

## Miniature Microswitch Introduction

Alcoswitch miniature microswitches are offered with many options to suit most typical applications.

These switches are available in a current range from 16A to .1A. Additional options available throughout the different current ratings include:

**Pin Plunger**

**Short, normal and long lever**

**Short and normal roller**

**Simulated lever**

**SPDT, SPNO and SPNC circuitry**

Within the 16A range, in addition to two different terminal options, there are three different actuation force options.

You can count on this offering of switches to be high reliability and low cost to fulfill your basic microswitch needs. Of course if you need something custom, we can offer that also. Contact your Tyco Electronics sales engineer for details.

## Technical Information

### Performance Information

Amp Rating	16	5	0.1
Insulation Resistance	Min. 100M ohm		
Contact Resistance	max 15M ohm		Max 50M ohm
Dielectric Strength	Between Non-consecutive terminals	AC 2,000V	
	Between each terminal & earth	AC 2,000V	
Operating Speed	0.2mm/sec - 1,000mm/sec		1mm/sec - 500mm/sec
Max Allowed Mechanical Open/close Frequencies	600 Cycles/min		300 Cycles/min
Shock Resistance (without lever)	300mm/sec <sup>2</sup> (approx 30G)		
Vibration Resistance (without lever)	1.5mm 10 - 55Hz (2Hr)		1.5mm 10 - 20Hz (2Hr)
Electrical Life	100,000 Operations at rated load (max 20 Operations/min)		1,000,000 Operations
Mechanical Life	10,000,000 operations (Max 200 operations/min)		
Safety Approval	UL / CSA / VDE		
Operating Temperature Range	-20°C to +130°C RH85% Max		-30°C to +130°C RH90% Max

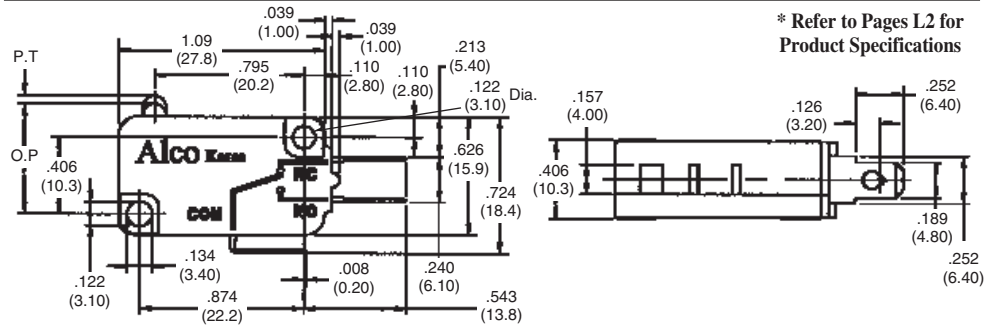
See drawings for DC ratings.

### Materials

	5 & 16A	.1A
Case and Cover	P.B.T Resin, UL 94 V-0	P.B.T Resin, UL 94 V-0
Movable Contact	Brass, Silver Plated	Phosphor Bronze
Guide Plate	Brass, Silver Plated	Brass, Silver Plated
Plate Spring	Beryllium Copper	Beryllium Copper
Terminal Aid	Brass	Brass
Contact	Silver Alloy	Gold Alloy
Common Terminal	Brass, Silver Plated	Brass, Silver Plated
Terminals	Brass, Silver Plated	Brass
Actuator	Phenolic Resin, UL 94 V-0	Phenolic Resin, UL 94 V-0
Lever	Stainless Steel	Stainless Steel

**Miniature Pin Plunger**

**Spade/Solder Type Terminal**



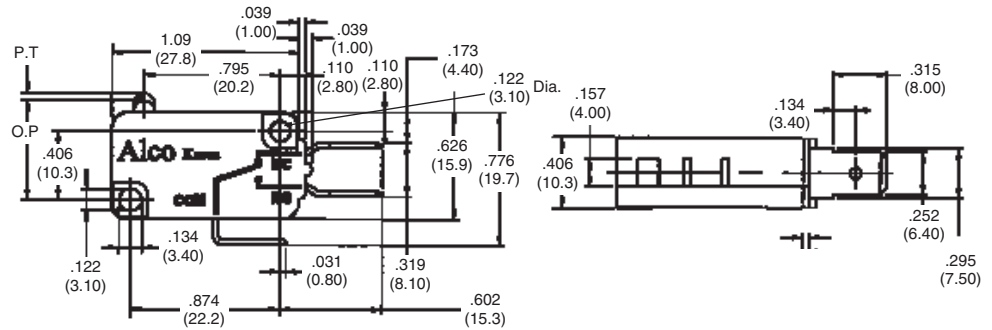
\* Refer to Pages L2 for Product Specifications

**Product Facts**

- n .187 [4.75] tab with solder hole
- n Use .187 [4.75] FASTON receptacles or solder wire directly to terminal

AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478603-1
		200g	50g					1478604-1
		300g	70g					1478605-1
	SPNC	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478609-1
		200g	50g					1478610-1
		300g	70g					1478611-1
SPNO	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478615-1	
	200g	50g					1478616-1	
	300g	70g					1478617-1	
5	SPDT	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478667-1
	SPNC							1478668-1
	SPNO							1478669-1
0.1	SPDT	60g	12g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478670-1
	SPNC							1478671-1
	SPNO							1478672-1

**Spade Type Terminal**



**Product Facts**

- n .250 [6.35] tab for use with .250 [6.35] FASTON receptacles

AMP	Switch Position	Operating Force	Releasing Force	Pre Travel (P.T.)	Operating Position	Over Travel	Movement Differential	Part Number
16	SPDT	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478606-1
		200g	50g					1478607-1
		300g	70g					1478608-1
	SPNC	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478612-1
		200g	50g					1478613-1
		300g	70g					1478614-1
SPNO	120g	20g	1.6 m/m [.063]	14.8 ±0.4 [.582±.016]	0.8 m/m [.031]	0.4 m/m [.016]	1478618-1	
	200g	50g					1478619-1	
	300g	70g					1478620-1	