

圆柱形接近开关 (标准型)

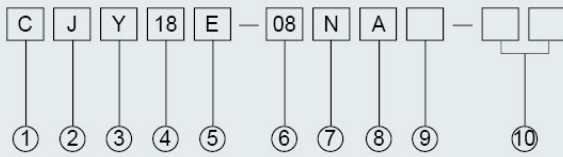
Proximity Sensor Cylindrical Type (Standard type)



特点 Features

- 内置浪涌保护, 电源反接保护电路
- 寿命长, 高可靠性, 操作简单, 经济实惠
- 红色 LED 状态指示灯, 易于识别运行状态
- IP67 防护等级 (IEC 规格)
- 可以代替微动开关或限位开关广泛使用
- Inside surge protection, reverse polarity protection
- Long use-life cycle and high reliability, easy install, economic price
- Red LED status indication, easy to confirm work situation
- Protection structure IP67(IEC standard)
- Replaceable for micro switches and limit switches

型号说明 Model Description



项目 Item	代号 Code	说明 Description
① 公司代号 Company code	C	公司代号 Company code
② 产品名称 Product name	J	电感式接近开关 Inductive proximity switch
③ 外壳形状 Shape of shell	Y	圆柱形 Cylinder-shaped
④ 尺寸代码 Dimension code	18	18=M18
⑤ 产品类型 Product type	E	标准型 Standard type
⑥ 检测距离 Detection distance	08	08=8mm
⑦ 输出方式 Output mode	K	AC 二线 AC 2wires
	L	DC 二线 DC 2wires
	P	PNP 三线 PNP 3wires
	N	NPN 三线 NPN 3wires
⑧ 输出状态 Output state	A	常开 NO
	B	常闭 NC
	C	常开 + 常闭 NO+NC
⑨ 连接形式 Connection	无 Without	2M 引线式 Without: 2M lead wire
	T	接插式 Plug-in
	R	配线引出接插式 Wiring leads Plug-in
⑩		特殊要求 Special requirements
		用二位数字表示 Represented by two digits

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CNTD® 昌得电器

规格 Specifications

直流3线式 DC 3-wire type

型号名 Model	CJY08E-01NA CJY08E-01NB CJY08E-01PA CJY08E-01PB	CJY08E-02NA CJY08E-02NB CJY08E-02PA CJY08E-02PB	CJY12E-02NA CJY12E-02NB CJY12E-02NC CJY12E-02PA CJY12E-02PB CJY12E-02PC	CJY12E-04NA CJY12E-04NB CJY12E-04NC CJY12E-04PA CJY12E-04PB CJY12E-04PC	CJY18E-05NA CJY18E-05NB CJY18E-05NC CJY18E-05PA CJY18E-05PB CJY18E-05PC	CJY18E-08NA CJY18E-08NB CJY18E-08NC CJY18E-08PA CJY18E-08PB CJY18E-08PC	CJY30E-10NA CJY30E-10NB CJY30E-10NC CJY30E-10PA CJY30E-10PB CJY30E-10PC	CJY30E-15NA CJY30E-15NB CJY30E-15NC CJY30E-15PA CJY30E-15PB CJY30E-15PC	
检测距离 Sensing distance	1mm	2mm	2mm	4mm	5mm	8mm	10mm	15mm	
应差距离 Hysteresis	检测距离的10%以下 Max. 10% of sensing distance								
标准检测物 Standard sensing target	8 × 8 × 1mm (铁 Iron)		12 × 12 × 1mm (铁 Iron)		18 × 18 × 1mm (铁 Iron)	25 × 25 × 1mm (铁 Iron)	30 × 30 × 1mm (铁 Iron)	45 × 45 × 1mm (铁 Iron)	
设定距离 Setting distance	0~0.8mm	0~1.4mm	0~1.4mm	0~2.8mm	0~3.5mm	0~5.6mm	0~7mm	0~10.5mm	
电源(使用电压范围)Power supply (Operating voltage)	12-24VDC (10-30VDC)								
漏电流 Leakage current	10mA以下 Max.10mA								
应答频率(※1) Response frequency(※1)	1000Hz	1000Hz	1000Hz	500Hz	350Hz	350Hz	200Hz		
残留电压 Residual voltage	1.0V以下 Max. 1.0V								
温度的影响 Affection by Temp.	在-25~+70℃温度范围内+20℃时的检测距离的±10%以内 Max. ±10% for sensing distance at ambient temperature 20℃								
控制输出 Control output	200mA以下 Max. 200mA								
绝缘阻抗 Insulation resistance	50MΩ以上(500VDC为基准) Min. 50MΩ(at 500VDC megger)								
耐电压 Dielectric strength	1500VAC 50/60Hz1分钟 1500VAC 50/60Hz for 1minute								
耐振动 Vibration	10~55Hz(周期1分钟) 振幅1mm X, Y, Z各方向2小时 1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours								
耐冲击 Shock	500m/s ² (50G) X, Y, Z 各方向3次 500m/s ² (approx. 50G) X, Y, Z directions for 3 times								
显示灯 Indicator	动作指示灯(红色LED) Operation indicator(red LED)								
使用周围温度 Ambient temperature	-25~+70℃(未结冰状态 No icing)								
储存温度 Storage temperature	-30~+80℃(未结冰状态 No icing)								
使用周围湿度 Ambient humidity	35~95%RH (未结露状态 No condensation)								
保护电路 Protection circuit	内置浪涌保护, 电源反接保护, 过流保护电路 Surge protection circuit, Reverse polarity protection circuit, Overcurrent protection circuit								
材质 Material	外壳/螺母: 镀镍黄铜, 垫片: 镍镀铁, 检测面: PBT, 一般线缆(灰色): 聚氯乙烯(PVC), 耐油性线缆(灰色): 聚乙烯(耐油强化型PVC) Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT, Standard cable(Grey): Polyvinyl chloride(PVC), Oil resistant cable(Gray): Oil resistant Polyvinyl chloride(PVC)								
连接线缆 Cable	φ 2.8, 3P, 1.5m (AWG24, 芯线直径:0.1mm, 芯线数:20, 绝缘皮外径: φ 1mm) (AWG24, Core diameter: 0.1mm, Number of cores: 20, Insulator diameter: φ 1)		φ 3.8, 3P, 4P 1.5m			φ 4.8, 3P, 4P 1.5m			(AWG22, 芯线直径:1mm, 芯线数:25, 绝缘皮外径: φ 1.25mm) (AWG24, Core diameter: 1mm, Number of cores: 25, Insulator diameter: φ 1.25)
认证 Approval	CE								
防护等级 Protection	IP67 (IEC规格 Standard)								

(※1) 开关动作的应答频率为平均值。测定条件使用标准检测物, 检测物的间距为标准检测物的2倍, 设定距离为检测距离的1/2。

(※1): The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

圆柱形接近开关 (标准型)

Proximity Sensor Cylindrical Type (Standard type)

规格 Specifications

交流2线式 AC 2-wire type

型号名 Model	CJY12E-02LA	CJY12E-04LA	CJY18E-05LA	CJY18E-08LA	CJY30E-10LA	CJY30E-15LA
检测距离 Sensing distance	2mm	4mm	5mm	8mm	10mm	15mm
应差距离 Hysteresis	检测距离的10%以下 Max. 10% of sensing distance					
标准检测物 Standard sensing target	12 × 12 × 1mm (铁 Iron)		18 × 18 × 1mm (铁 Iron)	25 × 25 × 1mm (铁 Iron)	30 × 30 × 1mm (铁 Iron)	45 × 45 × 1mm (铁 Iron)
设定距离 Setting distance	0~1.4mm	0~2.8mm	0~3.5mm	0~5.6mm	0~7mm	0~10.5mm
电源(使用电压范围)Power supply (Operating voltage)	12-24VDC (10-30VDC)					
漏电流 Leakage current	0.6mA以下 Max.0.6mA					
应答频率(※1) Response frequency(※1)	1000Hz	500Hz	500Hz	350Hz	350Hz	200Hz
残留电压 Residual voltage	3.5V以下 Max. 3.5V					
温度的影响 Affection by Temp.	在-25~+70℃温度范围内+20℃时的检测距离的±10%以内 Max. ± 10% for sensing distance at ambient temperature 20℃					
控制输出 Control output	200mA以下 Max. 200mA					
绝缘阻抗 Insulation resistance	50MΩ以上(500VDC为基准) Min. 50MΩ(at 500VDC megger)					
耐电压 Dielectric strength	1500VAC 50/60Hz1分钟 1500VAC 50/60Hz for 1minute					
耐振动 Vibration	10~55Hz(周期1分钟) 振幅1mm X, Y, Z各方向2小时 1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
耐冲击 Shock	500m/s ² (50G) X, Y, Z 各方向3次 500m/s ² (approx. 50G) X, Y, Z directions for 3 times					
显示灯 Indicator	动作指示灯(红色LED) Operation indicator(red LED)					
使用周围温度 Ambient temperature	-25~+70℃(未结冰状态 No icing)					
储存温度 Storage temperature	-30~+80℃(未结冰状态 No icing)					
使用周围湿度 Ambient humidity	35~95%RH (未结露状态 No condensation)					
保护电路 Protection circuit	内置浪涌保护 Surge protection circuit					
材质 Material	外壳/螺母: 镀镍黄铜, 垫片: 镍镀铁, 检测面: PBT, 一般线缆(黑色): 聚氯乙烯(PVC) Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT, Standard cable(Dark Grey): Polyvinyl chloride(PVC)					
连接线缆 Cable	φ 3.8, 2P, 2m		φ 4.8, 2P, 2m			
	(AWG22, 芯线直径:0.1mm, 芯线数:35, 绝缘皮外径: φ 1.25mm) (AWG24, Core diameter: 0.1mm, Number of cores: 35, Insulator diameter: φ 1.25)					
认证 Approval	CE					
防护等级 Protection	IP67 (IEC规格 Standard)					

(※1) 开关动作的应答频率为平均值。测定条件使用标准检测物, 检测物的间距为标准检测物的2倍, 设定距离为检测距离的1/2。

(※1): The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

圆柱形接近开关 (标准型)

Proximity Sensor Cylindrical Type (Standard type)

CNTD® 昌得电器

规格 Specifications

交流2线式 AC 2-wire type

型号名 Model	CJY12E-02KA CJY12E-02KB	CJY12E-04KA CJY12E-04KB	CJY18E-05KA CJY18E-05KB	CJY18E-08KA CJY18E-08KB	CJY30E-10KA CJY30E-10KB	CJY30E-15KA CJY30E-15KB
检测距离 Sensing distance	2mm	4mm	5mm	8mm	10mm	15mm
应差距离 Hysteresis	检测距离的10%以下 Max. 10% of sensing distance					
标准检测物 Standard sensing target	12 × 12 × 1mm (铁 Iron)		18 × 18 × 1mm (铁 Iron)	25 × 25 × 1mm (铁 Iron)	30 × 30 × 1mm (铁 Iron)	45 × 45 × 1mm (铁 Iron)
设定距离 Setting distance	0~1.4mm	0~2.8mm	0~3.5mm	0~5.6mm	0~7mm	0~10.5mm
电源(使用电压范围)Power supply (Operating voltage)	90-250VAC					
漏电流 Leakage current	10mA以下 Max. 10mA					
应答频率 (*1) Response frequency (*1)	20Hz					
残留电压 Residual voltage	10V以下 Max. 10V					
温度的影响 Affection by Temp.	在-25~+70℃温度范围内+20℃时的检测距离的±10%以内 Max. ± 10% for sensing distance at ambient temperature 20℃					
控制输出 Control output	200mA以下 Max. 200mA					
绝缘阻抗 Insulation resistance	50MΩ以上(500VDC为基准) Min. 50MΩ (at 500VDC megger)					
耐电压 Dielectric strength	1500VAC 50/60Hz1分钟 1500VAC 50/60Hz for 1minute					
耐振动 Vibration	10~55Hz(周期1分钟) 振幅1mm X, Y, Z各方向2小时 1mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours					
耐冲击 Shock	500m/s ² (50G) X, Y, Z 各方向3次 500m/s ² (approx. 50G) X, Y, Z directions for 3 times					
显示灯 Indicator	动作指示灯(红色LED) Operation indicator(red LED)					
使用周围温度 Ambient temperature	-25~+70℃(未结冰状态 No icing)					
储存温度 Storage temperature	-30~+80℃(未结冰状态 No icing)					
使用周围湿度 Ambient humidity	35~95%RH (未结露状态 No condensation)					
保护电路 Protection circuit	浪涌保护 Surge protection current					
材质 Material	外壳/螺母: 镀镍黄铜, 垫片: 镍镀铁, 检测面: PBT, 一般线缆(灰色): 聚氯乙烯(PVC) Case/Nut: Nickel plated Brass, Washer: Nickel plated Iron, Sensing surface: PBT, Standard cable(Grey): Polyvinyl chloride(PVC)					
连接线缆 Cable	φ 3.8, 2P, 1.5m		φ 4.8, 2P, 1.5m (AWG22, 芯线直径:0.1mm, 芯线数:25, 绝缘皮外径: φ 1.25mm) (AWG24, Core diameter: 0.1mm, Number of cores: 25, Insulator diameter: φ 1.25)			
认证 Approval	CE					
防护等级 Protection	IP67 (IEC规格 Standard)					

(*1) 开关动作的应答频率为平均值。测定条件使用标准检测物, 检测物的间距为标准检测物的2倍, 设定距离为检测距离的1/2。

(*1): The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

圆柱形接近开关 (标准型)

Proximity Sensor Cylindrical Type (Standard type)

外形尺寸 Dimensions

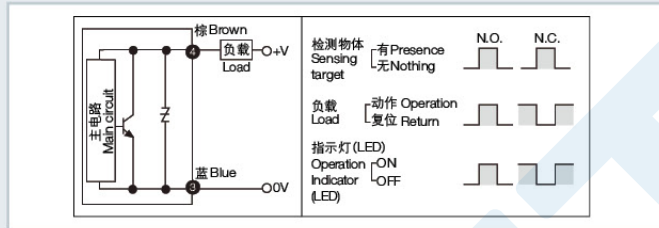
CJY08E-01			
CJY08E-02			
CJY12E-02			
CJY12E-04			
CJY18E-05			
CJY18E-08			
CJY30E-10			
CJY30E-15			

圆柱形接近开关 (标准型)

Proximity Sensor Cylindrical Type (Standard type)

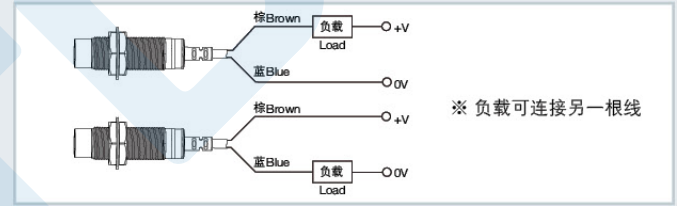
输出电路 Control Output Diagram

直流2线式 DC 2-wire type

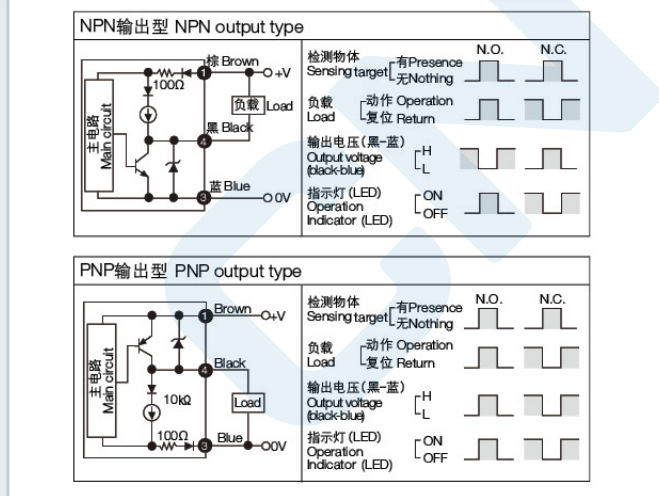


连接 Connections

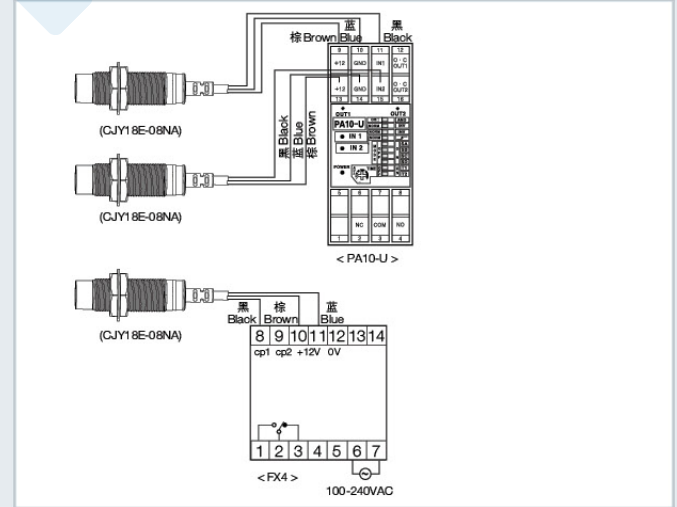
直流2线式 DC 2-wire type



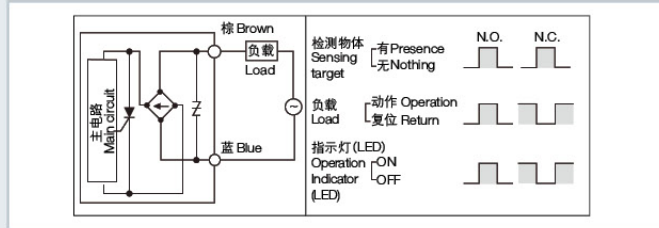
直流3线式 DC 3-wire type



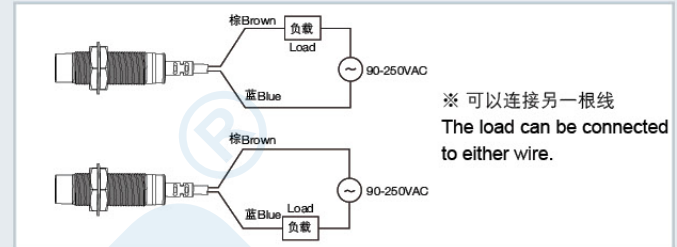
直流3线式 DC 3-wire type



交流2线式 AC 2-wire type



交流2线式 AC 2-wire type



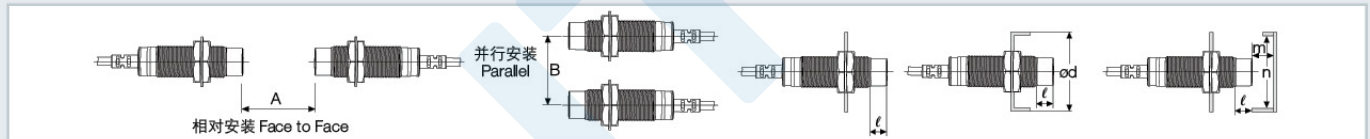
正确使用 Proper Usage

相互干扰 Mutual-interference

当把两个以上的接近开关一起安装使用时，可能会发生相互干扰引起的误动作，在安装时请务必满足下表中规定的尺寸要求进行安装。
When several proximity sensors are mounted close to one another a malfunction of the sensor may be caused due to mutual interference. Therefore, be sure to provide a minimum distance between the two sensors as below chart indicates.

周围金属的影响 Influence by surrounding metals

当接近传感器周围有金属存在时，为防止复位不正常等误差发生，安装时请满足下表中规定的尺寸要求进行安装。
When sensors are mounted on metallic panel, you must prevent the sensors from being affected by any metallic object except target. Therefore, be sure to provide a minimum distance as below chart indicates.



型号名 Model	CJY08E-01	CJY08E-02	CJY12E-02	CJY12E-04	CJY18E-05	CJY18E-08	CJY30E-10	CJY30E-15
项目 Item								
A	9	12	12	24	30	48	60	90
B	16	24	24	36	36	54	60	90
l	0	8	0	11	0	14	0	15
φ d	8	24	12	36	18	54	30	90
m	4.5	6	6	12	15	24	30	45
n	12	24	18	36	27	54	45	90