

## **NetGain Controls WarP-Drive Hall-Effect Pedal Assembly (HEPA)**

The WarP-Drive Hall-effect pedal assembly represents a significant improvement over conventional electric vehicle throttle inputs such as 0-5kohm “potbox” assemblies. This unit is designed to simplify both OEM and conversion applications and provide a professional, high-quality installation. Some of its features include:

- Fully redundant, dual output Hall-effect electrical sensor integrated into assembly.
- Dual load/return force generation in compliance with FMVSS 124
- Self adjusting hysteresis control
- Waterproof connectors included
- Compatible with the NetGain Controls WarP-Drive controller

### **Installation**

For conversion applications, first ensure that the pedal can be installed with the foot pedal portion of the assembly residing in the original vehicle's pedal location. If the pedal cannot fit in the original pedal location, consider using the NetGain Controls Hall-effect Throttle Assembly (HETA) instead.

Securely mount the pedal using all three mounting holes on the pedal assembly. It is the installer's responsibility to ensure that the pedal is mounted with the correct spacing between other pedals, and that it can be properly accessed by the driver without obstruction. Verify that the pedal can rotate through its entire movement.

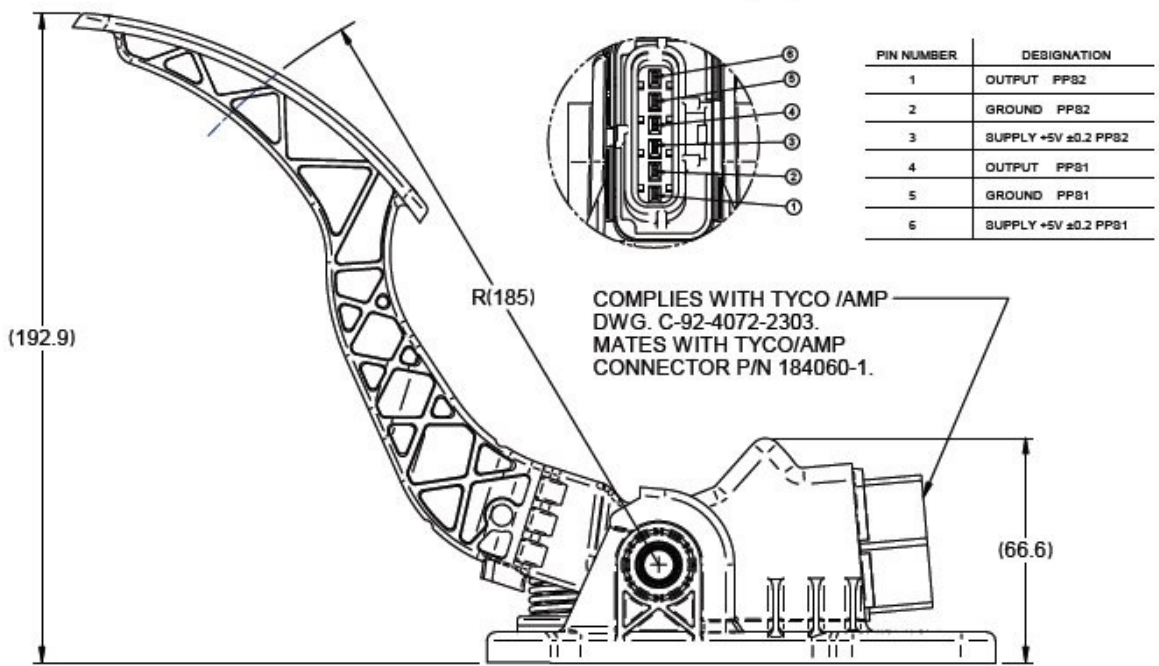
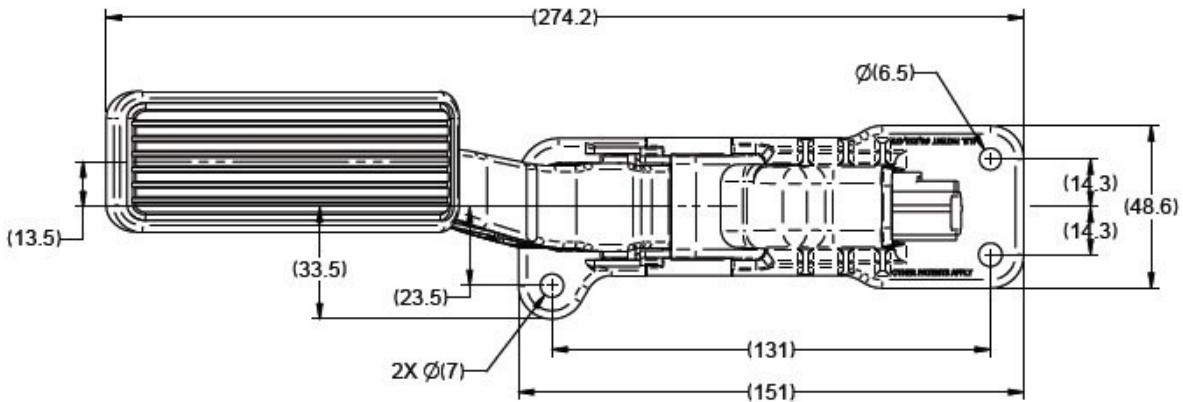
Route the connector from the pedal assembly to the WarP-Drive controller. If the cable must pass through metal such as a firewall or bulkhead, ensure that proper relief (such as a rubber grommet) is used to prevent chaffing of the cable.

Once the pedal is installed and connected, verify proper function with the controller turned on.

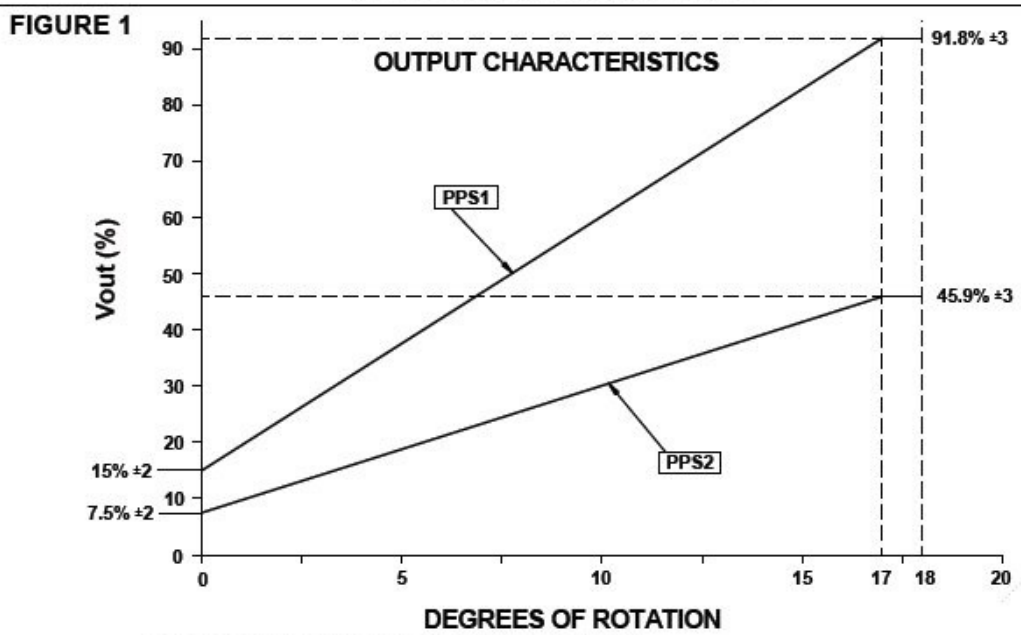
## Specifications

- Electrical
  - Linearity (absolute): see Figure 1
  - Rotation (electrical): 0 to 17 degrees
  - Rotation (mechanical): 0 to 18 degrees
  - Input voltage: 5VDC
- Mechanical
  - Internal end-stop strength: 900N
  - Sideload strength: 300N
- Durability
  - Operating temperature range: -40 to 80 Celsius
  - Life cycles: 3 million cycles
  - Vibration: 5 to 100 Hz @ 0.2 to 1.6g; 8 hrs. each plane
  - Thermal shock: -40 to 80 Celsius; 1000 cycles
  - ESD (powered): +/- 15kV, terminal discharge
  - EMC: 100 V/m; 1Hz – 1GHz
- Environmental
  - Salt Spray: 24 hours (5% NaCl)
  - Humidity: 144 hours @ 95% RH

DIMENSIONAL DETAILS:



TYPICAL ELECTRICAL OUTPUT:



All dimensions metric (mm) unless otherwise indicated