

F1NS

Snap-action Microswitches

Ultraminiature

F1NS

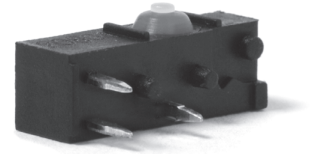
- Characteristics
- Small size
 - Low current
 - High mechanical life
 - PCB mounting from side

Rating Up to 250 VAC, 1 A

Dimensions (mm) 16 × 6.5 × 6

Actuator Plunger, plain lever cam follower, simulated roller levers

Approvals UL, CSA



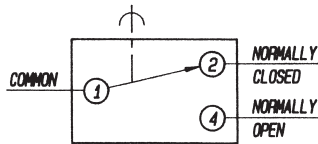
Preferred Range

Ordering Reference	Actuating Force (N) (ozf)		Sealing	Operating pos. (mm)	Terminal	Circuit	Actuator	Contacts	Electrical rating
F1NST8	2.0	7.2	IP5K4	5,9 ± 0,2	PCB	CO	Plunger	Silver	250 VAC, 1 A
F1NST8A1	0,6	2,2	IP5K4	7,6 ± 0,2	PCB	CO	Plain lever	Silver	250 VAC, 1 A
F1NST8AC	0,6	2,2	IP5K4	10,1 ± 1,2	PCB	CO	Plain lever	Silver	250 VAC, 1 A

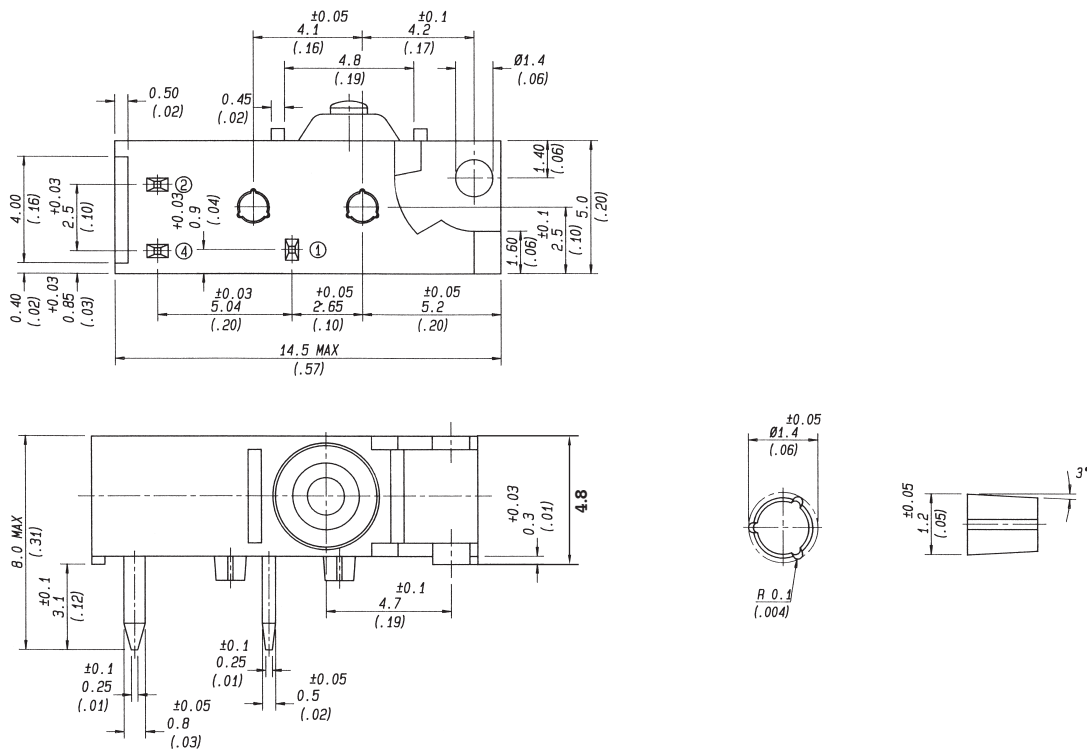
Specifications

Housing	Base: PA66 GF30; Cowl: Silicon; Lid: PA 66
Plunger	POM
Mechanism	Snap-action, coil spring mechanism with stainless steel spring. Single-pole change-over contact
Contacts	Fine silver, gold-plate on silver
Terminals	PCB silver plated
Temperature range °C	-40°C bis +85°C
Mechanical life	10 ⁷ cycles minimum (impact-free actuation)
Protection	Enclosure IP54
Mounting	PCB. Locating pins on housing

Circuit diagram



Dimensions



Recommended maximum electrical ratings

Voltage (VAC)	Resistive load (A)	Inductive load (A)	Voltage (VAC)	Resistive load (A)	Inductive load (A)
125	1	1	up to		
250	1	1	30	2	2
			50	0.5	0.5
			75	0.25	0.25
			125	0.2	0.03

The breaking capacities in the table refer to silver contacts.

For gold contacts: Gold-plated contacts are intended for use in signal circuits where the energy being switched is at the milliwatt level. Power being switched must be limited in order to avoid overheating and possible dispersal of the gold from the contact area.

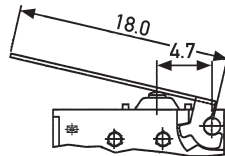
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Operating Characteristics

Actuator	Reference	Actuating Force Maximum		Release Force Minimum		Free Position Maximum		Operating Position		Movement Differential Maximum		Total travelled position Maximum	
		(N)	(ozf)	(N)	(ozf)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
Plunger	F1NST8	2	7.20	0.2	0.72	6.5	0.26	5.9 ± 0.2	0.23 ± 0.008	0.2	0.008	*	

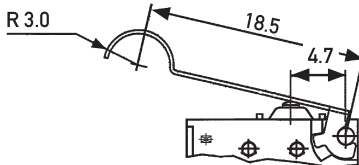


A1-Lever	F1NST8A1	0.6	2.20	0.09	0.32	10.5	0.41	7.6 ± 1.2	0.3 ± 0.05	0.7	0.03	*
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Width of lever 3 mm/0.12 in

AC-Lever	F1NST8AC	0.6	2.20	0.09	0.32	13.3	0.52	10.1 ± 1.2	0.4 ± 0.05	0.7	0.03	*
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Width of lever 3 mm/0.12 in

Datum for Free Position and Operating Position: base of switch opposite plunger.

* Flush with case. The case should not be used as an end stop.

Ordering Reference

F1N		
Type of sealing	No symbol Sealed IP54	Unsealed
Terminals	No symbol PCB 0.8 × 0.5 × 3.45 long	Pre-wired 500 mm with cable box
Circuit	No symbol Normally closed Normally open	Change over
Actuators	No symbol Plain lever 18.0 mm Cam follower lever 18.5 mm	Without lever
Contact Material	No symbol Gold on nickel Gold plate on silver (GP)	Fine silver