

# F5

## Snap-action Microswitches

Ultraminiature

### F5

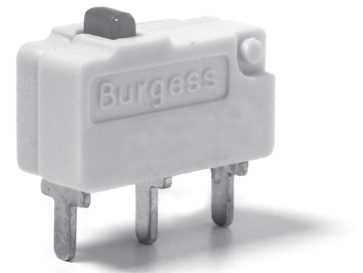
- Characteristics
- High electrical rating from a very small switch
  - Long mechanical and electrical life
  - PCB terminals
  - Gold-plated contact option
  - UL and CSA approved

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



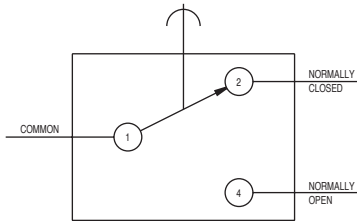
### Preferred Range

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

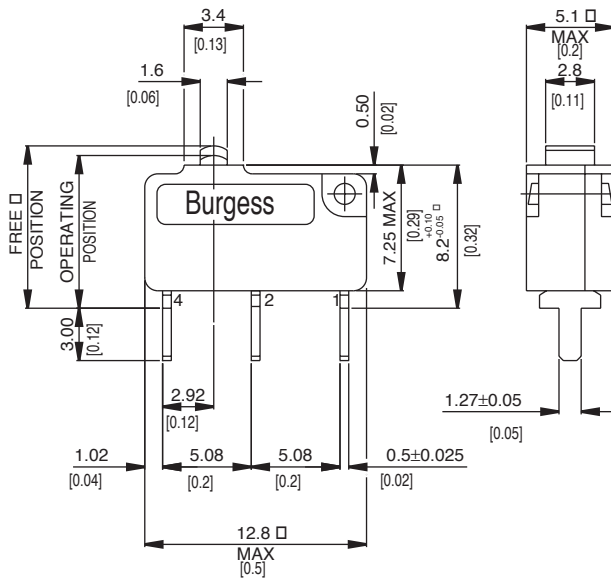
## Specifications

Housing	Glass fibre reinforced nylon
Plunger	Nylon
Mechanism	Snap-action, single pole
Functions	Change-over, Normally open
Contacts	Fixed, Moving - Silver or Gold plate on silver
Terminals	PCB - 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	PCB
Actuators	Plain lever; simulated roller (cam follower) lever

Circuit diagram



Dimensions



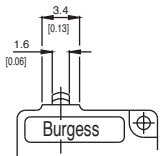
## Recommended maximum electrical ratings

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

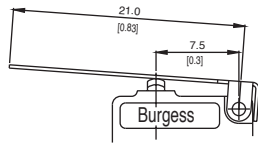
F5 switches are available with either silver or gold-plated silver contacts. Switches with gold-plated contacts are intended for use in circuits where switching is at milliwatt levels. In this case, the power being switched must be limited to avoid the erosion of gold plate from the contact area. However, as the underlying contacts are silver, the same power ratings apply.

### Operating Characteristics

Actuator	Reference	Actuating Force Maximum		Release Force Minimum		Free Position Maximum		Operating Position		Movement Differential Maximum		Over travel
		(N)	(ozf)	(N)	(ozf)	(mm)	(in)	(mm)	(in)	(mm)	(in)	
Plunger	F5T8	1,4	5,00	0,25	0,90	9,5	0,37	8,75 ± 0,3	0,34 ± 0,012	0,13	0,005	*

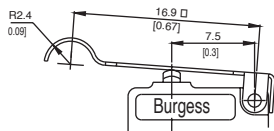


Y1-Lever	F5T8Y1	0,6	2,20	0,07	0,25	10,7	0,42	8,8 ± 1,1	0,35 ± 0,04	0,70	0,030	*
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Width of lever 3.0 mm/0.12 in

YC-Lever	F5T8YC	0,7	2,50	0,09	0,32	12,4	0,49	10,9 ± 0,85	0,43 ± 0,03	0,45	0,020	*
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Width of lever 3.0 mm/0.12 in

Operating characteristics are specified from the terminal shoulder.

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

### Ordering Reference

F5		
Terminals	T8	PCB 1,27 × 0,5 × 3,0 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
Contact Material	No symbol	Fine silver
	GP	Gold plate on silver (GP)
Approvals	No symbol	Without approval
	UL	UL and CSA approval