

适用于多种用途，产品性能与品质良好，
金属外壳，便于安装保护，灵敏度可以
调节

圆柱形漫反射光电传感器MP12系列

Cylindrical diffuse reflection photoelectric sensor MP12 series

It is suitable for a variety of purposes,
with good product performance and
quality. The metal shell is easy to
install and protect and the sensitivity
can be adjusted



▶ 型号说明 Model Explanation

M	P	12	-05	D	N	K	-Z	-□	-□
基本型号Model M:型号代码 Model code M: 特殊型号定义 Special definition	传感器类别: P:圆柱形光电 Cylindrical photoelectric sensor	直径OD: 12:12mm	检测距离 Sensing distance: 05:5cm 10:10cm	检测方式 Sensing method: D:漫反射 Diffuse reflective R:回波反射Retro- Reflective with MSR function T:对射Throughbeam	输出方式Output configuration: N:NPN输出 DC 3-wire,NPN P:PNP输出 DC 3-wire,PNP A:交流两线输出 AC 2-wire	输出状态 Operation mode: K:常开 NO B:常闭 NC KB:常开+常闭 NO + NC	产品等级 Product grade: Z:Z级	线缆长度 Cable length (标配2米 Standard Cable length is 2m) 5 : 5m	客户定制 Customized informat

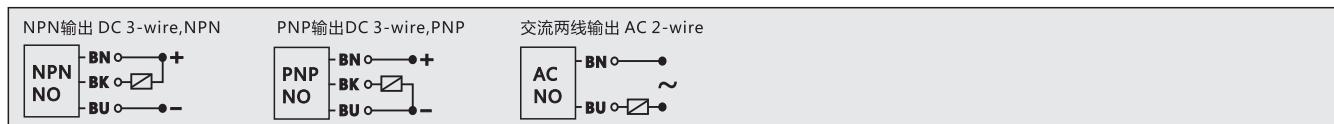
▶ 产品种类 Product Category

型号 Model	形状 Appearance	检测距离 Sensing distance	输出规格 Output configuration	动作状态 Operation mode	连接方式 Connection mode
MP12-05DNK-Z	=□-	5cm	N:NPN输出 DC 3-wire,NPN P:PNP输出 DC 3-wire,PNP A:交流两线输出 AC 2-wire	K:常开 NO B:常闭 NC KB:常开+常闭 NO + NC	导线引出 Cable line
MP12-10DNK-Z		10cm			

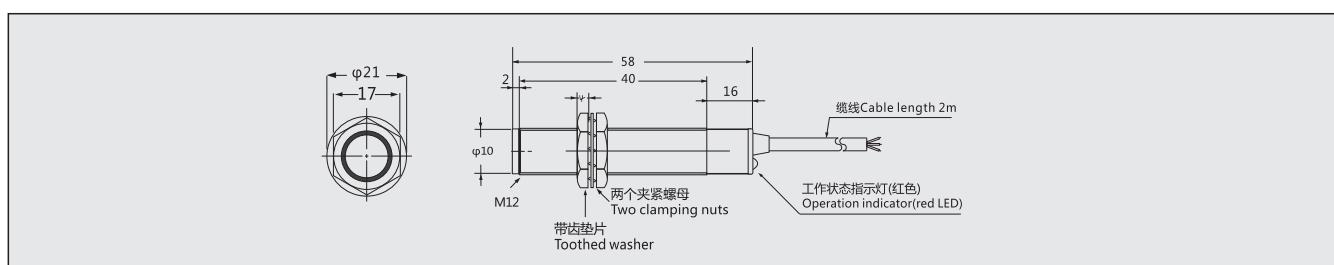
▶ 技术规格 Specification

型号Type	MP12-05/10 DN/DP/DA
电源电压 Voltage	直流NPN/PNP 10-30VDC 交流AC:220VAC
检测距离 Sensing distance	5cm/10cm
光源Light source	红外发光二极管Infrared LED
应差距离 Differential travel	检测距离的10%以下 10%max.of sensing distance
消耗电流 Leakage current	10mA max.
响应时间 Response time	2ms max.
输出/电源指示 Output/Power indication	-/红色LED Red LED
回路保护 Protection circuits	电源逆向保护,输出短路保护 Power supply reverse polarity, Output short-circuit protection
环境照度 Ambient illumination	太阳光Sunlight:10000lx,白炽灯Incandescent lamp:3000lx
环境温度 Ambient temperature	-25~+55°C(不结冰 with no icing)
环境湿度 Ambient humidity	工作时/保存时 Operating35~85°RH/Storage:35~95°RH(不结露 with no condensation)
绝缘电阻 Insulation resistance	20MΩ max. (DC500V)充电部总体与外壳间Between current -carrying parts and case
耐电压 Dielectric strength	AC1000V max. 50~60Hz 1min 充电部总体与外壳间Between current -carrying parts and case
重复精度 Repeat precision	<5%
负载电流 Load current	<200mA
压降 Drop	<1.5V
振动(耐久)Vibration resistance	10~55Hz复振幅1.5mmX , Y , Z各方向2h double amplitude for 2 hours each in X , Y and Z directions
冲击(耐久)Shock resistance	500m/s ² X , Y , Z各方向10次 500m/s ² 10 times each X , Y and Z directions
防护等级 Degree of protection	IEC IP67
材质 Material(外壳Case /透镜Lens)	镀镍黄铜 Brass-nicke plated /PMMA

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



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



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
Coupling/Accessories