

# F1NS

## F1NS



- Characteristics
- small size
  - low current
  - long mechanical life
  - PCB mounting
  - sealed IP54 (option)

Rating Up to 250 VAC, 1 A

Dimensions (mm) 14.6 × 6.5 × 6

- Actuator
- plunger
  - plain lever
  - simulated roller lever/cam follower

Approvals none

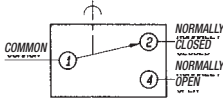
## Preferred Range

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

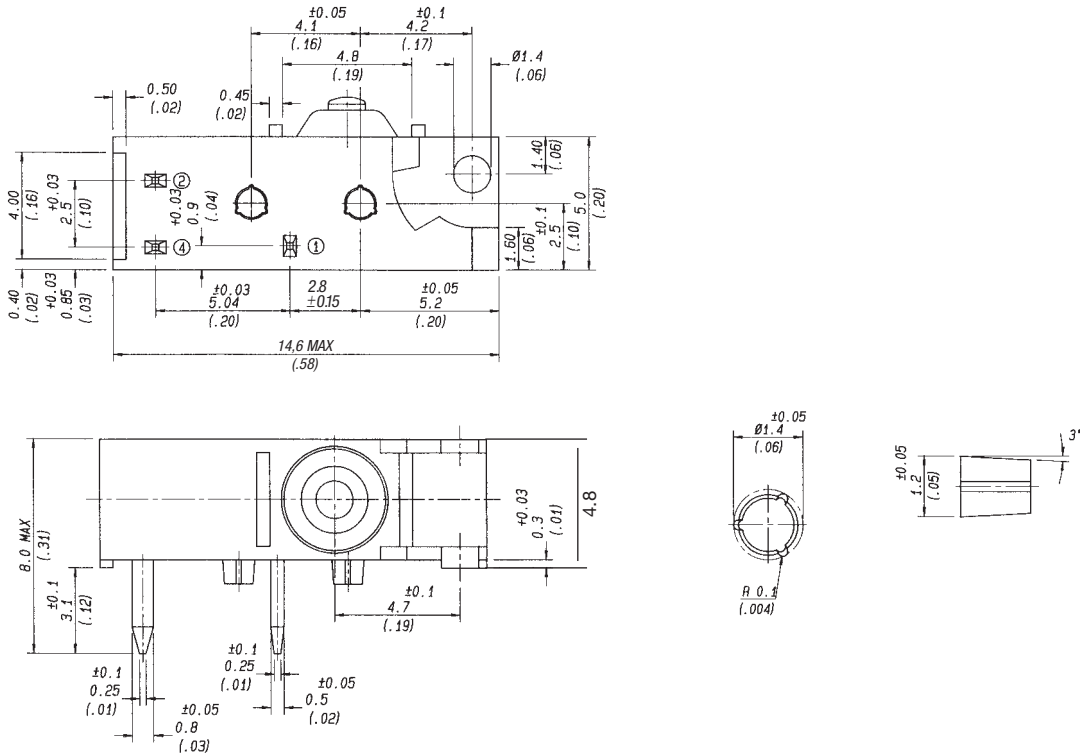
## Specifications

|                      |   |
|----------------------|---|
| Housing              | Base: PA 6.6; Cowl: Silicon; Lid: PA 6.6  |
| 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 - Phosphor Bronze silver plated   |
| Temperature range °C | -40°C bis +85°C   |
| Mechanical life      | 10 <sup>7</sup> cycles minimum (impact-free actuation)  |
| Protection           | Enclosure IP40 (F1N), IP54 (F1NS)   |
| Mounting             | PCB. Locating pins on housing   |

Circuit diagram



Dimensions



## Recommended maximum electrical ratings

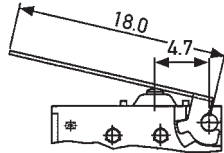
| Voltage (VAC) | Resistive load (A) | Inductive load (A) | Voltage (VDC) | Resistive load (A) | Inductive load (A) |
|---------------|--------------------|--------------------|---------------|--------------------|--------------------|
| 125           | 1                  | 1                  | up to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

## Operating Characteristics

| Actuator | Reference | Actuating Force Maximum |       | Release Force Minimum |       | Free Position |      | Operating Position Maximum |              | 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* |                                  |      |

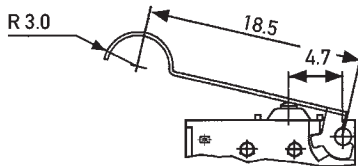


|          |          |     |      |      |      |      |      |           |            |     |        |  |  |
|----------|----------|-----|------|------|------|------|------|-----------|------------|-----|--------|--|--|
| A1-Lever | F1NST8A1 | 0,6 | 2,20 | 0,09 | 0,32 | 10,5 | 0,41 | 7,6 ± 1,2 | 0,3 ± 0,05 | 0,7 | 0,03 * |  |  |
|----------|----------|-----|------|------|------|------|------|-----------|------------|-----|--------|--|--|



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 * |  |  |
|----------|----------|-----|------|------|------|------|------|------------|------------|-----|--------|--|--|



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

|                  |               |  |   |    |   |    |
|------------------|---------------|--|---|----|---|----|
| Basic type       | F1N           | Example: F1N   | S | T8 | A | AU |
| Type of sealing  | S             | No symbol, unsealed<br>Sealed IP5K4  |   |    |   |    |
| Terminals        | T8            | PCB 0.8 × 0.5 × 3.45 long  |   |    |   |    |
| Circuit          |               | No symbol, change-over   |   |    |   |    |
| Actuators        | A<br>A1<br>AC | No symbol, without lever<br>Special lever A type (see specification)<br>Plain lever 18.0 mm<br>Cam follower lever 18.5 mm  |   |    |   |    |
| Contact Material | AU<br>GP      | No symbol, Ag<br>Gold on nickel<br>Gold plate on Ag (GP)   |   |    |   |    |
| Special Features | /□□□□         | Burgess specialise in customer specific solutions.<br>Additional product variants are available or can be provided.<br>If your requirements cannot be satisfied from the options listed,<br>please contact us. |   |    |   |    |