



- 特点 Features
- 内置浪涌保护, 电源反接保护
 - 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
 - IP65 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 IP65 (IEC standard)
 - Replaceable for limit switches



选型说明 Model Designation

CR Y 18 ☐ ☐ - 08 D N A / ☐ ☐ - L2

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

序号 No	项目 Item	代号 Code	说明 Description
①	分类代号 Classification code	CR	Capacitive proximity sensor
②	外形代号 Shape code	Y	圆柱形塑料管 Cylindrical plastic pipe
		YM	圆柱形金属铜管 Cylindrical copper tube of metal
③	尺寸代码 Size code	12	12=M12、18=M18、30=M30
④	产品类型 Product type	无 None	标准型 Normal form
⑤	螺纹长度 Thread length	无 None	标准型 Normal form
		L	长螺纹型 Long thread type
⑥	检测距离 Detection distance	04	04=4mm、05=5mm、08=8mm、10=10mm、15=15mm
⑦	工作电压 Operating voltage	A	90...250VAC
		D	10...30VDC
⑧	输出方式 Output mode	N	NPN
		P	PNP
		K	AC 二线 2 Wires
⑨	输出状态 Output state	A	NO
		B	NC
		C	NO+NC

序号 No	项目 Item	代号 Code	说明 Description
⑩	连接形式 Connection form	无 None	引线式自由出线端 Lead type free outlet end
		M	M12针式 直头 4芯 A编码 M12 pin straight head 4-core A coding
		M□□□□	M型接插件 M□□□□ M-type connector M□□□□
		D□□□□	DT型接插件 D□□□□ DT-type connector D□□□□
		A□□□□	AMP型接插件 A□□□□ AMP-type connector A□□□□
		S□□□□	SM型接插件 S□□□□ SM-type connector S□□□□
⑪	电线材质 Wire material	无 None	PVC
		U	PUR
		VP	PVC+屏蔽 Shield
		UP	Shielded PUR cable
⑫	引线长度 Lead length	无 None	M型接插件本体连接 M connector body connection
		L1-L5	L1表示1米线 (线长不限L5) L1 means 1 meter line (line length is not limited to L5)

国际认证规格 International Certification Specifications

认证规格 Certification specifications	规格 Specifications	文件No. Document
CCC	GB/T 14048.10	请咨询昌得代表处 Please consult the CNTD Representative Office
TUV	EN 60947-5-2	
CE		

安全规格认证额定值 Safety Specification Certification Rating

CCC(GB/T 14048.10)、TUV(EN60947-5-2)

类型与额定值 Type and Rating
AC-140 24~250VAC 200mA
DC-13 10~30VDC 200mA

规格 Specifications

DC 3-wire NO/NC and 4-wire combined NO+NC types

型号名 Model	CRY12-02DNA CRY12-02DNB CRY12-02DPA CRY12-02DPB	CRY12-04DNA CRY12-04DNB CRY12-04DPA CRY12-04DPB	CRY18-05DNA CRY18-05DNB CRY18-05DNC CRY18-05DPA CRY18-05DPB CRY18-05DPC	CRY18-08DNA CRY18-08DNB CRY18-08DNC CRY18-08DPA CRY18-08DPB CRY18-08DPC	CRY30-10DNA CRY30-10DNB CRY30-10DNC CRY30-10DPA CRY30-10DPB CRY30-10DPC	CRY30-15DNA CRY30-15DNB CRY30-15DNC CRY30-15DPA CRY30-15DPB CRY30-15DPC
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					
设定距离 Setting distance	0~1.4mm	0~2.8mm	0~3.5mm	0~5.6mm	0~7mm	0~10.5mm
工作电压 Working voltage	10-30VDC					
漏电流 Leakage current	10mA以下 Max.10mA					
应答频率(※1) Response frequency (※1)	50Hz					
残留电压 Residual voltage	1.0V以下 Max. 1.0V					
温度的影响 Affection by Temp	在-25~+60℃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					

规格 Specifications

型号名 Model	CRY12-02DNA	CRY12-04DNA	CRY18-05DNA	CRY18-08DNA	CRY30-10DNA	CRY30-15DNA
	CRY12-02DNB	CRY12-04DNB	CRY18-05DNB	CRY18-08DNB	CRY30-10DNB	CRY30-15DNB
	CRY12-02DPA	CRY12-04DPA	CRY18-05DNC	CRY18-08DNC	CRY30-10DNC	CRY30-15DNC
	CRY12-02DPB	CRY12-04DPB	CRY18-05DPA	CRY18-08DPA	CRY30-10DPA	CRY30-15DPA
			CRY18-05DPB	CRY18-08DPB	CRY30-10DPB	CRY30-15DPB
			CRY18-05DPC	CRY18-08DPC	CRY30-10DPC	CRY30-15DPC
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~+60°C(未结冰状态 No icing)					
储存温度 Storage temperature	-30~+80°C(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	浪涌保护电路, 过流保护电路 Surge protection circuit, Overcurrent protection circuit					
材质 Material	外壳/螺母: ABS, 垫片: 塑料, 检测面: PBT, 一般线缆(灰色): 聚氯乙烯(PVC), 耐油性线缆(黑色): 聚氯乙烯(耐油强化型PVC) Case/Nut: ABS, Washer: Plastic, Sensing surface: PBT, Standard cable(Gray): Polyvinyl chloride(PVC), Oil resistant cable(Black): Oil resistant Polyvinyl chloride(PVC)					
连接线缆 Cable	φ3.8, 3P, 2m		φ4.8, 3P,4P 2m			
	AWG22, 芯线直径:0.1mm, 芯线数:25, 绝缘皮 外径: φ1.25mm (AWG22, Core diameter: 0.1mm, Number of cores: 25, Insulator diameter: φ1.25		AWG22, 芯线直径:0.1mm, 芯线数:30, 绝缘皮外径: φ1.25mm (AWG22, Core diameter: 0.1mm, Number of cores: 30, Insulator diameter: φ1.25			
防护等级 Protection	IP65					

交流2线式 AC 2wire type

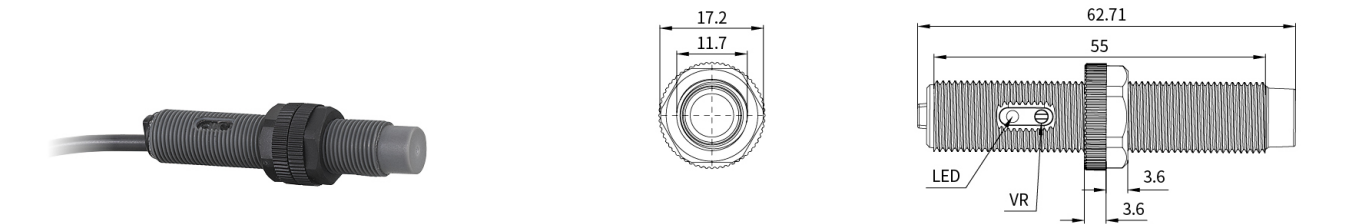
CRY12-08AKA/B: 5mm sensing, 0~3.5mm setting; use the model-specific distance.

型号名 Model	CRY12-08AKA CRY12-08AKB	CRY18-08AKA CRY18-08AKB	CRY30-10AKA CRY30-10AKB	CRY30-15AKA CRY30-15AKB
检测距离 Sensing distance	5mm	8mm	10mm	15mm
应差距离 Hysteresis	检测距离的10%以下 Max. 10% of sensing distance			
设定距离 Setting distance	0~3.5mm	0~5.6mm	0~7mm	0~10.5mm
工作电压 Working voltage	90-250VAC			
漏电流 Leakage current	10mA以下 Max.10mA			
应答频率(※1) Response frequency(※1)	50Hz			
残留电压 Residual voltage	10V以下 Max. 10V			
温度的影响 Affection by Temp	在-25~+60°C温度范围内+20°C时的检测距离的±10%以内 Max. ±10% for sensing distance at ambient temperature 20°C			
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)			

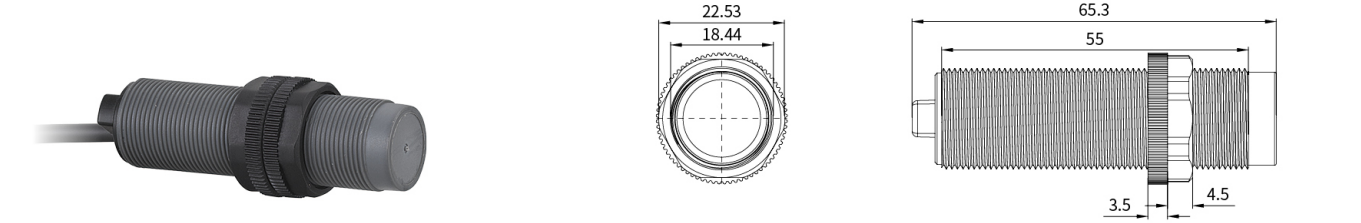
使用周围温度 Ambient temperature	-25~+60°C(未结冰状态 No icing)
储存温度 Storage temperature	-30~+80°C(未结冰状态 No icing)
使用周围湿度 Ambient humidity	35~95%RH (未结露状态 No condensation)
保护电路 Protection circuit	浪涌保护电路 Surge protection circuit,
材质 Material	外壳/螺母: ABS, 检测面: PBT, 一般线缆(灰色): 聚氯乙烯(PVC), 耐油性线缆(黑色): 聚氯乙烯(耐油强化型PVC) Case/Nut: ABS, Sensing surface: PBT, Standard cable(Gray): Polyvinyl chloride(PVC), Oil resistant cable(Black): Oil resistant Polyvinyl chloride(PVC)
连接线缆 Cable	φ4.8, 2P, 2m AWG22, 芯线直径:0.1mm, 芯线数:30, 绝缘皮外径: φ1.25mm (AWG22, Core diameter: 0.1mm, Number of cores: 30, Insulator diameter: φ1.25
防护等级 Protection	IP65

外观和尺寸 Appearance and Dimension

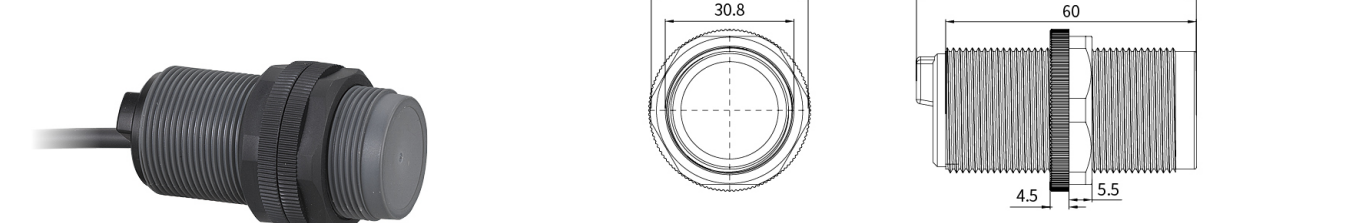
CRY12-04
电容式接近开关
Capacitive Proximity Sensor



CRY18-08
电容式接近开关
Capacitive Proximity Sensor



CRY30-10
电容式接近开关
Capacitive Proximity Sensor



使用注意事项 Using Precautions

本公司产品是作为工业产品而设计生产，严格遵守工业产品标准。我司明确声明，除非经过特殊设计并得到我司明确书面确认，我司产品不适用于以下应用场合：

- 要求极高可靠性的应用场合，包括核能、燃气、电力等要求长期稳定运行的系统。
- 要求极高安全性的应用场合，涉及人身安全与财产的情况。
- 苛刻条件、严酷环境的应用场合，包括室外、存在化学污染、电磁、振动或冲击影响的环境。
- 有火灾或爆炸风险的应用场合，包括存在易燃易爆性气体、强酸强碱化学品等物质的环境。
- 涉及军工用途、航天航空项目的应用场合。

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- Applications that require high reliability, including nuclear, gas, electric and other systems that require long-term stable operation.
- Applications requiring very high security, situations involving personal safety and property.
- Applications in harsh conditions, harsh environments, including outdoor, chemical contamination, electromagnetic, vibration or shock effects.
- Applications where there is a risk of fire or explosion, including environments where flammable and explosive gases, strong acids and alkali chemicals are present.
- Applications involving military use and aerospace projects.