MUJIE 慕杰®
YOUR AUTOMATION,YOUR MUJIE!

磁栅编码器MNK600系列
Magnetic grating encoder MDPI series

高精度、非接触式高精度测量、运行精密准确、自由设定分辨率、可按要求制定输出频率，间隙公差大、防尘防湿耐脏、无限的测量距离

High precision, non-contact high-precision measurement, precise and accurate operation, freely set resolution, output frequency can be set according to requirements, large gap tolerance, dust, moisture, dirt and unlimited measurement distance

▶ 型号说明Model Explanation

M	CSC	13	-Z1	P2	V5	D1	L1	-R1	-300	□	□
基本型号 Model M:常规增量型 Incremental encoder M□: 特殊型号定义 Speciall definition	CSC:磁栅尺 Magnescale	读头宽度: Read head width: 10:10mm 11:11mm 13:13mm	参考信号 Reference signal Z0:无 Z1:循环信号 Z3:来自参考点	磁极距： Magnetic pole distance: P0.5:0.5mm P1：1mm P2:2mm P5:5mm	电压 Voltage： V5:5V V732:7-32V	接口: Interface: D1:RS422 D2:推挽式 HTL push pull HTL D3:推挽式 TTL push pull TTL	线缆长度 Cable L1:1m L2:2m(标准) L3:3m(标准)	分辨率: resolving power: R0.5:1mm R1:2mm R2.5:5mm (标准的磁极距)	最大输出频率: Maximum output frequency: F1000	插头 可定制 Plug Custo mizable	客户定制 Customized informat

▶ 电缆线线色说明 Cable Color Explanation

信号线Signal	VCC	0V	A	B	Z	A/	B/	Z/	屏蔽线Shield
8芯电缆线8 wires	红Red	蓝Blue	棕Brown	灰Gray	粉Powder	绿Green	黄Yellow	白White	N.C

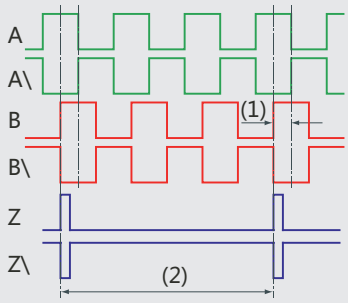
注1：电缆颜色若有更改，恕不另行通知，请以编码器标签或说明书上的颜色定义为准。Note1：Please refer to color table or product instruction to connect wires.Chang of wire color will not be informed respectively.
注2：电缆线标准线长2米，如需其他规格在订货中备注说明。Note2：Standard cable length is 2m.Other length can be customized.

▶ 技术规格Specification

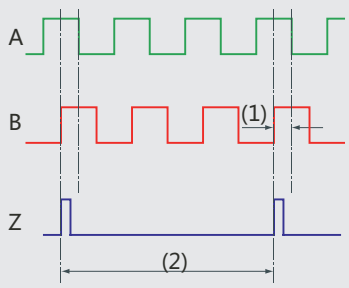
检测范围 Detection Range	
分辨率 resolution	0.0675 µm 至 to 312.5 µm
最高速度 Top speed	高至 Up to 75 m/s
电流能耗 Current energy consumption	65 mA ± 5 % (UB = 5 V)
工作温度 Operating temperature	-20° ... +70° C
储存温度 Storage temperature	-20° ... +80° C
保护等级 Protection level	Ip67
LED	绿色 LED = 设置正常 红色 LED = 设置错误 Green LED = normal setting red LED = wrong setting
可调节参数 Adjustable parameter	分辨率 最大输出频率和计算总数 Resolution, maximum output frequency and total count
磁极距 Magnetic Pole distanc	1 mm 2 mm 5 mm
电压 voltage	5 V 或7 - 32 V
连接类型 Connection type	RS422 推挽式 TTL 推挽式HTL Rs422 push pull TTL push pull HTL
线缆长度 Cable length	标准2 m 可按要求延长至6 m Standard 2 m can be extended to 6 m as required
插头 plug	散状线 根据选型订购插头 Loose thread, according to the type of order plug

▶ 输出信号 output signal

RS422

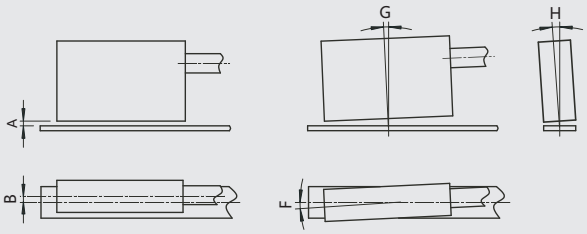


推挽式 Push-pull



(1) 相位移A 和B 90° ±10°电子 Phase shifts a and B 90 ° ± 10 ° electronic
(2) 信号周期取决于参考点磁道模式，或循环参考点 取决于磁极距
The signal period depends on the track modeof the reference point, or the cyclic referencepoint depends on the magnetic pole distance

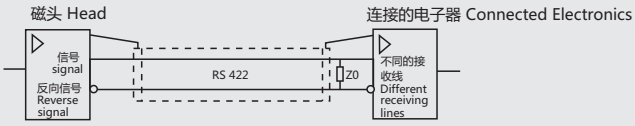
▶ 安装公差 Installation tolerance



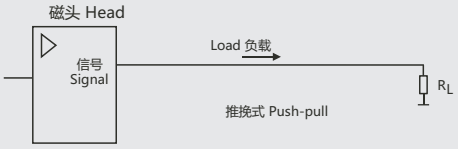
Magnetic pole distance	磁极距 0.5 mm	磁极距 1 mm	磁极距 2 mm	磁极距 5 mm
A [mm]	0.1...0.25	0.1...0.5	0.1...1.0	0.1...2.5
B(3) [mm]	2.5	2.5	2.5	2.5
B(4) [mm]	0.5	0.5	0.5	0.5
G	0.5°	1°	1°	1°
H	3°	3°	3°	3°
F	3°	3°	3°	3°

(3) 配 10 mm 宽的磁尺 (1-磁道)
Equipped with 10mm magnetic ruler (1-track)
(4) 配 10 mm 宽的磁尺 (2-磁道)
Equipped with 10mm magnetic ruler (2-track)

▶ 电路输出 Circut output



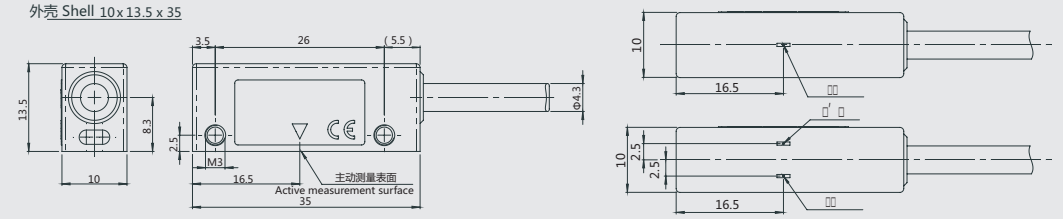
负载电阻 Load resistance Z0=120 Ohm接收端 Receiving end



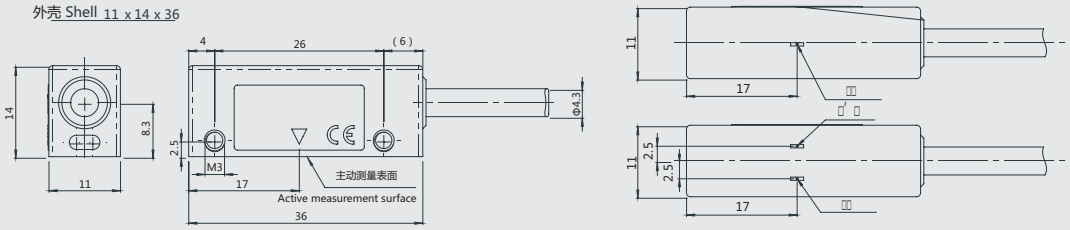
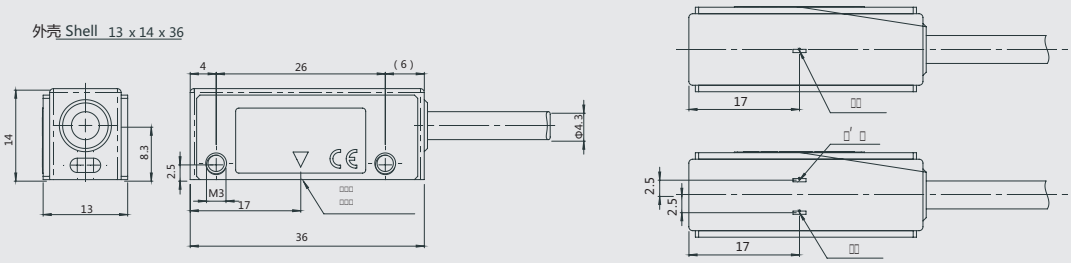
Maximum per channel 每个频道最大250 mA

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

外壳 Shell 10x13.5 x 35



外壳 Shell 11 x 14 x 36



外壳 Shell 13 x 14 x 36