PUBANG

圆柱型电感式接近开关
Cylindrical Inductive Proximity Sensor

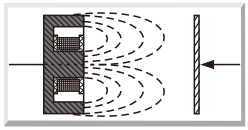
功能特点/Features

- 具有短路保护、反极性保护、过载保护功能（DC）
- Short-circuit protection, reversed polarity protection and overload protection (DC)
- 长寿命及高可靠性
- Long life-span and high reliability
- 经济实惠并且操作简单
- Cost-effective, easy operation
- 红色LED显示可以检查传感器的输出状态
- Visual LED display to indicate output status
- 运用广泛，可替换小型微动开关和限位开关
- Widely used, can replace micro switch and limit switch

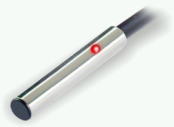
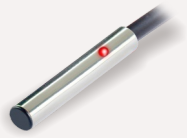
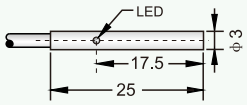
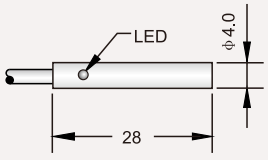


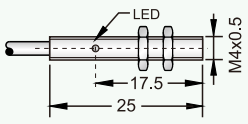
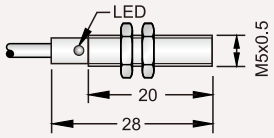
φ3、φ4–出线式(DC) φ3、φ4 –Cable(DC) / A–01
M4、M5–出线式(DC) M4、M5 –Cable(DC) / A–02
φ6.5–出线式(DC) φ6.5 –Cable(DC) / A–03
M8–出线式(DC) M8 –Cable(DC) / A–04
M8–插座式(DC) M8 –Connector(DC) / A–05
M12–出线式(DC) M12 –Cable(DC) / A–07
M12–插座式(DC) M12 –Connector(DC) / A–09
M12–端子连接(DC) M12 –Terminal Connection(DC) / A–10
M12–出线式(AC) M12 –Cable(AC) / A–11
M12–端子连接(AC) M12 –Terminal Connection(AC) / A–12
M18–出线式(DC) M18 –Cable(DC) / A–13
M18–插座式(DC) M18 –Connector (DC) / A–15
M18–端子连接(DC) M18 –Terminal Connection(DC) / A–16
M18–出线式(AC) M18 –Cable(AC) / A–17
M18–端子连接(AC) M18 –Terminal Connection(AC) / A–18
M30–出线式(DC) M30 –Cable(DC) / A–20
M30–插座式(DC) M30 –Connector(DC) / A–22
M30–端子连接(DC) M30 –Terminal Connection (DC) / A–23
M30–出线式(AC) M30 –Cable(AC) / A–24
M30–端子连接(AC) M30 –Terminal Connection(AC) / A–25

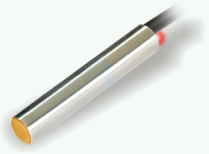
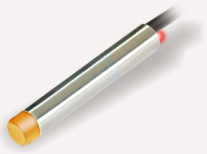
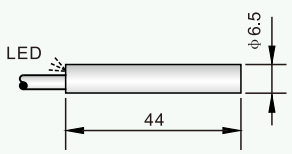
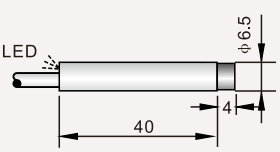
■ 电感式
■ Inductive

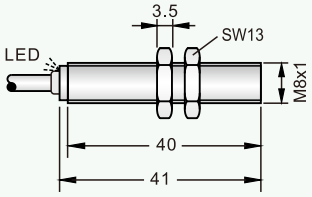
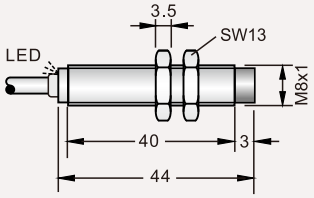


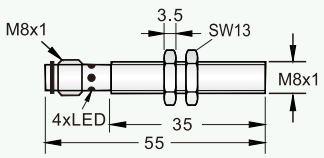
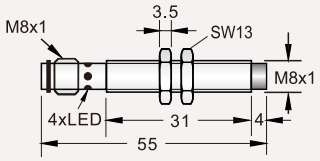
CE

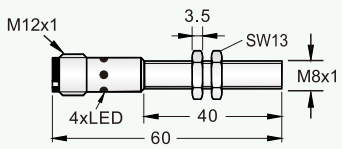
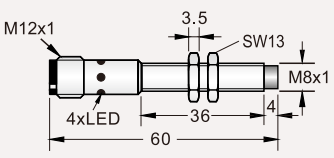
	φ3, L25		φ4, L28	
图 片 PICTURE				
直流-3线/DC–3 wires NPN N.O.	ISD3-S0.8NA-D3N2	*01	IBD4-S0.8NA-D3N2	*01
直流-3线/DC–3 wires NPN N.C.	ISD3-S0.8NB-D3N2	*02	IBD4-S0.8NB-D3N2	*02
直流-3线/DC–3 wires PNP N.O.	ISD3-S0.8PA-D3N2	*03	IBD4-S0.8PA-D3N2	*03
直流-3线/DC–3 wires PNP N.C.	ISD3-S0.8PB-D3N2	*04	IBD4-S0.8PB-D3N2	*04
直流-2线/DC–2 wires N.O.	————		————	
直流-2线/DC–2 wires N.C.	————		————	
检测距离/ Rated sensing distance	0.8mm			
安装方式/Mounting	埋入/shield			
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.			
漏电流/Leakage current	<0.01mA			
设定距离/Setting distance	0...0.56mm			
标准检出物体/Sensing target	铁/Iron 5x5x1mm			
工作频率/ Frequency	1500Hz			
消耗电流/Consumption	≤15mA			
负载电流/Load current	100mA			
电压降/Voltage drop(V_p)	≤1.8V			
滞后/Hysteresis	1...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	反极性保护/ Reversed polarity protection			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	300m/s²(30G) X、Y、Z、方向各10次/300m/s²(30G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP66			
连接方式/Connection	电缆线2M，外径φ2.3mm/Cable: φ2. 3mm 2M		电缆线2M，外径φ2.8mm/Cable: φ2. 8mm 2M	
外壳材料/Housing material	不锈钢/stainless steel		黄铜镀镍/nickel-plated brass	
检测面材料/Sensing face material	PC			
尺寸图 Dimensional drawing				
备 注/Remark	注 1： *01 ,*02 ,*03,*04...表示接线图序号,详见14...17页。			

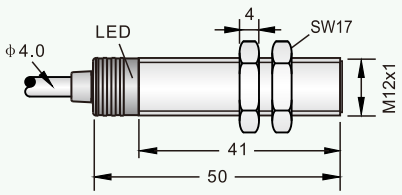
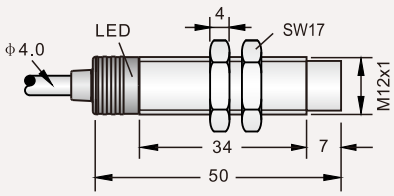
	M4x0.5, L25		M5x0.5, L28	
图 片 PICTURE				
直流-3线/DC–3 wires NPN N.O.	IST4-S0.8NA-D3N2	*01	IST5-S0.8NA-D3N2	*01
直流-3线/DC–3 wires NPN N.C.	IST4-S0.8NB-D3N2	*02	IST5-S0.8NB-D3N2	*02
直流-3线/DC–3 wires PNP N.O.	IST4-S0.8PA-D3N2	*03	IST5-S0.8PA-D3N2	*03
直流-3线/DC–3 wires PNP N.C.	IST4-S0.8PB-D3N2	*04	IST5-S0.8PB-D3N2	*04
直流-2线/DC–2 wires N.O.	————		————	
直流-2线/DC–2 wires N.C.	————		————	
检测距离/ Rated sensing distance	0.8mm			
安装方式/Mounting	埋入/shield			
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.			
漏电流/Leakage current	<0.01mA			
设定距离/Setting distance	0...0.56mm			
标准检出物体/Sensing target	铁/Iron 5x5x1mm			
工作频率/ Frequency	1500Hz			
消耗电流/Consumption	≤15mA			
负载电流/Load current	100mA			
电压降/Voltage drop(V_p)	≤1.8V			
滞后/Hysteresis	1...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	反极性保护/ Reversed polarity protection			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	300m/s²(30G) X、Y、Z、方向各10次/300m/s²(30G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP66			
连接方式/Connection	电缆线2M，外径φ2.3mm/Cable: φ2. 3mm 2M		电缆线2M，外径φ2.8mm/Cable: φ2. 8mm 2M	
外壳材料/Housing material	不锈钢/stainless steel			
检测面材料/Sensing face material	PC			
尺寸图 Dimensional drawing				
备 注/Remark	1: *01 ,*02 ,*03,*04-NO of wiring diagram (refers to page 14...17)			

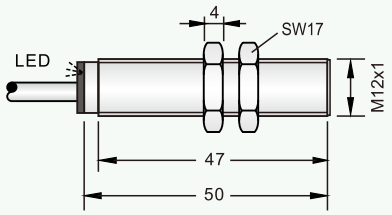
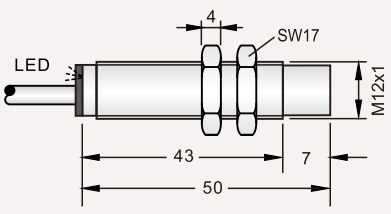
	φ6.5, L44	φ6.5, L44
图 片 PICTURE		
直流-3线/DC–3 wires NPN N.O.	IBD6.5-S1.5NA-D3Y2 *01	IBD6.5-N02NA-D3Y2 *01
直流-3线/DC–3 wires NPN N.C.	IBD6.5-S1.5NB-D3Y2 *02	IBD6.5-N02NB-D3Y2 *02
直流-3线/DC–3 wires PNP N.O.	IBD6.5-S1.5PA-D3Y2 *03	IBD6.5-N02PA-D3Y2 *03
直流-3线/DC–3 wires PNP N.C.	IBD6.5-S1.5PB-D3Y2 *04	IBD6.5-N02PB-D3Y2 *04
直流-2线/DC–2 wires N.O.	————	————
直流-2线/DC–2 wires N.C.	————	————
检测距离/ Rated sensing distance	1.5mm	2mm
安装方式/Mounting	埋入/shield	非埋入/non-shield
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.	
漏电流/Leakage current	<0.01mA	
设定距离/Setting distance	0...1.2mm	0...1.6mm
标准检出物体/Sensing target	铁/Iron 8x8x1mm	
工作频率/ Frequency	1000Hz	
消耗电流/Consumption	≤15mA	
负载电流/Load current	200mA	
电压降/Voltage drop(V_p)	≤1.8V	
滞后/Hysteresis	1...15%	
重复精度/Repeatability	≤5%	
LED 显示/Display	红色/Red LED	
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection	
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)	
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times	
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours	
防护等级/Protection	IP67	
连接方式/Connection	电缆线2M，外径φ3.2mm/Cable: φ3. 2mm 2M	
外壳材料/Housing material	黄铜镀镍/nickel-plated brass	
检测面材料/Sensing face material	PBT	
尺寸图 Dimensional drawing		
备 注/Remark	注 1： *01 ,*02 ,*03,*04...表示接线图序号,详见14...17页。	

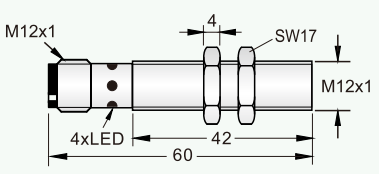
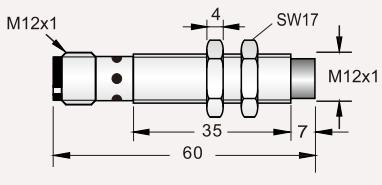
	M8x1, L40		M8x1, L44	
图 片 PICTURE	 CE		 CE	
直流-3线/DC–3 wires NPN N.O.	IBT8-S1.5NA-D3Y2	*01	IBT8-N02NA-D3Y2	*01
直流-3线/DC–3 wires NPN N.C.	IBT8-S1.5NB-D3Y2	*02	IBT8-N02NB-D3Y2	*02
直流-3线/DC–3 wires PNP N.O.	IBT8-S1.5PA-D3Y2	*03	IBT8-N02PA-D3Y2	*03
直流-3线/DC–3 wires PNP N.C.	IBT8-S1.5PB-D3Y2	*04	IBT8-N02PB-D3Y2	*04
直流-2线/DC–2 wires N.O.	IBT8-S1.5LA-D2Y2	*18	IBT8-N02LA-D2Y2	*18
直流-2线/DC–2 wires N.C.	IBT8-S1.5LB-D2Y2	*19	IBT8-N02LB-D2Y2	*19
检测距离/ Rated sensing distance	1.5mm		2mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.			
漏电流/Leakage current	3线式/3 wires : <0.01mA(2线式/2 wires: <0.8mA)			
设定距离/Setting distance	0...1.2mm		0...1.6mm	
标准检出物体/Sensing target	铁/Iron 8x8x1mm			
工作频率/ Frequency	1000Hz			
消耗电流/Consumption	≤15mA			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	≤1.8V(2线式：负载电流100mA＜5V)/≤1.8V(2 wires: Load current 100mA＜5V)			
滞后/Hysteresis	1...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP67			
连接方式/Connection	电缆线2M，外径φ3.2mm（2线式：外径φ2.8mm)/Cable: φ3. 2mm 2M（2 wire: Cable φ2.8mm)			
外壳材料/Housing material	黄铜镀镍/nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	1: *01 ,*02 ,*03,*04-NO of wiring diagram (refers to page 14...17)		2: Pigtail connection is also available	

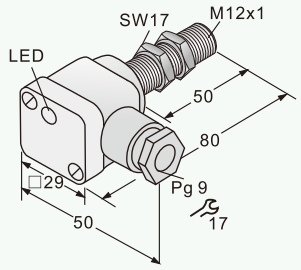
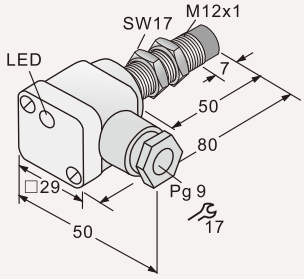
	M8x1, L55		M8x1, L55	
图 片 PICTURE				
直流-3线/DC–3 wires NPN N.O.	IBT8-S1.5NA-D3YV2	*27	IBT8-N02NA-D3YV2	*27
直流-3线/DC–3 wires NPN N.C.	IBT8-S1.5NB-D3YV2	*27	IBT8-N02NB-D3YV2	*27
直流-3线/DC–3 wires PNP N.O.	IBT8-S1.5PA-D3YV2	*28	IBT8-N02PA-D3YV2	*28
直流-3线/DC–3 wires PNP N.C.	IBT8-S1.5PB-D3YV2	*28	IBT8-N02PB-D3YV2	*28
检测距离/ Rated sensing distance	1.5mm		2mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.			
漏电流/Leakage current	<0.01mA			
设定距离/Setting distance	0...1.2mm		0...1.6mm	
标准检出物体/Sensing target	铁/Iron 8x8x1mm			
工作频率/ Frequency	1000Hz			
消耗电流/Consumption	≤15mA			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	≤1.8V			
滞后/Hysteresis	1...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP67			
连接方式/Connection	M8插座式连接，带LEDx4/M8 connector，LEDx4			
外壳材料/Housing material	黄铜镀镍/nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	注 1： *27 ,*28...表示接线图序号,详见14...17页。			

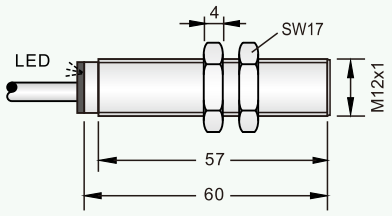
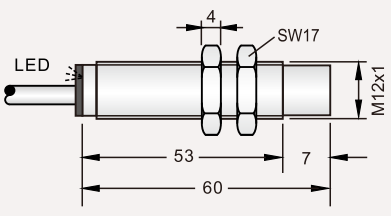
	M8x1, L60		M8x1, L60	
图 片 PICTURE				
直流-3线/DC–3 wires NPN N.O.	IBT8-S1.5NA-D4YV1	*29	IBT8-N02NA-D4YV1	*29
直流-3线/DC–3 wires NPN N.C.	IBT8-S1.5NB-D4YV1	*30	IBT8-N02NB-D4YV1	*30
直流-3线/DC–3 wires PNP N.O.	IBT8-S1.5PA-D4YV1	*31	IBT8-N02PA-D4YV1	*31
直流-3线/DC–3 wires PNP N.C.	IBT8-S1.5PB-D4YV1	*32	IBT8-N02PB-D4YV1	*32
直流-2线/DC–2 wires N.O.	IBT8-S1.5LA-D4YV1	*37	IBT8-N02LA-D4YV1	*37
直流-2线/DC–2 wires N.C.	IBT8-S1.5LB-D4YV1	*38	IBT8-N02LB-D4YV1	*38
检测距离/ Rated sensing distance	1.5mm		2mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.			
漏电流/Leakage current	3线式/3 wires : <0.01mA(2线式/2 wires：<0.8mA)			
设定距离/Setting distance	0...1.2mm		0...1.6mm	
标准检出物体/Sensing target	铁/Iron 8x8x1mm			
工作频率/Frequency	1000Hz			
消耗电流/Consumption	≤15mA			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	≤1.8V(2线式：负载电流100mA＜5V)/≤1.8V(2 wires：Load current 100mA＜5V)			
滞后/Hysteresis	1...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP67			
连接方式/Connection	M12插座式连接，带LEDx4/M12 connector，LEDx4			
外壳材料/Housing material	黄铜镀镍/nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	1: *29 ,*30 ,*31,*32-NO of wiring diagram (refers to page 14...17)			

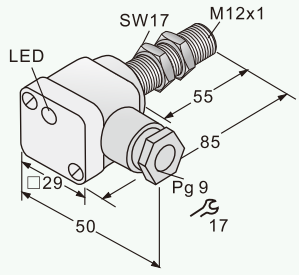
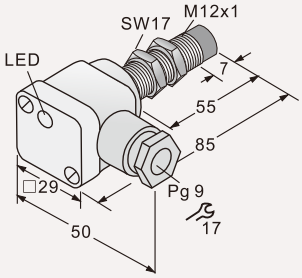
	M12x1, L50	M12x1, L50
图 片 PICTURE		
直流-3线/DC–3 wires NPN N.O.	IBT12-S02NA-D3Y2-1 *01	IBT12-N04NA-D3Y2-1 *01
直流-3线/DC–3 wires NPN N.C.	IBT12-S02NB-D3Y2-1 *02	IBT12-N04NB-D3Y2-1 *02
直流-3线/DC–3 wires PNP N.O.	IBT12-S02PA-D3Y2-1 *03	IBT12-N04PA-D3Y2-1 *03
直流-3线/DC–3 wires PNP N.C.	IBT12-S02PB-D3Y2-1 *04	IBT12-N04PB-D3Y2-1 *04
检测距离/ Rated sensing distance	2mm	4mm
安装方式/Mounting	埋入/shield	非埋入/non-shield
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.	
漏电流/Leakage current	<0.01mA	
设定距离/Setting distance	0...1.6mm	0...3.2mm
标准检出物体/Sensing target	铁/Iron 12x12x1mm	
工作频率/ Frequency	600HZ	400HZ
消耗电流/Consumption	≤15mA	
负载电流/Load current	200mA	
电压降/Voltage drop(V_p)	≤1.8V	
滞后/Hysteresis	1...15%	
重复精度/Repeatability	≤5%	
LED 显示/Display	红色/Red LED	
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection	
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)	
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times	
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours	
防护等级/Protection	IP67	
连接方式/Connection	电缆线2M，外径φ4mm/Cable: φ4mm 2M	
外壳材料/Housing material	黄铜镀镍/nickel-plated brass	
检测面材料/Sensing face material	PBT	
尺寸图 Dimensional drawing		
备 注/Remark	注 1： *01 ,*02 ,*03,*04...表示接线图序号,详见14...17页。	2：连接方式可选择插头式连接线(猪尾式)

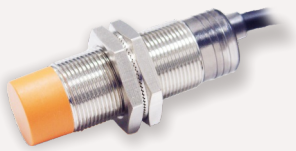
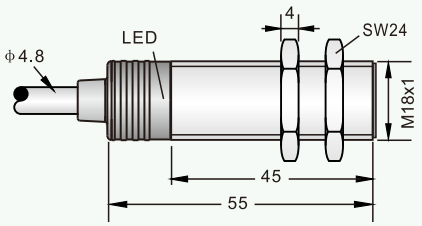
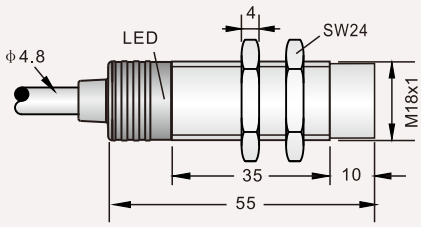
	M12x1, L50		M12x1, L50	
图 片 PICTURE				
直流-3线/DC–3 wires NPN N.O.				
直流-3线/DC–3 wires NPN N.C.				
直流-3线/DC–3 wires PNP N.O.				
直流-3线/DC–3 wires PNP N.C.				
直流-2线/DC–2 wires N.O.	IBT12-S02LA-D2Y2	* 18	IBT12-N04LA-D2Y2	* 18
直流-2线/DC–2 wires N.C.	IBT12-S02LB-D2Y2	* 19	IBT12-N04LB-D2Y2	* 19
检测距离/ Rated sensing distance	2mm		4mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.			
漏电流/Leakage current	2线式/2 wires：<0.8mA			
设定距离/Setting distance	0...1.4mm		0...2.8mm	
标准检出物体/Sensing target	铁/Iron 12x12x1mm			
工作频率/ Frequency	800Hz		600Hz	
消耗电流/Consumption	≤15mA			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	2线式：负载电流100mA＜5V/2 wires：Load current 100mA＜5V			
滞后/Hysteresis	1...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP67			
连接方式/Connection	电缆线2M，外径φ4mm/Cable: φ4mm 2M			
外壳材料/Housing material	黄铜镀镍/nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	注 1： *01 ,*02 ,*03,*04...表示接线图序号,详见14...17页。		2：连接方式可选择插头式连接线(猪尾式)	

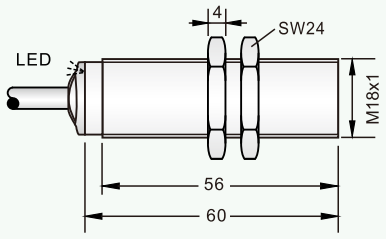
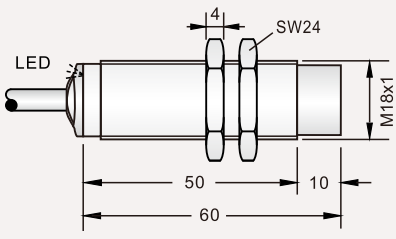
	M12x1, L60		M12x1, L60	
图 片 PICTURE				
直流-3线/DC–3 wires NPN N.O.	IBT12-S02NA-D4YV1	*29	IBT12-N04NA-D4YV1	*29
直流-3线/DC–3 wires NPN N.C.	IBT12-S02NB-D4YV1	*30	IBT12-N04NB-D4YV1	*30
直流-3线/DC–3 wires PNP N.O.	IBT12-S02PA-D4YV1	*31	IBT12-N04PA-D4YV1	*31
直流-3线/DC–3 wires PNP N.C.	IBT12-S02PB-D4YV1	*32	IBT12-N04PB-D4YV1	*32
直流-2线/DC–2 wires N.O.	IBT12-S02LA-D4YV1	*37	IBT12-N04LA-D4YV1	*37
直流-2线/DC–2 wires N.C.	IBT12-S02LB-D4YV1	*38	IBT12-N04LB-D4YV1	*38
检测距离/ Rated sensing distance	2mm		4mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.			
漏电流/Leakage current	3线式/3 wires : <0.01mA(2线式/2 wires：<0.8mA)			
设定距离/Setting distance	0...1.6mm		0...3.2mm	
标准检出物体/Sensing target	铁/Iron 12x12x1mm			
工作频率/Frequency	800Hz		600Hz	
消耗电流/Consumption	≤15mA			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	≤1.8V(2线式：负载电流100mA＜5V)/≤1.8V(2 wires：Load current 100mA＜5V)			
滞后/Hysteresis	1...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP67			
连接方式/Connection	M12插座式连接，带LEDx4/M12 connector，LEDx4			
外壳材料/Housing material	黄铜镀镍/nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	1: *29 ,*30 ,*31,*32-NO of wiring diagram (refers to page 14...17)			

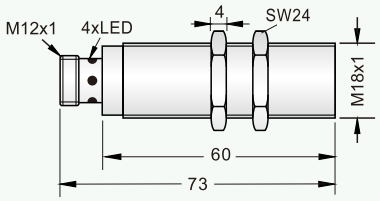
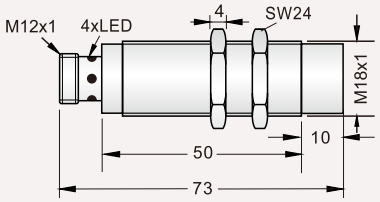
	M12x1, L80		M12x1, L80	
图 片 PICTURE				
直流-3线/DC–3 wires NPN N.O.	IBL12-S02NA-D3YT	*01	IBL12-N04NA-D3YT	*01
直流-3线/DC–3 wires NPN N.C.	IBL12-S02NB-D3YT	*02	IBL12-N04NB-D3YT	*02
直流-3线/DC–3 wires PNP N.O.	IBL12-S02PA-D3YT	*03	IBL12-N04PA-D3YT	*03
直流-3线/DC–3 wires PNP N.C.	IBL12-S02PB-D3YT	*04	IBL12-N04PB-D3YT	*04
直流-2线/DC–2 wires N.O.	IBL12-S02LA-D3YT	*18	IBL12-N04LA-D3YT	*18
直流-2线/DC–2 wires N.C.	IBL12-S02LB-D3YT	*19	IBL12-N04LB-D3YT	*19
检测距离/ Rated sensing distance	2mm		4mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.			
漏电流/Leakage current	3线式/3 wires : <0.01mA(2线式/2 wires：<0.8mA)			
设定距离/Setting distance	0...1.6mm		0...3.2mm	
标准检出物体/Sensing target	铁/Iron 12x12x1mm			
工作频率/Frequency	800Hz		600Hz	
消耗电流/Consumption	≤15mA			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	≤1.8V(2线式：负载电流100mA＜5V)/≤1.8V(2 wires：Load current 100mA＜5V)			
滞后/Hysteresis	1...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP66			
连接方式/Connection	端子连接/Terminal connection			
外壳材料/Housing material	PBT+黄铜镀镍/PBT + nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	注 1： *01 ,*02 ,*03,*04...表示接线图序号,详见14...17页。			

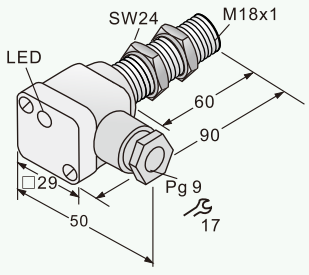
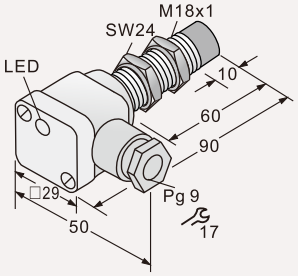
	M12x1, L60		M12x1, L60	
图 片 PICTURE				
交流-2线/AC–2 wires N.O.	IBT12-S02AA-A2N2	*20	IBT12-N04AA-A2N2	*20
交流-2线/AC–2 wires N.C.	IBT12-S02AB-A2N2	*21	IBT12-N04AB-A2N2	*21
检测距离/ Rated sensing distance	2mm		4mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	20...250V AC(50/60Hz)			
漏电流/Leakage current	≤1.7mA			
设定距离/Setting distance	0...1.6mm		0...3.2mm	
标准检出物体/Sensing target	铁/Iron 12x12x1mm			
工作频率/ Frequency	20Hz			
消耗电流/Consumption	———			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	≤8V			
滞后/Hysteresis	3...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	———			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP67			
连接方式/Connection	电缆线2M，外径φ4mm/Cable: φ4mm 2M			
外壳材料/Housing material	黄铜镀镍/nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	1: *20 ,*21 -NO of wiring diagram (refers to page 14...17)		2: Pigtail connection is also available	

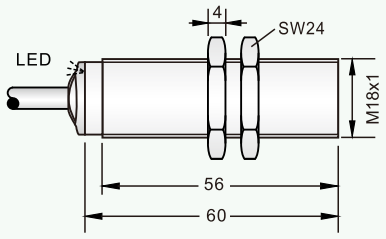
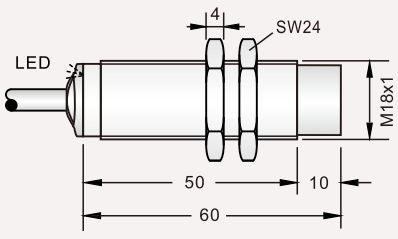
	M12x1, L85		M12x1, L85	
图 片 PICTURE				
交流-2线/AC–2 wires N.O.	IBL12-S02AA-A3NT	*20	IBL12-N04AA-A3NT	*20
交流-2线/AC–2 wires N.C.	IBL12-S02AB-A3NT	*21	IBL12-N04AB-A3NT	*21
检测距离/ Rated sensing distance	2mm		4mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	20...250V AC(50/60Hz)			
漏电流/Leakage current	≤1.7mA			
设定距离/Setting distance	0...1.6mm		0...3.2mm	
标准检出物体/Sensing target	铁/Iron 12x12x1mm			
工作频率/Frequency	20Hz			
消耗电流/Consumption	———			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	≤8V			
滞后/Hysteresis	3...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	———			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti–impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti–vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP66			
连接方式/Connection	端子连接/Terminal connection			
外壳材料/Housing material	PBT+黄铜镀镍/PBT + nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	注 1： *20 ,*21...表示接线图序号,详见14...17页。			

	M18x1, L55	M18x1, L55
图 片 PICTURE		
直流-3线/DC–3 wires NPN N.O.	IBT18-S05NA-D3Y2-1 *01	IBT18-N08NA-D3Y2-1 *01
直流-3线/DC–3 wires NPN N.C.	◇ IBT18-S05NB-D3Y2-1 *02	◇ IBT18-N08NB-D3Y2-1 *02
直流-3线/DC–3 wires PNP N.O.	IBT18-S05PA-D3Y2-1 *03	IBT18-N08PA-D3Y2-1 *03
直流-3线/DC–3 wires PNP N.C.	◇ IBT18-S05PB-D3Y2-1 *04	◇ IBT18-N08PB-D3Y2-1 *04
检测距离/ Rated sensing distance	5mm	8mm
安装方式/Mounting	埋入/shield	非埋入/non-shield
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.	
漏电流/Leakage current	<0.01mA	
设定距离/Setting distance	0...4.0mm	0...6.4mm
标准检出物体/Sensing target	铁/Iron 18x18x1mm	铁/Iron 25x25x1mm
工作频率/ Frequency	600Hz	600Hz
消耗电流/Consumption	≤15mA	
负载电流/Load current	200mA	
电压降/Voltage drop(V_p)	≤1.8V	
滞后/Hysteresis	1...20%	
重复精度/Repeatability	≤5%	
LED 显示/Display	红色/Red LED	
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection	
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)	
抗冲击/Anti–impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times	
抗震动/Anti–vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours	
绝缘阻抗/Insulation–impedance	≥500MΩ	
防护等级/Protection	IP67	
连接方式/Connection	电缆线2M，外径φ4.8mm/Cable: φ4.8mm 2M	
外壳材料/Housing material	黄铜镀镍/nickel-plated brass	黄铜镀镍/nickel-plated brass
检测面材料/Sensing face material	PBT	
尺寸图 Dimensional drawing		
备 注/Remark	1: *01 ,*02 ,*03,*04-NO of wiring diagram (refers to page 14...17)	2: Pigtail connection is also available

	M18x1, L60(nickel-plated brass) M18x1, L65(PBT)			M18x1, L60(nickel-plated brass) M18x1, L65(PBT)		
图 片 PICTURE	 CE			 CE		
直流-3线/DC–3 wires NPN N.O.						
直流-3线/DC–3 wires NPN N.C.						
直流-3线/DC–3 wires PNP N.O.						
直流-3线/DC–3 wires PNP N.C.						
直流-2线/DC–2 wires N.O.	IBT18-S05LA-D2Y2	IPT18-S05LA-D2Y2	* 18	IBT18-N08LA-D2Y2	IPT18-N08LA-D2Y2	* 18
直流-2线/DC–2 wires N.C.	IBT18-S05LB-D2Y2	IPT18-S05LB-D2Y2	* 19	IBT18-N08LB-D2Y2	IPT18-N08LB-D2Y2	* 19
检测距离/ Rated sensing distance	5mm			8mm		
安装方式/Mounting	埋入/shield			非埋入/non-shield		
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.					
漏电流/Leakage current	2线式/2 wires：<0.8mA					
设定距离/Setting distance	0...3.5mm			0...5.6mm		
标准检出物体/Sensing target	铁/Iron 18x18x1mm			铁/Iron 25x25x1mm		
工作频率/ Frequency	600Hz			400Hz		
消耗电流/Consumption	≤15mA					
负载电流/Load current	200mA					
电压降/Voltage drop(V_p)	2线式：负载电流100mA＜5V/2 wires：Load current 100mA＜5V					
滞后/Hysteresis	1...15%					
重复精度/Repeatability	≤5%					
LED 显示/Display	红色/Red LED					
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection					
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)					
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times					
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours					
防护等级/Protection	IP67					
连接方式/Connection	电缆线2M，外径φ4.8mm/Cable: φ4.8mm 2M					
外壳材料/Housing material	黄铜镀镍/nickel-plated brass	PBT		黄铜镀镍/nickel-plated brass	PBT	
检测面材料/Sensing face material	PBT					
尺寸图 Dimensional drawing						
备 注/Remark	1: *01 ,*02 ,*03,*04-NO of wiring diagram (refers to page 14...17)			2: Pigtail connection is also available		

	M18x1, L73		M18x1, L73	
图 片 PICTURE				
直流-3线/DC–3 wires NPN N.O.	IBT18-S05NA-D4YV1	*29	IBT18-N08NA-D4YV1	*29
直流-3线/DC–3 wires NPN N.C.	IBT18-S05NB-D4YV1	*30	IBT18-N08NB-D4YV1	*30
直流-3线/DC–3 wires PNP N.O.	IBT18-S05PA-D4YV1	*31	IBT18-N08PA-D4YV1	*31
直流-3线/DC–3 wires PNP N.C.	IBT18-S05PB-D4YV1	*32	IBT18-N08PB-D4YV1	*32
直流-2线/DC–2 wires N.O.	IBT18-S05LA-D4YV1	*37	IBT18-N08LA-D4YV1	*37
直流-2线/DC–2 wires N.C.	IBT18-S05LB-D4YV1	*38	IBT18-N08LB-D4YV1	*38
检测距离/ Rated sensing distance	5mm		8mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.			
漏电流/Leakage current	3线式/3 wires : <0.01mA(2线式/2 wires：<0.8mA)			
设定距离/Setting distance	0...4.0mm		0...6.4mm	
标准检出物体/Sensing target	铁/Iron 18x18x1mm		铁/Iron 25x25x1mm	
工作频率/ Frequency	600Hz		400Hz	
消耗电流/Consumption	≤15mA			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	≤1.8V(2线式：负载电流100mA＜5V)/≤1.8V(2 wires：Load current 100mA＜5V)			
滞后/Hysteresis	1...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP67			
连接方式/Connection	M12插座式连接，带LEDx4/M12 connector，LEDx4			
外壳材料/Housing material	黄铜镀镍/nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	注 1： *29 ,*30 ,*31,*32...表示接线图序号,详见14...17页。			

	M18x1, L90	M18x1, L90
图 片 PICTURE	 CE	 CE
直流-3线/DC–3 wires NPN N.O.	IBL18-S05NA-D3YT *01	IBL18-N08NA-D3YT *01
直流-3线/DC–3 wires NPN N.C.	IBL18-S05NB-D3YT *02	IBL18-N08NB-D3YT *02
直流-3线/DC–3 wires PNP N.O.	IBL18-S05PA-D3YT *03	IBL18-N08PA-D3YT *03
直流-3线/DC–3 wires PNP N.C.	IBL18-S05PB-D3YT *04	IBL18-N08PB-D3YT *04
直流-2线/DC–2 wires N.O.	IBL18-S05LA-D3YT *18	IBL18-N08LA-D3YT *18
直流-2线/DC–2 wires N.C.	IBL18-S05LB-D3YT *19	IBL18-N08LB-D3YT *19
检测距离/ Rated sensing distance	5mm	8mm
安装方式/Mounting	埋入/shield	非埋入/non-shield
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.	
漏电流/Leakage current	3线式/3 wires : <0.01mA(2线式/2 wires: <0.8mA)	
设定距离/Setting distance	0...4.0mm	0...6.4mm
标准检出物体/Sensing target	铁/Iron 18x18x1mm	铁/Iron 25x25x1mm
工作频率/Frequency	600Hz	400Hz
消耗电流/Consumption	≤15mA	
负载电流/Load current	200mA	
电压降/Voltage drop(V_p)	≤1.8V(2线式：负载电流100mA＜5V)/≤1.8V(2 wires: Load current 100mA＜5V)	
滞后/Hysteresis	1...15%	
重复精度/Repeatability	≤5%	
LED 显示/Display	红色/Red LED	
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection	
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)	
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times	
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours	
防护等级/Protection	IP66	
连接方式/Connection	端子连接/Terminal connection	
外壳材料/Housing material	PBT+黄铜镀镍/PBT + nickel-plated brass	
检测面材料/Sensing face material	PBT	
尺寸图 Dimensional drawing		
备 注/Remark	1: *01 ,*02 ,*03,*04-NO of wiring diagram (refers to page 14...17)	

	M18x1, L60(nickel-plated brass) M18x1, L65(PBT)			M18x1, L60(nickel-plated brass) M18x1, L65(PBT)		
图 片 PICTURE						
交流-2线/AC–2 wires N.O.	IBT18-S05AA-A2N2	IPT18-S05AA-A2N2	*20	IBT18-N08AA-A2N2	IPT18-N08AA-A2N2	*20
交流-2线/AC–2 wires N.C.	IBT18-S05AB-A2N2	IPT18-S05AB-A2N2	*21	IBT18-N08AB-A2N2	IPT18-N08AB-A2N2	*21
检测距离/Rated sensing distance	5mm			8mm		
安装方式/Mounting	埋入/shield			非埋入/non-shield		
工作电压/Supply voltage	20...250V AC(50/60Hz)					
漏电流/Leakage current	≤1.7mA					
设定距离/Setting distance	0...4.0mm			0...6.4mm		
标准检出物体/Sensing target	铁/Iron 18x18x1mm			铁/Iron 25x25x1mm		
工作频率/Frequency	20Hz					
消耗电流/Consumption	———					
负载电流/Load current	200mA					
电压降/Voltage drop(V_p)	≤8V					
滞后/Hysteresis	3...15%					
重复精度/Repeatability	≤5%					
LED 显示/Display	红色/Red LED					
保护/Protection Circuit	———					
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)					
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times					
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours					
防护等级/Protection	IP67					
连接方式/Connection	电缆线2M，外径φ4.8mm/Cable: φ4.8mm 2M					
外壳材料/Housing material	黄铜镀镍/nickel-plated brass	PBT		黄铜镀镍/nickel-plated brass	PBT	
检测面材料/Sensing face material	PBT					
尺寸图 Dimensional drawing						
备 注/Remark	注 1： *20 ,*21...表示接线图序号,详见14...17页。			2：连接方式可选择插头式连接线(猪尾式)		

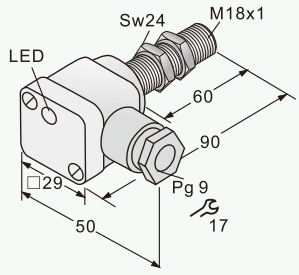
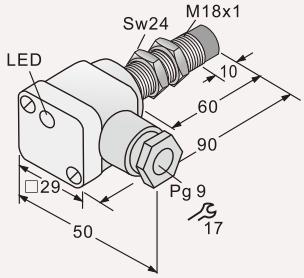
	M18x1, L90		M18x1, L90	
图 片 PICTURE				
交流-2线/AC–2 wires N.O.	IBL18-S05AA-A3NT	*20	IBL18-N08AA-A3NT	*20
交流-2线/AC–2 wires N.C.	IBL18-S05AB-A3NT	*21	IBL18-N08AB-A3NT	*21
检测距离/ Rated sensing distance	5mm		8mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	20...250V AC(50/60Hz)			
漏电流/Leakage current	≤1.7mA			
设定距离/Setting distance	0...4.0mm		0...6.4mm	
标准检出物体/Sensing target	铁/Iron 18x18x1mm		铁/Iron 25x25x1mm	
工作频率/Frequency	20Hz			
消耗电流/Consumption	———			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	≤8V			
滞后/Hysteresis	3...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	———			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP66			
连接方式/Connection	端子连接/Terminal connection			
外壳材料/Housing material	PBT+黄铜镀镍/PBT + nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	1: *20 ,*21-NO of wiring diagram (refers to page 14...17)			

图 片
PICTURE

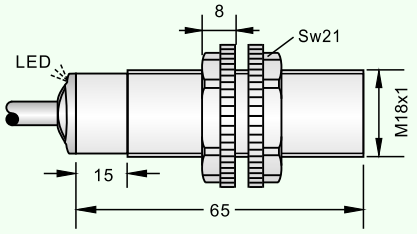
M18x1, L65



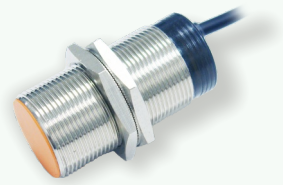
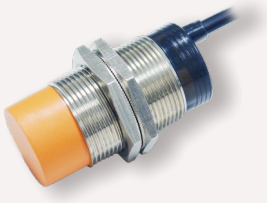
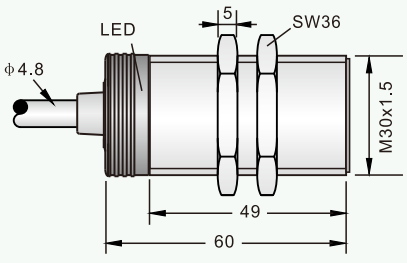
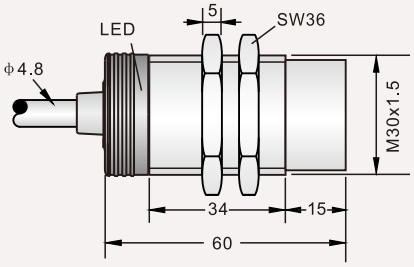
CE

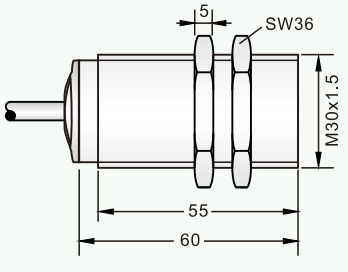
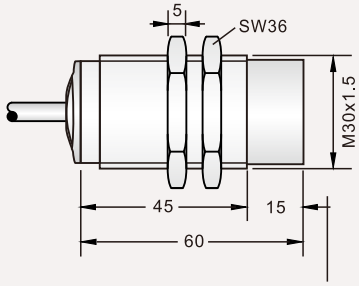
交直流-2线/AC+DC-2 wires N.O.	**IPT18-N08TA-T2N2**
交直流-2线/AC+DC-2 wires N.C.	**IPT18-N08TB-T2N2**
检测距离/ Rated sensing distance	8mm
安装方式/Mounting	非埋入/non-shield
工作电压/Supply voltage	20...250V DC/AC
漏电流/Leakage current	AC≤2mA,DC≤1mA
设定距离/Setting distance	0...5.6mm
标准检出物体/Sensing target	铁/Iron 25x25x1mm
工作频率/Frequency	AC:25Hz, DC:50Hz
消耗电流/Consumption	———
负载电流/Load current	AC≤200mA，DC≤100mA
电压降/Voltage drop(V_p)	≤8V
滞后/Hysteresis	1...20%
重复精度/Repeatability	≤5%
LED 显示/Display	红色/Red LED
保护/Protection Circuit	———
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours
防护等级/Protection	IP67
连接方式/Connection	电缆线2M，外径φ4.8mm/Cable: φ4.8mm 2M
外壳材料/Housing material	PBT
检测面材料/Sensing face material	PBT

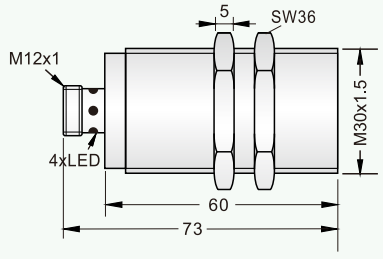
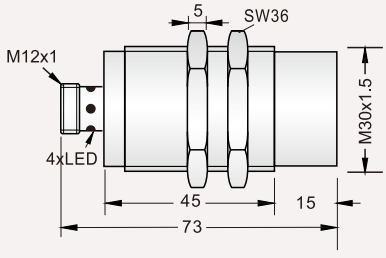
尺寸图
Dimensional drawing

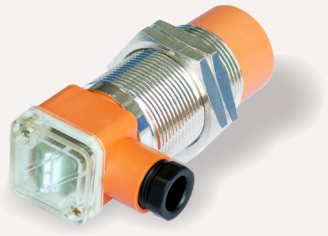
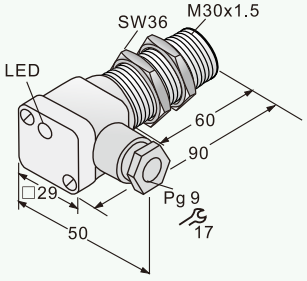
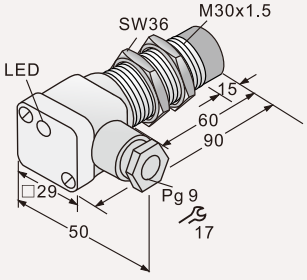


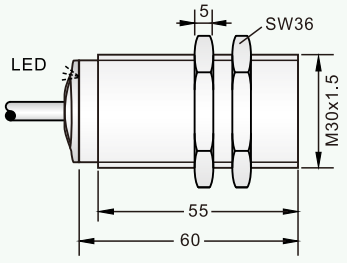
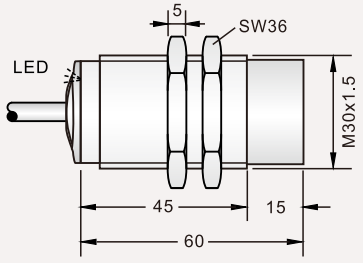
备 注/Remark

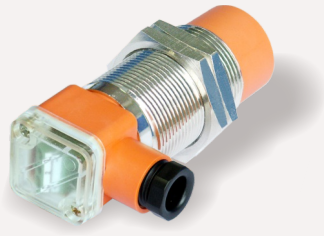
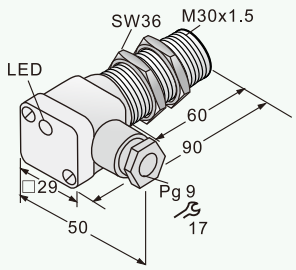
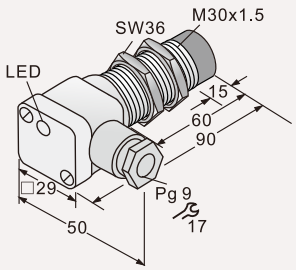
	M30x1.5, L60		M30x1.5, L60	
图 片 PICTURE				
直流-3线/DC–3 wires NPN N.O.	IBT30-S10NA-D3Y2-1	*01	IBT30-N15NA-D3Y2-1	*01
直流-3线/DC–3 wires NPN N.C.	◇ IBT30-S10NB-D3Y2-1	*02	◇ IBT30-N15NB-D3Y2-1	*02
直流-3线/DC–3 wires PNP N.O.	IBT30-S10PA-D3Y2-1	*03	IBT30-N15PA-D3Y2-1	*03
直流-3线/DC–3 wires PNP N.C.	◇ IBT30-S10PB-D3Y2-1	*04	◇ IBT30-N15PB-D3Y2-1	*04
检测距离/ Rated sensing distance	10mm		15mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.			
漏电流/Leakage current	<0.01mA			
设定距离/Setting distance	0...8mm		0...12mm	
标准检出物体/Sensing target	铁/Iron 30x30x1mm		铁/Iron 45x45x1mm	
工作频率/ Frequency	400Hz		300Hz	
消耗电流/Consumption	≤15mA			
负载电流/Load current	200mA			
电压降/ Voltage drop(V_p)	≤1.8V			
滞后/Hysteresis	1...20%			
重复精度/ Repeatability	≤5%			
LED 显示/ Display	红色/Red LED			
保护/ Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection			
工作温度/ Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti–impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti–vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
绝缘阻抗/Insulation–impedance	≥500MΩ			
防护等级/Protection	IP67			
连接方式/Connection	电缆线2M，外径φ4.8mm/Cable: φ4.8mm 2M			
外壳材料/Housing material	黄铜镀镍/nickel-plated brass		黄铜镀镍/nickel-plated brass	
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	注 1： *01 ,*02 ,*03,*04...表示接线图序号,详见14...17页。		2：连接方式可选择插头式连接线(猪尾式)	

	M30x1.5, L60(nickel-plated brass) M30x1.5, L72(PBT)			M30x1.5, L60(nickel-plated brass) M30x1.5, L72(PBT)		
图 片 PICTURE						
直流-3线/DC–3 wires NPN N.O.						
直流-3线/DC–3 wires NPN N.C.						
直流-3线/DC–3 wires PNP N.O.						
直流-3线/DC–3 wires PNP N.C.						
直流-2线/DC–2 wires N.O.	IBT30-S10LA-D2Y2	IPT30-S10LA-D2Y2	* 18	IBT30-N15LA-D2Y2	IPT30-N15LA-D2Y2	* 18
直流-2线/DC–2 wires N.C.	IBT30-S10LB-D2Y2	IPT30-S10LB-D2Y2	* 19	IBT30-N15LB-D2Y2	IPT30-N15LB-D2Y2	* 19
检测距离/ Rated sensing distance	10mm			15mm		
安装方式/Mounting	埋入/shield			非埋入/non-shield		
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.					
漏电流/Leakage current	2线式/2 wires：<0.8mA					
设定距离/Setting distance	0...7mm			0...10.5mm		
标准检出物体/Sensing target	铁/Iron 30x30x1mm			铁/Iron 45x45x1mm		
工作频率/ Frequency	400Hz			300Hz		
消耗电流/Consumption	≤15mA					
负载电流/Load current	200mA					
电压降/Voltage drop(V_p)	2线式：负载电流100mA＜5V/2 wires：Load current 100mA＜5V					
滞后/Hysteresis	1...15%					
重复精度/Repeatability	≤5%					
LED 显示/Display	红色/Red LED					
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection					
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)					
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times					
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours					
防护等级/Protection	IP67					
连接方式/Connection	电缆线2M，外径φ4.8mm/Cable: φ4.8mm 2M					
外壳材料/Housing material	黄铜镀镍/nickel-plated brass	PBT		黄铜镀镍/nickel-plated brass	PBT	
检测面材料/Sensing face material	PBT					
尺寸图 Dimensional drawing						
备 注/Remark	注 1： *01 ,*02 ,*03,*04...表示接线图序号,详见14...17页。			2：连接方式可选择插头式连接线(猪尾式)		

	M30x1.5, L73		M30x1.5, L73	
图 片 PICTURE				
直流-3线/DC–3 wires NPN N.O.	IBT30-S10NA-D4YV1	*29	IBT30-N15NA-D4YV1	*29
直流-3线/DC–3 wires NPN N.C.	IBT30-S10NB-D4YV1	*30	IBT30-N15NB-D4YV1	*30
直流-3线/DC–3 wires PNP N.O.	IBT30-S10PA-D4YV1	*31	IBT30-N15PA-D4YV1	*31
直流-3线/DC–3 wires PNP N.C.	IBT30-S10PB-D4YV1	*32	IBT30-N15PB-D4YV1	*32
直流-2线/DC–2 wires N.O.	IBT30-S10LA-D4YV1	*37	IBT30-N15LA-D4YV1	*37
直流-2线/DC–2 wires N.C.	IBT30-S10LB-D4YV1	*38	IBT30-N15LB-D4YV1	*38
检测距离/ Rated sensing distance	10mm		15mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.			
漏电流/Leakage current	3线式/3 wires : <0.01mA(2线式/2 wires: <0.8mA)			
设定距离/Setting distance	0...8mm		0...12mm	
标准检出物体/Sensing target	铁/Iron 30x30x1mm		铁/Iron 45x45x1mm	
工作频率/ Frequency	400Hz		300Hz	
消耗电流/Consumption	≤15mA			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	≤1.8V(2线式：负载电流100mA＜5V)/≤1.8V(2 wires: Load current 100mA＜5V)			
滞后/Hysteresis	1...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP67			
连接方式/Connection	M12插座式连接，带LEDx4/M12 connector，LEDx4			
外壳材料/Housing material	黄铜镀镍/nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	1: *29 ,*30 ,*31,*32-NO of wiring diagram (refers to page 14...17)			

	M30x1.5, L90		M30x1.5, L90	
图 片 PICTURE				
直流-3线/DC–3 wires NPN N.O.	IBL30-S10NA-D3YT	*01	IBL30-N15NA-D3YT	*01
直流-3线/DC–3 wires NPN N.C.	IBL30-S10NB-D3YT	*02	IBL30-N15NB-D3YT	*02
直流-3线/DC–3 wires PNP N.O.	IBL30-S10PA-D3YT	*03	IBL30-N15PA-D3YT	*03
直流-3线/DC–3 wires PNP N.C.	IBL30-S10PB-D3YT	*04	IBL30-N15PB-D3YT	*04
直流-2线/DC–2 wires N.O.	IBL30-S10LA-D3YT	*18	IBL30-N15LA-D3YT	*18
直流-2线/DC–2 wires N.C.	IBL30-S10LB-D3YT	*19	IBL30-N15LB-D3YT	*19
检测距离/ Rated sensing distance	10mm		15mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	DC12...24V (10...30V DC) 允许波动10%以下/ripple(p-p):10% max.			
漏电流/Leakage current	3线式/3 wires : <0.01mA(2线式/2 wires：<0.8mA)			
设定距离/Setting distance	0...8mm		0...12mm	
标准检出物体/Sensing target	铁/Iron 30x30x1mm		铁/Iron 45x45x1mm	
工作频率/ Frequency	400Hz		300Hz	
消耗电流/Consumption	≤15mA			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	≤1.8V(2线式：负载电流100mA＜5V)/≤1.8V(2 wires：Load current 100mA＜5V)			
滞后/Hysteresis	1...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	短路保护、反极性保护、过载保护/Short circuit protection, reversed polarity protection and overload protection			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP66			
连接方式/Connection	端子连接/Terminal connection			
外壳材料/Housing material	PBT+黄铜镀镍/PBT + nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	注 1： *01 ,*02 ,*03,*04...表示接线图序号,详见14...17页。			

	M30x1.5, L60(nickel-plated brass) M30x1.5, L72(PBT)			M30x1.5, L60(nickel-plated brass) M30x1.5, L72(PBT)		
图 片 PICTURE						
交流-2线/AC–2 wires N.O.	IBT30-S10AA-A2N2	IPT30-S10AA-A2N2	*20	IBT30-N15AA-A2N2	IPT30-N15AA-A2N2	*20
交流-2线/AC–2 wires N.C.	IBT30-S10AB-A2N2	IPT30-S10AB-A2N2	*21	IBT30-N15AB-A2N2	IPT30-N15AB-A2N2	*21
检测距离/Rated sensing distance	10mm			15mm		
安装方式/Mounting	埋入/shield			非埋入/non-shield		
工作电压/Supply voltage	20...250V AC(50/60Hz)					
漏电流/Leakage current	≤1.7mA					
设定距离/Setting distance	0...8mm			0...12mm		
标准检出物体/Sensing target	铁/Iron 30x30x1mm			铁/Iron 45x45x1mm		
工作频率/Frequency	20Hz					
消耗电流/Consumption	———					
负载电流/Load current	200mA					
电压降/Voltage drop(V_p)	≤8V					
滞后/Hysteresis	3...15%					
重复精度/Repeatability	≤5%					
LED 显示/Display	红色/Red LED					
保护/Protection Circuit	———					
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)					
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times					
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours					
防护等级/Protection	IP67					
连接方式/Connection	电缆线2M，外径φ4.8mm/Cable: φ4.8mm 2M					
外壳材料/Housing material	黄铜镀镍/nickel-plated brass	PBT		黄铜镀镍/nickel-plated brass	PBT	
检测面材料/Sensing face material	PBT					
尺寸图 Dimensional drawing						
备 注/Remark	1: *20 ,*21-NO of wiring diagram (refers to page 14...17)					

	M30x1.5, L90		M30x1.5, L90	
图 片 PICTURE				
交流-2线/AC–2 wires N.O.	IBL30-S10AA-A3NT	*20	IBL30-N15AA-A3NT	*20
交流-2线/AC–2 wires N.C.	IBL30-S10AB-A3NT	*21	IBL30-N15AB-A3NT	*21
检测距离/ Rated sensing distance	10mm		15mm	
安装方式/Mounting	埋入/shield		非埋入/non-shield	
工作电压/Supply voltage	20...250V AC(50/60Hz)			
漏电流/Leakage current	≤1.7mA			
设定距离/Setting distance	0...8mm		0...12mm	
标准检出物体/Sensing target	铁/Iron 30x30x1mm		铁/Iron 45x45x1mm	
工作频率/ Frequency	20Hz			
消耗电流/Consumption	———			
负载电流/Load current	200mA			
电压降/Voltage drop(V_p)	≤8V			
滞后/Hysteresis	3...15%			
重复精度/Repeatability	≤5%			
LED 显示/Display	红色/Red LED			
保护/Protection Circuit	———			
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)			
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times			
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours			
防护等级/Protection	IP66			
连接方式/Connection	端子连接/Terminal connection			
外壳材料/Housing material	PBT+黄铜镀镍/PBT + nickel-plated brass			
检测面材料/Sensing face material	PBT			
尺寸图 Dimensional drawing				
备 注/Remark	注 1： *20 ,*21...表示接线图序号,详见14...17页。			

M30x1, L72

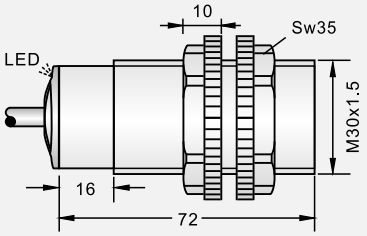
图 片
PICTURE



CE

交直流-2线/AC+DC–2 wires N.O.	IPT30-N15TA-T2N2
交直流-2线/AC+DC–2 wires N.C.	IPT30-N15TB-T2N2
检测距离/ Rated sensing distance	15mm
安装方式/Mounting	非埋入/non-shield
工作电压/Supply voltage	20...250V DC/AC
漏电流/Leakage current	AC≤2mA,DC≤1mA
设定距离/Setting distance	0...10.5mm
标准检出物体/Sensing target	铁/Iron 45x45x1mm
工作频率/Frequency	AC:25Hz, DC:50Hz
消耗电流/Consumption	———
负载电流/Load current	AC≤200mA，DC≤100mA
电压降/Voltage drop(V_p)	≤8V
滞后/Hysteresis	1...20%
重复精度/Repeatability	≤5%
LED 显示/Display	红色/Red LED
保护/Protection Circuit	———
工作温度/Operating temperature	-25...+70°C（未结露状态）/ -25...+70°C(no condensation)
抗冲击/Anti-impact	500m/s²(50G) X、Y、Z、方向各10次/500m/s²(50G) X、Y、Z direction, each 10 times
抗震动/Anti-vibration	10...55Hz（振幅1.5mm）X、Y、Z、方向各2小时/10...55Hz(amplitude 1.5mm)X、Y、Z direction each 2 hours
防护等级/Protection	IP67
连接方式/Connection	电缆线2M，外径φ4.8mm/Cable: φ4.8mm 2M
外壳材料/Housing material	PBT
检测面材料/Sensing face material	PBT

尺寸图
Dimensional drawing



备 注/Remark