MUJIE 慕杰®

YOUR AUTOMATION，YOUR MUJIE！

体积小，节省空间，安装方便，防护等级IP69；
不受背景颜色的影响，精准检测物体；
金属外壳，可用于水或其他液体的高湿度环境中工作。
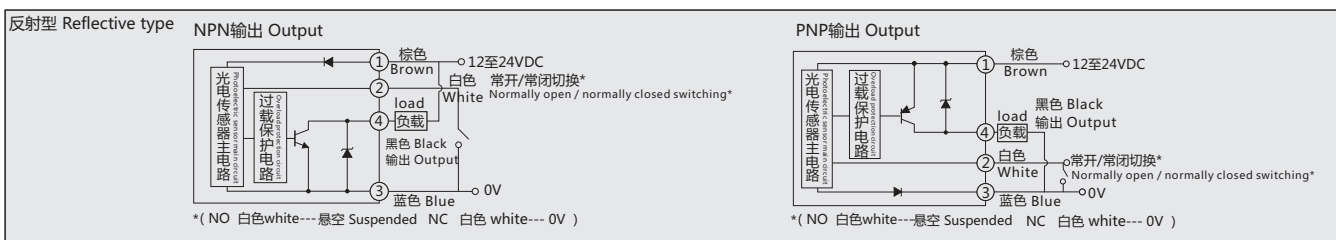BGS功能的完美应用，即使在异色工件流通的生产线上进行换产时，
也无需调节检测距离；

Small size, space saving, easy installation, protection grade ip69;
Accurate detection of objects without the influence of background color;
With metal shell, it can be used in high humidity environment of water or
other liquids.Perfect application of BGS function, even when changing
production on the production line with different color workpieces circulating,
perfect application of BGS function, even when changing production on the
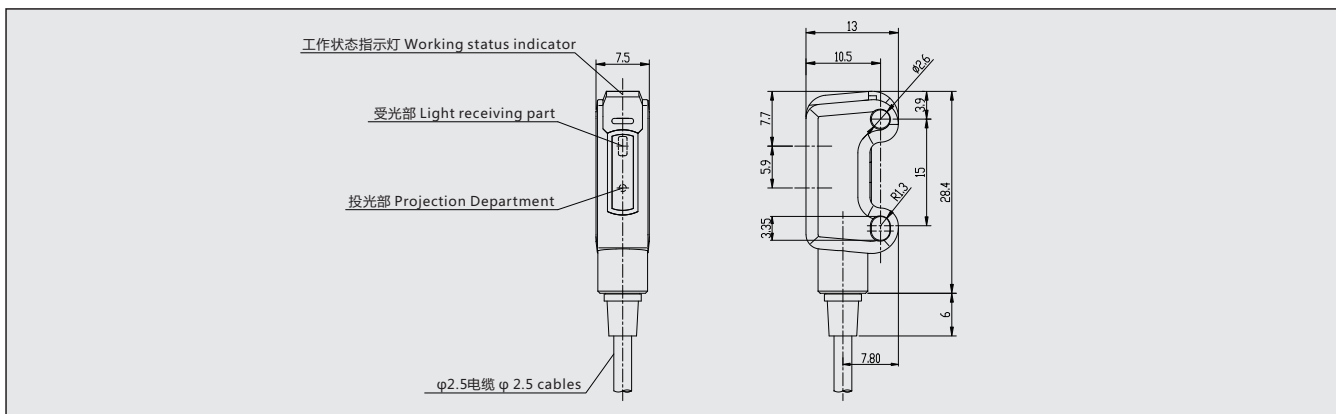production line with different color workpieces circulating,

小型光电传感器MTZ系列
Small photoelectric sensor MTZ series

▶ 型号及技术规格 Model and technical specification

类型 Type		漫反射 Diffuse reflection
型号 Model	NPN输出 Output	MTZ-3NKB-Z
	PNP输出 Output	MTZ-3PKB-Z
外观 Appearance		
检测距离 Detection distance		白纸 White paper100*100　　检测距离 Detection distance :2-50mm　　哑黑纸 Matte black paper:2-35mm
空载电流 No load current		≤15m A
光斑尺寸 Spot size		φ4mm
应差 Answer		检测距离的20%以下 Less than 20% of the detection distance
光源（波长）Light source (wavelength)		Red 红色LED（650nm）
电源电压 Supply voltage		DC 12~24V
响应频率 Response frequency		700Hz
环境温度 Ambient temperature		-20~+60℃
环境湿度 Ambient humidity		30~95%
储存温度/湿度 Storage temperature / humidity		-20~+60℃/30%~95%
振动（耐久）Vibration (durability)		10~55Hz，1.5mm 双振幅，在X、Y、Z方向达到1h Double amplitude, 1H in X, y and Z directions
冲击（耐久）Impact (durable)		500m /s²双振幅，在X、Y、Z各方向3次 Double amplitude, 3 times in X, y and Z directions
防护等级 Protection level:		IP69
保护电路 Protection circuit		正负极反接防护、负载短路保护 Positive and negative reverse connection protection, load short circuit protection
输出指示灯 Output indicator		Red 红色LED
电源指示灯 Power indicator		Green 绿色LED
常开/常闭模式 Normally open / normally closed mode		常开（入光动作）/常闭（遮光动作）模式可选 Normally open (light entry action) / normally closed (light blocking action) mode is optional
连接方式 Connection mode		导线引出型（标准导线长2m）Lead out type (standard lead length 2m)
外壳材质 Shell material		金属外壳 Metal shell

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

反射型 Reflective type

NPN输出 Output

光电传感器主电路 Photoelectric sensor main circuit
过载保护电路 Overload protection circuit

① 棕色 Brown — 12至24VDC
② 白色 White 常开/常闭切换* Normally open / normally closed switching*
④ load 负载
黑色 Black 输出 Output
⑤ 蓝色 Blue — 0V

*（NO 白色white--- 悬空 Suspended　NC 白色 white--- 0V）

PNP输出 Output

光电传感器主电路 Photoelectric sensor main circuit
过载保护电路 Overload protection circuit

① 棕色 Brown — 12至24VDC
④ load 负载
黑色 Black 输出 Output
② 白色 White 常开/常闭切换* Normally open / normally closed switching*
③ 蓝色 Blue — 0V

*（NO 白色white--- 悬空 Suspended　NC 白色 white--- 0V）

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

工作状态指示灯 Working status indicator
7.5
受光部 Light receiving part
投光部 Projection Department
φ2.5电缆 φ 2.5 cables

13
10.5
φ2.5
7.7
5.9
3.9
3.35
15
28.4
φ3.2
6
7.80