

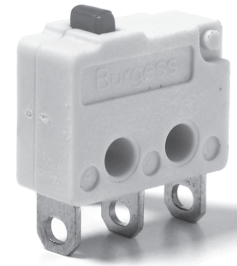
# F4

## Snap-action Microswitches

Ultraminiature

### F4

Characteristics	<ul style="list-style-type: none"> <li>■ High electrical rating from a very small switch</li> <li>■ Long mechanical and electrical life</li> <li>■ Gold-plated contact option</li> </ul>
Rating	Up to 250 VAC, 5 A
Dimensions (mm)	12.8 × 10 × 5
Actuator	Plunger, plain lever, simulated roller (cam follower) lever
Approvals	UL and CSA



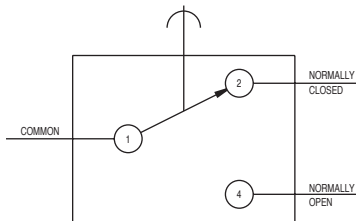
### Preferred Range

Ordering Reference	Actuating Force (N) (ozf)		Sealing	Operating pos. (mm) (in)		Terminal	Circuit	Actuator	Contacts	Electrical rating
F4T7UL	1.4	5.00	IP40	8.1	0.32	Solder	CO	Plunger	Silver	Up to 250 VAC, 5 A
F4T7GPUL	1.4	5.00	IP40	8.1	0.32	Solder	CO	Plunger	Gold plate	Up to 250 VAC, 5 A
F4T7Y1UL	0.6	2.20	IP40	8.2	0.32	Solder	CO	Plain lever	Silver	Up to 250 VAC, 5 A
F4T7Y1GPUL	0.6	2.20	IP40	8.2	0.32	Solder	CO	Plain lever	Gold plate	Up to 250 VAC, 5 A
F4T7YCUL	0.7	2.50	IP40	10.3	0.41	Solder	CO	Simulated roller	Silver	Up to 250 VAC, 5 A
F4T7YCGPUL	0.7	2.50	IP40	10.3	0.41	Solder	CO	Simulated roller	Gold plate	Up to 250 VAC, 5 A

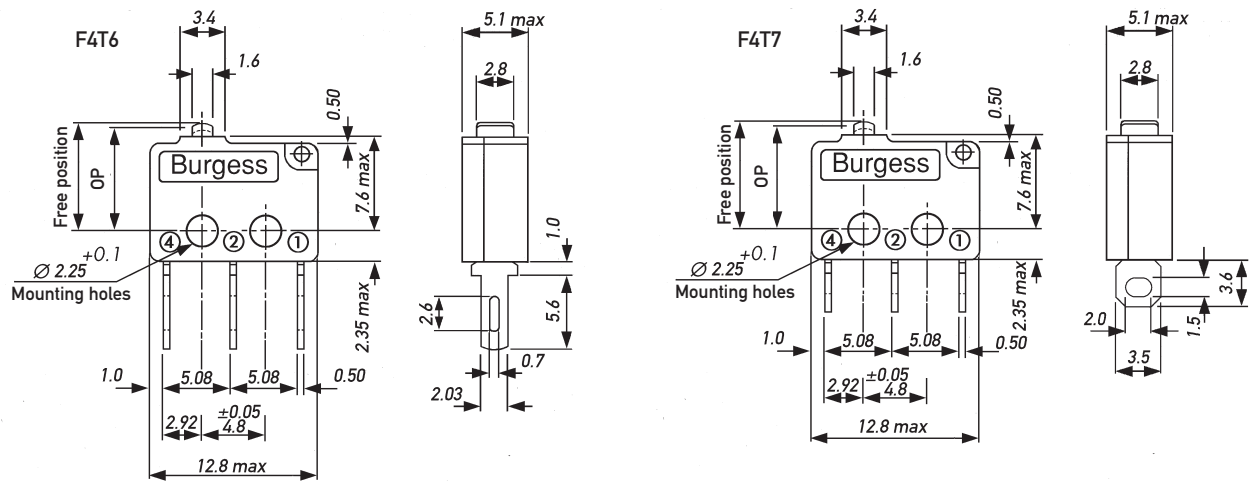
## Specifications

Housing	Glass fibre reinforced nylon
Plunger	Nylon
Mechanism	Snap-action, single pole
Functions	Change-over, Normally open, Normally closed
Contacts	Fixed, Moving – Silver or Gold plate on silver
Terminals	2.0 mm (0.08 in) faston and solder - brass, gold flashed
Temperature range °C	-40°C to +85°C
Mechanical life	10 <sup>7</sup> cycles minimum (impact free actuation)
Protection	IP 40 (enclosure)
Mounting	Side mounting
Actuators	Plain lever; simulated roller (cam follower) lever
Accessories	Lug mounting frame, insulating sheet, spring-leaf actuator

Circuit diagram



Dimensions



## Recommended maximum electrical ratings

Voltage (max)	Load (A)	Approval
250 VAC	5 (0.75 pf)	UL 1054/CSA 22.2 No. 55 - 6,000 operations
125 VAC	5 (0.75 pf)	UL 1054/CSA 22.2 No. 55 - 6,000 operations
0 - 15 VDC	5	General rating - 50,000 operations
15 - 30 VDC	3	General rating - 50,000 operations

F4 switches are available with either silver or 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.

# F4

## 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)	
Plunger	F4T6 F4T7	1.4	5.00	0.25	0.90	8.8	0.35	8.1 <sup>+0.3</sup> <sub>-0.2</sub>	0.32 <sup>+0.01</sup> <sub>-0.008</sub>	0.13	0.005	*
Y1-Lever	F4T6Y1 F4T7Y1	0.6	2.20	0.07	0.25	10.0	0.39	8.2 <sup>+1.0</sup> <sub>-0.7</sub>	0.32 <sup>+0.04</sup> <sub>-0.03</sub>	0.70	0.030	*
Width of lever 3.0 mm/0.12 in												
YC-Lever	F4T6YC F4T7YC	0.7	2.50	0.09	0.32	11.7	0.46	10.3 <sup>+0.8</sup> <sub>-0.55</sub>	0.41 <sup>+0.03</sup> <sub>-0.02</sub>	0.45	0.020	*
Width of lever 3.0 mm/0.12 in												

Operating characteristics are specified from the mounting holes.

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

## Ordering Reference

F4

Terminals	T6	Faston	2.03 × 0.5 × 6.6 long
	T7	Solder	3.50 × 0.5 × 3.6 long
	T8	PCB	0.8 × 0.5 × 4.0 long
Circuit		No symbol	Change over
	C2	Normally closed	
	C4	Normally open	
Actuators		No symbol	Without lever
	Y1	Plain lever 21.0 mm	
	YC	Cam follower lever 16.9 mm	
Contacts		No symbol	Fine silver
	GP	Gold plate on silver (GP)	
Approvals		No symbol	Without approval
	UL	UL and CSA approval	

# F5

## Snap-action Microswitches

Ultraminiature

### F5

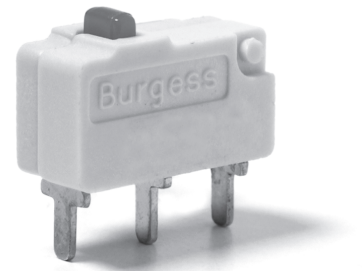
- Characteristics
- High electrical rating from a very small switch
  - Long mechanical and electrical life
  - PCB terminals
  - Gold-plated contact option
  - UL and CSA approved

Rating Up to 250 VAC, 5 A

Dimensions (mm) 12.8 × 7.25 × 5

Actuator Plunger, plain lever, simulated roller (cam follower) lever

Approvals UL and CSA



### Preferred Range

Ordering Reference	Actuating Force		Sealing	Operating pos.		Terminal	Circuit	Actuator	Contacts	Electrical rating
	(N)	(ozf)		(mm)	(in)					
F5T8UL	1.4	5.00	IP40	8.75	0.34	PCB	C0	Plunger	Silver	Up to 250 VAC, 5 A
F5T8GPUL	1.4	5.00	IP40	8.75	0.34	PCB	C0	Plunger	Gold plate	Up to 250 VAC, 5 A
F5T8Y1UL	0.6	2.20	IP40	8.80	0.35	PCB	C0	Plain lever	Silver	Up to 250 VAC, 5 A
F5T8Y1GPUL	0.6	2.20	IP40	8.80	0.35	PCB	C0	Plain lever	Gold plate	Up to 250 VAC, 5 A
F5T8YCUL	0.7	2.50	IP40	10.90	0.43	PCB	C0	Simulated roller	Silver	Up to 250 VAC, 5 A
F5T8YCGPUL	0.7	2.50	IP40	10.90	0.43	PCB	C0	Simulated roller	Gold plate	Up to 250 VAC, 5 A