



Representative photograph, actual product appearance may vary.

Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.

RPN1A112

RPN Series Hall-Effect Rotary Position Sensor with 90-degree range; standard temperature range and 6 mm drive-shaft actuation

Features

- Solid-state Hall effect technology
- Integrated reverse polarity, short circuit and EMC protection
- 90 ° measuring range with 360 ° allowable rotation
- Rugged sealed package with integral connector

Typical Applications

Heavy Duty Vehicles:

- Pedal movement
- Throttle position
- Gear shift position
- Lever position
- Linkage position
- Suspension height
- Tractor hitch height

Description

RPN Series Hall Effect Rotary Position Sensors use a magnetically biased Hall effect integrated circuit (IC) to accurately sense rotary movement of the actuator shaft. This IC, together with conditioning and protection circuitry and two permanent magnets, is sealed in a rugged package.

Rotation of the actuator shaft changes the Hall effect IC's position relative to the magnets. This results in a change in the flux density detected by the Hall effect IC as the shaft is rotated. The output of the IC is converted to a linear output over 90° of travel.

The sensor is flange mounted with two easily accessible mounting holes. Connection is by AMP Superseal 1.5 Series.



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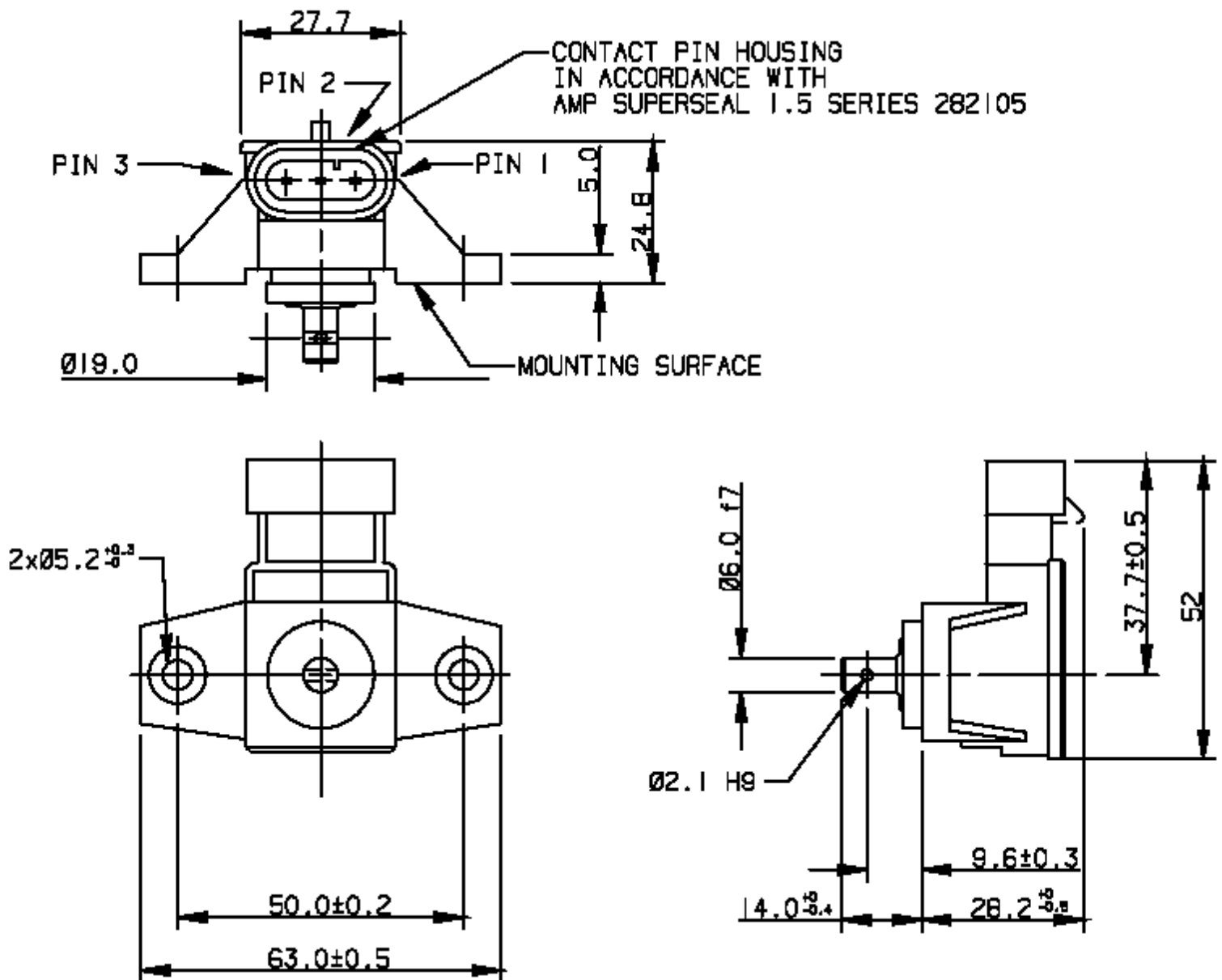
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Product Specifications	
Product Type	Hall-Effect Rotary Position Sensor
Package Style	Plastic Housing
Supply Voltage	10.0 Vdc to 30.0 Vdc
Output Type	Linear Voltage: 0.25 Vdc to 4.75 Vdc
Termination Type	AMP 3-Pin Connector
Operating Temperature Range	-25 °C to 85 °C [-13 °F to 185 °F]
Output Voltage	0.25 Vdc to 4.75 Vdc
Linearity (% of Span)	± 2.5 °
Sealing	IP67
Availability	Europe only
Comment	Resistant to short circuit connection and has reverse polarity protection.
Measuring range	± 45 °
Mechanical angle of rotation	360 °
Accuracy	± 0.5 °
Load Resistance	5 kOhms min.
Actuation	6 mm diameter plain shaft
Supply Current (max. @ 25 °C)	15 mA
Series Name	RPN Series



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WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

WARNING

MISUSE OF DOCUMENTATION

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

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