

接近开关型号说明 Model explanation of proximity switch

LM 18 - 30 05 N A □ / L
 1 2 3 4 5 6 7 8

开关类别 Switch category

Lm: 电感式 Inductance type
 Cm: 电容式 Capacitance type
 Sm: 霍尔式 Hall type
 Am: 安全防爆式 Safety Explosion-proof type
 Xm: 模拟线性式 Mimic Linear type
 Hm: 舌簧式 Reed type
 Ru: 超声波 Ultrasonic type

外形代号 Outward appearance code

□: 圆柱型 Cylinder type
 F□: 角柱型及平面安装型 Angular Column Type And Plane Installation Type

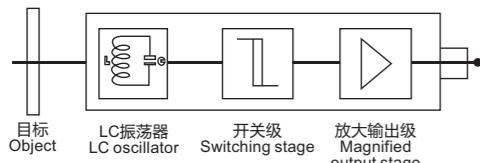
工作电压 Working voltage

30:6-36VDC 310:5-24VDC 320:12-60VDC 330:10-30VDC
 340:10-55VDC 350:10-60VDC 360:5-36VDC 20:90-250VAC
 210:24-250VAC 220:380VAC 40:12-240VDC/24-240AC
 50:特殊电压 Special voltage

检测距离 Detection distance

01:1mm 05:5mm 10:10mm

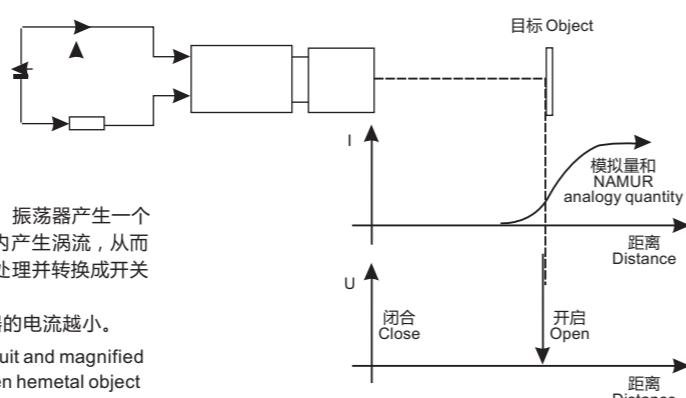
电感式接近开关工作原理 Working principle inductive proximity switch



电感式接近开关由三大部分组成：振荡器、开关电路及放大输出电路。振荡器产生一个交变磁场。当金属目标接近这一磁场，并达到感应距离时，在金属目标内产生涡流，从而导致振荡器衰减，以至停振。振荡器振荡及停振的变化被后级放大电路处理并转换成开关信号，触发驱动控制器件，从而达到非接触式之检测目的。

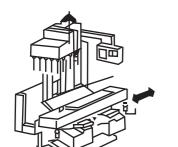
目标离传感器越近，线圈内的阻尼就越大，阻尼越大，传感器振荡器的电流越小。

Inductive proximity switch is composed of three parts: oscillator, switch circuit and magnified output circuit. The oscillator will generate an alternating electric field. When metal object approaches this electric field and reaches the induction distance, whirlpool will generate in metal object, resulting in attenuation of vibration and then stop. The change of vibration and stop of oscillator is treated by big stage magnified circuit and converted to switching signal, triggering driving contact detection.

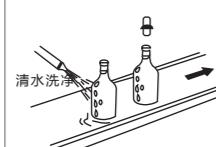


电感式接近开关的电流损耗，随着与金属目标距离的减小而减小。
 Current consumption of inductive proximity switch decreases proportional to the metal object distance.

接近开关应用图例 Application illustration of proximity switch



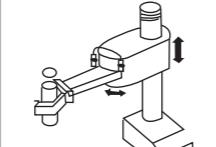
机加工中心的各种位置检测
Various location detection of machinery process center



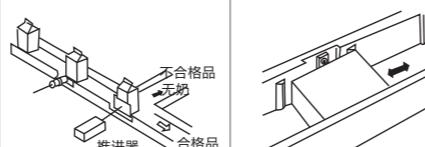
瓶盖检测
Bottle lid detection



磨床的挡块检测
Stopper detection of grinding machine



机器人手臂位置检测
Arm location detection of robot



检测纸包装内有无牛奶
Inspection of the existing of milk inside the paper package

限位检测
Spacing detection

接近开关的特性 Features of proximity switch

主要特性 Main features

以高频振荡型接近传感器(前面检测器)为代表例，概略说明接近传感器的一般特性。

Take high frequency oscillation type proximity sensor (front detector) as representative example to briefly explain features of proximity switch

项目/Item	说明/Explanation	特性/Features	◆ 关于检测物体 / About detected object												
检测物体的大小和检测距离 the size of detected object and detection distance	<p>检测物体为正方形金属板，厚度恒定($t=1\text{mm}$)，改变其边长$d\text{mm}$时的检测距离X进行测定。 If the detected object is square metal sheet with constant thickness($t=1\text{mm}$), detect at detection distance X when change its side length $d\text{mm}$.</p>	<ul style="list-style-type: none"> 检测物体为大于标准检测物体时，检测距离要下降。但厚度为大于0.01mm左右的箔材料时，会获得和磁性物体相同的检测距离，而镀膜等级其薄时及无导电性时，则不能检测。 根据机种的不同，有时和左边特性不同。 贯通型等，以圆柱状金属棒为检测物体。 镀层的影响检测物体具有镀层时，请注意其检测距离就变了。 	<ul style="list-style-type: none"> 检测物体的材料是非磁性金属时，动作的距离要下降。但厚度为大于0.01mm左右的箔材料时，会获得和磁性物体相同的检测距离，而镀膜等级其薄时及无导电性时，则不能检测。 When the material of detected object is non magnetic metal, the distance of action should decrease. But when the foil material is approximately thicker than 0.01mm, the detection distance will be the same as that of magnetic object. If the film plating is extremely thin or non-conductive, detection cannot be conducted. The effect of cladding material, when detected object has cladding material, take note of the changing of detection distance. 												
检测物体的厚度和检测距离 the thickness of detected object and detection distance	<p>测定改变指定的标准检测物体形状的厚1mm时的检测距离X_{mm}(前面检测型) Detect at detection distance X_{mm} (front detector) when change the thickness of the assigned standard detected object 1mm.</p>	<ul style="list-style-type: none"> 磁性金属(铁等)时，厚度在1mm以上时，检测距离基本上没有变化 For more than 1mm thick magnetic metal like iron, on the main, the detection distance will not change. 	<ul style="list-style-type: none"> 为保护动作的可靠和寿命长，请避免在有关规定以外的温度外界(户外)条件下使用，接近传感器虽为耐水结构，若装上罩使用，勿使水和水溶性切削油等淋到，则可更好地提高可靠性及寿命。还请避免在有化学药剂，特别是在强碱、酸、硝酸、铬酸、热浓硫酸等气候中使用。 In order to maintain reliable action and long service life, please avoid the (outdoor) occasion beyond the stipulated ambient temperature. Do not drench it with water-soluble cutting lubricant when it is used with cover, although the proximity sensor is waterproof. Do not use in the occasion with chemical agents, especially strong base, acid, nitric acid, hot strong sulfuric acid and so on. 												
检测物体材料和镀层等造成的影响 the effects resulted from the thickness of detected object and cladding material	<p>标准检测物体的由于形状、尺寸因具材料。或各种镀引起的影响，用检测距离X_{mm}的测定加以确认。 Because the detection to standard detected object will be effected by its shape, size, material, and various cladding material, confirm through detection distance X_{mm} measurement.</p> <table border="1"> <tr> <th>材料 Material</th> <th>检测距离 Detection distance</th> </tr> <tr> <td>铁 Iron</td> <td>100%</td> </tr> <tr> <td>不锈钢 Stainless steel</td> <td>60%</td> </tr> <tr> <td>黄铜 Brass</td> <td>约40%</td> </tr> <tr> <td>铝 Aluminum</td> <td>约30%</td> </tr> <tr> <td>铜 Copper</td> <td>约28%</td> </tr> </table>	材料 Material	检测距离 Detection distance	铁 Iron	100%	不锈钢 Stainless steel	60%	黄铜 Brass	约40%	铝 Aluminum	约30%	铜 Copper	约28%	<ul style="list-style-type: none"> 铁以外的金属造成的检测距离及镀层的影响，根据不同的机种而不同。 检测所有金属的机种时，基本上不受镀层的影响。 The effects resulted from detection distance and cladding material of the metal excluded iron will be different according to different machine type. On the main, the machine type which detects all the metals will not be effected by cladding material. 	<ul style="list-style-type: none"> 为使接近传感器长期稳定工作，和一般的控制器一样请实行下列定期检查。 1.被测物体及接近传感器的安装位置，偏移、松动，变形的有无。 2.配线，连接部位有无松动，接触，不良，断线。 3.有无附着金属粉末等积物。 4.使用温度条件，周围环境条件有无异常。 5.检查距离有无异常。
材料 Material	检测距离 Detection distance														
铁 Iron	100%														
不锈钢 Stainless steel	60%														
黄铜 Brass	约40%														
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铜 Copper	约28%														

技术用词的说明 EXPLANATION OF TECHNICAL TERMS

检测距离 Detection distance	设定距离 Setting distance	标准检测物体 Standard detected object
按指定方法移动检测物体，从基准位置(基准面到测定动作复位)的距离 Move the detected object according to assigned method, the distance from the reference position (reference plane) to the detecting action(resetting)	包括温度、电压影响在内，没有误动作从能实用的检测面到检测物体通过位置的距离。 Including the effects like temperature and voltage, without erroraction, the distance passed through from the practical detection surface to the objected object.	为测定基本性能作为标准的检测物体，形状尺寸、材料已决定的 Take as standard detected object to detect the basic performance. The shape, size and material have been determined.
差动距离 Differential distance	响应时间 Response time	响应效率 Response frequency
到动作的距离和到复位的距离之差的绝对值。 The absolute value of the distance difference between the distance to action and the distance to resetting	T1: 检测物体进入动作区内，从接近传感器成为动作状态到出现输出的时间。 T2: 从离开动作区到输出消失为止的时间。 T1: When the objected object enters the action zone, the time from proximity sensor being in action state to output appearance. T2: The time from leaving action zone to output disappearance.	反复接近检测物体时，能得出跟踪它的输出每秒次数。测定方法概略如上图。 Work out the tracking output times per second repeatedly approaching the detected object, Brief detection method sees the above diagram.

串联、并联 SERIES CONNECTION AND PARALLEL CONNECTION

★ 三线电流与三线直流传感器的串联 Series connection of three-wire DC and three-wire DC sensor	★ 三线电流与三线直流传感器的并联 Parallel connection of three-wire DC and three-wire DC sensor	★ 两线交流传感的串联 Series connection of two-wire AC sensor
◆ 两线交流传感的并联 Parallel connection of two-wire AC sensor	◆ 机械开关与交流传感的串联 Series connection of machinery switch and AC sensor	◆ 机械开关与交流传感的并联 Parallel connection of machinery switch and AC sensor

主要特征 Main features

- ① 体积小 Compact volume
- ② 重复定位精度高 High precision of repeated location
- ③ 外形结构多样 Diversified exterior structures
- ④ 抗干扰性能好 Good performance of anti-interference
- ⑤ 输出形式多 Many output forms
- ⑥ 开关频率高 High on-off frequency
- ⑦ 电压范围宽 Wide voltage range
- ⑧ 防尘、防震、防水、防油 Dustproof, vibration proof, water proof and oil proof
- ⑨ 具备短路保护, 反连接保护 With short-circuit protection and inverted connecting protection
- ⑩ 使用寿命长 Long service life

正确使用和安装及注意事项 Correct use, installation and cautions

<ul style="list-style-type: none"> ④ 螺纹式开关的安装 Mounting screw switch ④ 安装开关时不可采用过大力矩紧固，紧固时请务必采用齿垫圈 Do not tighten with over-torque when mounting the switch, Adopt toothed washer then tightening 	<ul style="list-style-type: none"> ④ 无螺纹式柱型开关的安装 Mounting non screw type pillar switch ④ 采用调节螺钉时，紧固力矩请用2-4kgf-cm以下安装 When adopt adjusting screw, the tightening torque should be within 2-4kgf-cm. 	<ul style="list-style-type: none"> ④ 防止非检测物体的干扰 Protection against the interference of non detected object ④ 在金属上按装接近开关时，请务必参照下图，所示预留一定空间，以避免开关产生误动作 When mounting the proximity switch in the metal part, do refer to the following diagram. Remain a certain space in advance according to the shown diagram so as to prevent the switch from error action

正确使用和安装及注意事项 Correct use, installation and cautions

<ul style="list-style-type: none"> ④ 螺纹式开关的安装 Mounting screw switch ④ 安装开关时不可采用过大力矩紧固，紧固时请务必采用齿垫圈 Do not tighten with over-torque when mounting the switch, Adopt toothed washer then tightening 	<ul style="list-style-type: none"> ④ 开关动作距离(灵敏度)可调节 Adjustable switch actiondistance (sensitivity) ④ 接近开关可通过微调电位器调节动作距离(灵敏度)。顺时针动作距离增大(灵敏度减低)，逆时针，切忌在动作距离最大临界状态下使用 The action distance (sensitivity) of proximity switch can be adjusted by the means of trimming potentiometer, increase the action distance and reduce sensitivity when turnclockwise, vice versa. Do not use in the critical state of max. Action distance. 	<ul style="list-style-type: none"> ④ 开关引线的防护 Guard of switch lead-wire ④ 按装开关时，请将离开开关10cm左右引线位置用线夹固定，防止开关引线受外力的作用损坏。 When mount switch, fix the lead-wire at a distance apit 10cm from the switch with wire clip so as to prevent the switch lead wire from damage from outer force.

注意事项 Cautions

- ④ 直流开关应使用绝缘变压器，并确保稳压电源纹波。
- ④ 如有电力线动力线通过开关引线周围时，防止开关损坏或误动作，将金属管套在开关引线上并接地。
- ④ 开关使用距离请设定在额定距离以内，以免受温度和电压影响。
- ④ 严禁通电接线，应严格按照接线图输出回路原理图接线。
- ④ 用户如需要防水、防油、耐酸、碱、耐高温开关等特殊要求或其他规格应在订货时说明，并给予定做。
- ④ DC switch should adopt insulation transformer and ensure stable voltage mains corrugation.
- ④ If any electric power line or dynamic line passes through the surrounding of switch lead-wire, in order to prevent the switch from damage or error action, cover the metal bushing on the switch lead-wire and ground it to the earth.
- ④ Set the switch use distance within the rated distance to avoid the effects from temperature and voltage.
- ④ Wiring while power-on is strictly prohibited. connecting the wires strictly according to the wiring diagram and output return elementary diagram.
- ④ If there are any special requirements to the switch like water proof, oil proof, acid proof, base proof, high temperature proof of with any other specifications, the users are required to give clear indication when placing an order. we can produce according to the requirements of the user.

结构分类 Structural category		圆柱型 Cylinder type	接插件型 Connector type		
外形编号 Outward Appearance code		LM8-□□T / LM8-□□T3	LM12-□T / LM12-□T3	LM18-□T	
外形图例	Outward appearance illustration				
外形尺寸	Overall dimensions				
检测距离 DETECTION DISTANCE		1mm	2mm	5mm	
埋入式 Flush	NPN 直流 DC 10-30 VDC	NO	LM8-3001NAT	LM12-3002NAT	LM18-3005NAT
		NC	LM8-3001NBT	LM12-3002NBT	LM18-3005NBT
		NO+NC		LM12-3002NCT	LM18-3005NCT
		NO	LM8-3001PAT	LM12-3002PAT	LM18-3005PAT
		NC	LM8-3001PBT	LM12-3002PBT	LM18-3005PBT
	PNP 交流 AC 90-250 VAC 可控硅 SCR Controlable silicon	NO+NC		LM12-3002PCT	LM18-3005PCT
		NO	LM8-3001LAT	LM12-3002LAT	LM18-3005LAT
		NC	LM8-3001LBT	LM12-3002LBT	LM18-3005LBT
		NO		LM12-2002AT	LM18-2005AT
		NC		LM12-2002BT	LM18-2005BT
继电器输出 Relay output					
非埋入式 Non-Flush	NPN 直流 DC 10-30 VDC	检测距离 DETECTION DISTANCE	2mm	4mm	
		NO	LM8-3002NAT	LM12-3004NAT	LM18-3008NAT
		NC	LM8-3002NBT	LM12-3004NBT	LM18-3008NBT
		NO+NC		LM12-3004NCT	LM18-3008NCT
		NO	LM8-3002PAT	LM12-3004PAT	LM18-3008PAT
		NC	LM8-3002PBT	LM12-3004PBT	LM18-3008PBT
		NO+NC		LM12-3004PCT	LM18-3008PCT
		NO	LM8-3002LAT	LM12-3004LAT	LM18-3008LAT
		NC	LM8-3002LBT	LM12-3004LBT	LM18-3008LBT
		NO	LM8-2002AT	LM12-2004AT	LM18-2008AT
	PNP 交流 AC 90-250 VAC 可控硅 SCR Controlable silicon	NC		LM12-2004BT	LM18-2008BT
		NO+NC			
继电器输出 Relay output					
输出电流 Control output	DC	150mA	200mA	300mA	
	SCR/继电器 Relay				
输出电压降 Output voltage drop DC/AC		直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V			
消耗电流 Consumption current		直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA			
标准检测物体 Standard detected object		8×8×1(A3铁iron)	12×12×1(A3铁iron)	18×18×1(A3铁iron)	
重复精度 Repeated precision		0.01	0.01	0.02	
响应频率 DC/AC		500Hz/10Hz	400Hz/10Hz	200Hz/10Hz	
工作环境温度 Working environment temperature		-25°C~+70°C	-25°C~+70°C	-25°C~+70°C	
绝缘电阻 Insulation resistance		50MΩ	50MΩ	50MΩ	
外壳材料 Shell material		金属 Metal	金属 Metal	金属 Metal	
防护等级 Protection grade		IP67	IP67	IP67	
可替代国内型号 Alyematic model at home and abroad		E2E-X1R5-M1	E2E-X2E1-M1	E2E-X5E5-M1	

结构分类 Structural category		圆柱型 Cylinder type				
外形编号 Outward Appearance code		LM4/LM5	LM6	LM06	LM8	
外形图例	Outward appearance illustration					
外形尺寸	Overall dimensions					
检测距离 DETECTION DISTANCE		0.8mm/1mm	1mm	1mm	1mm	
埋入式 Flush	NPN 直流 DC 10-30 VDC	NO	LM4-300.8NA/LM5-3001NA	LM6-3001NA	LM06-3001NA	LM8-3001NA
		NC		LM6-3001NB		LM8-3001NB
		NO+NC				LM8-3001NC
		NO	LM4-300.8PA/LM5-3001PA	LM6-3001PA	LM06-3001PA	LM8-3001PA
		NC		LM6-3001PB		LM8-3001PB
	PNP 交流 AC 90-250 VAC 可控硅 SCR Controlable silicon	NO+NC				LM8-3001PC
		NO		LM6-3001LA		LM8-3001LA
		NC		LM6-3001LB		LM8-2001LB
		NO		LM6-2001A		LM8-2001A
		NC		LM6-2001B		LM8-2001B
继电器输出 Relay output						
非埋入式 Non-Flush	NPN 直流 DC 10-30 VDC	检测距离 DETECTION DISTANCE	1.5mm	2mm		
		NO		LM6-3002NA		LM8-3002NA
		NC		LM6-3002NB		LM8-3002NB
		NO+NC				
		NO		LM6-3002PA		LM8-3002PA
	PNP 交流 AC 90-250 VAC 可控硅 SCR Controlable silicon	NC		LM6-3002PB		LM8-3002PB
		NO+NC				
		NO		LM6-3002LA		LM8-3002LA
		NC		LM6-3002LB		LM8-3002LB
		NO		LM6-2002A		LM8-2002A
	Non-Flush 交流 AC 90-250 VAC 可控硅 SCR Controlable silicon	NC		LM6-2002B		LM8-2002B
		NO+NC				
继电器输出 Relay output						
输出电流 Control output	DC	200mA	200mA	200mA	200mA	
	SCR/继电器 Relay					
输出电压降 Output voltage drop DC/AC		直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V				
消耗电流 Consumption current		直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA				
标准检测物体 Standard detected object		6×6×1(A3铁iron)	8×8×1(A3铁iron)	8×8×1(A3铁iron)	8×8×1(A3铁iron)	
重复精度 Repeated precision		0.01	0.01	0.01	0.01	
响应频率 DC/AC		500Hz	500Hz	500Hz	500Hz/25Hz	
工作环境温度 Workong environment temperature		-25°C~+70°C	-25°C~+75°C	-25°C~+70°C	-25°C~+75°C	
绝缘电阻 Insulation resistance		50MΩ	≥30MΩ	50MΩ	≥50MΩ	
外壳材料 Shell material		金属 Metal	不锈钢 Stainless steel	金属 Metal	金属 Metal	
防护等级 Protection grade		IP67	IP67	IP67	IP67	
可替代国内型号 Alyematic model at home and abroad		E2E-X1R5-M1			E2E-X1R5-M1	

结构分类 Structural category		圆柱型 Cylinder type			
外形编号 Outward Appearance code		LM12	LM14	LM18	LM20
外形图例 Outward appearance illustration		(Black)	(Blue)	(Silver)	(Yellow)
外形尺寸 Overall dimensions					
检测距离 DETECTION DISTANCE		2mm	3mm	5mm	
埋入式 Flush	NPN DC 10-30 VDC	NO LM12-3002NA	LM14-3003NA	LM18-3005NA	
	NC LM12-3002NB	LM14-3003NB	LM18-3005NB		
	NO+NC LM12-3002NC	LM14-3003NC	LM18-3005NC		
	NO LM12-3002PA	LM14-3003PA	LM18-3005PA		
	NC LM12-3002PB	LM14-3003PB	LM18-3005PB		
	NO+NC LM12-3002PC	LM14-3003PC	LM18-3005PC		
	NO LM12-3002LA	LM14-3003LA	LM18-3005LA		
	NC LM12-2002LB	LM14-2003LB	LM18-3005LB		
	NO LM12-2002A	LM14-2003A	LM18-2005A		
	NC LM12-2002B	LM14-2003B	LM18-2005B		
继电器输出 Relay output				LM18-2005C	
检测距离 DETECTION DISTANCE		4mm	5mm	8mm	10mm
非埋入式 Non-Flush	NPN DC 10-30 VDC	NO LM12-3004NA	LM14-3005NA	LM18-3008NA	LM20-3010NA
	NC LM12-3004NB	LM14-3005NB	LM18-3008NB	LM20-3010NB	
	NO+NC LM12-3004NC	LM14-3005NC	LM18-3008NC	LM20-3010NC	
	NO LM12-3004PA	LM14-3005PA	LM18-3008PA	LM20-3010PA	
	NC LM12-3004PB	LM14-3005PB	LM18-3008PB	LM20-3010PB	
	NO+NC LM12-3004PC	LM14-3005PC	LM18-3008PC	LM20-3010PC	
	NO LM12-3004LA	LM14-3005LA	LM18-3008LA	LM20-3010LA	
	NC LM12-3004LB	LM14-3005LB	LM18-2008LB	LM20-3010LB	
	NO LM12-2004A	LM14-2005A	LM18-2008A	LM20-2010A	
	NC LM12-2004B	LM14-2005B	LM18-2008B	LM20-2010B	
继电器输出 Relay output			LM18-2008C	LM20-2010C	
输出电流 Control output		DC 200mA	200mA	200mA	200mA
SCR/继电器 Relay		300mA	300mA	300mA	300mA/1A
输出电压降 Output voltage drop DC/AC					
直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V					
消耗电流 Consumption current					
直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA					
标准检测物体 Standard detected object		15×15×1(A3铁iron)	15×15×1(A3铁iron)	18×18×1(A3铁iron)	20×20×1(A3铁iron)
重复精度 Repeated precision		0.01	0.02	0.02	0.05
响应频率 DC/AC		400Hz/25Hz	300Hz/25Hz	200Hz/25Hz	200Hz/25Hz
工作环境温度 Working environment temperature		-25°C~+75°C	-25°C~+75°C	-25°C~+75°C	-25°C~+75°C
绝缘电阻 Insulation resistance		≥50MΩ	≥50MΩ	50MΩ	50MΩ
外壳材料 Shell material		金属 Metal	金属 Metal	金属 Metal	ABS树脂 Resin
防护等级 Protection grade		IP67	IP67	IP67	IP67
可替代国内型号 Alyematic model at home and abroad		E2E-X5□□	LJ14A3-□□	LJ18A3-8-□□	

接近开关 PROXIMITY SWITCH				
圆柱型 Cylinder type				
LM24	LM30	LM34	LM35	LM38
(Black)	(Blue)	(Yellow)	(Blue)	(Yellow)
8mm	10mm	12mm		
LM24-3008NA	LM30-3010NA			LM38-3012NA
LM24-3008NB	LM30-3010NB			LM38-3012NB
LM24-3008NC	LM30-3010NC			LM38-3012NC
LM24-3008PA	LM30-3010PA			LM38-3012PA
LM24-3008PB	LM30-3010PB			LM38-3012PB
LM24-3008PC	LM30-3010PC			LM38-3012PC
LM24-3008LA	LM30-3010LA			LM38-3012LA
LM24-3008LB	LM30-3010LB			LM38-3012LB
LM24-2008A	LM30-2010A			LM38-2012A
LM24-2008B	LM30-2010B			LM38-2012B
LM24-2008C	LM30-2010C			LM38-2012C
LM30-2010JC				
10mm	15mm	17mm	17mm	18mm
LM24-3010NA	LM30-3015NA	LM34-3017NA	LM35-3017NA	LM38-3018NA
LM24-3010NB	LM30-3015NB	LM34-3017NB	LM35-3017NB	LM38-3018NB
LM24-3010NC	LM30-3015NC	LM34-3017NC	LM35-3017NC	LM38-3018NC
LM24-3010PA	LM30-3015PA	LM34-3017PA	LM35-3017PA	LM38-3018PA
LM24-3010PB	LM30-3015PB	LM34-3017PB	LM35-3017PB	LM38-3018PB
LM24-3010PC	LM30-3015PC	LM34-3017PC	LM35-3017PC	LM38-3018PC
LM24-3010LA	LM30-3015LA	LM34-3017LA	LM35-3017LA	LM38-3018LA
LM24-3010LB	LM30-3015LB	LM34-3017LB	LM35-3017LB	LM38-3018LB
LM24-2010A	LM30-2015A	LM34-2017A	LM35-2017A	LM38-2018A
LM24-2010B	LM30-2015B	LM34-2017B	LM35-2017B	LM38-2018B
LM24-2010C	LM30-2015C	LM34-2017C	LM35-2017C	LM38-2018C
LM30-2015JC	LM34-2017JC	LM35-2017JC	LM38-2018JC	
200mA	200mA	200mA	200mA	200mA
300mA	300mA/1A			
直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V				
直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA				
24×24×1(A3铁iron)	30×30×1(A3铁iron)	34×34×1(A3铁iron)	40×40×1(A3铁iron)	40×40×1(A3铁iron)
0.05	0.05		0.1	
200Hz/25Hz	200Hz/25Hz		100Hz/15Hz	
-25°C~+75°C	-25°C~+75°C		-25°C~+75°C	
50MΩ	50MΩ		50MΩ	
金属 Metal	金属 Metal	ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin
IP67	IP67		IP67	
LJ24A3-10-□□	E2E-X18M□			LJ38A4-18-□□

结构分类 Structural category		圆柱型 Cylinder type				
外形编号 Outward Appearance code		LM39	LM40	LM480	LM36	
外形图例 Outward appearance illustration						
外形尺寸 Overall dimensions						
检测距离 DETECTION DISTANCE		15mm	20mm	25mm	15mm	
埋入式 Flush	NPN	NO	LM39-3015NA	LM40-3020NA	LM480-3025NA	LM36-3015NA
	DC 10-30 VDC	NC	LM39-3015NB	LM40-3020NB	LM480-3025NB	LM36-3015NB
	PNP	NO+NC	LM39-3015NC	LM40-3020NC	LM480-3025NC	LM36-3015NC
	NO	LM39-3015PA	LM40-3002PA	LM480-3025PA	LM36-3015PA	
	NC	LM39-3015PB	LM40-3002PB	LM480-3025PB	LM36-3015PB	
	NO+NC	LM39-3015PC	LM40-3020PC	LM480-3025PC	LM36-3015PC	
	二线制 two wire system	NO	LM39-3015LA	LM40-3002LA	LM480-3025LA	LM36-3015LA
	AC 90-250 VAC	NC	LM39-3015LB	LM40-3002LB	LM480-3025LB	LM36-2015LB
	SCR 可控硅 Controlable silicon	NO	LM39-2015A	LM40-2002A	LM480-2025A	LM36-2015A
	NC	LM39-2015B	LM40-2020B	LM480-2025B	LM36-2015B	
	NO+NC	LM39-2015C	LM40-2020C	LM480-2025C		
继电器输出 Relay output			LM40-2020JC			
输出电流 Control output		DC	200mA	200mA	200mA	
SCR/继电器 Relay			300mA/1A	300mA/1A	300mA	
输出电压降 Output voltage drop DC/AC						
直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V						
消耗电流 Consumption current						
直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA						
标准检测物体 Standard detected object		45×45×1(A3铁iron)	45×45×1(A3铁iron)	50×50×1(A3铁iron)	45×45×1(A3铁iron)	
重复精度 Repeated precision		0.1		0.05		
响应频率 DC/AC		100Hz/25Hz		200Hz/10Hz		
工作环境温度 Working environment temperature		-25°C~+75°C				
绝缘电阻 Insulation resistance		50MΩ				
外壳材料 Shell material		金属 Metal	金属 Metal	金属 Metal	ABS树脂 Resin	
防护等级 Protection grade			IP67			
可替代国内型号 Alyematic model at home and abroad		SC-□□	SC-□□	SFE-□□		

平面安装型 Plane installation type		角柱型 Angular column type		
LM42	LM48	LM55	LMF1	LMF2
5mm	5mm	5mm	5mm	5mm
LMF1-3005NA	LMF2-3005NA	LMF1-3005NB	LMF2-3005NB	LMF1-3005PA
LMF1-3005PB	LMF2-3005PB	LMF1-3005LA	LMF2-3005LA	LMF1-3005LB
LMF2-3005LB				
LM42-3020NA	LM48-3020NA	LM55-3025NA		
LM42-3020NB	LM48-3020NB	LM55-3025NB		
LM42-3020NC	LM48-3020NC	LM55-3025NC		
LM42-3020PA	LM48-3020PA	LM55-3025PA		
LM42-3020PB	LM48-3020PB	LM55-3025PB		
LM42-3020PC	LM48-3020PC	LM55-3025PC		
LM42-3020LA	LM48-3020LA	LM55-3025LA		
LM42-2020LB	LM48-2020LB	LM55-2025LB		
LM42-2020A	LM48-2020A	LM55-2025A	LMF1-2005A	LMF2-2005A
LM42-2020B	LM48-2020B	LM55-2025B	LMF1-2005B	LMF2-2005B
LM48-2020C	LM55-2025C	LM55-2025JC		
200mA	200mA	200mA	200mA	200mA
300mA	300mA	300mA	300mA	300mA
直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V				
直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA				
25×25×1(A3铁iron)	60×60×1(A3铁iron)	55×55×1(A3铁iron)	20×20×1(A3铁iron)	20×20×1(A3铁iron)
0.2	0.2	0.2	0.02	0.02
200Hz/10Hz	200Hz/10Hz	200Hz/10Hz	400Hz/25Hz	400Hz/25Hz
-25°C~+75°C	-25°C~+75°C	-25°C~+75°C	-25°C~+75°C	-25°C~+75°C
50MΩ	50MΩ	50MΩ	50MΩ	50MΩ
ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin
IP67	IP67	IP67	IP67	IP67
SD-□□	SE-□□	SE-□□	SN04-N	TL-Q5MC1

结构分类 Structural category		角柱型 Angular column type			
外形编号 Outward Appearance code		LMF3	LMF4	LMF5	LMF6
外形图例 Outward appearance illustration		(Green)	(Red)	(Yellow)	(Yellow)
外形尺寸 Overall dimensions					
检测距离 DETECTION DISTANCE		5mm	5mm	2mm	8mm
埋入式 Flush	NPN DC 10-30 VDC	NO LMF3-3005NA	NC LMF4-3005NA	LMF5-3002NA	LMF6-3008NA
	NO+NC PNP	LMF3-3005NB	LMF4-3005NB	LMF5-3002NB	LMF6-3008NB
	NO PNP	LMF3-3005PA	LMF4-3005PA	LMF5-3002PA	LMF6-3008PA
	NC PNP	LMF3-3005PB	LMF4-3005PB	LMF5-3002PB	LMF6-3008PB
	NO+NC PNP	LMF3-3005PC	LMF4-3005PC	LMF5-3002PC	LMF6-3008PC
	二线制 two wire system AC 90-250 VAC	NO LMF3-3005LA	LMF4-3005LA	LMF5-3002LA	LMF6-3008LA
	NC SCR 可控硅 Controlable silicon	LMF3-3005LB	LMF4-3005LB	LMF5-3002LB	LMF6-3008LB
	NO NO+NC 继电器输出 Relay output	LMF3-3008A	LMF4-3008B	LMF5-2008A	LMF6-2008B
	NO NC NO+NC 继电器输出 Relay output	LMF3-3004NA	LMF4-3004NB	LMF5-3004NC	LMF6-3010NA
	NO NC NO+NC 继电器输出 Relay output	LMF5-3004PA	LMF6-3010PA	LMF5-3004PB	LMF6-3010PB
非埋入式 Non-Flush	NPN DC 10-30 VDC	LMF5-3004PC	LMF6-3010PC	LMF5-3004LA	LMF6-3010LA
	NO PNP	LMF5-3004LB	LMF6-3010LB	LMF5-3004LA	LMF6-3010LB
	NO PNP	LMF3-2005A	LMF4-2010A	LMF5-2005B	LMF6-2010B
	NC PNP	LMF3-2005B	LMF4-2010B	NO+NC	LMF6-2010C
	NO NO+NC 继电器输出 Relay output	LMF6-2010A	LMF6-2015A	LMF6-2010B	LMF6-2015B
	NO NC NO+NC 继电器输出 Relay output	LMF6-2010C	LMF6-2015C	LMF6-2010C	LMF6-2015C
	DC SCR/继电器 Relay	200mA	200mA	200mA	200mA
	DC SCR/继电器 Relay	300mA/1A	300mA	300mA	300mA
	输出电压降 Output voltage drop DC/AC	直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V			
	消耗电流 Consumption current	直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA			
标准检测物体 Standard detected object	20×20×1(A3铁iron)	20×20×1(A3铁iron)	15×15×1(A3铁iron)	30×30×1(A3铁iron)	
重复精度 Repeated precision	0.02	0.03	0.03	0.05	
响应频率 DC/AC	400Hz/25Hz	300Hz	400Hz	200Hz/10Hz	
工作环境温度 Working environment temperature	-25°C~+75°C	-25°C~+75°C		-25°C~+75°C	
绝缘电阻 Insulation resistance	50MΩ	50MΩ		50MΩ	
外壳材料 Shell material	ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin	
防护等级 Protection grade	IP67	IP67		IP67	
可替代国内型号 Alyematic model at home and abroad	PS17-5PN	PS05-N、PS05-P		TL-N5ME□□	

角柱型 Angular column type				
LMF7	LMF8	LMF10	LMF11	LMF12
(Yellow)	(Yellow)	(Yellow)	(Red)	(Green)
10mm	10mm	15mm	5mm	
LMF7-3010NA	LMF8-3010NA	LMF10-3015NA	LMF11-3005NA	
LMF7-3010NB	LMF8-3010NB	LMF10-3015NB	LMF11-3005NB	
LMF8-3010NC	LMF10-3015NC	LMF11-3005NC		
LMF7-3010PA	LMF8-3010PA	LMF10-3015PA	LMF11-3005PA	
LMF7-3010PB	LMF8-3010PB	LMF10-3015PB	LMF11-3005PB	
LMF8-3010PC	LMF10-3015PC	LMF11-3005PC		
LMF7-3010LA	LMF8-3010LA	LMF10-3015LA	LMF11-3005LA	
LMF7-3010LB	LMF8-3010LB	LMF10-3015LB	LMF11-3005LB	
LMF7-2010A	LMF8-2010A	LMF10-2015A		
LMF7-2010B	LMF8-2010B	LMF10-2015B		
LMF7-2010C	LMF8-2010C	LMF10-2015C		
15mm	15mm	20mm	8mm	
LMF7-3015NA	LMF8-3015NA	LMF10-3020NA		LMF12-3008NA
LMF7-3015NB	LMF8-3015NB	LMF10-3020NB		LMF12-3008NB
LMF7-3015NC	LMF8-3015NC	LMF10-3020NC		LMF12-3008NC
LMF7-3015PA	LMF8-3015PA	LMF10-3020PA		LMF12-3008PA
LMF7-3015PB	LMF8-3015PB	LMF10-3020PB		LMF12-3008PB
LMF7-3015PC	LMF8-3015PC	LMF10-3020PC		LMF12-3008PC
LMF7-3015LA	LMF8-3015LA	LMF10-3020LA		LMF12-3008LA
LMF7-3015LB	LMF8-3015LB	LMF10-3020LB		LMF12-3008LB
LMF7-2015A	LMF8-2015A	LMF10-2020A		LMF12-2008A
LMF7-2015B	LMF8-2015B	LMF10-2020B		LMF12-2008B
LMF7-2015C	LMF8-2015C	LMF10-2020C		LMF12-2008C
200mA	200mA	200mA	200mA	200mA
300mA	300mA	500mA	500mA	500mA
直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V				
直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA				
35×35×1(A3铁iron)	40×40×1(A3铁iron)	45×45×1(A3铁iron)	20×20×1(A3铁iron)	25×25×1(A3铁iron)
0.05	0.05	0.05	0.05	0.04
200Hz/15Hz	200Hz/15Hz	100Hz/15Hz	500Hz	200Hz/15Hz
-25°C~+75°C	-25°C~+75°C	-25°C~+70°C	-25°C~+70°C	-25°C~+70°C
50MΩ	50MΩ	50MΩ	50MΩ	50MΩ
ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin
IP67	IP67	IP67	IP67	IP67
TL-N10M		TL-N20M□	PL-05N PL-05P	LJ1A-24

结构分类 Structural category		角柱型 Angular column type			
外形编号 Outward Appearance code		LMF13	LMF14	LMF15	LMF16
外形图例 Outward appearance illustration		(Green)	(Yellow)	(White)	(White)
外形尺寸 Overall dimensions					
		检测距离 DETECTION DISTANCE			
埋入式 Flush	NPN DC 10-30 VDC	NO			LMF15-3002NA
		NC			LMF15-3002NB
		NO+NC			LMF15-3002NC
		NO			LMF15-3002PA
		NC			LMF15-3002PB
	PNP AC 90-250 VAC	NO+NC			LMF15-3002PC
		NO			LMF15-3002LA
		NC			LMF15-3002LB
		NO			LMF15-2002A
		NC			LMF15-2002B
非埋入式 Non-Flush	NPN DC 10-30 VDC	NO+NC			
		继电器输出 Relay output			
		检测距离 DETECTION DISTANCE			
		8mm	5mm	4mm	15mm
		LMF13-3008NA	LMF14-3005NA	LMF15-3004NA	LMF16-3015NA
		NC	LMF13-3008NB	LMF14-3005NB	LMF15-3004NB
		NO+NC	LMF13-3008NC	LMF14-3005NC	LMF15-3004NC
		NO	LMF13-3008PA	LMF14-3005PA	LMF15-3015PA
		NC	LMF13-3008PB	LMF14-3005PB	LMF15-3004PB
		NO+NC	LMF13-3008PC	LMF14-3005PC	LMF15-3004PC
	PNP AC 90-250 VAC	NO	LMF13-3008LA	LMF14-3005LA	LMF15-3015LA
		NC	LMF13-3008LB	LMF14-3005LB	LMF15-3004LB
		NO	LMF13-2008A	LMF14-2005A	LMF15-2004A
		NC	LMF13-2008B	LMF14-2005B	LMF15-2004B
		NO+NC			LMF16-2015C
输出电流 Control output	DC	200mA	200mA	200mA	200mA
	SCR/继电器 Relay		300mA/1A		300mA
输出电压降 Output voltage drop DC/AC					
直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V					
消耗电流 Consumption current					
直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA					
标准检测物体 Standard detected object	25×25×1(A3铁iron)	18×18×1(A3铁iron)	15×15×1(A3铁iron)	45×45×1(A3铁iron)	
重复精度 Repeated precision	0.04	0.05	0.02	0.05	
响应频率 DC/AC	200Hz/15Hz	500Hz/10Hz		100Hz/Hz	
工作环境温度 Working environment temperature	-25°C~+70°C	-25°C~+70°C			
绝缘电阻 Insulation resistance	50MΩ	50MΩ			
外壳材料 Shell material	ABS树脂 Resin	ABS塑料 Plastil			
防护等级 Protection grade	IP67	IP67			
可替代国内型号 Alyemative model at home and abroad	LJD-□□		ST-F-□	LJ2-□□/□□□	

角柱型 Angular column type		平面安装型 Plane installation type			
LMF17		LMF21	LMF22	LMF23	LMF24
(Green)	(Yellow)	(Yellow)	(Orange)	(Blue)	
4mm	2mm	4mm	2mm	4mm	
LMF17-3020NA	LMF21-3004NA	LMF22-3004NA	LMF23-3005NA	LMF24-3005NA	
LMF17-3020NB	LMF21-3004NB	LMF22-3004NB	LMF23-3005NB	LMF24-3005NB	
LMF17-3020NC	LMF21-3004NC	LMF22-3004NC	LMF23-3005NC	LMF24-3005NC	
LMF17-3020PA	LMF21-3004PA	LMF22-3004PA	LMF23-3005PA	LMF24-3005PA	
LMF17-3020PB	LMF21-3004PB	LMF22-3004PB	LMF23-3005PB	LMF24-3005PB	
LMF17-3020PC	LMF21-3004PC	LMF22-3004PC	LMF23-3005PC	LMF24-3005PC	
LMF17-3020LA	LMF21-3004LA	LMF22-3004LA	LMF23-3005LA	LMF24-3005LA	
LMF17-3020LB	LMF21-3004LB	LMF22-3004LB	LMF23-3005LB	LMF24-3005LB	
LMF17-2020A					
LMF17-2020B					
LMF17-2020C					
LMF17-2020JC					
200mA	200mA	200mA	200mA	200mA	
直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V	直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V				
直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA	直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA				
50×50×1(A3铁iron)	12×12×1(A3铁iron)	15×15×1(A3铁iron)	20×20×1(A3铁iron)	12×12×1(A3铁iron)	
0.2	0.01	0.05	0.05	0.05	
200Hz/15Hz	500Hz/5Hz	300Hz	500Hz	500Hz/5Hz	
-25°C~+70°C	-25°C~+70°C	-25°C~+70°C	-25°C~+70°C	-25°C~+70°C	
≥50MΩ	50MΩ	≥50MΩ	50MΩ	50MΩ	
ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin	ABS塑料 Plastil	ABS塑料 Plastil	
IP67	IP67	IP67	IP67	IP67	

结构分类 Structural category		平面安装型 Plane installation type		角柱型 Angular column type		
外形编号 Outward Appearance code		LMF25	LMF27	LMF29	LMF30	
外形图例	Outward appearance illustration					
外形尺寸	Overall dimensions					
检测距离 DETECTION DISTANCE		5mm		15mm		
埋入式 Flush	NPN	NO		LMF29-3005NA		
	DC 10-30 VDC	NC		LMF29-3005NB		
	PNP	NO+NC		LMF29-3005NC		
	NO		LMF29-3005PA			
	NC		LMF29-3005PB			
	NO+NC		LMF29-3005PC			
	二线制 two wire system	NO		LMF29-3005LA		
	AC 90-250 VAC	NC		LMF29-2005A		
	SCR 可控硅 Controlable silicon	NO		LMF29-2005B		
	NC		NO+NC			
继电器输出 Relay output		5mm		15mm		
非埋入式 Non-Flush	NPN	NO	LMF25-3005NA	LMF27-3015NA	LMF29-3008NA	LMF30-3004NA
	DC 10-30 VDC	NC	LMF25-3005NB	LMF27-3015NB	LMF29-3008NB	LMF30-3004NB
	PNP	NO+NC	LMF25-3005NC	LMF27-3015NC	LMF29-3008NC	LMF30-3004NC
	NO		LMF25-3005PA	LMF27-3015PA	LMF29-3008PA	LMF30-3004PA
	NC		LMF25-3005PB	LMF27-3015PB	LMF29-3008PB	LMF30-3004PB
	NO+NC		LMF25-3005PC	LMF27-3015PC	LMF29-3008PC	LMF30-3004PC
	二线制 two wire system	NO	LMF25-3005LA	LMF27-3015LA	LMF29-3008LA	LMF30-3004LA
	NC		LMF25-3005LB		LMF29-3008LB	
	AC 90-250 VAC	NO	LMF25-2005A	LMF27-2015A	LMF29-2008A	LMF30-2004A
	SCR 可控硅 Controlable silicon	NC	LMF25-2005B	LMF27-2015B	LMF29-2008B	LMF30-2004B
继电器输出 Relay output		NO+NC				
输出电流 Control output		DC	200mA	200mA	200mA	
SCR/继电器 Relay			500mA	300mA	300mA	
输出电压降 Output voltage drop DC/AC						
直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V						
消耗电流 Consumption current						
直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA						
标准检测物体 Standard detected object		18×18×1(A3铁iron)	30×30×1(A3铁iron)	25×25×1(A3铁iron)	15×15×1(A3铁iron)	
重复精度 Repeated precision		0.05	0.05	0.05	0.05	
响应频率 DC/AC		500Hz/10Hz	300Hz/10Hz	300Hz	300Hz/10Hz	
工作环境温度 Working environment temperature		-25°C~+70°C	-25°C~+70°C	-25°C~+70°C	-25°C~+70°C	
绝缘电阻 Insulation resistance		50MΩ	50MΩ	50MΩ	50MΩ	
外壳材料 Shell material		ABS塑料 Plastil		ABS树脂 Resin		
防护等级 Protection grade		IP67	IP67	IP67	IP67	
可替代国内型号 Alyematic model at home and abroad						

角柱型 Angular column type		平面安装型 Plane installation type		接近开关 PROXIMITY SWITCH	
LMF35		LMF36		LMF37	
15mm	15mm	20mm	20mm	1-40mm	1-50mm
LMF35-3015NA	LMF36-3020NA	LMF37-3020NA	LMF38-3040NA	LMF39-3050NA	
LMF35-3015NB	LMF36-3020NB	LMF37-3020NB	LMF38-3040NB	LMF39-3050NB	
LMF35-3015NC	LMF36-3020NC	LMF37-3020NC	LMF38-3040NC	LMF39-3050NC	
LMF35-3015PA	LMF36-3020PA	LMF37-3020PA	LMF38-3040PA	LMF39-3050PA	
LMF35-3015PB	LMF36-3020PB	LMF37-3020PB	LMF38-3040PB	LMF39-3050PB	
LMF35-3015PC	LMF36-3020PC	LMF37-3020PC	LMF38-3040PC	LMF39-3050PC	
LMF35-3015LA	LMF36-3020LA	LMF37-3020LA	LMF38-3040LA	LMF39-3050LA	
LMF35-3015LA	LMF36-3020LB	LMF37-3020LB	LMF38-3040LB	LMF39-3050LB	
LMF35-2015A	LMF36-2020A	LMF37-2020A	LMF38-2040A	LMF39-2050A	
LMF35-2015B	LMF36-2020B	LMF37-2020B	LMF38-2040B	LMF39-2050B	
LMF35-2015C	LMF36-2020C	LMF37-2020C	LMF38-2040C	LMF39-2050C	
LMF36-2020JC	LMF37-2020JC	LMF38-2040JC	LMF39-2050JC		
200mA	200mA	200mA	200mA	200mA	200mA
300mA/2A	300mA/2A	300mA/2A	300mA/2A	300mA/2A	300mA/2A
直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V					
直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA					
40×40×1(A3铁iron)	50×50×1(A3铁iron)	50×50×1(A3铁iron)	100×100×1(A3铁iron)	120×120×1(A3铁iron)	
0.05	0.2	0.2	0.5	0.5	
200Hz/15Hz	500Hz/15Hz	200Hz/15Hz	50Hz/10Hz	50Hz/10Hz	
-25°C~+70°C	-25°C~+70°C	-25°C~+70°C	-25°C~+75°C	-25°C~+75°C	
≥50MΩ	50MΩ	≥50MΩ	50MΩ	50MΩ	
ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin			
IP67	IP67	IP67	IP67	IP67	IP67
JDK-2正负			HY-A20□	TCD-2040□	TCD-2050□

结构分类 Structural category		平面安装型 Plane installation type				
外形编号 Outward Appearance code		LMF40	LMF41	LMF42	LMF43	
外形图例	Outward appearance illustration					
外形尺寸	Overall dimensions					
检测距离 DETECTION DISTANCE		80mm	0-120mm	0-25mm	40mm	
埋入式 Flush	NPN	NO	LMF40-3080NA	LMF41-30120NA	LMF42-3025NA	LMF43-3040NA
	DC 10-30 VDC	NC	LMF40-3080NB	LMF41-30120NB	LMF42-3025NB	LMF43-3040NB
	PNP	NO+NC	LMF40-3080NC	LMF41-30120NC	LMF42-3025NC	LMF43-3040NC
	AC 90-250 VAC	NO	LMF40-3080PA	LMF41-30120PA	LMF42-3025PA	LMF43-3040PA
	SCR 可控硅 Controlable silicon	NC	LMF40-3080PB	LMF41-30120PB	LMF42-3025PB	LMF43-3040PB
	继电器输出 Relay output	NO+NC	LMF40-3080PC	LMF41-30120PC	LMF42-3025PC	LMF43-3040PC
	DC	80mm	0-120mm	0-25mm	40mm	
	SCR/继电器 Relay	200mA	200mA	200mA	200mA	
	输出电压降 Output voltage drop DC/AC	300mA/3A	300mA/5A	300mA/2A	300mA/2A	
	消耗电流 Consumption current	200mA	200mA	200mA	200mA	
非埋入式 Non-Flush	NPN	NO	LMF40-3080NA	LMF41-30120NA	LMF42-3025NA	LMF43-3040NA
	DC 10-30 VDC	NC	LMF40-3080NB	LMF41-30120NB	LMF42-3025NB	LMF43-3040NB
	PNP	NO+NC	LMF40-3080NC	LMF41-30120NC	LMF42-3025NC	LMF43-3040NC
	AC 90-250 VAC	NO	LMF40-3080PA	LMF41-30120PA	LMF42-3025PA	LMF43-3040PA
	SCR 可控硅 Controlable silicon	NC	LMF40-3080PB	LMF41-30120PB	LMF42-3025PB	LMF43-3040PB
	继电器输出 Relay output	NO+NC	LMF40-3080PC	LMF41-30120PC	LMF42-3025PC	LMF43-3040PC
	DC	200mA	200mA	200mA	200mA	
	SCR/继电器 Relay	300mA/3A	300mA/5A	300mA/2A	300mA/2A	
	输出电压降 Output voltage drop DC/AC	200mA	200mA	200mA	200mA	
	消耗电流 Consumption current	500mA	300mA/2A	300mA	500mA	
标准检测物体 Standard detected object		160×160×1(A3铁iron)	250×250×1(A3铁iron)	80×80×1(A3铁iron)	100×100×1(A3铁iron)	
重复精度 Repeated precision		0.5	0.5	0.05	0.05	
响应频率 DC/AC		10Hz/5Hz	10Hz/5Hz	50Hz/10Hz	30Hz/10Hz	
工作环境温度 Working environment temperature		-25°C~+75°C	-25°C~+75°C	-25°C~+70°C	-25°C~+70°C	
绝缘电阻 Insulation resistance		50MΩ	50MΩ	50MΩ	50MΩ	
外壳材料 Shell material			ABS树脂 Resin	ABS树脂 Resin		
防护等级 Protection grade		IP67	IP67	IP65	IP65	
可替代国内型号 Alyemative model at home and abroad		TCB-2080□	TCC-2120□			

接近开关 PROXIMITY SWITCH				
平面安装型 Plane installation type				
LMF45	LMF55	LMF340	LMF370	LMF380
0-50mm	25mm	20mm	40mm	40mm
LMF45-3050NA	LMF55-3025NA	LMF340-3020NA	LMF370-3040NA	LMF380-3040NA
LMF45-3050NB	LMF55-3025NB	LMF340-3020NB	LMF370-3040NB	LMF380-3040NB
LMF45-3050NC	LMF55-3025NC	LMF340-3020NC	LMF370-3040NC	LMF380-3040NC
LMF45-3050PA	LMF55-3025PA	LMF340-3020PA	LMF370-3040PA	LMF380-3040PA
LMF45-3050PB	LMF55-3025PB	LMF340-3020PB	LMF370-3040PB	LMF380-3040PB
LMF45-3050PC	LMF55-3025PC	LMF340-3020PC	LMF370-3040PC	LMF380-3040PC
LMF45-3050LA	LMF55-3025LA	LMF340-3020LA	LMF370-3040LA	LMF380-3040LA
LMF45-3050LA	LMF55-3025LB	LMF340-3020LB	LMF370-3040LB	LMF380-3040LB
LMF45-2050A	LMF55-2025A	LMF340-2020A	LMF370-2040A	LMF380-2040A
LMF45-2050B	LMF55-2025B	LMF340-2020B	LMF370-2040B	LMF380-2040B
LMF45-2050C	LMF55-2025C	LMF340-2020C	LMF370-2040C	LMF380-2040C
200mA	200mA	200mA	200mA	200mA
200mA	200mA	200mA	200mA	200mA
500mA	300mA/2A	300mA	500mA	500mA
直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V				
直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA				
80×80×1(A3铁iron)	70×70×1(A3铁iron)	35×35×1(A3铁iron)	55×55×1(A3铁iron)	50×50×1(A3铁iron)
0.5	0.2	0.05	0.5	0.05
200Hz/5Hz	200Hz/10Hz	300Hz/10Hz	200Hz/10Hz	500Hz/10Hz
-25°C~+70°C	-25°C~+70°C	-25°C~+70°C	-25°C~+70°C	-25°C~+70°C
50MΩ	50MΩ	50MΩ	50MΩ	50MΩ
塑料 Plastil	ABS树脂 Resin		塑料 Plastil	ABC塑料 Plastil
IP67	IP67	IP67	IP67	IP67
HE-/HD-				NJ40P-FP-A2-P1

接插件式接近开关 STRAIGHT CONNECTOR SWITCH

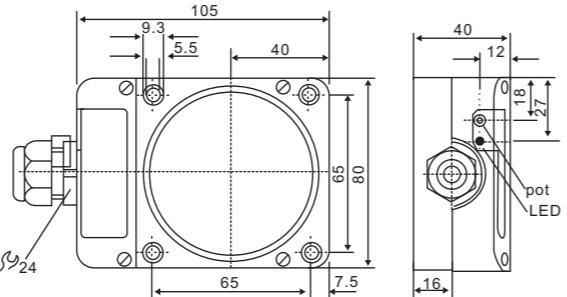
结构分类 Structural category		接插件型 Connector type		
外形编号 Outward Appearance code		LM30-□T/LM30-□T3	LMF31	LMF32
外形图例	Outward appearance illustration			
外形尺寸	Overall dimensions			
检测距离 DETECTION DISTANCE		10mm	15mm	内环20mm
埋入式 Flush	NPN	NO	LM30-3010NAT	LMF31-3015NA
		NC	LM30-3010NBT	LMF31-3015NB
		NO+NC	LM30-3010NCT	LMF31-3015NC
	PNP	NO	LM30-3010PAT	LMF31-3015PA
		NC	LM30-3010PBT	LMF31-3015PB
		NO+NC	LM30-3010PCT	LMF31-3015PC
	二线制 two wire system	NO	LM30-3010LAT	LMF31-3015LA
		NC	LM30-3010LBT	LMF31-3015LB
		NO	LM30-2010AT	LMF31-2015A
		NC	LM30-2010BT	LMF31-2015B
	继电器输出 Relay output			
非埋入式 Non-Flush	NPN	检测距离 DETECTION DISTANCE	15mm	20mm
		NO	LM30-3015NAT	LMF31-3020NA
		NC	LM30-3015NBT	LMF31-3020NB
	PNP	NO+NC	LM30-3015NCT	LMF31-3020NC
		NO	LM30-3015PAT	LMF31-3020PA
		NC	LM30-3015PBT	LMF31-3020PB
	二线制 two wire system	NO+NC	LM30-3015PCT	LMF31-3020PC
		NO	LM30-3015LAT	LMF31-3020LA
		NC	LM30-3015LBT	LMF31-3020LB
		NO	LM30-2015AT	LMF31-2020A
		NC	LM30-2015BT	LMF31-2020B
	继电器输出 Relay output			
输出电流 Controloutput		DC	200mA	200mA
SCR/继电器 Relay		300mA	300mA	
输出电压降 Output voltage drop DC/AC				
直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V				
消耗电流 Consumption current				
直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA				
标准检测物体 Standard detected object				
重复精度 Repeated precision	0.5	0.5		
响应频率 DC/AC	200Hz/10Hz	200Hz/10Hz		
工作环境温度 Working environment temperature	-25°C~+65°C	-25°C~+65°C		
绝缘电阻 Insulation resistance	50MΩ	50MΩ		
外壳材料 Shell material	金属 Metal	金属 Metal		
防护等级 Protection grade	IP67	IP67		
可替代国内型号 Alyemative model at home and abroad	EZE-X18ME1-M1			

接近开关 PROXIMITY SWITCH

JWK系列接近开关 JWK series proximity switch											
LXJo-1A、1B、2D系列接近开关 LXJo-1A、1B、2D series proximity switch											
♦ 用途 Application											
LXJo系列接近开关(又称无触点行程开关)的作用是在接近金属时就动作。它在机床及其它设备中作无接触，无压力的行程监测和控制之用，也可以用来液面控制，转动机构的转速，转数控制装置中作位置检测变送器。											
The function of LXJo series proximity switch (alias non-contact travel switch) is to act while approaching metal. It is used in machine tools and other equipments for travel supervision and control with out any contact or pressure. In addition, it is used as position detection transducer in the equipments like liquid level control, speedand revolution control of rotation gear, etc.											
♦ 主要参数 Main parameters											
1. 供电电源 Power supply mains: AC172V、AC220V、AC380V											
2. 输出方式 Output way: 一开一闭											
3. 输出电流 Output current: 127V、220V、1A、380V、500mA											
4. 检测距离 Detection distance: 2-10mm±%											
5. 开关频率 ON-OFF frequency: 5Hz											

特点 Characteristic

ID000A
IDE2060-FBOA/3D
电感式传感器
Inductive sensor
矩形塑料
Rectangular, plastics
接线端子
Terminals
感应距离 60mm [nf]
Sensing range 60mm [nf]
可设定
adjustable
非齐平安装
non-flush mountable


外形尺寸 Overall dimensions

电气设计 Electrical design
AC/DC

输出功能 Output	常开/常闭可选 normally open / closed programmable
工作电压(V) Operating voltage(V)	20...250 AC/DC
负载电流(持续的)(mA) Current rating (continuous)(mA)	200 AC, 100 DC *
负载电流(最大值)(mA) Current rating (peak)(mA)	I:2.2A (20ms / 0.5Hz)
最小的负载电流(mA) Minimum load current(mA)	5
短路保护 Short circuit proof	否 no
反极性保护 Reverse polarity protection	否 no
过载保护 Overload protection	否 no
电压降(V) Voltage drop(V)	<AC6.5 / <DC6
漏电流(mA) Leakage current (mA)	<2.5(AC 250V) / <1.3(AC 110V) / <0.8(DC 24V)
实际感应电流(mm) Real sensing range(Sn)(mm)	60±10%
工作距离(mm) Operating distance(mm)	0...48.6
开关点偏移(Sr的百分比) Hysteresis(% of Sn)	-10...10
迟滞(Sr的百分比) Hysteresis(% of Sr)	1...15
开关频率(Hz) Switching frequency(Hz)	4
修正系数 Correction factors	钢(St37)=1/ 不锈钢约0.7/ 黄铜约0.4/ 铝约0.3/ 铜约0.2 mild steel=1/stainless steel approx. 0.7/brass approx. 0.4/aluminum approx. 0.3/copper approx. 0.2
环境温度(°C) Ambient temperature (°C)	-20...60**)
防护等级 Protection	IP65, II
EMC 电磁兼容 EMC	EN60947-5-2
产品标记 Marking of the unit	II 3D Ex tD A22 IP65 T90°C X
外壳材料 Housing materials	460
功能显示 Function display	PPE
开关状态LED Switching status LED	黄色 yellow
接口 Connection	接线端子至2.5mm ² ; 电缆直径5.5...13mm, 电缆螺旋套管接头M20×1.5 terminals up to 2.5mm ² ; cable diameter 5.5...13mm, cable gland M20×1.5
用于电缆螺旋套管接头的拧紧扭矩(Nm) tightening torque for cable gland(Nm)	3.5
重量(kg) Weight (kg)	0.454
注释 Remarks	*)AC:350 mA (...50°C) / DC:250mA(...80°C), if the product is used outside the hazardous area. **) -25...80 °C if used outside the hazardous area.建议:短路后请一定检查该产品的安全功能。 *)AC:350 mA (...50°C) / DC:250mA(...80°C) when used outside the hazardous area. **) -25...80 °C when used outside the hazardous area. Recommendation: check the unit for reliable function after a short circuit.
配件(同时供货) Accessories (included)	螺丝刀 screwdriver

结构分类 Structural category
外形编号 Outward Appearance code

PR08

PR12

PR18

PR30

**外形图例
Outward appearance illustration**

**外形尺寸
Overall dimensions**

	检测距离 DETECTION DISTANCE	1.5mm	2mm	5mm	10mm
		NO	PR08-1.5DN	PR12-2DN	PR18-5DN
埋入式 Flush	NPN	NC	PR08-1.5DN2	PR12-2DN2	PR18-5DN2
	NO+NC	PR08-1.5DN3	PR12-2DN3	PR18-5DN3	PR30-10DN3
	PNP	NO	PR08-1.5DP	PR12-2DP	PR18-5DP
	NC	PR08-1.5DP2	PR12-2DP2	PR18-5DP2	PR30-10DP2
	NO+NC	PR08-1.5DP3	PR12-2DP3	PR18-5DP3	PR30-10DP3
	二线制 two-wire system	NO	PR08-1.5DO	PR12-2DO	PR18-5DO
	AC 90-250 VAC	NC	PR08-1.5DC	PR12-2DC	PR18-5DC
	SCR 可控硅 Controlable silicon	NO	PR08-1.5AO	PR12-2AO	PR18-5AO
	NC	PR08-1.5AC	PR12-2AC	PR18-5AC	PR30-10AC
	继电器输出 Relay output	NO+NC			
非埋入式 Non-Flush	检测距离 DETECTION DISTANCE	2mm	4mm	8mm	15mm
		NO	PR08-2DN	PR12-4DN	PR18-8DN
	NPN	NC	PR08-2DN2	PR12-4DN2	PR18-8DN2
	NO+NC	PR08-2DN3	PR12-4DN3	PR18-8DN3	PR30-15DN3
	PNP	NO	PR08-2DP	PR12-4DP	PR18-8DP
	NC	PR08-2DP2	PR12-4DP2	PR18-8DP2	PR30-15DP2
	NO+NC	PR08-2DP3	PR12-4DP3	PR18-8DP3	PR30-15DP3
	二线制 two-wire system	NO	PR08-2DO	PR12-4DO	PR18-8DO
	AC 90-250 VAC	NC	PR08-2DC	PR12-4DC	PR18-8DC
	SCR 可控硅 Controlable silicon	NO	PR08-2AO	PR12-4AO	PR18-8AO
	NC	PR08-2AC	PR12-4AC	PR18-8AC	PR30-15AC
输出电流 Control output	继电器输出 Relay output	NO+NC			
	DC		200mA	200mA	
SCR/继电器 Relay		300mA	300mA		
输出电压降 Output voltage drop DC/AC		直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V			
消耗电流 Consumption current		直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA			
标准检测物体 Standard detected object					
重复精度 Repeated precision		0.5	0.5		
响应频率 DC/AC		200Hz/10Hz	200Hz/10Hz		
工作环境温度 Working environment temperature		-25°C~+65°C	-25°C~+65°C		
绝缘电阻 Insulation resistance		50MΩ	50MΩ		
外壳材料 Shell material		金属 Metal	金属 Metal		
防护等级 Protection grade		IP67	IP67		
可替代国内型号 Alyemate model at home and abroad		EZE-X18ME1-M1			

结构分类 Structural category		接插件型 Connector type					
外形编号 Outward Appearance code		E2E					
外形图例 Outward appearance illustration							
外形尺寸 Overall dimensions							
		检测距离 DETECTION DISTANCE	2mm	4mm	8mm		
埋入式 Flush	直流 DC 6-36 VDC	NPN	NO	E2E-X2E1	E2E-X4E1	E2E-X8E1	E2E-X10E1
		NC	NO	E2E-X2E2	E2E-X4E2	E2E-X8E2	E2E-X10E2
		NO+NC	NO	E2E-X2E3	E2E-X4E3	E2E-X8E3	E2E-X10E3
		PNP	NO	E2E-X2F1	E2E-X4F1	E2E-X8F1	E2E-X10F1
		NC	NO	E2E-X2F2	E2E-X4F2	E2E-X8F2	E2E-X10F2
		NO+NC	NO	E2E-X2F3	E2E-X4F3	E2E-X8F3	E2E-X10F3
	交流 AC 90- 250 VAC	二线制 two wire system	NO	E2E-X2D1	E2E-X4D1	E2E-X8D1	E2E-X10D1
		SCR 可控硅 Control- able silicon	NC	E2E-X2D2	E2E-X4D2	E2E-X8D2	E2E-X10D2
		NO	NO	E2E-X2Y1	E2E-X4Y1	E2E-X8Y1	E2E-X10Y1
		NC	NO	E2E-X2Y2	E2E-X4Y2	E2E-X8Y2	E2E-X10Y2
		NO+NC					
		继电器输出 Relay output					
检测距离 DETECTION DISTANCE		4mm	5mm	10mm	18mm		
非埋入式 Non-Flush	直流 DC 10- 30 VDC	NPN	NO	E2E-X4ME1	E2E-X5ME1	E2E-X10ME1	E2E-X18ME1
		NC	NO	E2E-X4ME2	E2E-X5ME2	E2E-X10ME2	E2E-X18ME2
		NO+NC	NO	E2E-X4ME3	E2E-X5ME3	E2E-X10ME3	E2E-X18ME3
		PNP	NO	E2E-X4MF1	E2E-X5MF1	E2E-X10MF1	E2E-X18MF1
		NC	NO	E2E-X4MF2	E2E-X5MF2	E2E-X10MF2	E2E-X18MF2
		NO+NC	NO	E2E-X4MF3	E2E-X5MF3	E2E-X10MF3	E2E-X18MF3
		二线制 two wire system	NO	E2E-X4MD1	E2E-X5MD1	E2E-X10MD1	E2E-X18MD1
		SCR 可控硅 Control- able silicon	NC	E2E-X4MD2	E2E-X5MD2	E2E-X10MD2	E2E-X18MD2
		NO	NO	E2E-X4MY1	E2E-X5MY1	E2E-X10MY1	E2E-X18MY1
		NC	NO	E2E-X4MY2	E2E-X5MY2	E2E-X10MY2	E2E-X18MY2
		NO+NC					
		继电器输出 Relay output					
输出电流 Control output	DC	200mA	200mA				
	SCR/继电器 Relay	300mA	300mA				
输出电压降 Output voltage drop DC/AC		直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V					
消耗电流 Consumption current		直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA					
标准检测物体 Standard detected object							
重复精度 Repeated precision		0.5					
响应频率 DC/AC		200Hz/10Hz					
工作环境温度 Working environment temperature		-25°C~+65°C					
绝缘电阻 Insulation resistance		50MΩ					
外壳材料 Shell material		金属 Metal					
防护等级 Protection grade		IP67					
可替代国内型号 Alyematic model at home and abroad		EZE-X18ME1-M1					

结构分类 Structural category		接插件型 Connector type					
外形编号 Outward Appearance code		E2E					
外形图例 Outward appearance illustration							
外形尺寸 Overall dimensions							
		检测距离 DETECTION DISTANCE	2mm	4mm	8mm		
埋入式 Flush	直流 DC 6-36 VDC	NPN	NO	E2E-X2E1	E2E-X4E1	E2E-X8E1	E2E-X10E1
		NC	NO	E2E-X2E2	E2E-X4E2	E2E-X8E2	E2E-X10E2
		NO+NC	NO	E2E-X2E3	E2E-X4E3	E2E-X8E3	E2E-X10E3
		PNP	NO	E2E-X2F1	E2E-X4F1	E2E-X8F1	E2E-X10F1
		NC	NO	E2E-X2F2	E2E-X4F2	E2E-X8F2	E2E-X10F2
		NO+NC	NO	E2E-X2F3	E2E-X4F3	E2E-X8F3	E2E-X10F3
		二线制 two wire system	NO	E2E-X2D1	E2E-X4D1	E2E-X8D1	E2E-X10D1
		SCR 可控硅 Control- able silicon	NC	E2E-X2D2	E2E-X4D2	E2E-X8D2	E2E-X10D2
		NO	NO	E2E-X2Y1	E2E-X4Y1	E2E-X8Y1	E2E-X10Y1
		NC	NO	E2E-X2Y2	E2E-X4Y2	E2E-X8Y2	E2E-X10Y2
		NO+NC					
		继电器输出 Relay output					
检测距离 DETECTION DISTANCE		4mm	5mm	10mm	18mm		
非埋入式 Non-Flush	直流 DC 10- 30 VDC	NPN	NO	E2E-X4ME1	E2E-X5ME1	E2E-X10ME1	E2E-X18ME1
		NC	NO	E2E-X4ME2	E2E-X5ME2	E2E-X10ME2	E2E-X18ME2
		NO+NC	NO	E2E-X4ME3	E2E-X5ME3	E2E-X10ME3	E2E-X18ME3
		PNP	NO	E2E-X4MF1	E2E-X5MF1	E2E-X10MF1	E2E-X18MF1
		NC	NO	E2E-X4MF2	E2E-X5MF2	E2E-X10MF2	E2E-X18MF2
		NO+NC	NO	E2E-X4MF3	E2E-X5MF3	E2E-X10MF3	E2E-X18MF3
		二线制 two wire system	NO	E2E-X4MD1	E2E-X5MD1	E2E-X10MD1	E2E-X18MD1
		SCR 可控硅 Control- able silicon	NC	E2E-X4MD2	E2E-X5MD2	E2E-X10MD2	E2E-X18MD2
		NO	NO	E2E-X4MY1	E2E-X5MY1	E2E-X10MY1	E2E-X18MY1
		NC	NO	E2E-X4MY2	E2E-X5MY2	E2E-X10MY2	E2E-X18MY2
		NO+NC					
		继电器输出 Relay output					
输出电流 Control output	DC	200mA	200mA				
	SCR/继电器 Relay	300mA	300mA				
输出电压降 Output voltage drop DC/AC		直流(NPN PNP)型3V以下、二线型:3.9V以下、交流AC 10V以下 DC<3V、AC<10V					
消耗电流 Consumption current		直流(NPN PNP)型DC 12V时8mA、24V时15mA、交流AC 10mA以下 DC<15mA、AC<10mA					
标准检测物体 Standard detected object							
重复精度 Repeated precision		0.5					
响应频率 DC/AC		200Hz/10Hz					
工作环境温度 Working environment temperature		-25°C~+65°C					
绝缘电阻 Insulation resistance		50MΩ					
外壳材料 Shell material		金属 Metal					
防护等级 Protection grade		IP67					
可替代国内型号 Alyematic model at home and abroad		EZE-X18ME1-M1					

特点 Characteristic	
① 保护结构达到IP67的规格，能有效的防水 The IP67 rating is designed	

特点 Characteristic

- ◆ 具有双LED，检测操作更方便
Build-in twin LED, convenient for checking the operation
- ◆ 插入式接线，安装更换很容易
Plug-in connector type is available, easy to connect, anyone can replace the new sensor in a minute.



规格表 Specifications

输出模式 Output method	NPN N.O	RN05-N	RN05-ND1
	NPN N.C	RN05-N2	—
	PNP N.O	RN05-P	RN05-PD1
	PNP N.C	RN05-P2	—
检测方向 Sensng Surface		前方 Top surface	
标准检测物体 Standard detected object		Iron 18*18*1mm	
检测距离 Sensung distance		5mm	
建议距离 Secure sensing distance		0 to 4mm	
迟滞 Hysteresis		$\leq 10\%$ of sensing distance	
反应时间 Response time		2ms Max	
工作电压 Operating voltage		DC10~30V	
消耗电流 Current consumption		$\leq 8\text{mA}$ no-load	
负载电流 Load current		100mA Max. at DC30V	
漏电流 Leakage current		$\leq 1.1\text{mA}$ no-load	
残余电压 Residual voltage		$\leq \text{DC}1.5\text{V}$	
隔离阻抗 Insulation resistance		20m Ω min. (DC500V)	
绝缘耐压 Voltage withstandabiligy		AC1000V 60Hz for 60 secretary	
工作温度范围 Operating temperature		-20°C~+60°C	
防水等级 Protection degree		IP64/IP67(Option)	
出线方式 Wiring method		Φ4.2*2M/3wires	M8接头 connector
重量 Weight		Approx.60g	Approx.12g

尺寸图 Dimensions

