

SUB-SUBMINIATURE MICROSWITCHES - CYLINDRIC BODY

83228 / 83229

- › High precision snap-action mechanism with wiping contacts
- › Very compact cylindrical body
- › Flush-mounting model for minimum footprint (83228)
- › Threaded barrel model for precise setting (83229)
- › Long mechanical life
- › Use from 1 mA 4 V_{DC} to 5 A 250 V_{AC}
- › Operating temperature -55 °C up to +140 °C



Main specifications

Function	Connections	Flush-mounting 83228	Threaded barrel fixing 83229
I (changeover)	W2 (solder)	83228001	83229001
Electrical characteristics			
Rating nominal / 250 V AC (A)		5*	5*
Rating thermal / 250 V AC (A)		10	10
Mechanical characteristics			
Maximum operating force (N)		1.7	1.7
Min. Release force (N)		0.4	0.4
Maximum total travel force (N)		2.5	2.5
Max. Allowable overtravel force (N)		10	10
Maximum rest position (mm)		2.4	7
Operating position (mm)		1.95±0.25	6.55±0.25
Differential travel (mm)		0.13±0.06	0.13±0.06
Min. overtravel (mm)		0.15	0.15
Ambient operating temperature (°C)		-55 → +100	-55 → +100
Mechanical life (operations)		2 x 10 ⁶	2 x 10 ⁶
Contact gap (mm)		0.35	0.35
Weight (g)		0.7	1.7

Additional specifications

- Cover: PBT GF (UL 94-V0 / GWFI 960 °C)
- Base: PA46 GF (UL 94-V0 / GWFI 960 °C / GWIT 775 °C)
- Moving blade: gold-plated beryllium copper
- Button: PA66 (optional : ceramic)
- Contacts: gold-plated silver
- Terminals: gold-plated brass
- Threaded barrel: nickel-plated brass
- Degree of protection: IP40 (mechanism)
- Recommended min actuating speed: 0.01 mm/s
- Conformity / Certifications: on request (83229) /

Product adaptations

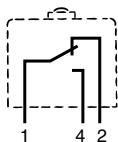


- › Ceramic plunger for high stability of operating position throughout the temperature range
- › High operating temperature: +140 °C
- › Reduced differential travel: max 0.12 mm (SP9202)
- › Telescopic plunger for large overtravel: 1.5 mm (832295)
- › Plunger with ball for lateral approach from any direction
- › M8 x 0.75 threaded barrel
- › 83229 supplied with single nut, assembled or delivered separately
- › cURus approved versions (83229)

Principles

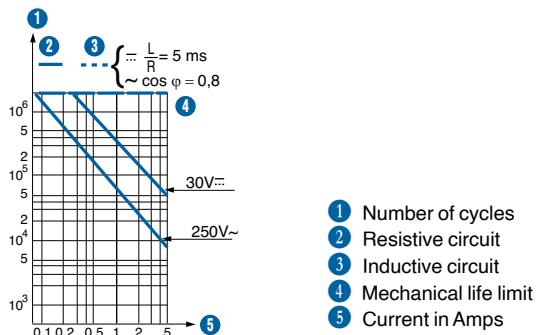
Single break snap-action switch

Changeover - SPDT (form C)



Curves

Operating curve for types 83228 - 83229

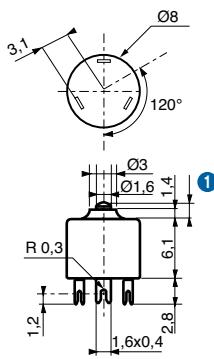


* These products are designed to operate equally well on low-current (1 mA 4 V minimum recommended) or medium-current circuits (5 A maximum) circuits. However, a given product should only be used to switch one type of circuit during its working life.

Dimensions

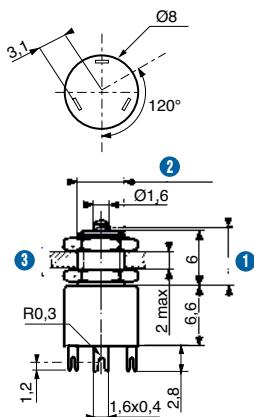
Products

83228



① Operating position

83229



① Operating position

② M5 x 0.5

③ 2 nuts: 7 across flats, max tightening torque 0.8 N.m

Installation recommendations

See "Basic technical concepts"

For use above 200 V, with pollution degree 3: to ensure protection against electric shock after installation in the application, metal barrel shall be earthed if accessible.

How to order

Use the 8 digit part numbers when they are defined

Other cases, precise: Type of microswitch - Function - Connection - UL approval* - Adaptation*

* if needed

Example: 83229 I W2 UL SP9202

Examples of special adaptations



Plunger with ball (Ø 3 mm)
for lateral approach from any
direction (83229B)



Large overtravel model: 83229
1.5 mm overtravel
M8 x 0.75 threaded barrel

Warning:

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