



| 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

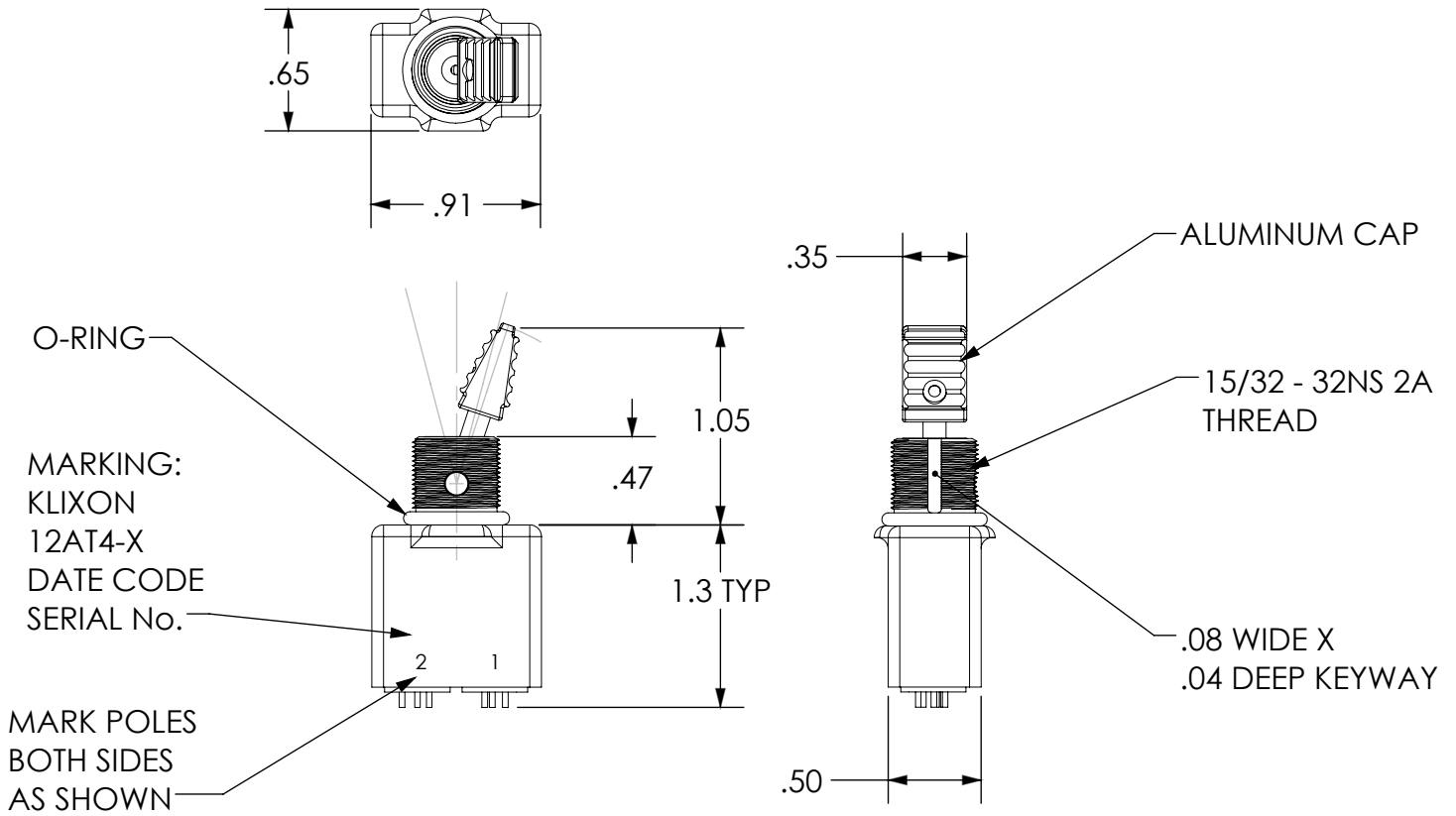
Internal Switch Element Performance Characteristics

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