

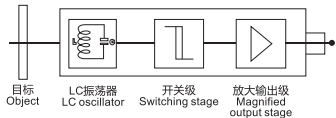
接近开关 PROXIMITY SWITCH

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

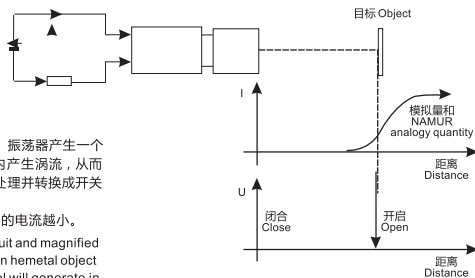
开关类别 Switch category	输出形式 Output form
Lm: 电感式 Inductance type Cm: 电容式 Capacitance type Sm: 霍尔式 Hall type Am: 安全防爆式 Safety Explosion-proof type Xm: 模拟线性式 Mimic Linear type Hm: 舌簧式 Reed type Ru: 超声波 Ultrasonic type	N: 三线直流 NpN负逻辑输出 Three-wire Dc NpN Output P: 三线直流 PnP正逻辑输出 Three-wire Dc PnP Output L: 二线直流输出 Two-wire Dc Output : 交流二线输出 Ac Two-wire Output J: 继电器触点输出 Relay Contact Output Np: NpN+PnP 双输出 NpN+PnP Double Output
外形代号 Outward appearance code	输出状态 Output state
□: 圆柱型 Cylinder type F□: 角柱型及平面安装型 Angular Column Type And Plane Installation Type	A: 常开(no) normally Open (no) B: 常闭(nc) Normally Close (nc) C: 一开一闭(no-nc) normally Open-Normally Close(no+nc) Mu: 模拟电压 Mimic Voltage Mi: 模拟电流 Mimic Current Mu: 电压+电流 双输出 Voltage+Current
工作电压 Working voltage	附属功能 Subsidiary functions
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	T: 带航空插座 with aviation connector Y: 防水、防油 water proof, oil proof I: 特殊要求 special requirement H: 耐高温 high temp resistance R: 环形 ring type
检测距离 Detection distance	远距离 Long-distance
01:1mm 05:5mm 10:10mm	L: 远距离型 Long-distance

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 vibrati on and then stop. The change of vibrati on and stop of oscillator is treated by begid stage magnified circuit and converted to switching sign, triggering driving con-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	磨床的档块检测 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 exiating of milk inside the paper package	限位检测 Spacing detection

接近开关 PROXIMITY SWITCH

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	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 $d\text{mm}$.	<ul style="list-style-type: none"> 检测物体为大于标准检测物体时, 检测距离基本上恒定。 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。 When the detected object is bigger than standard detected object, on the main, the detection distance is constant. According to different machine type, sometimes the features will be different with that mentioned on the left. To throug type, the detection object is like cylinder metal bar. 	<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。 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。 When the material of detected object is non magnetic metal, the distance of action should descend. 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. When the material of detected object is non magnetic metal, the distance of action should descend. 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.
检测物体的厚度和检测距离 the thickness of detected object and detection distance	测定改变指定的标准检测物体形状的厚 1mm 时的检测距离 $X\text{mm}$ (前面检测型) when change the thickness of the assigned standard detected object 1mm .	<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. 	<h3>◆关于环境气候 About ambient weather</h3> <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, 勿使水和相容性切削油等淋到, 则可更好地提高可靠性及寿命。还请在有化学药剂, 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, althouth 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	标准检测物体的由于形状、尺寸因具材料。或各种镀层引起的影响, 用检测距离 $X\text{mm}$ 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 $X\text{mm}$ measurement.	<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. 	<h3>◆关于维护检修 About maintenance and overhaul</h3> <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. 被检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. 有无粘附金属粉末等积物。 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。 In order to keep the proximity sensor to work stably for long time, the following regular examinations should be performed just like general control. 1. Check the installation position of detected object and proximity sensor if any deviation, loosening of deformation exists. 2. Check the attached wires and connecting parts if any loosening, bad contact or wire breaking off exists. 3. Check if there is any metallic powder accumulation or not. 4. Check if the temperature condition and surrounding environment condition are normal or not. 5. Check if the detection distance is normal or not.
材料	检测距离		
铁	100%		
不锈钢	约60%		
黄铜	约40%		
铝	约30%		
铜	约28%		

接近开关 PROXIMITY SWITCH

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
<p>按指定方法移动检测物体，从基准位置(基准面)到测定动作复位的位置。</p> <p>Move the detected object according to assigned method, the distance from the reference position (reference plane) to the detecting action (resetting)</p>	<p>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。</p> <p>Including the effects like temperature and voltage, without error action, the distance passed through from the practical detection surface to the objected object.</p>	<p>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。</p> <p>Take as standard detected object to detect the basic performance. The shape, size and material have been determined.</p>
差动距离 Differential distance	响应时间 Response time	响应效率 Response frequency
<p>到动作的距离和到复位的距离之差的绝对值。</p> <p>The absolute value of the distance difference between the distance to action and the distance to resetting</p>	<p>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。</p> <p>T2: 从离开动作区到输出消失为止的时间。</p> <p>T1: When the objected object enters the action zone, the time from proximity sensor being in action state to output appearance.</p> <p>T2: The time from leaving action zone to output disappearance.</p>	<p>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。</p> <p>Work out the tracking output times per second repeatedly approaching the detected object, Brief detection method sees the above diagram.</p>

串联、并联 SERIES CONNECTION AND PARALLEL CONNECTION

<p>★ 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</p>	<p>★ 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</p>	<p>★ 两线交流传感器的串联 Series connection of two-wire AC sensor</p>
<p>◆ 两线交流传感器的并联 Parallel connection of two-wire AC sensor</p>	<p>◆ 机械开关与交流传感器的串联 Series connection of machinery switch and AC sensor</p>	<p>◆ 机械开关与交流传感器的并联 Parallel connection of machinery switch and AC sensor</p>

接近开关 PROXIMITY SWITCH

主要特征 Main features

- ✦ 体积小 Compact volume
- ✦ 重复定位精度高 High precision of repeated location
- ✦ 外形结构多样 Diversified exterior structures
- ✦ 抗干扰性能好 Good performance of anti-interference
- ✦ 输出形式多 Many output forms
- ✦ 开关频率高 High on-off frequency
- ✦ 电压范围宽 Wide voltage range
- ✦ 防尘、防震、防水、防油 Dust proof, vibration proof, water proof and oil proof
- ✦ 具备短路保护，反连接保护 With short-circuit protection and inverted connecting protection
- ✦ 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

<p>✦ 螺纹式开关的安装 Mounting screw switch</p> <p>✦ 安装开关时不可采用过大力距紧固，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</p>	<p>✦ 无螺纹式柱型开关的安装 Mounting non screw type pillar switch</p> <p>✦ 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.</p>	<p>✦ 防止非检测物体的干扰 Protection against the interference of non detected object</p> <p>✦ 在金属件上安装接近开关时，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 certain space in advance according to the shown diagram so as to prevent the switch from error action</p>
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正确使用和安装及注意事项 Correct use, installation and cautions

<p>✦ 螺纹式开关的安装 Mounting screw switch</p> <p>✦ 安装开关时不可采用过大力距紧固，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</p>	<p>✦ 开关动作距离(灵敏度)可调节 Adjustable switch action distance (sensitivity)</p> <p>✦ 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，反之，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 turn clockwise, vice versa. Do not use in the critical state of max. Action distance.</p>	<p>✦ 开关引线的防护 Guard of switch lead-wire</p> <p>✦ 安装开关时，请将离开关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 about 10cm from the switch with wire clip so as to prevent the switch lead wire from damage from outer force.</p>
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注意事项 Cautions

- ✦ 直流开关应使用绝缘变压器，并确保稳压电源纹波。
- ✦ 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。
- ✦ 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。
- ✦ 严禁通电接线，应严格按接线图输出回路原理图接线。
- ✦ 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。
- ✦ Dc switch should adopt insulation transformer and ensure stable voltage mains corrugation.
- ✦ 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.
- ✦ Set the switch use distance within the rated distance to avoid the effects from temperature and voltage.
- ✦ Wiring while power-on is strictly prohibited. connecting the wires strictly according to the wiring diagram and output return elementary diagram.
- ✦ If there are any special requirements to the switch like water proof, oil proof, acid proof, base proof, high temperature proof or 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.

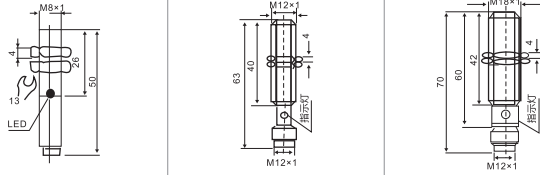
接近开关 PROXIMITY SWITCH

结构分类 Structural category	圆柱型 Cylinder type	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



埋入式 Flush	检测距离 DETECTION DISTANCE	1mm			2mm			5mm						
		直流 DC 10-30 VDC	NPN	NO	LM8-3001NAT	LM12-3002NAT	LM18-3005NAT	NC	LM8-3001NBT	LM12-3002NBT	LM18-3005NBT	NO+NC	LM8-3001NCT	LM12-3002NCT
交流 AC 90-250 VAC	二线制 two wire system	NO	LM8-3001PAT	LM12-3002PAT	LM18-3005PAT	NC	LM8-3001PBT	LM12-3002PBT	LM18-3005PBT	NO+NC	LM8-3001LAT	LM12-3002LAT	LM18-3005LAT	
		NO	LM8-3001LAT	LM12-3002LAT	LM18-3005LAT	NC	LM8-3001LBT	LM12-3002LBT	LM18-3005LBT	NO+NC	LM8-3001LCT	LM12-3002LCT	LM18-3005LCT	
	SCR 可控硅 Control-lable silicon	NO	LM8-3001SAT	LM12-2002AT	LM18-2005AT	NC	LM8-3001SBT	LM12-2002BT	LM18-2005BT	NO+NC	LM8-3001SCT	LM12-2002CT	LM18-2005CT	
	继电器输出 Relay output													
	非埋入式 Non-Flush	检测距离 DETECTION DISTANCE	2mm			4mm								
			直流 DC 10-30 VDC	NPN	NO	LM8-3002NAT	LM12-3004NAT	LM18-3008NAT	NC	LM8-3002NBT	LM12-3004NBT	LM18-3008NBT	NO+NC	LM8-3002NCT
	交流 AC 90-250 VAC	二线制 two wire system	NO	LM8-3002PAT	LM12-3004PAT	LM18-3008PAT	NC	LM8-3002PBT	LM12-3004PBT	LM18-3008PBT	NO+NC	LM8-3002LAT	LM12-3004LAT	LM18-3008LAT
			NO	LM8-3002LAT	LM12-3004LAT	LM18-3008LAT	NC	LM8-3002LBT	LM12-3004LBT	LM18-3008LBT	NO+NC	LM8-3002LCT	LM12-3004LCT	LM18-3008LCT
		SCR 可控硅 Control-lable silicon	NO	LM8-2002AT	LM12-2004AT	LM18-2008AT	NC	LM8-2002BT	LM12-2004BT	LM18-2008BT	NO+NC	LM8-2002ACT	LM12-2004ACT	LM18-2008ACT
		继电器输出 Relay output												
输出电流 Control output		DC			150mA			200mA			400mA			
输出耐压降 Output voltage drop DC/AC		直流(NPN PNP)型3V以下、二线城市: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 Alyemative model at home and abroad		E2E-X1R5-M1			E2E-X2E1-M1			E2E-X5E5-M1						

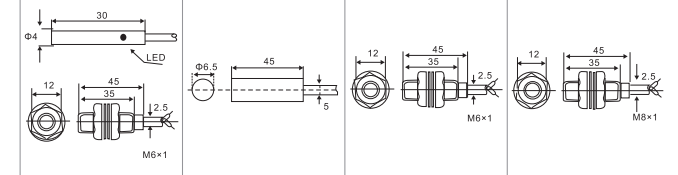
接近开关 PROXIMITY SWITCH

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



埋入式 Flush	检测距离 DETECTION DISTANCE	0.8mm/1mm		1mm		1mm		1mm								
		直流 DC 10-30 VDC	NPN	NO	LM4-300.8NA/LM5-3001NA	LM6-3001NA	LM06-3001NA	LM8-3001NA	NC	LM4-300.8NB/LM5-3001NB	LM6-3001NB	LM06-3001NB	LM8-3001NB	NO+NC	LM4-300.8PA/LM5-3001PA	LM6-3001PA
交流 AC 90-250 VAC	二线制 two wire system	NO	LM4-300.8NA/LM5-3001NA	LM6-3001NA	LM06-3001NA	LM8-3001NA	NC	LM4-300.8NB/LM5-3001NB	LM6-3001NB	LM06-3001NB	LM8-3001NB	NO+NC	LM4-300.8PA/LM5-3001PA	LM6-3001PA	LM06-3001PA	LM8-3001PA
		NO	LM4-300.8NA/LM5-3001NA	LM6-3001NA	LM06-3001NA	LM8-3001NA	NC	LM4-300.8NB/LM5-3001NB	LM6-3001NB	LM06-3001NB	LM8-3001NB	NO+NC	LM4-300.8PA/LM5-3001PA	LM6-3001PA	LM06-3001PA	LM8-3001PA
	SCR 可控硅 Control-lable silicon	NO	LM4-300.8SA/LM5-3001SA	LM6-2001A	LM06-2001A	LM8-2001A	NC	LM4-300.8SB/LM5-3001SB	LM6-2001B	LM06-2001B	LM8-2001B	NO+NC	LM4-300.8SA/LM5-3001SA	LM6-2001A	LM06-2001A	LM8-2001A
	继电器输出 Relay output															
	非埋入式 Non-Flush	检测距离 DETECTION DISTANCE	1.5mm		2mm											
			直流 DC 10-30 VDC	NPN	NO	LM6-3002NA	LM8-3002NA	NC	LM6-3002NB	LM8-3002NB	NO+NC	LM6-3002NCT	LM8-3002NCT			
	交流 AC 90-250 VAC	二线制 two wire system	NO	LM6-3002PA	LM8-3002PA	LM6-3002PB	LM8-3002PB	NC	LM6-3002PBT	LM8-3002PBT	NO+NC	LM6-3002LAT	LM8-3002LA			
			NO	LM6-3002LAT	LM8-3002LA	LM6-3002LBT	LM8-3002LB	NC	LM6-2002A	LM8-2002A	NO+NC	LM6-2002ACT	LM8-2002ACT			
		SCR 可控硅 Control-lable silicon	NO	LM6-2002A	LM8-2002A	LM6-2002B	LM8-2002B	NC	LM6-2002BT	LM8-2002BT	NO+NC	LM6-2002ACT	LM8-2002ACT			
		继电器输出 Relay output														
输出电流 Control output		DC		200mA		200mA		200mA		200mA						
输出耐压降 Output voltage drop DC/AC		直流(NPN PNP)型3V以下、二线城市: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)		8×8×1(A3铁iron)						
重复精度 Repeated precision		0.01		0.01		0.01		0.01		0.01						
响应频率 DC/AC		500Hz		500Hz		500Hz		500Hz		500Hz/25Hz						
工作环境温度 Working environment temperature		-25°C~+70°C		-25°C~+75°C		-25°C~+70°C		-25°C~+70°C		-25°C~+75°C						
绝缘电阻 Insulation resistance		50MΩ		≥30MΩ		50MΩ		50MΩ		≥50MΩ						
外壳材料 Shell material		金属 Metal		不锈钢 Stainless steel		金属 Metal		金属 Metal		金属 Metal						
防护等级 Protection grade		IP67		IP67		IP67		IP67		IP67						
可替代国内型号 Alyemative model at home and abroad		E2E-X1R5-□□		E2E-X1R5-□□		E2E-X1R5-□□		E2E-X1R5-□□		E2E-X1R5-□□						

接近开关 PROXIMITY SWITCH

结构分类 Structural category

圆柱型 Cylinder type

外形编号 Outward Appearance code

LM12

LM14

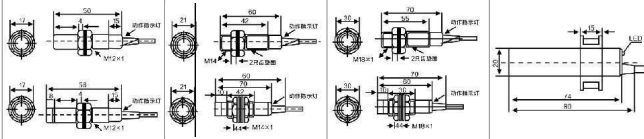
LM18

LM20

外形图例
Outward appearance illustration



外形尺寸
Overall dimensions



埋入式 Flush	检测距离 DETECTION DISTANCE		2mm	3mm	5mm		
	直流 DC 10-30 VDC	NPN	NO	LM12-3002NA	LM14-3003NA	LM18-3005NA	
NC			LM12-3002NB	LM14-3003NB	LM18-3005NB		
NO+NC			LM12-3002NC	LM14-3003NC	LM18-3005NC		
PNP		NO	LM12-3002PA	LM14-3003PA	LM18-3005PA		
		NC	LM12-3002PB	LM14-3003PB	LM18-3005PB		
		NO+NC	LM12-3002PC	LM14-3003PC	LM18-3005PC		
二线制 two wire system		NO	LM12-3002LA	LM14-3003LA	LM18-3005LA		
		NC	LM12-3002LB	LM14-3003LB	LM18-3005LB		
		SCR 可控硅 Control- lable silicon	NO	LM12-2002A	LM14-2003A	LM18-2005A	
		NC	LM12-2002B	LM14-2003B	LM18-2005B		
交流 AC 90-250 VAC	NO+NC			LM18-2005C			
	继电器输出 Relay output						
非埋入式 Non-Flush	检测距离 DETECTION DISTANCE		4mm	5mm	8mm	10mm	
	直流 DC 10-30 VDC	NPN	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	
PNP		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	
二线制 two wire system		NO	LM12-3004LA	LM14-3005LA	LM18-3008LA	LM20-3010LA	
		NC	LM12-3004LB	LM14-3005LB	LM18-3008LB	LM20-3010LB	
		SCR 可控硅 Control- lable silicon	NO	LM12-2004A	LM14-2005A	LM18-2008A	LM20-2010A
		NC	LM12-2004B	LM14-2005B	LM18-2008B	LM20-2010B	
交流 AC 90-250 VAC	NO+NC			LM18-2008C	LM20-2010C		
	继电器输出 Relay output						
输出电流 Control output		DC	200mA	200mA	200mA	200mA	
SCR/继电器 Relay			400mA	400mA	400mA	400mA/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℃~+75℃	-25℃~+75℃	-25℃~+75℃	-25℃~+75℃		
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 Aiyemative model at home and abroad		E2E-X5□□	LJ14A3-□□	LJ18A3-8-□□			

接近开关 PROXIMITY SWITCH

圆柱型 Cylinder type

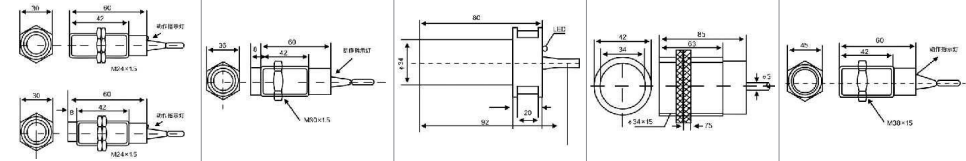
LM24

LM30

LM34

LM35

LM38



埋入式 Flush	检测距离 DETECTION DISTANCE		8mm	10mm	12mm			
	直流 DC 10-30 VDC	NPN	NO	LM24-3008NA	LM30-3010NA	LM38-3012NA		
NC			LM24-3008NB	LM30-3010NB	LM38-3012NB			
NO+NC			LM24-3008NC	LM30-3010NC	LM38-3012NC			
PNP		NO	LM24-3008PA	LM30-3010PA	LM38-3012PA			
		NC	LM24-3008PB	LM30-3010PB	LM38-3012PB			
		NO+NC	LM24-3008PC	LM30-3010PC	LM38-3012PC			
二线制 two wire system		NO	LM24-3008LA	LM30-3010LA	LM38-3012LA			
		NC	LM24-3008LB	LM30-3010LB	LM38-3012LB			
		SCR 可控硅 Control- lable silicon	NO	LM24-2008A	LM30-2010A	LM38-2012A		
		NC	LM24-2008B	LM30-2010B	LM38-2012B			
交流 AC 90-250 VAC	NO+NC		LM30-2010C	LM38-2012C				
	继电器输出 Relay output							
非埋入式 Non-Flush	检测距离 DETECTION DISTANCE		10mm	15mm	17mm	17mm	18mm	
	直流 DC 10-30 VDC	NPN	NO	LM24-3010NA	LM30-3015NA	LM34-3017NA	LM35-3017NA	LM38-3018NA
NC			LM24-3010NB	LM30-3015NB	LM34-3017NB	LM35-3017NB	LM38-3018NB	
NO+NC			LM24-3010NC	LM30-3015NC	LM34-3017NC	LM35-3017NC	LM38-3018NC	
PNP		NO	LM24-3010PA	LM30-3015PA	LM34-3017PA	LM35-3017PA	LM38-3018PA	
		NC	LM24-3010PB	LM30-3015PB	LM34-3017PB	LM35-3017PB	LM38-3018PB	
		NO+NC	LM24-3010PC	LM30-3015PC	LM34-3017PC	LM35-3017PC	LM38-3018PC	
二线制 two wire system		NO	LM24-3010LA	LM30-3015LA	LM34-3017LA	LM35-3017LA	LM38-3018LA	
		NC	LM24-3010LB	LM30-3015LB	LM34-3017LB	LM35-3017LB	LM38-3018LB	
		SCR 可控硅 Control- lable silicon	NO	LM24-2010A	LM30-2015A	LM34-2017A	LM35-2017A	LM38-2018A
		NC	LM24-2010B	LM30-2015B	LM34-2017B	LM35-2017B	LM38-2018B	
交流 AC 90-250 VAC	NO+NC		LM30-2015C	LM34-2017C	LM35-2017C	LM38-2018C		
	继电器输出 Relay output							
输出电流 Control output		DC	200mA	200mA	200mA	200mA	200mA	
SCR/继电器 Relay			400mA	400mA/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		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)		
重复精度 Repeated precision		0.05	0.05	0.1				
响应频率 DC/AC		200Hz/25Hz	200Hz/25Hz	100Hz/15Hz				
工作环境温度 Working environment temperature		-25℃~+75℃	-25℃~+75℃	-25℃~+75℃				
绝缘电阻 Insulation resistance		50MΩ	50MΩ	50MΩ				
外壳材料 Shell material		金属 Metal	金属 Metal	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 Aiyemative model at home and abroad		LJ24A3-10-□□	E2E-X18M□			LJ38A4-18-□□		

接近开关 PROXIMITY SWITCH

结构分类 Structural category

圆柱型 Cylinder type

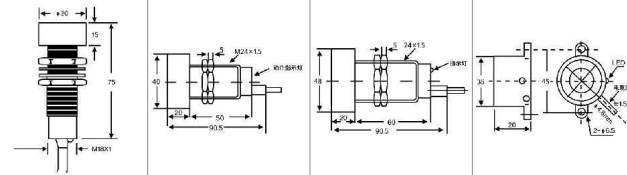
外形编号 Outward Appearance code

LM39 LM40 LM480 LM36

外形图例
Outward appearance illustration



外形尺寸
Overall dimensions



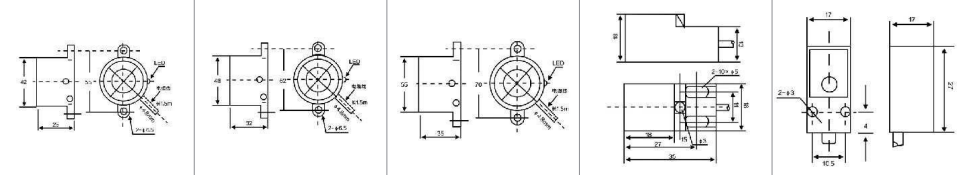
检测距离 DETECTION DISTANCE							
埋入式 Flush	直流 DC 10-30 VDC	NPN	NO				
			NC				
			NO+NC				
	PNP	NO					
		NC					
		NO+NC					
	交流 AC 90-250 VAC	二线制 two wire system	NO				
		NC					
		SCR 可控硅 Control- lable silicon	NO				
		NC					
继电器输出 Relay output							
检测距离 DETECTION DISTANCE		15mm	20mm	25mm	15mm		
非埋入式 Non-Flush	直流 DC 10-30 VDC	NPN	NO	LM39-3015NA	LM40-3020NA	LM480-3025NA	LM36-3015NA
			NC	LM39-3015NB	LM40-3020NB	LM480-3025NB	LM36-3015NB
			NO+NC	LM39-3015NC	LM40-3020NC	LM480-3025NC	LM36-3015NC
	PNP	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	
	交流 AC 90-250 VAC	二线制 two wire system	NO	LM39-3015LA	LM40-3002LA	LM480-3025LA	LM36-3015LA
		NC	LM39-3015LB	LM40-3002LB	LM480-3025LB	LM36-2015LB	
		SCR 可控硅 Control- lable silicon	NO	LM39-2015A	LM40-2002A	LM480-2025A	LM36-2015A
		NC	LM39-2015B	LM40-2020B	LM480-2025B	LM36-2015B	
继电器输出 Relay output			LM40-2020C	LM480-2025C			
输出电流 Control output		DC	200mA	200mA	200mA	200mA	
SCR/继电器 Relay			400mA/1A	400mA/1A		400mA	
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 Aiyemative model at home and abroad		SC-□□	SC-□□	SFE-□□			

接近开关 PROXIMITY SWITCH

平面安装型 Plane installation type

角柱型 Angular column type

LM42 LM48 LM55 LMF1 LMF2



检测距离 DETECTION DISTANCE					5mm	5mm		
埋入式 Flush	直流 DC 10-30 VDC	NPN	NO					
			NC					
			NO+NC					
	PNP	NO						
		NC						
		NO+NC						
	交流 AC 90-250 VAC	二线制 two wire system	NO					
		NC						
		SCR 可控硅 Control- lable silicon	NO					
		NC						
继电器输出 Relay output								
检测距离 DETECTION DISTANCE		20mm	20mm	25mm				
非埋入式 Non-Flush	直流 DC 10-30 VDC	NPN	NO	LM42-3020NA	LM48-3020NA	LM55-3025NA		
			NC	LM42-3020NB	LM48-3020NB	LM55-3025NB		
			NO+NC	LM42-3020NC	LM48-3020NC	LM55-3025NC		
	PNP	NO	LM42-3020PA	LM48-3020PA	LM55-3025PA			
		NC	LM42-3020PB	LM48-3020PB	LM55-3025PB			
		NO+NC	LM42-3020PC	LM48-3020PC	LM55-3025PC			
	交流 AC 90-250 VAC	二线制 two wire system	NO	LM42-3020LA	LM48-3020LA	LM55-3025LA		
		NC	LM42-2020LB	LM48-2020LB	LM55-2025LB			
		SCR 可控硅 Control- lable silicon	NO	LM42-2020A	LM48-2020A	LM55-2025A	LMF1-2005A	LMF2-2005A
		NC	LM42-2020B	LM48-2020B	LM55-2025B	LMF1-2005B	LMF2-2005B	
继电器输出 Relay output			LM48-2020C	LM55-2025C				
输出电流 Control output		DC	200mA	200mA	200mA	200mA		
SCR/继电器 Relay			400mA	400mA	400mA	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)	60×60×1(A3铁iron)	55×55×1(A3铁iron)	20×20×1(A3铁iron)	20×20×1(A3铁iron)		
重复精度 Repeated precision		0.2				0.02		
响应频率 DC/AC		200Hz/10Hz				400Hz/25Hz		
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		ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin		
防护等级 Protection grade		IP67						
可替代国内型号 Aiyemative model at home and abroad		SD-□□	SE-□□	SN04-N	TL-Q5MC1			

接近开关 PROXIMITY SWITCH

结构分类 Structural category

角柱型 Angular column type

外形编号 Outward Appearance code

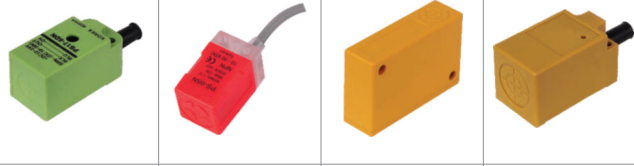
LMF3

LMF4

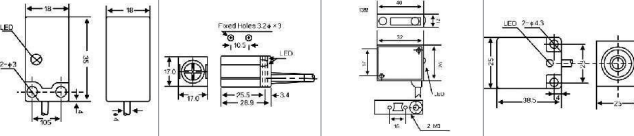
LMF5

LMF6

外形图例
Outward appearance illustration



外形尺寸
Overall dimensions



		检测距离 DETECTION DISTANCE					
		5mm	5mm	2mm	8mm		
埋入式 Flush	直流 DC 10-30 VDC	NPN	NO	LMF3-3005NA	LMF4-3005NA	LMF5-3002NA	LMF6-3008NA
			NC	LMF3-3005NB	LMF4-3005NB	LMF5-3002NB	LMF6-3008NB
			NO+NC		LMF4-3005NC	LMF5-3002NC	LMF6-3008NC
		PNP	NO	LMF3-3005PA	LMF4-3005PA	LMF5-3002PA	LMF6-3008PA
			NC	LMF3-3005PB	LMF4-3005PB	LMF5-3002PB	LMF6-3008PB
	交流 AC 90-250 VAC	二线制 two wire system	NO	LMF3-3005LA	LMF4-3005LC	LMF5-3002PC	LMF6-3008PC
			NC	LMF3-3005LB	LMF4-3005LB	LMF5-3002LB	LMF6-3008LB
		SCR 可控硅 Control- lable silicon	NO				LMF6-2008A
			NC				LMF6-2008B
		NO+NC					
继电器输出 Relay output							
		检测距离 DETECTION DISTANCE					
				4mm	10mm		
非埋入式 Non-Flush	直流 DC 10-30 VDC	NPN	NO		LMF5-3004NA	LMF6-3010NA	
			NC		LMF5-3004NB	LMF6-3010NB	
			NO+NC		LMF5-3004NC	LMF6-3010NC	
		PNP	NO		LMF5-3004PA	LMF6-3010PA	
			NC		LMF5-3004PB	LMF6-3010PB	
	交流 AC 90-250 VAC	二线制 two wire system	NO		LMF5-3004PC	LMF6-3010PC	
			NC		LMF5-3004LA	LMF6-3010LA	
		SCR 可控硅 Control- lable silicon	NO	LMF3-2005A		LMF6-2010A	
			NC	LMF3-2005B		LMF6-2010B	
		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				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		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 Aiyemative model at home and abroad		PS17-5PN	PS05-N, PS05-P		TL-N5ME□		

接近开关 PROXIMITY SWITCH

角柱型 Angular column type

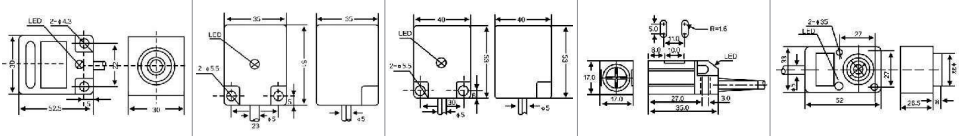
LMF7

LMF8

LMF10

LMF11

LMF12



		检测距离 DETECTION DISTANCE				
		10mm	10mm	15mm	5mm	
埋入式 Flush	直流 DC 10-30 VDC	NPN	LMF7-3010NA	LMF8-3010NA	LMF10-3015NA	LMF11-3005NA
			LMF7-3010NB	LMF8-3010NB	LMF10-3015NB	LMF11-3005NB
			LMF7-3010PA	LMF8-3010PA	LMF10-3015PA	LMF11-3005PA
		PNP	LMF7-3010PB	LMF8-3010PB	LMF10-3015PB	LMF11-3005PB
			LMF7-3010PC	LMF8-3010PC	LMF10-3015PC	LMF11-3005PC
	交流 AC 90-250 VAC	二线制 two wire system	LMF7-3010LA	LMF8-3010LA	LMF10-3015LA	LMF11-3005LA
			LMF7-3010LB	LMF8-3010LB	LMF10-3015LB	LMF11-3005LB
		SCR 可控硅 Control- lable silicon	LMF7-2010A	LMF8-2010A	LMF10-2015A	
			LMF7-2010B	LMF8-2010B	LMF10-2015B	
		LMF7-2010C	LMF8-2010C	LMF10-2015C		
继电器输出 Relay output						
		检测距离 DETECTION DISTANCE				
		15mm	15mm	20mm	8mm	
非埋入式 Non-Flush	直流 DC 10-30 VDC	NPN	LMF7-3015NA	LMF8-3015NA	LMF10-3020NA	LMF12-3008NA
			LMF7-3015NB	LMF8-3015NB	LMF10-3020NB	LMF12-3008NB
			LMF7-3015NC	LMF8-3015NC	LMF10-3020NC	LMF12-3008NC
		PNP	LMF7-3015PA	LMF8-3015PA	LMF10-3020PA	LMF12-3008PA
			LMF7-3015PB	LMF8-3015PB	LMF10-3020PB	LMF12-3008PB
	交流 AC 90-250 VAC	二线制 two wire system	LMF7-3015PC	LMF8-3015PC	LMF10-3020PC	LMF12-3008PC
			LMF7-3015LA	LMF8-3015LA	LMF10-3020LA	LMF12-3008LA
		SCR 可控硅 Control- lable silicon	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			
继电器输出 Relay output						
输出电流 Control output		200mA	200mA	200mA	200mA	
SCR/继电器 Relay		300mA	500mA		500mA	
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		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)
重复精度 Repeated precision		0.05	0.05	0.05	0.05	0.04
响应频率 DC/AC		200Hz/15Hz	200Hz/15Hz	100Hz/15Hz	500Hz	200Hz/15Hz
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	-25°C~+70°C
绝缘电阻 Insulation resistance		50MΩ	50MΩ	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	ABS树脂 Resin
防护等级 Protection grade		IP67	IP67	IP67	IP67	IP67
可替代国内型号 Aiyemative model at home and abroad		TL-N10M		TL-N20M□	PL-05N PL-05P	LJ1A-24

接近开关 PROXIMITY SWITCH

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				
外形尺寸 Overall dimensions				

埋入式 Flush	检测距离 DETECTION DISTANCE						
	2mm						
直流 DC 10-30 VDC	NPN	NO			LMF15-3002NA		
		NC			LMF15-3002NB		
		NO+NC			LMF15-3002NC		
	PNP	NO			LMF15-3002PA		
		NC			LMF15-3002PB		
		NO+NC			LMF15-3002PC		
	二线制 two wire system	NO			LMF15-3002LA		
		NC			LMF15-3002LB		
		NO+NC			LMF15-3002LC		
	交流 AC 90-250 VAC	SCR 可控硅 Control- lable silicon	NO			LMF15-2002A	
		NC				LMF15-2002B	
		NO+NC					
继电器输出 Relay output							
非埋入式 Non-Flush	检测距离 DETECTION DISTANCE						
	直流 DC 10-30 VDC	NPN	NO	LMF13-3008NA	LMF14-3005NA	LMF15-3004NA	LMF16-3015NA
			NC	LMF13-3008NB	LMF14-3005NB	LMF15-3004NB	LMF16-3015NB
			NO+NC	LMF13-3008NC	LMF14-3005NC	LMF15-3004NC	LMF16-3015NC
	PNP	NO	LMF13-3008PA	LMF14-3005PA	LMF15-3004PA	LMF16-3015PA	
		NC	LMF13-3008PB	LMF14-3005PB	LMF15-3004PB	LMF16-3015PB	
		NO+NC	LMF13-3008PC	LMF14-3005PC	LMF15-3004PC	LMF16-3015PC	
	二线制 two wire system	NO	LMF13-3008LA	LMF14-3005LA	LMF15-3004LA	LMF16-3015LA	
		NC	LMF13-3008LB	LMF14-3005LB	LMF15-3004LB	LMF16-3015LB	
		NO+NC	LMF13-3008LC	LMF14-3005LC	LMF15-3004LC	LMF16-3015LC	
	交流 AC 90-250 VAC	SCR 可控硅 Control- lable silicon	NO	LMF13-2008A	LMF14-2005A	LMF15-2004A	LMF16-2015A
		NC	LMF13-2008B	LMF14-2005B	LMF15-2004B	LMF16-2015B	
NO+NC					LMF16-2015C		
继电器输出 Relay output							
输出电流 Control output							
DC		200mA	200mA	200mA	200mA		
SCR/继电器 Relay		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							
		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 Aiyemative model at home and abroad							
		LJD-□□		ST-F-□	LJ2-□□□□		

接近开关 PROXIMITY SWITCH

角柱型 Angular column type

平面安装型 Plane installation type

外形编号 Outward Appearance code	LMF17	LMF21	LMF22	LMF23	LMF24
外形图例 Outward appearance illustration					
外形尺寸 Overall dimensions					

埋入式 Flush	检测距离 DETECTION DISTANCE							
	4mm							
直流 DC 10-30 VDC	NPN	NO			LMF22-3002NA			
		NC			LMF22-3002NB			
		NO+NC			LMF22-3002NC			
	PNP	NO			LMF22-3002PA			
		NC			LMF22-3002PB			
		NO+NC			LMF22-3002PC			
	二线制 two wire system	NO			LMF22-3002LA			
		NC			LMF22-3002LB			
		NO+NC			LMF22-3002LC			
	交流 AC 90-250 VAC	SCR 可控硅 Control- lable silicon	NO			LMF22-2002A		
		NC				LMF22-2002B		
		NO+NC				LMF22-2002C		
继电器输出 Relay output								
非埋入式 Non-Flush	检测距离 DETECTION DISTANCE							
	直流 DC 10-30 VDC	NPN	NO	LMF17-3020NA	LMF21-3004NA	LMF22-3004NA	LMF23-3005NA	LMF24-3005NA
			NC	LMF17-3020NB	LMF21-3004NB	LMF22-3004NB	LMF23-3005NB	LMF24-3005NB
			NO+NC	LMF17-3020NC	LMF21-3004NC	LMF22-3004NC	LMF23-3005NC	LMF24-3005NC
	PNP	NO	LMF17-3020PA	LMF21-3004PA	LMF22-3004PA	LMF23-3005PA	LMF24-3005PA	
		NC	LMF17-3020PB	LMF21-3004PB	LMF22-3004PB	LMF23-3005PB	LMF24-3005PB	
		NO+NC	LMF17-3020PC	LMF21-3004PC	LMF22-3004PC	LMF23-3005PC	LMF24-3005PC	
	二线制 two wire system	NO	LMF17-3020LA	LMF21-3004LA	LMF22-3004LA	LMF23-3005LA	LMF24-3005LA	
		NC	LMF17-3020LB	LMF21-3004LB	LMF22-3004LB	LMF23-3005LB	LMF24-3005LB	
		NO+NC	LMF17-2020A					
	交流 AC 90-250 VAC	SCR 可控硅 Control- lable silicon	NO	LMF17-2020B				
		NC	LMF17-2020C					
NO+NC		LMF17-2020C						
继电器输出 Relay output								
输出电流 Control output								
DC		200mA	200mA	200mA	200mA			
SCR/继电器 Relay		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								
		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)		
重复精度 Repeated precision								
		0.2	0.01	0.05	0.05	0.05		
响应频率 DC/AC								
		200Hz/15Hz	500Hz/5Hz	300Hz	500Hz	500Hz/5Hz		
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	-25°C~+70°C		
绝缘电阻 Insulation resistance								
		≥50MΩ	50MΩ	≥50MΩ	50MΩ	50MΩ		
外壳材料 Shell material								
		ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin	ABS塑料 Plastil	ABS塑料 Plastil		
防护等级 Protection grade								
		IP67	IP67	IP67	IP67	IP67		

接近开关 PROXIMITY SWITCH

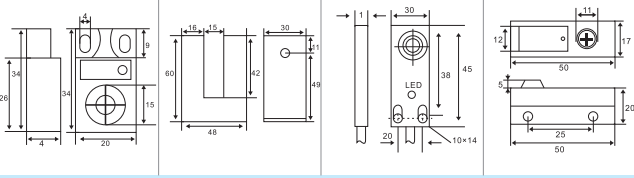
结构分类 Structural category 平面安装型 Plane installation type 角柱型 Angular column type

外形编号 Outward Appearance code LMF25 LMF27 LMF29 LMF30

外形图例
Outward appearance illustration



外形尺寸
Overall dimensions

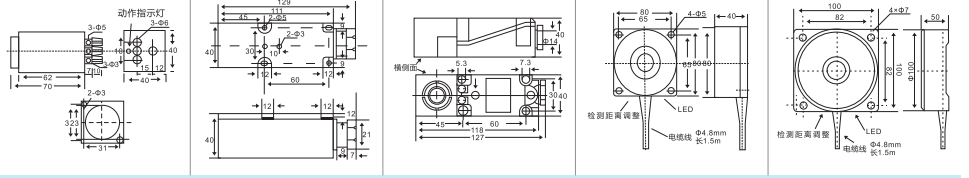


		检测距离 DETECTION DISTANCE					
		5mm	15mm	8mm	4mm		
埋入式 Flush	直流 DC 10-30 VDC	NPN	NO		LMF29-3005NA		
			NC		LMF29-3005NB		
			NO+NC		LMF29-3005NC		
		PNP	NO		LMF29-3005PA		
			NC		LMF29-3005PB		
	交流 AC 90-250 VAC	二线制 two wire system	NO		LMF29-3005PC		
		NC		LMF29-3005LA			
		SCR 可控硅 Control- lable silicon	NO		LMF29-2005A		
		NC		LMF29-2005B			
		NO+NC					
继电器输出 Relay output							
		检测距离 DETECTION DISTANCE					
		5mm	15mm	8mm	4mm		
非埋入式 Non-Flush	直流 DC 10-30 VDC	NPN	NO	LMF25-3005NA	LMF27-3015NA	LMF29-3008NA	LMF30-3004NA
			NC	LMF25-3005NB	LMF27-3015NB	LMF29-3008NB	LMF30-3004NB
			NO+NC	LMF25-3005NC	LMF27-3015NC	LMF29-3008NC	LMF30-3004NC
		PNP	NO	LMF25-3005PA	LMF27-3015PA	LMF29-3008PA	LMF30-3004PA
			NC	LMF25-3005PB	LMF27-3015PB	LMF29-3008PB	LMF30-3004PB
	交流 AC 90-250 VAC	二线制 two wire system	NO	LMF25-3005PC	LMF27-3015PC	LMF29-3008PC	LMF30-3004PC
		NC	LMF25-3005LA	LMF27-3015LA	LMF29-3008LA	LMF30-3004LA	
		SCR 可控硅 Control- lable silicon	NO	LMF25-2005A	LMF27-2015A	LMF29-2008A	LMF30-2004A
		NC	LMF25-2005B	LMF27-2015B	LMF29-2008B	LMF30-2004B	
		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		500mA	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		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塑料 Resin	ABS树脂 Resin			
防护等级 Protection grade		IP67	IP67	IP67	IP67		
可替代国内型号 Aiyemative model at home and abroad							

接近开关 PROXIMITY SWITCH

角柱型 Angular column type 平面安装型 Plane installation type

LMF35 LMF36 LMF37 LMF38 LMF39



		检测距离 DETECTION DISTANCE						
		15mm	1-20mm	20mm	1-40mm	1-50mm		
埋入式 Flush	直流 DC 10-30 VDC	NPN	NO		LMF37-3015NA			
			NC		LMF37-3015NB			
			NO+NC		LMF37-3015NC			
		PNP	NO		LMF37-3015PA			
			NC		LMF37-3015PB			
	交流 AC 90-250 VAC	二线制 two wire system	NO		LMF37-3015PC			
		NC		LMF37-3015LA				
		SCR 可控硅 Control- lable silicon	NO		LMF37-2015A			
		NC		LMF37-2015B				
		NO+NC			LMF37-2015C			
继电器输出 Relay output								
		检测距离 DETECTION DISTANCE						
		15mm	1-20mm	20mm	1-40mm	1-50mm		
非埋入式 Non-Flush	直流 DC 10-30 VDC	NPN	NO	LMF35-3015NA	LMF36-3020NA	LMF37-3020NA	LMF38-3040NA	LMF39-3050NA
			NC	LMF35-3015NB	LMF36-3020NB	LMF37-3020NB	LMF38-3040NB	LMF39-3050NB
			NO+NC	LMF35-3015NC	LMF36-3020NC	LMF37-3020NC	LMF38-3040NC	LMF39-3050NC
		PNP	NO	LMF35-3015PA	LMF36-3020PA	LMF37-3020PA	LMF38-3040PA	LMF39-3050PA
			NC	LMF35-3015PB	LMF36-3020PB	LMF37-3020PB	LMF38-3040PB	LMF39-3050PB
	交流 AC 90-250 VAC	二线制 two wire system	NO	LMF35-3015PC	LMF36-3020PC	LMF37-3020PC	LMF38-3040PC	LMF39-3050PC
		NC	LMF35-3015LA	LMF36-3020LA	LMF37-3020LA	LMF38-3040LA	LMF39-3050LA	
		SCR 可控硅 Control- lable silicon	NO	LMF35-2015A	LMF36-2020A	LMF37-2020A	LMF38-2040A	LMF39-2050A
		NC	LMF35-2015B	LMF36-2020B	LMF37-2020B	LMF38-2040B	LMF39-2050B	
		NO+NC						
继电器输出 Relay output								
输出电流 Control output		200mA	200mA	200mA	200mA	200mA		
SCR/继电器 Relay		300mA/2A	300mA/2A	300mA/2A	300mA/2A	300mA/2A		
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		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)		
重复精度 Repeated precision		0.05	0.2	0.2	0.5	0.5		
响应频率 DC/AC		200Hz/15Hz	500Hz/15Hz	200Hz/15Hz	50Hz/10Hz	50Hz/10Hz		
工作环境温度 Working environment temperature		-25°C~+70°C	-25°C~+70°C	-25°C~+70°C	-25°C~+75°C	-25°C~+75°C		
绝缘电阻 Insulation resistance		≥50MΩ	50MΩ	≥50MΩ	50MΩ	50MΩ		
外壳材料 Shell material		ABS树脂 Resin	ABS树脂 Resin	ABS树脂 Resin				
防护等级 Protection grade		IP67	IP67	IP67	IP67	IP67		
可替代国内型号 Aiyemative model at home and abroad		JDK-2正负		HY-A20□	TCD-2040□	TCD-2050□		

接近开关 PROXIMITY SWITCH

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				

埋入式 Flush	检测距离 DETECTION DISTANCE					
	直流 DC 10-30 VDC	NPN	NO NC NO+NC			
交流 AC 90-250 VAC	PNP	NO NC NO+NC				
	二线制 two wire system SCR 可控硅 Control-able silicon	NO NC NO+NC				
继电器输出 Relay output						
非埋入式 Non-Flush	检测距离 DETECTION DISTANCE		80mm	0-120mm	0-25mm	40mm
	直流 DC 10-30 VDC	NPN	NO NC NO+NC	LMF40-3080NA LMF40-3080NB LMF40-3080NC	LMF41-30120NA LMF41-30120NB LMF41-30120NC	LMF42-3025NA LMF42-3025NB LMF42-3025NC
交流 AC 90-250 VAC	PNP	NO NC NO+NC	LMF40-3080PA LMF40-3080PB LMF40-3080PC	LMF41-30120PA LMF41-30120PB LMF41-30120PC	LMF42-3025PA LMF42-3025PB LMF42-3025PC	LMF43-3040PA LMF43-3040PB LMF43-3040PC
	二线制 two wire system SCR 可控硅 Control-able silicon	NO NC NO+NC	LMF40-3080LA LMF40-3080LB LMF40-2080A LMF40-2080B LMF40-2080C	LMF41-30120LA LMF41-30120LB LMF41-20120A LMF41-20120B LMF41-20120C	LMF42-3025LA LMF42-3025LB LMF42-2025A LMF42-2025B LMF42-2025C	LMF43-3040LA LMF43-3040LB LMF43-2040A LMF43-2040B LMF43-2040C
继电器输出 Relay output			LMF40-2080JC	LMF41-20120JC	LMF42-2025JC	LMF43-2040JC
输出电流 Control output		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		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		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 Aiyemative model at home and abroad		TCB-2080□	TCC-2120□			

接近开关 PROXIMITY SWITCH

平面安装型 Plane installation type

外形编号 Outward Appearance code	LMF45	LMF55	LMF340	LMF370	LMF380
外形图例 Outward appearance illustration					
外形尺寸 Overall dimensions					

非埋入式 Non-Flush	检测距离 DETECTION DISTANCE		0-50mm	25mm	20mm	40mm	40mm
	直流 DC 10-30 VDC	NPN	NO NC NO+NC	LMF45-3050NA LMF45-3050NB LMF45-3050NC	LMF55-3025NA LMF55-3025NB LMF55-3025NC	LMF340-3020NA LMF340-3020NB LMF340-3020NC	LMF370-3040NA LMF370-3040NB LMF370-3040NC
交流 AC 90-250 VAC	PNP	NO NC NO+NC	LMF45-3050PA LMF45-3050PB LMF45-3050PC	LMF55-3025PA LMF55-3025PB LMF55-3025PC	LMF340-3020PA LMF340-3020PB LMF340-3020PC	LMF370-3040PA LMF370-3040PB LMF370-3040PC	LMF380-3040PA LMF380-3040PB LMF380-3040PC
	二线制 two wire system SCR 可控硅 Control-able silicon	NO NC NO+NC	LMF45-2050A LMF45-2050B LMF45-2050C	LMF55-2025A LMF55-2025B LMF55-2025C	LMF340-2020A LMF340-2020B LMF340-2020C	LMF370-2040A LMF370-2040B LMF370-2040C	LMF380-2040A LMF380-2040B LMF380-2040C
继电器输出 Relay output			LMF45-2080JC	LMF55-20120JC	LMF340-2020JC	LMF370-2040JC	LMF380-2040JC
输出电流 Control output		DC	200mA	200mA	200mA	200mA	200mA
		SCR/继电器 Relay	300mA/3A	300mA/5A	300mA/2A	300mA/2A	300mA/2A
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		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)	
重复精度 Repeated precision		0.5	0.2	0.05	0.5	0.05	
响应频率 DC/AC		200Hz/5Hz	200Hz/10Hz	300Hz/10Hz	200Hz/10Hz	500Hz/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	-25°C~+70°C	
绝缘电阻 Insulation resistance		50MΩ	50MΩ	50MΩ	50MΩ	50MΩ	
外壳材料 Shell material		塑料 Plastil	ABS树脂 Resin	塑料 Plastil	塑料 Plastil	ABC塑料 Plastil	
防护等级 Protection grade		IP67	IP67	IP67	IP67	IP67	
可替代国内型号 Aiyemative model at home and abroad			HE-/HD-			NJ40P-FP-A2-P1	