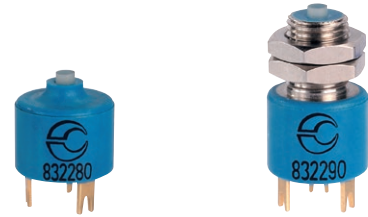


SUB-SUBMINIATURE MICROSWITCHES - CYLINDRIC BODY

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
		83228001	83229001
I (changeover)	W2 (solder)		
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)
- Min actuating speed: 0.01 mm/s
- Recommended min actuating speed

- Certification marks: cURus on request (83229) / EAC

Product adaptations

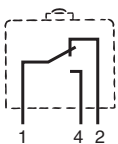


- › Ceramic plunger for high stability of operating position throughout the temperature range
- › High operating temperature: +140 °C
- › Reduced differential travel: max 0.12 mm (SP9202)
- › Telescopic plunger for large overtravel: 1.5 mm (832295)
- › Plunger with ball for lateral approach from any 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)



Standard product

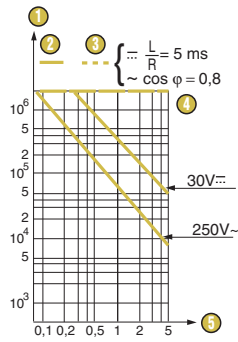
Product made to order



Contact us

Curves

Operating curve for types 83228 - 83229



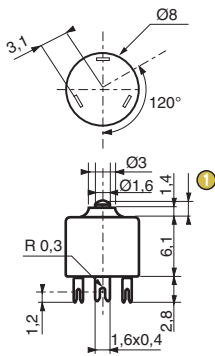
- ① Number of cycles
- ② Resistive circuit
- ③ Inductive circuit
- ④ Mechanical life limit
- ⑤ Current in Amps

* 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

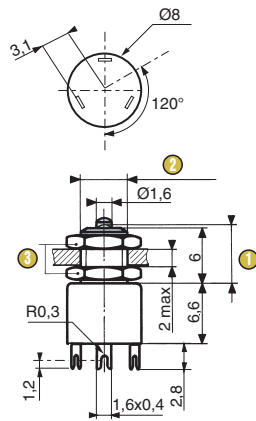
Products

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"

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



Large overtravel model: 832295
 1.5 mm overtravel
 M8 x 0.75 threaded barrel

Warning:

The product information contained in this catalogue is given purely as information and does not constitute a representation, warranty or any form of contractual commitment. Crouzet Automatismes SAS and its subsidiaries reserve the right to modify their products without notice. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate tests, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.