



# Wabash 1036 RPS

## Rotary Position Sensor

Well suited for a variety of vehicle control applications in rugged environments and temperature extremes.

The Wabash 1036 Rotary Position Sensor (RPS) is a versatile device that is fully sealed to ingress protection IP67. This provides exceptional mechanical durability and long electrical life, making it ideal for applications such as:

- Transmission position
- Steering angle
- Gear lever position
- Suspension travel
- Throttle position

The 1036 RPS is ideal for use in automotive, agricultural, off-highway, construction, marine and industrial control systems. It functions perfectly in the harshest environmental conditions, including:

- Temperature extremes
- Continuous vibration
- Chemical exposure
- Water immersion

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.



# Wabash 1036 RPS

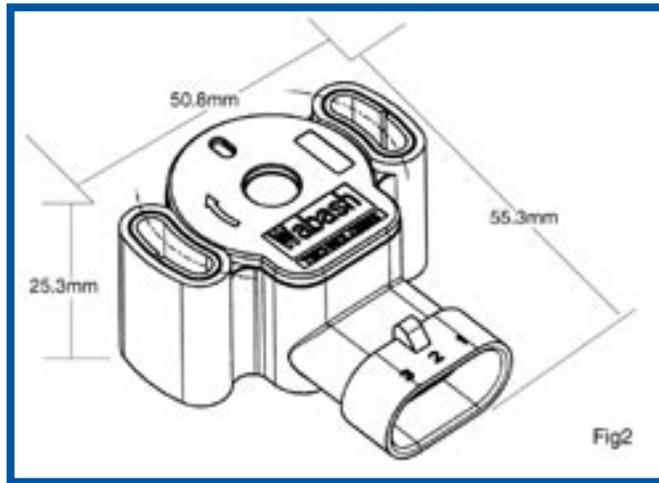
## Rotary Position Sensor

### Technical Specification

- # 1036-0000 Standard Version without return spring
- # 1036-0001 Standard Version with return spring
- # 1036-0002 Continuous Rotation

### PHYSICAL

- Fully “sealed”, robust package suitable for automotive, agricultural, marine and industrial environments
- Electrical connection: AMP Superseal 1.5 Series Connector
- Through hole “D” drive
- Mountable on both faces to give Clockwise and Counter Clockwise rotation
- Mounting: Slots with  $\pm 15^\circ$  adjustment for M4 screws
- Reference index indent
- Return spring option
- Standard electrical resistance (and Custom Options)



### ELECTRICAL

	Standard Version	Continuous Rotation
Electrical Angle - Maximum	200°	346° $\pm 1^\circ$
RT (Standard Range)	5K $\Omega$ AT 20°C $\pm 10^\circ$ C	5K $\Omega$ AT 20°C $\pm 10^\circ$ C
Index Point (Ref only )	10% $\pm 2\%$ AT 90° Lower Endstop	50% $\pm 2\%$ AT 180° Centre Line
Absolute Linearity		$\pm 2\%$
Maximum Voltage		30 V d.c.
Temperature Coefficient		$\pm 600$ ppm/ $^\circ$ C

### MECHANICAL

	Standard Version Without Spring	Standard Version Return Spring	Continuous Rotation
Rotation	190° Maximum with stops	190° Maximum with stops	360° Continuous
Stop Strength - Minimum	680 mNm	680 mNm	Not Applicable
Mounting Pitch	41 mm	41 mm	41 mm
Fixing Torque - Recommended	2-3 Nm	2-3 Nm	2-3 Nm
Spring Torque		Minimum Return 20 Nmm Maximum Wind-up 115 Nmm	

### PERFORMANCE & ENVIRONMENTAL

	Standard Version	Continuous Rotation
Rotational Life (Electrical Angle)		5,000,000 Full Cycles
Dither Cycles		10,000,000 (2° rotation) Cycles
Functional Temperature Range		-40°C to +130°C
Mechanical Vibration	10 - 57 Hz 1 mm Displacement	57-100 Hz @ 10g, 100 - 500 Hz @ 27g
Shock (Operational)		3 Axis 100 x 40 g 6 ms (BSEN 60068-2-29)
Shock (Handling)		1 m Drop (Concrete)
Sealing		IP67
Pressure Wash @		1000 psi (69 Bar)
Ambient Temperature & 90°C		(0.3 - 5.0m, 2.5 min)
Humidity		96% RH @ 40°C (504 Hrs)
Salt Spray		5% Solution @ 40°C (336 Hrs)
Chemical Resistance	Diesel, Hydraulic Oil, Gear Box Oil, Engine Coolant, Brake Fluid Dot 4, Ethylene Glycol 50% Aqueous, Urea Nitrogen, Liquid Lime 10% Aqueous, 7.5% N.P.K Fertiliser Battery Acid	
Mass	Approx 51g	Approx 47g



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