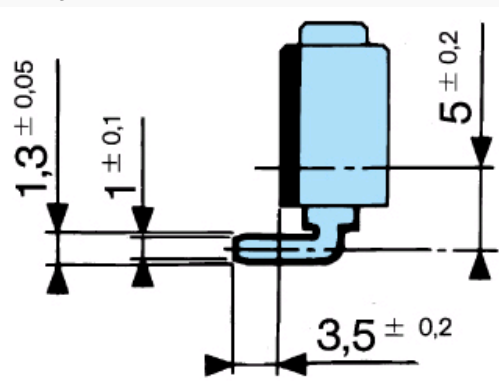


Fixing with M2 screws Recommended tightening torque : 2 cm daN

#### Dimensions (mm)

#### Connections

X2 - X2S

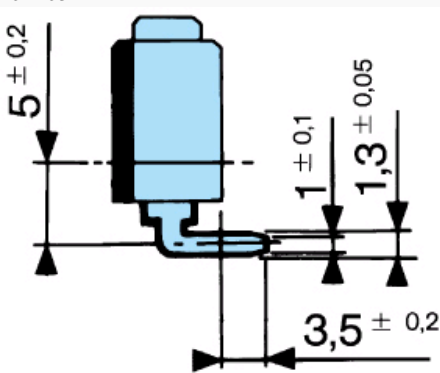


Fixing with M2 screws Recommended tightening torque : 2 cm daN

#### Dimensions (mm)

#### Connections

X3 - X3S

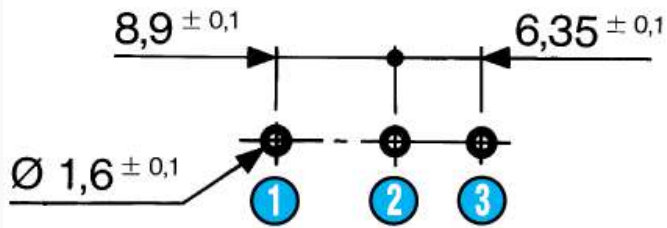


Fixing with M2 screws Recommended tightening torque : 2 cm daN

#### Dimensions (mm)

#### Drilling

Printed circuit board mounting  
Asymmetrical X1 - X2 - X3



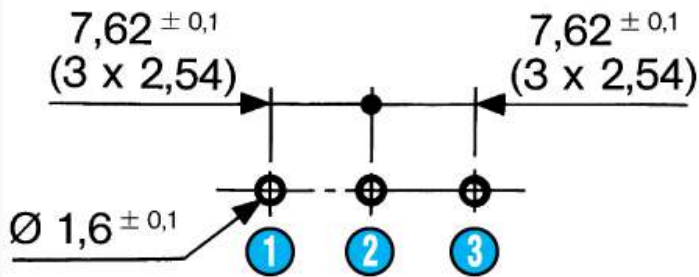
Fixing with M2 screws Recommended tightening torque : 2 cm daN

N°	Legend
①	1.C
②	4.NO
③	2.NC

#### Dimensions (mm)

##### Drilling

Printed circuit board mounting  
Symmetrical X1S - X2S - X3S

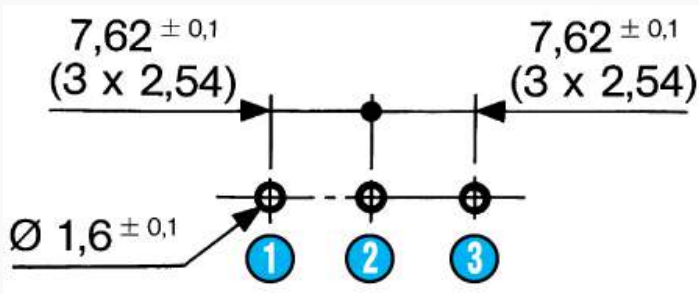


Fixing with M2 screws Recommended tightening torque : 2 cm daN

N°	Legend
①	1.C
②	4.NO
③	2.NC

#### Dimensions (mm)

##### Drilling

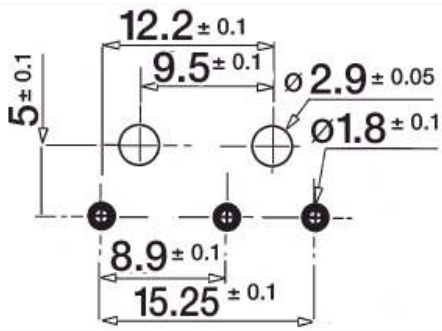


Fixing with M2 screws Recommended tightening torque : 2 cm daN

#### Dimensions (mm)

##### Drilling

Mounting on a printed circuit board with fixing pins  
Asymmetrical



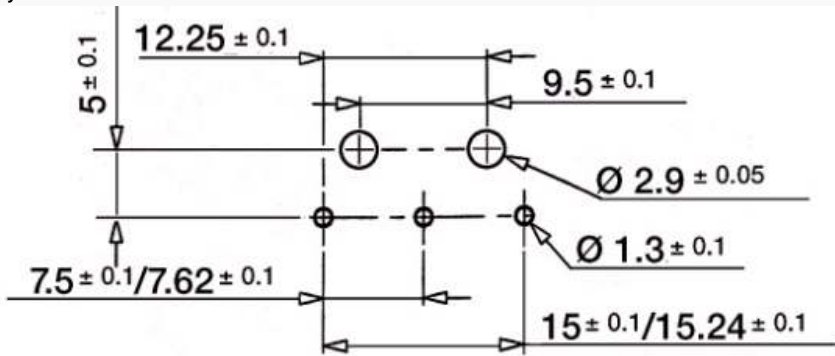
Fixing with M2 screws Recommended tightening torque : 2 cm daN

**Dimensions (mm)**

**Drilling**

Mounting on a printed circuit board with fixing pins

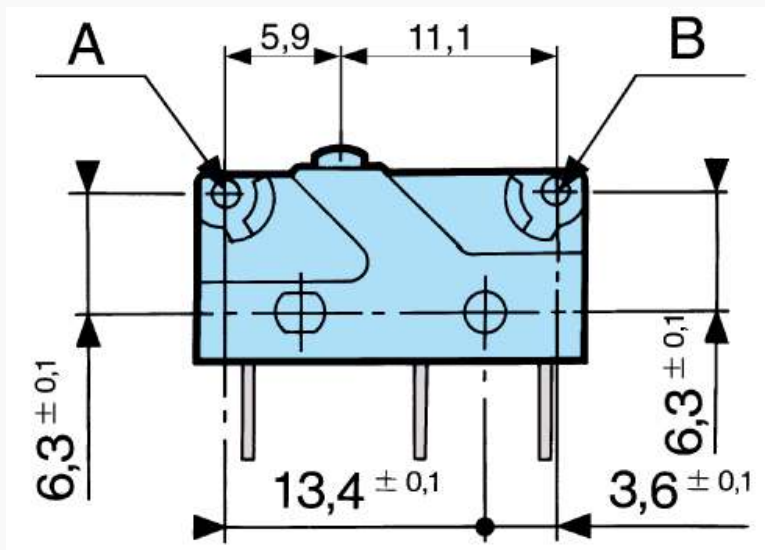
Symmetrical



Fixing with M2 screws Recommended tightening torque : 2 cm daN

**Dimensions (mm)**

**Actuator mounting positions**

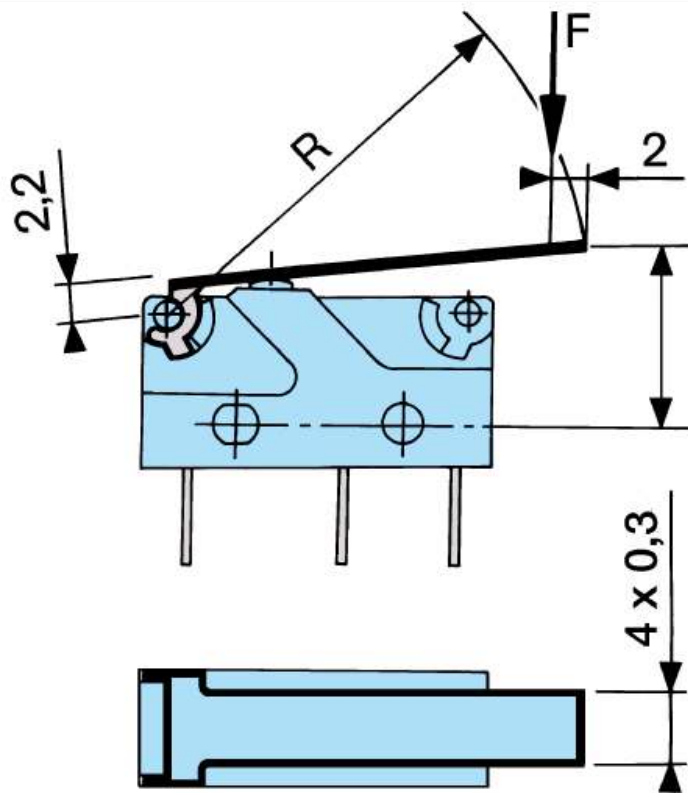


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

**Dimensions (mm)**

**Actuators**

170A

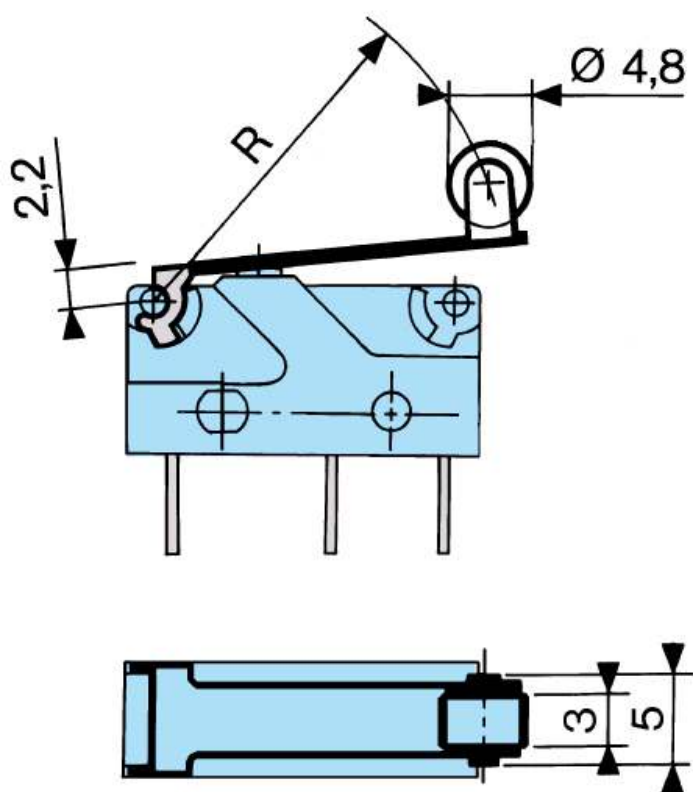


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

#### Dimensions (mm)

#### Actuators

170E

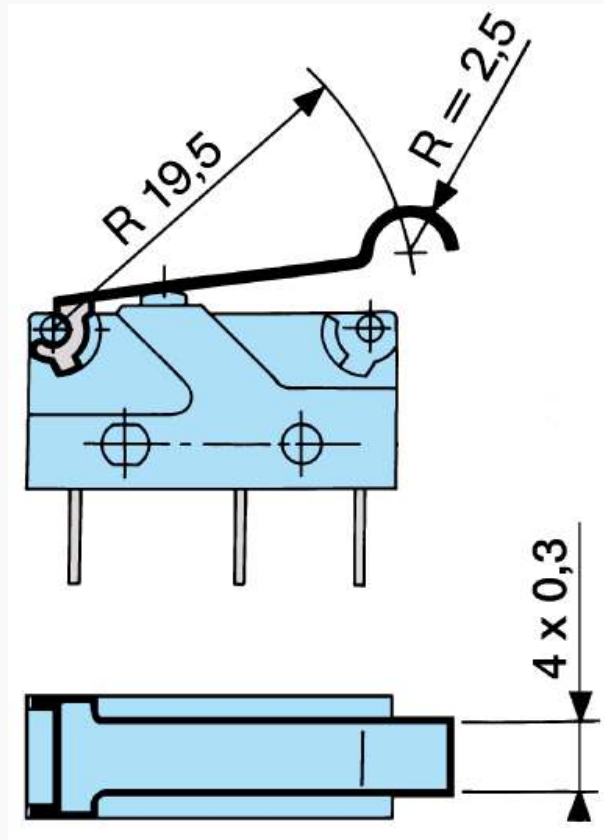


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

Dimensions (mm)

Actuators

170F

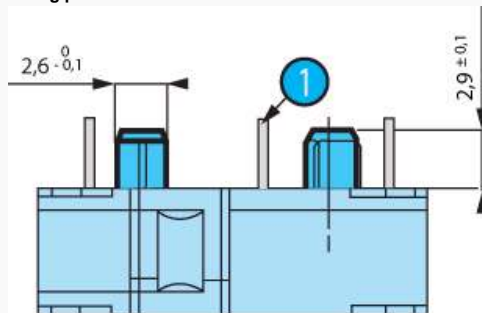


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

Dimensions (mm)

Mounting accessories

Fixing pins



Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

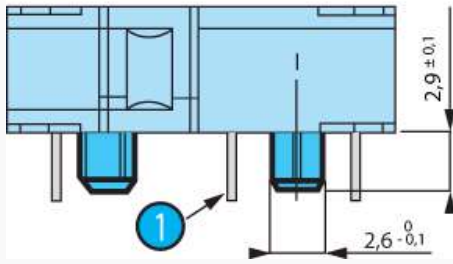
N°	Legend
1	Output on unit side : X2

Dimensions (mm)

Mounting accessories

Fixing pins



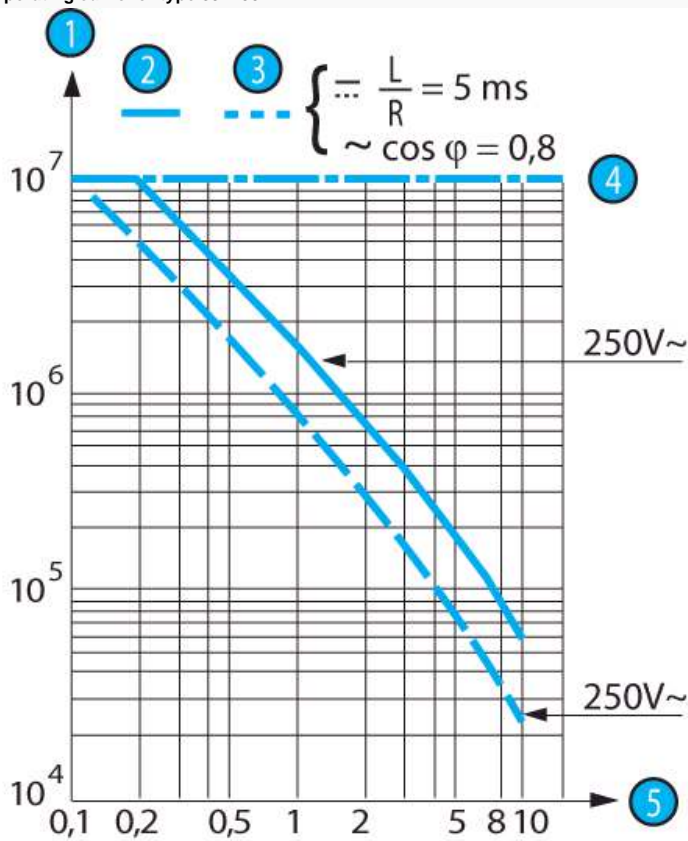


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

N°	Legend
1	Output on cover side : X3

Curves








Operating curve for type 831700



N°	Legend
1	Number of cycles
2	Resistive circuit
3	Inductive circuit
4	Mechanical life limit
5	Current in Amps

Connections

Actuators and fixing positions

Part numbers for standard actuators	79253327	79253326	79253328	79218454	79253329
Actuators	Flat 170A R18.3	Flat 170A R24	Flat 170A R41	Roller 170E R20	Dummy roller 170F
Fixing positions					
Coefficient	A: 3 B: 1.5	A: 4 B: 2	A: 7 B: 3.5	A: 3 B: 1.5	A: 3 B: 1.5
Tripping point	10 <sup>+1.0</sup> 9.2 <sup>+0.8</sup>	10.7 <sup>+1.2</sup> 9.6 <sup>+1</sup>	12.7 <sup>+1.8</sup> 10.6 <sup>+1.8</sup>	15.5 <sup>+1.8</sup> 14.5 <sup>+0.8</sup>	12.9 <sup>+1.8</sup> 11.9 <sup>+1.2</sup>
Levers	Screw 170D	Transverse roller 170EL			
					
Characteristics available on request					

### Other information

#### Mounting - Operation

See basic technical concepts

### Product adaptations



- Special levers
- Special connections