



# Wabash 1029 PPS

## Pedal Position Sensor

Engineered for accuracy and long life in drive-by-wire throttle applications for agricultural, construction, heavy trucks, marine and off-road equipment.

The Wabash 1029 Pedal Position Sensor (PPS) is designed for use in drive-by-wire throttle applications. The primary configuration conforms to SAE J1834 standards, yet modifications can be made to meet customer specific demands. The 1029 PPS is ideal for:

- Agricultural equipment
- Construction equipment
- Heavy trucks
- Marine applications
- Off-highway vehicles

The tough, reliable 1029 PPS features Wabash Technologies' patented silver-in glass encoder sensing technology to provide exceptional accuracy and extended life. A tested, field proven product withstands the harshest operating environments.

Wabash generic sensors offer customers low cost options with minimal or little tooling investment.

Count on Wabash Technologies for sensing solutions that add performance and value to products. We serve customers with advanced design and engineering capabilities, flawless quality performance, flexible manufacturing and on-time delivery.



To learn more about how our products can help you, contact us at 260-355-4100 or visit [www.wabashtech.com](http://www.wabashtech.com)



Committed to sensor advancement.





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## Pedal Position Sensor

### Technical Specifications

#### PHYSICAL

- Sealed Package
- Kick Down Switch Option
- Single Output Available

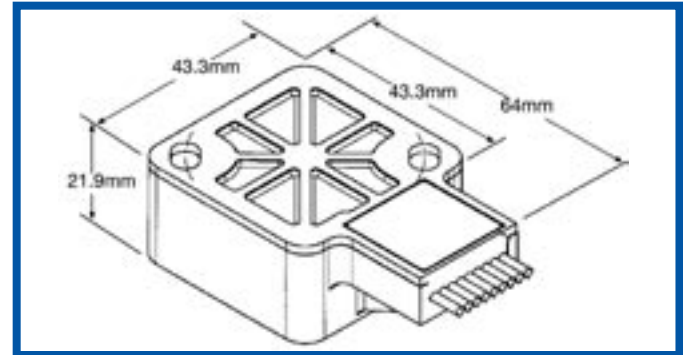
#### ELECTRICAL – POTENTIOMETERS

	Specifications
<b>Potentiometer 1</b>	
Total Resistance	2.5k ohms at 20°C ±10°C
Resistance Tolerance	±15%
Index Point (Idle position)	*13% at 40° ±2°
Output Gradient	1.048% /° ± 0.05% /°
<b>Potentiometer 2</b>	
Total Resistance	2.5k ohms at 20°C ±10°C
Resistance Tolerance	±15%
Index Point (Idle position)	*13% at 40° ±2°
Output Gradient	1.205% /° ±0.05% /°
<b>Both Potentiometers</b>	
Linearity (independent)	±2% over 5% to 85% of output
Power Rating	0.15 watts at 85° Derated to Zero at 105°C
Temperature Coefficient	±600 ppm/°C
Insulation Resistance	1000 M ohms/min., 500 V DC
Maximum Voltage	13.5 V DC

#### ELECTRICAL – SWITCHES

	Specifications
Mean Switch Position	43° ±2°
Angle Between Switches	0.5° to 3.5°
Switch State at Idle	Switch 1 Closed Switch 2 Open
Max Continuous Current	20 mA

NOTE: All angles are quoted in direction of rotation from center line.



#### MECHANICAL

	Specifications
Rotation	83° ±2°
Spring Torque (min return)	20 mNm
Stop Strength	5 Nm Min
Lead Wires - Length	762 mm
- Size	0.5 mm CSA, 1.75/1.85 mm OD
- Type	To ISO 6722 for Low Tension, Thin Wall Cable
Pull Strength	5 kg Max for 1 Hour on all Cables in Direction of Cable Exit

#### ENVIRONMENTAL

	Specifications
<b>Tests Include</b>	
Rotational Life	5,000,000 Full Cycles 10,000,000 Dither Cycles (2° rotation)
<b>Temperature Range</b>	
Storage	-40°C to + 105°C
Operating	-40°C to + 85°C
Sealing	Pressure Jet Wash
Relevant sealing specifications are only valid where appropriately sealed electrical connectors are fitted	



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#### Wabash Technologies, Inc.

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