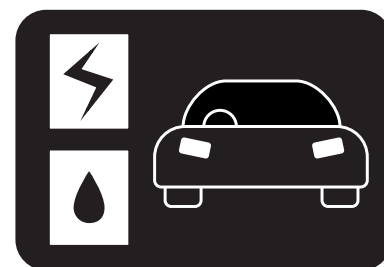
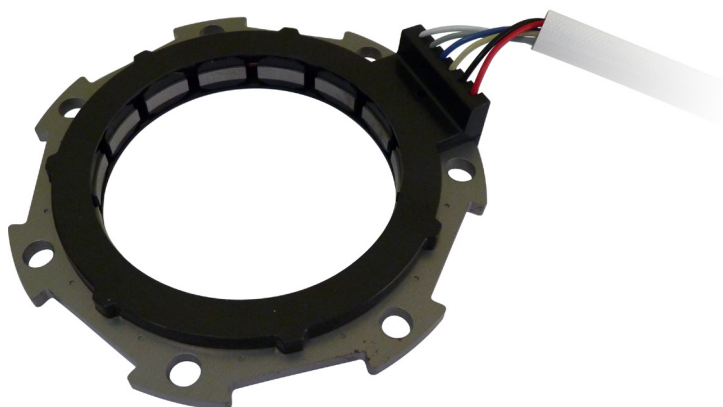


# JVR Variable Reluctance Type Resolvers



## Key features

- Low cost
- High reliability
- Accurate angle measurement
- Robust design
- High temperature operation

Due to its simple non-contact design the JVR resolvers provide high reliability even in harsh conditions. Utilizing more than 50 years of experience in the aerospace industry we have designed a resolver range that provides accurate angle measurement with integrated angle error compensation. Motor control is optimized by the use of special winding techniques to reduce magnetic and electrical noise.

The thin design of the JVR resolvers minimizes space requirements. All resolvers are manufactured in-house in our own facilities on automated production lines to guarantee superior product quality.

## Applications

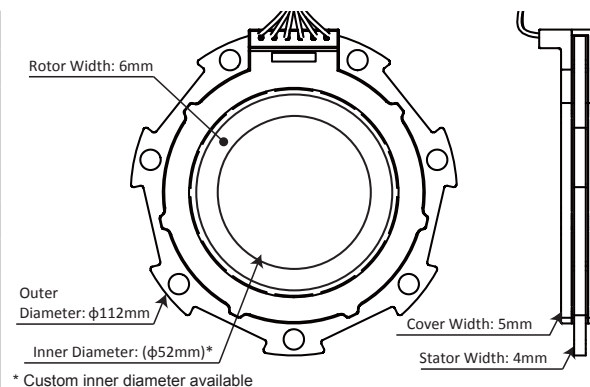
- Electric vehicle (EV)
- Hybrid electric vehicle (HEV)
- Plugin hybrid electric vehicle (PHEV)

JAE appreciate that every new car design is special and can require unique resolver features. Therefore to support key OEMs we have set up a global engineering team to provide both integration and design support.

Recognizing product cost constraints, we have already set up production facilities in multiple countries to economically support local demands.

## Technical data

Typical specification		
Drive number	5-Drive (Custom numbers available)	
Input voltage	7 Vrms @ AC 10 kHz	
Transformation ratio	0.286 ± 10 %	
Angle error	Electrical	3° p-p max.
	Mechanical *	0.6° p-p max.
Zero position error	Please contact us for details	
Insulation resistance	100 MΩ @ 23 °C	
Withstand voltage	Between wire and core	AC 500 V 1 min @ 50 Hz @ 23 °C
	Between wire and wire	AC 250 V 1 min @ 50 Hz @ 23 °C
Rotational speed *	15,000 rpm	
Temperature	-40 °C to +180 °C	
Vibration *	Random	27.8 G <sup>2</sup> /Hz
	Sine, 10 Hz to 60 Hz	40.0 m/s <sup>2</sup> rms
	Sine, 60 Hz to 200 Hz	20.0 m/s <sup>2</sup> rms
Chemical resistance *	Engine oil, Coolant, ATF, and others	



\* Please contact us for further information

## Contact information

### North America

JAE Electronics, Inc.  
1100 W. Park One Drive  
Sugar Land  
TX 77478  
United States

T: +1 281 325 5760  
E: [support.aerospace@jae.com](mailto:support.aerospace@jae.com)

### Europe

JAE Europe, Ltd.  
200 Fowler Avenue  
Farnborough Business Park  
Hampshire  
GU14 7JP  
United Kingdom

T: +44 1252 55 11 00  
E: [support.aerospace@jae.co.uk](mailto:support.aerospace@jae.co.uk)

### Japan and Rest of World

Japan Aviation Electronics  
Industry, Ltd.  
1-19, Aobadai 3-chome  
Meguro-ku  
Tokyo 153-8539  
Japan

T: +81 3 3780 2925  
E: [aeroinfo@jae.co.jp](mailto:aeroinfo@jae.co.jp)

## Document revision table

Document number	Issue	Revision date	Changes
JVR_DS	01	01/03/2016	New document

JAE reserves the right to modify specifications without prior notice.