

F1

Snap-action Microswitches

Ultraminiature

F1

Characteristics	<ul style="list-style-type: none">■ High electrical rating from a very small switch■ Gold plated contacts■ PCB mounting from side■ UL and CSA approved
Rating	Up to 250 VAC, 5 A
Dimensions (mm)	16 × 6.5 × 5.7
Actuator	Plunger, plain lever
Approvals	UL, CSA



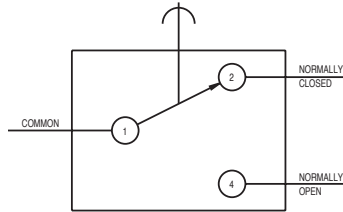
Preferred Range

Ordering Reference	Actuating Force (N) (ozf)		Sealing	Operating pos. (mm) (in)		Terminal	Circuit	Actuator	Contacts	Electrical rating
F1T8GPUL	1.4	5.00	IP40	6.35	0.25	PCB	CO	Plunger	Gold plate	Up to 250 VAC, 5 A
F1T8Y1GPUL	0.5	1.8	IP40	8.5	0.33	PCB	CO	Lever	Gold plate	Up to 250 VAC, 5 A

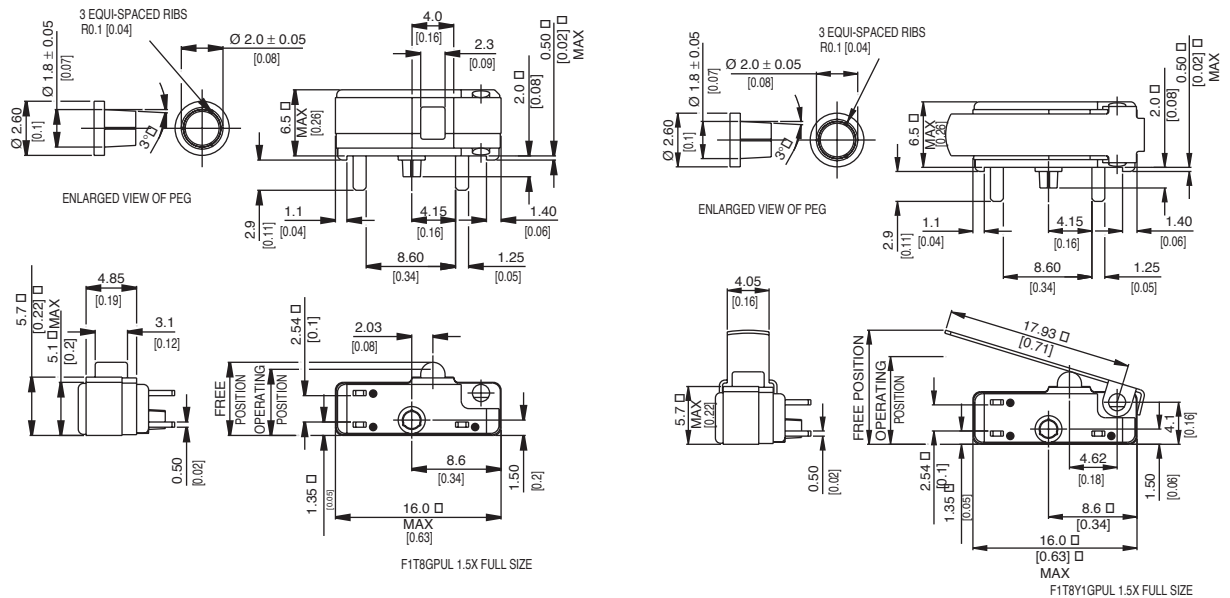
Specifications

Housing	Glass fibre reinforced nylon
Plunger	Nylon
Mechanism	Snap-action, coil spring mechanism with stainless steel spring
Functions	Single pole change-over
Contacts	Gold plate on silver
Terminals	PCB - copper, gold-flashed
Temperature range °C	-40°C to +85°C
Mechanical life	10 ⁶ cycles minimum (impact-free actuation)
Protection	IP40 (enclosure)
Mounting	Side mount PCB with locating pin on housing
Actuators	Plain plunger, straight lever

Circuit diagram



Dimensions



Recommended maximum electrical ratings

Voltage (max)	Resistive load (A)	Inductive load	Approval
250 VAC	5 (0.75 pf)	5	UL 1054/CSA 22.2 No. 55 - 6,000 operations
0 - 15 VDC	5		General rating - 50,000 operations
15 - 30 VDC	10	10	General rating - 50,000 operations

F1 switches have gold-plated silver contacts. Switches with gold-plated contacts are intended for use in circuits where switching is at milliwatt levels. In this case, the power being switched must be limited to avoid the erosion of gold plate from the contact area. However, as the underlying contacts are silver, the same power ratings apply.

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Operating Characteristics

Actuator	Reference	Actuating Force		Release Force		Free Position		Operating Position		Movement Differential		Over Travel	
		Maximum (N)	(ozf)	Minimum (N)	(ozf)	Maximum (mm)	(in)	(mm)	(in)	Maximum (mm)	(in)	(mm)	(in)
Plunger	F1T8GPUL	1,4	5,00	0,28	1,00	7,1	0,28	6,35 ± 0,38	0,25 ± 0,015	0,1	0,004	*	
Straight lever	F1T8Y1GPUL	0,5	1,8	0,06	0,022	11,0	0,43	8,5 ± 1,5	0,33 ± 0,06	0,5	0,02	*	

Width of lever 4.05 mm/0.16 in

* Plunger can be depressed flush with housing. The housing should not be used as an end stop.

Ordering Reference

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Terminals	T8	PCB	1,25 × 0,5 × 2,9 long
Circuit		No symbol	Change-over
Actuators		No symbol	Without lever
	Y1	Plain lever 18,0 mm	
	YR1	Roller lever 16,0 mm	
Contacts		No symbol	Fine silver
	GP	Gold plate on silver (GP)	
Approvals		No symbol	Without approval
	UL	UL and CSA approval	