

# Williams Controls WCS-135189 Williams Customer Specification

# FEATURES

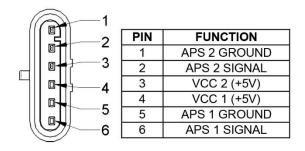
- 20° Angular Rotation
- Non-Contact Hall Effect Sensor
- Dual APS Output
- Electronics IP66 Sealed
- +5V Operation
- -40°C to + 85°C Operation
- AMP 6-Pin Connector



## **APPLICATIONS**

- Throttle Control Pedal
  - o Commonly Used with Bosch 6.1 ECU
- Compliant with US Standards FMVSS-124 and FMVSS-302

## **Connector Pin Configuration:**



#### Mating connector:

Tyco Electronics/ AMP Part - 282108-1

#### DESCRIPTION

135189 is a suspended, electronic pedal assembly that provides a throttle control signal in response to a driver's input. The pedal employs a sensor that outputs two electrical signals proportional to the angular displacement of the pedal

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QEMS Representative	Mary Knight	Process Owner	ocess Owner Michael Cooper		Department Manager	Scott Th	iel		

## ABSOLUTE MAXIMUM ELECTRICAL/MECHANICAL RATINGS

Supply Voltage	+5V ±0.5V
Supply Current	+10mA
Short Circuit Duration to ground	Indefinite
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Static Load Limit	667 N measured 152mm from pivot

Operation of this device beyond absolute maximum ratings may result in permanent damage.

#### **ENVIRONMENTAL VALIDATION**

Thermal Cycle/Stress	SAE J1455 -40°C to +85°C
Thermal Shock	-40°C to +85°C
Humidity	120 Hour exposure at 95% humidity from +27°C to +75°C
Mechanical Vibration	Random broadband 5-500Hz, 4.0 G's
Salt Spray Exposure	ASTM B-117 96hr Exposure
Dust Exposure	24 Hr Exposure, pedals cycled
Chemical Exposure	Diesel fuel, brake fluid, antifreeze and plastic protectant exposure
Pressure Wash	250 psig detergent at +75°C – 40 minute exposure, 0.05rpm 1000 psig water at +75°C - 40 minute exposure, 0.05 rpm
Mechanical Shock	SAE J1455 One meter drop to concrete with additional harness drop test

## **REGULATORY VALIDATION**

FMVSS-124 RTI Certification	Per Federal regulations		
FMVSS-302 Flammability	Per Federal regulations		

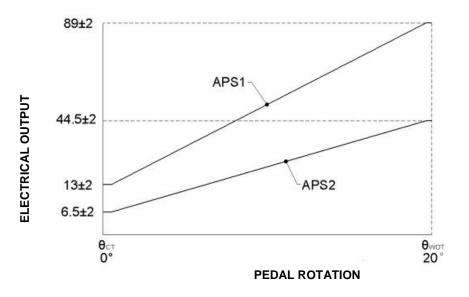
## **MECHANICAL VALIDATION**

Validated to 3X106 full stroke cycles at 1Hz

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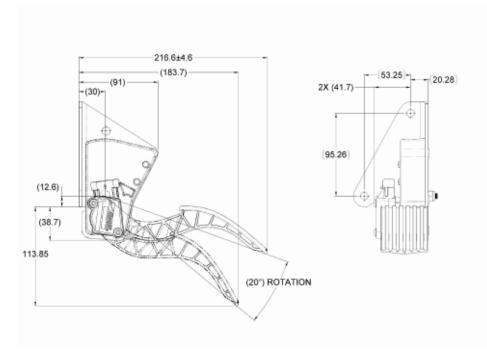


## **TYPICAL OUTPUT CHARACTERISTICS**



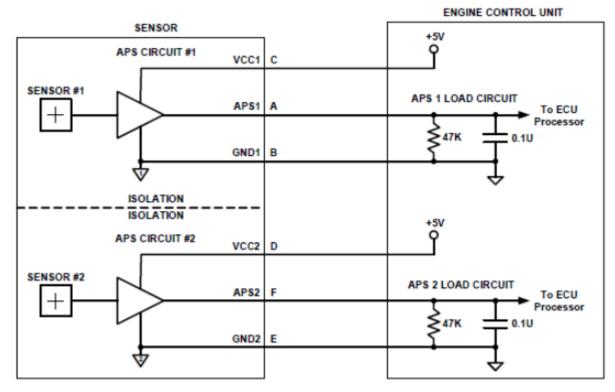
# MECHANICAL DIMENSIONS AND CHARACTERISTICS (FOR REFENCE ONLY)

Measurements in mm



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## **APPLICATIONS INFORMATION:**



#### **REVISION HISTORY**

Rev	Date	ECN#	Checked	Approved	Changes/Comments
А	06/02/10	002326			Initial Release

USA	Portland Oregon T: +1.503.684.8600 cwig.us@curtisswrig www.cw-industrialg		Europe Garching Germany T: +44.89.5404.100.0 cwig.de@curtisswright.com www.cw-industrialgroup.com			Asia	Shanghai China T: +86.213.3310670 cwig.cn@curtisswright.com www.cw-industrialgroup.com			
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