



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 \rightarrow +125
Mechanical life (operations)	10 ⁷⁺
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)

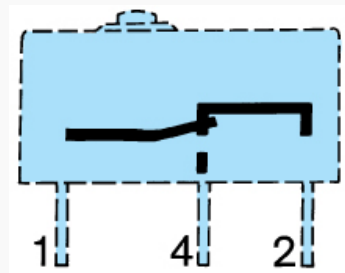
Levers

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

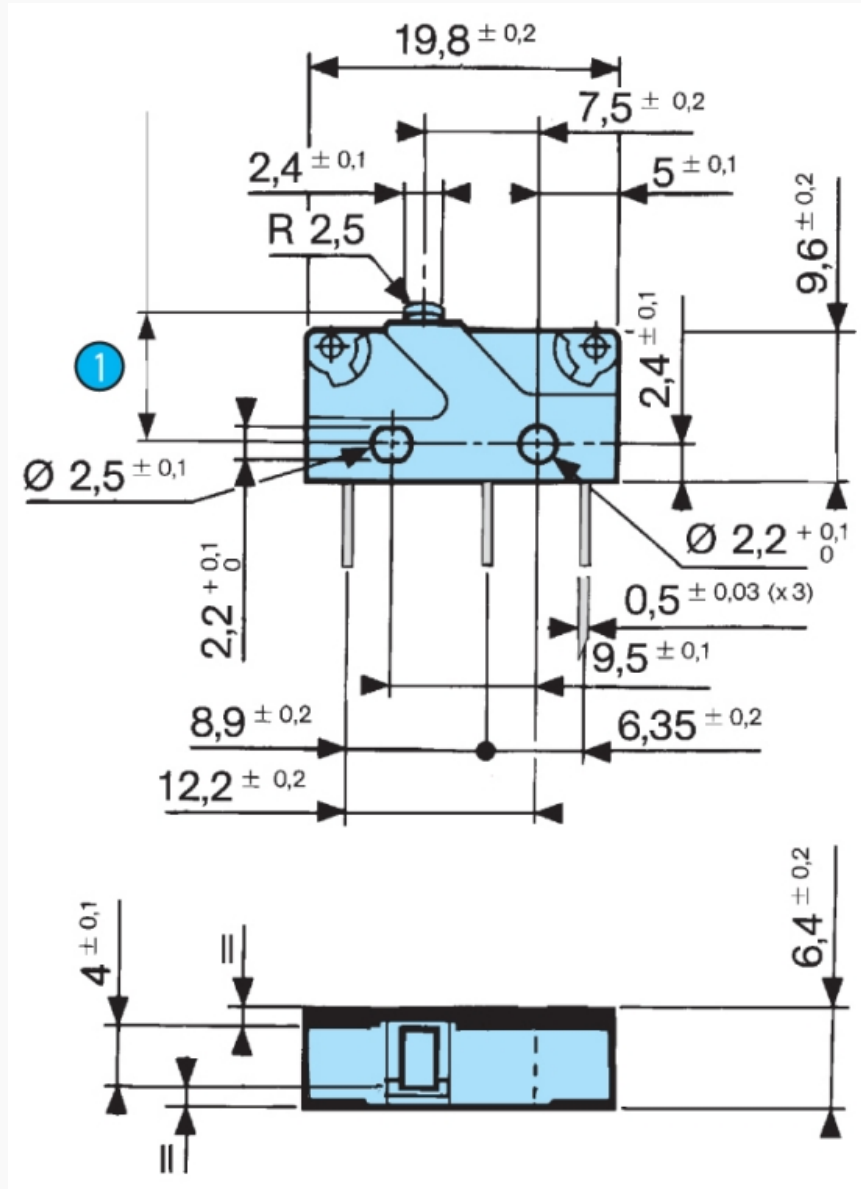
Approvals

NF - UL - cUL

Principles



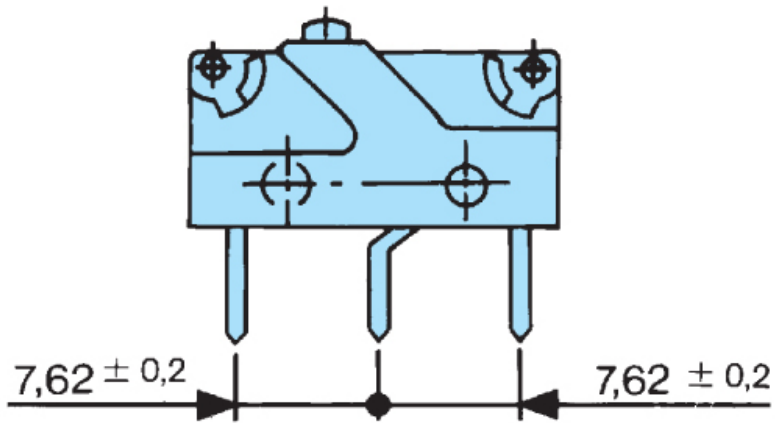
Dimensions (mm)



Fixing with M2 screws Recommended tightening torque : 2 cm daN

N°	Legend
1	OL = 7.6

Dimensions (mm)

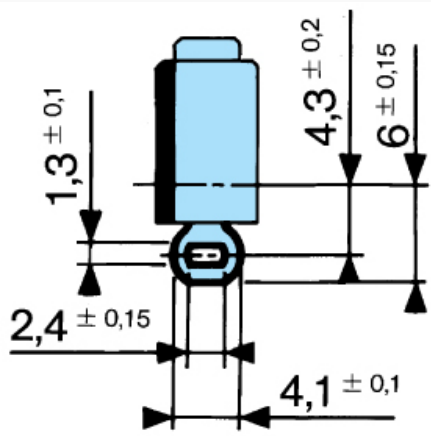


Fixing with M2 screws Recommended tightening torque : 2 cm daN

Dimensions (mm)

Connections

W2

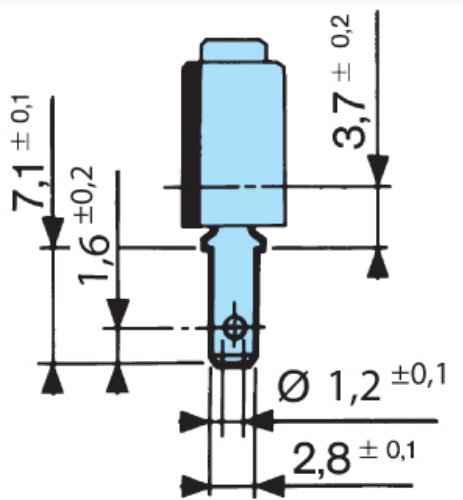


Fixing with M2 screws Recommended tightening torque : 2 cm daN

Dimensions (mm)

Connections

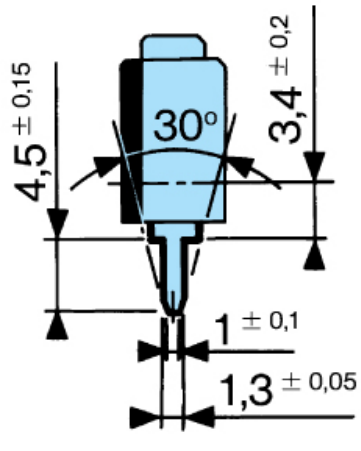
W7A5



Fixing with M2 screws Recommended tightening torque : 2 cm daN

Dimensions (mm)

Connections

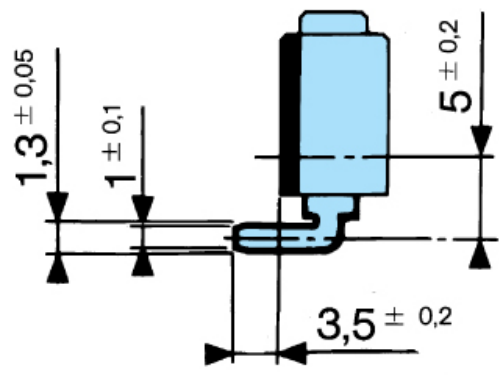


Fixing with M2 screws Recommended tightening torque : 2 cm daN

Dimensions (mm)

Connections

X2 - X2S

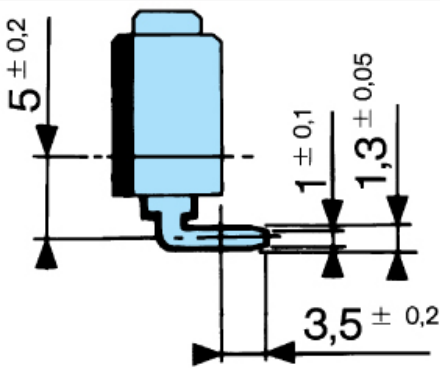


Fixing with M2 screws Recommended tightening torque : 2 cm daN

Dimensions (mm)

Connections

X3 - X3S

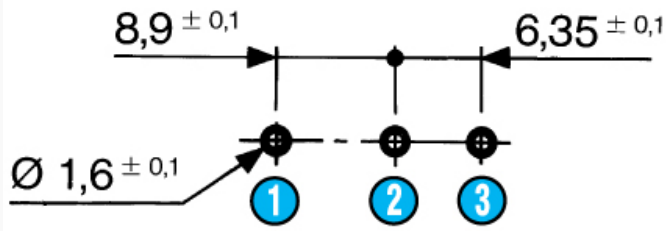


Fixing with M2 screws Recommended tightening torque : 2 cm daN

Dimensions (mm)

Drilling

Printed circuit board mounting
Asymmetrical X1 - X2 - X3



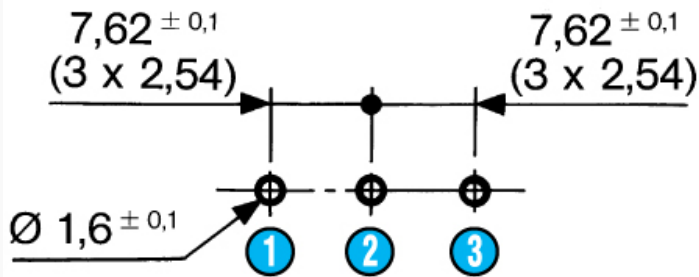
Fixing with M2 screws Recommended tightening torque : 2 cm daN

N°	Legend
①	1.C
②	4.NO
③	2.NC

Dimensions (mm)

Drilling

Printed circuit board mounting
Symmetrical X1S - X2S - X3S

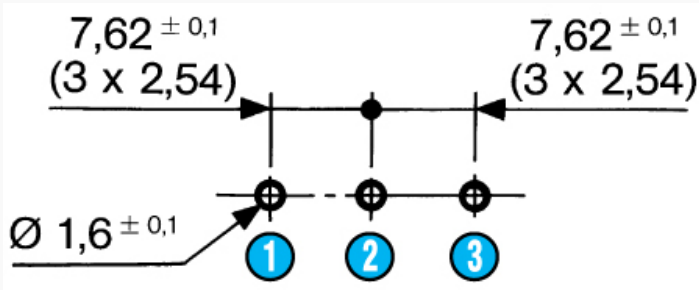


Fixing with M2 screws Recommended tightening torque : 2 cm daN

N°	Legend
①	1.C
②	4.NO
③	2.NC

Dimensions (mm)

Drilling

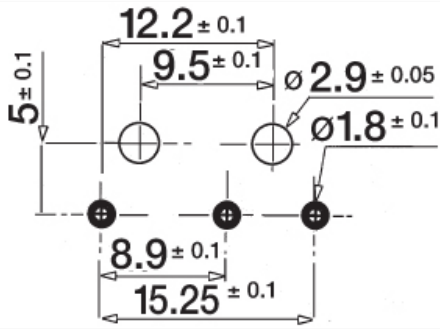


Fixing with M2 screws Recommended tightening torque : 2 cm daN

Dimensions (mm)

Drilling

Mounting on a printed circuit board with fixing pins
Asymmetrical



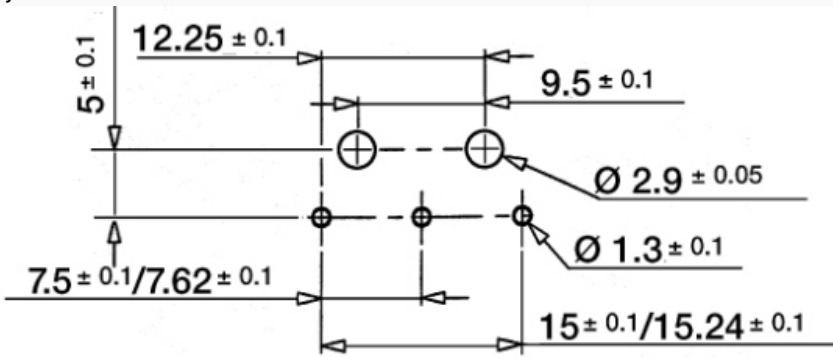
Fixing with M2 screws Recommended tightening torque : 2 cm daN

Dimensions (mm)

Drilling

Mounting on a printed circuit board with fixing pins

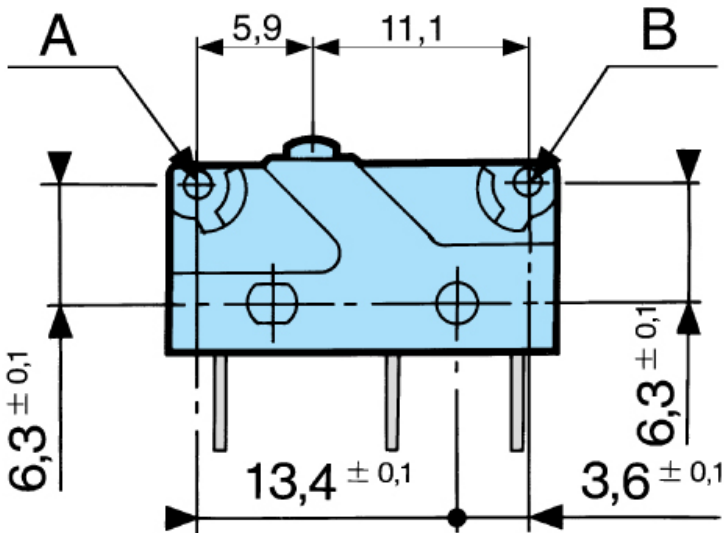
Symmetrical



Fixing with M2 screws Recommended tightening torque : 2 cm daN

Dimensions (mm)

Actuator mounting positions

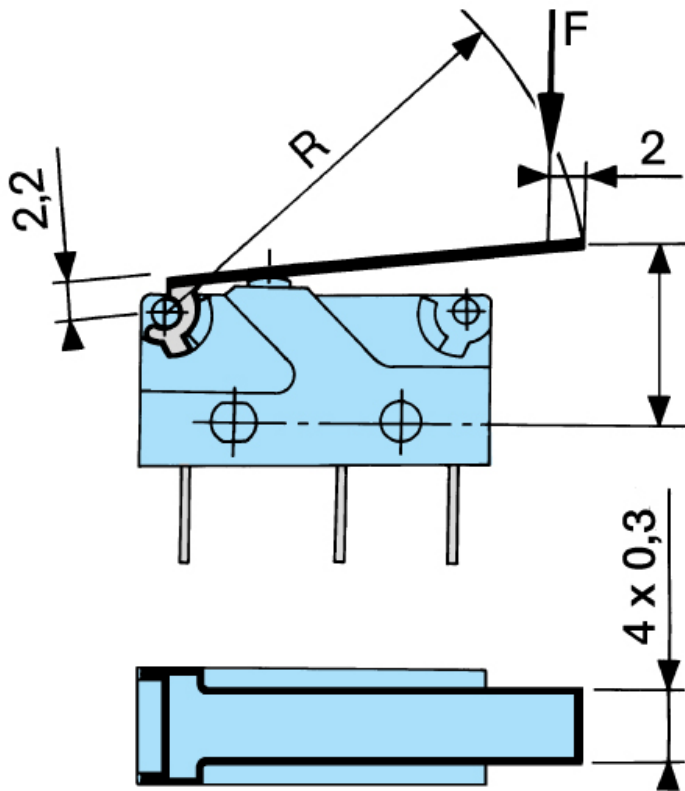


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

Dimensions (mm)

Actuators

170A

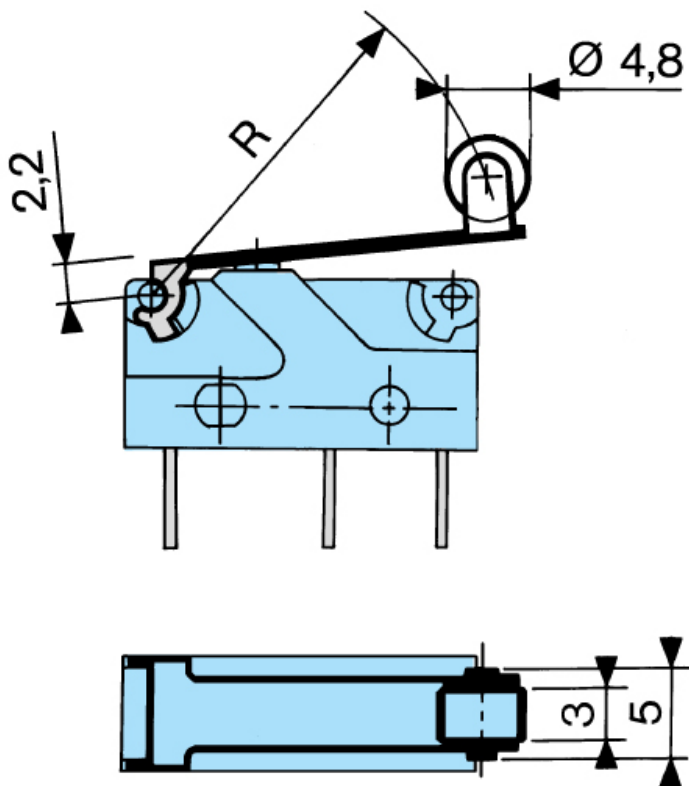


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

Dimensions (mm)

Actuators

170E

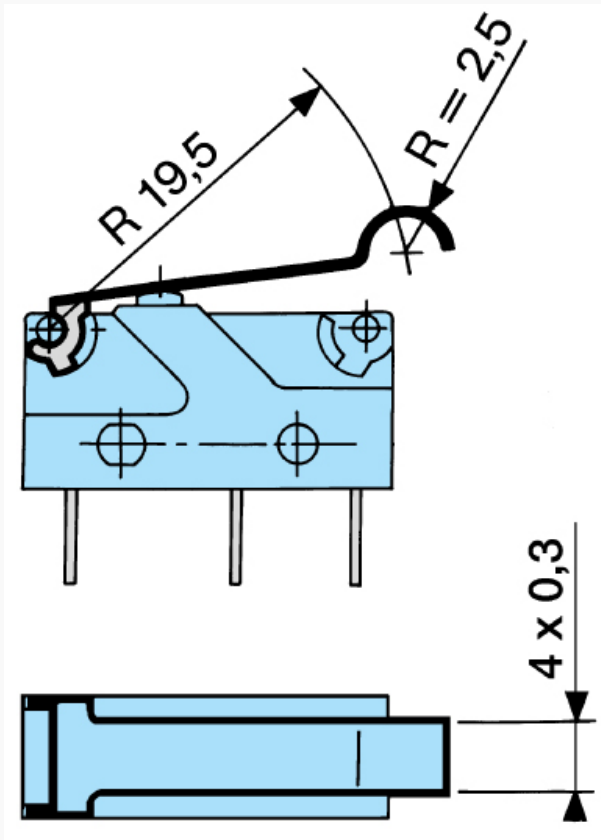


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

Dimensions (mm)

Actuators

170F

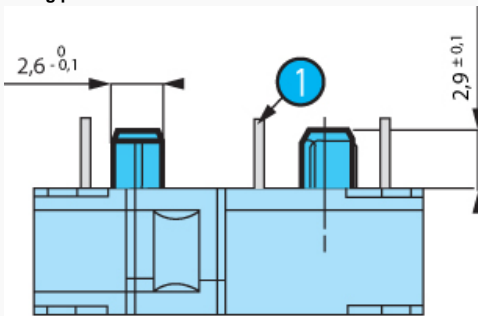


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

Dimensions (mm)

Mounting accessories

Fixing pins



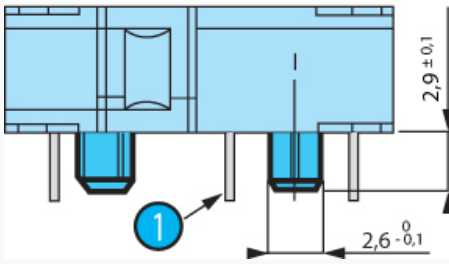
Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

N°	Legend
1	Output on unit side : X2

Dimensions (mm)

Mounting accessories

Fixing pins

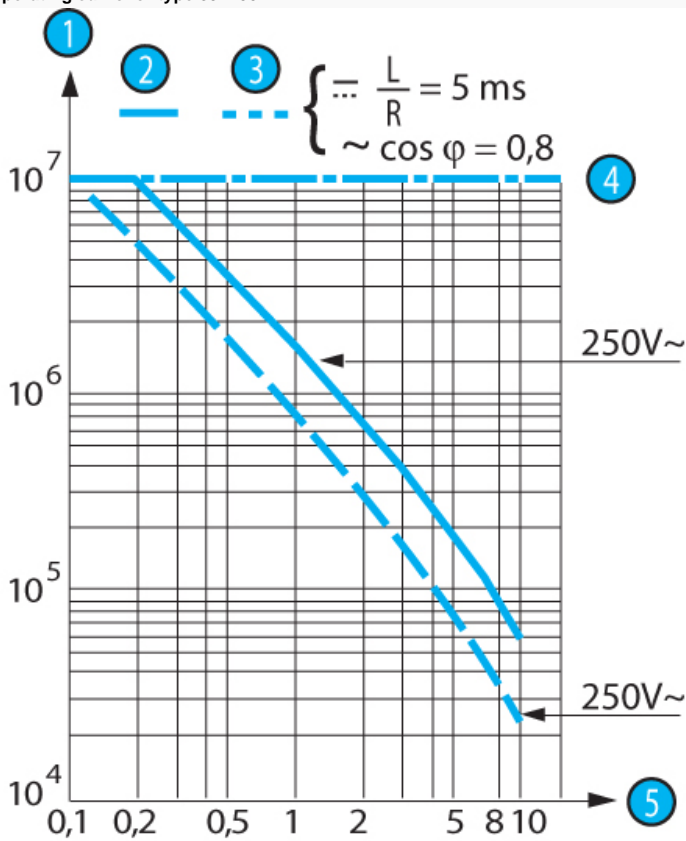


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

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 B	A B	A B	A B	A B
Tripping point	3 1.5	4 2	7 3.5	3 1.5	3 1.5
	10 ^{+1.4} 9.2 ^{+0.9}	10.7 ^{+1.2} 9.6 ⁺¹	12.7 ^{+1.8} 10.6 ^{+1.8}	15.5 ^{+1.4} 14.5 ^{+0.9}	12.9 ^{+1.3} 11.9 ^{+1.1}
Levers	Screw 170D Transverse roller 170EL				
	 				
	Characteristics available on request				

Other information

Mounting - Operation

See basic technical concepts

Product adaptations



- Special levers
- Special connections