

#### **SERIES 18 - SNAP ACTION SWITCH**

The Series 18 is ITW Switches' smallest Snap Action switch. It is a single pole with a self cleaning 'butterfly' mechanism. This gives a high performance switch in terms of life and load ability, switching from logic loads to 8A max.

The series comes in gold double break, snap action contacts with gold solder terminals as standard. PCB terminals and custom brackets and actuators are available as non-standard options. Its small size, high performance and high temperature rating, provide a switch that is suitable for many demanding applications.

The switch has UL and MIL-Specification approval according to version.



- Industrial valve controls
- Aircraft rotary actuator
- Aircraft linear actuator
- Float control pumps
- Spool valves
- Medical equipment
- Aircraft fuel valves
- Pressure switches

# KEY FEATURES:

- Gold contacts
- Solder terminals
- Meets MIL-S-8805/76
- UL recognized and CSA certified: Lever and roller actuator are available
- requirements CSA certified:
  - Snap action uses high integrity butterfly action

 Diallyl Phthalate body (DAP) – wide temperature range

Form Z contact – covers all switching

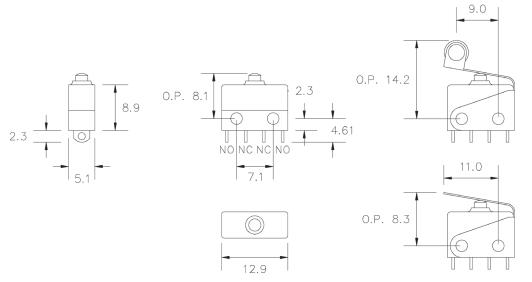
# Non-Standard Options:

- PCB terminals
- Custom brackets and actuators

# Actuation Information: There are a number of actuato

There are a number of actuators designed to fit directly onto the Snap Action Switch. These include leaf, roller levers and pushbuttons. If you have an application that requires an actuator with the Series 18 Snap Action Switch then please contact the Sales Office.

## **PRODUCT DRAWINGS**

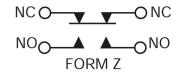


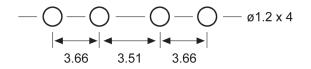
All dimensions in Millimetres

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#### **CIRCUIT FORM**

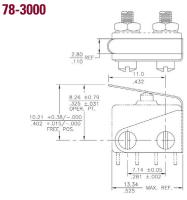
# PCB PIN LAYOUT (VIEWED FROM EITHER SIDE)



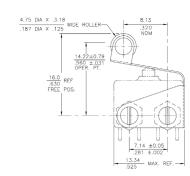


#### **A**CTUATOR

# ACTUATUR



#### 78-3100



### MECHANICAL CHARACTERISTICS

Part Number	Operating Force	Release Force	Pretravel	Overtravel	Movement Diff.	Operating Point
<b>78-3000</b> Spring Lever	6 ± 2 oz	2 oz min	.125 max	.030 min	.030 ± .015	.325 ± .030
<b>78-3100</b> Roller Lever	6 ± 2 oz	2 oz min	.125 max	.030 min	.035 ± .015	.560 ± .030

# **O**RDERING **I**NFORMATION

18-40919 - 2A, gold contacts, solder terminals through the bottom of the case

18-488051 - 8A, gold contact, MIL-SPEC approved, solder terminals through the bottom of the case

# Mechanical / Electrical / Environmental Characteristics:

Pretravel (max):

0.9mm

Overtravel (min):

0.1mm to 0.15mm

**Movement differential (nom):** 

0.4mm

**Operating point:** 

8.13mm ±0.4mm

Mechanical Life (min):

10,000,000 cycles

Operating force (max):

2.2N

Current (max):

8A resistive 250 VAC (18-488051) 2A resistive 250 VAC (18-40919)

**Current (min):** 

5mA resistive 5 VDC

Electrical Life (min):

100,000 cycles

Dielectric strength (min):

1 KVAC, 1 minute

Insulation resistance (min):

1GΩ at 500 VDC

**Contact resistance (initial):** 

 $25 \text{m}\Omega$ 

**Ingress protection:** 

IP40

Shock:

50g

**Temperature rating:** 

-55°C to +180°C