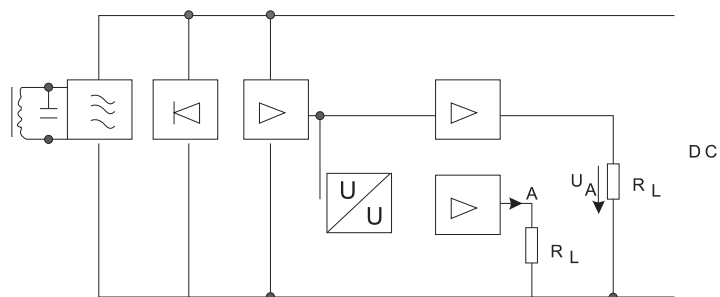


## 电感式线性传感器 INDUCTIVE LINEAR SENSOR

### 工作原理 work principle

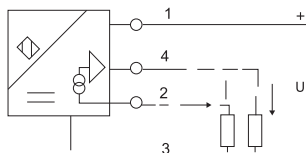
- 带模拟量输出的电感式接近开关与普通电感式接近开关的工作原理相同，当一个金属物体靠近传感器的感应面时，振荡器系统的能量减小，能量减小的程度是物体和传感器之间距离的尺寸标志，在一个附加电路中能量损耗被转换成测量信号，经线性化处理后被放大。(图5)
- 在输出端提供一个标志模拟信号(0...5V或4-20mA...)
- Inductive proximity switch with analog quantity output has the similar work principle with general inductive proximity switch. The energy of oscillator system decreases when a metal object approaches the inductive side. The energy decrease degree indicates the distance between the metal object and the sensor. The energy consumption is transformed into measuring signal in an additional device and magnified through linear treatment.(Fig.5) Provide a standard analog signal at output terminal(0...5V or 4-20mA...)

带模拟量输出的电感式接近开关的工作原理  
Work principle of inductive proximity switch with analog quantity

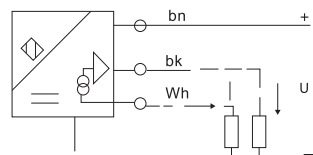


### 接线示意图 Installation and connection

用连接端子引出  
lead out with connecting terminal



用导线引出  
lead out with conductor



注芯线颜色BN=棕、BK=黑、BU=蓝、WH=白  
Note: the color of core line BN=brown, BK=black, BU=blue, and YE=yellow

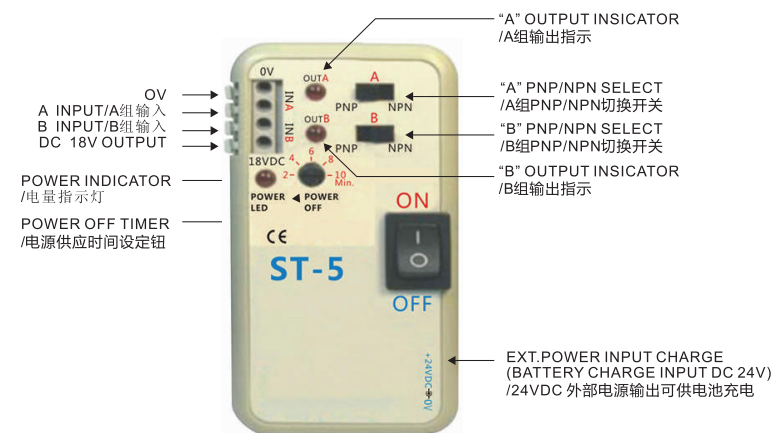
## 传感器测试仪 SENSORTESTERS

### TYPE:ST-1

- 具有AC/DC/NPN/PNP/接插件/LED指示灯等多功能微型传感器测试仪
- Multi-functional Micro-sensor tester with AC/DC/NPN/PNP/connector/led indicator and other functions



### TYPE:ST-5

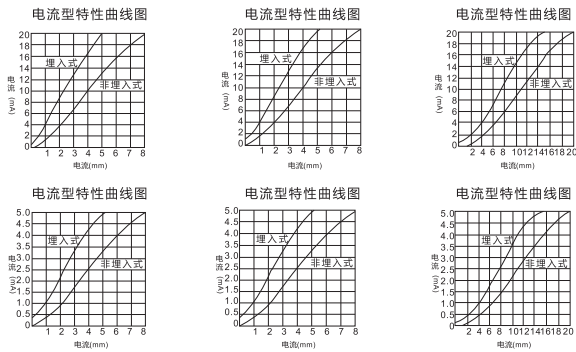


## 电感式线性传感器 INDUCTIVE LINEAR SENSOR

结构分类 Structural category	电感式位移量线性传感器 inductive linear displacement sensor		
外形编号 Outward Appearance code	XM12	XM18	XM30
外形图例 Outward appearance illustration			



可检测物体 Detectable object	金属 Metal						
检测距离 Detection distance	埋入式: 2mm Flush type: 2mm	非埋入式: 4mm Non-Flush: 4mm	埋入式: 5mm Flush type: 5mm	非埋入式: 8mm Non-Flush: 8mm	埋入式: 10mm Flush: 10mm	非埋入式: 15mm Non-Flush: 15mm	
具备型号 Model available	电流型 Current type	XM12-3002PMI	XM12-3004PMI	XM18-3005PMI	XM18-3008PMI	XM30-3010PMI	XM30-3015PMI
	电压型 Voltage type	XM12-3002PMU	XM12-3004PMU	XM18-3005PMU	XM18-3008PMU	XM30-3010PMU	XM30-3015PMU
电压范围 Voltage range	15~30VDC						
功耗 Consumption	检测时 at the time of detection	$\leq 200\text{mA} \sim < 4\text{mA}$					
	无检测时 at the time of non-detection	$\leq 20\text{mA}$					
负载电阻 Loading resistance	电流型 Current type	0~300Ω					
	电压型 Voltage type	$\geq 2.2\text{k}\Omega$					
输出 Output	电流型 Current type	4~20mA					
	电压型 Voltage type	0.5V/0~10Vz					

输出特性图  
Output characteristic diagram



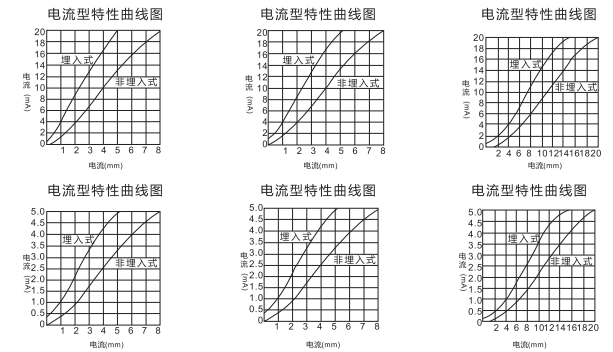
电压波动 Voltage fluctuation	$\leq 5\%$
输出信号 Output signal	PNP 模拟 PNP Simulation
线性误差 Linear deviation	$\pm 5\%$
环境温度 Ambient temperature	$-10^{\circ}\text{C} \sim +70^{\circ}\text{C}$
外壳材料 Shell material	塑料、金属 Plastic, Metal
防护等级 Protection grade	IP54

## 电感式线性传感器 INDUCTIVE LINEAR SENSOR

结构分类 Structural category	电感式位移量线性传感器 inductive linear displacement sensor		
外形编号 Outward Appearance code	XMF10	XMF37	XMF38
外形图例 Outward appearance illustration			

可检测物体 Detectable object	金属 Metal						
检测距离 Detection distance	埋入式: 15mm Flush: 15mm	非埋入式: 20mm Non-Flush: 20mm	埋入式: 15mm Flush: 15mm	非埋入式: 20mm Non-Flush: 20mm	埋入式: 40mm Flush: 40mm	非埋入式: 50mm Non-Flush: 50mm	
具备型号 Model available	电流型 Current type	XMF10-3015PMI	XMF10-3020PMI	XMF37-3015PMI	XMF37-3020PMI	XMF38-3040PMI	XMF38-3050PMI
	电压型 Voltage type	XMF10-3015PMU	XMF10-3020PMU	XMF37-3015PMU	XMF37-3020PMU	XMF38-3040PMU	XMF38-3050PMU
电压范围 Voltage range	15~30VDC						
功耗 Consumption	检测时 at the time of detection	$\leq 200\text{mA} \sim < 4\text{mA}$					
	无检测时 at the time of non-detection	$\leq 20\text{mA}$					
负载电阻 Loading resistance	电流型 Current type	0~300Ω					
	电压型 Voltage type	$\geq 2.2\text{k}\Omega$					
输出 Output	电流型 Current type	4~20mA					
	电压型 Voltage type	0.5V/0~10V					

输出特性图  
Output characteristic diagram



电压波动 Voltage fluctuation	$\leq 5\%$
输出信号 Output signal	PNP 模拟 PNP Simulation
线性误差 Linear deviation	$\pm 5\%$
环境温度 Ambient temperature	$-10^{\circ}\text{C} \sim +70^{\circ}\text{C}$
外壳材料 Shell material	塑料、金属 Plastic, Metal
防护等级 Protection grade	IP54