

## DPF系列 DPF Series

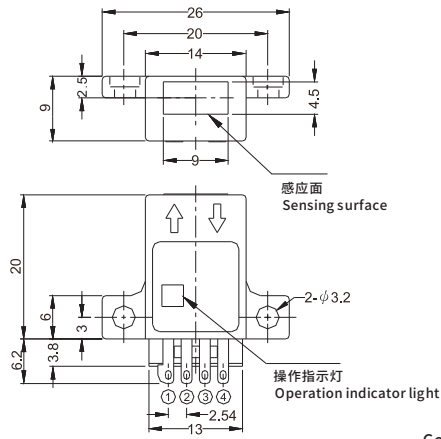


型号 Model	
NPN	DPF-D412N-E
PNP	DPF-D412P-E
基本特点 Basic Features	
工作原理 Working principle	光电传感器 Photoelectric Sensors
外壳样式 Enclosure style	扁平方形 Flatsquare
光学工作原理 How optics work	漫反射 Reflection
检测距离 Detection distance	40mm
光斑尺寸 Spot size	不适用(红外光) N/A (Infrared)
检测物 Detection	/
光源 Light source	红外光 850nm Infrared light 850nm
指示灯 Light	运行状态: 绿色 LED Operational status: Green LED
灵敏性调节 Sensitivity regulation	无 None
电气数据 Electrical Data	
开关模式 Switch mode	L.on(入光动作)/D.on(遮光动作) 可切换 Light.on (light action) / Dark.on (light shading action) can be switched
输出模式 Output mode	NPN或PNP集电极开路 NPN or PNP open collector
响应时间 Response time	≤1ms
开关频率 Switching frequency	2 kHz
重复精度 Repeatability	5%
迟滞(回差/应差) Hysteresis/ Return Response	≤20%
工作电压 Operating voltage	12~24V DC
消耗电流 Current consumption	≤25mA
残余电压 Residual voltage	<2.5V (负载电流为100mA)
负载电流 Load current	≤100mA (24VDC)
绝缘电阻 Insulation resistance	电源端子与外壳之间≥20MΩ (500VDC) Between power terminal and housing ≥20MΩ (500VDC)
耐压 Resistance	1000VAC (50/60Hz), 1 分钟电源端子和外壳之间 1000VAC (50/60Hz), 1 minute between power terminal and housing
保护电路 Protection circuits	反极性保护/短路保护 Reverse polarity protection/short circuit protection
环境条件 Environmental Conditions	
工作环境温度 Operating ambient temperature	-20~55°C (无冻结) -20~55°C (no freezing)
储存温度 Storage temperature	-25~80°C (无冻结) -25~80°C (no freezing)
工作环境湿度 Humidity of the working environment	45~85%RH (无凝露) 45~85%RH (no condensation)
储存湿度 Store humidity	35~90%RH (无凝露) 35~90%RH (no condensation)
环境照度 Ambient illumination	白炽灯 ≤900 Lux; 太阳光 ≤10000 Lux Incandescent lamp ≤ 3000 Lux; Sunlight ≤ 10000 Lux
抗振性 Anti-vibration	10~55Hz, 1.5mm 振幅, X、Y、Z 三个方向各2h 10~55Hz, 1.5mm amplitude, XYZ 3 directions for 2 hours each
防护等级 Ingress protection	IP50
机械数据 Mechanical Data	
最大拧紧扭矩 Maximum tightening torque	≤0.5Nm
连接方式 Connection	4 针连接器 4-pin connector
尺寸(宽x高x深) Size	26.0x20.0x9.0mm
材料 Material	PC
重量 Weight	0.003kg
配件 Fittings	安装螺丝 Mountingscrews

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## 尺寸规格 Dimensions

## DPF-D412N(P)-E



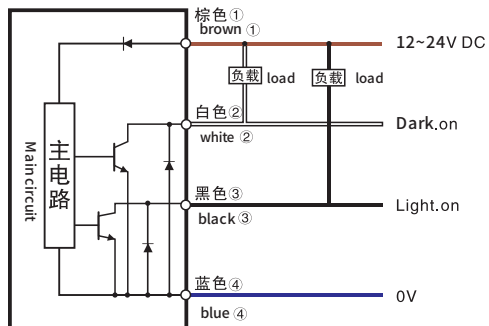
- ①: ● Brown
- ②: ● OUT1 White
- ③: ● OUT2 Black
- ④: ● Blue

连接线缆: ME-1007  
 Connecting cable: ME-1007

## 接线示意图 Wiring Diagram

## DPF-D412N(P)-E

## NPN输出 NPN output



## PNP输出 PNP output

