

接近开关

概述：

根据检测对象、检测方式、现场工艺等方面的不同,接近开关分为电感式、电容式、NAMUR型、霍尔式、模拟量输出等种类；关于接近开关的术语等事项说明如下：

► 检测物体：按规定的材质、尺寸、形状用来检测接近开关基本性能的物体；选用厚度为1mm、边长为3倍检测距离的正方形Q235钢。

► 检测距离 S_n ：按照指定方法检测物体，从基准位置（基准面）到测定动作（复位）的距离。

► 设定距离 S_a ： $S_a \leq 0.8S_n$ ，在此距离内接近开关的工作应不受温度、电压波动的影响而产生误动作，在安装时请将检测物与开关间的距离控制在该数值内。

► 电压降 U_d ：开关输出电流达到额定值，负载回路上测得的开关两端的电压值。

► 消耗电流 I_x ：当电源电压达到额定最大值开关处于导通或截止状态时，流过回路的 电流值，交流两线、直流两线的消耗电流值接近于0mA。

► 漏电流：在开关处于截止状态下，流过负载的最大电流，直流PNP、NPN输出的开关的漏电流值接近0mA。

► 响应时间：检测物体到位或离位的瞬间与开关相应发生翻转的时间间隔。

► 温度特性：以+25°C时的 S_n 为基准，在-25°C~+70°C时检测距离的变化范围为该基准的±10%以内。

► 齐平式与非齐平式：齐平式——当任何金属材料设置在检测面的四周而不影响其特性；非齐平式——检测面周围需要有一定的空间以保持其特性。

► 工作频率：反复接近检测物体时，能判断出其输出的每秒次数。

► 检测物的材料与检测距离的关系：

◊ 当检测不同金属时，开关有不同的动作距离，请参照接近开关不同检测体的 修正系数；

◊ 当开关用于测量动作频率或高速场合时，请将开关的动作距离设定在50%检测距离 S_n ，开关在此位置可获得最大的动作频率；

◊ 电容式接近开关不仅能检测金属，还能检测塑料、玻璃、水、油等物质，因各检测物的导电率和介电数、吸水率、体积的不同，故检测距离也不同，对于接地的金属可获得最大的检测距离；另电容式接近开关的动作距离一般可调，以适合不同对象的检测，在安装时请根据现场需求进行调整。

!!!!注意事项：

◊ 当开关使用的环境中有关涌干扰时，请添加浪涌吸收保护装置；

◊ 开关不应连接较大电流负载，以免损坏，请添加中间继电器予以保护；

◊ 开关到控制系统的连接线应尽量短，并避免与动力线同路，以减少信号传输过程中的干扰；

◊ 开关必须串联负载，以免损坏；

◊ 请勿用硬物撞击检测面、请勿将其使用在有腐蚀的场所，以免影响其寿命，特殊的应用场合请选用特殊型。

► 维护与检修：为了使开关能长期稳定地工作，请进行定期检查。

◊ 检查开关的安装位置是否有偏移、松动、变形；

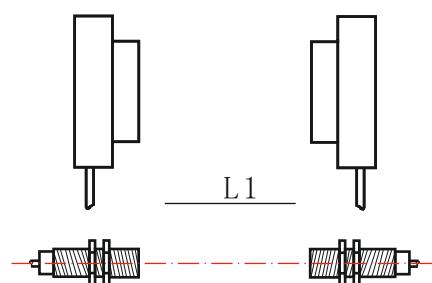
◊ 检查配线、连接部位是否有松动、接触不良、断线；

◊ 检查检测面是否有金属灰层附着；

◊ 检查使用场所的环境、温度等有无异常。

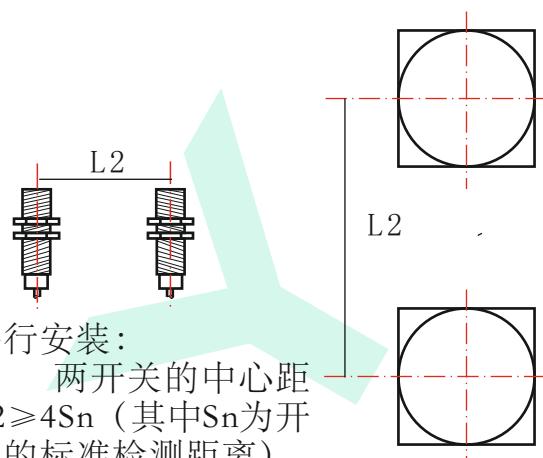


安装注意事项：



对向安装：

两开关的检测面之间的距离
 $L_1 \geq 8S_n$ (其中 S_n 为开关的标准

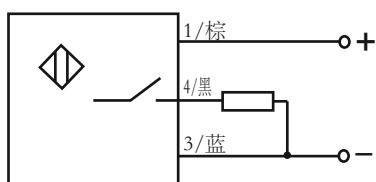


平行安装：

两开关的中心距
 $L_2 \geq 4S_n$ (其中 S_n 为开关的标准检测距离)

开关信号输出接线/针脚图：

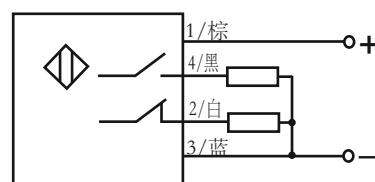
PNP常开



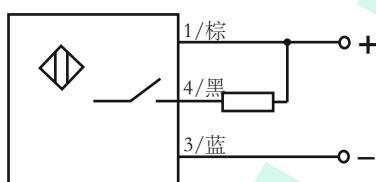
PNP常闭



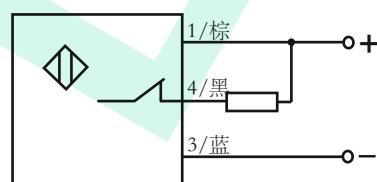
PNP常开+常闭



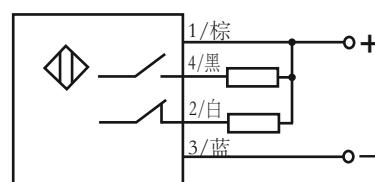
NPN常开



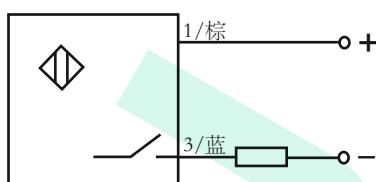
NPN常闭



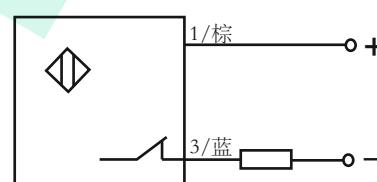
NPN常开+常闭



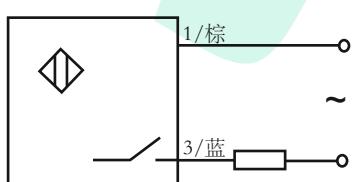
直流两线常开



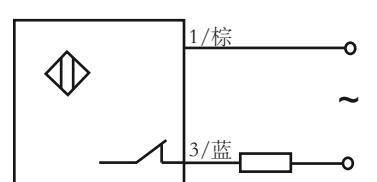
直流两线常闭



交流两线常开



交流两线常闭



注：

1、在安装使用之前请确定关闭电源；

2、请仔细确认各种出线方式，以免接错损坏相关设备；

3、请确认输出回路带有负载以免损坏接近开关；

4、接线前请查看开关铭牌上线路图，若有疑问请与我公司技术人员联系。



1	2	3	4	5	6	7	8	9	10	11	12
EI	2	Y	18	08	B	N	P	0	W	2	S

1 类型：

EI:电感式 EC: 电容式 EM: 电磁式

2 工作电压：

2:DC10~30V 3: DC10~60V 4: AC20~250V 5: AC/DC20~250V

3 外观形状：

Y:圆柱形 X: 方形 Q: 其它形状

4 外形尺寸：

05:5mm 08:8mm 12:12mm 18:18mm 24:24mm 0:30mm ...

5 外壳材质：

B:镀铬铜+ABS A: ABS

6 屏蔽类型：

S:屏蔽 N: 非屏蔽 |

7 检测距离：

01:1mm 02: 2mm 04: 4mm 08: 8mm 12: 12mm ...

8 输出类型

P:PNP N:NPN T:DC2线制 R:AC2线制 G:DC/AC2线制 K:4线制

M:NAMUR

9 输出状态：

0:NO C: NC A: NO与NC H: NO或NC可转换

10 连接类型：

W:直接出线 E: M8 T: M12 D: 端子接线

11 电缆长度、端子数、连接器类型：

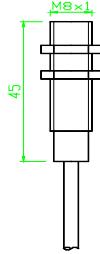
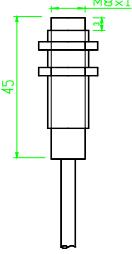
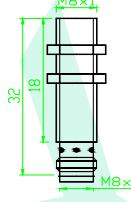
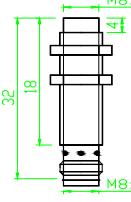
电缆: 2:2m 5:5m 9:9m ...

端子: 2:2个 3:3个 4:4个 ...

连接器类型: 2:2针 3:3针 4:4针 5:5针 ...

12 附加功能：

常温:S L: 耐低温(>-20°C) H: 耐高温(<120°C)

规格	M8		M8		
安装方式	齐平式	齐平式	齐平式	齐平式	
检测距离	1mm	2mm	1mm	2mm	
尺寸图 (mm): 接线图请 参见P2					
10~30DCV	2线NO	EI2Y08BS01TOW2S	EI2Y08BN02TOW2S	EI2Y08BS01TOE3S	EI2Y08BS02TOE3S
	2线NC	EI2Y08BS01TCW2S	EI2Y08BN02TCW2S	EI2Y08BS01TCE3S	EI2Y08BS02TCE3S
	3线PNP NO	EI2Y08BS01POW2S	EI2Y08BN02POW2S	EI2Y08BS01POE3S	EI2Y08BS02POE3S
	3线PNP NC	EI2Y08BS01PCW2S	EI2Y08BN02PCW2S	EI2Y08BS01PCE3S	EI2Y08BS02PCE3S
	3线NPN NO	EI2Y08BS01NOW2S	EI2Y08BN02NOW2S	EI2Y08BS01NOE3S	EI2Y08BS02NOE3S
	3线NPN NC	EI2Y08BS01NCW2S	EI2Y08BN02NCW2S	EI2Y08BS01NCE3S	EI2Y08BS02NCE3S
	4线PNP NO+NC	EI2Y08BS01PAW2S	EI2Y08BN02PAW2S	EI2Y08BS01PAE4S	EI2Y08BS02PAE4S
	4线NPN NO+NC	EI2Y08BS01NAW2S	EI2Y08BN02NAW2S	EI2Y08BS01NAE4S	EI2Y08BS02NAE4S
10~60DCV	2线NO	EI3Y08BS01TOW2S	EI3Y08BN02TOW2S	EI3Y08BS01TOE3S	EI3Y08BS02TOE3S
	2线NC	EI3Y08BS01TCW2S	EI3Y08BN02TCW2S	EI3Y08BS01TCE3S	EI3Y08BS02TCE3S
	3线PNP NO	EI3Y08BS01POW2S	EI3Y08BN02POW2S	EI3Y08BS01POE3S	EI3Y08BS02POE3S
	3线PNP NC	EI3Y08BS01PCW2S	EI3Y08BN02PCW2S	EI3Y08BS01PCE3S	EI3Y08BS02PCE3S
	3线NPN NO	EI3Y08BS01NOW2S	EI3Y08BN02NOW2S	EI3Y08BS01NOE3S	EI3Y08BS02NOE3S
	3线NPN NC	EI3Y08BS01NCW2S	EI3Y08BN02NCW2S	EI3Y08BS01NCE3S	EI3Y08BS02NCE3S
	4线PNP NO+NC	EI3Y08BS01PAW2S	EI3Y08BN02PAW2S	EI3Y08BS01PAE4S	EI3Y08BS02PAE4S
	4线NPN NO+NC	EI3Y08BS01NAW2S	EI3Y08BN02NAW2S	EI3Y08BS01NAE4S	EI3Y08BS02NAE4S
交流	2线NO				
	2线NC				
	2线NO+NC可调				
交直 流	2线NO				
	2线NC				
	2线NO+NC可调				

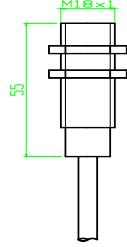
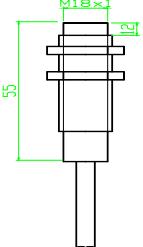
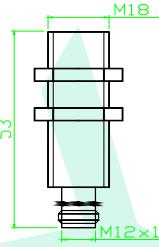
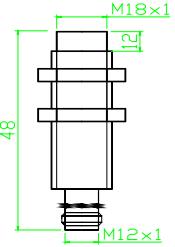
技术参数				
工作电压	10~30VDC	10~60VDC	20~250VAC	20~250VAC/DC
涟波	<10%	<10%	-	-
无负载电流	<10mA	10mA	<1.8mA	<2.5mA
最大负载电流	200mA	100mA	400mA	100/200mA
漏电流	<0.01mA	<0.01mA	<1.8mA	<2.5mA
电压降	<1.5V	<1.5V	<8VAC AT 400mA	<10VAC/8VDC
开关频率	2K/1K/300/100HZ	2K/1K/300/100HZ	<25HZ	25HZ AC/40HZ DC
响应时间	0.1ms/0.1ms	0.1ms/0.1ms	10ms/10ms	10ms/10ms
开关磁滞	<15%(Sr)	<15%(Sr)	<15%(Sr)	<15%(Sr)
重复精度	<1.0%(Sr)	<1.0%(Sr)	<1.0%(Sr)	<1.0%(Sr)
防护等级	IP67	IP67	IP67	IP67
工作环境温度	-25 °C ~ +70 °C			
温度漂移	<10%(Sr)	<10%(Sr)	<10%(Sr)	<10%(Sr)
短路保护	有	有	-	有
过载电流保护	220mA	220mA	5A (20ms)	2.2A (20ms)
检测对象	磁性金属	磁性金属	磁性金属	磁性金属
外壳材质	黄铜镀铬	黄铜镀铬	黄铜镀铬	黄铜镀铬



规格		M12		M12	
安装方式		齐平式	非齐平式	齐平式	非齐平式
检测距离		2mm	4mm	2mm	4mm
尺寸图 (mm): 接线图请 参见P2					
10~30DCV	2线NO	EI2Y12BS02TOW2S	EI2Y12BN04TOW2S	EI2Y12BS02TOT4S	EI2Y12BN04TOT4S
	2线NC	EI2Y12BS02TCW2S	EI2Y12BN04TCW2S	EI2Y12BS02TCT4S	EI2Y12BN04TCT4S
	3线PNP NO	EI2Y12BS02POW2S	EI2Y12BN04POW2S	EI2Y12BS02POT4S	EI2Y12BN04POT4S
	3线PNP NC	EI2Y12BS02PCW2S	EI2Y12BN04PCW2S	EI2Y12BS02PCT4S	EI2Y12BN04PCT4S
	3线NPN NO	EI2Y12BS02NOW2S	EI2Y12BN04NOW2S	EI2Y12BS02NOT4S	EI2Y12BN04NOT4S
	3线NPN NC	EI2Y12BS02NCW2S	EI2Y12BN04NCW2S	EI2Y12BS02NCT4S	EI2Y12BN04NCT4S
	4线PNP NO+NC	EI2Y12BS02PAW2S	EI2Y12BN04PAW2S	EI2Y12BS02PAT4S	EI2Y12BN04PAT4S
	4线NPN NO+NC	EI2Y12BS02NAW2S	EI2Y12BN04NAW2S	EI2Y12BS02NAT4S	EI2Y12BN04NAT4S
10~60DCV	2线NO	EI3Y12BS02TOW2S	EI3Y12BN04TOW2S	EI3Y12BS02TOT4S	EI3Y12BN04TOT4S
	2线NC	EI3Y12BS02TCW2S	EI3Y12BN04TCW2S	EI3Y12BS02TCT4S	EI3Y12BN04TCT4S
	3线PNP NO	EI3Y12BS02POW2S	EI3Y12BN04POW2S	EI3Y12BS02POT4S	EI3Y12BN04POT4S
	3线PNP NC	EI3Y12BS02PCW2S	EI3Y12BN04PCW2S	EI3Y12BS02PCT4S	EI3Y12BN04PCT4S
	3线NPN NO	EI3Y12BS02NOW2S	EI3Y12BN04NOW2S	EI3Y12BS02NOT4S	EI3Y12BN04NOT4S
	3线NPN NC	EI3Y12BS02NCW2S	EI3Y12BN04NCW2S	EI3Y12BS02NCT4S	EI3Y12BN04NCT4S
	4线PNP NO+NC	EI3Y12BS02PAW2S	EI3Y12BN04PAW2S	EI3Y12BS02PAT4S	EI3Y12BN04PAT4S
	4线NPN NO+NC	EI3Y12BS02NAW2S	EI3Y12BN04NAW2S	EI3Y12BS02NAT4S	EI3Y12BN04NAT4S
交流	2线NO	EI4Y12BS02ROW2S	EI4Y12BN04ROW2S	EI4Y12BS02ROT4S	EI4Y12BN04ROT4S
	2线NC	EI4Y12BS02RCW2S	EI4Y12BN04RCW2S	EI4Y12BS02RCT4S	EI4Y12BN04RCT4S
	2线NO+NC可调				
交直 流	2线NO	EI5Y12BS02GOW2S	EI5Y12BN04GOW2S	EI5Y12BS02GOT4S	EI5Y12BN04GOT4S
	2线NC	EI5Y12BS02GCW2S	EI5Y12BN04GCW2S	EI5Y12BS02GCT4S	EI5Y12BN04GCT4S
	2线NO+NC可调				

技术参数

工作电压	10~30VDC	10~60VDC	20~250VAC	20~250VAC/DC
涟波	<10%	<10%	-	-
无负载电流	<10mA	10mA	<1.8mA	<2.5mA
最大负载电流	200mA	100mA	400mA	100/200mA
漏电流	<0.01mA	<0.01mA	<1.8mA	<2.5mA
电压降	<1.5V	<1.5V	<8VAC AT 400mA	<10VAC/8VDC
开关频率	2K/1K/300/100HZ	2K/1K/300/100HZ	<25HZ	25HZ AC/40HZ DC
响应时间	0.1ms/0.1ms	0.1ms/0.1ms	10ms/10ms	10ms/10ms
开关磁滞	<15%(Sr)	<15%(Sr)	<15%(Sr)	<15%(Sr)
重复精度	<1.0%(Sr)	<1.0%(Sr)	<1.0%(Sr)	<1.0%(Sr)
防护等级	IP67	IP67	IP67	IP67
工作环境温度	-25 °C ~ +70 °C			
温度漂移	<10%(Sr)	<10%(Sr)	<10%(Sr)	<10%(Sr)
短路保护	有	有	-	有
过载电流保护	220mA	220mA	5A (20ms)	2.2A (20ms)
检测对象	磁性金属	磁性金属	磁性金属	磁性金属
外壳材质	黄铜镀铬	黄铜镀铬	黄铜镀铬	黄铜镀铬

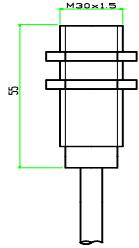
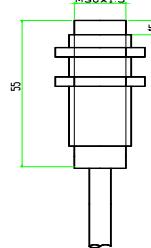
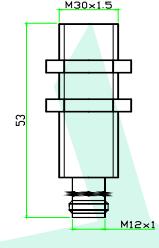
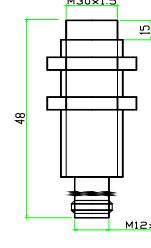
规格		M18		M18	
安装方式		齐平式	非齐平式	齐平式	非齐平式
检测距离		5mm	8mm	5mm	8mm
尺寸图 (mm): 接线图请 参见P2					
10~30DCV	2线NO	EI2Y18BS05TOW2S	EI2Y18BN08TOW2S	EI2Y18BS05T0T4S	EI2Y18BN08T0T4S
	2线NC	EI2Y18BS05TCW2S	EI2Y18BN08TCW2S	EI2Y18BS05TCT4S	EI2Y18BN08TCT4S
	3线PNP NO	EI2Y18BS05POW2S	EI2Y18BN08POW2S	EI2Y18BS05POT4S	EI2Y18BN08POT4S
	3线PNP NC	EI2Y18BS05PCW2S	EI2Y18BN08PCW2S	EI2Y18BS05PCT4S	EI2Y18BN08PCT4S
	3线NPN NO	EI2Y18BS05NOW2S	EI2Y18BN08NOW2S	EI2Y18BS05NOT4S	EI2Y18BN08NOT4S
	3线NPN NC	EI2Y18BS05NCW2S	EI2Y18BN08NCW2S	EI2Y18BS05NCT4S	EI2Y18BN08NCT4S
	4线PNP NO+NC	EI2Y18BS05PAW2S	EI2Y18BN08PAW2S	EI2Y18BS05PAT4S	EI2Y18BN08PAT4S
	4线NPN NO+NC	EI2Y18BS05NAW2S	EI2Y18BN08NAW2S	EI2Y18BS05NAT4S	EI2Y18BN08NAT4S
10~60DCV	2线NO	EI3Y18BS05TOW2S	EI3Y18BN08TOW2S	EI3Y18BS05T0T4S	EI3Y18BN08T0T4S
	2线NC	EI3Y18BS05TCW2S	EI3Y18BN08TCW2S	EI3Y18BS05TCT4S	EI3Y18BN08TCT4S
	3线PNP NO	EI3Y18BS05POW2S	EI3Y18BN08POW2S	EI3Y18BS05POT4S	EI3Y18BN08POT4S
	3线PNP NC	EI3Y18BS05PCW2S	EI3Y18BN08PCW2S	EI3Y18BS05PCT4S	EI3Y18BN08PCT4S
	3线NPN NO	EI3Y18BS05NOW2S	EI3Y18BN08NOW2S	EI3Y18BS05NOT4S	EI3Y18BN08NOT4S
	3线NPN NC	EI3Y18BS05NCW2S	EI3Y18BN08NCW2S	EI3Y18BS05NCT4S	EI3Y18BN08NCT4S
	4线PNP NO+NC	EI3Y18BS05PAW2S	EI3Y18BN08PAW2S	EI3Y18BS05PAT4S	EI3Y18BN08PAT4S
	4线NPN NO+NC	EI3Y18BS05NAW2S	EI3Y18BN08NAW2S	EI3Y18BS05NAT4S	EI3Y18BN08NAT4S
交流	2线NO	EI4Y18BS05ROW2S	EI4Y18BN08ROW2S	EI4Y18BS05ROT4S	EI4Y18BN08ROT4S
	2线NC	EI4Y18BS05RCW2S	EI4Y18BN08RCW2S	EI4Y18BS05RCT4S	EI4Y18BN08RCT4S
	2线NO+NC可调				
直流	2线NO	EI5Y18BS05GOW2S	EI5Y18BN08GOW2S	EI5Y18BS05GOT4S	EI5Y18BN08GOT4S
	2线NC	EI5Y18BS05GCW2S	EI5Y18BN08GCW2S	EI5Y18BS05GCT4S	EI5Y18BN08GCT4S
	2线NO+NC可调				

技术参数				
工作电压	10~30VDC	10~60VDC	20~250VAC	20~250VAC/DC
涟波	<10%	<10%	-	-
无负载电流	<10mA	10mA	<1.8mA	<2.5mA
最大负载电流	200mA	100mA	400mA	100/200mA
漏电流	<0.01mA	<0.01mA	<1.8mA	<2.5mA
电压降	<1.5V	<1.5V	<8VAC AT 400mA	<10VAC/8VDC
开关频率	2K/1K/300/100HZ	2K/1K/300/100HZ	<25HZ	25HZ AC/40HZ DC
响应时间	0.1ms/0.1ms	0.1ms/0.1ms	10ms/10ms	10ms/10ms
开关磁滞	<15%(Sr)	<15%(Sr)	<15%(Sr)	<15%(Sr)
重复精度	<1.0%(Sr)	<1.0%(Sr)	<1.0%(Sr)	<1.0%(Sr)
防护等级	IP67	IP67	IP67	IP67
工作环境温度	-25 °C ~ +70 °C			
温度漂移	<10%(Sr)	<10%(Sr)	<10%(Sr)	<10%(Sr)
短路保护	有	有	-	有
过载电流保护	220mA	220mA	5A (20ms)	2.2A (20ms)
检测对象	磁性金属	磁性金属	磁性金属	磁性金属
外壳材质	黄铜镀铬	黄铜镀铬	黄铜镀铬	黄铜镀铬



规格		M24		M24	
安装方式		齐平式	非齐平式	齐平式	非齐平式
检测距离		7mm	10mm	7mm	10mm
尺寸图 (mm): 接线图请 参见P2					
10~30DCV	2线NO	EI2Y24BS07TOW2S	EI2Y24BN10TOW2S	EI2Y24BS07TOT4S	EI2Y24BN10TOT4S
	2线NC	EI2Y24BS07TCW2S	EI2Y24BN10TCW2S	EI2Y24BS07TCT4S	EI2Y24BN10TCT4S
	3线PNP NO	EI2Y24BS07POW2S	EI2Y24BN10POW2S	EI2Y24BS07POT4S	EI2Y24BN10POT4S
	3线PNP NC	EI2Y24BS07PCW2S	EI2Y24BN10PCW2S	EI2Y24BS07PCT4S	EI2Y24BN10PCT4S
	3线NPN NO	EI2Y24BS07NOW2S	EI2Y24BN10NOW2S	EI2Y24BS07NOT4S	EI2Y24BN10NOT4S
	3线NPN NC	EI2Y24BS07NCW2S	EI2Y24BN10NCW2S	EI2Y24BS07NCT4S	EI2Y24BN10NCT4S
	4线PNP NO+NC	EI2Y24BS07PAW2S	EI2Y24BN10PAW2S	EI2Y24BS07PAT4S	EI2Y24BN10PAT4S
	4线NPN NO+NC	EI2Y24BS07NAW2S	EI2Y24BN10NAW2S	EI2Y24BS07NAT4S	EI2Y24BN10NAT4S
10~60DCV	2线NO	EI3Y24BS07TOW2S	EI3Y24BN10TOW2S	EI3Y24BS07TOT4S	EI3Y24BN10TOT4S
	2线NC	EI3Y24BS07TCW2S	EI3Y24BN10TCW2S	EI3Y24BS07TCT4S	EI3Y24BN10TCT4S
	3线PNP NO	EI3Y24BS07POW2S	EI3Y24BN10POW2S	EI3Y24BS07POT4S	EI3Y24BN10POT4S
	3线PNP NC	EI3Y24BS07PCW2S	EI3Y24BN10PCW2S	EI3Y24BS07PCT4S	EI3Y24BN10PCT4S
	3线NPN NO	EI3Y24BS07NOW2S	EI3Y24BN10NOW2S	EI3Y24BS07NOT4S	EI3Y24BN10NOT4S
	3线NPN NC	EI3Y24BS07NCW2S	EI3Y24BN10NCW2S	EI3Y24BS07NCT4S	EI3Y24BN10NCT4S
	4线PNP NO+NC	EI3Y24BS07PAW2S	EI3Y24BN10PAW2S	EI3Y24BS07PAT4S	EI3Y24BN10PAT4S
	4线NPN NO+NC	EI3Y24BS07NAW2S	EI3Y24BN10NAW2S	EI3Y24BS07NAT4S	EI3Y24BN10NAT4S
交流	2线NO	EI4Y24BS07ROW2S	EI4Y24BN10ROW2S	EI4Y24BS07ROT4S	EI4Y24BN10ROT4S
	2线NC	EI4Y24BS07RCW2S	EI4Y24BN10RCW2S	EI4Y24BS07RCT4S	EI4Y24BN10RCT4S
	2线NO+NC可调				
直流	2线NO	EI5Y24BS07GOW2S	EI5Y24BN10GOW2S	EI5Y24BS07GOT4S	EI5Y24BN10GOT4S
	2线NC	EI5Y24BS07GCW2S	EI5Y24BN10GCW2S	EI5Y24BS07GCT4S	EI5Y24BN10GCT4S
	2线NO+NC可调				

技术参数				
工作电压	10~30VDC	10~60VDC	20~250VAC	20~250VAC/DC
涟波	<10%	<10%	-	-
无负载电流	<10mA	10mA	<1.8mA	<2.5mA
最大负载电流	200mA	100mA	400mA	100/200mA
漏电流	<0.01mA	<0.01mA	<1.8mA	<2.5mA
电压降	<1.5V	<1.5V	<8VAC AT 400mA	<10VAC/8VDC
开关频率	2K/1K/300/100HZ	2K/1K/300/100HZ	<25HZ	25HZ AC/40HZ DC
响应时间	0.1ms/0.1ms	0.1ms/0.1ms	10ms/10ms	10ms/10ms
开关磁滞	<15%(Sr)	<15%(Sr)	<15%(Sr)	<15%(Sr)
重复精度	<1.0%(Sr)	<1.0%(Sr)	<1.0%(Sr)	<1.0%(Sr)
防护等级	IP67	IP67	IP67	IP67
工作环境温度	-25 °C ~ +70 °C			
温度漂移	<10%(Sr)	<10%(Sr)	<10%(Sr)	<10%(Sr)
短路保护	有	有	-	有
过载电流保护	220mA	220mA	5A (20ms)	2.2A (20ms)
检测对象	磁性金属	磁性金属	磁性金属	磁性金属
外壳材质	黄铜镀铬	黄铜镀铬	黄铜镀铬	黄铜镀铬

规 格		M30		M30	
安装方式		齐平式	非齐平式	齐平式	非齐平式
检测距离		10mm	15mm	10mm	15mm
尺寸图 (mm): 接线图请 参见P2					
10~30DCV	2线NO	EI2Y30BS10TOW2S	EI2Y30BN15TOW2S	EI2Y30BS10TOT4S	EI2Y30BN15TOT4S
	2线NC	EI2Y30BS10TCW2S	EI2Y30BN15TCW2S	EI2Y30BS10TCT4S	EI2Y30BN15TCT4S
	3线PNP NO	EI2Y30BS10POW2S	EI2Y30BN15POW2S	EI2Y30BS10POT4S	EI2Y30BN15POT4S
	3线PNP NC	EI2Y30BS10PCW2S	EI2Y30BN15PCW2S	EI2Y30BS10PCT4S	EI2Y30BN15PCT4S
	3线NPN NO	EI2Y30BS10NOW2S	EI2Y30BN15NOW2S	EI2Y30BS10NOT4S	EI2Y30BN15NOT4S
	3线NPN NC	EI2Y30BS10NCW2S	EI2Y30BN15NCW2S	EI2Y30BS10NCT4S	EI2Y30BN15NCT4S
	4线PNP NO+NC	EI2Y30BS10PAW2S	EI2Y30BN15PAW2S	EI2Y30BS10PAT4S	EI2Y30BN15PAT4S
	4线NPN NO+NC	EI2Y30BS10NAW2S	EI2Y30BN15NAW2S	EI2Y30BS10NAT4S	EI2Y30BN15NAT4S
10~60DCV	2线NO	EI3Y30BS10TOW2S	EI3Y30BN15TOW2S	EI3Y30BS10TOT4S	EI3Y30BN15TOT4S
	2线NC	EI3Y30BS10TCW2S	EI3Y30BN15TCW2S	EI3Y30BS10TCT4S	EI3Y30BN15TCT4S
	3线PNP NO	EI3Y30BS10POW2S	EI3Y30BN15POW2S	EI3Y30BS10POT4S	EI3Y30BN15POT4S
	3线PNP NC	EI3Y30BS10PCW2S	EI3Y30BN15PCW2S	EI3Y30BS10PCT4S	EI3Y30BN15PCT4S
	3线NPN NO	EI3Y30BS10NOW2S	EI3Y30BN15NOW2S	EI3Y30BS10NOT4S	EI3Y30BN15NOT4S
	3线NPN NC	EI3Y30BS10NCW2S	EI3Y30BN15NCW2S	EI3Y30BS10NCT4S	EI3Y30BN15NCT4S
	4线PNP NO+NC	EI3Y30BS10PAW2S	EI3Y30BN15PAW2S	EI3Y30BS10PAT4S	EI3Y30BN15PAT4S
	4线NPN NO+NC	EI3Y30BS10NAW2S	EI3Y30BN15NAW2S	EI3Y30BS10NAT4S	EI3Y30BN15NAT4S
交流	2线NO	EI4Y30BS10ROW2S	EI4Y30BN15ROW2S	EI4Y30BS10ROT4S	EI4Y30BN15ROT4S
	2线NC	EI4Y30BS10RCW2S	EI4Y30BN15RCW2S	EI4Y30BS10RCT4S	EI4Y30BN15RCT4S
	2线NO+NC可调				
交 直流	2线NO	EI5Y30BS10GOW2S	EI5Y30BN15GOW2S	EI5Y30BS10GOT4S	EI5Y30BN15GOT4S
	2线NC	EI5Y30BS10GCW2S	EI5Y30BN15GCW2S	EI5Y30BS10GCT4S	EI5Y30BN15GCT4S
	2线NO+NC可调				

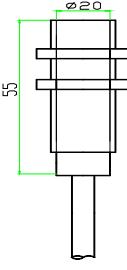
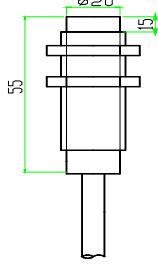
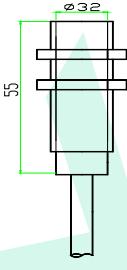
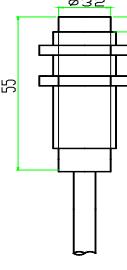
技术参数				
工作电压	10~30VDC	10~60VDC	20~250VAC	20~250VAC/DC
涟波	<10%	<10%	-	-
无负载电流	<10mA	10mA	<1.8mA	<2.5mA
最大负载电流	200mA	100mA	400mA	100/200mA
漏电流	<0.01mA	<0.01mA	<1.8mA	<2.5mA
电压降	<1.5V	<1.5V	<8VAC AT 400mA	<10VAC/8VDC
开关频率	2K/1K/300/100HZ	2K/1K/300/100HZ	<25HZ	25HZ AC/40HZ DC
响应时间	0.1ms/0.1ms	0.1ms/0.1ms	10ms/10ms	10ms/10ms
开关磁滞	<15% (Sr)	<15% (Sr)	<15% (Sr)	<15% (Sr)
重复精度	<1.0% (Sr)	<1.0% (Sr)	<1.0% (Sr)	<1.0% (Sr)
防护等级	IP67	IP67	IP67	IP67
工作环境温度	-25 °C ~ +70 °C			
温度漂移	<10% (Sr)	<10% (Sr)	<10% (Sr)	<10% (Sr)
短路保护	有	有	-	有
过载电流保护	220mA	220mA	5A (20ms)	2.2A (20ms)
检测对象	磁性金属	磁性金属	磁性金属	磁性金属
外壳材质	黄铜镀铬	黄铜镀铬	黄铜镀铬	黄铜镀铬



规格		M18/30		M24/40	
安装方式		齐平式	非齐平式	齐平式	非齐平式
检测距离		10mm	15mm	15mm	20mm
尺寸图 (mm): 接线图请 参见P2					
10~30DCV	2线NO	EI2Q30BS10TOW2S	EI2Q30BN15TOW2S	EI2Q40BS15TOW2S	EI2Q40BN20TOW2S
	2线NC	EI2Q30BS10TCW2S	EI2Q30BN15TCW2S	EI2Q40BS15TCW2S	EI2Q40BN20TCW2S
	3线PNP NO	EI2Q30BS10POW2S	EI2Q30BN15POW2S	EI2Q40BS15POW2S	EI2Q40BN20POW2S
	3线PNP NC	EI2Q30BS10PCW2S	EI2Q30BN15PCW2S	EI2Q40BS15PCW2S	EI2Q40BN20PCW2S
	3线NPN NO	EI2Q30BS10NOW2S	EI2Q30BN15NOW2S	EI2Q40BS15NOW2S	EI2Q40BN20NOW2S
	3线NPN NC	EI2Q30BS10NCW2S	EI2Q30BN15NCW2S	EI2Q40BS15NCW2S	EI2Q40BN20NCW2S
	4线PNP NO+NC	EI2Q30BS10PAW2S	EI2Q30BN15PAW2S	EI2Q40BS15PAW2S	EI2Q40BN20PAW2S
	4线NPN NO+NC	EI2Q30BS10NAW2S	EI2Q30BN15NAW2S	EI2Q40BS15NAW2S	EI2Q40BN20NAW2S
10~60DCV	2线NO	EI3Q30BS10TOW2S	EI3Q30BN15TOW2S	EI3Q40BS15TOW2S	EI3Q40BN20TOW2S
	2线NC	EI3Q30BS10TCW2S	EI3Q30BN15TCW2S	EI3Q40BS15TCW2S	EI3Q40BN20TCW2S
	3线PNP NO	EI3Q30BS10POW2S	EI3Q30BN15POW2S	EI3Q40BS15POW2S	EI3Q40BN20POW2S
	3线PNP NC	EI3Q30BS10PCW2S	EI3Q30BN15PCW2S	EI3Q40BS15PCW2S	EI3Q40BN20PCW2S
	3线NPN NO	EI3Q30BS10NOW2S	EI3Q30BN15NOW2S	EI3Q40BS15NOW2S	EI3Q40BN20NOW2S
	3线NPN NC	EI3Q30BS10NCW2S	EI3Q30BN15NCW2S	EI3Q40BS15NCW2S	EI3Q40BN20NCW2S
	4线PNP NO+NC	EI3Q30BS10PAW2S	EI3Q30BN15PAW2S	EI3Q40BS15PAW2S	EI3Q40BN20PAW2S
	4线NPN NO+NC	EI3Q30BS10NAW2S	EI3Y30BN15NAW2S	EI3Q40BS15NAW2S	EI3Q40BN20NAW2S
交流	2线NO	EI4Q30BS10ROW2S	EI4Q30BN15ROW2S	EI4Q40BS15ROW2S	EI4Q40BN20ROW2S
	2线NC	EI4Q30BS10RCW2S	EI4Q30BN15RCW2S	EI4Q40BS15RCW2S	EI4Q40BN20RCW2S
	2线NO+NC可调				
直流	2线NO	EI5Q30BS10GOW2S	EI5Q30BN15GOW2S	EI5Q40BS15GOW2S	EI5Q40BN20GOW2S
	2线NC	EI5Q30BS10GCW2S	EI5Q30BN15GCW2S	EI5Q40BS15GCW2S	EI5Q40BN20GCW2S
	2线NO+NC可调				

技术参数

工作电压	10~30VDC	10~60VDC	20~250VAC	20~250VAC/DC
涟波	<10%	<10%	-	-
无负载电流	<10mA	10mA	<1.8mA	<2.5mA
最大负载电流	200mA	100mA	400mA	100/200mA
漏电流	<0.01mA	<0.01mA	<1.8mA	<2.5mA
电压降	<1.5V	<1.5V	<8VAC AT 400mA	<10VAC/8VDC
开关频率	2K/1K/300/100HZ	2K/1K/300/100HZ	<25HZ	25HZ AC/40HZ DC
响应时间	0.1ms/0.1ms	0.1ms/0.1ms	10ms/10ms	10ms/10ms
开关磁滞	<15%(Sr)	<15%(Sr)	<15%(Sr)	<15%(Sr)
重复精度	<1.0%(Sr)	<1.0%(Sr)	<1.0%(Sr)	<1.0%(Sr)
防护等级	IP67	IP67	IP67	IP67
工作环境温度	-25 °C - +70 °C			
温度漂移	<10%(Sr)	<10%(Sr)	<10%(Sr)	<10%(Sr)
短路保护	有	有	-	有
过载电流保护	220mA	220mA	5A(20ms)	2.2A(20ms)
检测对象	磁性金属	磁性金属	磁性金属	磁性金属
外壳材质	ABS	ABS	ABS	ABS

规 格		Φ20		Φ32	
安装方式		齐平式	非齐平式	齐平式	非齐平式
检测距离		7mm	10mm	10mm	15mm
尺寸图 (mm): 接线图请 参见P2					
10~30DCV	2线NO	EI2Y20BS07TOW2S	EI2Y20BN10TOW2S	EI2Y32BS10TOW2S	EI2Y32BN15TOW2S
	2线NC	EI2Y20BS07TCW2S	EI2Y20BN10TCW2S	EI2Y32BS10TCW2S	EI2Y32BN15TCW2S
	3线PNP NO	EI2Y20BS07POW2S	EI2Y20BN10POW2S	EI2Y32BS10POW2S	EI2Y32BN15POW2S
	3线PNP NC	EI2Y20BS07PCW2S	EI2Y20BN10PCW2S	EI2Y32BS10PCW2S	EI2Y32BN15PCW2S
	3线NPN NO	EI2Y20BS07NOW2S	EI2Y20BN10NOW2S	EI2Y32BS10NOW2S	EI2Y32BN15NOW2S
	3线NPN NC	EI2Y20BS07NCW2S	EI2Y20BN10NCW2S	EI2Y32BS10NCW2S	EI2Y32BN15NCW2S
	4线PNP NO+NC	EI2Y20BS07PAW2S	EI2Y20BN10PAW2S	EI2Y32BS10PAW2S	EI2Y32BN15PAW2S
	4线NPN NO+NC	EI2Y20BS07NAW2S	EI2Y20BN10NAW2S	EI2Y32BS10NAW2S	EI2Y32BN15NAW2S
10~60DCV	2线NO	EI3Y20BS07TOW2S	EI3Y20BN10TOW2S	EI3Y32BS10TOW2S	EI3Y32BN15TOW2S
	2线NC	EI3Y20BS07TCW2S	EI3Y20BN10TCW2S	EI3Y32BS10TCW2S	EI3Y32BN15TCW2S
	3线PNP NO	EI3Y20BS07POW2S	EI3Y20BN10POW2S	EI3Y32BS10POW2S	EI3Y32BN15POW2S
	3线PNP NC	EI3Y20BS07PCW2S	EI3Y20BN10PCW2S	EI3Y32BS10PCW2S	EI3Y32BN15PCW2S
	3线NPN NO	EI3Y20BS07NOW2S	EI3Y20BN10NOW2S	EI3Y32BS10NOW2S	EI3Y32BN15NOW2S
	3线NPN NC	EI3Y20BS07NCW2S	EI3Y20BN10NCW2S	EI3Y32BS10NCW2S	EI3Y32BN15NCW2S
	4线PNP NO+NC	EI3Y20BS07PAW2S	EI3Y20BN10PAW2S	EI3Y32BS10PAW2S	EI3Y32BN15PAW2S
	4线NPN NO+NC	EI3Y20BS07NAW2S	EI3Y20BN10NAW2S	EI3Y32BS10NAW2S	EI3Y32BN15NAW2S
交流	2线NO	EI4Y20BS07ROW2S	EI4Y20BN10ROW2S	EI4Y32BS10ROW2S	EI4Y32BN15ROW2S
	2线NC	EI4Y20BS07RCW2S	EI4Y20BN10RCW2S	EI4Y32BS10RCW2S	EI4Y32BN15RCW2S
	2线NO+NC可调				
交 直流	2线NO	EI5Y20BS10GOW2S	EI5Y20BN10GOW2S	EI5Y32BS10GOW2S	EI5Y32BN15GOW2S
	2线NC	EI5Y20BS10GCW2S	EI5Y20BN10GCW2S	EI5Y32BS10GCW2S	EI5Y32BN15GCW2S
	2线NO+NC可调				

技术参数				
工作电压	10~30VDC	10~60VDC	20~250VAC	20~250VAC/DC
涟波	<10%	<10%	-	-
无负载电流	<10mA	10mA	<1.8mA	<2.5mA
最大负载电流	200mA	100mA	400mA	100/200mA
漏电流	<0.01mA	<0.01mA	<1.8mA	<2.5mA
电压降	<1.5V	<1.5V	<8VAC AT 400mA	<10VAC/8VDC
开关频率	2K/1K/300/100HZ	2K/1K/300/100HZ	<25HZ	25HZ AC/40HZ DC
响应时间	0.1ms/0.1ms	0.1ms/0.1ms	10ms/10ms	10ms/10ms
开关磁滞	<15% (Sr)	<15% (Sr)	<15% (Sr)	<15% (Sr)
重复精度	<1.0% (Sr)	<1.0% (Sr)	<1.0% (Sr)	<1.0% (Sr)
防护等级	IP67	IP67	IP67	IP67
工作环境温度	-25 °C ~ +70 °C			
温度漂移	<10% (Sr)	<10% (Sr)	<10% (Sr)	<10% (Sr)
短路保护	有	有	-	有
过载电流保护	220mA	220mA	5A (20ms)	2.2A (20ms)
检测对象	磁性金属	磁性金属	磁性金属	磁性金属
外壳材质	黄铜镀铬	黄铜镀铬	黄铜镀铬	黄铜镀铬



规格	X17×17×28	X40×40×53	X40×40×120	
安装方式	非齐平式	非齐平式	齐平式	非齐平式
检测距离	5mm	20mm	20mm	30mm
尺寸图 (mm): 接线图请 参见P2				
10~30DCV	2线NO	EI2X17BS05TOW2S	EI2X40BS20TOW2S	EI2X12BS20TOW2S
	2线NC	EI2X17BS05TCW2S	EI2X40BS20TCW2S	EI2X12BS30TCW2S
	3线PNP NO	EI2X17BS05POW2S	EI2X40BS20POW2S	EI2X12BS30POW2S
	3线PNP NC	EI2X17BS05PCW2S	EI2X40BS20PCW2S	EI2X12BS30PCW2S
	3线NPN NO	EI2X17BS05NOW2S	EI2X40BS20NOW2S	EI2X12BS30NOW2S
	3线NPN NC	EI2X17BS05NCW2S	EI2X40BS20NCW2S	EI2X12BS30NCW2S
	4线PNP NO+NC		EI2X40BS20PAW2S	EI2X12BS30PAW2S
	4线NPN NO+NC		EI2X40BS20NAW2S	EI2X12BS30NAW2S
10~60DCV	2线NO	EI3X17BS05TOW2S	EI3X40BS20TOW2S	EI3X12BS20TOW2S
	2线NC	EI3X17BS05TCW2S	EI3X40BS20TCW2S	EI3X12BS30TCW2S
	3线PNP NO	EI3X17BS05POW2S	EI3X40BS20POW2S	EI3X12BS30POW2S
	3线PNP NC	EI3X17BS05PCW2S	EI3X40BS20PCW2S	EI3X12BS30PCW2S
	3线NPN NO	EI3X17BS05NOW2S	EI3X40BS20NOW2S	EI3X12BS30NOW2S
	3线NPN NC	EI3X17BS05NCW2S	EI3X40BS20NCW2S	EI3X12BS30NCW2S
	4线PNP NO+NC		EI3X40BS20PAW2S	EI3X12BS30PAW2S
	4线NPN NO+NC		EI3X40BS20NAW2S	EI3X12BS30NAW2S
交流	2线NO	EI4X17BS05ROW2S	EI4X40BS20ROW2S	EI4X12BS30ROW2S
	2线NC	EI4X17BS05RCW2S	EI4X40BS20RCW2S	EI4X12BS30RCW2S
	2线NO+NC可调		EI4X40BS20PCW2S	EI4X12BS30PCW2S
交直 流	2线NO		EI5X40BS20GOW2S	EI5X12BS30GOW2S
	2线NC		EI5X40BS20GCW2S	EI5X12BS30GCW2S
	2线NO+NC可调		EI5X12BS20PCW2S	EI5X12BN30PCW2S

技术参数

工作电压	10~30VDC	10~60VDC	20~250VAC	20~250VAC/DC
涟波	<10%	<10%	-	-
无负载电流	<10mA	10mA	<1.8mA	<2.5mA
最大负载电流	200mA	200mA	400mA	100/200mA
漏电流	<0.01mA	<0.01mA	<1.8mA	<2.5mA
电压降	<1.5V	<1.5V	<8VAC AT 400mA	<10VAC/8VDC
开关频率	2K/1K/300/100HZ	2K/1K/300/100HZ	<25HZ	25HZ AC/40HZ DC
响应时间	0.1ms/0.1ms	0.1ms/0.1ms	10ms/10ms	10ms/10ms
开关磁滞	<15% (Sr)	<15% (Sr)	<15% (Sr)	<15% (Sr)
重复精度	<1.0% (Sr)	<1.0% (Sr)	<1.0% (Sr)	<1.0% (Sr)
防护等级	IP67	IP67	IP67	IP67
工作环境温度	-25 °C - +70 °C			
温度漂移	<10% (Sr)	<10% (Sr)	<10% (Sr)	<10% (Sr)
短路保护	有	有	-	有
过载电流保护	220mA	220mA	5A (20ms)	2.2A (20ms)
检测对象	磁性金属	磁性金属	磁性金属	磁性金属
外壳材质	ABS	ABS	ABS	ABS



规格	Q42	Q80	Q60×48	Q60×10
安装方式	非齐平式	非齐平式	非齐平式	非齐平式
检测距离	20mm	40mm	15mm	2mm
10~30DCV	尺寸图 (mm): 接线图请 参见P2			
	2线NO	EI2Q42BN20TOE3S	EI2Q80BN40TOW2S	EI2Q60BS15TOW2S
	2线NC	EI2Q42BN30TCE3S	EI2Q80BN40TCW2S	EI2Q60BS15TCW2S
	3线PNP NO	EI2Q42BN30POE3S	EI2Q80BN40POW2S	EI2Q60BS15POW2S
	3线PNP NC	EI2Q42BN30PCE3S	EI2Q80BN40PCW2S	EI2Q60BS15PCW2S
	3线NPN NO	EI2Q42BN30NOE3S	EI2Q80BN40NOW2S	EI2Q60BS15NOW2S
	3线NPN NC	EI2Q42BN30NCE3S	EI2Q80BN40NCW2S	EI2Q60BS15NCW2S
	4线PNP NO+NC	EI2Q42BN30PAE3S	EI2Q80BN40PAW2S	EI2Q60BS15PAW2S
10~60DCV	4线NPN NO+NC	EI2Q42BN30NAE3S	EI2Q80BN40NAW2S	EI2Q60BS15NAW2S
	2线NO	EI3Q42BN30TOE3S	EI3Q80BN40TOW2S	EI3Q60BS15TOW2S
	2线NC	EI3Q42BN30TCE3S	EI3Q80BN40TCW2S	EI3Q60BS15TCW2S
	3线PNP NO	EI3Q42BN30POE3S	EI3Q80BN40POW2S	EI3Q60BS15POW2S
	3线PNP NC	EI3Q42BN30PCE3S	EI3Q80BN40PCW2S	EI3Q60BS15PCW2S
	3线NPN NO	EI3Q42BN30NOE3S	EI3Q80BN40NOW2S	EI3Q60BS15NOW2S
	3线NPN NC	EI3Q42BN30NCE3S	EI3Q80BN40NCW2S	EI3Q60BS15NCW2S
	4线PNP NO+NC	EI3Q42BN30PAE3S	EI3Q80BN40PAW2S	EI3Q60BS15PAW2S
交流	4线NPN NO+NC	EI3Q42BN30NAE3S	EI3Q80BN40NAW2S	EI3Q60BS15NAW2S
	2线NO	EI4Q42BN30ROE3S	EI4Q80BN40ROW2S	
	2线NC	EI4Q42BN30RCE3S	EI4Q80BN40RCW2S	
直流	2线NO+NC可调			EI4Q10BS02PCE4S
	2线NO	EI5Q42BN30GOE3S	EI5Q80BN40GOW2S	
	2线NC	EI5Q42BN30GCE3S	EI5Q80BN40GCW2S	
	2线NO+NC可调			EI5Q10BS02PCE4S

技术参数

工作电压	10~30VDC	10~60VDC	20~250VAC	20~250VAC/DC
涟波	<10%	<10%	-	-
无负载电流	<10mA	10mA	<1.8mA	<2.5mA
最大负载电流	200mA	100mA	400mA	100/200mA
漏电流	<0.01mA	<0.01mA	<1.8mA	<2.5mA
电压降	<1.5V	<1.5V	<8VAC AT 400mA	<10VAC/8VDC
开关频率	2K/1K/300/100HZ	2K/1K/300/100HZ	<25HZ	25HZ AC/40HZ DC
响应时间	0.1ms/0.1ms	0.1ms/0.1ms	10ms/10ms	10ms/10ms
开关磁滞	<15% (Sr)	<15% (Sr)	<15% (Sr)	<15% (Sr)
重复精度	<1.0% (Sr)	<1.0% (Sr)	<1.0% (Sr)	<1.0% (Sr)
防护等级	IP67	IP67	IP67	IP67
工作环境温度	-25 °C - +70 °C			
温度漂移	<10% (Sr)	<10% (Sr)	<10% (Sr)	<10% (Sr)
短路保护	有	有	-	有
过载电流保护	220mA	220mA	5A (20ms)	2.2A (20ms)
检测对象	磁性金属	磁性金属	磁性金属	磁性金属
外壳材质	ABS	ABS	ABS	ABS