



# Sensata

## Technologies

## 12AT SERIES



**Neumüller**

Elektronik GmbH

Autorisierter Distributor:

**Neumüller Elektronik GmbH** | Gewerbegebiet Ost 7 | D-91085 Weisendorf  
Tel. +49 9135 73666-0 | [info@neumueller.com](mailto:info@neumueller.com) | [www.neumueller.com](http://www.neumueller.com)

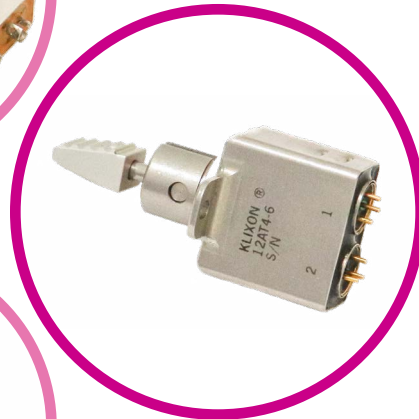


## | 12AT SERIES

### TOGGLE ACTUATED HERMETIC SWITCHES

#### Introduction

On NASA's Apollo space program, Sensata 12AT Series Toggle Actuated Hermetic Switches traveled to the moon and back, including moon landings on Apollo 11 and later missions. The 12AT series utilizes gas tight switch elements with a robust design ideal for use on military aircraft, space-craft, space suit EVA, military ground, and other extremely harsh environments like oil and gas. Switch designs are available in single pole and multiple pole configurations with momentary, maintain, or locked toggle actions.



#### Features

- Switch element qualified per MIL-PRF-8805, Enclosure Symbol 5, gas-tight, hermetic seal with dry nitrogen backfill
- Momentary, maintain, or locked toggle actions
- Optimal for both low level circuits and switching up to 4 amps
- Excellent shock and vibration resistance

#### Applications

- Spacecraft / space capsule control
- Space Suit EVA (Extra Vehicular Activity)
- Lunar Rover control
- Battery circuit control
- Weapons System Control
- Aircraft Cargo or Hoist Control
- Military Ground Vehicle
- Oil and Gas



#### SPECIFICATIONS

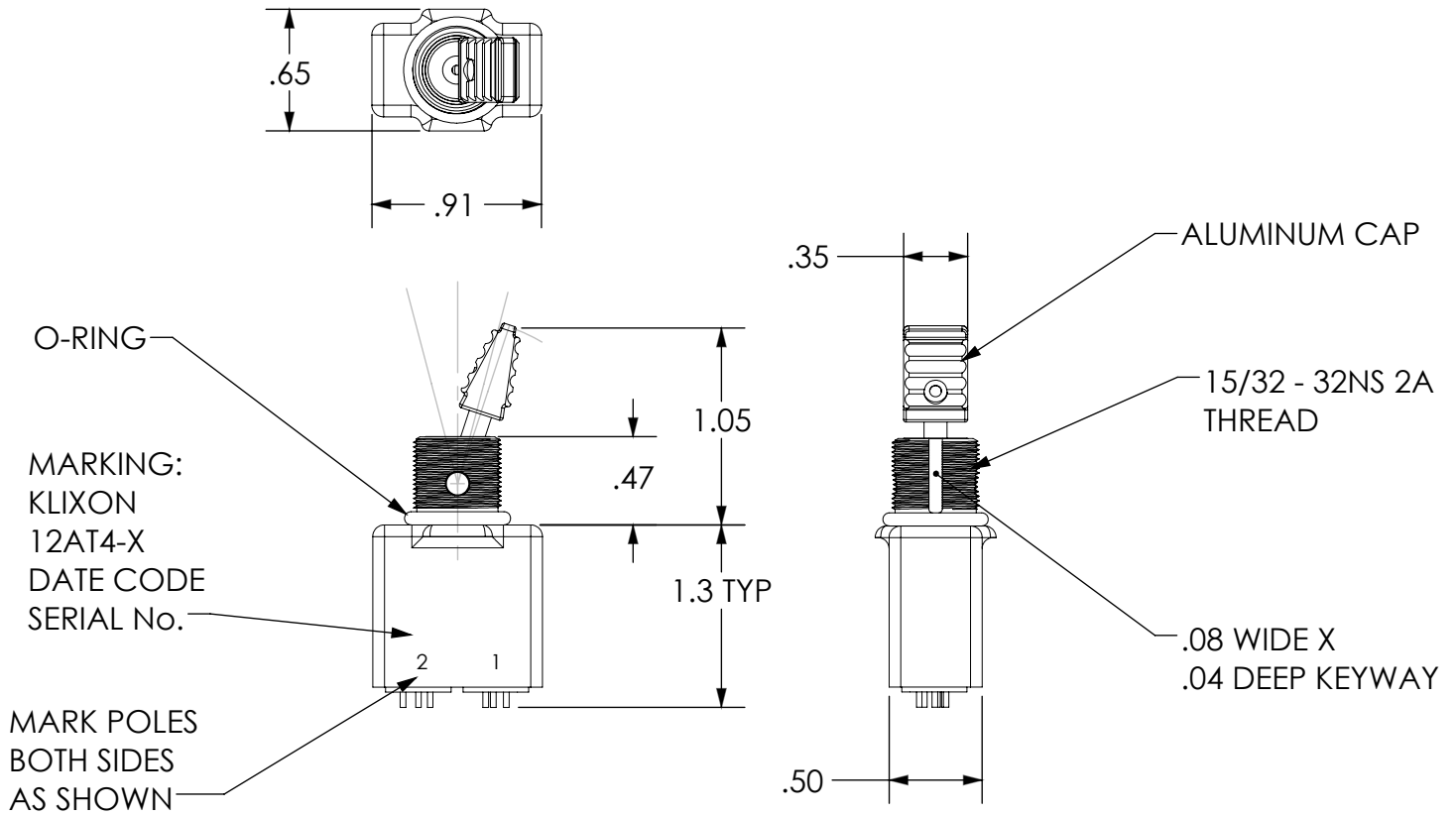
##### Internal Switch Element Performance Characteristics

<b>Switch Element</b>	QPL per MIL-PRF-8805/68
<b>Seal, Hermetic</b>	Per MIL-PRF-8805, Enclosure Symbol 5 (1x10 <sup>-8</sup> cc Helium/second)
<b>Shock</b>	100G, 6 millisecond
<b>Vibration</b>	10-3000 Hz, 30G (no contact chatter > 10 microseconds)
<b>Current Rating</b>	4 amps max. (resistive) at 28 VDC
<b>Voltage Drop</b>	4mV max (0.040 ohms) at 100 mA and 6VDC
<b>Temperature</b>	-65 °C to +135 °C
<b>Dielectric Strength</b>	1000 Vrms (terminal to case), 800 Vrms (terminal to terminal) with 0.5 milliamp max. leakage
<b>Insulation Resistance</b>	100 Meg-ohms at 500VDC



## DIMENSIONS

All dimensions are in inches  
The most popular configurations are shown below. Consult factory for additional configurations.





## ORDERING OPTIONS

Please contact Sensata to define the specific requirements for your application



## WARNINGS



### RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

**Failure to follow these instructions can result in serious injury, or equipment damage.**



### HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

**Failure to follow these instructions will result in death or serious injury.**

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Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

## CONTACT US

### Americas

+1 (508) 236-3800

Ask for Aerospace team

[klixon@sensata.com](mailto:klixon@sensata.com)