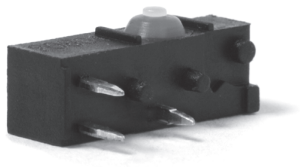
F1NS

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

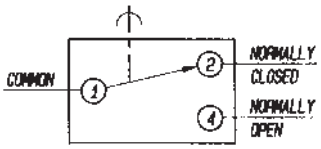
Preferred Range

Ordering Reference	Actuating Force (N)	(ozf)	Sealing	Operating pos. (mm)	Terminal	Circuit	Actuator	Contacts	Electrical rating
F1NST8	2,0	7,2	IP54	5,9 ± 0,2	PCB	CO	Plunger	Silver	250 VAC, 1 A
F1NST8A1	0,6	2,2	IP54	7,6 ± 0,2	PCB	CO	Plain lever	Silver	250 VAC, 1 A
F1NST8AC	0,6	2,2	IP54	10,1 ± 1,2	PCB	CO	Plain lever	Silver	250 VAC, 1 A

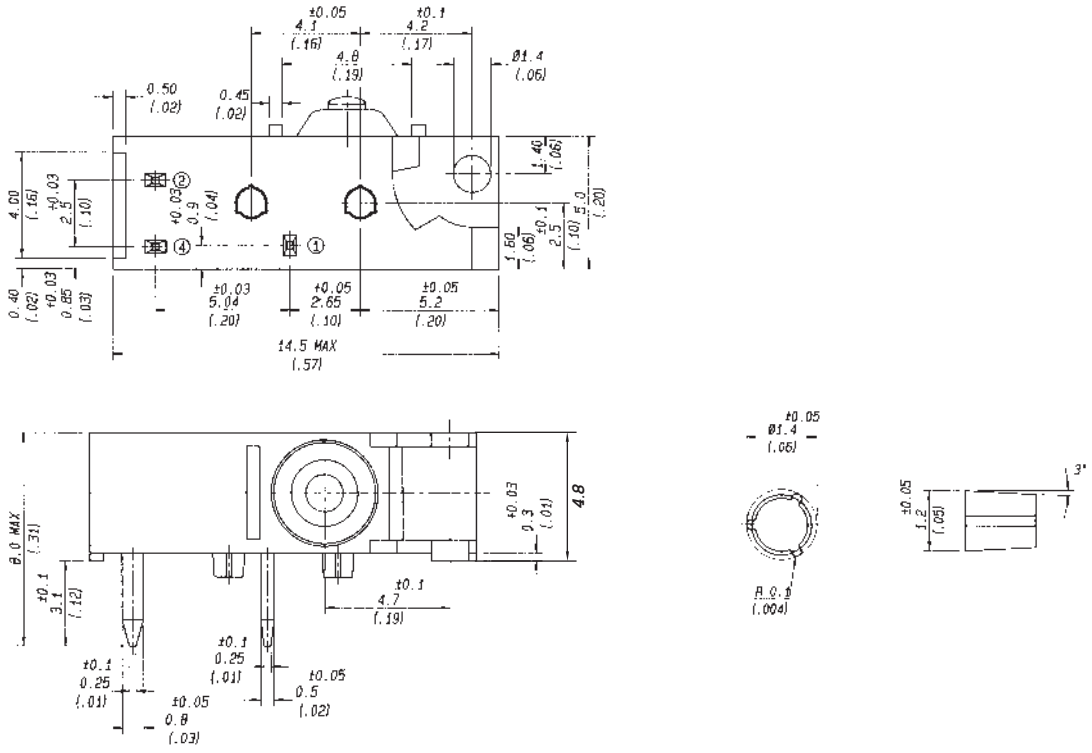
Specifications

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

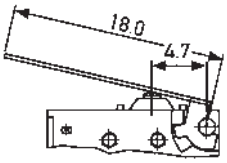
Voltage (VAC)	Resistive load (A)	Inductive load (A)	Voltage (VAC)	Resistive load (A)	Inductive load (A)
125	1	1	up to		
250	1	1	30	2	2
			50	0,5	0,5
			75	0,25	0,25
			125	0,2	0,03

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.

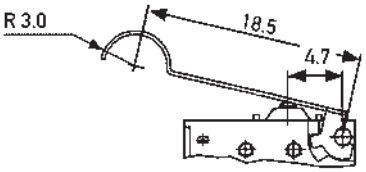
Operating Characteristics

Actuator	Reference	Actuating Force Maximum (N)	(ozf)	Release Force Minimum (N)	(ozf)	Free Position Maximum (mm)	(in)	Operating Position (mm)	(in)	Movement Differential Maximum (mm)	(in)	Total travelled position Maximum (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	*	
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	*	





Width of lever 3 mm/0,12 in



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

F1NS

Terminals	T8	PCB
Circuit	No digit	Change-over
	C2	Normally closed (NC)
	C4	Normally open (NO)
Actuators	No digit	Plunger
	A1	Plain lever
	AC	Cam follower
Contacts	No digit	Fine Silver
	GP	Gold plate on silver