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.

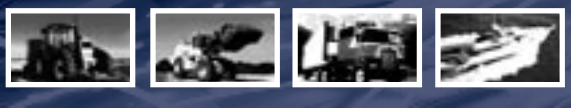
Wabash generic sensors offer customers low cost options with minimal or little tooling investment.

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

Wabash TECHNOLOGIES

Committed to sensor advancement.



Wabash 1029 PPS

Pedal Position Sensor

Technical Specifications

PHYSICAL

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

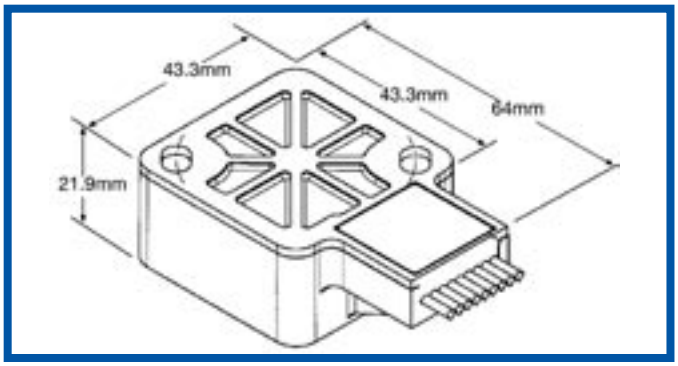
ELECTRICAL – POTENTIOMETERS

	Specifications
Potentiometer 1	
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% /°
Potentiometer 2	
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% /°
Both Potentiometers	
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
Tests Include	
Rotational Life	5,000,000 Full Cycles 10,000,000 Dither Cycles (2° rotation)
Temperature Range	
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

Wabash TECHNOLOGIES

Committed to sensor advancement.

Wabash Technologies, Inc.
1375 Swan Street, P.O. Box 829, Huntington, IN 46750-0829 USA Phone: 260-355-4100 Fax: 260-355-4265

Wabash Technologies, Ltd.
5 Faraday Park, Dorcan, Swindon, Wiltshire, SN3 5JF, England UK Phone: +44 1793 600500 Fax: +44 1793 600600