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微槽型 光电传感器

Micro-slot photoelectric sensor

响应频率高 High response frequency

防水、防尘、防油 Waterproof, dustproof and oil proof

体积小，可安装在狭小空间 Small size, can be installed in a small space

— 专注工控自动化 行业 17 年

Our Mission

Let the world's factories feel happy electric

Corporate values

Customer first, integrity and win-win, focus on professionalism, pragmatic innovation

Corporate vision

Become a great industrial and trade integrated company, be a company that allows employees to feel the bloom of their own value, and be a leader in industrial control automation within five years.

企业使命

让世界的工厂感受到幸福电气

企业价值观

客户至上、诚信共赢、专注专业、务实创新

企业愿景

成为一家伟大的工贸一体企业，让员工能感受到自身价值绽放的公司，五年内做到工控自动化的领跑者。


Brief Introduction

企业简介

上海本煜电气科技有限公司其前身是一家集设计开发、生产、销售于一体的专业的传感器的制造商。我公司拥有独立的研发部门，专业的生产团队，并吸取众家之长，所设计的产品在品质、外观均可与任何厂家媲美。

我们产品涵盖电感接近传感器、电容式接近传感器、霍尔传感器、光电传感器、固态继电器、固态调压器及开关电源。我们一直致力于通过不断研发和质量管理，以高品质和多种类的产品及优质的服务来满足用户的需要。

公司以完善的组织架构和技术实力，保证了生产效率，以高度的灵活性为客户提供优质的服务，大部分产品通过欧共体 CE 认证，并始终贯彻执行“今天的质量，明天的市场”的质量方针，使企业得到了飞速的发展。

 在中国已被业界公认为传感器行业的领导品牌，并日益成为全球工控领域的知名品牌。

Shanghai Nature Beyond Electric Technology Co.,LTD is a sensor manufacturer, specialized in research and development, production and marketing. We have independent department and technical office for research and development. We also manage to accumulate other companies' strong points so that the products could compare with others about both the quality and the outward appearances.

Our products include inductive proximity sensors, capacitive proximity sensors, Hall sensors, photoelectric sensors, solid state relays, solid state voltage regulators and switching power supplies. We are committed to meeting the needs of our customers with high quality and diverse products and quality services through continuous research and development and quality management.

With perfect organizational structure and technical strength, the company guarantees production efficiency and provides customers with high-quality service with high flexibility. Most of the products have passed the CE certification of the European Community and have always implemented the "Today's Quality, Tomorrow's Market". The quality policy has enabled the company to develop rapidly.

QWIFM, has been the leading brand in sensor market and gained its global reputation among industrial areas.



小型 - 电缆线

	入光指示灯 ON	EG15NK	EG15NT	EG15NY	EG15NF	EG15NR
NPN	入光指示灯 OFF	EG25NK	EG25NT	EG25NY	EG25NF	EG25NR
PNP	入光指示灯 ON	EG15PK	EG15PT	EG15PY	EG15PF	EG15PR
	入光指示灯 OFF	EG25PK	EG25PT	EG25PY	EG25PF	EG25PR
外型		K	T	Y	F	R
外观						
符合 CE 标志指令	EMC 指令、RoHS 指令					
检测距离	6mm 固定					
最小检测物体	0.8mmx1.2mm 不透明体					
应差 (迟滞)	0.05mm 以下					
重复精度	0.01 mm 以下					
电源电压	5V DC~24V DC+ 10% 脉动 P- P10% 以下					
消耗电流	15mA 以下					
输出	NPN 开路集电极晶体管 外加电压: 30V DC 以下 (输出和 0V 间) PNP 开路集电极晶体管 外加电压: 30V DC 以下 (输出和 + V 间)			NPN/PNP 最大流入电流: 50mA 压降: <2V		
输出动作	入光时 ON / 遮光时 ON 2 种输出					
短路保护	NPN 具有、PNP 无					
反应时间	入光时: 20 μs 以下、遮光时: 80 μs 以下 (最大反应频率为 3KHz)					
工作状态指示灯	红色 LED (入光时亮灯)					
保护结构	IP66					
使用环境温度	-25℃ ~ + 55℃ (注意不可结露、结冰) 存储时: - 30℃ ~ + 80℃					
使用环境湿度	5% RH~85%RH、存储时: 5%RH~95%RH					
使用环境照度	荧光灯: 受光面照度 1,000lx 以下					
耐电压	AC1000V 1 分钟所有电源连接端子与外壳之间					
绝缘电阻	所有电源连接端子与外壳之间, 20MQ 以上, 基于 DC250V 的高阻表					
耐振动	频率 10Hz ~ 2000Hz 双振幅 1.5mm (最大加速度 196m/s ²) XYZ 各方向 2 小时					
耐冲击	加速度 15000m/s ² (约 1500G) X、Y、Z 各方向 3 次					
投光元件	红外线 LED (投光波峰波长: 940nm、非调制式)					
材质	外壳: PC+ABS、显示罩: ABS					
电缆	0.09mm ² 4 芯附带橡胶绝缘电缆 PVC 1m					
延长电缆	0.3mm ² 以上的电缆, 全长可延长到 100m					
质量	本体重量: 约 10g、包装重量: 约 15g					

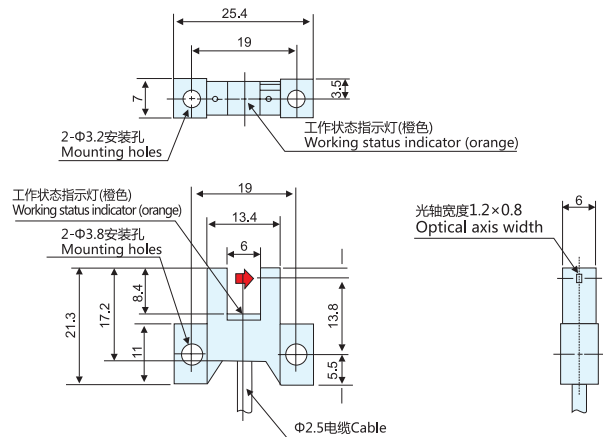


Small-Cable

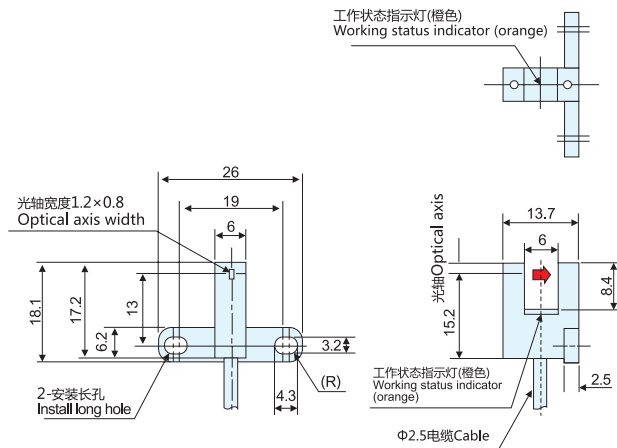
		EG15NK	EG15NT	EG15NY	EG15NF	EG15NR
NPN	Incident indicator ON	EG15NK	EG15NT	EG15NY	EG15NF	EG15NR
	Incident indicator Off	EG25NK	EG25NT	EG25NY	EG25NF	EG25NR
PNP	Incident indicator ON	EG15PK	EG15PT	EG15PY	EG15PF	EG15PR
	Incident indicator Off	EG25PK	EG25PT	EG25PY	EG25PF	EG25PR
Appearance		K	T	Y	F	R
Conforms to CE marking directives	EMC directive, RoHS directive					
Detection distance	6mm fixed					
Smallest detectable object	0.8mmx 1.2mm Opaque body					
Hysteresis	0.05mm or less					
Repeat accuracy	0.01 mm or less					
Voltage	5V DC~24V DC+ 10% pulsation P- P10% or less					
Current consumption	15mA or less					
Output	NPN open collector transistor Applied voltage: 30V DC or less (between output and 0V) PNP open collector transistor Applied voltage: 30V DC or less (between output and +V)			NPN/PNP Maximum sink current: 50mA Voltage drop: <2V		
Output action	Two outputs: ON when light is received /ON when light is blocked					
Short circuit protection	NPN with, PNP without					
Reaction time	When light is received: 20 μs or less, when shading: 80 μs or less (the maximum response frequency is 3KHz)					
Working status indicator	Red LED (lights up when light is received)					
Protection structure	IP66					
Ambient temperature	-25℃ ~ + 55℃ (Be careful not to condense or freeze) When storing:-30℃ ~ + 80℃					
Environment humidity	5%RH~85%RH, storage: 5%RH~95%RH					
Ambient lighting	Fluorescent light: Illumination of the light-receiving surface below 1, 000Lx					
Withstand voltage	AC1000V 1 minute, all power connection terminals are the same as the shell					
Insulation resistance	Between all power connection terminals and the shell, above 20MQ, high resistance meter based on DC250V					
Vibration resistant	Frequency 10Hz ~ 2000Hz double amplitude 1.5mm (maximum acceleration 196m/s ²) XYZ directions for 2 hours each					
Shock proof	Acceleration 15000m / s ² (about 1500G) 3 times each in X, Y, and Z directions					
Projection element	Infrared LED (projection peak wavelength: 940nm, non-modulated)					
Material	Shell: PC+ABS, display cover: ABS					
Cable	0.09mm ² 4-core with rubber insulated cable PVC 1m					
Extension cable	Cables above 0.3mm ² can be extended to 100m in total length					
Weight	N.W.:10g; GW:15g					

尺寸规格 Dimensions

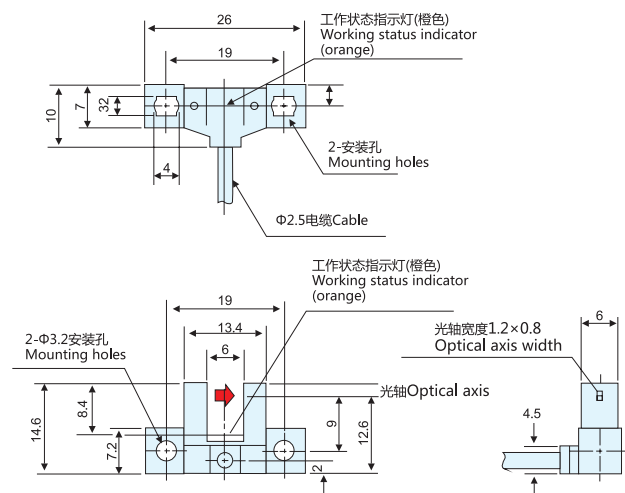
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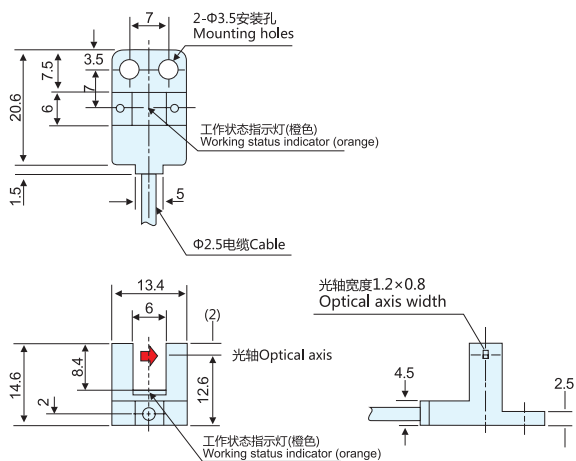
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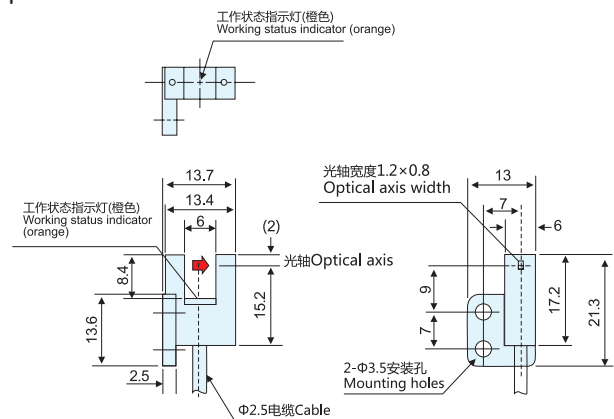
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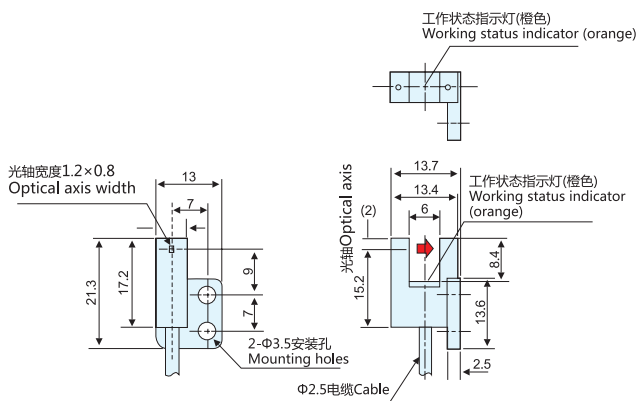
Y



F



R



电路图

型号	动作状态	时间图	连接端子	输出回路
EG15NK EG15NT EG15NL EG15NY EG15NF EG15NR	EG15PK EG15PT EG15PL EG15PY EG15PF EG15PR	入光时 ON 遮光时 ON	~ ⊕ 间短路时 ~ ⊕ 间开放时	

型号	动作状态	时间图	连接端子	输出回路
EG25NK EG25NT EG25NL EG25NY EG25NF EG25NR	EG25PK EG25PT EG25PL EG25PY EG25PF EG25PR	入光时 ON 遮光时 ON	~ ⊕ 间短路时 ~ ⊕ 间开放时	

Circuit diagram

Type	Action state	Time chart	Connection terminal	Output circuit
EG15NK EG15NT EG15NL EG15NY EG15NF EG15NR	When light is received ON When shading ON	Light received Shading Incident light display (Red) Light Lights off Output Transistor ON OFF Load 1 (Relay) Action Reset	~ ⊕ Short circuit ~ ⊕ Opening	

Type	Action state	Time chart	Connection terminal	Output circuit
EG25NK EG25NT EG25NL EG25NY EG25NF EG25NR	When light is received ON When shading ON	Light received Shading Incident light display (Red) Light Lights off Output Transistor ON OFF Load 2 (Relay) Action Reset	~ ⊕ Short circuit ~ ⊕ Opening	

注：若为遮光是 ON，请勿将 L 端子与 0V 短路 Note: If it is ON for shading, do not short-circuit the L terminal with 0V

微槽型光电传感器

Micro-slot photoelectric sensor



小型 - 电缆线

	入光指示灯 ON	EG35NF	EG35NK	EG35NL	EG35NR	EG35NU
NPN	入光指示灯 OFF	EG45NF	EG45NK	EG45NL	EG45NR	EG45NU
PNP	入光指示灯 ON	EG35PF	EG35PK	EG35PL	EG35PR	EG35PU
	入光指示灯 OFF	EG45PF	EG45PK	EG45PL	EG45PR	EG45PU
外型		F 型	K 型	L 型	R 型	U 型
外观						
符合 CE 标志指令	EMC 指令、RoHS 指令					
检测距离	6mm 固定					
最小检测物体	0.8mmx1.2mm 不透明体					
应差 (迟滞)	0.05mm 以下					
重复精度	0.01 mm 以下					
电源电压	5V DC~24V DC+ 10% 脉动 P- P10% 以下					
消耗电流	15mA 以下					
输出	NPN 开路集电极晶体管 外加电压: 30V DC 以下 (输出和 0V 间) PNP 开路集电极晶体管 外加电压: 30V DC 以下 (输出和 + V 间)			NPN/PNP 最大流入电流: 50mA 压降: <2V		
输出动作	入光时 ON / 遮光时 ON 2 种输出					
短路保护	NPN 具有、PNP 无					
反应时间	入光时: 20 μs 以下、遮光时: 80 μs 以下 (最大反应频率为 3KHz)					
工作状态指示灯	红色 LED (入光时亮灯)					
保护结构	IP66					
使用环境温度	-25℃ ~ + 55℃ (注意不可结露、结冰) 存储时: - 30℃ ~ + 80℃					
使用环境湿度	5% RH~85%RH、存储时: 5%RH~95%RH					
使用环境照度	荧光灯光: 受光面照度 1,000lx 以下					
耐电压	AC1000V 1 分钟 所有电源连接端子与外壳之间					
绝缘电阻	所有电源连接端子与外壳之间, 20MQ 以上, 基于 DC250V 的高阻表					
耐振动	频率 10Hz ~ 2000Hz 双振幅 1.5mm (最大加速度 196m/s ²) XYZ 各方向 2 小时					
耐冲击	加速度 15000m/s ² (约 1500G) X、Y、Z 各方向 3 次					
投光元件	红外线 LED (投光波峰波长: 940nm、非调制式)					
材质	外壳: PC+ABS、显示罩: ABS					
电缆	0.09mm ² 4 芯附带橡胶绝缘电缆 PVC 1m					
延长电缆	0.3mm ² 以上的电缆, 全长可延长到 100m					
质量	本体重量: 约 10g、包装重量: 约 15g					



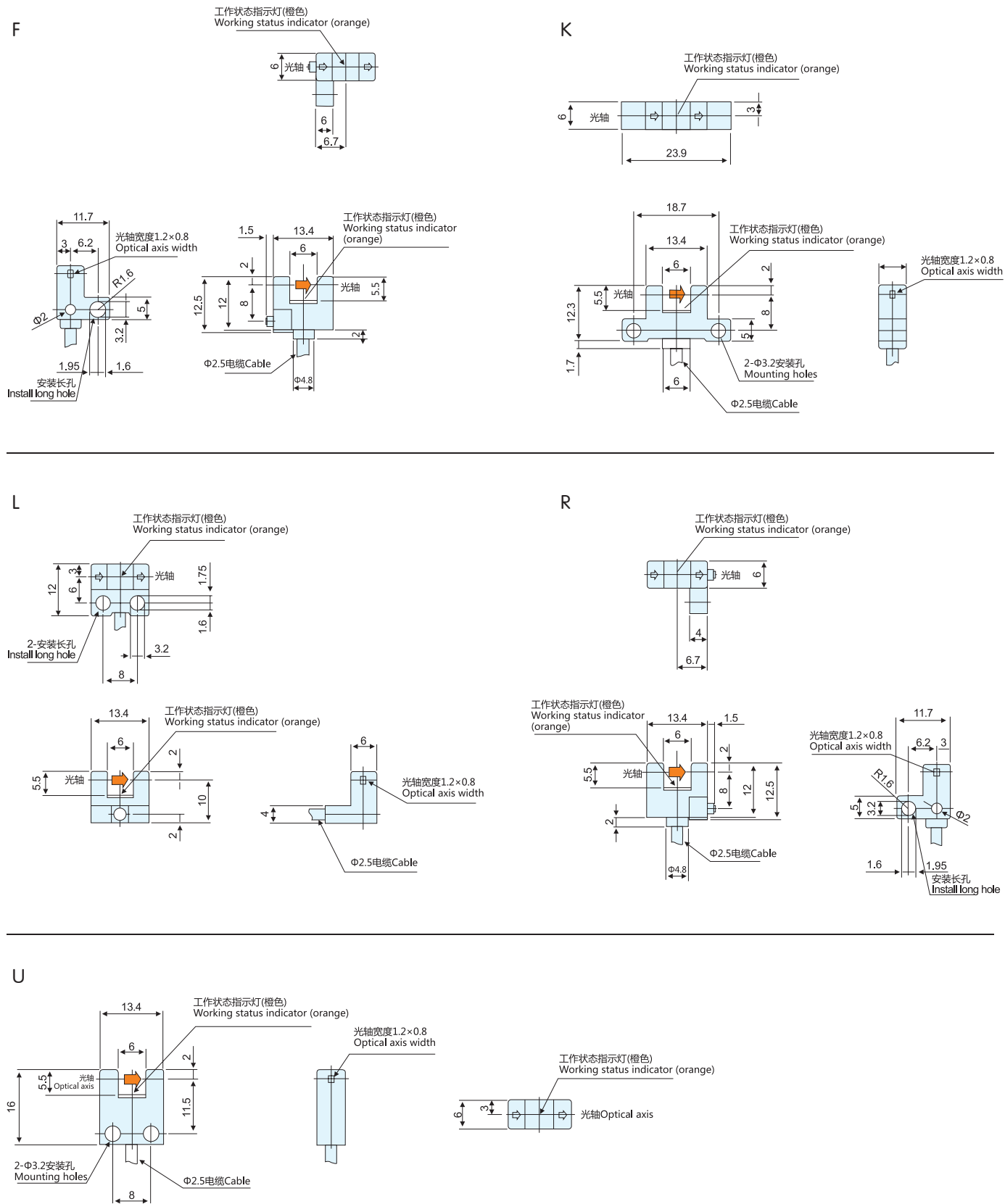
Small-Cable

		EG35NF	EG35NK	EG35NL	EG35NR	EG35NU
NPN	Incident indicator ON	EG35NF	EG35NK	EG35NL	EG35NR	EG35NU
	Incident indicator Off	EG45NF	EG45NK	EG45NL	EG45NR	EG45NU
PNP	Incident indicator ON	EG35PF	EG35PK	EG35PL	EG35PR	EG35PU
	Incident indicator Off	EG45PF	EG45PK	EG45PL	EG45PR	EG45PU
Appearance	F type	K type	L type	R type	U type	
Conforms to CE marking directives	EMC directive, RoHS directive					
Detection distance	6mm fixed					
Smallest detectable object	0.8mm x 1.2mm opaque body					
Hysteresis	0.05mm or less					
Repeat accuracy	0.01 mm or less					
Power supply Voltage	5V DC~24V DC + 10% pulsation P- P10% or less					
Current consumption	15mA or less					
Output	NPN open collector transistor Applied voltage: 30V DC or less (between output and 0V) PNP open collector transistor Applied voltage: 30V DC or less (between output and +V)				NPN/PNP Maximum sink current: 50mA Voltage drop: <2V	
Output action	Two outputs: ON when light is received /ON when light is blocked					
Short circuit protection	NPN with, PNP without					
Reaction time	When light is received: 20 μs or less, when shading: 80 μs or less (the maximum response frequency is 3KHz)					
Working status indicator	Red LED (lights up when light is received)					
Protection structure	IP66					
Ambient temperature	-25℃ ~ + 55℃ (Be careful not to condense or freeze) When storing:-30℃ ~ + 80℃					
Environment humidity	5%RH~85%RH, storage: 5%RH~95%RH					
Ambient lighting	Fluorescent light: Illumination of the light-receiving surface less than 1,000Lx					
Withstand voltage	AC1000V for 1 minute, all power connection terminals are the same as the shell					
Insulation resistance	Between all power connection terminals and the shell, above 20MQ, high resistance meter based on DC250V					
Vibration resistant	Frequency 10Hz ~ 2000Hz double amplitude 1.5mm (maximum acceleration 196m/s ²) XYZ directions for 2 hours each					
Shock proof	Acceleration 15000m / s ² (about 1500G) 3 times each in X, Y, and Z directions					
Projection element	Infrared LED (projection peak wavelength: 940nm, non-modulated)					
Material	Shell: PC+ABS, display cover: ABS					
Cable	0.09mm ² 4-core with rubber insulated cable PVC 1m					
Extension cable	Cables above 0.3mm ² can be extended to 100m in total length					
Weight	N.W. :10g; G.W. :15g					

微槽型光电开关

Micro-slot photoelectric switch

尺寸规格 Dimensions



电路图

型号		动作状态	时间图	连接端子	输出回路
EG35NF EG35NK EG35NL EG35NR EG35NU	EG35PF EG35PK EG35PL EG35PR EG35PU	入光时 ON		Ⓛ ~ ⊕ 间短路时	
		遮光时 ON		Ⓛ ~ ⊕ 间开放时	

型号		动作状态	时间图	连接端子	输出回路
FG45NF EG45NK EG45NL EG45NR EG45NU	EG45PF EG45PK EG45PL EG45PR EG45PU	入光时 ON		Ⓛ ~ ⊕ 间短路时	
		遮光时 ON		Ⓛ ~ ⊕ 间开放时	

Circuit diagram

Type		Action state	Time chart	Connection terminal	Output circuit
EG35NF EG35NK EG35NL EG35NR EG35NU	EG35PF EG35PK EG35PL EG35PR EG35PU	When light is received ON		Ⓛ ~ ⊕ Short circuit	
		When shading ON		Ⓛ ~ ⊕ Opening	

Type		Action state	Time chart	Connection terminal	Output circuit
FG45NF EG45NK EG45NL EG45NR EG45NU	EG45PF EG45PK EG45PL EG45PR EG45PU	When light is received ON		Ⓛ ~ ⊕ Short circuit	
		When shading ON		Ⓛ ~ ⊕ Opening	

注：若为遮光是 ON，请勿将 L 端子与 0V 短路 Note: If it is ON for shading, do not short-circuit the L terminal with 0V