MUJIE 慕杰®
YOUR AUTOMATION,YOUR MUJIE!

磁绝对值式分体MFT系列
Magnetic absolute value type split MFT series

分体设计，安装方便，无轴承，耐高速，无负载担忧，
可编程并保存的零位，使用备用电池进行断电后的最高16位多圈值记录
外径主要有φ35mm,φ46两种，适应电机尾轴外径φ6mm,φ8mm
环境适应性强，耐油污，粉尘污染，无惧水汽冷凝
屏蔽金属外壳，可在复杂电磁环境中可靠运行
反接保护与短路保护，最高转速7200RPM

Split design, easy installation, no bearing, high speed resistance, no load worry, Programmable and saved zero position, use the backup battery to record the highest 16 bit multi turn value after power failure. The outer diameter mainly includes: φ 35mm, φ 46 two types, suitable for the outer diameter of motor tail shaft φ 6mm, φ 8mm Strong environmental adaptability, resistance to oil pollution, dust pollution, no fear of water vapor condensation. Shielded metal shell, reliable operation in complex electromagnetic environment. Reverse connection protection and short circuit protection, maximum speed 7200rpm

▶ 型号说明Model Explanation

MFT	C	35	F	FG	1	-(M16)	R	5-30	A	D	□
基本型号 Model M:常规增量型 Incremental encoder M□: 特殊型号定义 Speciall definition	C:磁绝对值式 Magnetic absolute value formula	主体外径OD 35:φ35mm 46:φ46mm	内径: internal diameter F:非中空 Non hollow	结构形式 ： structural style FG:分体式高款 Split high profile FA:分体式矮款 Split short B:仅编码电路板 Coding circuit board only Y:一体式 Integrated	电机极对数: Motor pole pairs 0:无极对数 Nonpolar logarithm 1:1对极 Opposite pole 2:2对极 等	分辨率: resolving power M16:216圈 S17:17bits 等 etc.	信号方式： Signal mode R=RS485	电压： Voltage: 5:5V 12:12V 5-30:5-30V	安装方式 Installation method A:过盈安装 Interference installation B:螺钉安装 Screw installation C:轴套顶丝 Shaft sleeve jacking screw	出线方式： Entry cable D:端子式 Terminal type H:焊线式 Welding wire type	客户定制 Customized informat

▶ 电缆线线色说明 Cable Color Explanation

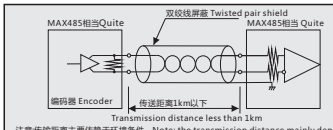
信号线Signal	+5V	GND	RS485+	RS485-	电池+	电池 GND	预留	PE	屏蔽线Shield
8芯电缆线8 wires	红Red	黑Black	蓝Blue	黄Yellow	棕Brown	白White	-	屏蔽网 Shielding net	N.C

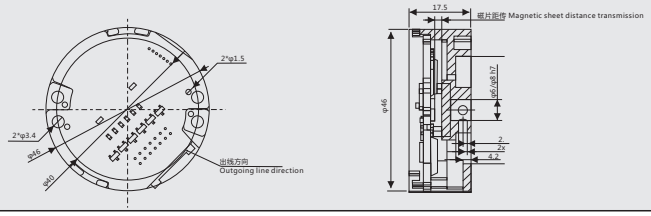
注1：电缆颜色若有更改，恕不另行通知，请以编码器标签或说明书上的颜色定义为准。Note1：Please refer to color table or product instruction to connect wires.Chang of wire color will not be informed respectively.
注2：电缆线标准线长2米，如需其他规格在订货中备注说明。Note2：Standard cable length is 2m.Other length can be customized.

▶ 技术规格Specification

机械及环境参数Mechanical and Environmental	
分辨率 Resolving power	131070 (17bit)可选Optional
圈数 Number of turns	65536 (16bit)
辅助功能 Auxiliary functions	故障预警 Fault warning 1.电磁环境预警 Electromagnetic environment warning 2.电池电压预警 Battery voltage warning
接口 Interface	Rs485
通信频率 Communication frequency	≤16kHz
波特率 Baud rate	2.5Mbps
输入轴允许偏差 Allowable deviation of input shaft	轴向 Axial：±0.3mm 轴向窜动 Axial movement：＜0.2mm 径向 Radial：±0.2mm 径向跳动Radial runout：＜0.05mm 倾角 Dip angle：＜0.2°
主轴转速 Spindle speed	≤7200rpm
轴径 Shaft diameter	直轴 Straight axis φ6/φ8
转动惯量 Moment of inertia	$6.5*10^{-6}$ kg·m²
重量 Weight	≈0.008kg(不含线缆） Excluding cable
转子角加速度 Rotor angular acceleration	电源供电时 Power supply ≤80000rad/s2，电池供电时 Battery powered ≤80000rad/s2
振动 Vibration	10至55Hz之间，保存振幅15mm; 55至2000Hz之间，加速度为98m/s²:X Y Z每轴向2小时，共6小时。Between 10 and 55Hz, save the amplitude of 15mm; Between 55 and 2000Hz, the acceleration is 98m / s²: X, y, Z 2 hours per axial direction, 6 hours in total.
机械冲击 Mechanical impact	冲击加速度 Impact acceleration 980m/s²,11ms:每方向冲击3次，共18次 Impact 3 times in each direction, 18 times in total
工作温度 Operating temperature	-40℃至 to +85℃
保湿温度 moisture retention temperature	-40℃至 to +85℃
相对湿度 Relative humidity	≤90%（40℃/21d,基于 be based on EN60068-2-78）：无结露 No condensation
防护等级 Protection level:	电机后壳防护 Motor rear housing protection
电磁兼容性 Electromagnetic compatibility	满足 Satisfy IEC61800-3标准要求 Standard requirements
输出形式 Output form:	线驱动 Line drive 26C31
防静电能力 Antistatic ability	4KB接触式 Contact type

▶ 电路输出方式(示例) Example for output circuit



注意传输距离主要依赖于环境条件。Note: the transmission distance mainly depends on the environmental conditions.

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