

V4 83170 Low force 831704 Part number made to order



- 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 |
|----------------------|------------------|----------------|---------------------------|
| MADE TO ORDER | Low force 831704 | I (changeover) | X1S - X2 - X2S - X3 - X3S |

Specifications

Electrical characteristics

| | |
|------------------------------|---|
| Rating nominal / 250 VAC (A) | 5 |
| Rating thermal / 250 VAC (A) | 6 |

Mechanical characteristics

| | |
|-------------------------------------|-------------------|
| Maximum operating force (N) | 0,6 |
| Min. Release force (N) | 0,1 |
| Maximum total travel force (N) | 1 |
| Max. permitted overtravel force (N) | 10 |
| Maximum rest position (mm) | 9,2 |
| Operating position (mm) | 8,4 ±0,3 |
| Max. differential travel mm | 0,15 |
| Min. overtravel (mm) | 0,5 |
| Ambient operating temperature (°C) | -20 → +125 |
| Mechanical life (operations) | 3.10 ⁷ |
| Contact gap (mm) | 0,4 |
| Weight (g) | 1,7 |

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)

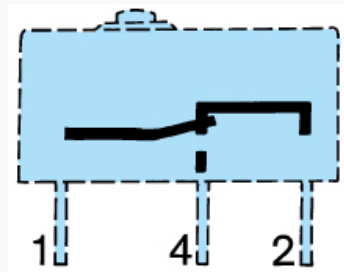
Levers

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

Approvals

NF - UL - cUL

Principles



Dimensions (mm)

Product

83170



| N° | Legend |
|----|----------|
| 1 | OL = 7.6 |

Dimensions (mm)

Product

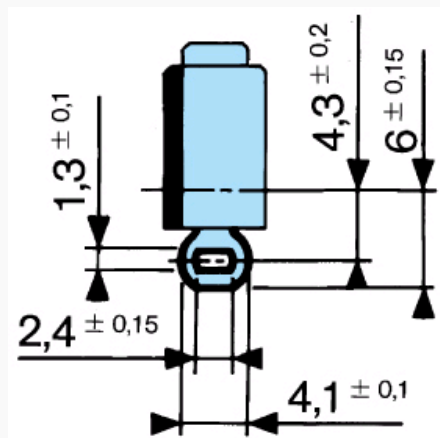
83170 Symmetrical version



Dimensions (mm)

Connections

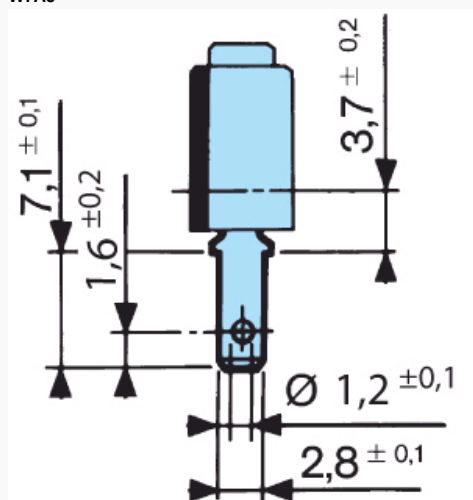
W2



Dimensions (mm)

Connections

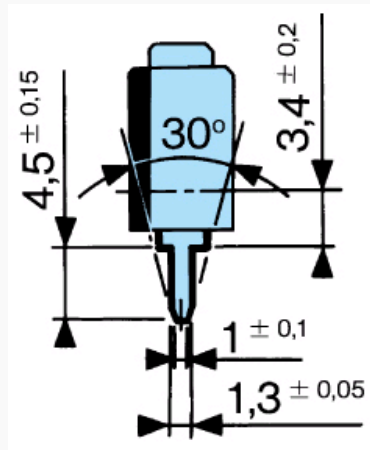
W7A5



Dimensions (mm)

Connections

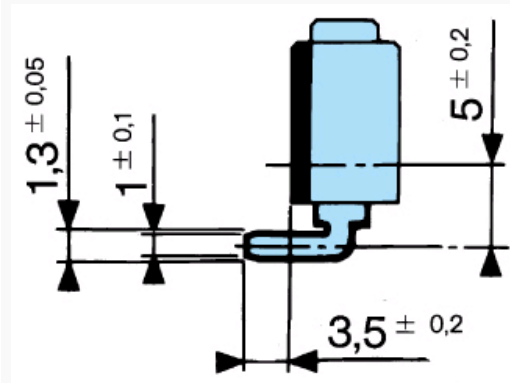
X1 - X1S



Dimensions (mm)

Connections

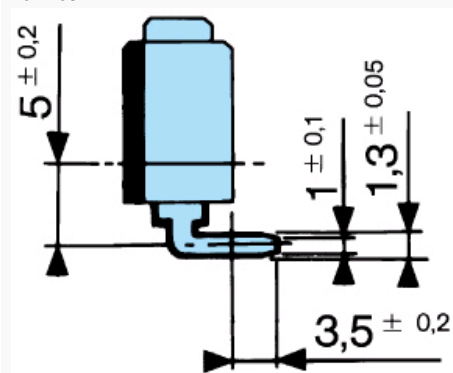
X2 - X2S



Dimensions (mm)

Connections

X3 - X3S

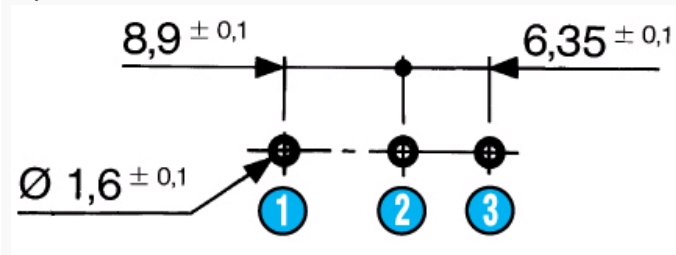


Dimensions (mm)

Drilling

Printed circuit board mounting

Asymmetrical X1 - X2 - X3



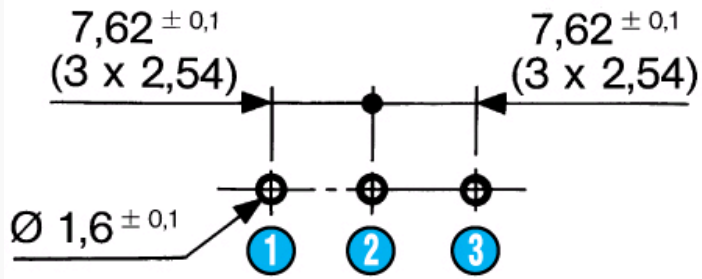
| N° | Legend |
|----|--------|
| 1 | 1.C |
| 2 | 4.NO |
| 3 | 2.NC |

Dimensions (mm)

Drilling

Printed circuit board mounting

Symmetrical X1S - X2S - X3S

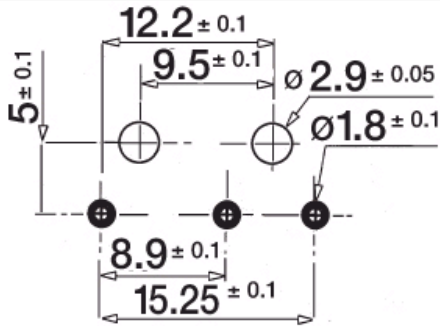


| N° | Legend |
|----|--------|
| 1 | 1.C |
| 2 | 4.NO |
| 3 | 2.NC |

Dimensions (mm)

Drilling

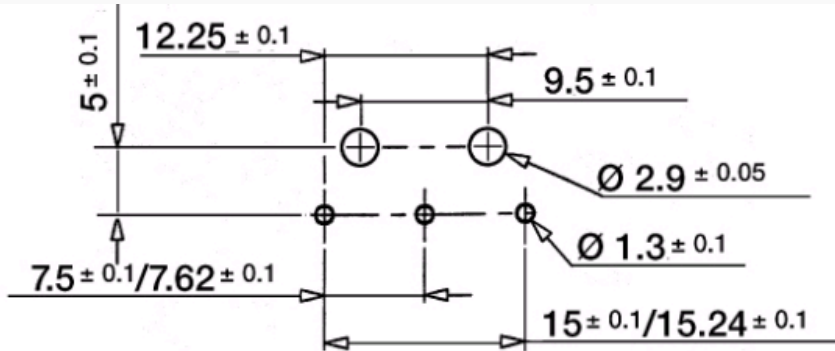
Mounting on a printed circuit board with fixing pins
Asymmetrical



Dimensions (mm)

Drilling

Mounting on a printed circuit board with fixing pins
Symmetrical



Dimensions (mm)

Actuator mounting positions

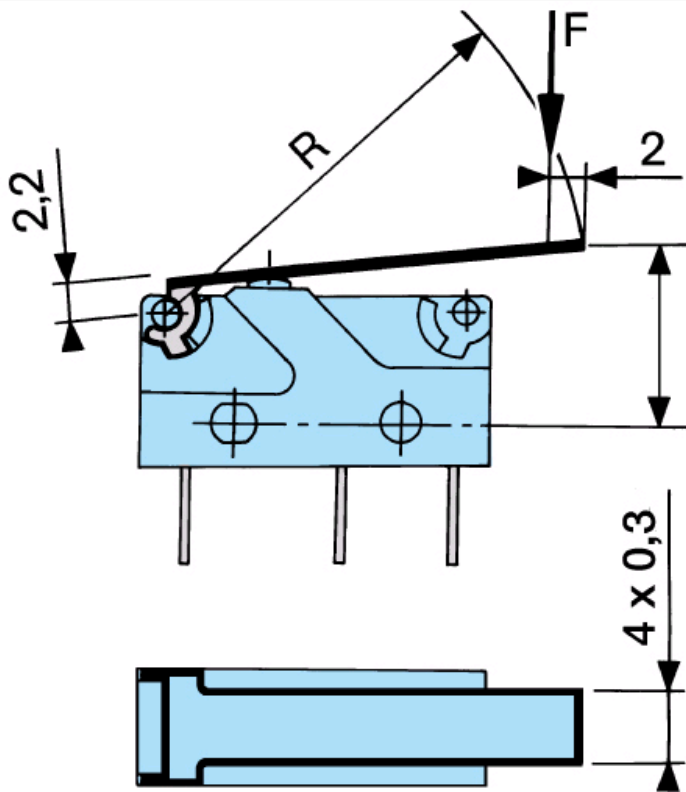


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

Dimensions (mm)

Actuators

170A

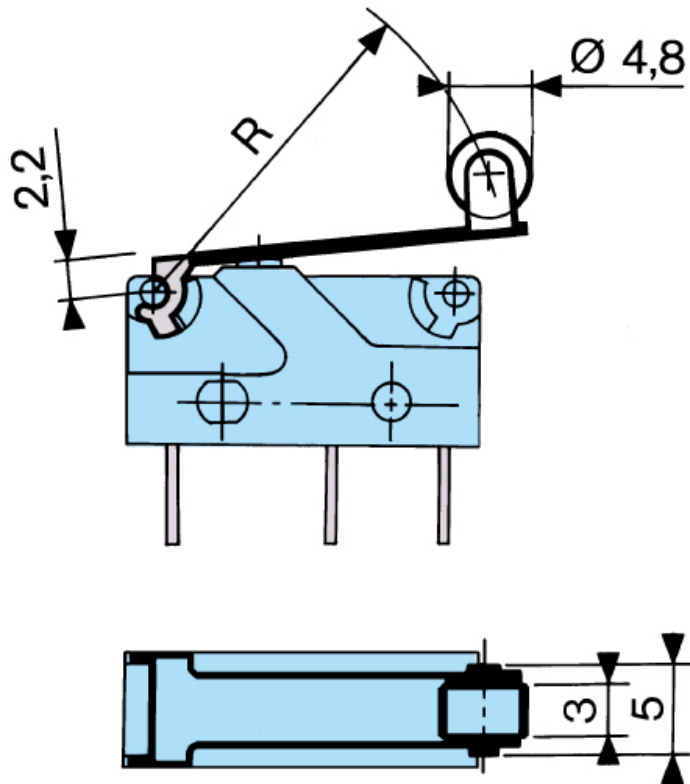


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

Dimensions (mm)

Actuators

170E

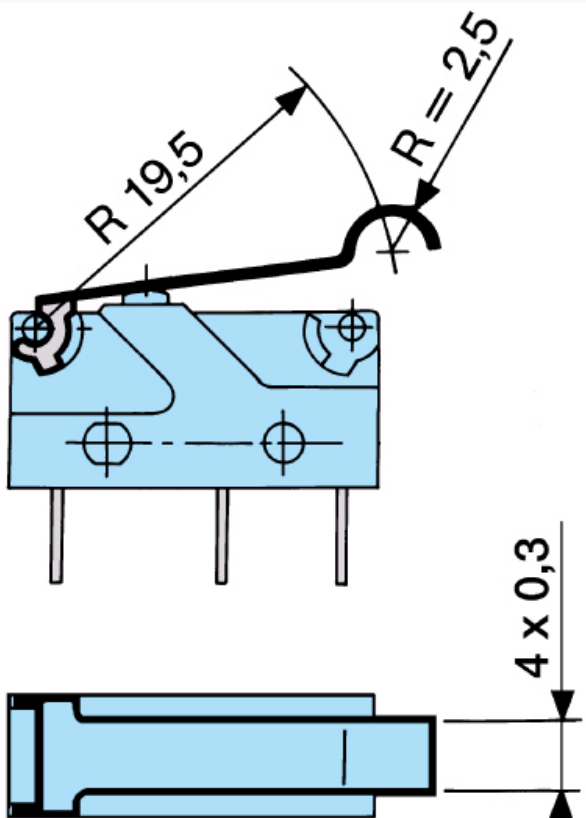


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

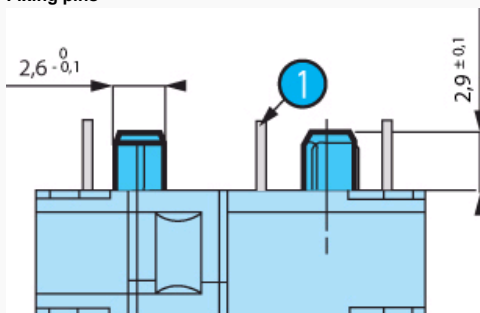
Dimensions (mm)

Actuators

170F

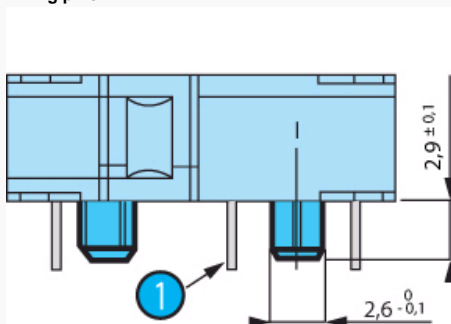


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

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.

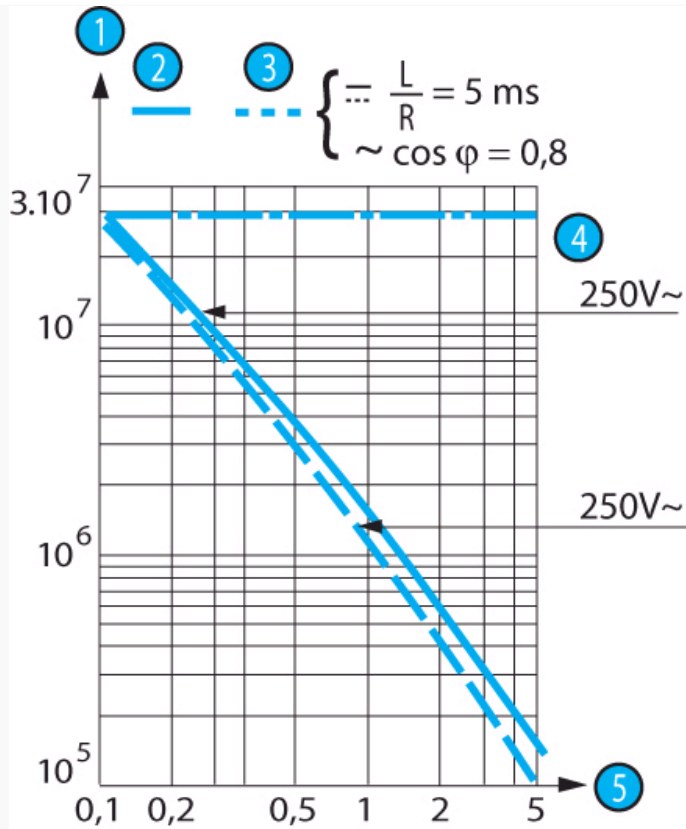
| N° | Legend |
|----|--------------------------|
| ① | Output on unit side : X2 |

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 831704**



| 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 ⁺¹⁴ | 9.2 ⁺⁰⁹ | 10.7 ⁺¹⁷ | 9.6 ⁺¹¹ | 12.7 ⁺¹⁸ | 10.6 ⁺¹⁴ | 15.5 ⁺¹⁴ | 14.5 ⁺⁰⁹ | 12.9 ⁺¹³ | 11.9 ⁺¹¹ |
| Levers | Screw 170D | | Transverse roller 170EL | | | | | | | |
| | | | | | | | | | | |
| Characteristics available on request | | | | | | | | | | |

Other information

Mounting - Operation

See basic technical concepts

Product adaptations



- Special levers
- Special connections