



## INSTALLATION MANUAL

# POSITAIL NANO™

Tail / Rudder Position Light

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## 1. POSITAIL NANO

If your aircraft has an extremely thin and streamlined empennage, the PosiTailNano™ and StrobeTailNano™ are the ultimate solution! As the world's smallest position and strobe light assemblies that meet all DO-160F and FAR requirements, these two lights will make your aircraft legal for night flying if your wing lights are not parallel to your aircraft centerline due to wingtip shapes. These lights also are part of Aveo's exclusive GreenAir™ earth friendly aviation lighting series.

## 2. TECHNICAL SPECIFICATION

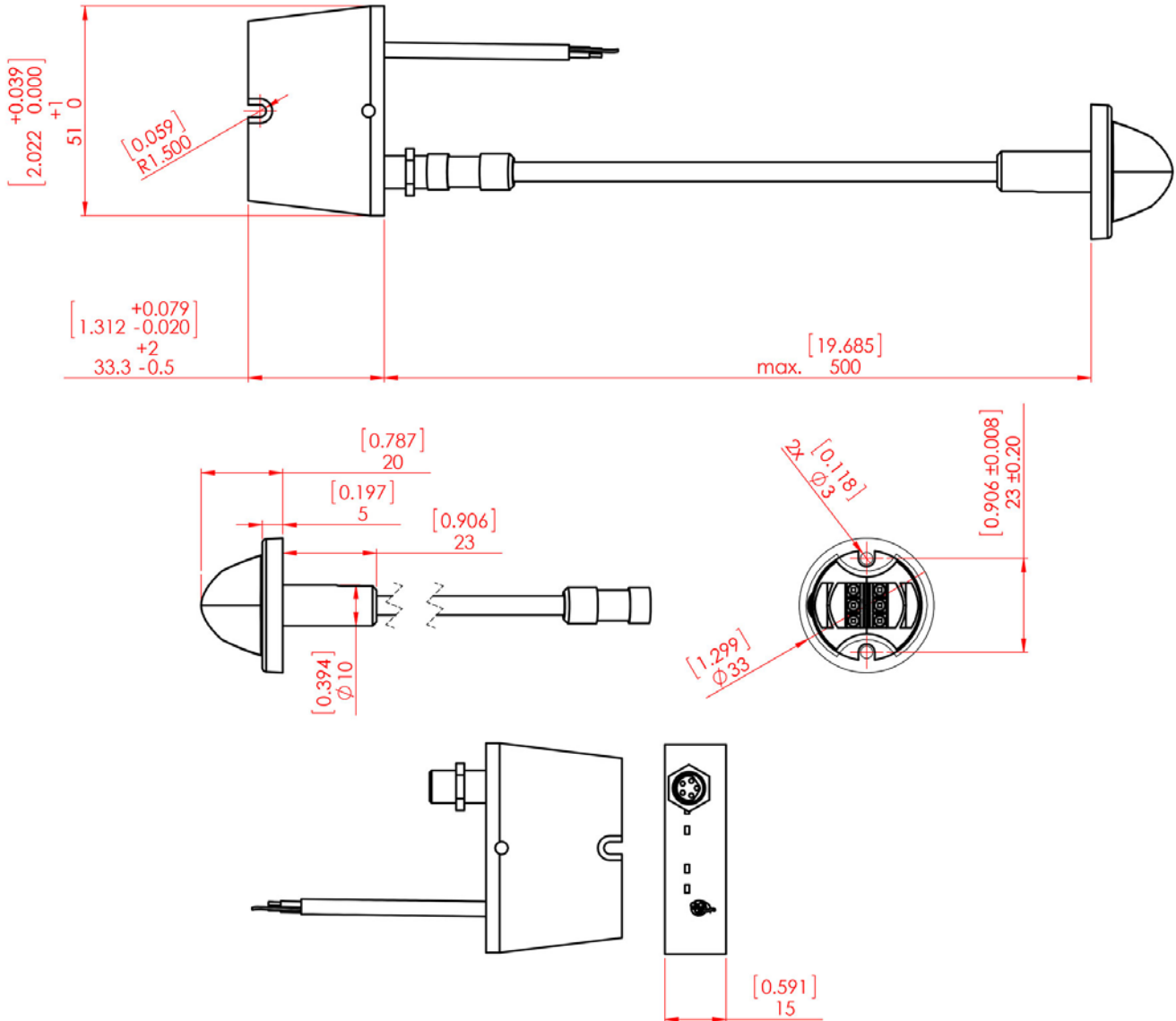
Dimensions:	<i>see Section 4: Technical Drawing</i>
Weight:	<i>95 g / 3.35 oz</i>
Nominal Operating Voltage:	<i>9 - 36 Vdc</i>
Voltage protection:	
Transcend voltage:	<i>60V, both polarities</i>
Under-voltage lockout:	<i>9V, not more</i>
Over-voltage lockout:	<i>36V, not less</i>
Performance:	
Output current:	
steady version	<i>0.075A/LED</i>
Output power:	
white steady	<i>2.7W</i>
Warm up time:	<i>less than 3sec</i>
Ambient temperature:	<i>from -40°C to +85°C</i> <i>from -40°F to +185°F</i>
Overheat protection:	<i>+85°C / +185°F</i>

## 3. CONTROL & POWER INPUTS:

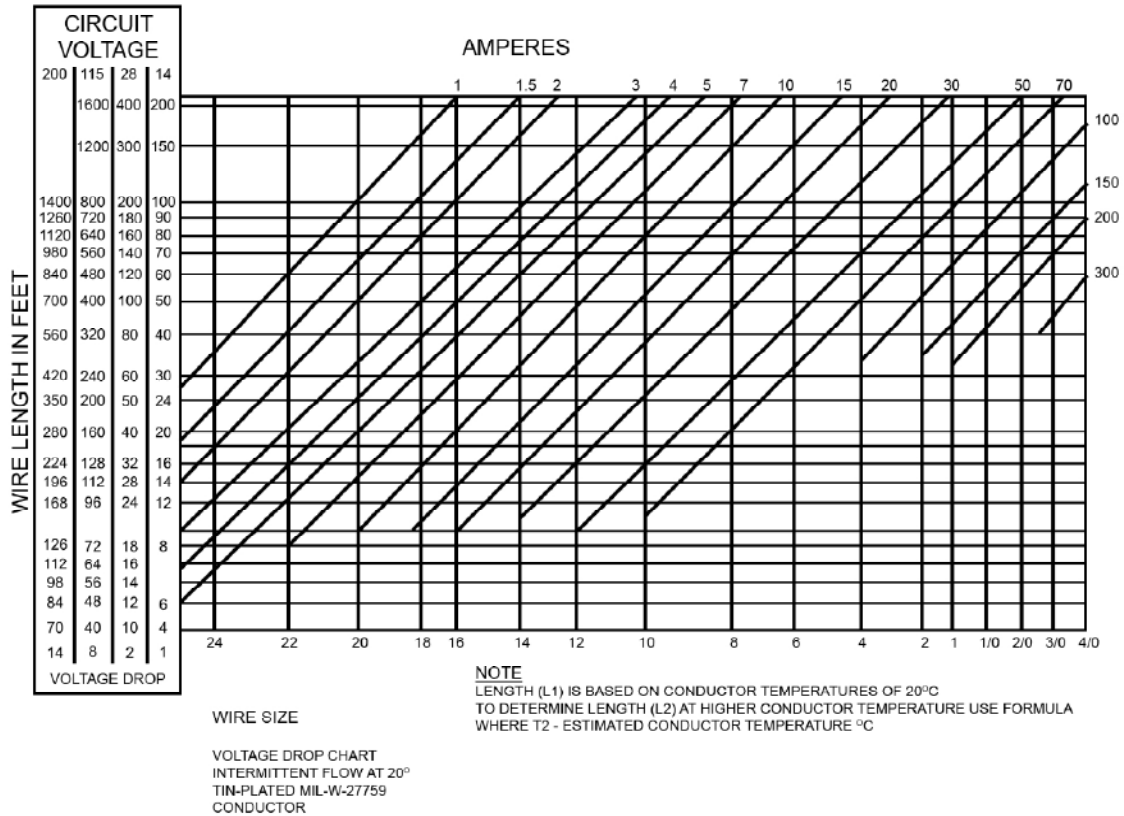
**Steady:**

**Red**   VCC  
**Black** GND

4. TECHNICAL DRAWING



## 5. WIRING CHART



## 6. TESTING THE FUNCTION OF THE AVEO AURORA SERIES LIGHTS BEFORE INSTALLATION

All Aveo Aviation lights undergo rigorous testing prior to being released from our engineering manufacturing department. This testing involves a burn-in time as well as other function testing. No light is released for sale without undergoing this extensive operational testing.

When you receive the Aveo Aurora Series Aviation Lights, and wish to test the function of the lights prior to installation on your aircraft, please note the following:

1. Please review the written information that is enclosed in the packaging. Warranty information as well as a cautionary note about power supply removal is enclosed with each package.

2. Remove the lights from the package. Note that there are two (2) wires coming from each light. These wires are:
  - a. Black wire – Ground wire (negative lead)
  - b. Red wire – Position/Navigation light function wire (positive lead)
3. Testing of the function of each light can be done with a regular 12V/2.5A dc power supply (not a battery chargers). Connect the black wire to the ground (negative) leads of a power supply, then connect the red wire to the positive (+) leads on the power supply. The position/navigation light, either red or green on the front side and white on the back side should light up. When installed on the aircraft, using the aircraft's power (14 or 28 volts), the lights will be at their maximum intensity.

After testing, the lights can be installed on the aircraft.

#### IMPORTANT NOTES:

1. Under no circumstances should any power supply other than a 9-32 Vdc, or a 12/24 volt battery be used to test the light. Do not use: Battery chargers, battery back-up power devices, or other bench avionics testing methods to test the aviation light. The light is functional between 9 and 32 volts. Use of a battery charger or other power unit to test the light will void the warranty and may damage the light.
2. All power supplies for existing strobe lights, flasher beacons, etc. are required to be removed from the aircraft prior to the installation of the Aveo light.

If you have any questions about the installation of the lights, please refer to our web site: [www.aveoengineering.com](http://www.aveoengineering.com), and check FAQ and other links on our aviation lights web page.

## 7. CARE AND CLEANING OF YOUR AVEO ENGINEERING AVIATION LIGHTS

When you receive your Aveo Engineering Aviation Lights, they will have been factory polished and ready to install on the aircraft. Upon installation, just give the lights a good coat or two of a quality automotive polish. This should protect the lights from dirt and other environmental factors. Once or twice a month, just refresh the polish and hand buff to bring back the lights to factory like new condition.

If the lights need a deeper cleaning, they can be polished with a good automotive cleaner wax and/or a liquid polishing compound. The liquid polishing compounds can normally be found at automotive parts stores or an automotive paint store. After using a polishing compound, just give the lights another coat of an automotive polish and you will again protect the lights against dirt, etc.. An electric buffing machine, with a lamb's wool cover, can also be used for deeper cleaning and polishing. Under no circumstances should any petroleum based product be used to clean the lights.