



Hercules H30

INSTALLATION MANUAL

AVE-H30-002-IM

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Part 0 Manual Administration

0.1 Document approval

This document has been established in accordance with an alternative procedure to DOA approved under EASA AP429. This installation manual is applicable for part numbers:

Hercules Drop-In Landing Hercules Drop-In Taxi Hercules LLP Taxi Hercules LLP Landing •

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- •
- •

AVE-H30TATSNL-T0A AVE-H30TATSNT-T0A AVE-H30-W-X01, AVE-H30-W-X11 AVE-H30-W-X02, AVE-H30-W-X12

Compiled by:

_____ 01. – July - 2018

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Approved by:

_____ 01. – July - 2018

Georg Hartl Head of DO, Aveo Engineering Group, s.r.o.



0.2 Amendment Record procedure

The master copy of this document shall be kept electronically as a read only document under the control of Aveo Engineering Group, s.r.o. as Master Copy.

ALL amendments to this manual will initiate a raise of issue.

ALL raises of issue will be given a sequential Alphabetic Issue Ident sequentially from 01 to 99 in Table 01 - *Issue No:* Column– Initial Issue of Document will be "**01**"

ALL Issues of this document will be approved by Head of DO

| Issue No. | Details | Date | Effected Pages |
|--------------|--|----------------|-------------------------|
| 01 | Initial Issue | 01.July.2018 | ALL |
| 02 | Cover picture changed (not marked) Addition of P/N (not marked) Distribution list removed (not marked) Typo corrected | 1. Jul. 2018 | 1 3, 6 & 8 4 7 |
| | Table 01: Document Amendmen | t Descud Table | |

0.3 Effected Pages Procedure

ALL pages affected by ANY raise of issue of this manual will be listed in Table 01 - *Effected Pages* Column.

The reason(s) for ALL raise of issue and description of change due to raise of issue will be provided for ALL raises of issue in Table 01 - *Details* Column. Changes from the previous issue are highlighted by YELLOW HIGHLIGHTING over new content. AND YELLOW HIGHLIGHTING AND CROSSING OUT of deleted content.

Example (CROSSING OUT)



Part 1 Installation data

1.1 Product info

Aveo Engineering introduces the exclusive next-generation Hercules[™] Drop-In and external bracket (LLP) replacement for Legacy Lights.

Environmentally Friendly

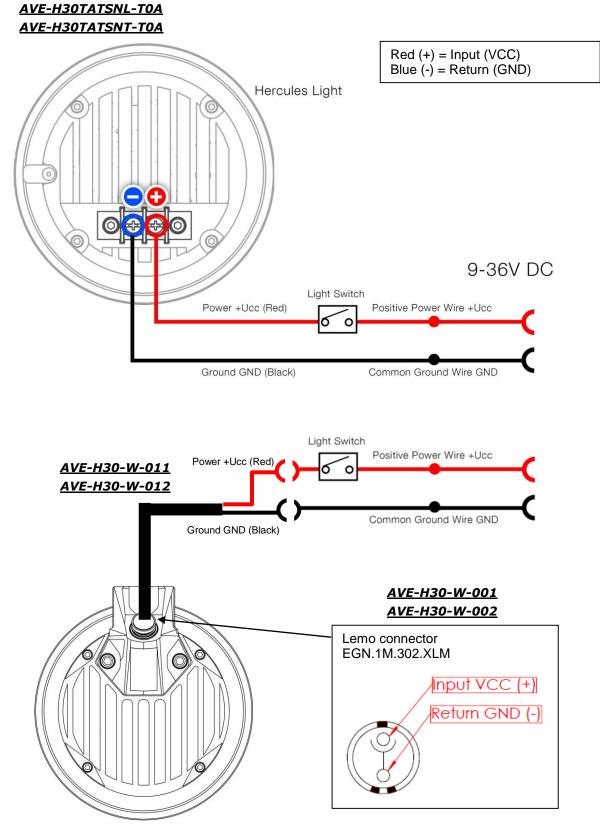
The Hercules uses far less power than competitive products illuminated by mercury-arc, high intensity discharge, or halogen lamps, which means they help to reduce air pollution from carbon emissions. Mercury and Lead-free, this RoHS compliant environmentally-friendly technology helps reduce power consumption and the amount of hazardous waste entering the environment. Finally, a "green" aircraft light!

Main Features:

- Highly optimized optics including Aveo RockyReflector[™] System
- Aveo PowerOptimizer™ advanced LED power supply and controller
- ON/OFF function only
- Landing or Taxi lens
- Different holders available



1.2 Wiring



Recommended wire AWG size: 16



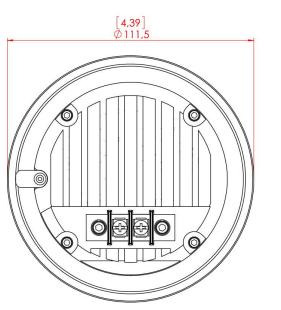
1.3 Technical Specification

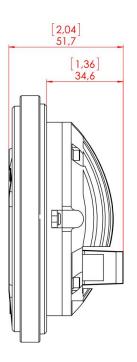
| 1. Number of LED: | 30 | | | |
|--|---|-------------------|--|--|
| 2. Input voltage: | 9-36 V DC | | | |
| • • | $3.2A \text{ at } 28V \pm 10\%$ | | | |
| 3. Input current: | | | | |
| 4. Output power: | 90W | | | |
| - | 2 seconds +80V | | | |
| Under-voltage lockout: 9 VDC, not more | | | | |
| 7. Over-voltage lockout: | 36 VD <u>C,</u> not less | | | |
| 8. Ambient temperature: | Ambient temperature: from -55°C to +85°C (from -67°F to +185°F) | | | |
| 9. Color and shade: | cool white, 5000K – White | | | |
| 10. Lens: | | | | |
| - Landing light version | 12° viewing angle | | | |
| 5 5 | symmetrical beam | | | |
| - Taxi light version | 40° x 20° viewing angle | | | |
| | asymmetrical beam | | | |
| 11 Overheat protection | • | ment of intensity | | |
| 11. Overheat protection, temperature dependent decrement of intensity 12. Weight: 510g / 1.124 lb | | | | |
| 13. Useful life: | | ht hours | | |
| | not less than 30,000 aircraft flight hours | | | |
| 14. Material: | a. Housing/Heatsink: Aluminum Alloy, natural | | | |
| | anodizing | | | |
| | b. Lens: Clear PMMA | | | |
| 15. P/N: | | | | |
| Hercules Drop-In Landing | | AVE-H30TATSNL-T0A | | |
| | | AVE-H30TATSNT-T0A | | |
| Hercules LLP Taxi (W/O Holder, Lemo Connector) | | AVE-H30-W-001 | | |
| I langulag I Di anding ///// | 2 Holdon Longo Connector) | | | |

- Hercules LLP Landing (W/O Holder, Lemo Connector)
 AVE-H30-W-001
 AVE-H30-W-001
 AVE-H30-W-002
- Hercules LLP Taxi (W/O Holder, cable gland w/o connector): AVE-H30-W-011
- Hercules LLP Landing (W/O Holder, cable gland w/o connector): AVE-H30-W-012

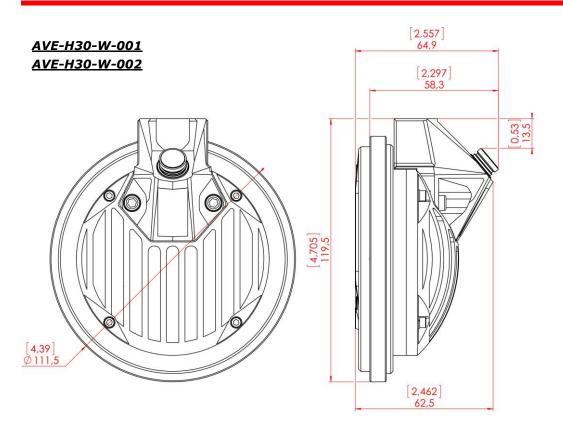
1.4 Technical Drawing

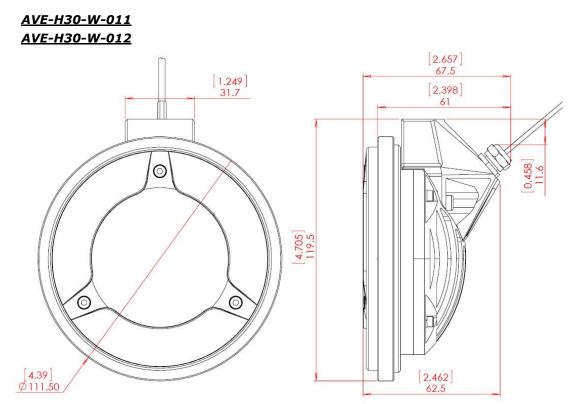
<u>AVE-H30TATSNL-TOA</u> <u>AVE-H30TATSNT-TOA</u>







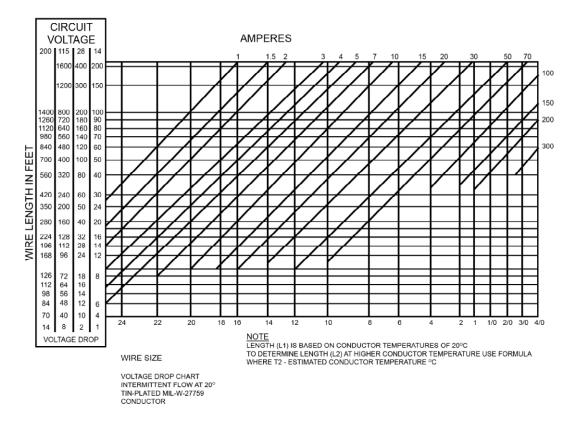




*dimensions in mm [inches]



1.5 Wiring Chart



1.6 Care and Cleaning of Lights

When you receive your Aveo Engineering Aviation Lights, they will have been factory polished and ready to install on the aircraft.

If the lights require a deeper cleaning, they should be polished with a quality lamb's wool sheet and can also be used for deeper polishing. Under no circumstances should any petroleum based product be used to clean the lights.

