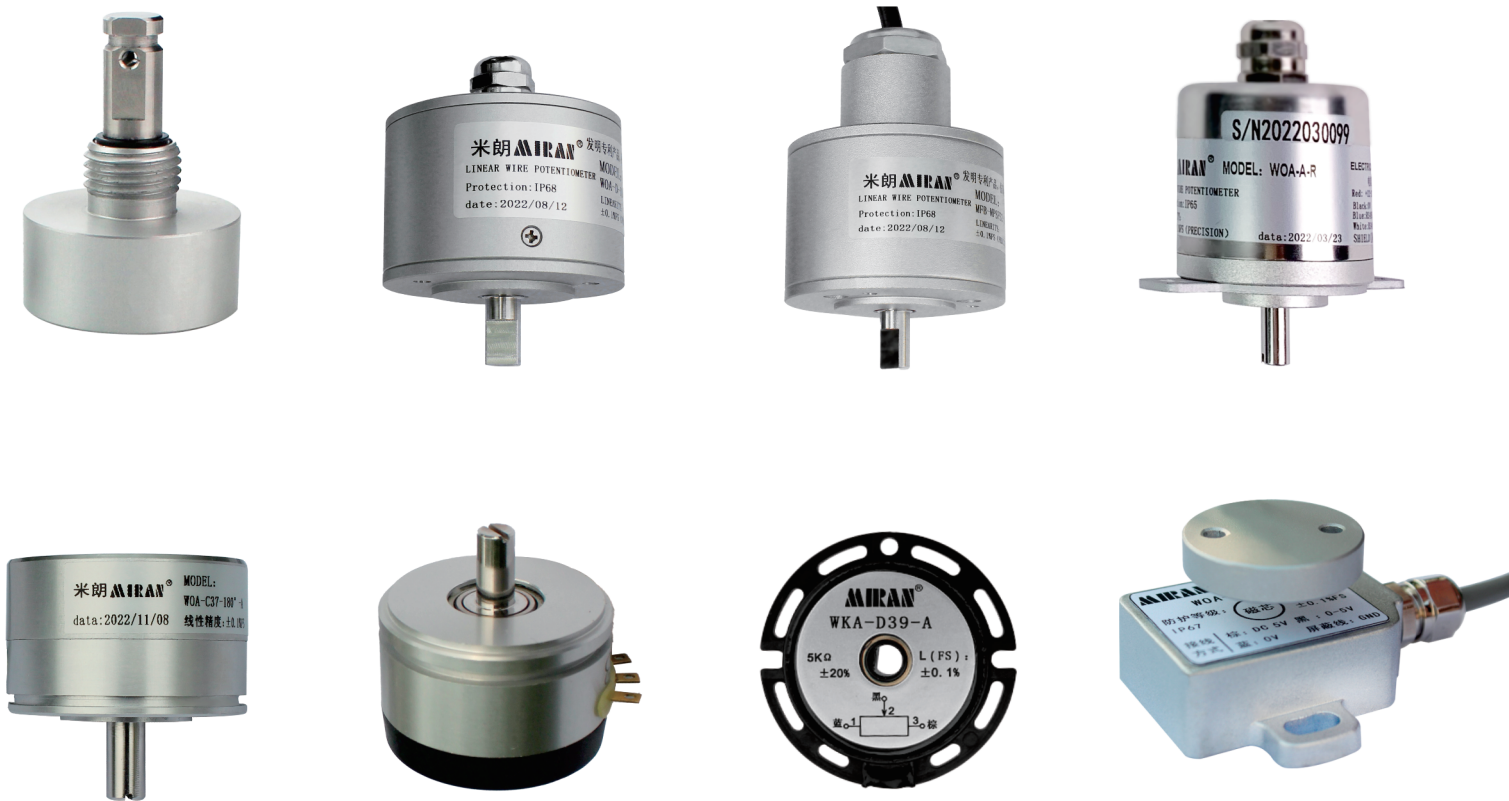


角度位置传感器

Angle position sensor



角度（单圈/多圈）位置传感器

- Demonstration project of one-stop application plan for high-precision sensors of Ministry of Industry and Information Technology of China
- National level specialized and special new "little giant" enterprise, national level high-tech enterprise
- Key products of strong industrial base in China, demonstration enterprise of sensor one-stop application plan of Ministry of Industry and Information Technology of China

P2500/4500/6500角度位移传感器

P2500/4500/6500 Angular Displacement Sensor

产品实物图Product Picture

P2500/P4500/P6500 (尺寸不同different sizes)



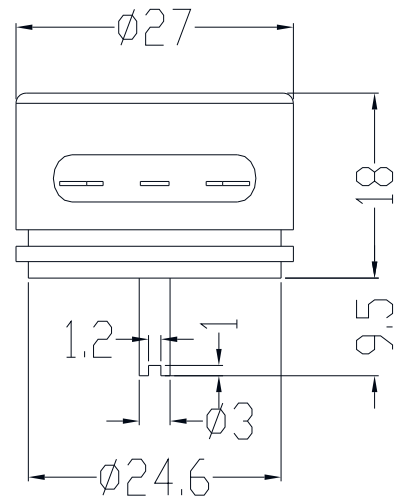
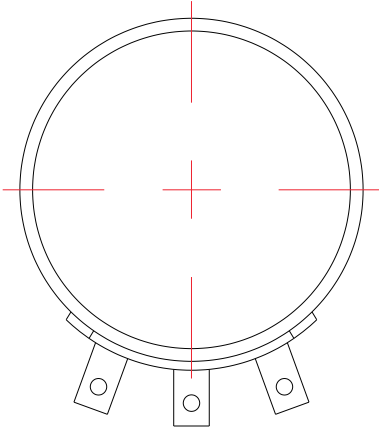
产品概述Product Overview

P2500/P4500/P6500角度位移传感器机壳为阳极氧化铝机壳和耐高温塑料封盖,电阻材质为导电塑料,采用不锈钢轴及不锈钢球轴承,滑刷组件为贵金属多触点滑刷,电器连接为镀金黄铜端子。该系列角度位移传感器全金属机壳,球形轴承,导电塑料基板和弹性阻尼滑刷使得测量换向自如,P2500/P4500/P6500角度位移传感器由于其可靠性高,寿命长,线性优异,分辨率高,可高转速运动和耐腐导电材质,使传统的电位计原理传感器技术达到现代应用水平。厂家可提供特殊行程和转轴尺寸等特殊规格的定制。

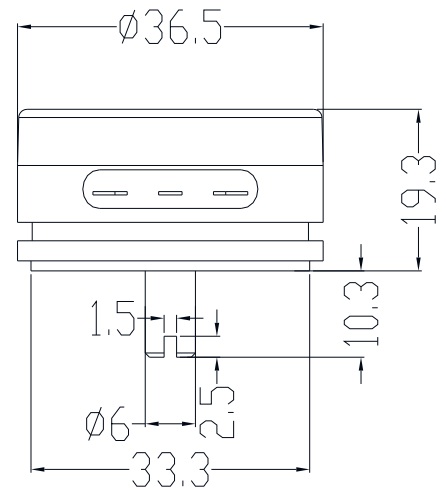
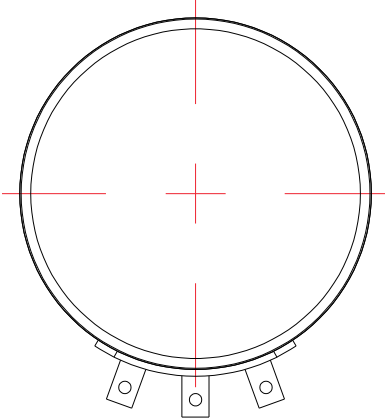
P2500/P4500/P6500 angular displacement sensor housing for anodized aluminum housing and high temperature plastic cover, resistor material for conductive plastic, stainless steel shaft and stainless steel ball bearings, brush assembly for the precious metal multi-contact brush, electrical connections for the gold-plated brass terminals. The series of angular displacement sensor all-metal housing, ball bearings, conductive plastic substrate and elastic damping slide brush makes the measurement of free direction, P2500/P4500/P6500 angular displacement sensor due to its high reliability, long life, excellent linearity, high resolution, can be a high speed movement and corrosion-resistant conductive materials, so that the traditional potentiometer principle of sensor technology to achieve the level of modern applications. Manufacturers can provide special travel and spindle size and other special specifications of customization.

产品尺寸图 Product Dimension Drawing

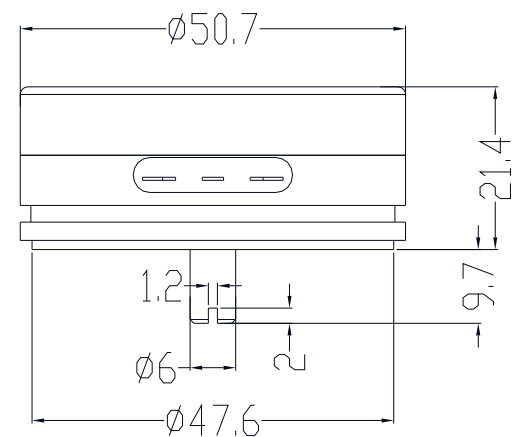
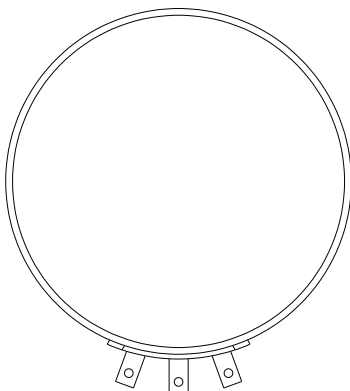
P2500



P4500



P6500



性能参数 Performance Parameters

⚡ 电气指标 Electrical indicators

型号 Model Number	P2500/P4500/P6500角度位移传感器 P2500/P4500/P6500 Angular Displacement Sensor		
有效行程 Valid Itinerary	0-355°	温度漂移 Temperature Drift	9ppm/°C
阻值范围 Resistance Range	5000Ω	工作温度 Operating Temperature	-40°C~ + 100°C
线性精度 Linear Accuracy	±0.1%FS	工作速度 Working Speed	10 000rpm
输出信号 Output Signal	分压器 voltage divider	防护等级 Protection Class	IP57
使用寿命 Service Life	100x10 ⁶ 次 100x10 ⁶ times		
备注 Note	高精度, 应用于测量、控制领域及仪表配套 high precision, used in the field of measurement, control and instrumentation supporting		

⚡ 性能指标 Performance indicators

型号 Model Number	P2500	外形尺寸 Overall Dimensions	Φ27mm
重复精度 Repeatability	0.01°	输出轴 Output Shaft	Φ3mm

型号 Model Number	P4500	外形尺寸 Overall Dimensions	Φ36.5mm
重复精度 Repeatability	0.007°	输出轴 Output Shaft	Φ6mm

型号 Model Number	P6500	外形尺寸 Overall Dimensions	Φ50.8mm
重复精度 Repeatability	0.007°	输出轴 Output Shaft	Φ6mm

WDD35D4/WDD51D4角度传感器

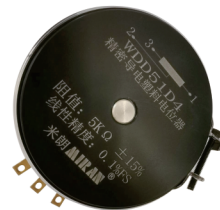
WDD35D4/WDD51D4 Angle Sensor

产品实物图Product Picture

WDD35D4



WDD51D4



产品概述Product Overview

WDD35D4/WDD51D4角度位移传感器机壳为阳极氧化铝机壳和耐高温塑料封盖,电阻材质为导电塑料,采用不锈钢轴及不锈钢球轴承,滑刷组件为贵金属多触点滑刷,电器连接为镀金黄铜端子。WDD35D4/WDD51D4角度位移传感器为全金属机壳,球形轴承和导电塑料换向自如,WDD35D4/WDD51D4角度位移传感器作为一种高精度角度位移传感器,它既适合各种模拟量输出的应用,又能兼具数字信号输出应用,比如,如果它同时和A/D变换器配合使用,则构成性价比极高的数字型绝对值编码器,可用于精确定位,位置监测等。厂家可提供特殊行程和转轴尺寸等特殊规格的定制。

WDD35D4/WDD51D4 angular displacement sensor housing for anodized aluminum housing and high temperature plastic cover, resistor material for conductive plastic, stainless steel shaft and stainless steel ball bearings, slide brush assembly for the precious metal multi-contact sliding brush, electrical connection for the gold-plated brass terminals.WDD35D4/WDD51D4 angular displacement sensor for the all-metal chassis, spherical bearings and conductive plastic Commutation freely, WDD35D4/WDD51D4 angle displacement sensor as a kind of high-precision angle displacement sensor, it is suitable for a variety of analog output applications, but also can be both digital signal output applications, for example, if it is used at the same time and the A/D converter with the use of the digital digital absolute encoder constitutes a cost-effective, can be used for precise positioning, position monitoring and so on. Customized specifications such as special travel and shaft sizes are available.

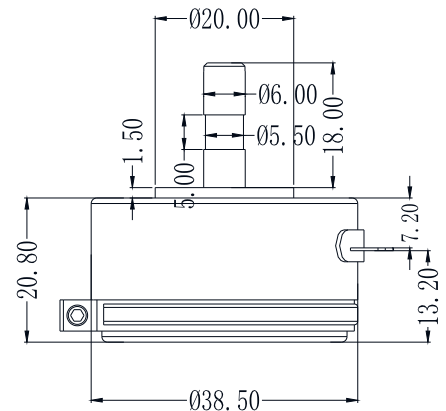
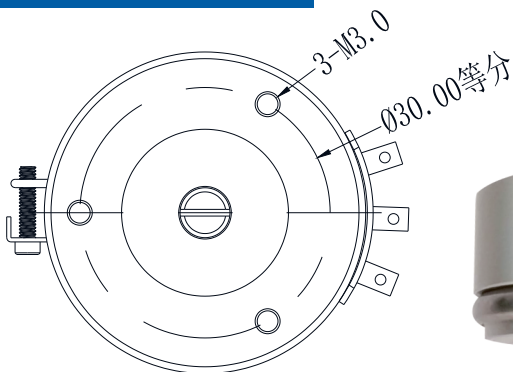
性能参数Performance Parameters

电气指标Electrical indicators

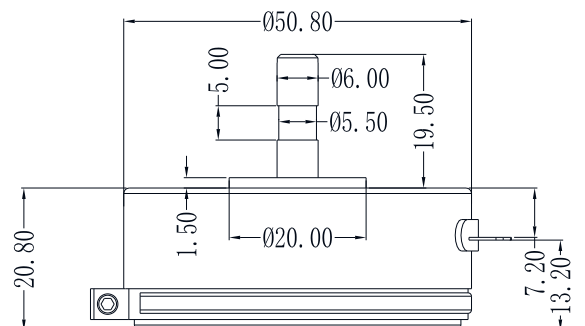
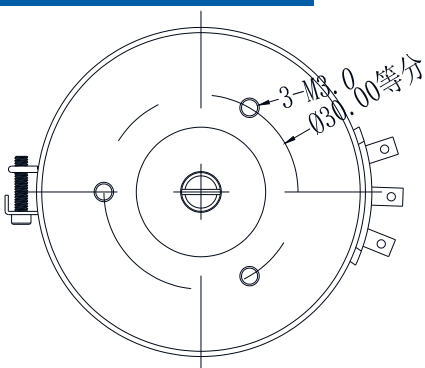
型号 Model Number	WDD35D4/WDD51D4角度位移传感器 WDD35D4/WDD51D4 Angular Displacement Sensor		
有效行程 Valid Itinerary	0-355°	温度漂移 Temperature Drift	9ppm/°C
阻值范围 Resistance Range	5000Ω	工作温度 Operating Temperature	-40°C~ + 100°C
线性精度 Linear Accuracy	± 0.1% FS	工作速度 Working Speed	10 000rpm
输出信号 Output Signal	分压器 voltage divider	防护等级 Protection Class	IP57
使用寿命 Service Life	100x10 ⁶ 次 100x106 times	输出轴 Output Shaft	Φ 6mm
重复精度 Repeatability	0.01°	外形尺寸 Overall Dimensions	WDD35D4:Φ38.5mm WDD51D4:Φ50.8mm
备注 Note	高精度, 应用于测量、控制领域及仪表配套 High precision, used in the field of measurement, control and instrumentation supporting		

产品尺寸图Product Dimension Drawing

WDD35D4



WDD51D4



WDA-D22-A/B/WDA-D40-P角度传感器

WDA-D22-A/B/WDA-D40-P Angle Sensor

产品实物图Product Picture

WDA-D22-A 可多圈连续旋转Multi-turn continuous rotation



WDA-D22-B 可多圈连续旋转Multi-turn continuous rotation



WDA-D40-P 有角度机械限位, 只能单圈200度以内往复旋转Angular mechanical limit, can only be a single circle within 200 degrees of reciprocating rotation



产品概述Product Overview

WDA-D22-A/WDA-D22-B/WDA-D40-P角度位移传感器机壳为阳极氧化铝机壳和耐高温塑料封盖,电阻材质为导电塑料,采用不锈钢轴及不锈钢球轴承,滑刷组件为贵金属多触点滑刷,电器连接为镀金黄铜端子。该系列角度位移传感器球形轴承和导电塑料换向自如,该系列角度位移传感器作为一种高精密角度位移传感器,它既适合各种模拟量输出的应用,又能兼具数字信号输出应用,比如,如果它同时和A/D变换器配合使用,则构成性价比极高的数字型绝对值编码器,可用于精确定位,位置监测等。厂家可提供特殊行程和转轴尺寸等特殊规格的定制。

WDA-D22-A/WDA-D22-B/WDA-D40-P angular displacement sensor chassis is anodized aluminum chassis and high-temperature-resistant plastic cover, the resistor material is conductive plastic, stainless steel shaft and stainless steel ball bearings, the slide brush assembly is a precious metal multi-contact slide brush, the electrical connection is gold-plated brass terminals. The series of angular displacement sensor ball bearing and conductive plastic commutation freely, the series of angular displacement sensor as a high-precision angular displacement sensor, it is suitable for a variety of analog output applications, but also both digital signal output applications, for example, if it is also used in conjunction with the A/D converter, it constitutes a cost-effective digital absolute encoder can be used for precise positioning, position monitoring and so on. Customized specifications such as special travel and shaft sizes are available.

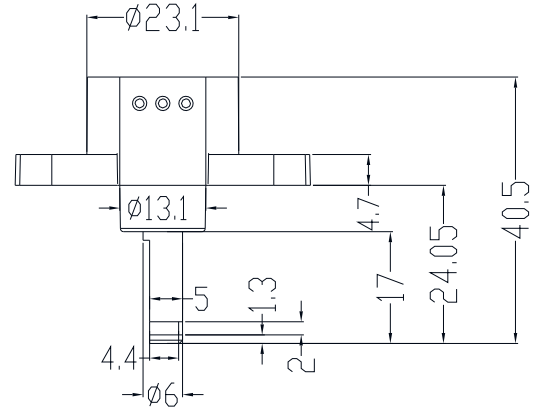
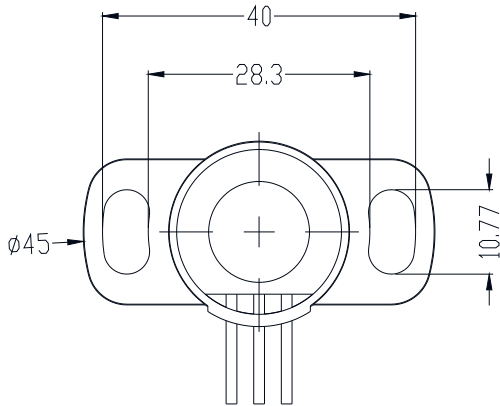
性能参数Performance Parameters

电气指标Electrical indicators

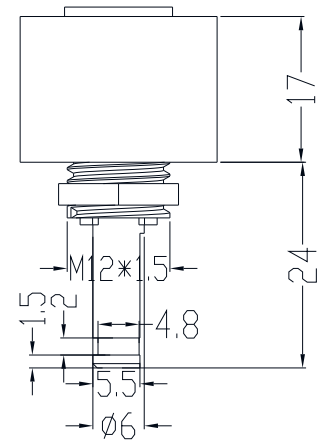
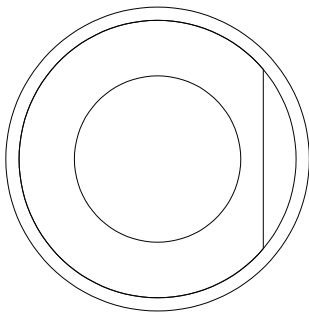
型号 Model Number	WDA-D22-A/WDA-D22-B/WDA-D40-P		
线性精度 Linear Accuracy	$\pm 0.3\%FS$		
输出信号 Output Signal	分压器 voltage divider		
使用寿命 Service Life	100x10 ⁶ 次 100x106 times		
重复精度 Repeatability	0.007°	输出轴 Output Shaft	Φ6mm
工作温度 Operating Temperature	-40°C~ + 100°C	工作速度 Working Speed	10000rpm
温度漂移 Temperature Drift	9ppm/°C	防护等级 Protection Class	IP57
有效行程 Valid Itinerary	WDA-D22-A/WDA-D22-B:0-300° WDA-D40-P:0-200°		
阻值范围 Resistance Range	WDA-D22-A/WDA-D22-B:5KΩ/10KΩ WDA-D40-P:5KΩ		
外形尺寸 Overall Dimensions	WDA-D22-A:Φ22mm WDA-D22-B:Φ23mm WDA-D40-P:Φ41mm		

产品尺寸图 Product Dimension Drawing

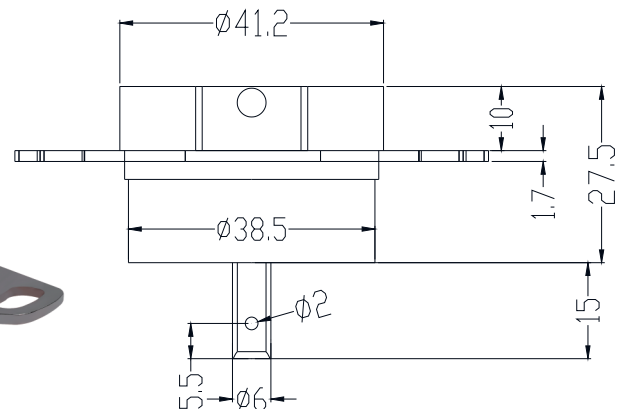
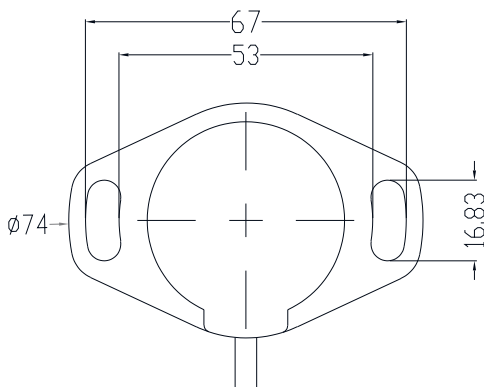
WDA-D22-A



WDA-D22-B



WDA-D40-P



中空轴角度位置传感器(电位器)

Hollow Shaft Angle Position Sensor (potentiometer)

产品实物图Product Picture



产品概述Product Overview

中空轴角度传感器（电位器）分为WKA-D39-A和WKA-D22-B两款。产品机壳为阳极氧化铝机壳和耐高温塑料封盖，电阻材质为导电塑料，滑刷组件为贵金属多触点滑刷，电器连接为镀金黄铜端子。该产品使用寿命长，线性优异，分辨率高，且运行速度高，材质精良。

中空轴角度传感器（电位器）的显著特点：作为一种高精密角度位移传感器，既合适各种模拟量输出的应用，又能兼具数字信号输出应用。中空轴角度传感器（电位器）适用于测量、准确定位，位置检测等。

Hollow shaft angle sensors (potentiometers) are available in two models, WKA-D39-A and WKA-D22-B. The product housing is anodized aluminum housing and high temperature resistant plastic cover, the resistor material is conductive plastic, the slide brush assembly is precious metal multi-contact slide brush, and the electrical connection is gold-plated brass terminal. The product has a long service life, excellent linearity, high resolution, high operating speed, and is made of high quality materials.

Hollow shaft angle sensor (potentiometer) significant features: as a high-precision angle displacement sensor, both suitable for a variety of analog output applications, but also digital signal output applications. Hollow shaft angle sensors (potentiometers) are suitable for measurement, accurate positioning, position detection, and so on.

性能参数Performance Parameters

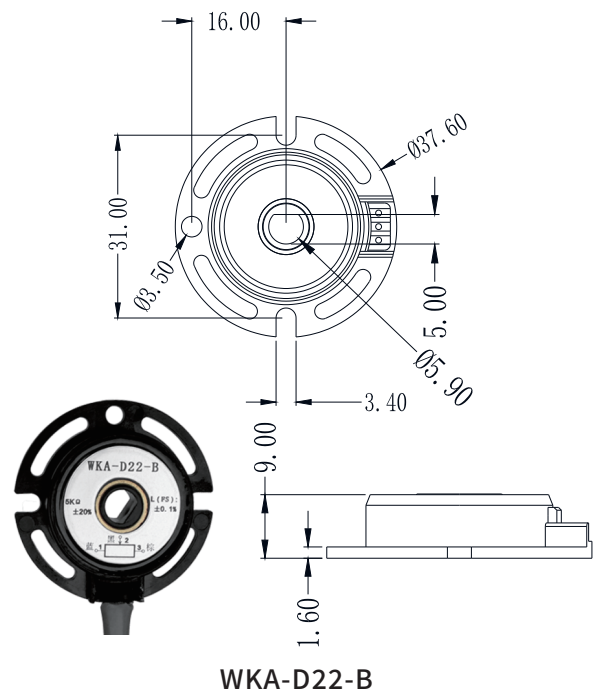
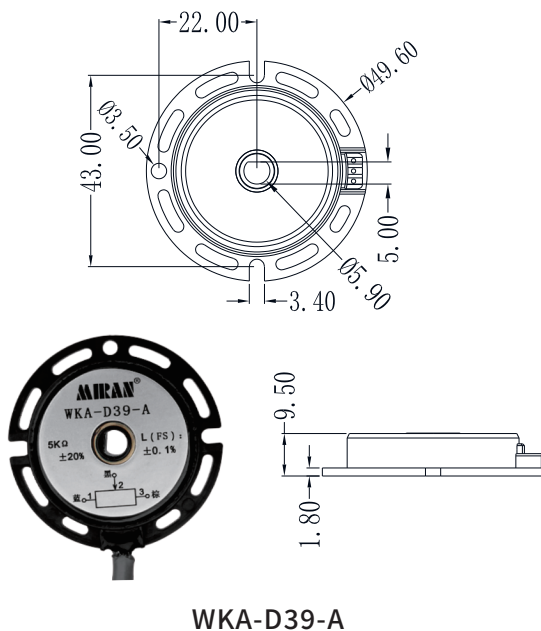
电气指标Electrical indicators

型号 Model Number	WKA-D39-A WKA-D22-B
有效行程 Valid Itinerary	WKA-D39-A: 0-335° WKA-D22-B: 0-300°
阻值范围 Resistance Range	0-5000Ω
输出轴 Output Shaft	内孔Φ5.9 bore φ5.9
线性精度 Linear Accuracy	± 0.3% FS
输出信号 Output Signal	分压器 voltage divider

性能指标

重复精度 Repeatability	0.007°	工作温度 Operating Temperature	-60°C~ +125°C
温度漂移 Temperature Drift	9ppm/°C	工作速度 Working Speed	10000rpm
防护等级 Protection Class	IP55	使用寿命 (次) Service life (times)	100x10 ⁶

产品尺寸图Product Dimension Drawing



MZK系列中空轴角度传感器

MZK Series Hollow Shaft Angle Sensor

产品实物图Product Picture



产品概述Product Overview

MZK-(6mm-50mm)中空轴角度传感器为绝对位置测量型,该传感器适用于各种模拟量输出的应用,又能兼具数字信号输出,比如,如果它同时和A/D变换器配合使用,则构成性价比及高的数字型值编码器,可用于精确定位/位置检测等。

MZK系列中空轴角度传感器共有6种输出中心孔轴可选,分别为6mm、10mm、20mm、30mm、40mm、50mm,测量角度范围是0-350°。搭配外置式变送模块,供电12-24V,可选0-5V,0-10V,4-20mA,RS485信号输出。供电5V/10V,电位计原理电阻输出0-5V/0-10V。

MZK-(6mm-50mm) hollow shaft angle sensors for absolute position measurement type, the sensor is suitable for a variety of analog output applications, but also has a digital signal output, for example, if it is also used in conjunction with the A/D converter, it constitutes a cost-effective and high digital value encoder, can be used for precise positioning/position detection, etc.

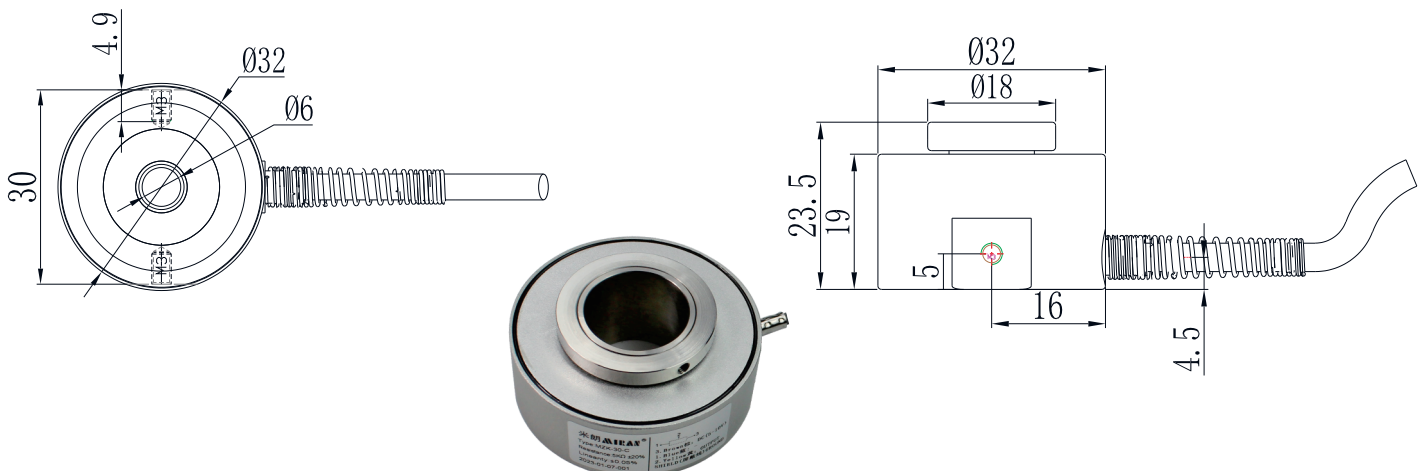
The MZK series of hollow shaft angle sensors are available in six types. There are 6 types of hollow shaft angle sensors, respectively 6mm, 10mm, 20mm, 30mm, 40mm, 50mm, and the measuring angle range is 0-350°. With external transmitter module, power supply 12-24V, optional 0-5V, 0-10V, 4-20mA, RS485 signal output. Power supply 5V/10V, potentiometer principle resistance output 0-5V/0-10V.

性能参数Performance Parameters

电气指标Electrical indicators

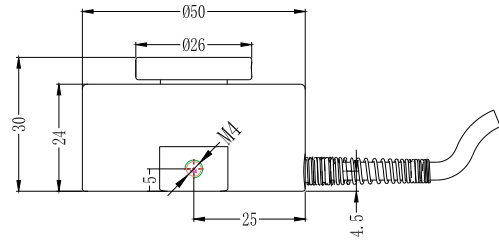
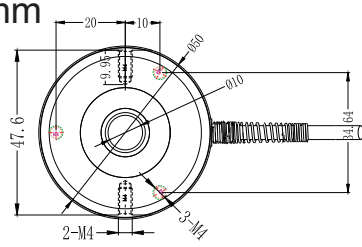
侧角范围 Side Angle Range	0-350°
电阻值 Resistance Value	5KΩ ±10% (10KΩ可接受非标定制) 5KΩ±10% (10KΩ can accept non-standard customization)
输出中心孔轴 Output Center Hole Shaft	6mm、10mm、20mm、30mm、40mm、50mm
电源线长 Power Cord Length	1m
输出信号 Output Signal	(供电+DC 12~24V) 0-5V, 0-10V, 4-20mA, RS485均需外置模块 (Power supply +DC 12~24V) 0-5V, 0-10V, 4-20mA, RS485 all need external module (供电+DC 5V/10V) 电位计输出0-5V/0-10V (Supply +DC 5V/10V) Potentiometer output 0-5V/0-10V
线性精度 Linear Accuracy	±0.05%FS
重复精度 Repeatability	0.01°
温度漂移 Temperature Drift	9ppm/°C
工作温度 Operating Temperature	-40°C~+100°C
MAX转速 MAX Rpm	10000rpm
防护等级 Protection Class	IP65

产品尺寸图Product Dimension Drawing

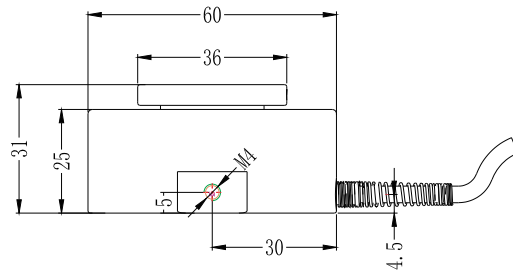
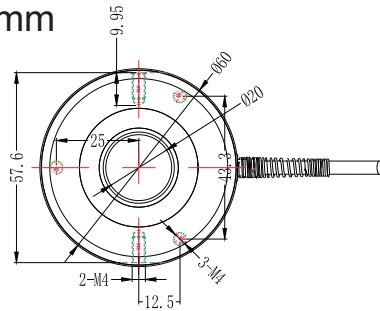


产品尺寸图Product Dimension Drawing

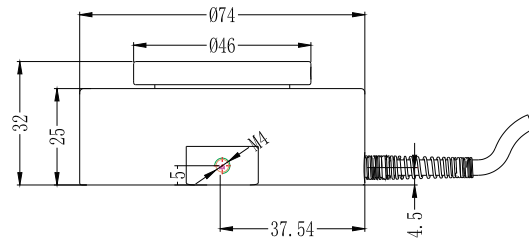
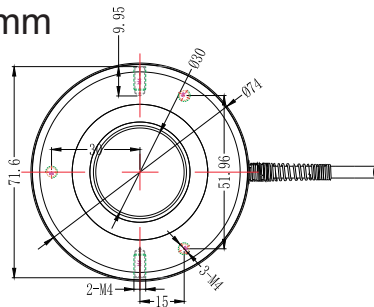
MZK-10mm



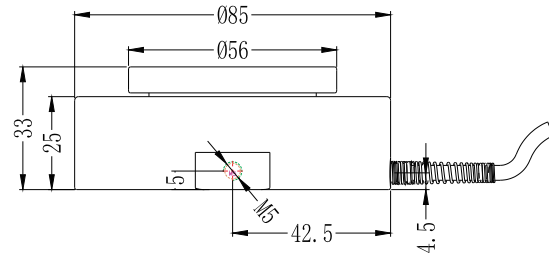
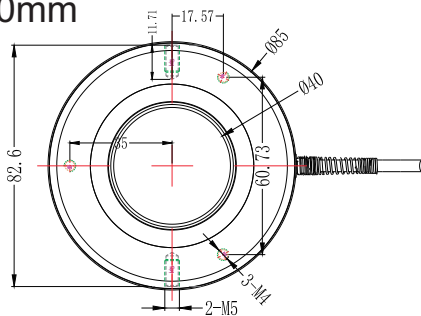
MZK-20mm



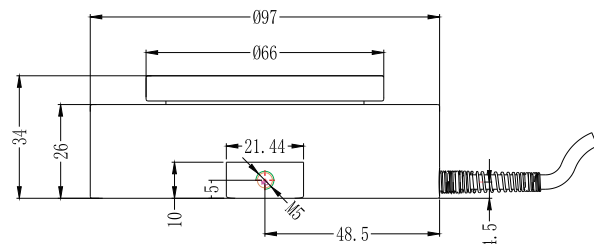
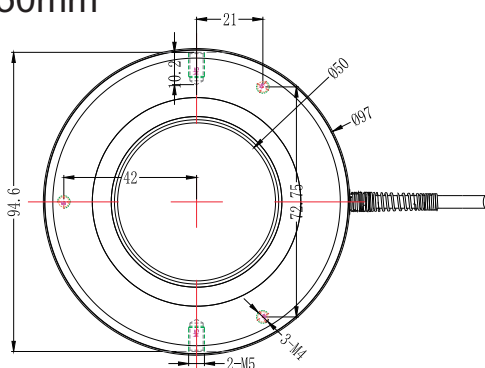
MZK-30mm



MZK-40mm



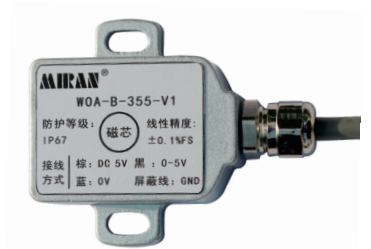
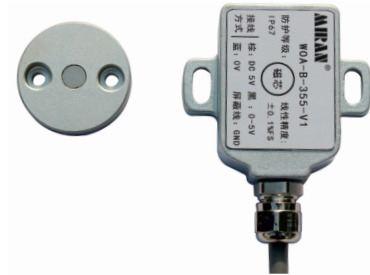
MZK-50mm



霍尔磁感应系列角度传感器 Hall Magnetic Induction Series Angle Sensor

产品实物图Product Picture

WOA-B



WOA-B1



WOA-B2



WOA-C



产品概述Product Overview

米朗科技WOA-B、WOA-B1、WOA-B2、WOA-C系列霍尔角度传感器，采用磁感应原理（内部非接触式）测量角度，具有无触点、长寿命、高分辨、高频响、低温漂、优线性、耐振抗冲、抗干扰等特点。

霍尔角度（磁感应）位移传感器特点：无接触、无噪音、高灵敏度、高重复性、长寿命、高频响应特性好；环境适用性强，可用于水、油、汽、粉尘、高低温、振动冲击等恶劣工业使用环境；位置测量，是替代光学编码器、旋转变压器、导电塑料电位器的理想产品。

米朗科技WOA-B、WOA-B1、WOA-B2、WOA-C系列霍尔角度传感器355度以内的角度可以任意定制，如90度、180度、200度等均可生产；供电电压+DC 24V，输出信号有0~5V、0~10V、4~20MA、RS485等，RS485输出仅限B1、B2、C型电子仓。WOA-B系列角度传感器安装时电子仓主体感应面与磁芯同心且间距小于5mm。

Miran Technology WOA-B, WOA-B1, WOA-B2, WOA-C series Hall angle sensors, using the principle of magnetic induction (internal non-contact) to measure the angle, with no contact, long life, high resolution, high frequency resonance, low temperature drift, excellent linearity, vibration and shock resistance, anti-interference and other characteristics.

Hall angle (magnetic induction) displacement sensor features: no contact, no noise, high sensitivity, high repeatability, long life, good high-frequency response characteristics; environmental applicability, can be used for water, oil, steam, dust, high and low temperatures, vibration and shock and other harsh industrial use of the environment; position measurement, is an alternative to the optical encoder, rotary transformer, conductive plastic potentiometer ideal product.

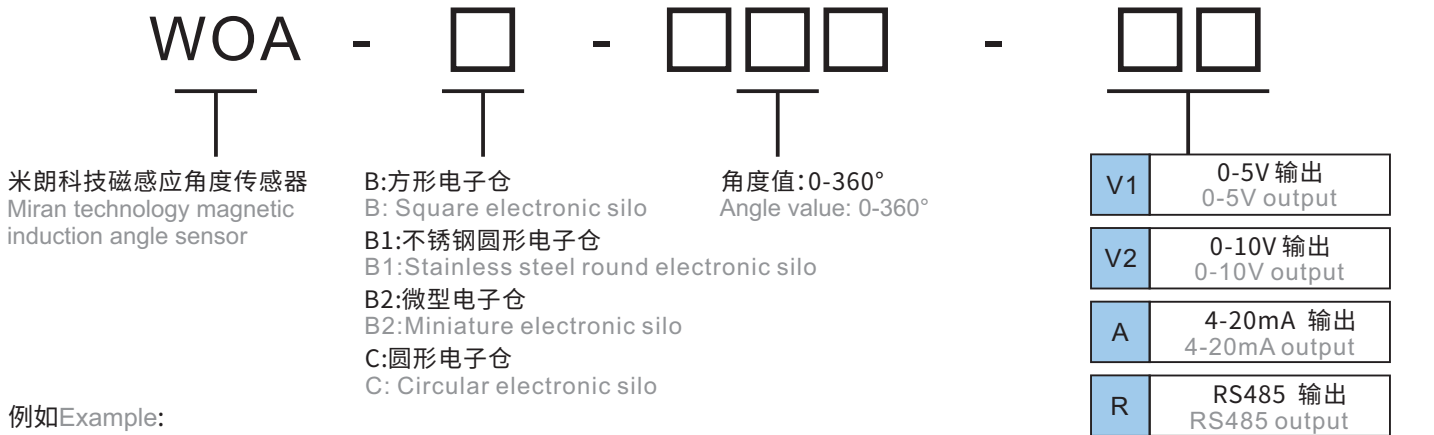
Miran Technology WOA-B, WOA-B1, WOA-B2, WOA-C series Hall angle sensor 355 degrees within the angle can be customized, such as 90 degrees, 180 degrees, 200 degrees, etc. can be produced; power supply voltage + DC 24V, the output signal 0 ~ 5V, 0 ~ 10V, 4 ~ 20MA, RS485, etc., RS485 output is limited to B1, B2, WOA-B series angle sensors are installed with the core concentric to the sensing surface of the main body of the electronic warehouse and the distance between them is less than 5mm.

性能参数Performance Parameters

⚡ 电气指标Electrical indicators

WOA-B1/ WOA-B2/WOA-C 测角范围 Angle Measuring Range	0-355°(模拟量输出可任意定制角度) 0-355° (analog output can be customized to any angle)
	0-360°(RS485输出) 0-360°(RS485 output)
WOA-B 输出信号 Output Signal	(供电+DC 12~24V) 0-5V, 0-10V, 4-20mA (power supply +DC 12~24V) 0-5V, 0-10V, 4-20mA
	(供电+DC 5V) 0-5V (power supply +DC 5V) 0-5V
WOA-B1/WOA-B2 输出信号 Output Signal	(供电+DC 12~24V) 0-5V, 0-10V, 4-20mA (power supply +DC 12~24V) 0-5V, 0-10V, 4-20mA
	(供电+DC 5V) 0-5V, RS485 (power supply +DC 5V) 0-5V, RS485
WOA-C 输出信号 Output Signal	(供电+DC 12~24V) 0-5V, 0-10V, 4-20mA, RS485 (power supply +DC 12~24V) 0-5V, 0-10V, 4-20mA, RS485
	(供电+DC 5V) 0-5V (power supply +DC 5V) 0-5V
WOA-B测角范围 WOA-B Angle Measuring Range	0-355°(模拟量输出可任意定制) 0-355° (analog output can be customized)
重复精度 Repeatability	0.01°
线性精度 Linear Accuracy	±0.1%FS
工作温度 Operating Temperature	-40°C~+85°C
MAX转速 MAX Rpm	10000rpm
温度漂移 Temperature Drift	9ppm/°C
防护等级 Protection Class	IP65(WOA-C)
	IP68(WOA-B/WOA-B1/WOA-B2)

产品型号选型 Product Model Selection



例如 Example:

WOA-B-5-V1: 代表米朗霍尔角度传感器方形电子仓 5° 0-5V 信号输出。

WOA-B-5-V1: represents miran hall angle sensor square e-bin 5° 0-5V signal output.

WOA-C-300-A: 代表米朗霍尔角度传感器圆形电子仓 300° 4-20mA 信号输出。

WOA-C-300-A: stands for miran hall angle sensor round electronic bin 300° 4-20 mA signal output.

注: RS485 输出仅限 B1、B2、C 型结构。

Note: RS485 output is limited to B1, B2, and C type structures.

电气连接 Electrical Connection

接线定义 wiring definition	棕色 BROWN	黑色 BLACK	蓝色 BLUE	屏蔽层 SHIELDING LAYER
模拟量信号输出 analog signal output	电源正 power positive +DC 5V	输出 exports 0-5V	电源负 power negative 0V	GND

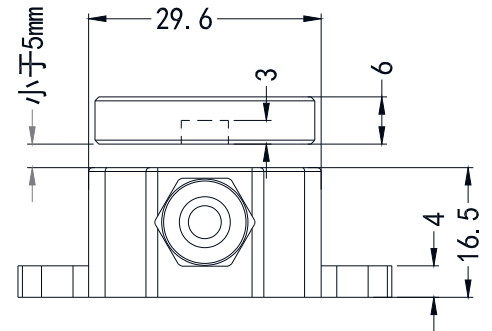
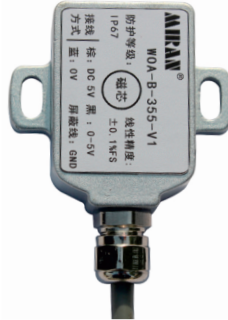
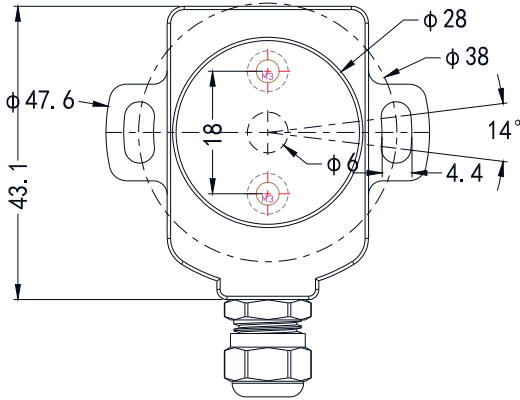
接线定义 wiring definition	棕色 BROWN	黑色 BLACK	蓝色 BLUE	屏蔽层 SHIELDING LAYER
模拟量信号输出 analog signal output	电源正 power positive +DC 12-24V	输出 exports 0-5V, 0-10V, 4-20mA	电源负 power negative 0V	GND

接线定义 wiring definition	棕色 BROWN	黑色 BLACK	蓝色 BLUE	白色 WHITE	屏蔽层 SHIELDING LAYER
数字量信号输出 digital signal output (限 B1、B2 型结构) (B1, B2 structures only)	电源正 power positive +DC 5V	输出负 negative output 0V	RS485 A	RS485 B	GND

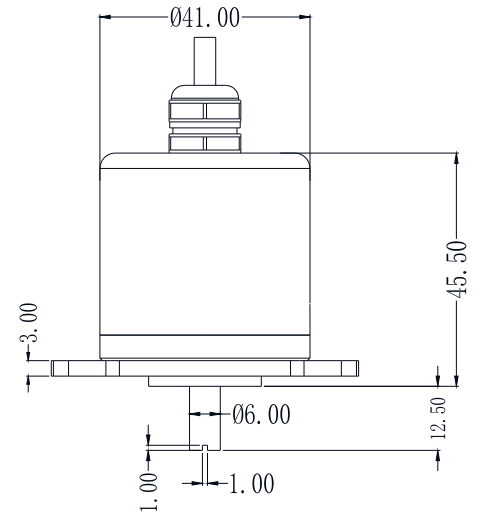
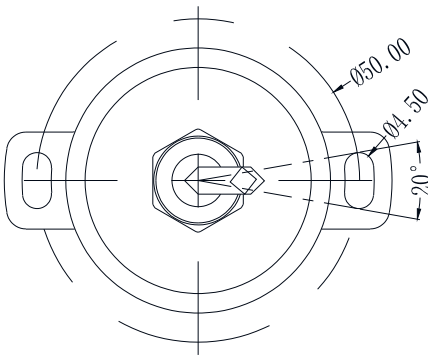
接线定义 wiring definition	棕色 BROWN	黑色 BLACK	蓝色 BLUE	白色 WHITE	屏蔽层 SHIELDING LAYER
数字量信号输出 digital signal output (限 C 型结构) (C structures only)	电源正 power positive +DC 12-24V	电源负 power negative 0V	RS485 A	RS485 B	GND

产品尺寸图 Product Dimension Drawing

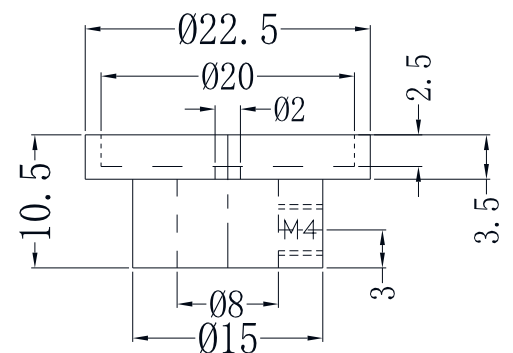
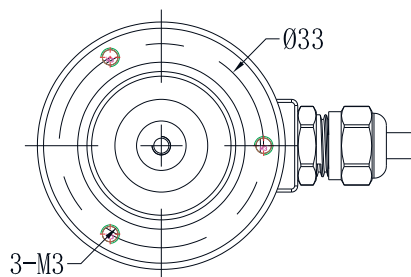
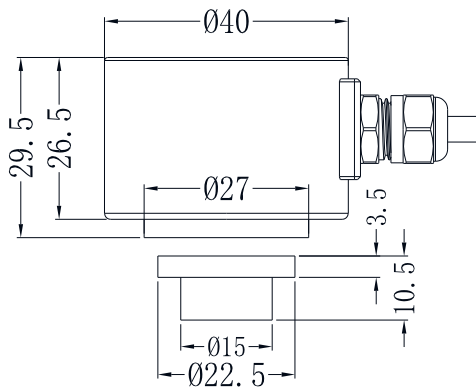
WOA-B



WOA-C

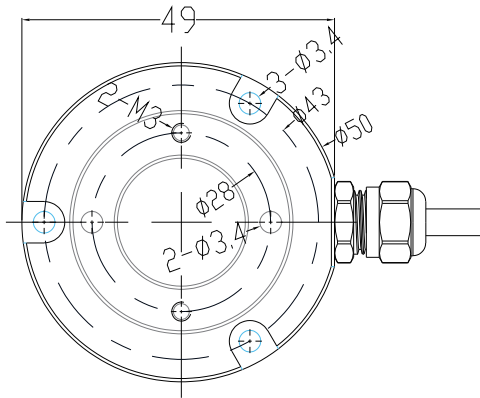


WOA-B2



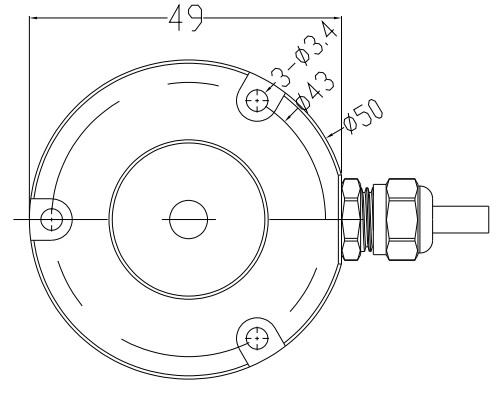
产品尺寸图Product Dimension Drawing

WOA-B1



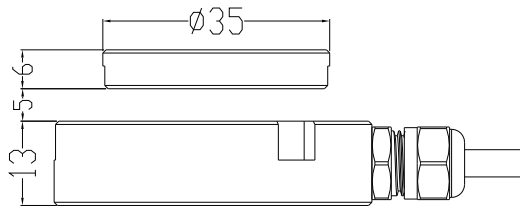
传感器与标准感应磁芯俯视图

top view of sensor with standard induction core



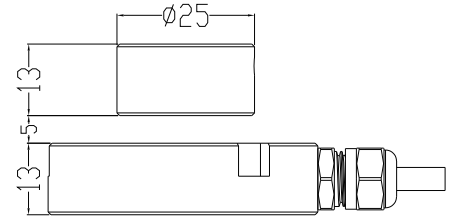
传感器与可选感应磁芯俯视图

top view of sensor with optional induction core



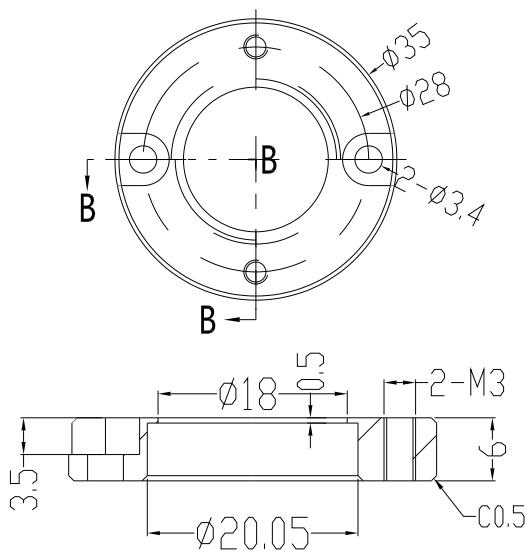
传感器与标准感应磁芯侧面图

side view of sensor with standard induction core



传感器与可选感应磁芯侧面图

side view of sensor with optional induction core



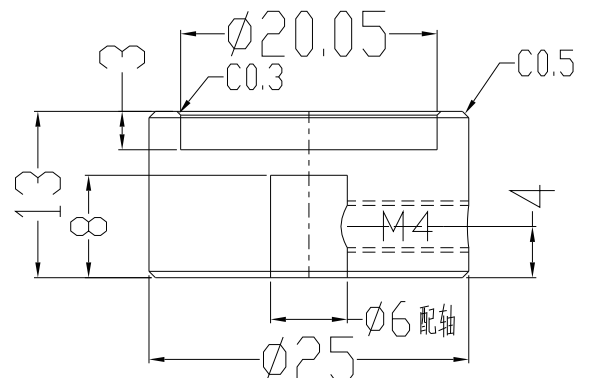
标准感应磁芯

standard induction core



可选感应磁芯

optional induction core



微型磁感应系列角度传感器

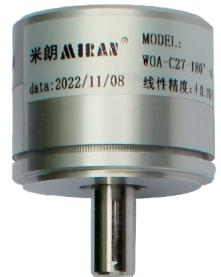
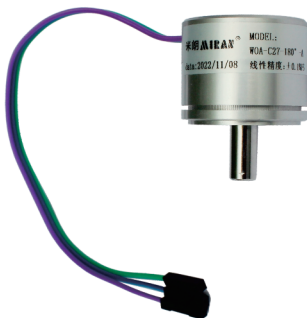
Miniature Magnetic Induction Series Angle Sensor

产品实物图Product Picture

WOA-C22



WOA-C27



WOA-C37



产品实物图Product Picture

WOA-C44



实心轴
hollow shaft



中空轴
hollow shaft



实心轴
hollow shaft

产品概述Product Overview

WOA-C系列微型角度位置传感器采用磁感应原理(内部非接触式)测量角度,具有无触点、长寿命、高分辨、高频响、低温漂、优线性、耐振抗冲、抗干扰等特点。广泛应用于水、油、气、振动、冲击等多种恶劣工业环境中。

WOA-C系列微型磁感应角度位置传感器特点:无接触、无噪音、高灵敏度、高重复性、长寿命、高频响应特性好;环境适用性强;位置测量,是替代光学编码器、旋转变压器、导电塑料电位器的理想产品;355度以内的角度可以任意定制,如90度、180度、200度等均可生产。供电电压+DC12-24V,输出信号有0~5V、0~10V、4~20MA等。

WOA-C series miniature angle position sensor adopts magnetic induction principle (internal non-contact) to measure the angle, featuring non-contact, long life, high resolution, high frequency response, low temperature drift, excellent linearity, vibration and shock resistance, anti-interference, etc. It is widely used in water, oil, gas, vibration, shock and other harsh industrial environments. Widely used in water, oil, gas, vibration, shock and other harsh industrial environments.

WOA-C series miniature magnetic induction angle position sensor features: no contact, no noise, high sensitivity, high repeatability, long life, high frequency response characteristics; environmental applicability; position measurement, is an ideal alternative to optical encoders, resolver, conductive plastic potentiometers; 355 degrees within the angle can be customized, such as 90 degrees, 180 degrees, 200 degrees, etc. can be produced. Supply voltage +DC12-24V, output signals are 0-5V, 0-10V, 4-20MA, etc..

性能参数 Performance Parameters

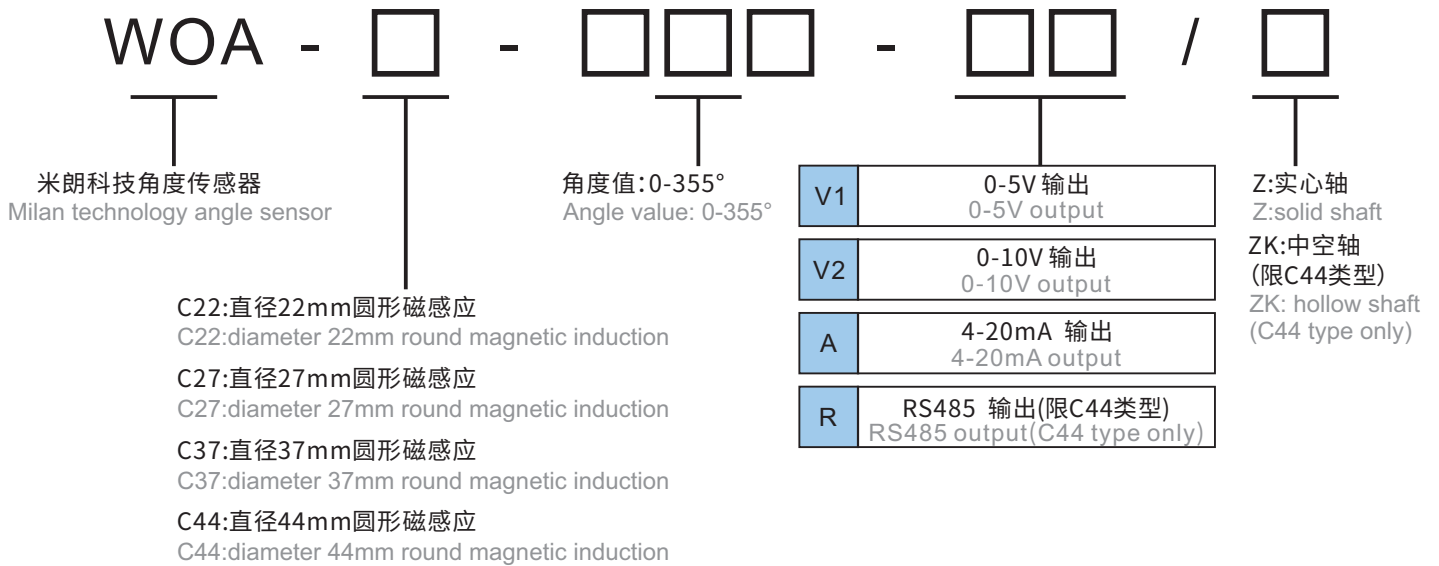
电气指标 Electrical indicators

侧角范围 Side Angle Range	0-355°(模拟量输出可任意定制角度) 0-355° (analog output can be customized to any angle)		
	0-360°(RS485输出, 不可任意定制角度) 0-360°(RS485 output, cannot customize the angle arbitrarily)		
输出信号 Output Signal	(供电+DC 12~24V) 0-5V,0-10V,4-20mA (Power supply +DC 12~24V) 0-5V,0-10V,4-20mA		
	(供电+DC 5V) 0-5V, RS485 (Power Supply +DC 5V) 0-5V, RS485		
线性精度 Linear Accuracy	±0.1%FS	重复精度 Repeatability	0.01°
防护等级 Protection Class	IP65	MAX转速 MAX Rpm	10000rpm
温度漂移 Temperature Drift	9ppm/°C	工作温度 Operating Temperature	-40°C~+85°C

电气连接 Electrical Connection

接线定义 wiring definition 模拟量信号输出 analog signal output	棕色 BROWN		黑色 BLACK		蓝色 BLUE		屏蔽层 SHIELDING LAYER		
	电源正 power positive +DC 5V		输出 exports 0-5V		电源负 power negative 0V		GND		
接线定义 wiring definition 模拟量信号输出 analog signal output	棕色 BROWN		黑色 BLACK		蓝色 BLUE		屏蔽层 SHIELDING LAYER		
	电源正 power positive +DC 12-24V		输出 exports 0-5V,0-10V		电源负 power negative 0V		GND		
接线定义 wiring definition 模拟量信号输出 analog signal output	棕色 BROWN		黑色 BLACK		蓝色 BLUE		屏蔽层 SHIELDING LAYER		
	电源正 power positive +DC 12-24V		输出 exports 4-20mA		电源负 power negative 0V		GND		
接线定义 wiring definition 数字量信号输出 digital signal output	棕色 / 红色 BROWN/RED		黑色 BLACK		蓝色 BLUE		白色 WHITE		屏蔽层 SHIELDING LAYER
	电源正 power positive +DC 5V		电源负 power negative 0V		RS485 A		RS485 B		GND

产品型号选型 Product Model Selection



例如 Example:

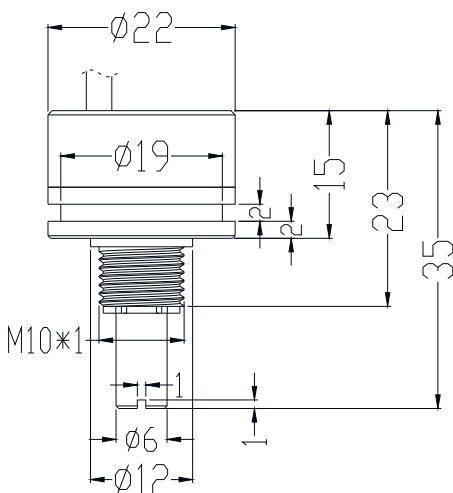
WOA-C22-5-V1: 代表米朗微型磁感应角度传感器直径22mm圆形磁感应5° 0-5V信号输出

WOA-C22-5-V1: stands for miran miniature magnetic induction angle sensor diameter 22mm round magnetic induction 5° 0-5V signal output

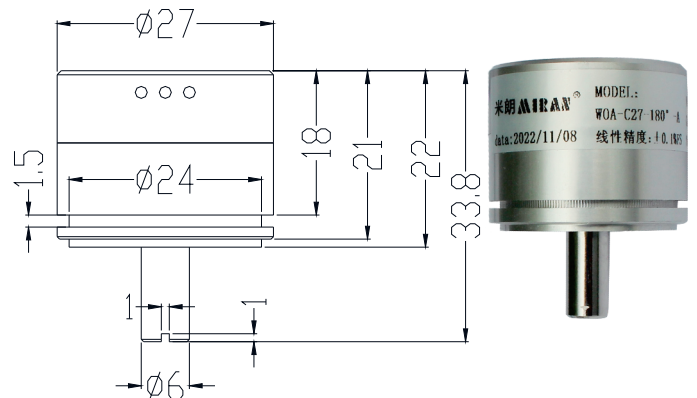
WOA-C27-300-A: 代表米朗微型磁感应角度传感器直径27mm圆形磁感应300° 4-20mA信号输出

WOA-C27-300-A: stands for miran miniature magnetic induction angle sensor diameter 27mm round magnetic induction 300° 4-20mA signal output

产品尺寸图 Product Dimension Drawing



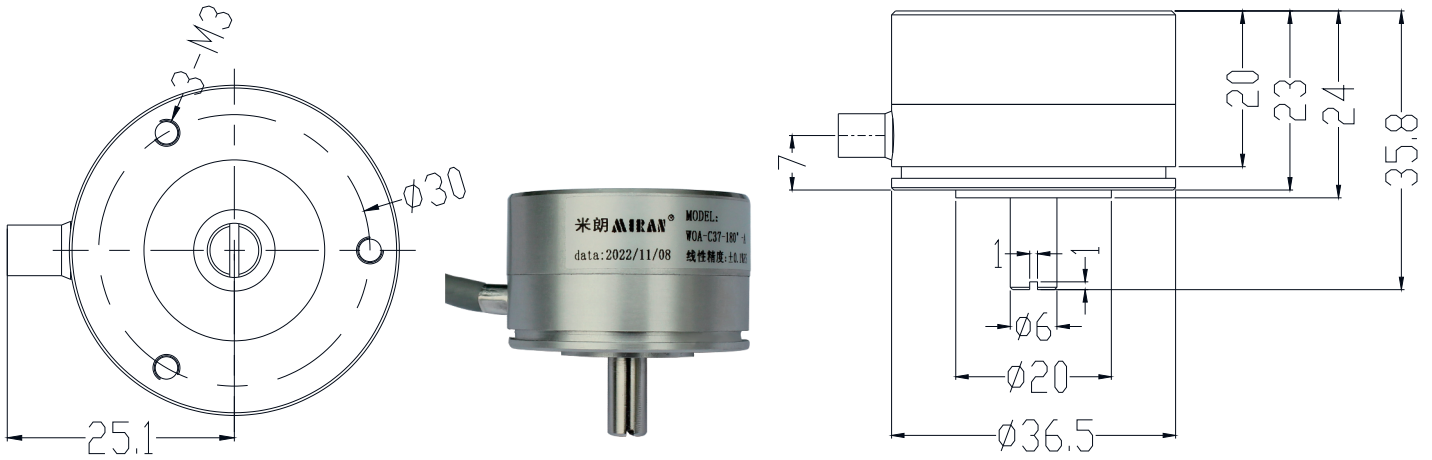
WOA-C22-180°-A



WOA-C27-180°-A



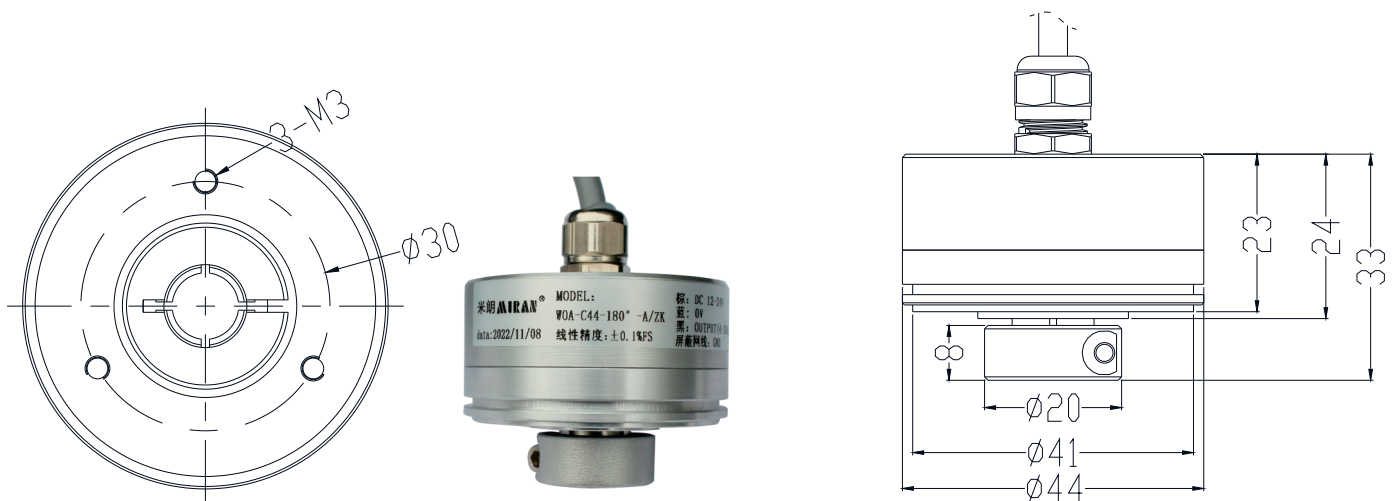
产品尺寸图 Product Dimension Drawing



WOA-C37-180°-A



WOA-C44-180°-A/Z



WOA-C44-180°-A/ZK

PX4500/PX6500微型磁感应角度传感器

PX4500/PX6500 Miniature Magnetic Induction Angle Sensor

产品实物图Product Picture

PX4500



PX6500



产品概述Product Overview

PX系列角度位移传感器采用磁感应原理(内部非接触式)测量角度,具有无触点、长寿命、高分辨、高频响、低温漂、优线性、耐振抗冲、抗干扰等特点。广泛应用于水、油、气、振动、冲击等多种恶劣工业环境中。

P系列磁感应角度位移传感器特点:无接触、无噪音、高灵敏度、高重复性、长寿命、高频响应特性好;环境适用性强;位置测量,是替代光学编码器、旋转变压器、导电塑料电位器的理想产品;

355度以内的角度可以任意定制,如90度、180度、200度等均可生产。供电电压+DC12-24V,输出信号有0~5V、0~10V、4~20MA等。

PX series angle displacement sensors use magnetic induction principle (internal non-contact) to measure the angle, with no contact, long life, high resolution, high frequency, low temperature drift, excellent linearity, vibration and shock resistance, anti-interference and other characteristics. Widely used in water, oil, gas, vibration, shock and other harsh industrial environments.

P series magnetic induction angle displacement sensor features: no contact, no noise, high sensitivity, high repeatability, long life, high frequency response characteristics; environmental applicability; position measurement, is an ideal product to replace the optical encoder, resolver, conductive plastic potentiometer; 355 degrees within the angle can be customized, such as 90 degrees, 180 degrees, 200 degrees, etc. can be produced. Supply voltage +DC12-24V, output signals are 0-5V, 0-10V, 4-20MA, etc.

性能参数Performance Parameters

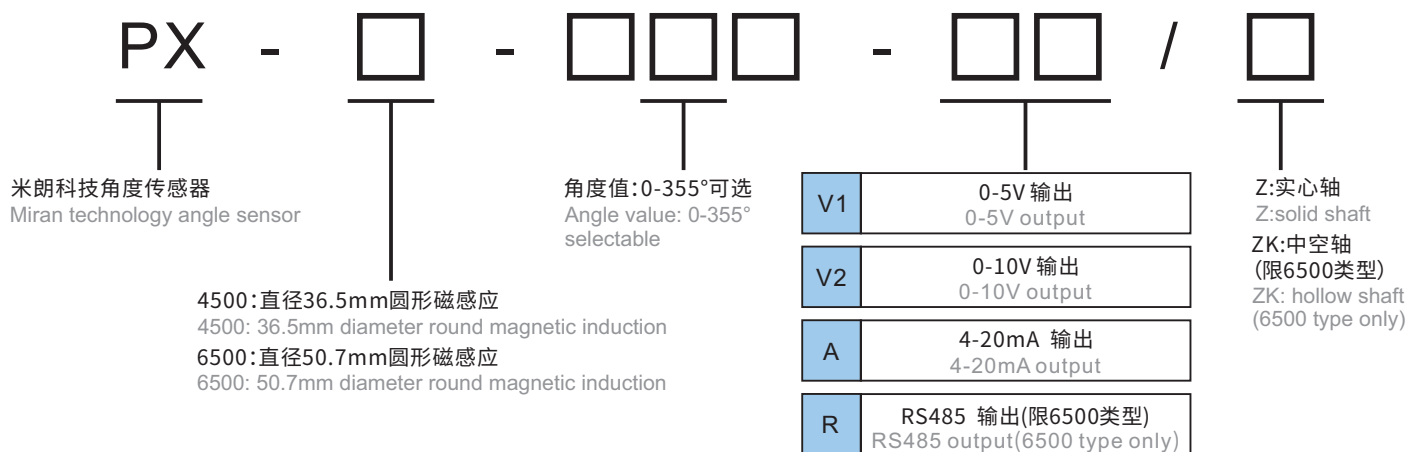
⚡ 电气指标Electrical indicators

重复精度 Repeatability	0.01°
温度漂移 Temperature Drift	9ppm/°C
工作温度 Operating Temperature	-40°C~+85°C
MAX转速 MAX Rpm	10000rpm
防护等级 Protection Class	IP65
线性精度 Linear Accuracy	+0.1%FS
侧角范围 Side Angle Range	0-355°(模拟量输出可任意定制角度) 0-355° (analog output can be customized to any angle)
	0-360°(RS485输出,不可任意定制角度) 0-360°(RS485 output, cannot customize the angle arbitrarily)
输出信号 Output Signal	(供电+DC 12~24V) 0-5V,0-10V,4-20mA (power supply +DC 12~24V) 0-5V,0-10V,4-20mA
	(供电+DC 5V) 0-5V, RS485 (power supply +DC 5V) 0-5V, RS485

电气连接Electrical Connection

接线定义 wiring definition 模拟量信号输出 analog signal output	棕色 BROWN 电源正 power positive +DC 5V	黑色 BLACK 输出 exports 0-5V	蓝色 BLUE 电源负 power negative 0V	屏蔽层 SHIELDING LAYER GND
接线定义 wiring definition 模拟量信号输出 analog signal output	棕色 BROWN 电源正 power positive +DC 12-24V	黑色 BLACK 输出 exports 0-5V, 0-10V	蓝色 BLUE 电源负 power negative 0V	屏蔽层 SHIELDING LAYER GND
接线定义 wiring definition 模拟量信号输出 analog signal output	棕色 BROWN 电源正 power positive +DC 12-24V	黑色 BLACK 输出 exports 4-20mA	蓝色 BLUE 电源负 power negative 0V	屏蔽层 SHIELDING LAYER GND
接线定义 wiring definition 数字量信号输出 digital signal output	棕色/红色 BROWN/RED 电源正 power positive +DC 5V	黑色 BLACK 电源负 power negative 0V	蓝色 BLUE RS485 A	白色 WHITE RS485 B 屏蔽层 SHIELDING LAYER GND

产品型号选型Product Model Selection



例如Example:

PX-4500-5-V1-Z: 代表米朗磁感应角度位移传感器直径36.5mm圆形磁感应5° 0-5V信号输出实心轴

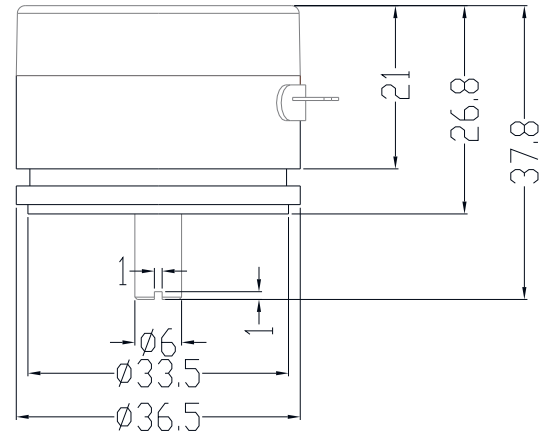
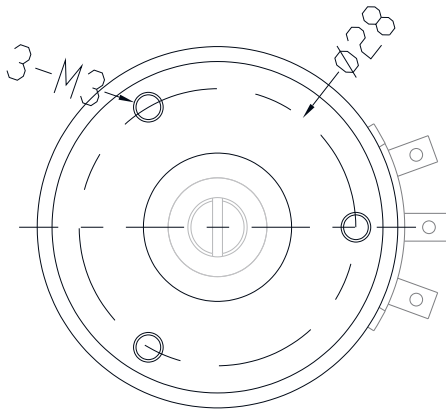
PX-4500-5-V1-Z: stands for miran magnetic induction angular displacement sensor diameter 36.5mm round magnetic induction 5° 0-5V signal output solid shaft

PX-6500-300-V2-ZK: 代表米朗磁感应角度位移传感器直径50.7mm圆形磁感应300° 0-10V信号输出中空轴

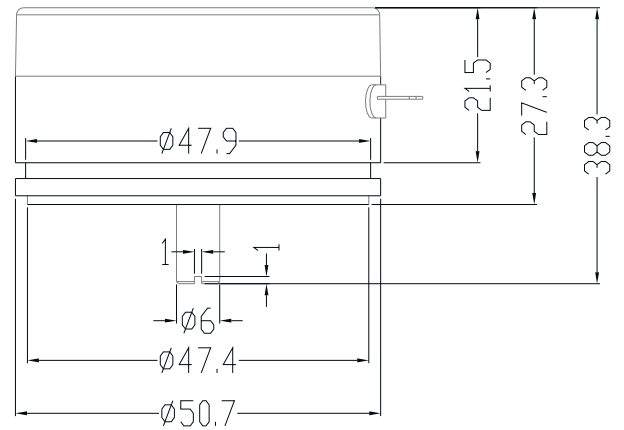
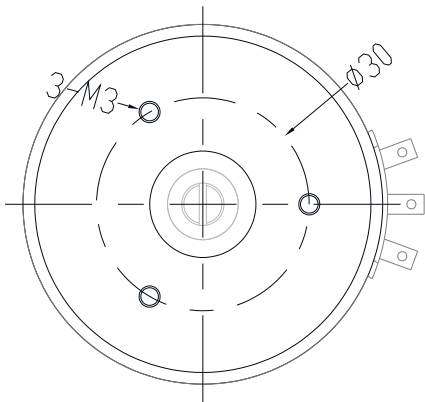
PX-6500-300-V2-ZK: stands for miran magnetic induction angular displacement sensor diameter 50.7mm round magnetic induction 300° 0-10V signal output hollow shaft

产品尺寸图 Product Dimension Drawing

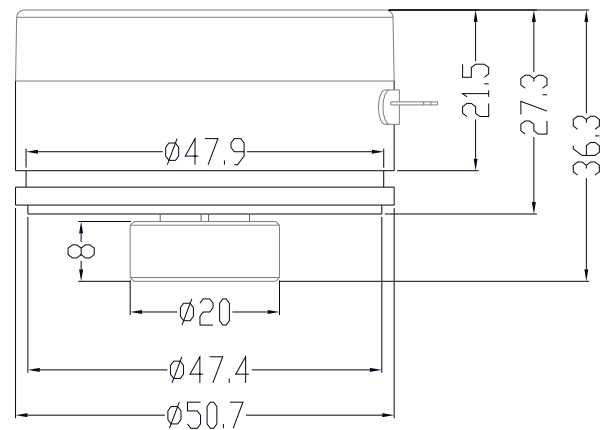
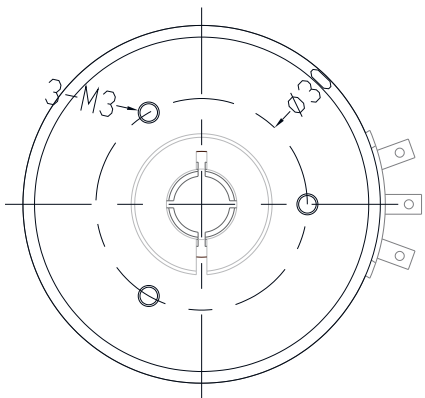
PX4500-90°-A/Z



PX6500-90°-A/Z



PX6500-90°-A/ZK



WOA-A角度传感器

WOA-A Angle Sensor

产品实物图Product Picture



产品概述Product Overview

WOA-A系列磁感应编码器为测量电机旋转位置的非接触式编码器，产品为米朗科技自主研发的磁感应多圈传感器，并加入信号调理及算法，计算角度。WOA-A系列角度传感器支持多种信号输出（RS485半双工输出，4-20mA,0-5V,0-10V），最大转速6000rpm，输出分辨率为17分辨率，温度范围： $-30^{\circ}\text{C}\sim 85^{\circ}\text{C}$ ，体积小，抗污染能力强，精度高。可应用于伺服控制系统、机器手臂、位置测量、工业自动化控制，直流电机等领域。

WOA-A series magnetic induction encoder is a non-contact encoder to measure the rotary position of motor, which is developed by miran Technology independently. The product is a magnetic induction multi-turn sensor developed by miran Technology, with signal conditioning and algorithm to calculate the angle. WOA-A series angle sensors support a variety of signal output (RS485 half-duplex output, 4-20mA, 0-5V,0-10V), maximum speed of 6000rpm, the output resolution of 17 resolution, the temperature range: $-30^{\circ}\text{C} \sim 85^{\circ}\text{C}$, small size, anti-pollution ability, high precision. It can be used in servo control system, robot arm, position measurement, industrial automation control, DC motor and other fields.

电气连接Electrical Connection

	红色 RED	黑色 BLACK	蓝色 BLUE	白色 WHITE	屏蔽层 SHIELDING LAYER
接线定义 wiring definition	电源正VCC DC 5V(RS485)或 DC12V~DC24V (电压/电流/RS485) power positive VCC DC 5V (RS485) or DC12V~DC24V (voltage/current/RS485)	电源负 power negative GND	D+/OUT+ RS485-A/OUT+	D-/OUT- RS485-B/OUT-	接外壳 connecting shell

性能参数Performance Parameters

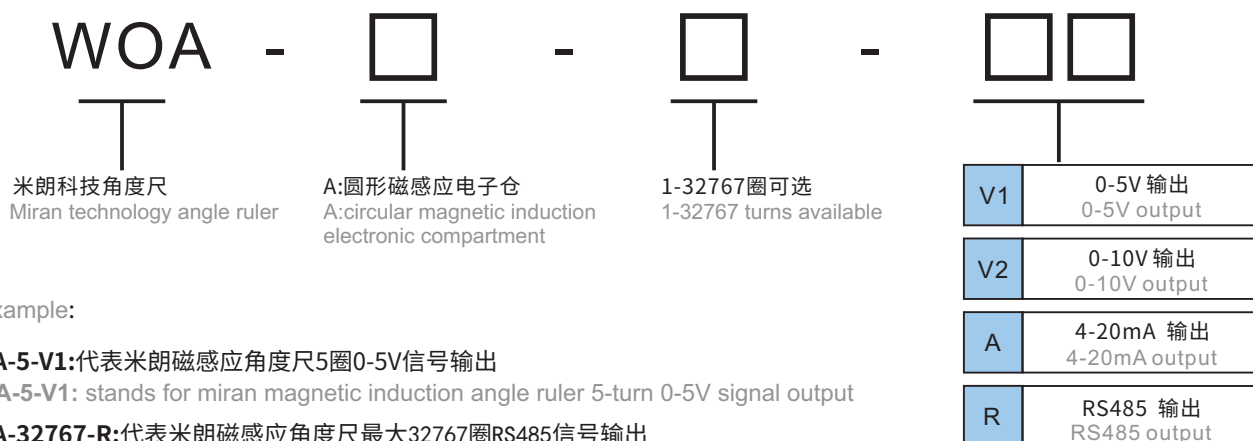
电气指标Electrical indicators

型号 Model Number	WOA-A	线性精度 Linear Accuracy	≤0.02°
分辨率 Resolution	17位 17th	Bit顺序 Bit Order	LSB First
输出信号 Output Signal	0-5V / 0-10V / 4-20mA / RS485	通信速率 Communications Rate	9600bps(默认) 9600bps (default)
允许旋转速度 Allowable Rotation Speed	≤6000rpm	工作环境温度 Working Environment Temperature	-30℃~85℃
圈线 Twine	1-32767圈(范围内可任意标定) 1-32767 revolutions (range can be arbitrarily calibrated)		
传送方式 Delivery Method	半双工串行通信(RS485) half-duplex serial communication (RS485)		
传送错误校验 Transmission Error Check	CRC校验(CRC多项式CRC16+1) CRC checksum (CRC polynomial CRC16+1)		
电源电压 Supply Voltage	DC 5V(RS485)/DC12V~DC24V(电压/电流/RS485)波动5%以下 DC 5V(RS485)/DC12V~DC24V (voltage/current/RS485) fluctuation 5% or less		
同步方式 Synchronization	起止同步(8bit数据、1bit停止) start-stop synchronization (8bit data, 1bit stop)		
输入输出形态 Input/Output Forms	差分线路驱动器/接收器 differential line driver/receiver		
电源电压VCC 消耗电流 Supply Voltage VCC Current Consumption	40mA不含突发情况 40mA without contingency		

注: 电源打开后因内部电路的初期化, 请在上电50msec后, 再输入命令。BAT电压小于2.8V时, 多圈数据会清零。

Note: Please input the command after 50msec of power-on due to the initialization of the internal circuit after the power is turned on. multi-turn data will be cleared when the BAT voltage is less than 2.8V.

产品型号选型Product Model Selection



例如Example:

WOA-A-5-V1: 代表米朗磁感应角度尺5圈0-5V信号输出

WOA-A-5-V1: stands for miran magnetic induction angle ruler 5-turn 0-5V signal output

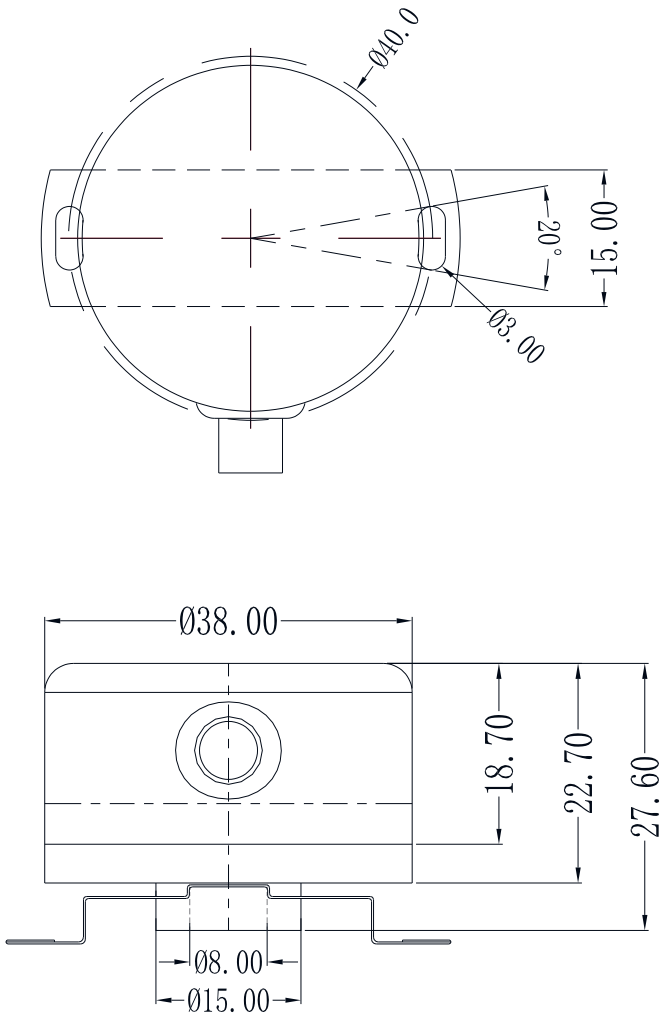
WOA-A-32767-R: 代表米朗磁感应角度尺最大32767圈RS485信号输出

WOA-A-32767-R: stands for miran magnetic induction angle ruler up to 32767 turns with RS485 signal output.

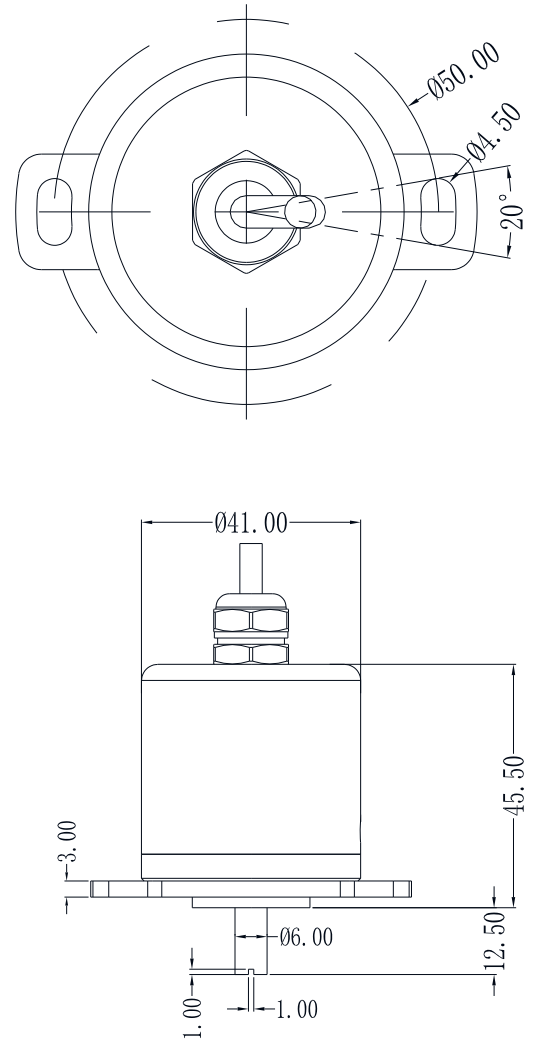
注: 单圈为绝对值输出模式, 多圈为增量型输出模式

Note: single-turn for absolute output mode, multi-turn for incremental output mode

产品尺寸图Product Dimension Drawing



数字信号输出
Digital signal output
DC5V供电
DC5V power supply



数字信号输出与模拟量信号输出
Digital signal output
and analog signal output
DC12V-24V供电
DC12V-24V power supply

WOA-D角度传感器

WOA-D Angle Sensor

产品实物图Product Picture



产品概述Product Overview

WOA-D系列防水型磁电编码器为测量电机旋转位置的内部非接触式绝对值编码器，产品采用米朗科技自主研发的磁感应多圈传感器，并加入信号调理及算法，计算绝对角度，可在水下100米里长期正常工作。

WOA-D系列防水型传感器体积小，抗污染能力强，绝对值输出，数据掉电记忆，防护等级IP68。可应用于伺服控制系统、机器手臂、位置测量、工业自动化控制、直流电机等领域。

WOA-D series waterproof magnetic encoder is an internal non-contact absolute encoder for measuring the rotary position of motor, the product adopts the magnetic induction multi-turn sensor independently developed by Milan Technology and adds signal conditioning and algorithms to calculate the absolute angle, which can be used for long time and normal work in 100 meters underwater.

WOA-D series waterproof sensors have small size, strong anti-pollution ability, absolute value output, data power-down memory, and IP68 protection level, which can be used in servo control system, robot arm, position measurement, industrial automation control, DC motor and other fields.

性能参数Performance Parameters

电气指标Electrical indicators

旋转方向 Direction Of Rotation	顺时针/逆时针 clockwise/counterclockwise	允许旋转速度 Allowable Rotation Speed	≤600rpm
响应频率 Response Frequency	100Hz	防护等级 Protection Class	IP68
工作环境温度 Working Environment Temperature	-10℃~60℃ (低温状态下, 需保持无结晶状态) -10℃~60℃ (at low temperature, need to keep no crystallization)		

性能指标Performance indicators

技术规格 Technical Specification	模拟输出 analog output
输出信号 Output Signal	0~5V/0~10V/4~20mA
电源电压 Supply Voltage	+12~24VDC
分辨率 Resolution	0.09°
可标定圈数范围 Range Of Calibratable Turns	1~40圈 1~40 turns
线性精度 Linear Accuracy	≤0.2%FS

技术规格 Technical Specification	数字输出 digital output
输出信号 Output Signal	RS485
电源电压 Supply Voltage	+12~24VDC
分辨率 Resolution	0.09°
可标定圈数范围 Range Of Calibratable Turns	1~4080圈 1~4080 turns
线性精度 Linear Accuracy	≤0.2%FS

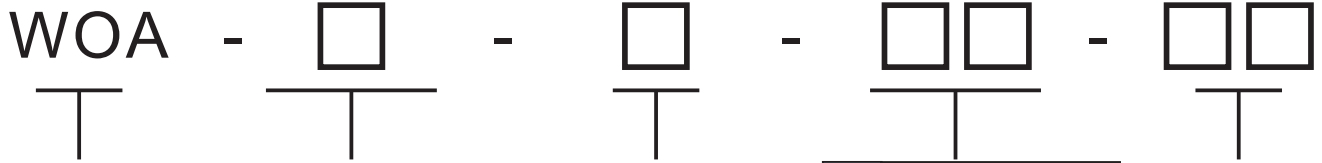
注: 电源打开后因内部电路的初期化, 请在上电50msec后, 再输入命令。每次断电与上电保持间隔大于10秒。

Note: Please enter the command after 50msec of power-on due to initialization of internal circuitry after the power is turned on. Keep the interval between each power-off and power-on more than 10 seconds.

电气连接Electrical Connection

接线定义 wiring definition	红色 RED	黑色 BLACK	绿色 GREEN	白色 WHITE	屏蔽线 SHIELDED WIRE
	电源正VCC power positive VCC +12V~24VDC	电源负GND power negative GND 0V	RS485-A/OUT+ 信号输出 signal output	RS485-B/OUT- 信号输出 signal output	接外壳 connecting shell 接地 grounding

产品型号选型Product Model Selection



米朗科技角度传感器
Miran technology angle sensor

D:圆形磁感应专用电子仓
D:round magnetic induction
special electronic compartment

1-4080圈可选
1-4080 turns available

V1 0-5V 输出
0-5V output

V2 0-10V 输出
0-10V output

A 4-20mA 输出
4-20mA output

R RS485 输出
RS485 output

DL:尾部直出线
DL:tail straight out line
SL:尾部侧出线
SL:tail side exit wire

例如Example:

WOA-D-5-V1-SL:代表米朗磁感应角度尺5圈0-5V输出侧出线。

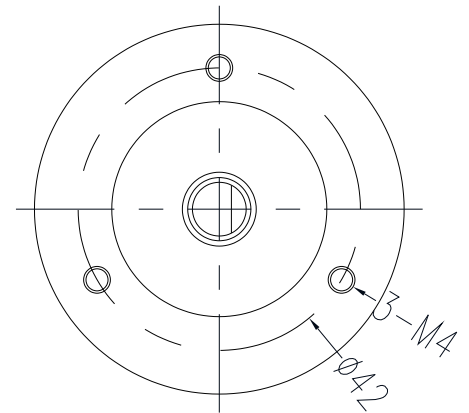
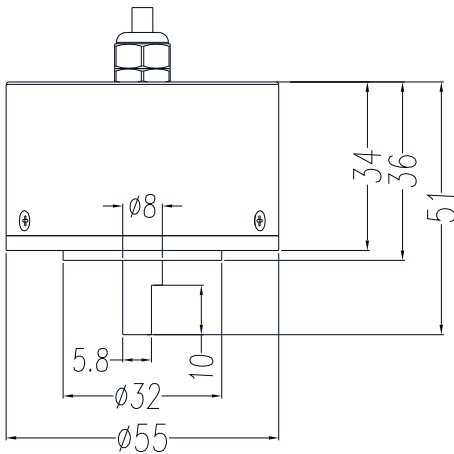
WOA-D-5-V1-SL: stands for miran magnetic induction angle ruler 5-turn 0-5V output side out.

WOA-D-4080-R-DL:表示米朗磁感应角度尺最大4080圈RS485信号输出直出线。

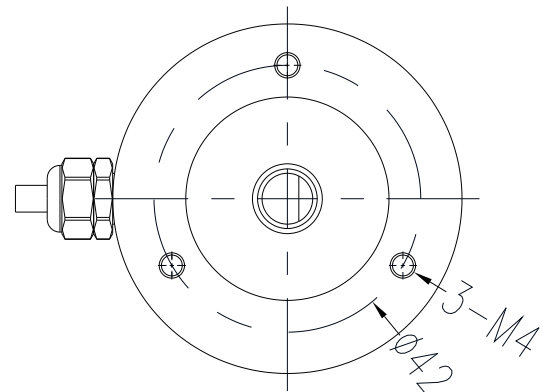
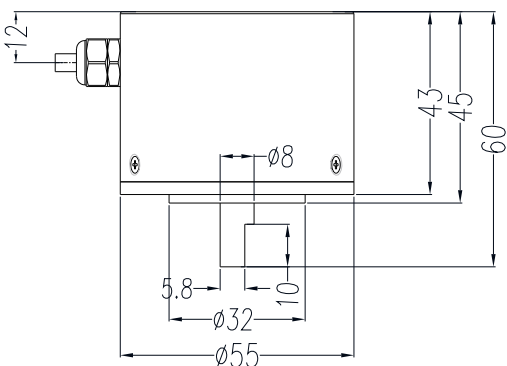
WOA-D-4080-R-DL: indicates the maximum 4080-turn RS485 signal output straight out of the miran magnetic induction angle scale.

产品尺寸图Product Dimension Drawing

WOA-D直出线WOA-D straight outlet



WOA-D侧出线WOA-D side outlet



WOA-D2角度传感器

WOA-D2 Angle Sensor

产品实物图Product Picture



产品概述Product Overview

WOA-D2系列磁感应编码器为测量电机旋转位置的内部非接触式绝对值编码器, 产品为米朗科技自主研发的磁感应多圈传感器, 并加入信号调理及算法, 计算绝对角度, 可同时输出模拟量信号与数字量信号。

WOA-D2双输出型磁感应多圈角度传感器支持多种信号输出 (RS485半双工通信, 4-20mA, 0-5V, 0-10V), 最大转速600rpm, 体积小, 抗污染能力强, 绝对值输出, 数据掉电记忆, 可应用于伺服控制系统、机器手臂、位置测量、工业自动化控制、直流电机等领域。

WOA-D2 series magnetic induction encoder is an internal non-contact absolute encoder to measure the rotary position of the motor. The product is a magnetic induction multi-turn sensor independently developed by Miran Technology, with signal conditioning and algorithms to calculate the absolute angle, and it can output analog signals and digital signals at the same time.

WOA-D2 dual output magnetic induction multi-turn angle sensor supports a variety of signal output (RS485 half-duplex communication, 4-20mA, 0-5V, 0-10V), maximum speed 600rpm, small size, strong anti-pollution ability, absolute value output, data power-down memory, can be applied to servo control system, robot arm, position measurement, industrial automation control, DC motors and other fields. .

性能参数Performance Parameters

电气指标Electrical indicators

旋转方向 Direction Of Rotation	顺时针/逆时针 clockwise/counterclockwise	允许旋转速度 Allowable Rotation Speed	≤600rpm
响应频率 Response Frequency	100Hz	防护等级 Protection Class	IP68
工作环境温度 Working Environment Temperature	-10℃~60℃ (低温状态下, 需保持无结晶状态) -10℃~60℃ (at low temperature, need to keep no crystallization)		

性能指标Performance indicators

技术规格 Technical Specification	模拟输出 analog output
输出信号 Output Signal	0~5V/0~10V/4~20mA
电源电压 Supply Voltage	+12~24VDC
分辨率 Resolution	16位 16-bit
可标定圈数范围 Range Of Calibratable Turns	1~40圈 1~40 turns
线性精度 Linear Accuracy	≤0.05%FS

技术规格 Technical Specification	数字输出 digital output
输出信号 Output Signal	RS485,SSI
电源电压 Supply Voltage	+12~24VDC
分辨率 Resolution	单圈12位 single-turn 12-position
可标定圈数范围 Range Of Calibratable Turns	1~4080圈 1~4080 turns
线性精度 Linear Accuracy	≤0.05%FS

注: ①模拟量输出选择较大圈数后, 分辨率也会随之变差。②电源打开后因内部电路的初期化, 请在上电50msec后, 再输入命令。每次断电与上电保持间隔大于10秒。

Note: ①Resolution deteriorates when a larger number of turns is selected for analog output. ②The internal circuitry is initialized after the power is turned on, so enter the command after 50msec of power-on. The interval between each power-off and power-on should be more than 10 seconds.

电气连接Electrical Connection

接线定义 wiring definition	红色 RED	黑色 BLACK	绿色 GREEN	白色 WHITE	黄色 YELLOW	屏蔽线 SHIELDED WIRE
	电源正VCC power positive VCC +12V~24VDC	电源负GND power negative GND 0V	RS485-A/OUT+ 信号输出 signal output	RS485-B/OUT- 信号输出 signal output	4-20mA/0-5V/0-10V 模拟量信号输出 analog signal output	接外壳 connecting shell 接地 grounding

产品型号选型 Product Model Selection

WOA - □ - □ - □/□

米朗科技角度传感器
Miran technology angle sensor

D2:磁感应双输出专用电子仓
D2:magnetic induction dual output specialized electronic compartment

1-4080圈可选
1-4080 turns available

V1 0-5V 输出
0-5V output

V2 0-10V 输出
0-10V output

A 4-20mA 输出
4-20mA output

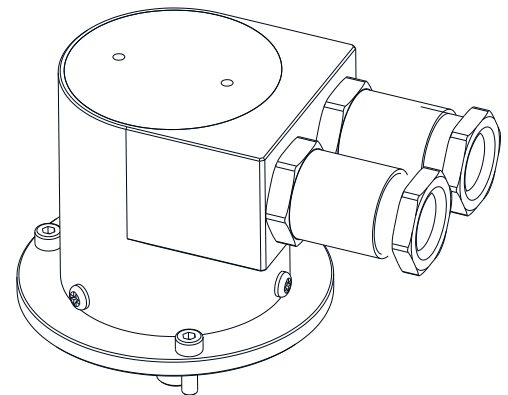
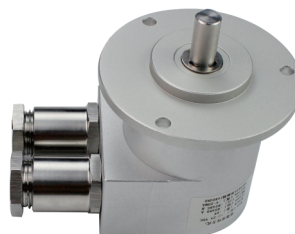
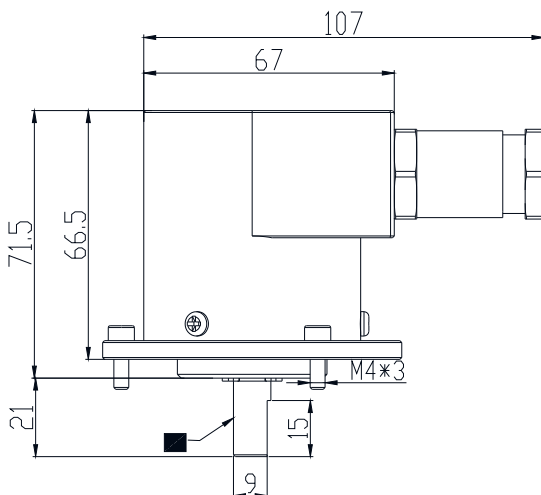
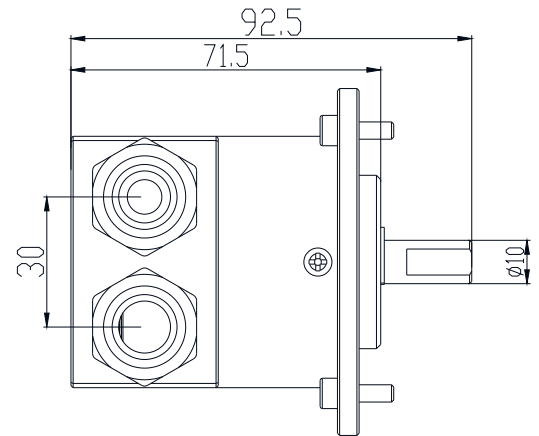
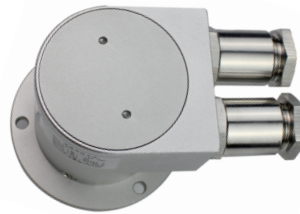
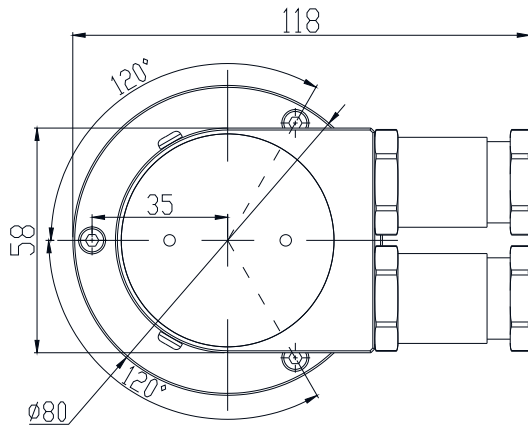
R RS485 输出
RS485 output

例如Example:

WOA-D2-10-A/R:表示米朗磁感应角度尺10圈,可同时输出电流信号与RS485信号
(只可同时输出两种不同的信号)

WOA-D2-10-A/R: indicates that miran 10-turn magnetic angle gauge can simultaneously output current signals and RS485 signals.(only two different signals can be output at the same time)

产品尺寸图 Product Dimension Drawing



MFB-MPSFS2角度传感器

MFB-MPSFS2 Angle Sensor

产品实物图Product Picture



产品概述Product Overview

MFB-MPSFS2防水防爆系列磁感应编码器为测量电机旋转位置的内部非接触式绝对值编码器,产品为米朗科技自主研发的磁感应多圈传感器,并加入信号调理及算法,计算绝对角度,可在水下长期正常工作。

MFB-MPSFS2防水防爆型传感器体积小,抗污染能力强,绝对值输出,数据掉电记忆,防护等级为IP68。信号输出:RS485半双工通信、4-20mA、0-5V、0-10V,支持(max)转速600rpm。可应用于伺服控制系统、机器手臂、位置测量、工业自动化控制,直流电机等领域。

MFB-MPSFS2 waterproof and explosion-proof series magnetic induction encoder is an internal non-contact absolute encoder for measuring the rotary position of motor, the product is a magnetic induction multi-turn sensor independently developed by Miran Technology, and add signal conditioning and algorithms to calculate the absolute angle, which can work properly for a long time under water. Underwater for a long time normal work.

MFB-MPSFS2 waterproof and explosion-proof sensor is small in size, anti-pollution ability, absolute value output, data power-down memory, protection grade IP68. Signal output: RS485 half-duplex communication, 4-20mA, 0-5V, 0-10V, support (max) speed of 600rpm. it can be applied in servo control system, robot arm, position measurement, industrial automation control DC motors and other fields.

性能参数Performance Parameters

⚡ 电气指标Electrical indicators

型号 Model Number	MFB-MPSFS2	允许旋转速度 Allowable Rotation Speed	≤600rpm
旋转方向 Direction Of Rotation	顺时针/逆时针 clockwise/counterclockwise	防护等级 Protection Class	IP68
响应频率 Response Frequency	100Hz	防爆等级 Explosion-proof Grade	Ex db IIC T6 Gb
工作环境温度 Working Environment Temperature	-10℃~60℃ (低温状态下, 需保持无结晶状态) -10℃~60℃ (at low temperature, need to keep no crystallization)		

⚡ 性能指标Performance indicators

技术规格 Technical Specification	模拟输出 analog output
输出信号 Output Signal	0~5V/0~10V/4~20mA
电源电压 Supply Voltage	+12~24VDC
分辨率 Resolution	0.09°
可标定圈数范围 Range Of Calibratable Turns	1~40圈 1~40 turns
线性精度 Linear Accuracy	≤0.2%FS

技术规格 Technical Specification	数字输出 digital output
输出信号 Output Signal	RS485
电源电压 Supply Voltage	+12~24VDC
分辨率 Resolution	0.09°
可标定圈数范围 Range Of Calibratable Turns	1~4080圈 1~4080 turns
线性精度 Linear Accuracy	≤0.2%FS

注: 电源打开后因内部电路的初期化, 请在上电50msec后, 再输入命令。每次断电与上电保持间隔大于10秒。

Note: Please enter the command after 50msec of power-on due to initialization of internal circuitry after the power is turned on. Keep the interval between each power-off and power-on more than 10 seconds.

电气连接Electrical Connection

接线定义 wiring definition	红色 RED	黑色 BLACK	绿色 GREEN	白色 WHITE	屏蔽线 SHIELDED WIRE
	电源正VCC power positive VCC +12V~24VDC	电源负GND power negative GND 0V	RS485-A/OUT+ 信号输出 signal output	RS485-B/OUT- 信号输出 signal output	接外壳 connecting shell 接地 grounding

产品型号选型 Product Model Selection

MFB - MPSFS2

米朗科技防爆系列
Miran technology
explosion-proof series

防水防爆角度传感器
Waterproof explosion-
proof angle sensor

1-4080圈可选
1-4080 turns available

- [] [] -

EX

防爆标志
Explosion-proof symbol

V1	0-5V 输出 0-5V output
V2	0-10V 输出 0-10V output
A	4-20mA 输出 4-20mA output
R	RS485 输出 RS485 output

例如 Example:

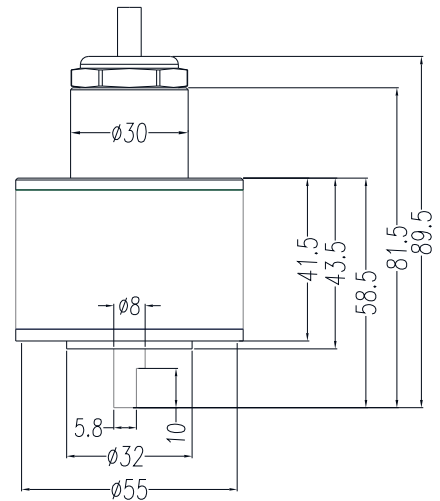
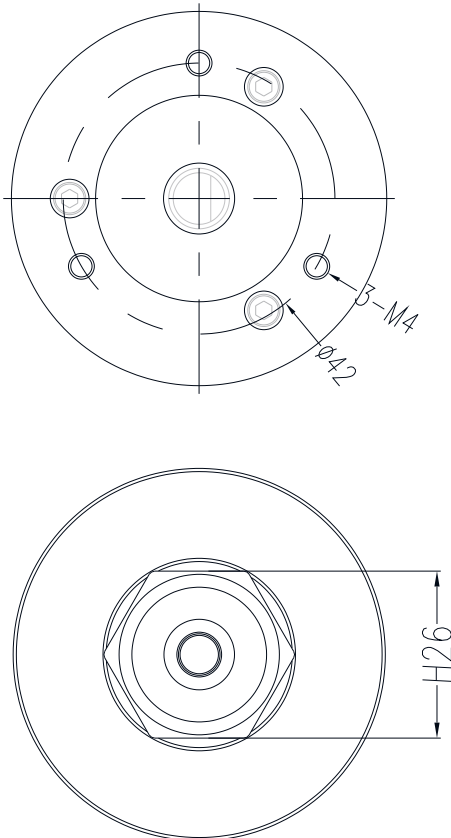
MFB-MPSFS2-4080-R-EX:表示米朗防水防爆角度传感器最大4080圈RS485信号输出。

MFB-MPSFS2-4080-R-EX: indicates that miran waterproof and explosion-proof angle sensor has a maximum of 4080 turns of RS485 signal output.

MFB-MPSFS2-5-V1-EX:表示米朗防水防爆角度传感器5圈0-5V信号输出。

MFB-MPSFS2-5-V1-EX: indicates the 5-turn 0-5V signal output of miran waterproof and explosion-proof angle sensor.

产品尺寸图 Product Dimension Drawing



防爆合格证Explosion-proof Certificate



国家防爆

编号: CNEx22.5301

防爆合格证

制造单位 枣阳市米朗科技有限公司
地址: 湖北省枣阳市南城霍庄村八组

产品名称 拉绳位移传感器

型号规格 MFB-MPSFS2 24VDC

防爆标志 Ex db IIC T6 Gb

产品标准 Q/ MLKJ02 -2022

总装图号 MFB-MPSFS2.00

经对上述产品图样及技术文件的审查和样品检验,确认符合下列标准:

GB/T3836.1-2021 《爆炸性环境 第1部分:设备 通用要求》

GB/T3836.2-2021 《爆炸性环境 第2部分:由隔爆外壳“d”保护的设备》

记事:

1.使用环境温度: -20℃ ~ +60℃。

2.外壳防护等级: IP68(1m/2h)。

国家防爆

中心主任

王军

颁发日期

2022年11月02日

本证有效期

2022年11月02日至2027年11月01日



南阳防爆电气研究所
国家防爆电气产品质量检验检测中心



公众号

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应用领域 Areas of application



• 测量测绘仪器
Measuring and
mapping instruments



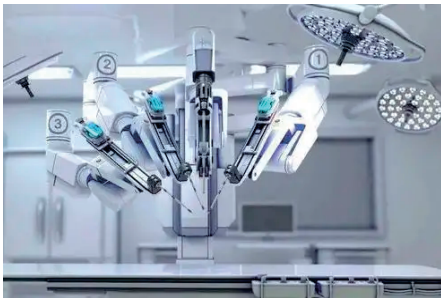
• 铁路机车监测
Railroad locomotive monitoring



• 建筑健康监测
Building health monitoring



• 塔杆倾斜监测
Tower tilt monitoring



• 工业自动化姿态控制
Industrial automation attitude control



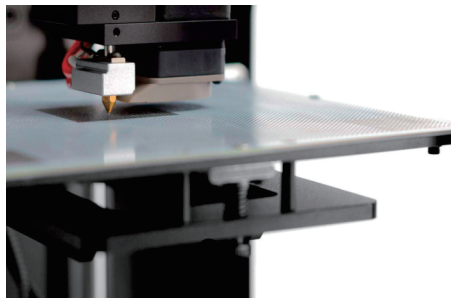
• 汽车轮胎角度测量
Car tire angle measurement



• 桥梁与大坝监测
Bridge and dam monitoring



• 石油钻井设备
Oil drilling equipment



• 精密平台自动调平
Precision platform with automatic leveling

...

角度位置传感器应用场所极多,随着核心技术的发展,角度传感器得到越来越广泛的应用。

Angle position sensors are used in an extremely wide range of applications, and with the development of core technologies, angle sensors are becoming more and more widely used.

适合应用于工厂、山体、铁路、隧道、船业、机械、建筑业、医疗事业、桥梁铺设、水坝建设、汽车行业、核工业和航空航天事业等。

Suitable for applications in factories, mountains, railroads, tunnels, shipping, machinery, construction, medical business, bridge laying, dam construction, automotive industry, nuclear industry and aerospace business.



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用户至上
Customer First

诚信为本
Credit First

将致力于位移、物位、角度等测控领域

Will be committed to the field of displacement, level, angle measurement and control

为客户提供一站式解决方案的产品与服务

Products and services that provide one-stop solutions for our customers

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