## DOOR SWITCHES - WITH LATCHING FUNCTION

## 83523 / 83528

> Double-break flexible leaf snap-action mechanism for precise operation
, Compact size, narrow profile - Robust construction, metal plunger and bracket
Latching mode, with auto reset at next actuation
Changeover-SPDT microswitch as standard
) One, two and three-pole configurations
> Very long life
) Ratings from 1 mA 4 V -- to 10 A 250 V ~
) Operating temperature $-40^{\circ} \mathrm{C}$ up to $+125^{\circ} \mathrm{C}$
> Choice of connections


Main specifications

|  |  | 835230 | 835233 | 835280 | 835283 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Function | Connections |  |  |  |  |
| I (changeover) | W1 (screw) | 83523011 | 83523311 | - | - |
| 1 (changeover) | W2 (solder) | 83523009 | 83523304 | 83528002 | 83528302 |
| I (changeover) | W3 (QC $6.3 \times 0.8$ ) | 83523012 | - | - | - |
| Electrical characteristics |  |  |  |  |  |
| Rating nominal / 250 V AC (A) |  | 10 | 10 | 6 | 6 |
| Rating thermal / 250 V AC (A) |  | 17.5 | 17.5 | 11 | 11 |
| Mechanical characteristics |  |  |  |  |  |
| Maximum operating force (N) |  | 30 | 30 | 7.5 | 7.5 |
| Maximum total travel force ( N ) |  | 35 | 35 | 10 | 10 |
| Pretravel (mm) |  | 3 | 3 | 2.5 | 2.5 |
| Total travel (mm) |  | 6 | 6 | 6 | 6 |
| Differential travel (mm) |  | 1 | 1 | 1 | 1 |
| Ambient operating temperature ( ${ }^{\circ} \mathrm{C}$ ) |  | $-40 \rightarrow+85$ | $-40 \rightarrow+85$ | $-40 \rightarrow+125$ | $-40 \rightarrow+125$ |
| Mechanical life (operations) |  | $10^{7}$ | $10^{7}$ | $10^{7}$ | $10^{7}$ |
| Weight (g) |  | 40 | 55 | 18 | 23 |

## Additional specifications

- Plunger: nickel-plated brass (83523), nickel-plated steel (83528)
- Mounting bracket: zinc-plated steel
- Contacts: silver alloy (gold-plated silver alloy: on request)
- Terminals: brass (except W2: copper nickel)
- Degree of protection: IP40 (mechanism)
- Protection against electric shock: Class I
- Rated insulation voltage Ui: 250 V (for Ui 400 V , please consult us)
- Impulse withstand voltage Uimp: 2.5 kV
- Pollution degree: 3
- Certification marks: cidu us on request / @c)


## Product adaptations

) Functions on request: normally closed (R) or normally open (C) SPST microswitches
) Adjustable plunger on 83528: 6 mm setting range (SP3141)

) Hexagon socket head plunger
) 3-pole configuration: 835236
) High DC switching capacity on 83523: 5 A 250 V
> Dual-current variants with gold-plated contacts for use from 1 mA to 5 A
) Built-in screw connections on 83523 (with 83112 microswitches)
) High operating temperature on $83523:+125^{\circ} \mathrm{C}$
> cURus approved models

## Principles (per pole)

Double break snap-action switch

Changeover - SPDT (form Za)


Normally closed - SPST-NC (form Y)


Normally open - SPST-NO (form X)


Both circuits must be used at same polarity
Operation:
Normal mode: plunger automatically returns to rest position when released
Latching mode: depress the plunger and turn it a quarter-turn to latch. Then depress to unlatch (back to normal mode).

## Curves

## Operating curve for type 83523



## Operating curve for type 83528


(1) Number of cycles
(2) Resistive circuit
(3) Inductive circuit
(4) Mechanical life limit
(5) Current in Amps

* Dual-current variants are designed to operate equally well on low-current (1 mA 4 V minimum recommended) or medium-current (5 A maximum) circuits. However, a given product should only be used to switch one type of circuit during its working life.


## Dimensions

Products

835230-835233-835236


835280


835283


## Connections

W1 screw with clamp (83523)


W2 solder (83523)


W3 quick-connect $6.3 \times 0.8$ (83523)


W2 solder or quick-connect $2.8 \times 0.5$ (83528)


## Installation recommendations

See "Basic technical concepts"

## How to order

Use the 8 digit part numbers when they are defined
Other cases, precise: Type of switch / nb of poles - Function - Connection - UL approval* - Adaptation* * if needed

Example: 835233 I W3 UL

## Examples of special adaptations



83528 with adjustable plunger
(SP3141)
Setting range: 6 mm

## Warning:

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