

MUJIE 慕杰®

YOUR AUTOMATION, YOUR MUJIE!

本系列产品有各种尺寸的磁源体匹配私用非接触式磁环编码器有多种安装尺寸,使用更加精准

This series of products have various sizes of magnetic source to match the private non-contact magnetic ring encoder, which has a variety of installation sizes and is more accurate to use

磁环编码器MCH系列 Magnetic ring encoder MCH series



► 型号说明 Model Explanation

MCH	163	-D83	PZ	J	-05L	-1024BZ	-3M	□	□
基本型号 The basic model MCH	磁环外径: Outer diameter of magnetic ring 42 82 115 122 160 163 203 285	孔径: aperture 83	读数头朝向 Reading head orientation LZ LB PZ PB	支架形状 Support shape A, B, C, D, E, F, J, H, I, J, K, L, M, N	输出方式: Output mode: 05L: 5V长线驱动 输出 V: 1VPP	分辨率/磁极对数 Resolution / pole pairs 1024 2048 4096 8192 16384	线缆长度: Cable length 3米 5米 8米	HC: 航空插头 aviation Plug	客户定制 Customized informat

型号说明 Model Description: MCH122-D83PZJ-05L-1024BZ-3M

(MCH型读数头, 外径122, 孔径83, 直板朝向PZ, J形支架, 5V长线驱动输出, 分辨率1024PPr, 3米线缆, 无插头。)

(MCH type reading head, outer diameter 122, aperture 83, straight plate facing PZ, J-shaped bracket, 5V long line drive output, resolution 1024ppr, 3M cable, no plug.)

► 选型规格表 Model selection specification table

型号 Model	客户端最大孔径(mm) Maximum aperture of client (mm)	读数头(倍数) Reading head (multiple)	可实现分辨率(p/r) Achievable resolution (P / R)	最高转速 Maximum speed
42	21.5	2/4/8	64/128/256	140000~35000
		10/16	320/512	14000~8800
		20/32/64	640/1024/2048	3500~1100
82	61.5	2/4/8	128/256/512	140000~35000
		10/16	640/1024	14000~8800
		20/32/64	1280/2048/4096	3500~1100
115	94.5	2/4/8	180/360/720	100000~25000
		10/16	900/1440	1000~6250
		20/32/64	1800/2880/5760	2500~780
122	101.5	2/4/8	192/384/768	95000~23000
		10/16	960/1536	9300~6000
		20/32/64	1920/3072/6144	2300~750
160	139.5	2/4/8	250/500/1000	72000~18000
		10/16	1250/2000	7200~4500
		20/32/64	2500/4000/8000	1800~560
163	142.5	2/4/8	256/512/1024	70000~17500
		10/16	1280/2048	7000~4400
		20/32/64	2560/4096/8192	1750~550
203	182.5	2/4/8	320/640/1280	56000~14000
		10/16	1600/2560	5600~13500
		20/32/64	3200/5120/10240	1400~440
285	264.5	2/4/8	448/896/1792	40000, 20000, 16000, 10000
		10/16	2240/3584	4000~2500
		20/32/64	4480/7168/14336	1000~300

磁源体磁圈规格:

Magnetic coil specification of magnetic source body:

按照磁间距大小分为: 0.5mm, 1.0mm, 2.0mm三种。

According to the magnetic spacing, it is divided into three types: 0.5mm, 1.0mm and 2.0mm.

磁环外形尺寸与现有磁间距2.0mm磁环一致。

The outline dimension of the magnetic ring is consistent with the existing magnetic ring with a magnetic spacing of 2.0mm.

举例说明: 外径82的磁源体使用磁间距2.0mm磁圈时, 磁极对数是64,

For example, when a magnetic source with an outer diameter of 82 uses a magnetic coil with a magnetic pitch of 2.0 mm,

如果使用磁间距为1.0mm的磁圈后, 磁极对数是128,

If a magnetic coil with a magnetic pitch of 1.0 mm is used, the number of magnetic pole pairs is 128.

编码器/磁栅尺
Encoder/Magnetic Scale

位移/倾角/计数器
Displacement/Inclination/Counter

接近/加速度/温度
Proximity/Acceleration/Temperature

光电/超声波/区域
Photoelectric/Ultrasonic/Area

压力/称重
Pressure / load cell

联轴器/附件
Couplings/Accessories

► 磁源体型号说明 (尺寸单位mm) Description of type number of magnetic source (dimension unit: mm)

磁圈安装方式 Magnetic ring install mode	基本型号 Basic model	磁源体外径型号 Magnetic source (external) Diameter model	磁源体厚度 Thickness of magnetic source	磁源体最大孔径 Magnetic source Large aperture	安装附件 Installation accessories	键宽*键深/数量 Key width * key depth / quantity	安装孔* Mounting hole* 坐标(安装孔形成的圆直径) Coordinates (diameter of circle formed by mounting hole) /数量/Quantity	拆卸孔/数量 Removal holes / quantity	盖板/护罩 Cover / shield
磁圈包在磁源体内 Magnetic ring Wrapped in Magnetic source in vivo	MCH	42	/16 标准 厚度 standard thickness 16mm	21.5	MCH 42	10*5/2:此组代码表示键槽宽度10mm, 深度5mm, 2个键槽。 10 * 5 / 2: this group of codes indicates: The width of keyway is 10mm, depth 5mm, 2 keyways.	无安装孔此处可省略 No mounting hole (omitted here)	M6/2:此组代码表示拆卸工艺孔配M6螺钉, 2个工艺孔, M6 / 2: this group of codes indicates: Remove the M6 screw from the process hole, 2 process holes,	G:盖板 Cover plate
		82		61.5	MCH 82	82标注K6.5*61.5/4			
		115		94.5	MCH115	115标注K6.5*94.5/4			
		122		101.5	MCH122	122标注6.5*101.5/4			
		160		139.5	MCH160	160标注K6.5*139.5/4			
		163		142.5	MCH163	163标注K6.5*142.5/4			
		203		182.5	MCH203	4*2 203标注K6.5*182.5/4			
		285		264.5	MCH285	6*3 285标注K6.5*264.5/4			
						8*4			
						10*5			
						12*6			
						32*10			

► 电缆线颜色说明 Cable Color Explanation

信号线Signal	5V	0V	A	B	Z	A/	B/	Z/	屏蔽线Shield
方波Square wave	红Red	黑Black	绿Green	白White	黄Yellow	棕Brown	灰Gray	橙Orange	N.C

注1: 电缆颜色若有更改, 恕不另行通知, 请以编码器标签或说明书上的颜色定义为准。Note1: Please refer to color table or product instruction to connect wires. Change of wire color will not be informed respectively.
注2: 电缆线标准线长2米, 如需其他规格在订货中备注说明。Note2: Standard cable length is 2m. Other length can be customized.

► 技术规格Specification

电气参数 Electric parametar			
输出电路 Output circuit	长线驱动 Line Driver (26LS31)		
电源电压Mains voltage	Dc5 ±0.25V		
消耗电流Current consumption	≤ 200mA		
允许输入角加速度	10000rad/s ²		
信号高电平Signal high electrical level	≥ 2.5V		
信号低电平Signal low electrical level	≤ 0.5V		
分辨率PPR	见选型规格表See type selection specification table		
响应频率Response frequency	≤ 300KHz		
机械及环境参数Mechanical and Environmental			
径向负载 Radial load	≤ 30N	抗冲击 Concussion resist	490m/s ²
轴向负荷Axial load	≤ 15N	抗振动Vibration resist	50m/s ²
起动力矩 Storque	3X10 Nm	工作温度Working temperature	- 20°C ~ +85°C
最高转速 Tiptop rotate speed	见选型规格表	储存温度Storing temperature	- 30°C ~ +95°C
转动惯量 Runing inertia	6X10-5kgm	相对湿度Relatively humidity	≤ RH85%无结露No icing
附件The attachment	A, B, C, D, E, F, G, H, I, J, K, L, M	防护等级Protect grade	IP65
读数头Reading head	P, L	外径OD	82, 115, 122, 160, 163, 203, 285

► 输出波形与信号位置精度Output waveform and signal position accuracy

方波
Square wave

正弦波
Sine and cosine wave

波形比Waveform ratio: X1+X2=0.5T±0.1T
X2+X3=0.5T±0.1T
相位差Phase difference: Xn≥0.125T (n=1.2.3.4)
绝对角度误差 Absolute angle error: ≤0.2T
周期误差Periodic error: ≤0.05T
T=360°/N (N为每转输出脉冲数)
(N Is the number of output pulses per revolution)
Z路信号宽度 Z-channel signal width

1、Tm=1T±0.5T
Tm=nT±0.1T (n≥2)
Z路信号与A、B路信号相位关系不做规定
The phase relationship between channel Z signal and channel A and B signal is not specified

2、Tm=0.5T±0.25T
Tm=0.25T±0.125T
Z路信号上升沿与B路信号上升沿对齐
The rising edge of the Z-channel signal is aligned with the rising edge of the B-channel signal

编码器/磁栅尺
Encoder/Magnetic Scale

位移/倾角/计数器
Displacement/Inclination/Counter

接近加速度/温度
Proximity/Acceleration/Temperature

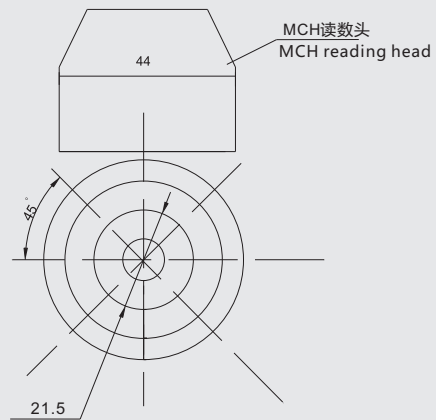
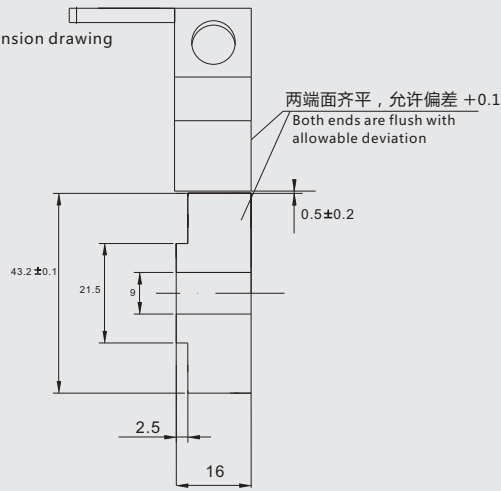
光电/超声波/区域
Photoelectric/Ultrasonic/Area

压力/称重
Pressure / load cell

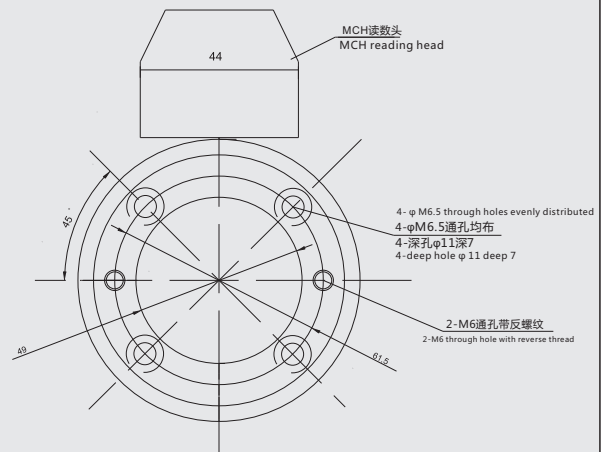
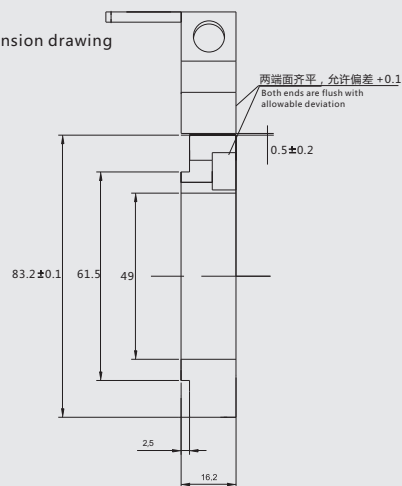
联轴器/附件
Couplings/Accessories

► 安装尺寸图 Mounting Dimensions(单位Unit:mm)

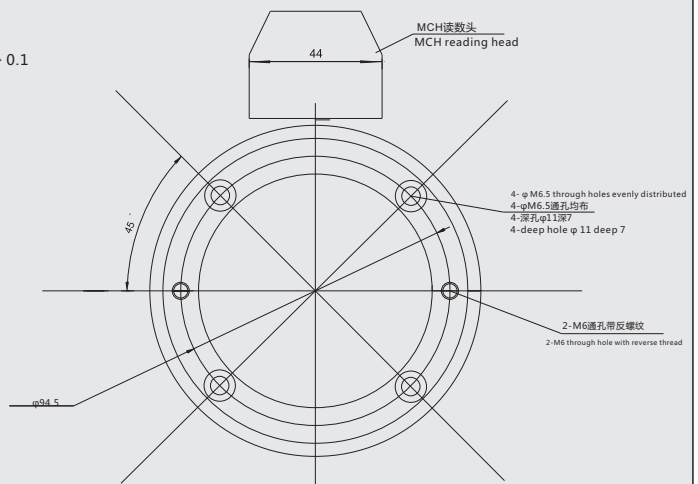
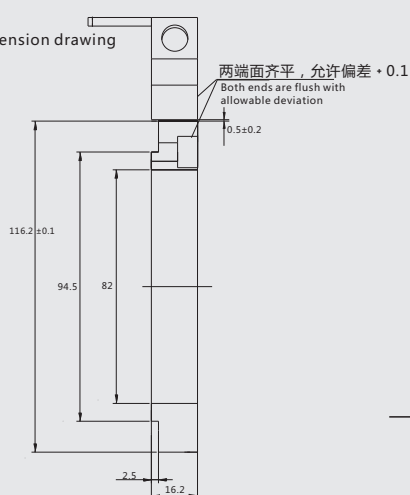
MCH42安装尺寸图
MCH 42 Installation dimension drawing



MCH 82安装尺寸图
MCH 82 Installation dimension drawing

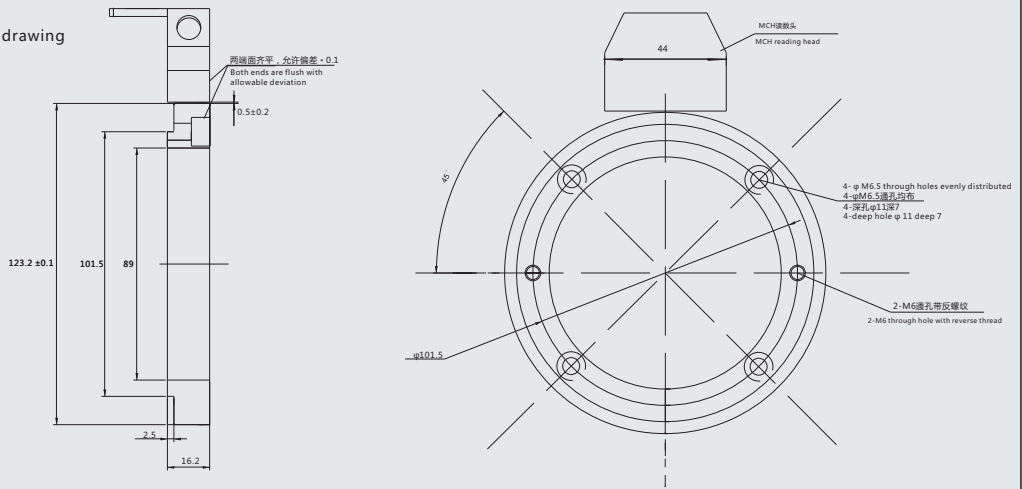


MCH 115安装尺寸图
MCH 115 Installation dimension drawing

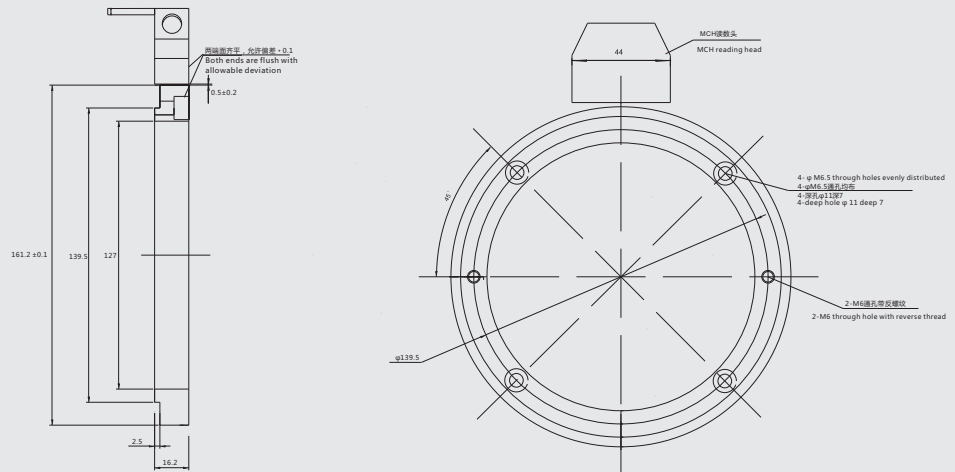


► 安装尺寸图 Mounting Dimensions(单位Unit:mm)

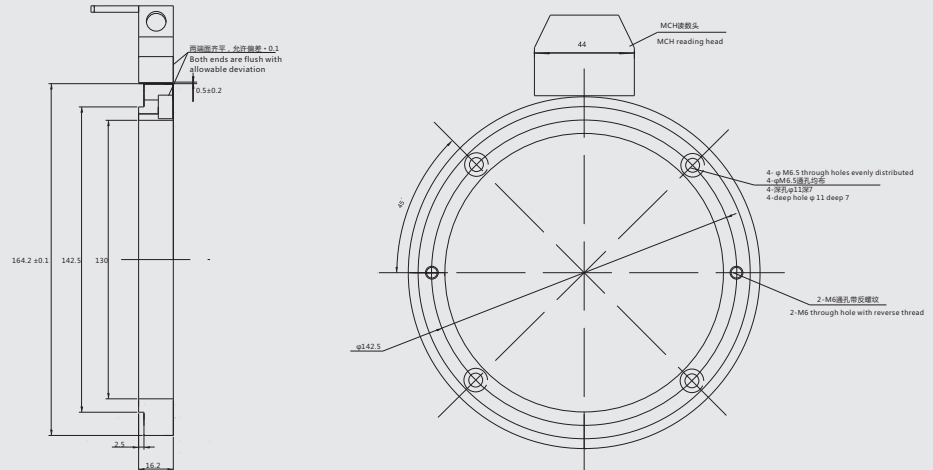
MCH 122安装尺寸图
MCH 122 Installation dimension drawing



MCH 160安装尺寸图
MCH 160 Installation dimension drawing

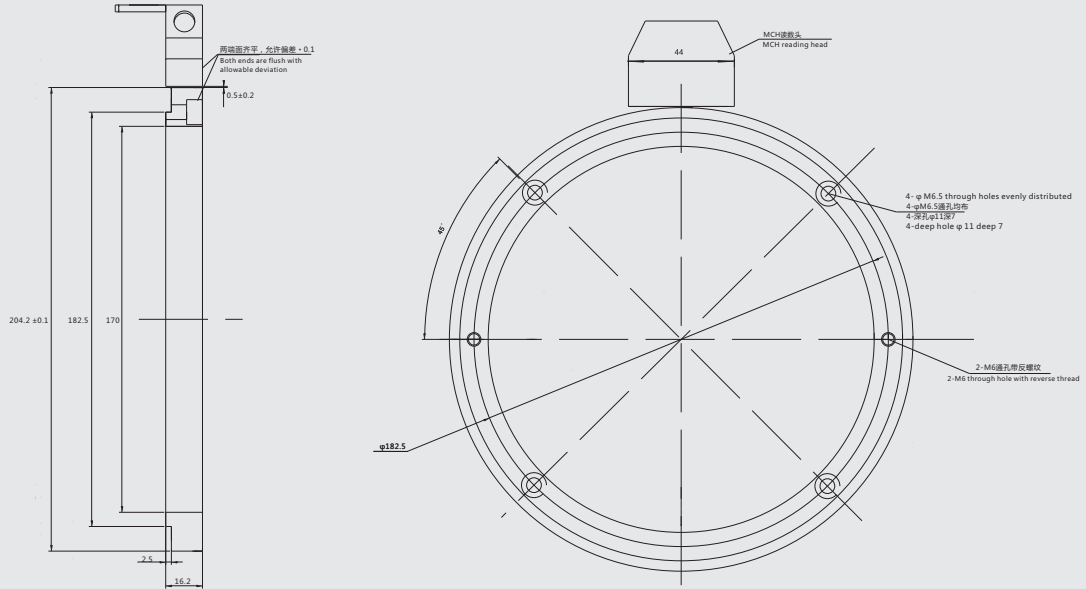


MCH 163安装尺寸图
MCH 163 Installation dimension drawing

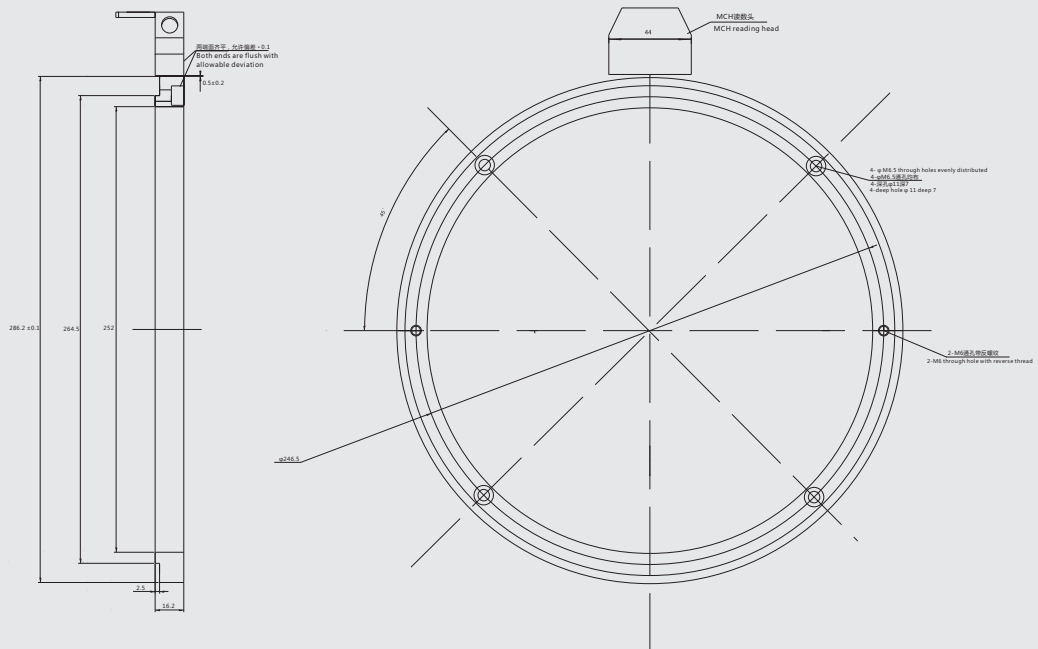


► 安装示意图 Mounting Dimensions(单位Unit:mm)

MCH 203 安装尺寸图
MCH 203 Installation dimension drawing



MCH286 安装尺寸图
MCH 286 Installation dimension drawing



编码器/磁栅尺
Encoder/Magnetic Scale

位移/倾角/计数器
Displacement/Inclination/Counter

接近/加速度/温度
Proximity/Acceleration/Temperature

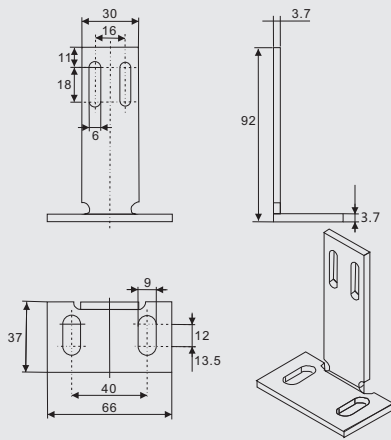
光电/超声波/区域
Photoelectric/Ultrasonic/Area

压力/称重
Pressure / load cell

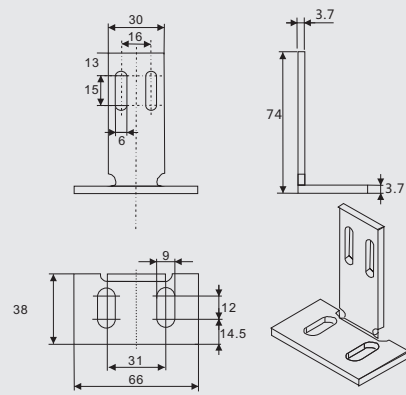
联轴器/附件
Couplings/Accessories

► 安装支架尺寸图 Dimension drawing of mounting bracket (单位Unit:mm)

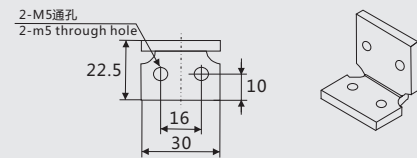
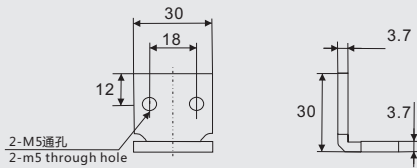
附件A Attachment A



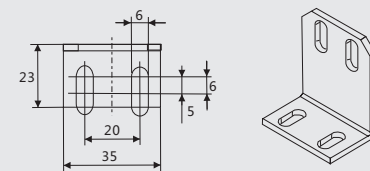
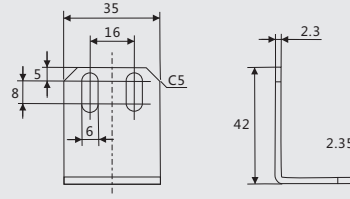
附件B Attachment B



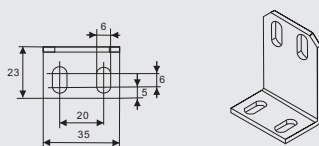
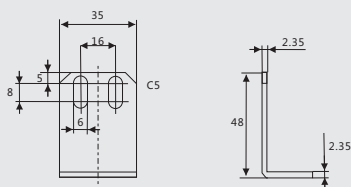
附件C Attachment C



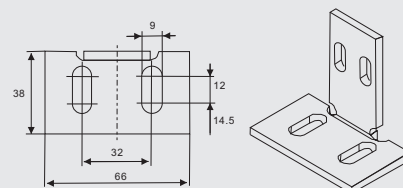
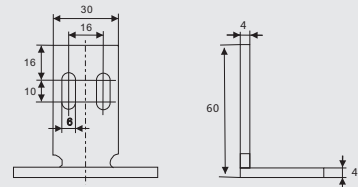
附件D Attachment D



附件E Attachment E



附件F Attachment F



编码器/磁栅尺
Encoder/Magnetic Scale

位移/倾角/计数器
Displacement/Inclination/Counter

接近/加速度/温度
Proximity/Acceleration/Temperature

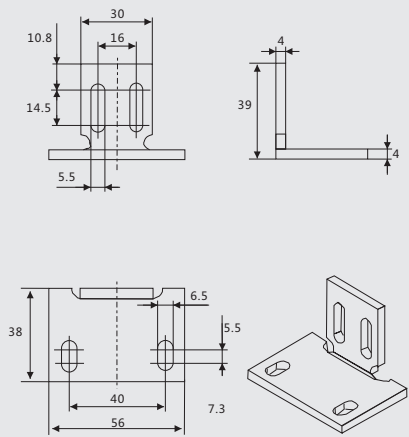
光电/超声波/区域
Photoelectric/Ultrasonic/Area

压力/称重
Pressure / load cell

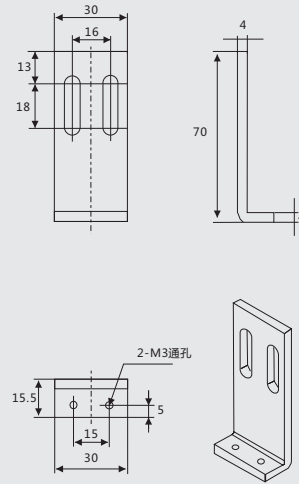
联轴器/附件
Couplings/Accessories

► 安装支架尺寸图 Dimension drawing of mounting bracket (单位 Unit:mm)

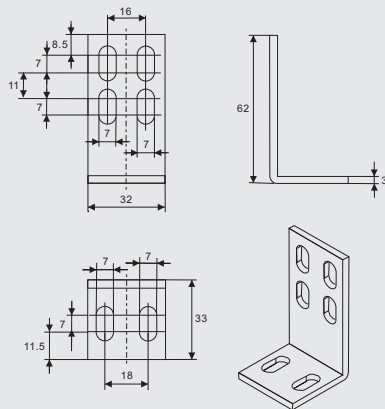
附件G Attachment G



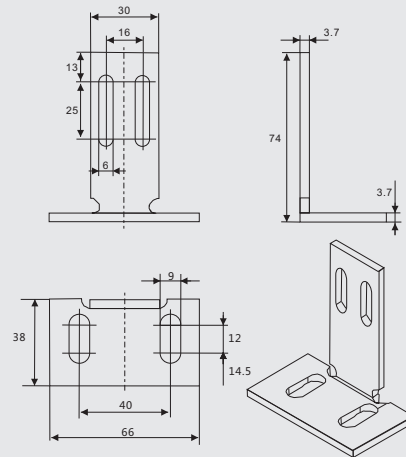
附件H Attachment H



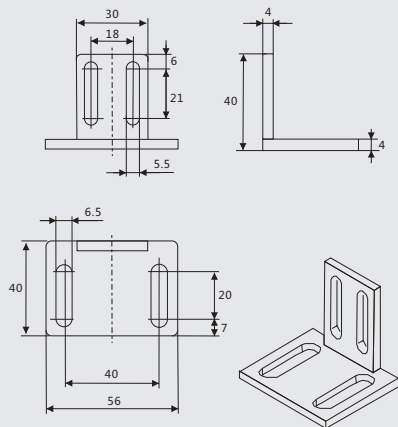
附件J Attachment J



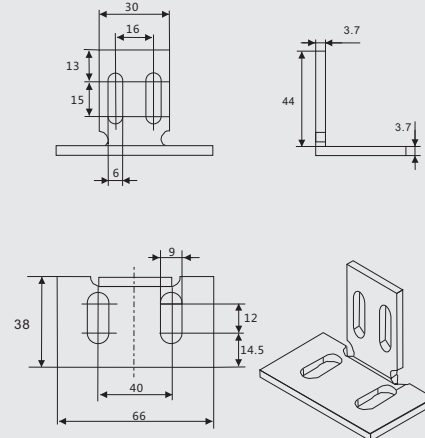
附件K Attachment K



附件L Attachment L



附件M Attachment M



编码器/磁栅尺
Encoder/Magnetic Scale

位移/倾角/计数器
Displacement/Inclination/Counter

接近/加速度/温度
Proximity/Acceleration/Temperature

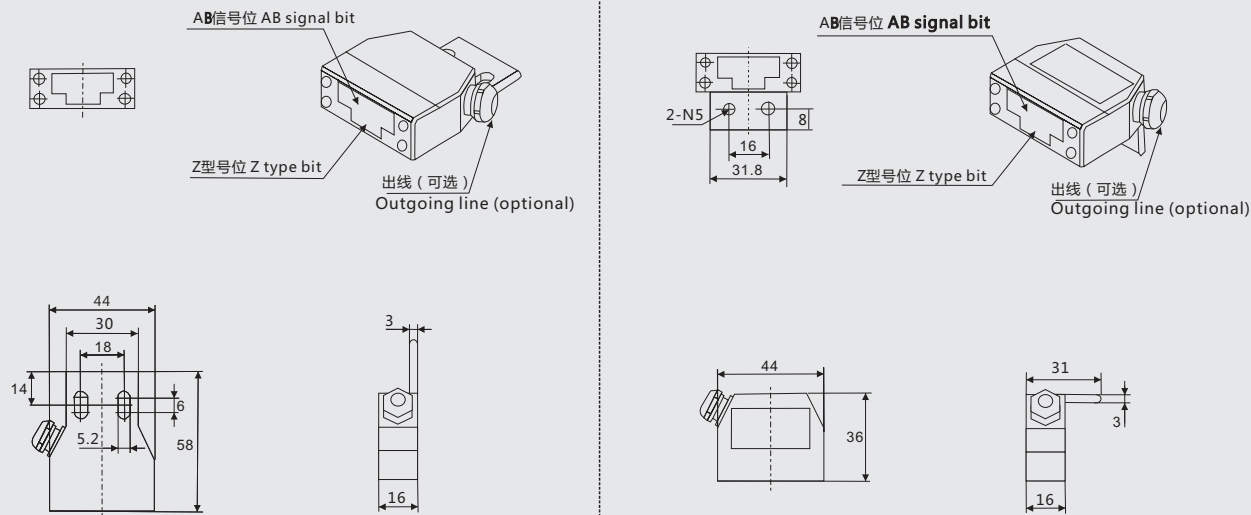
光电/超声波/区域
Photoelectric/Ultrasonic/Area

压力/称重
Pressure / load cell

联轴器/附件
Couplings/Accessories

► 读数头选型明细 Selection details of reading head (单位Unit:mm)

MCH读数头选型明细 MCH reading head selection details



► 读数头朝向明细 Reading head orientation details (单位Unit:mm)

