

## 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               |
|----------------------|------------------|----------------|---------------------------|
| <b>MADE TO ORDER</b> | 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 <sup>+0,3</sup> |
| Max. differential travel mm         | 0,15                |
| Min. overtravel (mm)                | 0,5                 |
| Ambient operating temperature (°C)  | -20 → +125          |
| Mechanical life (operations)        | 3.10 <sup>7</sup>   |
| 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)

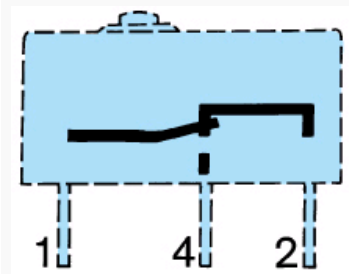
##### Levers

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

##### Approvals

NF - UL - cUL

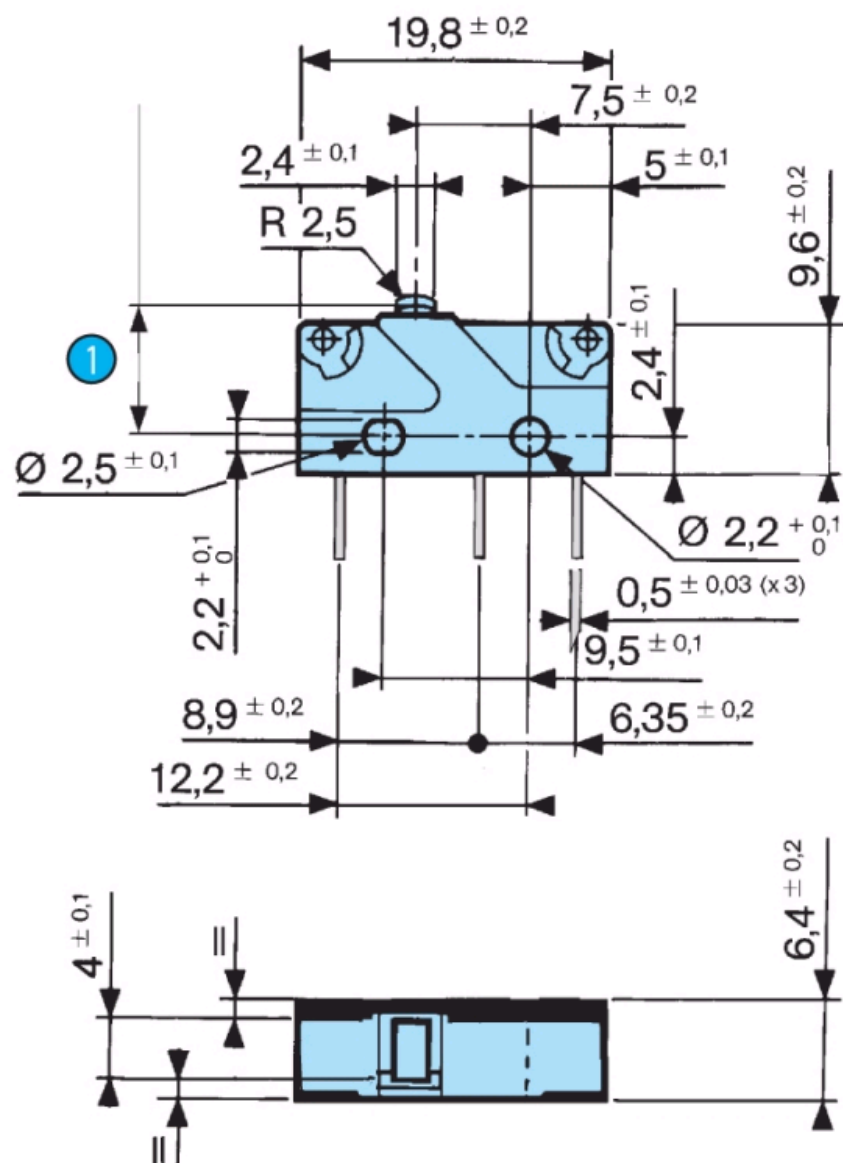
### Principles



### Dimensions (mm)

#### Product

83170

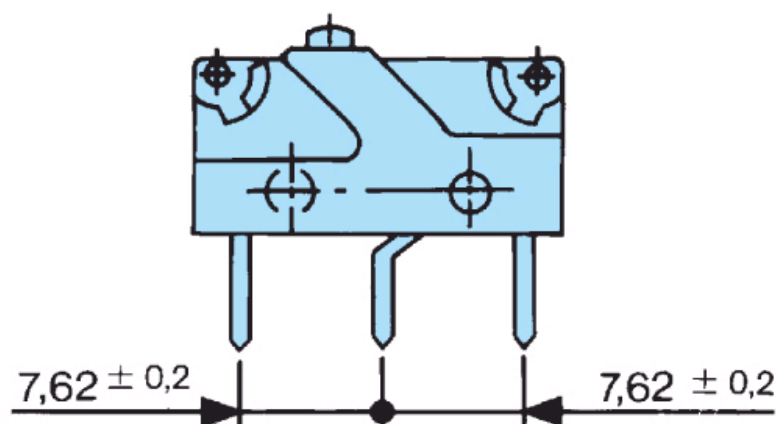


| N° | Legend   |
|----|----------|
| 1  | OL = 7.6 |

#### Dimensions (mm)

#### Product

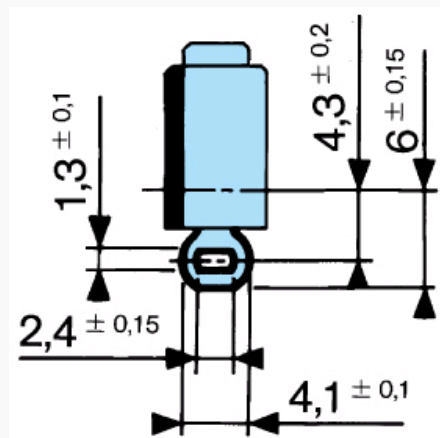
#### 83170 Symmetrical version



## Dimensions (mm)

## Connections

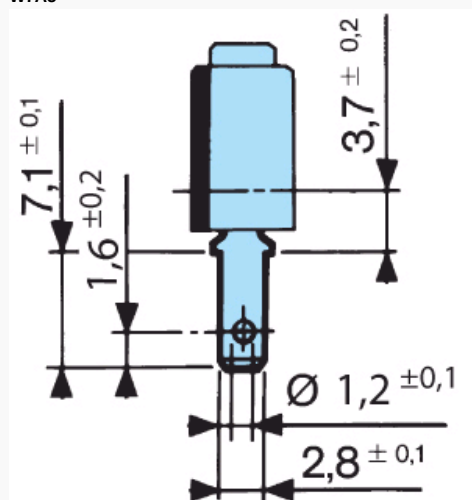
W2



## Dimensions (mm)

## Connections

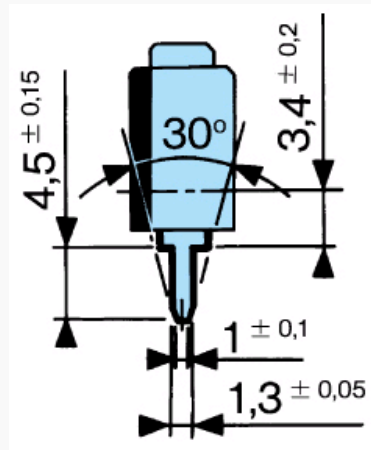
W7A5



## Dimensions (mm)

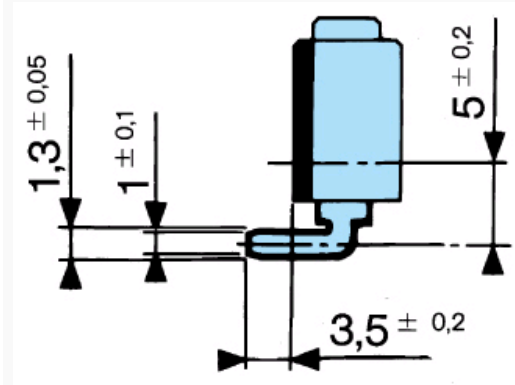
## Connections

X1 - X1S



## Dimensions (mm)

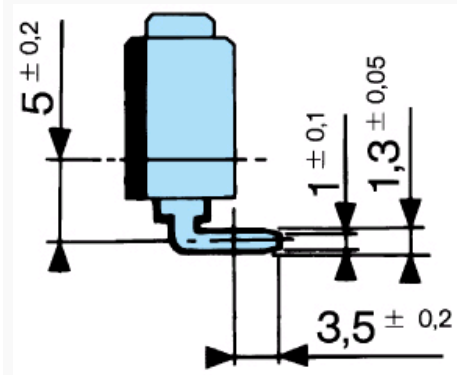
## Connections



Dimensions (mm)

Connections

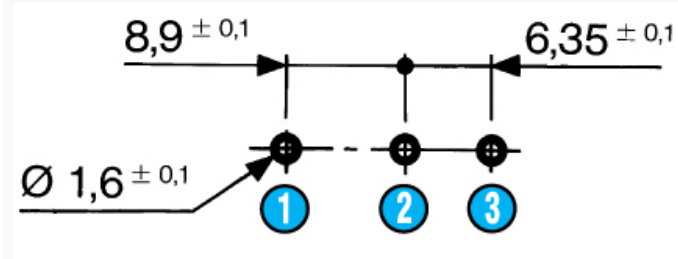
X3 - X3S



Dimensions (mm)

Drilling

Printed circuit board mounting  
Asymmetrical X1 - X2 - X3

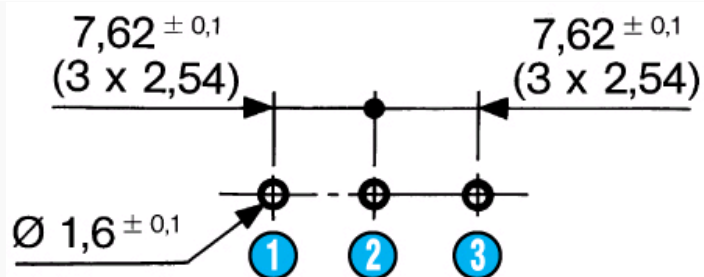


| N° | Legend |
|----|--------|
| 1  | 1.C    |
| 2  | 4.NO   |
| 3  | 2.NC   |

Dimensions (mm)

Drilling

Printed circuit board mounting  
Symmetrical X1S - X2S - X3S

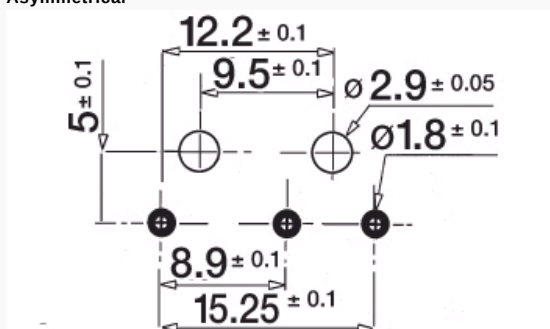


| N° | Legend |
|----|--------|
| 1  | 1.C    |
| 2  | 4.NO   |
| 3  | 2.NC   |

#### Dimensions (mm)

##### Drilling

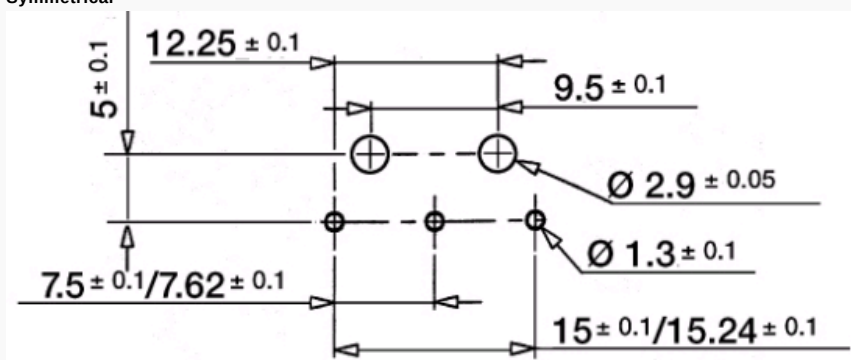
Mounting on a printed circuit board with fixing pins  
Asymmetrical



#### Dimensions (mm)

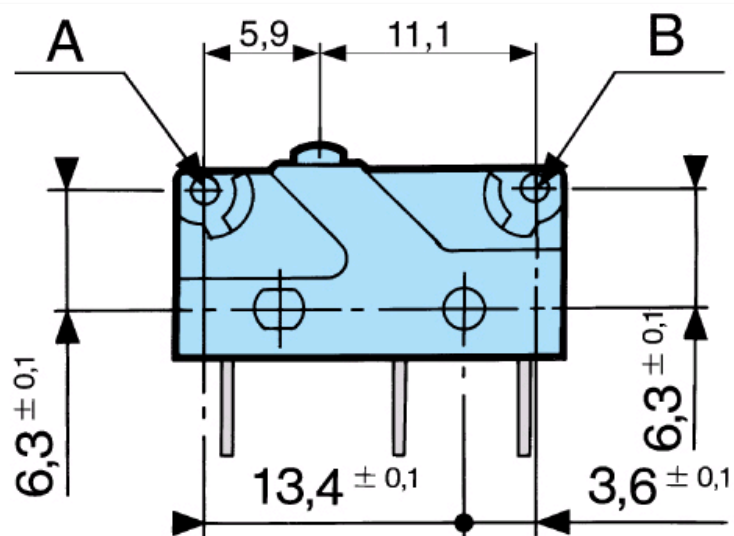
##### Drilling

Mounting on a printed circuit board with fixing pins  
Symmetrical



#### Dimensions (mm)

##### Actuator mounting positions

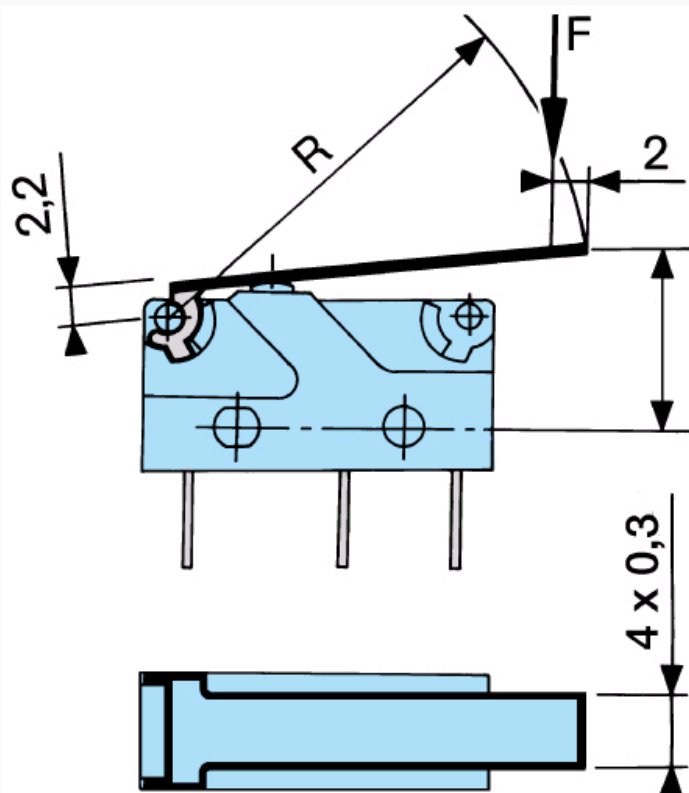


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

#### Dimensions (mm)

#### Actuators

170A

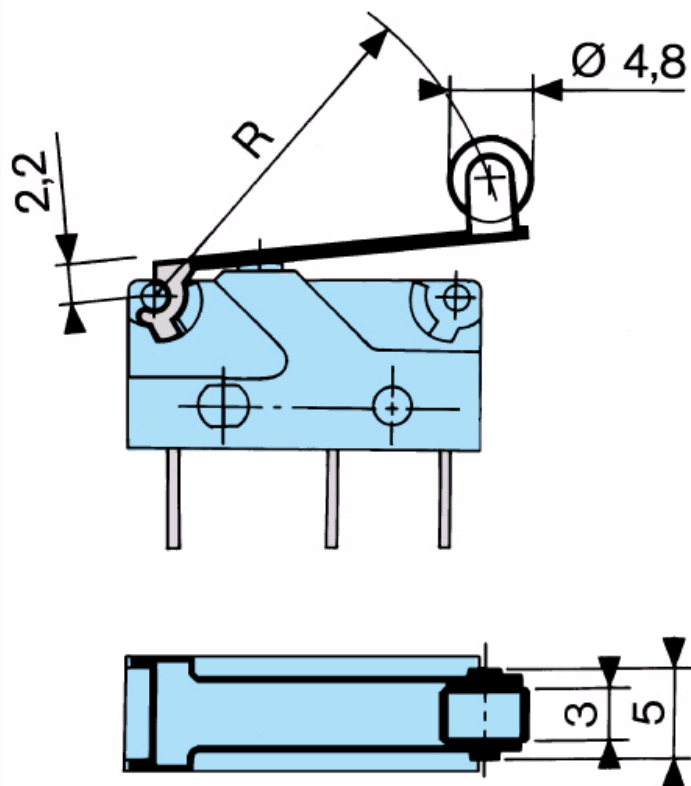


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

#### Dimensions (mm)

#### Actuators

170E

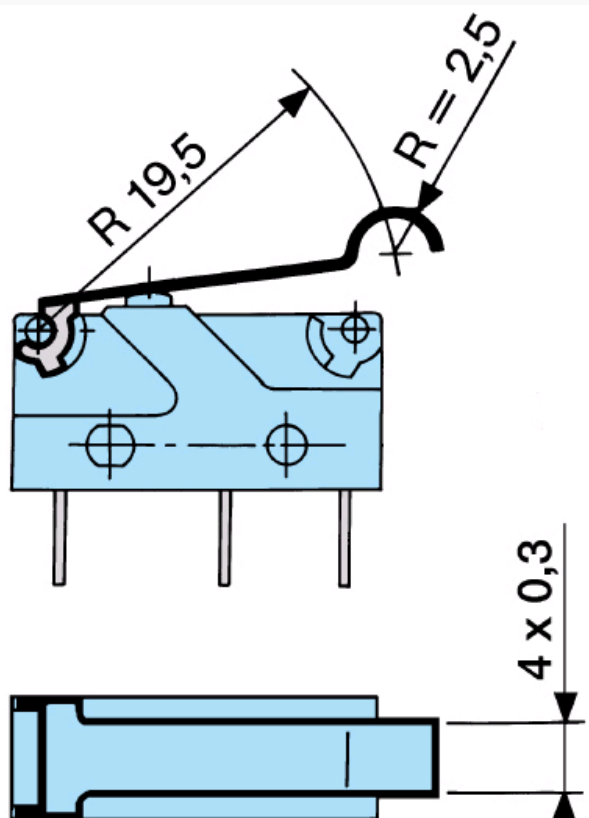


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

#### Dimensions (mm)

#### Actuators

170F

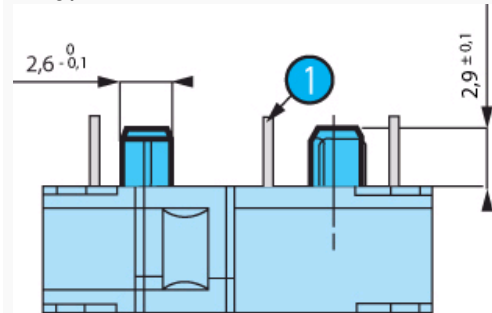


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

Dimensions (mm)

Mounting accessories

Fixing pins



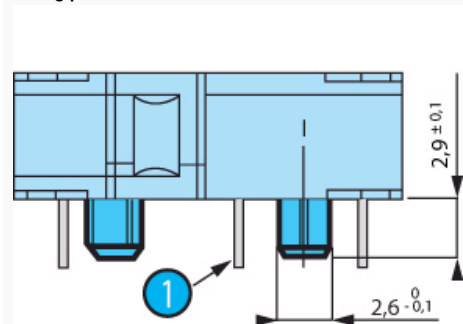
Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

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

Dimensions (mm)

Mounting accessories

Fixing pins

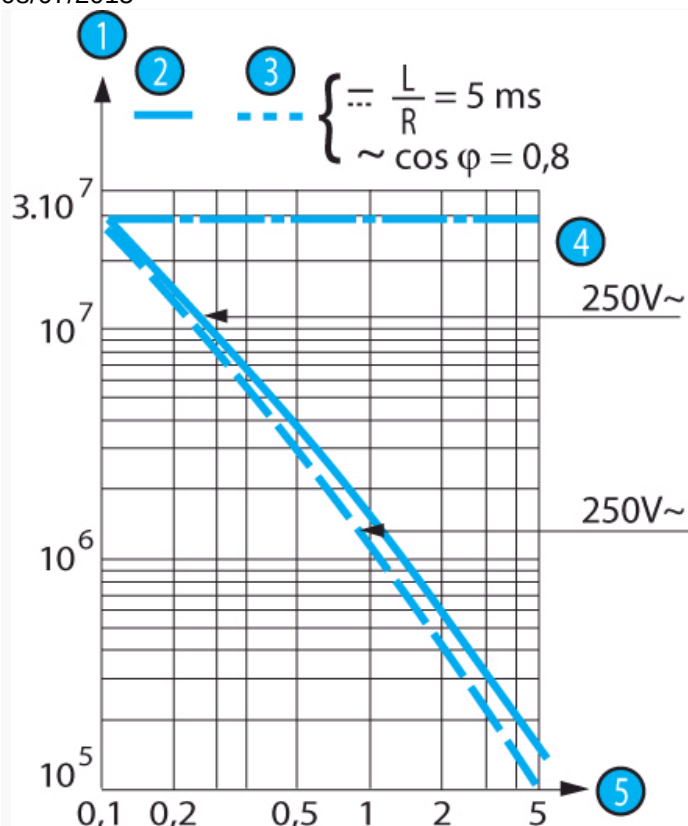


Fixing position Except where otherwise indicated, levers are supplied unmounted. For factory mounting, specify fixing position A or B. To calculate force : divide the switch force by the coefficient in the table. To calculate travel : multiply the switch travel by the same coefficient.

| 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 <sup>+1.4</sup>                                                                  | 9.2 <sup>+0.9</sup> | 10.7 <sup>+1.7</sup>                                                                | 9.6 <sup>+1</sup> | 12.7 <sup>+1.8</sup>                                                                | 10.6 <sup>+1.4</sup> | 15.5 <sup>+1.4</sup>                                                                | 14.5 <sup>+0.9</sup> | 12.9 <sup>+1.3</sup>                                                                | 11.9 <sup>+0.1</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

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