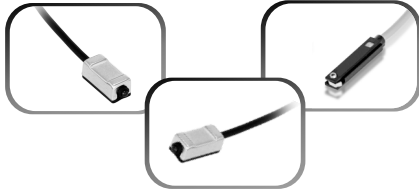


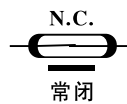
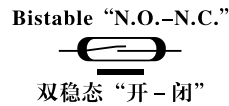
## 磁感应式接近开关 Magnetic Proximity Sensor

### 功能特点/ Features

- 可使用在恶劣环境下，不受污垢、潮湿、气体、灰尘等影响。  
● Can be used in the poor conditions, but not affected by dirt, moist, gas, dust etc.
- 长寿命及高可靠性。  
● Long life-span and high reliability
- 备有多种规格尺寸来满足工业自动化的各种需求。  
● Wide range of size, to meet different kinds of industrial automation needs.
- 齿轮开关具有高速响应频率的特点。  
● Gear Sensors: high response frequency.



SB,SI-舌簧磁感应式 SB,SI-Reed type	/I-01
M8, M12-舌簧磁感应式 M8, M12-Reed type	/I-02
M18-舌簧磁感应式 M18-Reed type	/I-03
M8, M12-霍尔磁感应式 M8, M12-Hall effect type	/I-04
高速齿轮接近开关 High-speed Gear Sensor	/I-05



图片

PICTURE

	W6xH4.5xL29	W12xH12xL26
		
	CE	CE
直流-2线/DC-2 wires N.O.	PPSSB-LA-D2N2 * 18	PPSSI-LA-D2N2 * 18
直流-2线/DC-2 wires N.C.		
检测距离/Rated sensing distance	磁钢强度而定/Depends on intensity of magnetic steel	
安装方式/Mounting	_____	
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	_____	
设定距离/Setting distance	_____	
标准检出物体/Sensing target	磁钢/Magnetic steel	
工作频率/Frequency	300Hz	
消耗电流/Consumption	_____	
负载电流/Load current	80mA	
电压降/Voltage drop(V <sub>r</sub> )	_____	
电气寿命/Electric life	10 <sup>5</sup> (5V时10 <sup>6</sup> )/10 <sup>5</sup> (5V, 10 <sup>6</sup> )	
重复精度/Repeatability	_____	
LED 显示/Display	红色/Red LED	
保护/Protection Circuit	_____	
工作温度/Operating temperature	-20...+60°C (未结露状态) / -20...+60°C(no condensation)	
抗冲击/Anti-impact	500m/s <sup>2</sup> (50G) X、Y、Z、方向各10次/500m/s <sup>2</sup> (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φ2.8mm/Cable: φ2.8mm 2M	电缆线2M, 外径φ4.0mm/Cable: φ4.0mm 2M
外壳材料/Housing material	ABS	ABS+金属/ABS+Metal
检测面材料/Sensing face material	ABS	
		

尺寸图

Dimensional drawing

备注/Remark

注 1: \*18...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)

Magnetic Proximity Sensor

关 开 近 接 式 磁 感 应

图片

PICTURE

	M8x1, L40	M12x1, L50
		
	CE	CE
直流-2线/DC-2 wires N.O.	PBT8-05LA-D2N2 * 18	PBT12-10LA-D2N2 * 18
直流-2线/DC-2 wires N.C.		PBT12-10LB-D2N2 * 18
检测距离/Rated sensing distance	磁钢强度而定/Depends on intensity of magnetic steel:5mm	磁钢强度而定/Depends on intensity of magnetic steel:10mm
安装方式/Mounting		
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		
设定距离/Setting distance		
标准检出物体/Sensing target	磁钢/Magnetic steel	
工作频率/Frequency	300Hz	
消耗电流/Consumption		
负载电流/Load current	200mA	
电压降/Voltage drop(V <sub>r</sub> )		
电气寿命/Electric life	10 <sup>5</sup> (5V时10 <sup>6</sup> )/10 <sup>5</sup> (5V, 10 <sup>6</sup> )	
重复精度/Repeatability		
LED 显示/Display	红色(可选)/Red LED(selectable)	
保护/Protection Circuit		
工作温度/Operating temperature	-20...+60°C (未结露状态) / -20...+60°C(no condensation)	
抗冲击/Anti-impact	500m/s <sup>2</sup> (50G) X、Y、Z、方向各10次/500m/s <sup>2</sup> (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	电缆线2M, 外径φ4.0mm/Cable: φ4.0mm 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: \*18-NO of wiring diagram ( refers to page 14...17 )

2: Pigtail connection is also available

图片

PICTURE

M18x1, L60

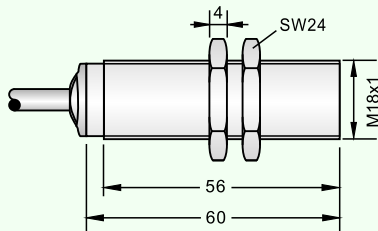


CE

直流-2线/DC-2 wires N.O.	PBT18-10LA-D2N2	* 18
直流-2线/DC-2 wires N.C.	PBT18-10LB-D2N2	* 18
检测距离/Rated sensing distance	(约10mm)磁钢强度而定/(Approx.10mm)Depends on intensity of magnetic steel	
安装方式/Mounting	_____	
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	_____	
设定距离/Setting distance	_____	
标准检出物体/Sensing target	磁钢/Magnetic steel	
工作频率/Frequency	300Hz	
消耗电流/Consumption	_____	
负载电流/Load current	500mA	
电压降/Voltage drop(V <sub>r</sub> )	_____	
电气寿命/Electric life	10 <sup>5</sup> (5V时10 <sup>8</sup> )/10 <sup>5</sup> (5V, 10 <sup>8</sup> )	
重复精度/Repeatability	_____	
LED 显示/Display	红色(可选)/Red LED(selectable)	
保护/Protection Circuit	_____	
工作温度/Operating temperature	-20...+60°C (未结露状态) / -20...+60°C(no condensation)	
抗冲击/Anti-impact	500m/s <sup>2</sup> (50G) X、Y、Z、方向各10次/500m/s <sup>2</sup> (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	
检测面材料/Sensing face material	PBT	

尺寸图

Dimensional drawing



备注/Remark

注 1: \*18...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)

图片

PICTURE

	M8x1, L40	M12x1, L40
		
	CE	CE
直流-3线/DC-3 wires NPN N.O.	HBT8-S05NA-D3Y2 * 01	HBT12-S05NA-D3Y2 * 01
直流-3线/DC-3 wires NPN N.C.	HBT8-S05NB-D3Y2 * 02	HBT12-S05NB-D3Y2 * 02
直流-3线/DC-3 wires PNP N.O.	HBT8-S05PA-D3Y2 * 03	HBT12-S05PA-D3Y2 * 03
直流-3线/DC-3 wires PNP N.C.	HBT8-S05PB-D3Y2 * 04	HBT12-S05PB-D3Y2 * 04
检测距离/Rated sensing distance	(约5mm)磁钢强度而定/(Approx.5mm)Depends on intensity of magnetic steel	
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	—————	
标准检出物体/Sensing target	磁钢/Magnetic steel	
工作频率/Frequency	150Hz	500Hz
消耗电流/Consumption	≤10mA	
负载电流/Load current	200mA	
电压降/Voltage drop(V <sub>r</sub> )	≤1.8V	
电气寿命/Electric life	1...15%	
重复精度/Repeatability	≤2%	
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/Outputs short circuit and over current protected, Vs reverse polarity protected	
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/s <sup>2</sup> (50G) X、Y、Z、方向各10次/500m/s <sup>2</sup> (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	电缆线2M, 外径φ4.0mm/Cable: φ4.0mm 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



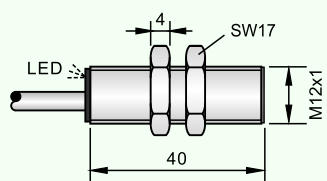
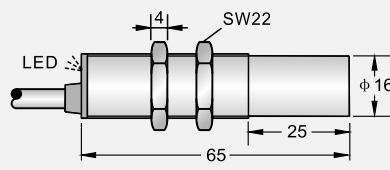
备注/Remark

1: \*01,\*02,\*03,\*04-NO of wiring diagram ( refers to page 14...17 )

2: Pigtail connection is also available

图片

PICTURE

	M12x1, L40	M16x1, L65
		
	CE	CE
直流-3线/DC-3 wires NPN N.O.	GBT12-S01NA-D3Y2 * 01	GBT16-S01NA-D3Y2 * 01
直流-3线/DC-3 wires NPN N.C.	GBT12-S01NB-D3Y2 * 02	GBT16-S01NB-D3Y2 * 02
直流-3线/DC-3 wires PNP N.O.	GBT12-S01PA-D3Y2 * 03	GBT16-S01PA-D3Y2 * 03
直流-3线/DC-3 wires PNP N.C.	GBT12-S01PB-D3Y2 * 04	GBT16-S01PB-D3Y2 * 04
检测距离/Rated sensing distance	1mm	
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	—————	
标准检出物体/Sensing target	齿轮、齿条/Gear, Rack	
工作频率/Frequency	20KHz	
消耗电流/Consumption	≤10mA	
负载电流/Load current	150mA	
电压降/Voltage drop(V <sub>r</sub> )	≤1.8V	
滞后/Hysteresis	1...15%	
重复精度/Repeatability	≤2%	
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/Outputs short circuit and over current protected, Vs reverse polarity protected	
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/s <sup>2</sup> (50G) X、Y、Z、方向各10次/500m/s <sup>2</sup> (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φ4.0mm/Cable: φ4.0mm 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)