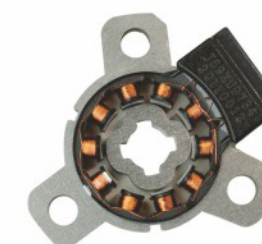




上海赢双电机科技股份有限公司

Shanghai Yingshuang Electric Machinery Technology Co.,Ltd

全球专业旋变供应商
Global Resolver Supplier



上海赢双电机科技股份有限公司

Shanghai Yingshuang Electric Machinery Technology Co.,Ltd

地址：上海市闵行区颛桥镇北吴路1230号

Address: No.1230, Beiwu Road, Minhang District, Shanghai

电话 (Tel) : 021-34023300 传真 (Fax) : 021-34200075

邮编 (Post code) : 201108 E-mail: sales@windouble.com.cn

网址 (Website) : www.windouble.com.cn

中国·上海
China, Shanghai

Company PROFILE 公司简介

上海赢双电机科技股份有限公司成立于2005年，公司位于上海市闵行区颛桥镇北吴路1230号，是一家致力于旋转变压器研发、生产和提供系统解决方案的高新技术企业。

公司成立以来，坚持以市场为导向，走产学研发展的道路，已参加和承担多项国家863、上海市科委科研项目。已获取60多项专利。

公司一直坚持以客户为中心、企业价值产生于客户价值的理念。公司于2010年通过ISO9001质量体系认证，2014年通过TS16949汽车质量管理体系认证，并于2018年通过IATF16949:2016/ISO9001:2015体系认证；2012年被授予“上海市高新技术企业”，2015年被授予上海市“专精特新”企业，2016年被授予“小巨人”企业，2022年被国家工信部授予“专精特新小巨人”企业，同时也是“科技小巨人”企业。

公司磁阻式旋转变压器应用于新能源汽车、高铁、轨道交通、矿山机械等诸多电机驱动领域；绕线式旋转变压器主要应用于工业伺服系统、机器人、国防军工等领域。

公司本着“同发展、共进步、利益共享、实现双赢”的经营理念，于国内外广大企业携手共进，为实现提升中国电机科技水平的愿望而奋斗。

Founded in 2005, Shanghai Yingshuang Electric Machinery Technology Co., Ltd. is a high-tech enterprise specialized in the resolver research & development and providing system solutions.

Since its establishment, the company adheres to the market-oriented approach and takes the road of Production, Education and Research. It has participated in and undertaken a number of national 863 and Shanghai Science and Technology Commission scientific research projects. More than 60 patents have been obtained.

The company has always adhered to the concept of customer-centered and enterprise value arising from customer value. The company has passed ISO9001 quality system certification since 2010 and TS16949 automotive quality management certification since 2014, and has passed IATF 16949:2016 / ISO9001:2015 system certification in 2018. In 2012, the company was honored as Shanghai High-tech Enterprise. In 2015, it was awarded as Shanghai Newly Exclusive Specialized Professional Enterprise. In 2022, it was awarded as Newly Exclusive Specialized Professional Enterprise by the National Industry and Information Technology Ministry.

The company's reluctance resolver is used in many electric drive fields such as new energy vehicles, high-speed rail, rail transit, mining machinery, etc; Brushless resolver is mainly used in industrial servo systems, robots, national defense and military industries etc.

Based on the business philosophy of Develop & Improve together, Share benefit & Achieve win-win, the company is making progress with enterprises at home and abroad to improve China's electrical technology level.

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产品简介 Product introduction

磁阻式旋变(Variable Reluctance Resolver)是依据电磁感应原理, 仅通过转子凸极效应产生具有正弦轨迹的气隙磁导变化, 使输出绕组的感生电压随机械转角作相应正弦或余弦变化的角度传感元件。适用于较大的温度与湿度范围和恶劣环境, 并且高可靠性。

广泛应用于新能源汽车、轨道交通、矿山机械、纺织机械等诸多电驱动领域。产品具有以下特点:

- 高精度的绝对式检测, 适应高转速应用需求;
- 超薄结构、结构紧凑、安装使用方便;
- 可靠性高、寿命长、适用于恶劣工况;
- 较高的性价比;
- 独有专利技术。

VR resolver is an absolute angle sensor component that converts mechanical rotary angle into electric signal through the electromagnetic induction.

It is applicable to wide temperature, humidity range, severe environments and has high reliability. It is widely used in many fields such as new energy vehicles, rail transit, mining machinery, textile machinery and so on. The product has the following characteristics:

- High accurate absolute angle detection, adapted to high speed application demand;
- Ultra-thin configuration, compact structure, easy installation;
- High reliability, long lifespan, applicable for bad working conditions;
- Highly cost-effective;
- Unique patented technology.

电路原理 Circuit Theory

磁阻式旋转变压器是根据定子内圈与转子外圈间隙的磁导率, 而产生特定波形的曲线(正弦波)。定子里有1组励磁绕组和2组输出绕组, 根据检测转子和定子间的间隙变化, 以sin和cos式波形的变化来输出电压。

VR resolver can produce a particular waveform curve (Sine) based on the magnetic permeability between the inner ring of the stator and the outer ring of the rotor. The stator has 1 set of excitation winding and 2 output windings. The output voltage changes as a sine or cosine characteristic according to the change of the air gap between rotor and stator.

具体参照图1、图2。Please refer to diagram 1 and diagram 2 for details.

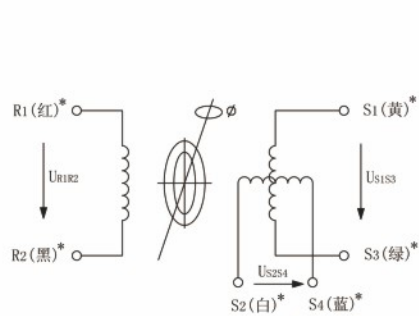


图1接线图
Diagram 1 wiring diagram

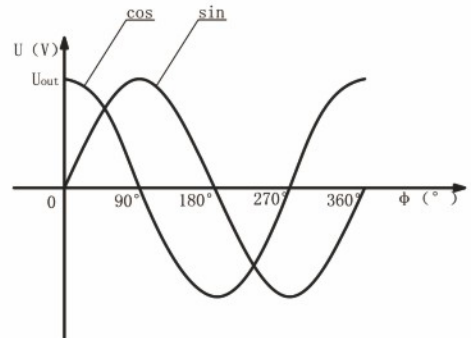


图2输出电压特性
Diagram 2 Output voltage characteristic

*根据不同产品, 可能颜色有变化, 具体参照产品规格图纸。
The wire colors may vary depending on different products, please refer to the product specification drawing for specifics.

励磁正 Input Voltage (Ref+)	红线 Red
励磁负 Input Voltage (Ref-)	黑线 Black
正弦正 Sin Output (Sin+)	白线 White
正弦负 Sin Output (Sin-)	蓝线 Blue
余弦正 Cos Output (Cos+)	黄线 Yellow
余弦负 Cos Output (Cos-)	绿线 Green

电压方程式: Voltage equation

$$U_{S1S3} = K U_{R1R2} \cos(p\phi)$$

$$U_{S2S4} = K U_{R1R2} \sin(p\phi)$$

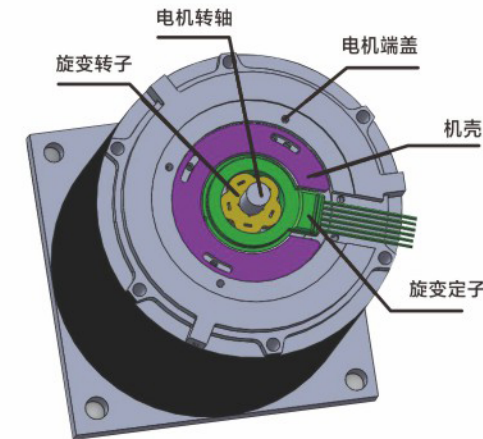
K: 变压比 K: Transformation Ratio

U_{R1R2} : 励磁电压 Excitation voltage

p: 极对数 p: Number of pole-pairs

ϕ : 角度 ϕ : Angle

安装精度说明 Installation guide and assembly sections



安装精度说明: Installation accuracy instruction:

旋变的安装过程需要保证安装精度, 安装不当的情况下可能会导致旋变性能不良、损坏、甚至无法使用。

对于旋变同电动机的配合状况, 建议采用间隙配合: H7/h6/ and h6/H7

对于旋变定子与转子的同心度偏差, 建议不大于0.05mm;

对于旋变定子、转子与电动机轴的垂直度, 建议不大于0.05mm;

对于旋变定子、转子轴向偏差, 通常不大于0.5mm即可。

The installation process of resolver needs to ensure the setting accuracy. Improper installation may result in poor performance, damage, even unavailability.

For the fitting of the resolver and motor, it is suggested to use clearance fit;

For the concentricity tolerance of the stator and rotor, it is suggested not more than 0.05mm;

For the perpendicularity tolerance of the stator, rotor and motor shaft, it is suggested not more than 0.05mm;

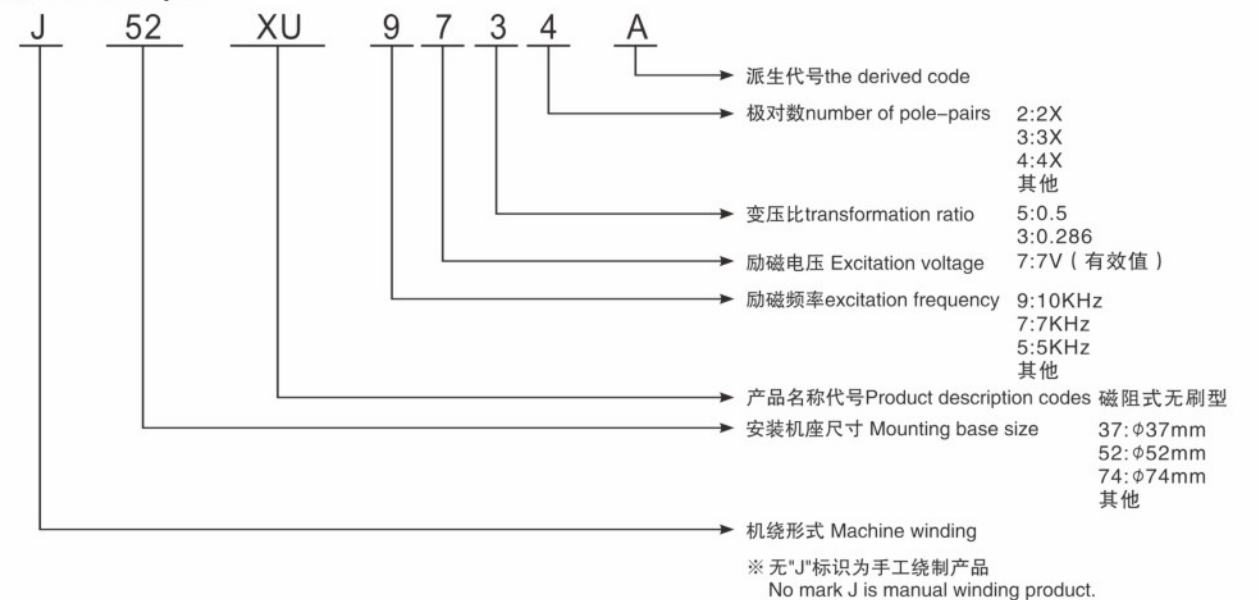
For the axial deviation of the stator and rotor, it is usually suggested not more than 0.5mm.

磁阻式旋变型号命名规则 Naming rules for VR resolver part no.

磁阻式旋转变压器的型号由四部分组成: 机座号、产品名称代号、性能参数代号和派生代号组成。

VR resolver part no. includes four parts: Frame No., Product description code, Performance parameter code and the derived code.

示例: For example:



J37 系列

磁阻式
VR RESOLVER



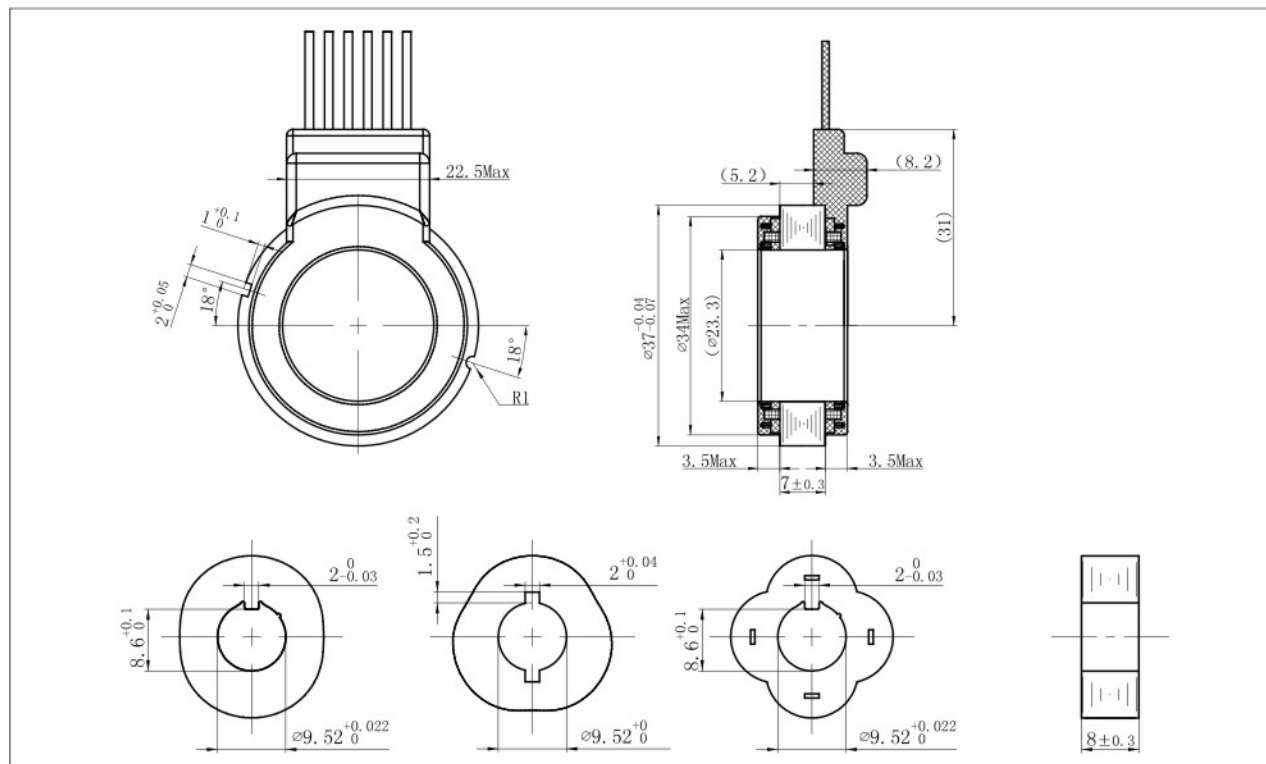
J37 series(OD 37mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J37XU9732R	J37XU9733R	J37XU9734G-L40
极对数 (Pole pairs)	2	3	4
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'
相位移 (Phase shift)	≤±10°	≤±10°	≤±10°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)		
绝缘电阻(Insulation resistance)	250MΩ MIN		
转子孔径 (Rotor ID)	9.52mm	9.52mm	9.52mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm²	0.35mm²	0.35mm²
允许最大转速(Max operating speed)	30000 rpm		
工作温度范围(Operating temperature range)	-40℃ ~ +155℃		

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J37T 系列

磁阻式
VR RESOLVER



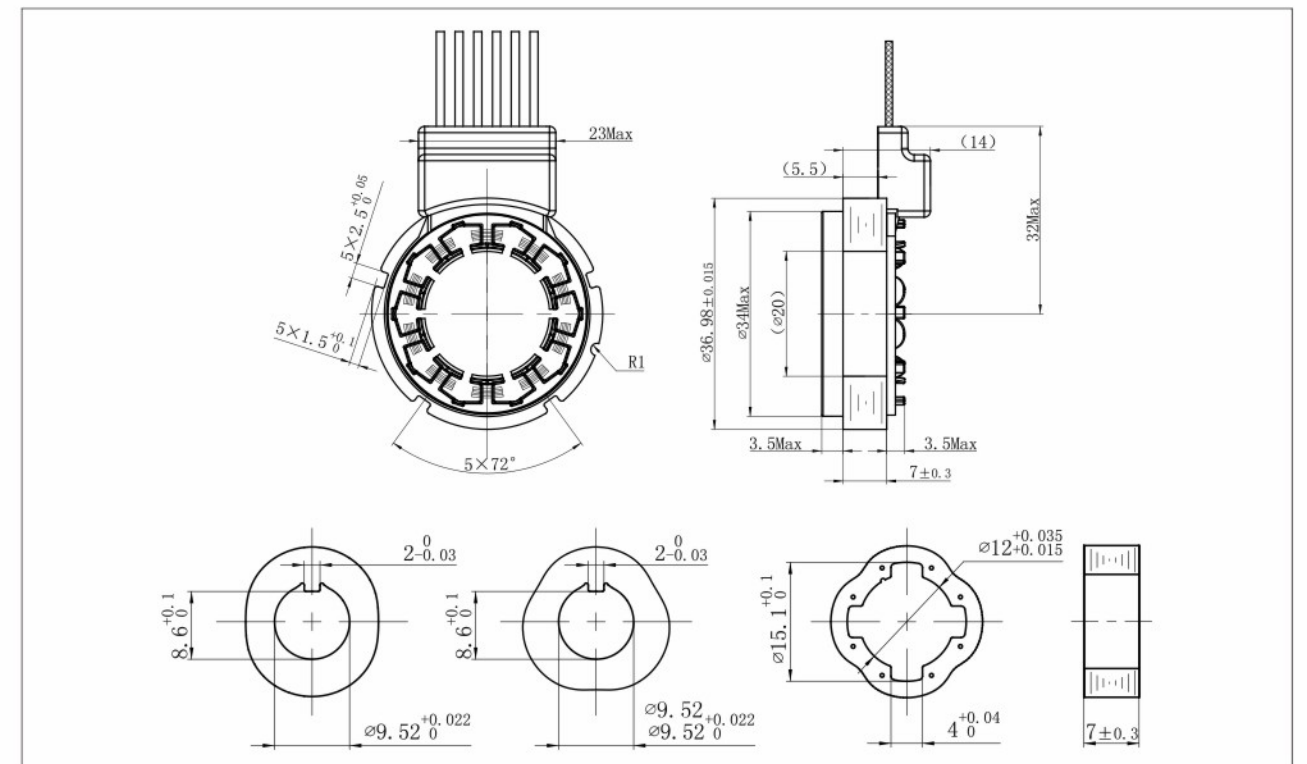
J37T series(OD 37mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J37XU9732T	J37XU9733T	J37XU9734T
极对数 (Pole pairs)	2	3	4
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率 (Input frequency)	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'
相位移 (Phase shift)	T.B.D	T.B.D	(-14°±5°)
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)		
绝缘电阻(Insulation resistance)	250MΩ MIN		
转子孔径 (Rotor ID)	9.52mm	9.52mm	12mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm²	0.35mm²	0.35mm²
允许最大转速(Max operating speed)	30000 rpm		
工作温度范围(Operating temperature range)	-40℃ ~ +155℃		

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J52 系列

磁阻式
VR RESOLVER



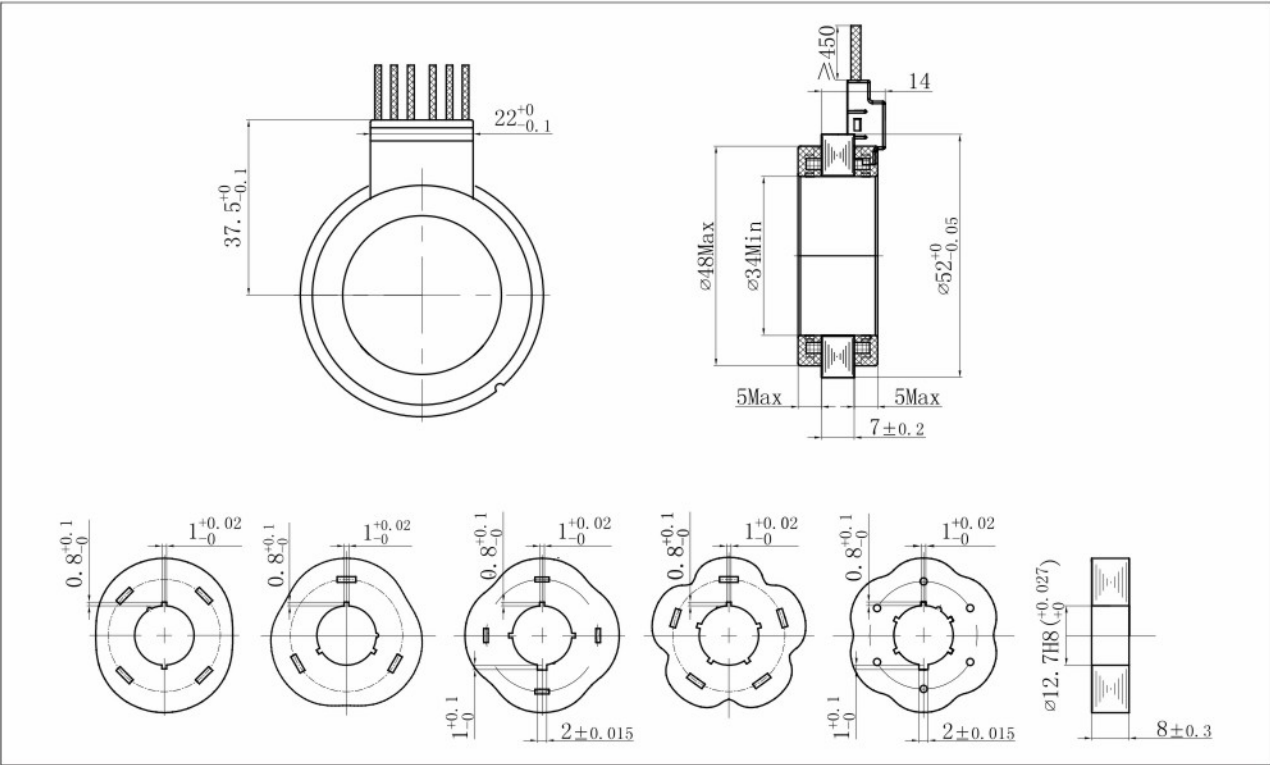
J52 series(OD 52mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J52XU9732G	J52XU9733Q	J52XU9734R	J52XU9735E	J52XU9736K
极对数 (Pole pairs)	2	3	4	5	6
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'	≤±25'	≤±20'
相位移 (Phase shift)	≤±15°	≤±15°	≤±15°	≤±15°	≤±15°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)				
绝缘电阻(Insulation resistance)	250MΩ MIN				
转子孔径 (Rotor ID)	12.7mm	12.7mm	12.7mm	12.7mm	12.7mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm ²	0.35mm ²	0.35mm ²	0.35mm ²	0.35mm ²
允许最大转速(Max operating speed)	30000 rpm				
工作温度范围(Operating temperature range)	-40℃ ~ +155℃				

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J52T 系列

磁阻式
VR RESOLVER



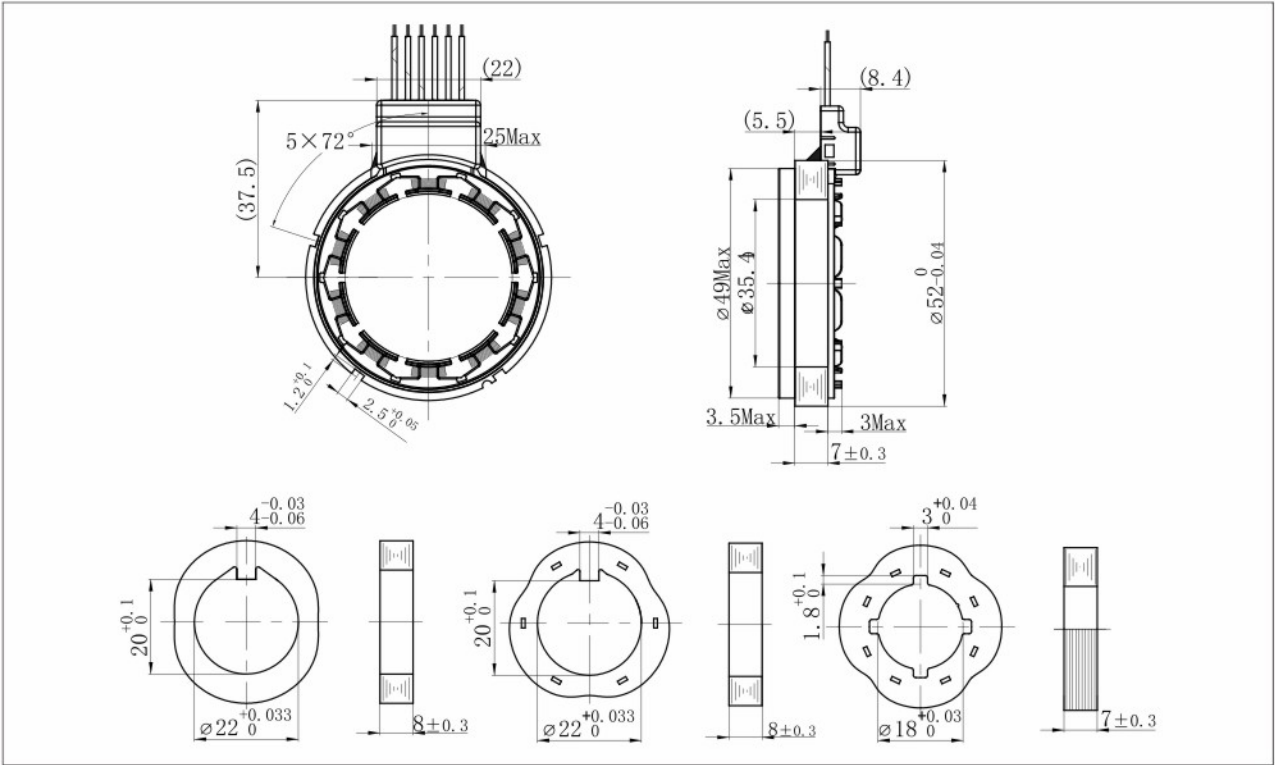
J52T series(OD 52mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J52XU9732T	J52XU9733TC	J52XU9734T
极对数 (Pole pairs)	2	3	4
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'
相位移 (Phase shift)	T.B.D	T.B.D	(-13.6°±5°)
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)		
绝缘电阻(Insulation resistance)	250MΩ MIN		
转子孔径 (Rotor ID)	22mm	22mm	18mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm ²	0.35mm ²	0.35mm ²
允许最大转速(Max operating speed)	30000 rpm		
工作温度范围(Operating temperature range)	-40℃ ~ +155℃		

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J56 系列

磁阻式
VR RESOLVER



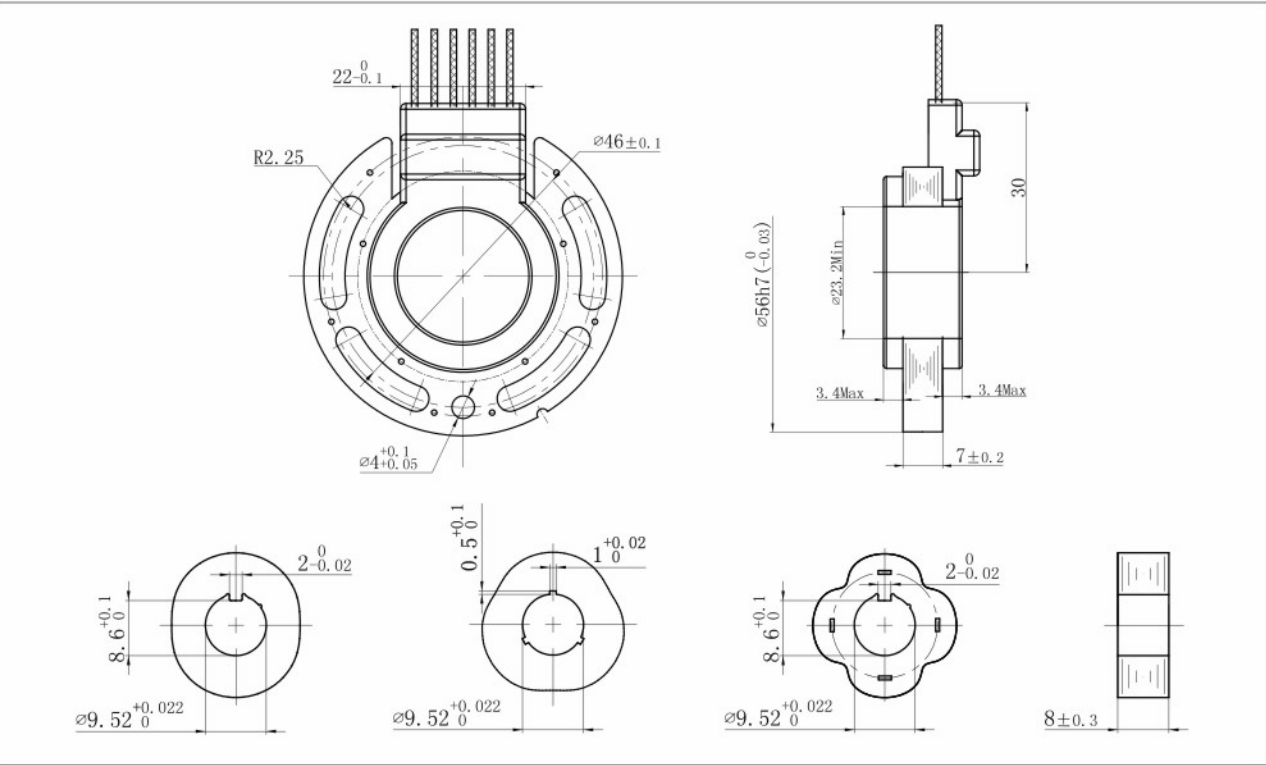
J56 series(OD 56mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J56XU9732A	J56XU9733A	J56XU9734C
极对数 (Pole pairs)	2	3	4
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率 (Input frequency)	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'
相位移 (Phase shift)	≤±15°	≤±15°	≤±15°
耐电压 (Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)		
绝缘电阻 (Insulation resistance)	250MΩ MIN		
转子孔径 (Rotor ID)	9.52mm	9.52mm	18mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm²	0.35mm²	0.35mm²
允许最大转速 (Max operating speed)	30000 rpm		
工作温度范围 (Operating temperature range)	-40℃ ~ +155℃		

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J59 系列

磁阻式
VR RESOLVER



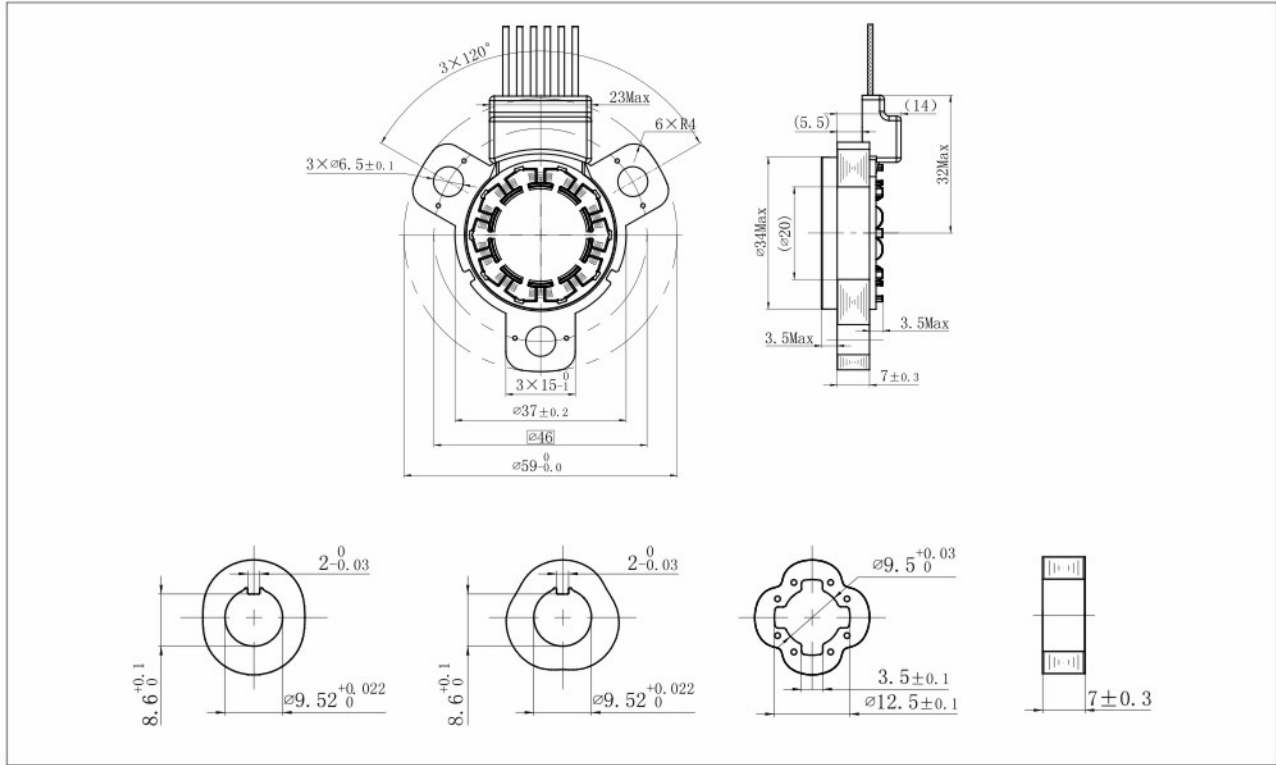
J59 series(OD 59mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J59XU9732T	J59XU9733T	J59XU9734T
极对数 (Pole pairs)	2	3	4
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率 (Input frequency)	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'
相位移 (Phase shift)	T.B.D	T.B.D	(-14°±5°)
耐电压 (Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)		
绝缘电阻 (Insulation resistance)	250MΩ MIN		
转子孔径 (Rotor ID)	9.52mm	9.52mm	12mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm²	0.35mm²	0.35mm²
允许最大转速 (Max operating speed)	30000 rpm		
工作温度范围 (Operating temperature range)	-40℃ ~ +155℃		

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J74 系列

磁阻式
VR RESOLVER



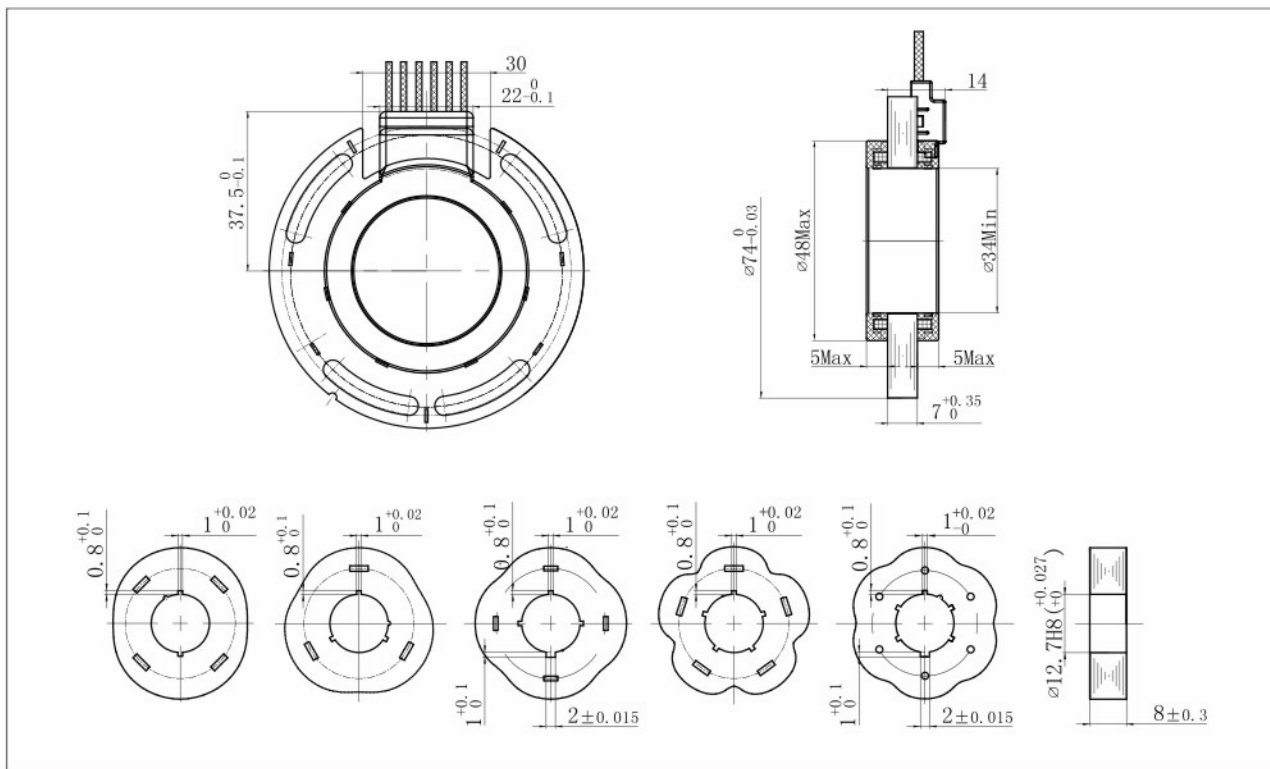
J74 series(OD 74mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J74XU9732B	J74XU9733	J74XU9734A-L5	J74XU9735C	J74XU9736A
极对数 (Pole pairs)	2	3	4	5	6
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'	≤±25'	≤±20'
相位移 (Phase shift)	≤±15°	≤±15°	≤±15°	≤±15°	≤±15°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)				
绝缘电阻(Insulation resistance)	250MΩ MIN				
转子孔径 (Rotor ID)	12.7mm	12.7mm	12.7mm	18mm	18mm
引出线规格 (截面积)Wire spec.(sectional area)	0.35mm²	0.35mm²	0.35mm²	0.35mm²	0.35mm²
允许最大转速(Max operating speed)	30000 rpm				
工作温度范围(Operating temperature range)	-40℃ ~ +155℃				

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J76 系列

磁阻式
VR RESOLVER



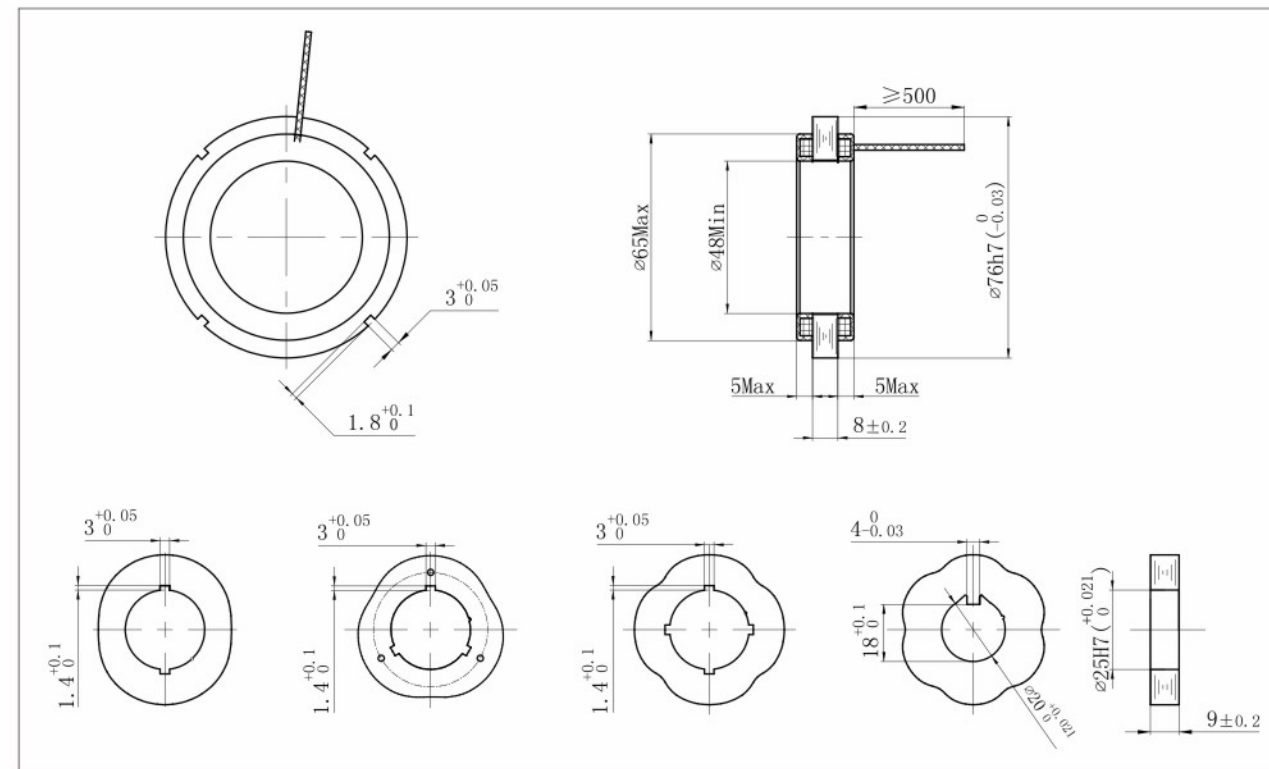
J76 series(OD 76mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J76XU9732	J76XU9733	J76XU9734	J76XU9736
极对数 (Pole pairs)	2	3	4	6
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'	≤±20'
相位移 (Phase shift)	≤±10°	≤±10°	≤±12°	≤±10°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)			
绝缘电阻(Insulation resistance)	250MΩ MIN			
转子孔径 (Rotor ID)	25mm	25mm	25mm	20mm
引出线规格 (截面积) Wire spec.(sectional area)	0.15mm²	0.15mm²	0.15mm²	0.15mm²
允许最大转速(Max operating speed)	30000 rpm			
工作温度范围(Operating temperature range)	-40℃ ~ +155℃			

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J89系列

磁阻式
VR RESOLVER



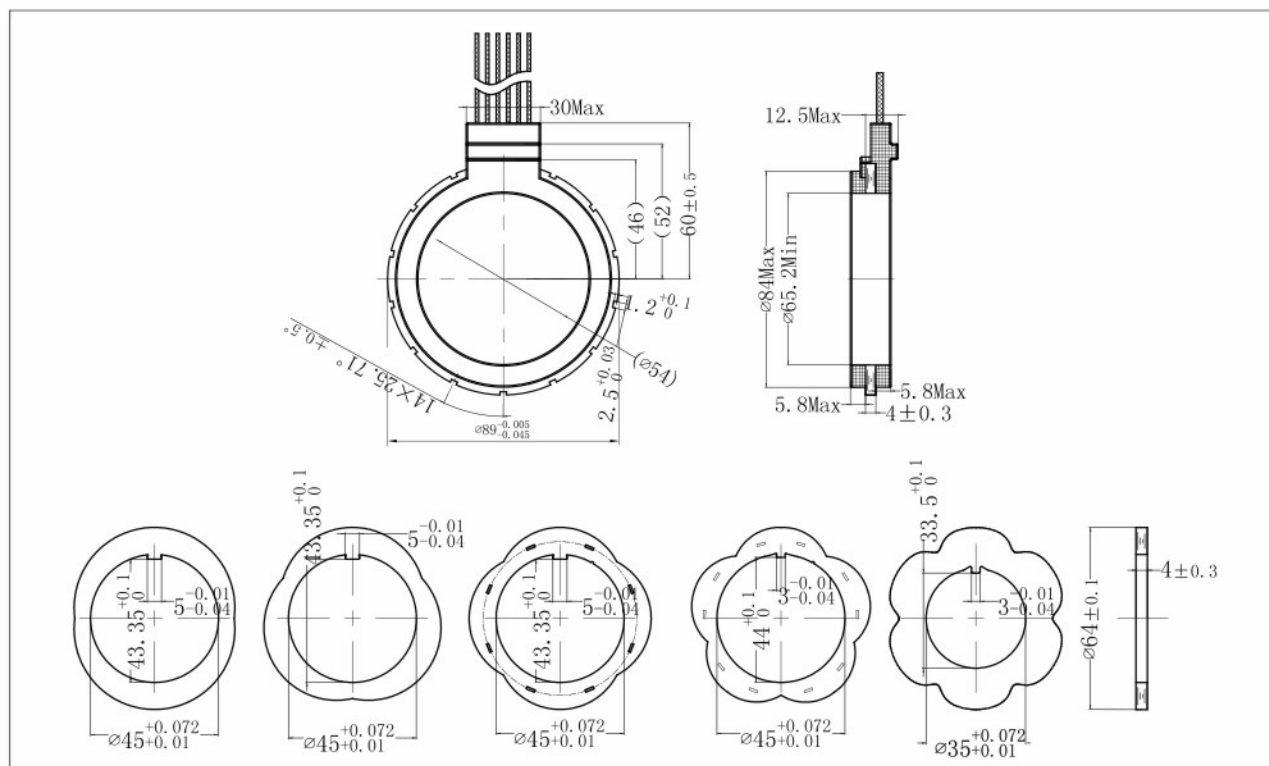
J89 series(OD 89mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J89XU9732	J89XU9733	J89XU9734	J89XU9735	J89XU9736
极对数 (Pole pairs)	2	3	4	5	6
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'	≤±24'	≤±20'
相位移 (Phase shift)	≤±15°	≤±15°	≤±15°	≤±15°	≤±15°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)				
绝缘电阻(Insulation resistance)	250MΩ MIN				
转子孔径 (Rotor ID)	45mm	45mm	45mm	45mm	35mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm²	0.35mm²	0.35mm²	0.35mm²	0.35mm²
允许最大转速(Max operating speed)	30000 rpm				
工作温度范围(Operating temperature range)	-40℃ ~ +155℃				

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J100 系列

磁阻式
VR RESOLVER



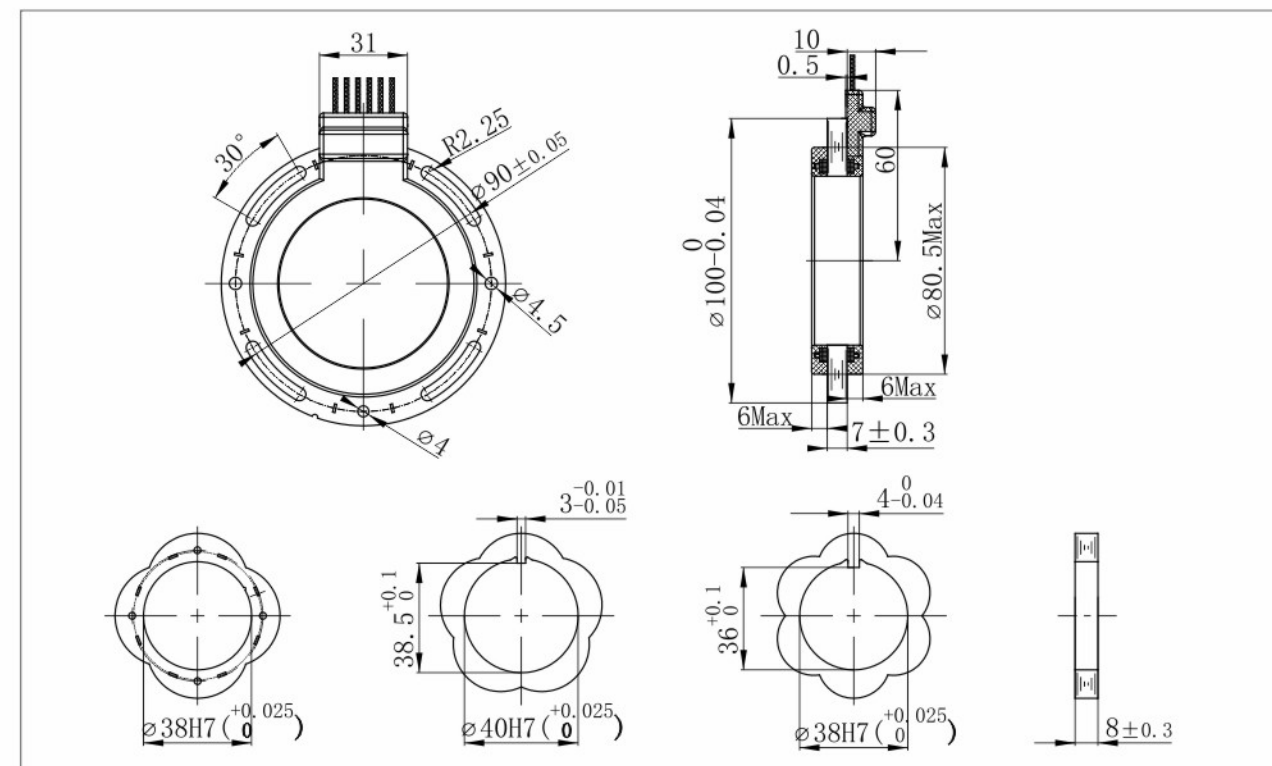
J100 series(OD 100mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J100XU9734A	J100XU9735	J100XU9736
极对数 (Pole pairs)	4	5	6
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±30'	≤±24'	≤±20'
相位移 (Phase shift)	≤±10°	≤±10°	≤±10°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)		
绝缘电阻(Insulation resistance)	250MΩ MIN		
转子孔径 (Rotor ID)	38mm	40mm	38mm
引出线规格 (截面积) Wire spec.(sectional area)	0.5mm²	0.5mm²	0.5mm²
允许最大转速(Max operating speed)	30000 rpm		
工作温度范围(Operating temperature range)	-40℃ ~ +155℃		

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J101 系列

磁阻式
VR RESOLVER



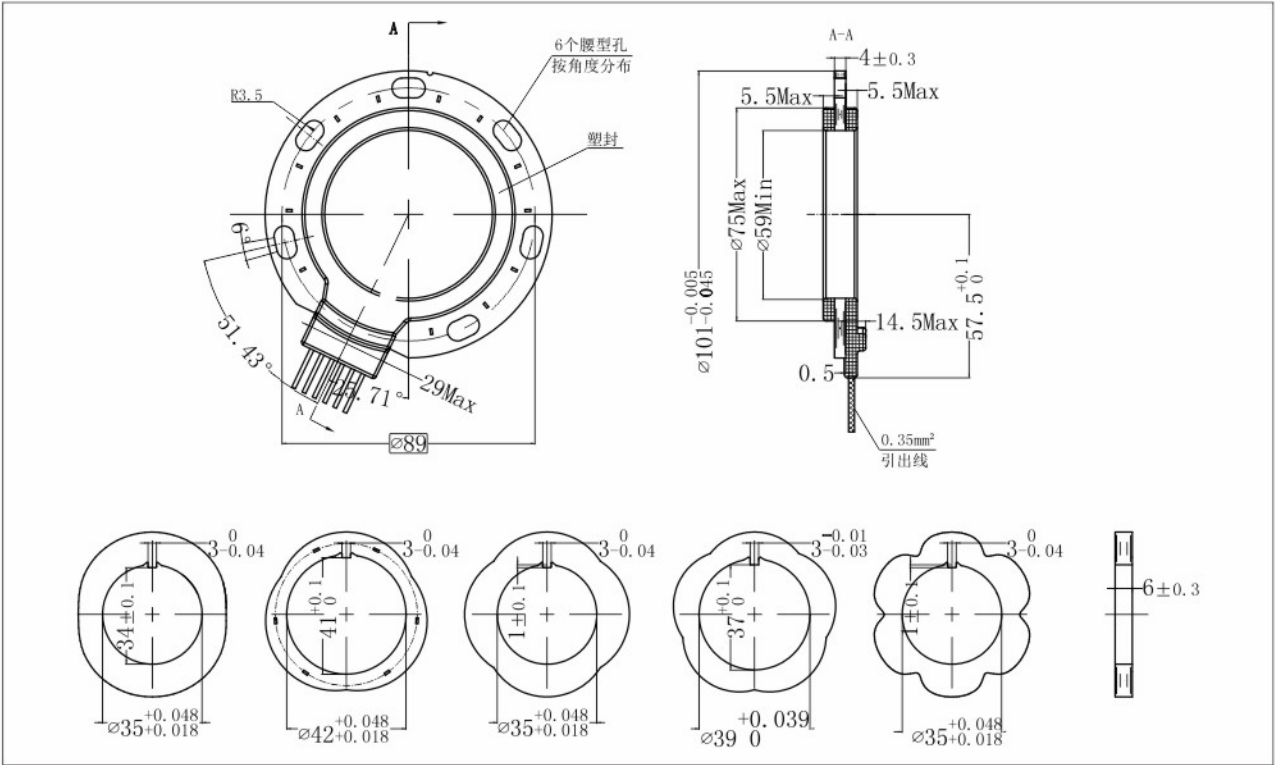
J101 series(OD 101mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J101XU9732E	J101XU9733A	J101XU9734G	J101XU9735B	J101XU9736A
极对数 (Pole pairs)	2	3	4	5	6
激励电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms
激励频率(Input frequency)	10KHz	10KHz	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'	≤±25'	≤±20'
相位移 (Phase shift)	≤±15°	≤±15°	≤±15°	≤±15°	≤±15°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)				
绝缘电阻(Insulation resistance)	250MΩ MIN				
转子孔径 (Rotor ID)	35mm	42mm	35mm	39mm	35mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm²	0.35mm²	0.35mm²	0.35mm²	0.35mm²
允许最大转速(Max operating speed)	30000 rpm				
工作温度范围(Operating temperature range)	-40℃ ~ +155℃				

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J117 系列

磁阻式
VR RESOLVER



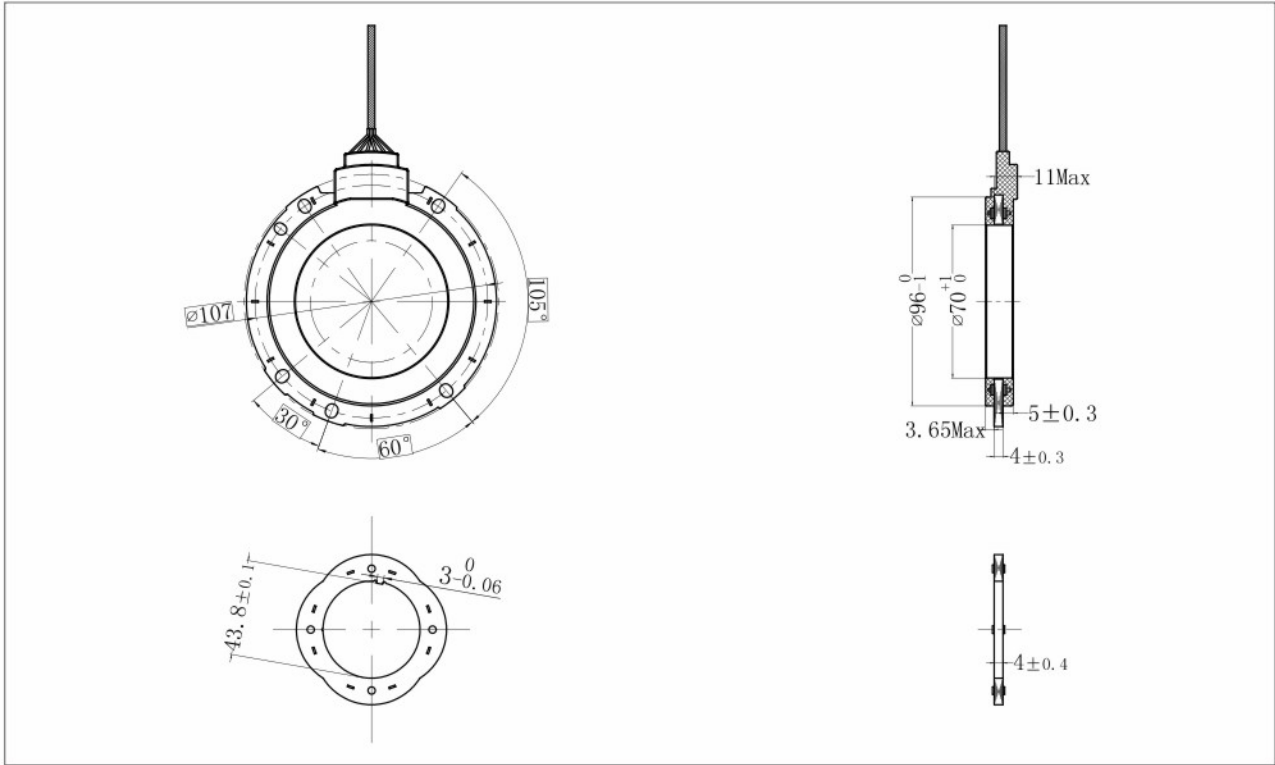
J117 series(OD 117mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J117XU9732	J117XU9733	J117XU9734	J117XU9735	J117XU9736
极对数 (Pole pairs)	2	3	4	5	6
激励电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms
激励频率(Input frequency)	10KHz	10KHz	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'	≤±25'	≤±20'
相位移 (Phase shift)	≤±15°	≤±15°	≤±15°	≤±15°	≤±15°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)				
绝缘电阻(Insulation resistance)	250MΩ MIN				
转子孔径 (Rotor ID)	T.B.D	T.B.D	44.6mm	T.B.D	T.B.D
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm²	0.35mm²	0.35mm²	0.35mm²	0.35mm²
允许最大转速(Max operating speed)	30000 rpm				
工作温度范围(Operating temperature range)	-40℃ ~ +155℃				

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J124 系列

磁阻式
VR RESOLVER



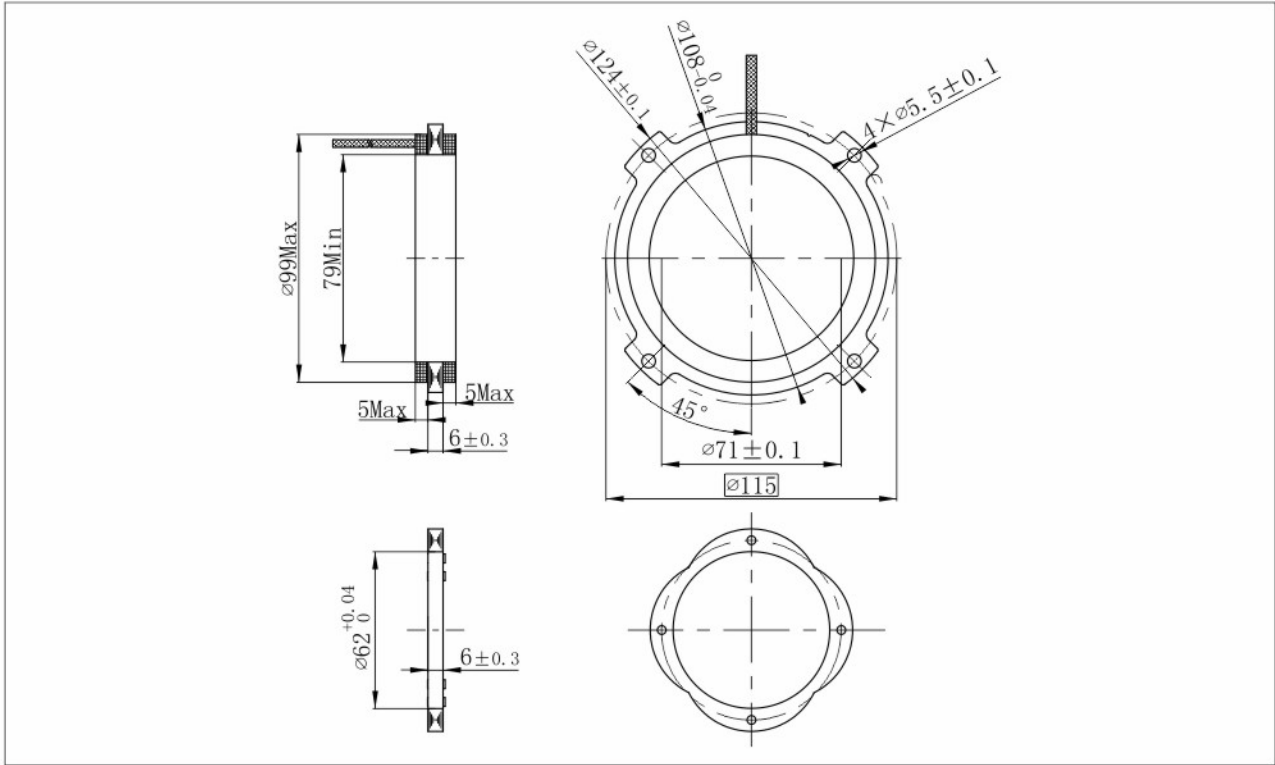
J124 series(OD 124mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J124XU9732	J124XU9733	J124XU9734	J124XU9736
极对数 (Pole pairs)	2	4	6	8
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'	≤±20'
相位移 (Phase shift)	≤±10°	≤±10°	≤±10°	≤±10°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)			
绝缘电阻(Insulation resistance)	250MΩ MIN			
转子孔径 (Rotor ID)	T.B.D	T.B.D	62mm	T.B.D
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm ²	0.35mm ²	0.35mm ²	0.35mm ²
允许最大转速(Max operating speed)	30000 rpm			
工作温度范围(Operating temperature range)	-40℃ ~ +155℃			

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J132 系列

磁阻式
VR RESOLVER



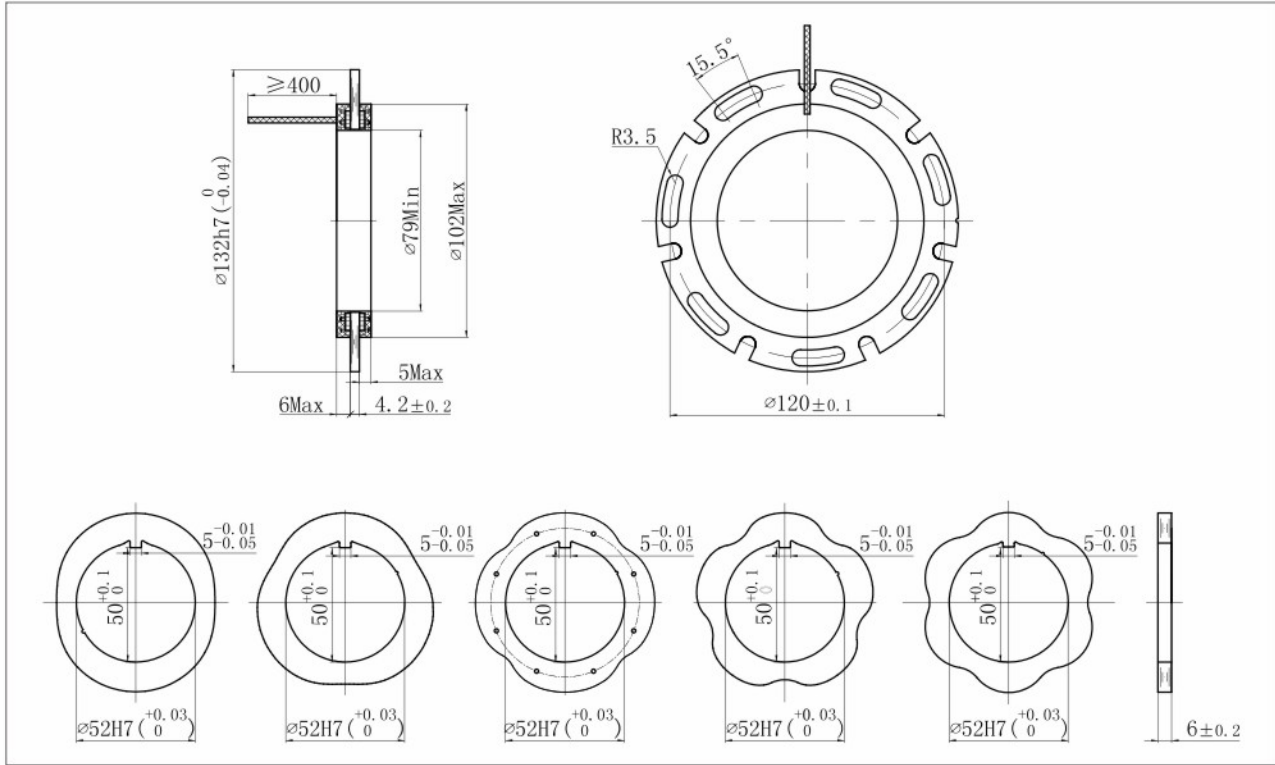
J132 series(OD 132mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J132XU9732	J132XU9733	J132XU9734	J132XU9735	J132XU9736A
极对数 (Pole pairs)	2	3	4	5	6
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±40'	≤±30'	≤±25'	≤±20'
相位移 (Phase shift)	≤±10°	≤±10°	≤±10°	≤±10°	≤±15°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)				
绝缘电阻(Insulation resistance)	250MΩ MIN				
转子孔径 (Rotor ID)	52mm	52mm	52mm	52mm	52mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm ²	0.35mm ²	0.35mm ²	0.35mm ²	0.35mm ²
允许最大转速(Max operating speed)	30000 rpm				
工作温度范围(Operating temperature range)	-40℃ ~ +155℃				

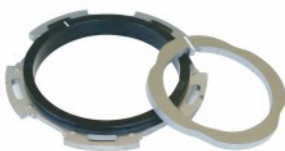
备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J160 系列

磁阻式
VR RESOLVER



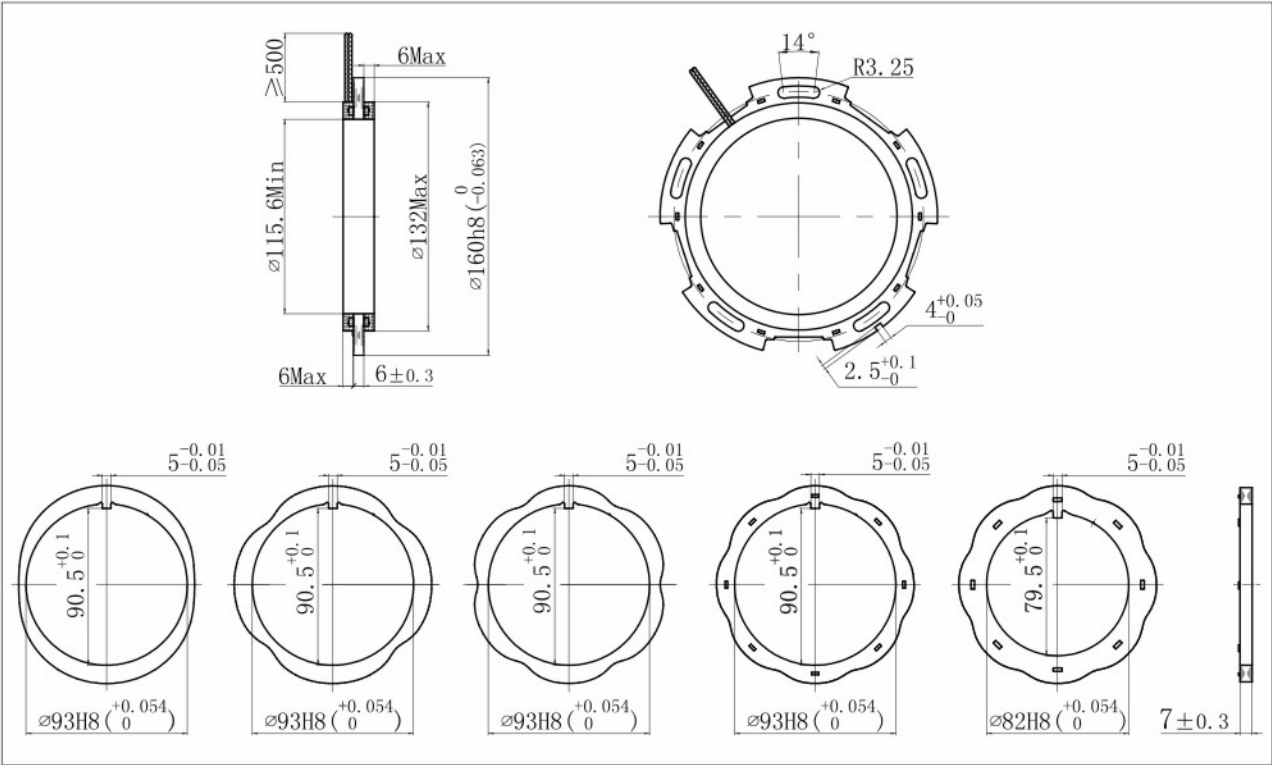
J160 series(OD 160mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	J160XU9732	J160XU9734	J160XU9736	J160XU9738
极对数 (Pole pairs)	2	4	6	8
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±60'	≤±30'	≤±20'	≤±15'
相位移 (Phase shift)	≤±10°	≤±10°	≤±10°	≤±10°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)			
绝缘电阻(Insulation resistance)	250MΩ MIN			
转子孔径 (Rotor ID)	93mm	93mm	93mm	93mm/82mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm ²	0.35mm ²	0.35mm ²	0.35mm ²
允许最大转速(Max operating speed)	30000 rpm			
工作温度范围(Operating temperature range)	-40℃ ~ +155℃			

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



J191 系列

磁阻式
VR RESOLVER



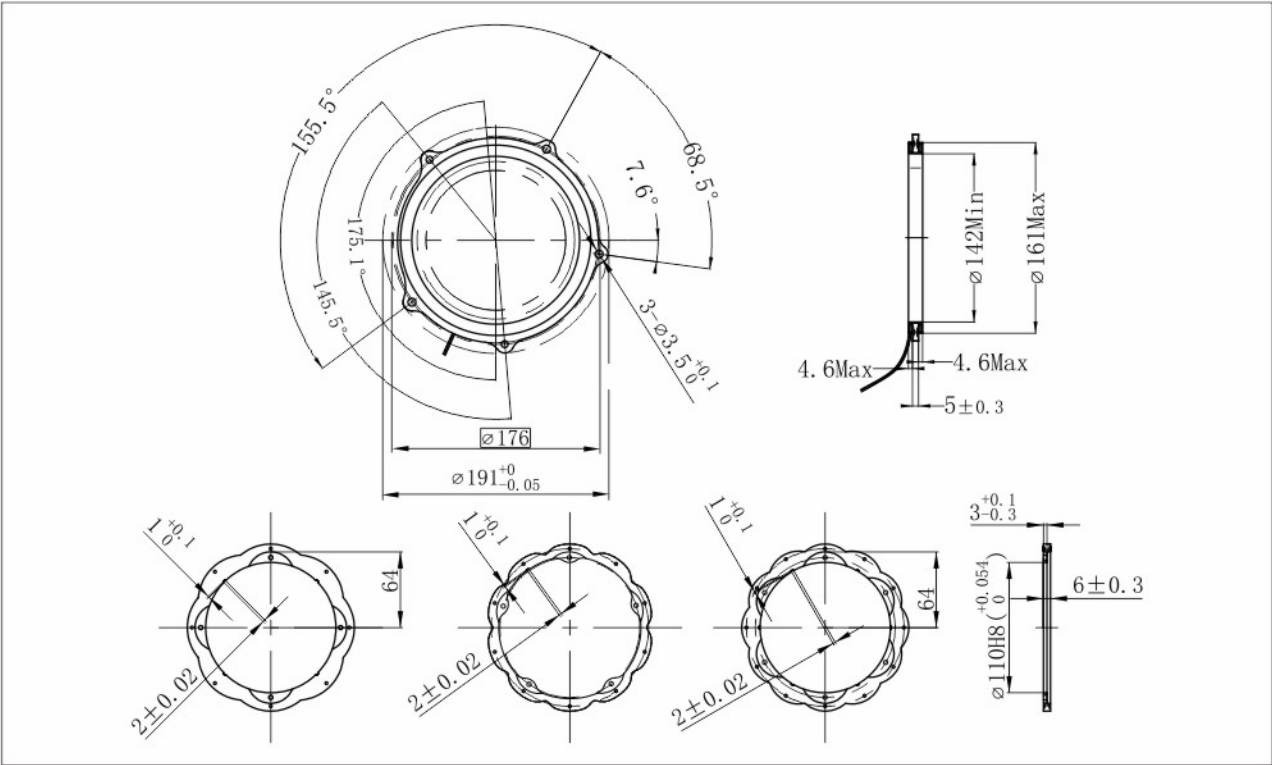
J191 series(OD 191mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	191XU9738	J191XU97310A	191XU97312
极对数 (Pole pairs)	8	10	12
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±15'	≤±12'	≤±10'
相位移 (Phase shift)	≤±15°	≤±15°	≤±15°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)		
绝缘电阻(Insulation resistance)	250MΩ MIN		
转子孔径 (Rotor ID)	110mm	120mm	110mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm ²	0.35mm ²	0.35mm ²
允许最大转速(Max operating speed)	30000 rpm		
工作温度范围(Operating temperature range)	-40℃ ~ +155℃		

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



215 系列

磁阻式
VR RESOLVER



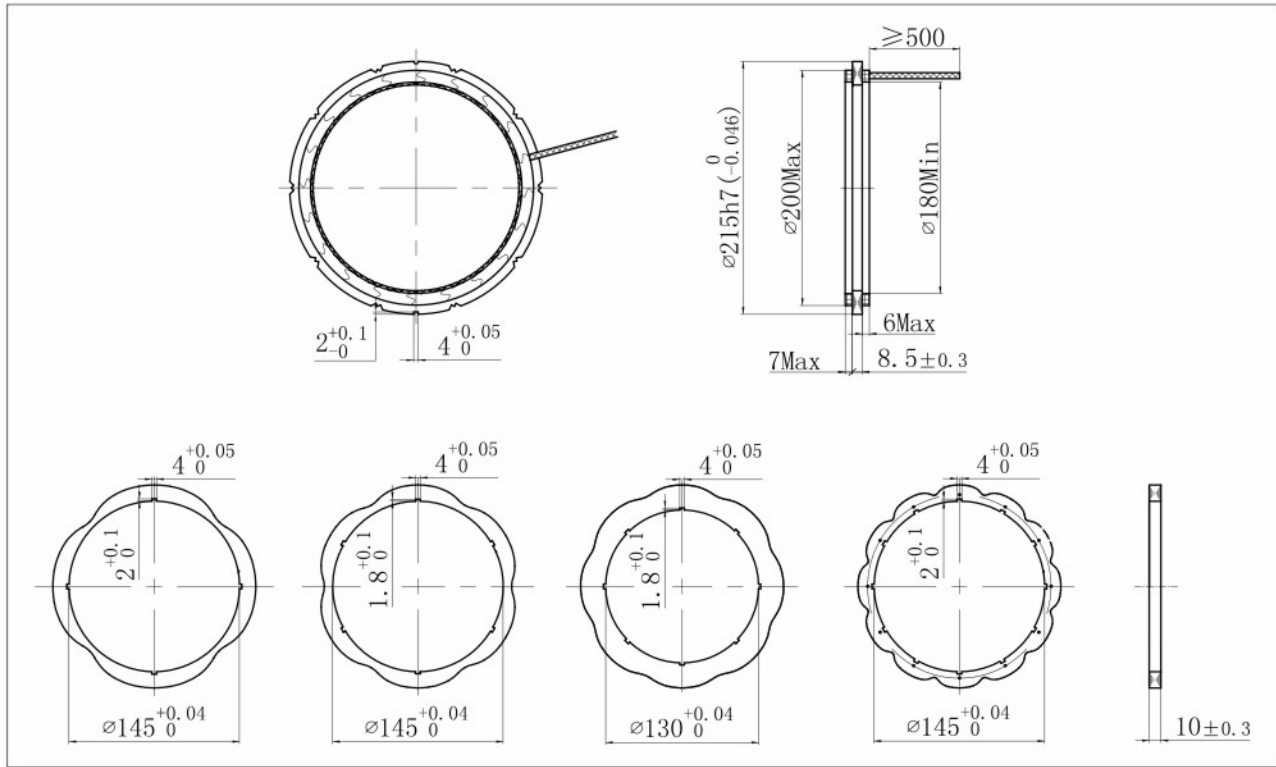
215 series(OD 215mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	215XU9734	215XU9736	215XU9738	215XU97312A
极对数 (Pole pairs)	4	6	8	12
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±30'	≤±20'	≤±15'	≤±10'
相位移 (Phase shift)	≤±10°	≤±10°	≤±10°	≤±10°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)			
绝缘电阻(Insulation resistance)	250MΩ MIN			
转子孔径 (Rotor ID)	145mm	145mm	130mm	145mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm²	0.35mm²	0.35mm²	0.35mm²
允许最大转速(Max operating speed)	30000 rpm			
工作温度范围(Operating temperature range)	-40℃ ~ +155℃			

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm



316 系列

磁阻式
VR RESOLVER



316 series(OD 316mm series)

性能参数 SPECIFICATIONS

推荐型号 (Recommended part no.)	316XU9733	316XU9736	316XU9738
极对数 (Pole pairs)	3	6	8
激磁电压 (Input voltage)	AC7Vrms	AC7Vrms	AC7Vrms
激磁频率(Input frequency)	10KHz	10KHz	10KHz
变压比 (Transformation ratio)	0.286±10%	0.286±10%	0.286±10%
电气误差 (Accuracy)	≤±40'	≤±20'	≤±15'
相位移 (Phase shift)	≤±10°	≤±10°	≤±10°
耐电压(Dielectric strength)	AC500Vrms 1s (500V AC rms for one second)		
绝缘电阻(Insulation resistance)	250MΩ MIN		
转子孔径 (Rotor ID)	110mm	120mm	110mm
引出线规格 (截面积) Wire spec.(sectional area)	0.35mm²	0.35mm²	0.35mm²
允许最大转速(Max operating speed)	30000 rpm		
工作温度范围(Operating temperature range)	-40℃ ~ +155℃		

备注：产品详情可联系市场部获取相关外形图，引线长度、线束处理、转子内孔孔径等可根据需求咨询定制化生产事宜。

外观尺寸 OUTLINE DIMENSION (单位: mm) Dimension : mm

