## SENSORS, SWITCHES, ELECTRONIC CONTROLS

#### **SERIES 16 - MICROSWITCH**

The Series 16 is a popular microswitch offering the unique self cleaning butterfly action. The centrally positioned actuating button offers the ability to mount easily into a pushbutton switch, something that ITW Switches has taken advantage of by incorporating the microswitch in our Series 76-94 and 76-91 Flexibutton ranges.

The series comes with gold or silver contacts and solder terminals as standard. PCB, solder/faston terminals, choice of contact forms and custom brackets and actuators are available as non-standard options. A two pole version is available in the form of the Series 26. Switches also have UL, CSA and MIL-Specification approvals according to the version.

#### **APPLICATIONS:**

- · Process control limit switching
- Aerospace applications
- Telecommunications
- Military control systems
- Elevator systems
- Missile systems

#### **KEY FEATURES:**

- Form Z contacts to cover all switching requirements
- Snap action for positive switching
- Solder terminals for superior electrical contact
- · Choice of contacts gold and silver
- Choice of actuators to fit many applications



#### **Non-Standard Options:**

- PCB and solder/faston terminals
- Other contact forms X, Y & C
- Custom brackets and levers
- Special operating forces

#### **ACTUATION INFORMATION:**

There are a number of additional actuators including leaf, roller levers and pushbuttons that fit. If you require any of these actuators, please contact the Sales Office.

#### 2 Pole Version:

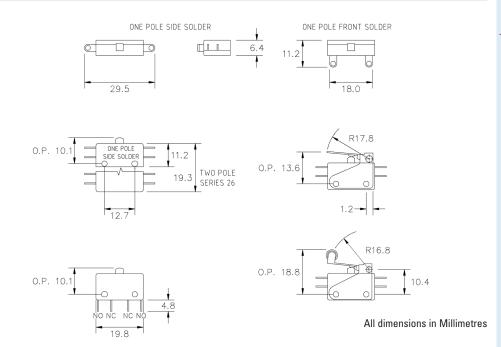
The 2 pole version is available in the form of the Series 26. This has the same self cleaning butterfly action as the Series 16, but has a higher operating force due to switching a number of poles.

Applications for these include requirements for auxiliary back up switches for additional safety and the need for a switch with a high operating force to safeguard against accidental actuation.

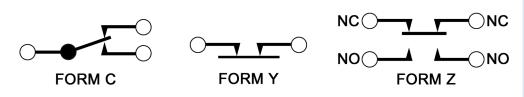
Similar to the Series 16, the 26 can be used as the switching mechanism in the 76-94 pushbutton range.

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#### **CONTACT LOADING**



#### **CIRCUIT FORM**



#### PCB PIN LAYOUT (VIEWED FROM EITHER SIDE)



#### **ORDERING INFORMATION:**

16-4044 - 10A, silver contacts, solder terminals through the bottom of the case

16-40441 - 5A, gold contacts, solder terminals through the bottom of the case

**16-488051** - 10A, gold contacts, MIL-SPEC approved, solder terminals through the bottom of the case

16-104 - 10A, silver contacts, solder terminals through the side of the case

16-304 - 10A, silver contacts, solder terminals through the front of the case

#### **Actuators**

76-1210/\* Standard leaf lever

76-1200/\* Standard roller lever

Substitute \* for switch part number to be fitted, e.g. 76-1200 fitted to 16-4044 = 76-1200/4044.

These are standard parts for this series. If you should require a non-standard option please contact the Sales Office.

## MECHANICAL / ELECTRICAL / ENVIRONMENTAL CHARACTERISTICS:

#### Pretravel:

1.27mm

#### Overtravel:

0.15mm (min)

#### **Movement differential:**

0.5mm (nominal)

#### Operating point:

10.31mm ±0.40mm

#### Life (min):

10,000,000 cycles

#### **Operating force:**

2.2N

#### Current (max) silver contacts:

10A resistive 250 VAC

#### **Current (min) silver contacts:**

10mA resistive 5 VDC

#### Life (min):

100,000 cycles at 20°C 50,000 cycles at 70°C

#### **Dielectric strength (min):**

1 KVAC, 1minute

#### Insulation resistance (min):

 $1G\Omega$  at 500 VDC

### Contact resistance (max. initial):

 $25m\Omega$ 

#### **Ingress protection:**

Equivalent to IP40

#### Shock (min):

50g

All dimensions in Millimetres

#### Temperature (ambient):

-55°C to +135°C

