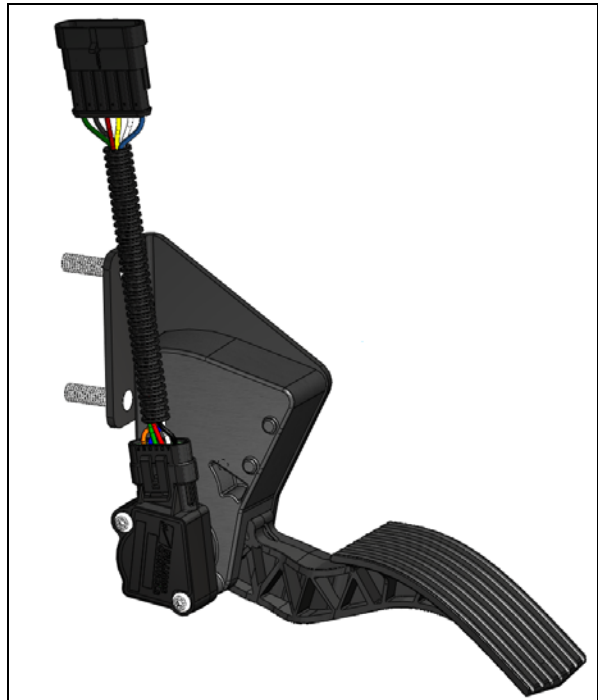


Features:

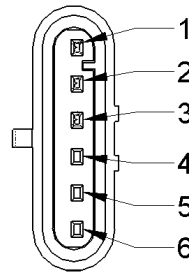
- 20° Angular Rotation
- Non-Contact Hall Effect Sensor
- Dual APS output
- Electronics IP66 Sealed
- +5V Operation
- -40°C to + 85°C Operation
- AMP 6-Pin Connector

Applications:

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


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.

Connector Pin Configuration:


PIN	FUNCTION
1	APS 2 GROUND
2	APS 2 SIGNAL
3	VCC 2 (+5V)
4	VCC 1 (+5V)
5	APS 1 GROUND
6	APS 1 SIGNAL

Mating connector:

Tyco Electronics/ AMP Part - 282108-1

 WILLIAMS CONTROLS		PROCEDURE NAME:	DEPT:		030	
		Williams Customer Specification Form				
DOCUMENT NUMBER:	WQF-030-021	REVISION LEVEL:	A	DATE EFFECTIVE:	11/13/07	DAF# 00396
QEMS Representative	Mary Knight	Process Owner	Michael Cooper	Department Manager	Scott Thiel	

Absolute Maximum Electrical/Mechanical Ratings

Supply Voltage	+5V ± 0.5V
Supply Current (APS)	±10 mA
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 (Refer to Williams Spec WDS-010)


- **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 5-500 Hz, 4.0
G's
- **Salt Spray Exposure**
ASTM B-117 96 hr 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, 0.05 rpm
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

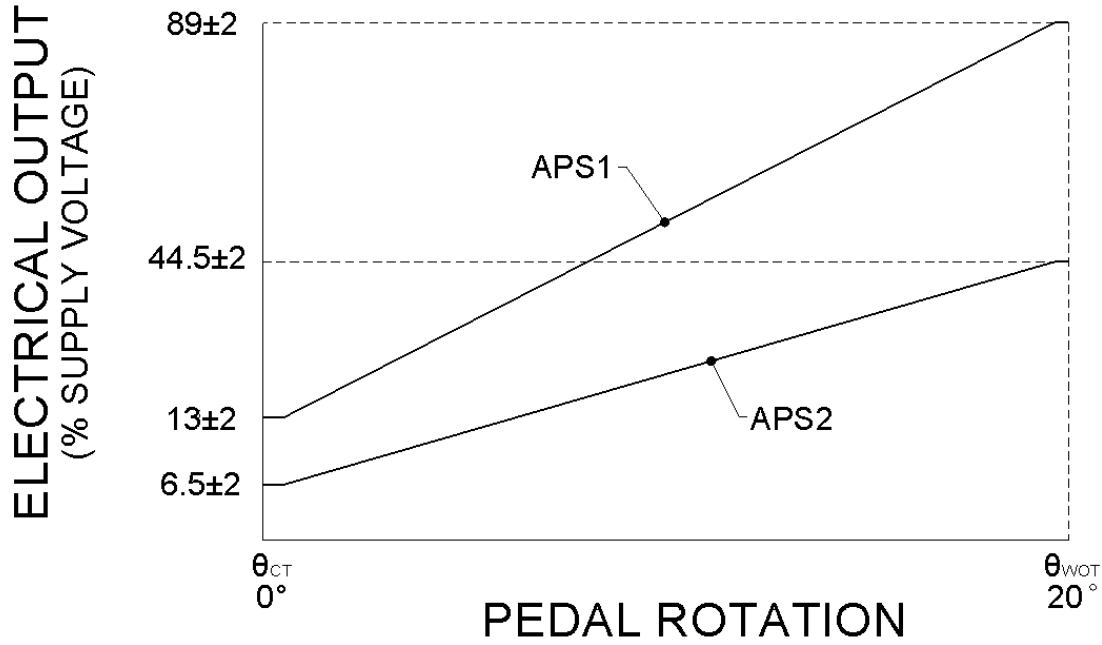
- **FMVSS-124 RTI Certification**
Per Federal regulations
- **FMVSS-302 Flammability**
Per Federal regulations


Mechanical Validation

- Validated to 3X10⁶ full stroke cycles at 1Hz

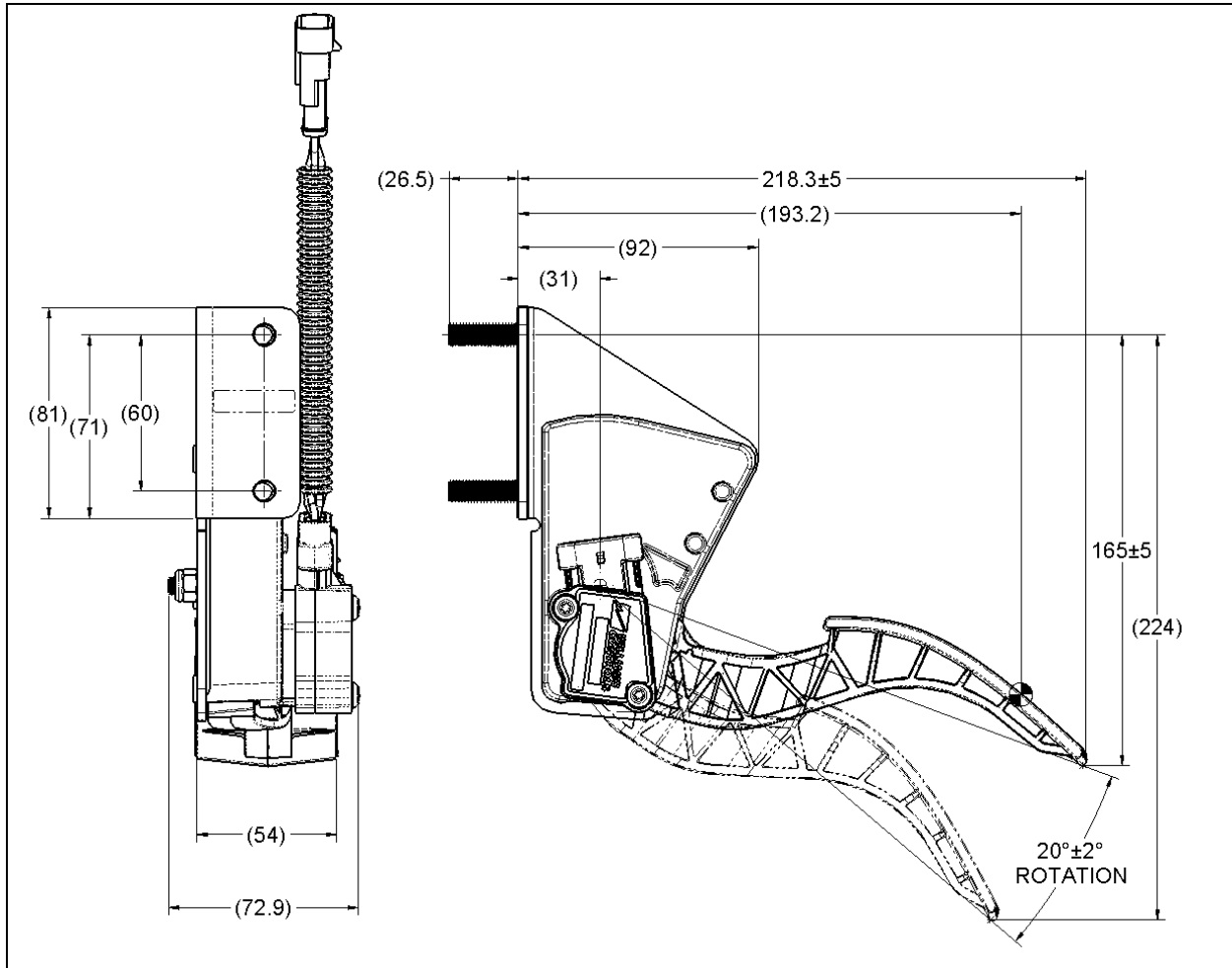
 WILLIAMS CONTROLS		PROCEDURE NAME:	DEPT:		030	
		Williams Customer Specification Form				
DOCUMENT NUMBER:	WQF-030-021	REVISION LEVEL:	A	DATE EFFECTIVE:	11/13/07	DAF# 00396
QEMS Representative	Mary Knight	Process Owner	Michael Cooper	Department Manager	Scott Thiel	


Typical Output Characteristics



 WILLIAMS CONTROLS		PROCEDURE NAME:	DEPT:		030	
		<i>Williams Customer Specification Form</i>				
DOCUMENT NUMBER:	WQF-030-021	REVISION LEVEL:	A	DATE EFFECTIVE:	11/13/07	DAF# 00396
QEMS Representative	Mary Knight	Process Owner	Michael Cooper	Department Manager	Scott Thiel	

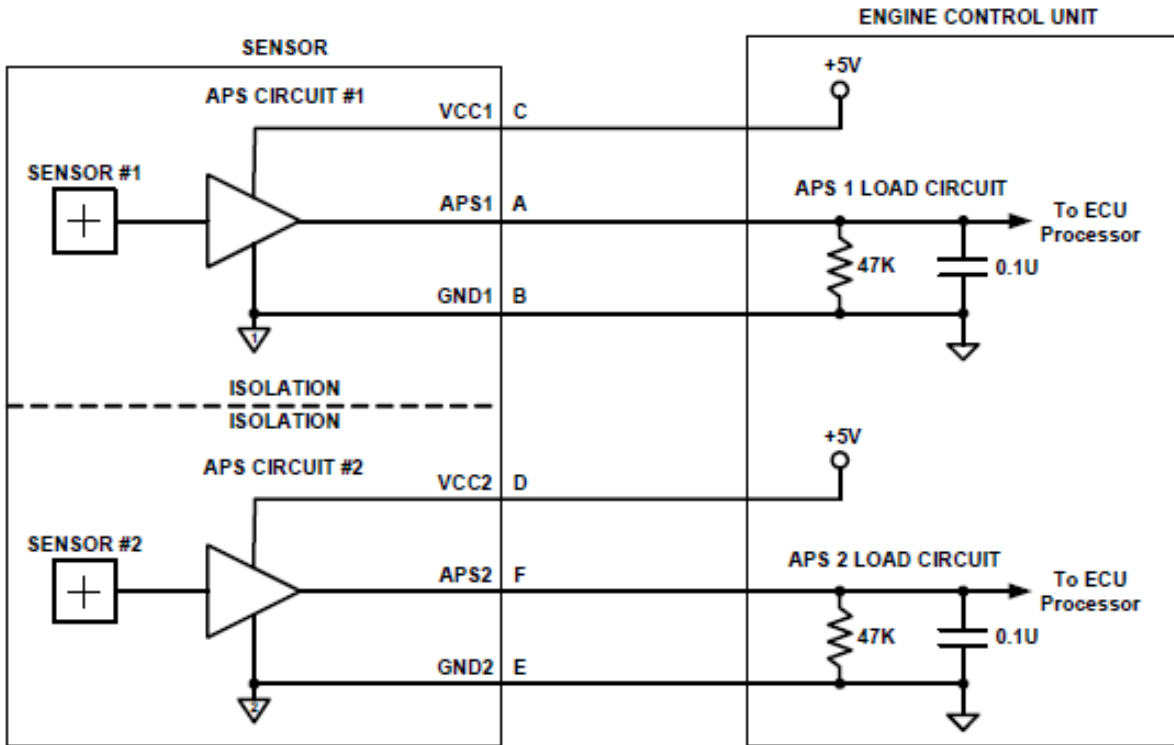
Mechanical Dimensions and Characteristics
(For reference only, wire harness not shown in side view)



 WILLIAMS CONTROLS		PROCEDURE NAME:	DEPT:		030	
		Williams Customer Specification Form				
DOCUMENT NUMBER:	WQF-030-021	REVISION LEVEL:	A	DATE EFFECTIVE:	11/13/07	DAF# 00396
QEMS Representative	Mary Knight	Process Owner	Michael Cooper	Department Manager	Scott Thiel	

Applications Information:

The diagram below shows a suggested interconnection between the pedal sensor and a typical, compatible load circuit.




Revision History

Rev	Date	ECN#	Changes/Comments
A	06/02/2010	002326	Initial production release
002			
001			

Williams Controls
14100 S.W. 72nd Avenue
Portland, OR. 97224

Phone (503) 684-8600
Fax (503) 624-3812

Email info@wmco.com

 WILLIAMS CONTROLS	PROCEDURE NAME:	DEPT:	030				
	Williams Customer Specification Form						
DOCUMENT NUMBER:	WQF-030-021	REVISION LEVEL:	A	DATE EFFECTIVE:	11/13/07	DAF#	00396
QEMS Representative	Mary Knight	Process Owner	Michael Cooper	Department Manager	Scott Thiel		