KJTDQ®

凯基特 传感·科技

纺织行业专用传感器

Sensors for yarn textile applications



南京凯基特电气有限公司

Najing KJT Electric CO.,LTD.

断丝检测器
Contactless Yarn Detector

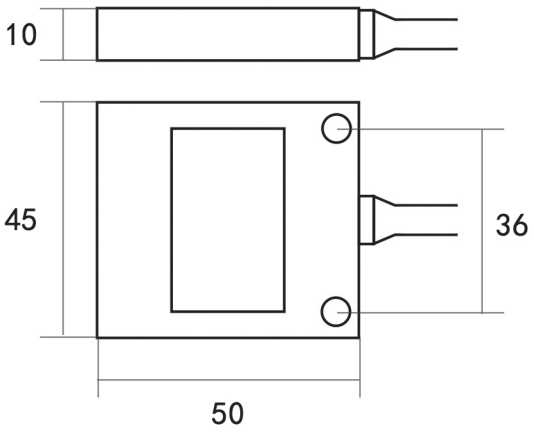


凯基特光电式纱线传感器具有很高的探测能力，可检测到最细为0.02mm的纱纬。适用于巴马格卷绕机、前纺。
KJT photoelectric yarn sensor has high detection ability, and can detect the yarn weft with the thinnest of 0.02mm. Suitable for Bamag winding machine and front spinning.

参数性能/Parameter

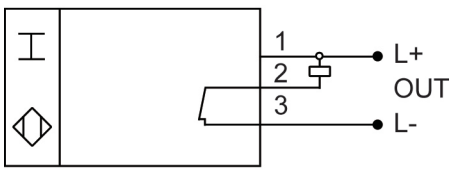
纱线类型/Yarn Type	POY/FDY/Cotton
纱线速度/Yarn Speed	6000m/min
供电电压/Voltage	10~30V DC
供电电流/Current	30mA
输出类型/Output	NPN/PNP
检测功能/Detection	走纱/断纱/Running/Break
外壳材质/Housing	锌压铸件/Zn
工作环境温度/Operating Temperature	0℃~55℃
工作环境湿度/Operating Humidity	up to 95%
光输出/Optical	红外漫反射/Diffuse reflection infrared
输出方式/Output	保护脉冲/连续/Pulsed/constant
最大检测距离/Max. Detection Distance	8-10mm
粗纱/Heavy Yarn	20mm
安装孔/Mounting Pitch	35.0mm
精度/Toerance	±0.2mm

尺寸图/Dimensions （单位:mm）

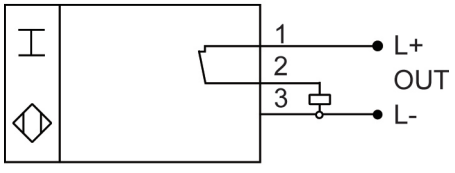


电气接线图/Wiring diagram

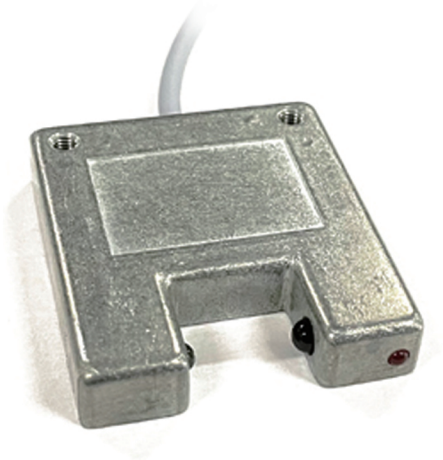
NPN



PNP



断丝检测器
Contactless Yarn Detector

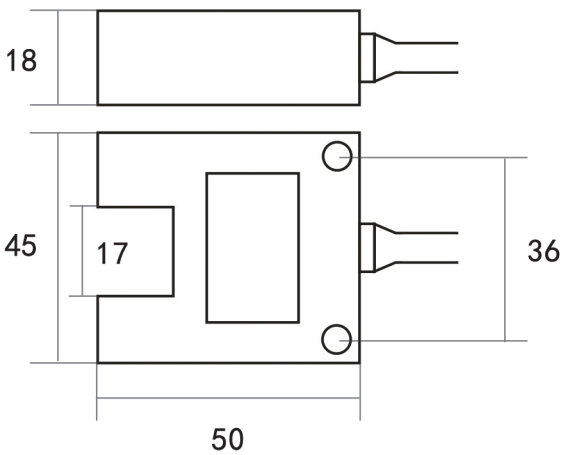


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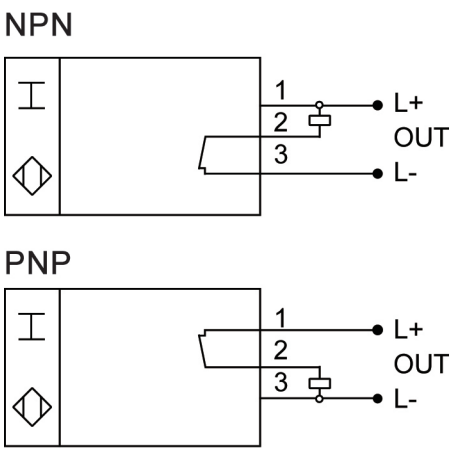
参数性能/Parameter

纱线类型/Yarn Type	POY/FDY/Cotton
纱线速度/Yarn Speed	50m/min~3000m/min
供电电压/Voltage	10~30V DC
供电电流/Current	30mA
输出类型/Output	NPN/PNP
检测功能/Detection	走纱/断纱/Running/Break
其他功能/Function	暂停/Muting
外壳材质/Housing	PBT/ABS/铝
工作环境温度/Operating Temperature	0℃~55℃
工作环境湿度/Operating Humidity	up to 95%
光输出/Optical	红外对射式/Transmissive infrared
输出方式/Output	保护脉冲/连续/Pulsed/constant
安装孔/Mounting Pitch	35.0mm
精度/Toerance	±0.2mm

尺寸图/Dimensions（单位:mm）



电气接线图/Wiring diagram



断丝检测器
Contactless Yarn Detector

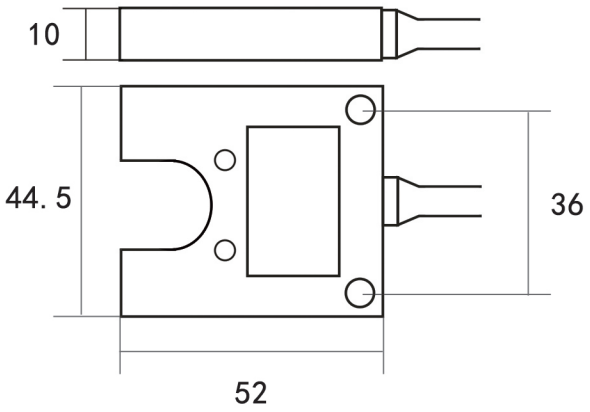
凯基特光电式断丝传感器，倒毛机感应器，并纱机断丝检测，高速倒毛机感应。
KJT photoelectric yarn break sensor, linter sensor, yarn breaking detection of doubling machine, induction of high -speed wool pouring machine.



参数性能/Parameter

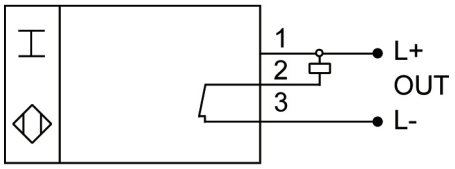
纱线类型/Yarn Type	POY/FDY/Cotton
纱线速度/Yarn Speed	up to 2000m/min
供电电压/Voltage	10~30V DC
供电电流/Current	30mA
输出类型/Output	NPN/PNP
检测功能/Detection	走纱/断纱/Running/Break
其他功能/Function	暂停/Muting
外壳材质/Housing	锌压铸件/Zn
工作环境温度/Operating Temperature	0℃~55℃
工作环境湿度/Operating Humidity	up to 95%
光输出/Optical	红外对射式/Transmissive infrared
输出方式/Output	保护脉冲/连续/Pulsed/constant
安装孔/Mounting Pitch	36mm
精度/Toerance	±0.2mm

尺寸图/Dimensions （单位:mm）

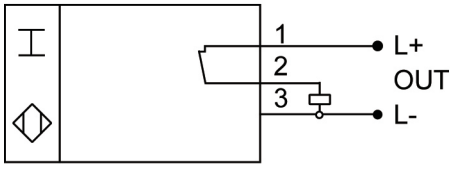


电气接线图/Wiring diagram

NPN



PNP



断丝检测器
Contactless Yarn Detector

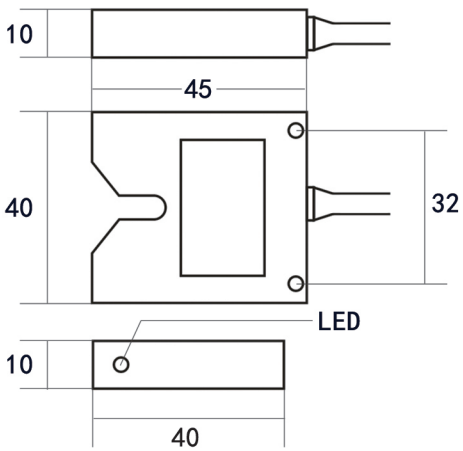
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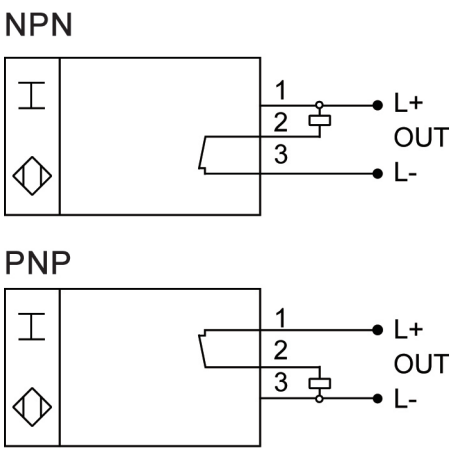
参数性能/Parameter

纱线类型/Yarn Type	POY/FDY/Cotton
纱线速度/Yarn Speed	up to 2000m/min
供电电压/Voltage	10~30V DC
供电电流/Current	30mA
输出类型/Output	NPN/PNP
检测功能/Detection	走纱/断纱/Running/Break
其他功能/Function	暂停/Muting
外壳材质/Housing	锌压铸件/Zn
工作环境温度/Operating Temperature	0℃~55℃
工作环境湿度/Operating Humidity	up to 95%
光输出/Optical	红外对射式/Transmissive infrared
输出方式/Output	保护脉冲/连续/Pulsed/constant
安装孔/Mounting Pitch	36mm
精度/Toerance	±0.2mm

尺寸图/Dimensions（单位:mm）



电气接线图/Wiring diagram



断丝检测器
Contactless Yarn Detector

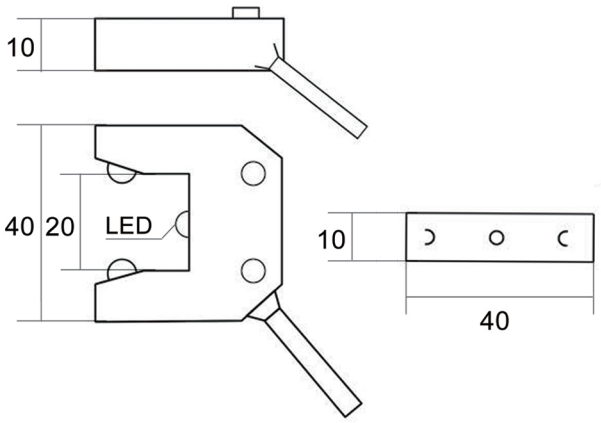
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KJT photoelectric yarn break sensor, linter sensor, yarn breaking detection of doubling machine, induction of high -speed wool pouring machine.



参数性能/Parameter

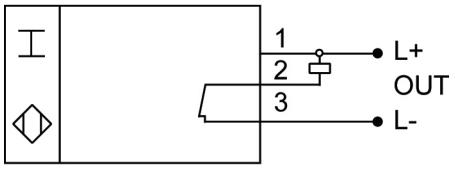
纱线类型/Yarn Type	POY/FDY/Cotton
纱线速度/Yarn Speed	up to 2000m/min
供电电压/Voltage	10~30V DC
供电电流/Current	30mA
输出类型/Output	NPN/PNP
检测功能/Detection	走纱/断纱/Running/Break
连接方式/Connection	带线插头连接/Plug with cable
外壳材质/Housing	锌压铸件/Zn
工作环境温度/Operating Temperature	0℃~55℃
工作环境湿度/Operating Humidity	up to 75%
光输出/Optical	红外对射式/Transmissive infrared
输出方式/Output	保护脉冲/连续/Pulsed/constant
安装孔/Mounting Pitch	20mm
精度/Toerance	±0.2mm

尺寸图/Dimensions（单位:mm）

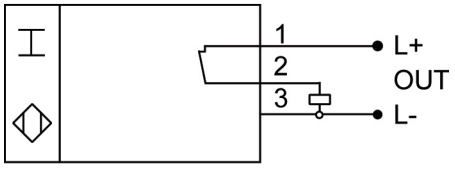


电气接线图/Wiring diagram

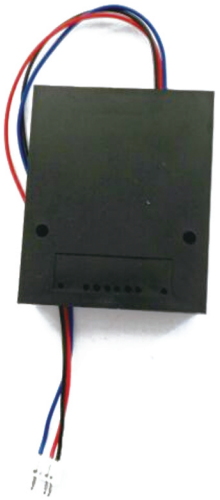
NPN



PNP



断丝检测器
Contactless Yarn Detector

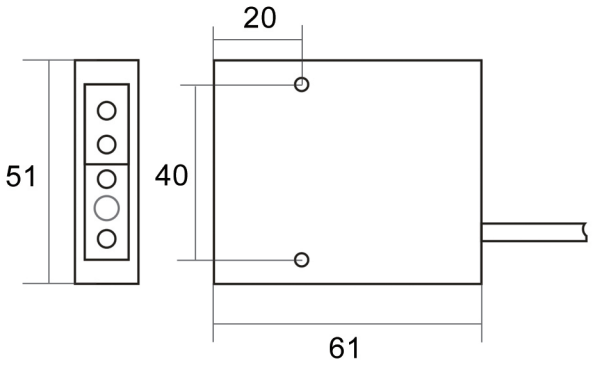


凯基特光电式探丝传感器，村田光电感丝器探丝器，
可代替纺机帝人卷绕机光电传感器。
KJT photoelectric yarn detector, Murata photoelectric yarn sensor, can replace the photoelectric sensor of textile machine Teijin winding machine.

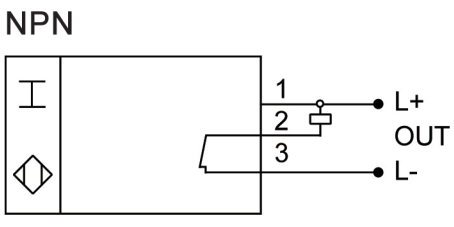
参数性能/Parameter

检测距离/Sensing distance	100mm
输出类型/Output	NPN
连接方式/Connection	带线插头连接/Plug with cable
外壳材质/Housing	锌压铸件/Zn
光输出/Optical	红外漫反射式/Diffuse reflection infrared
输出方式/Output	连续/Constant
安装孔/Mounting Pitch	40mm
精度/Toerance	±0.2mm

尺寸图/Dimensions （单位:mm）



电气接线图/Wiring diagram



断丝检测器
Contactless Yarn Detector

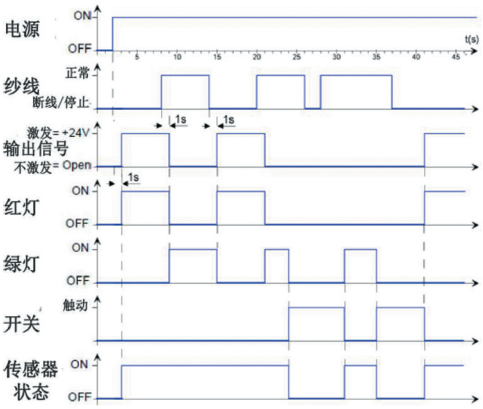


凯基特非接触断纱检测光电传感器，测试纱线的存在与否.
可以检测到的最小纱线：0.1mm。
KJT non-contact yarn break opto-electronic sensor can control the presence of yarns for to-and-fro or ballooning motion.Minimum yarn size detected : 0.1mm.

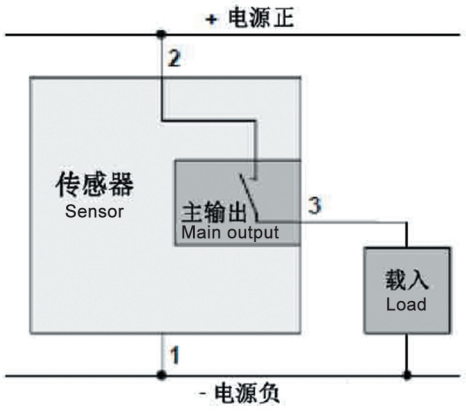
参数性能/Parameter

纱线直径/Yarn Diameter	0.2-4 mm
供电电压/Voltage	18~30V DC
传感器电流/Current	环境温度25℃ 8.8~10mA Ambient temperature 25℃ 远程控制，输出端断开 34.5~36℃ Remote control, output disconnected
反应时间/Reaction time	1s(±0.25s)
输出类型/Output	PNP
连接方式/Connection	线缆连接/Cable
外壳材质/Housing	铝合金外壳/Aluminum alloy
储存温度/Storage Temperature	-15℃~80℃
工作环境温度/Operating Temperature	10℃~50℃
工作环境湿度/Operating Humidity	up to 90%

时序图/Timing diagram



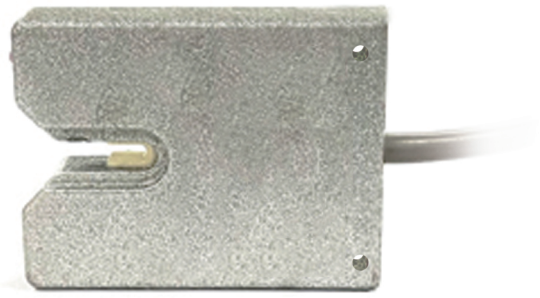
电气接线图/Wiring diagram



断丝检测器
Contactless Yarn Detector

凯基特电容式断丝检测器可检测各类纺纱在纺机上的运行（直线运动）状况。判断纺纱停滞或断纱的情况。

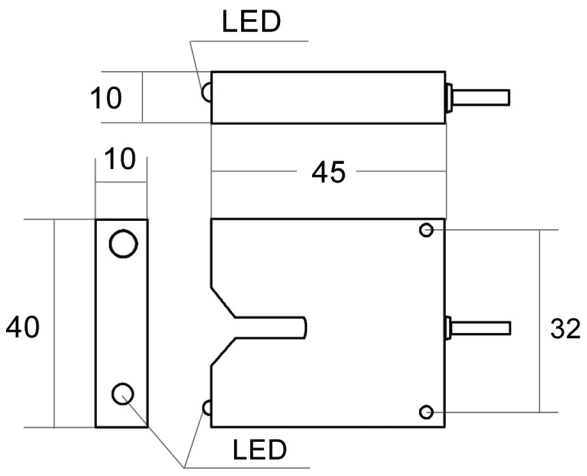
The KJT Capacitive Yarn Breaking Detector can detect the running conditions (linear motion) of various spinning yarns on the spinning machine. Determine the situation of spinning stagnation or yarn breakage.



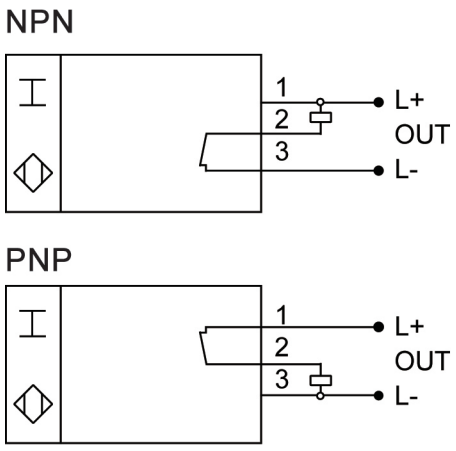
参数性能/Parameter

纱线类型/Yarn Type	POY/FDY/Cotton
纱线速度/Yarn Speed	up to 2000m/min
供电电压/Voltage	10~30V DC
供电电流/Current	30mA
输出类型/Output	NPN/PNP
检测功能/Detection	走纱/断纱/Running/Break
连接方式/Connection	带线插头连接/Plug with cable
外壳材质/Housing	锌压铸件/Zn
工作环境温度/Operating Temperature	0℃~55℃
工作环境湿度/Operating Humidity	up to 75%
检测功能/Detection	电容式/Capacitive
输出保护/Output	短路/极性/Short-circuit/Polarity
安装孔/Mounting Pitch	32mm
精度/Toerance	±0.2mm

尺寸图/Dimensions （单位:mm）



电气接线图/Wiring diagram



张力传感器
Load Cell Tension Sensor

凯基特张力传感器应用于并纱及加捻工艺的测力，适用高特(40010000dtex)高张力(至4000g)的纱线，如轮胎帘子线。

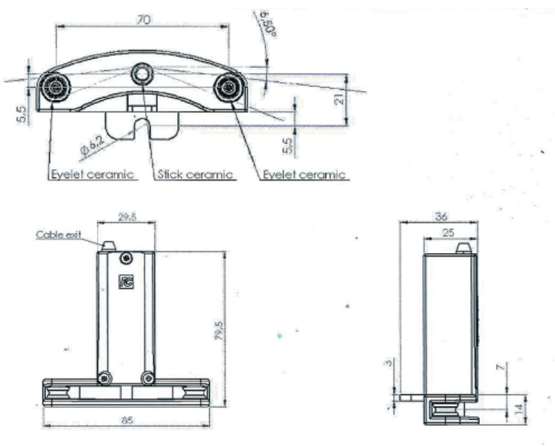
KJT tension sensor is a force measuring sensor used in yarn merging and twisting process. It is suitable for high (40010000dtex) and high tension (up to 4000g) yarns, such as tire cord.



参数性能/Parameter

纱线直径/Yarn Diameter	0.2-4 mm
纱线张力/Yarn Tension	0-4000 g
供电电压/Voltage	18~30V DC
传感器电流/Current	15mA
输出/Output	0~10V
波动电压频率/Fluctuation Voltage Frequency	Max.< 30V
最小负载电阻/Min. Load Resistance	10kΩ
零位输入极限值/Zero Input Limit	Okg 85/100/115 V
	4kg 5390/5420/5450 V
连接方式/Connection	线缆连接/Cable
外壳材质/Housing	铝合金外壳/Aluminum alloy
储存温度/Storage Temperature	-25℃~85℃
工作环境温度/Operating Temperature	10℃~50℃
工作环境湿度/Operating Humidity	up to 95%
其他/Others	偏移量和增益可调/Adjustable offset and gain

尺寸图/Dimensions （单位:mm）

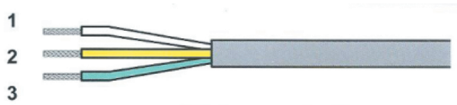


电气接线图/Wiring diagram

白线： 电源正极

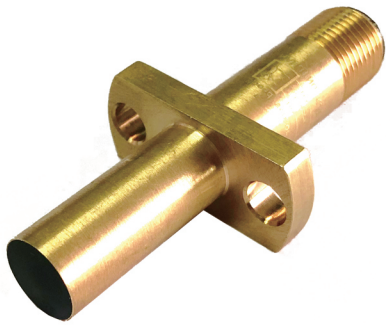
黄线： O/10V 输出

蓝线： 电源负极



齿轮测速传感器
Gear speed sensor

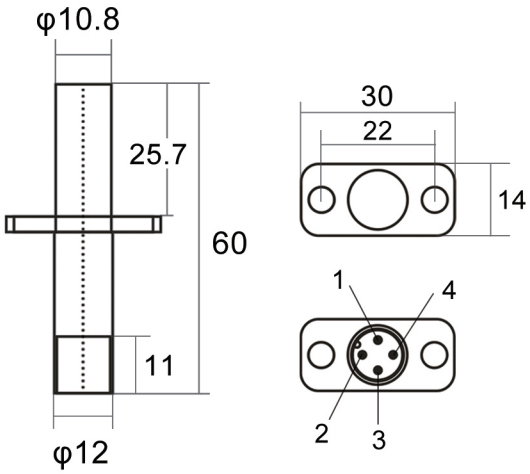
凯基特齿轮测速传感器非接触式检测金属物体，可避免探头磨损，抗振动。用在齿轮、齿条或凹凸不平的导磁金属上，可以计数、定位、检测。
KJT gear speed sensor can detect metal objects without contact, which can avoid probe wear and anti vibration. It can be used on gears, racks or uneven magnetic conductive metal for counting, positioning and testing.



参数性能/Parameter

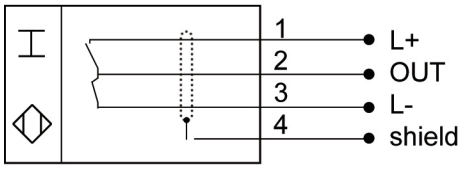
感应距离/Sensing Distance	1.5mm
检测物体/Sensing Object	齿轮/Gear
响应频率/Response Frequency	0.1-33KHz
工作电压/Voltage	10~30V DC
输出类型/Output	NPN/PNP
输出状态/Output State	Pulse
连接方式/Connection	4线制/5线制/4 wires/5 wires
外壳材料/Housing	PBT/Zn
工作环境温度/Operating Temperature	-25℃~85℃

尺寸图/Dimensions （单位:mm）

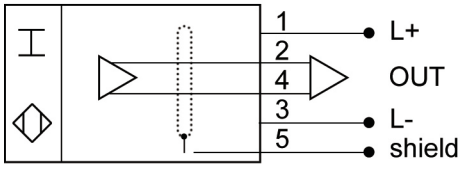


电气接线图/Wiring diagram

4线制/4 wires



5线制/5 wires



齿轮测速传感器
Gear speed sensor

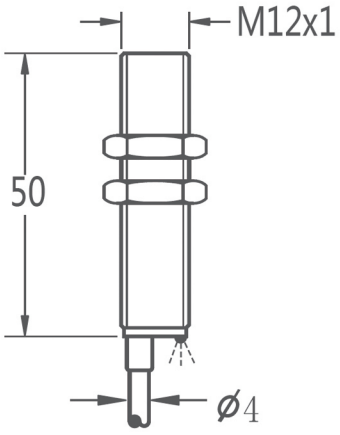
凯基特齿轮测速传感器非接触式检测金属物体，可避免探头磨损，抗振动。用在齿轮、齿条或凹凸不平的导磁金属上，可以计数、定位、检测。
KJT gear speed sensor can detect metal objects without contact, which can avoid probe wear and anti vibration. It can be used on gears, racks or uneven magnetic conductive metal for counting, positioning and testing.



参数性能/Parameter

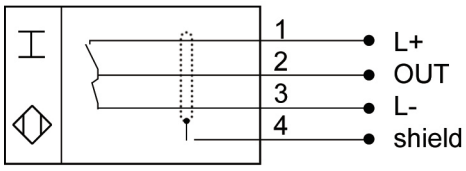
感应距离/Sensing Distance	2.5mm
检测物体/Sensing Object	齿轮/Gear
响应频率/Response Frequency	0.1-33KHz
工作电压/Voltage	10~30V DC
输出类型/Output	NPN/PNP
输出状态/Output State	Pulse
连接方式/Connection	4线制/4 wires
外壳材料/Housing	铜/Brass
工作环境温度/Operating Temperature	-25℃~85℃

尺寸图/Dimensions（单位:mm）



电气接线图/Wiring diagram

4线制/4 wires



齿轮测速传感器
Contactless Yarn Detector

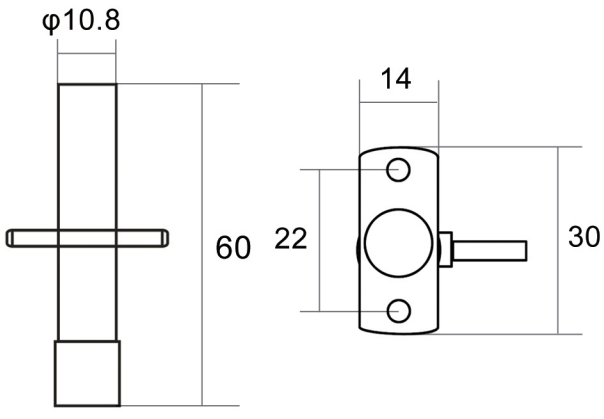
凯基特齿轮测速传感器非接触式检测金属物体，可避免探头磨损，抗振动。用在齿轮、齿条或凹凸不平的导磁金属上，可以计数、定位、检测。
KJT gear speed sensor can detect metal objects without contact, which can avoid probe wear and anti vibration. It can be used on gears, racks or uneven magnetic conductive metal for counting, positioning and testing.



参数性能/Parameter

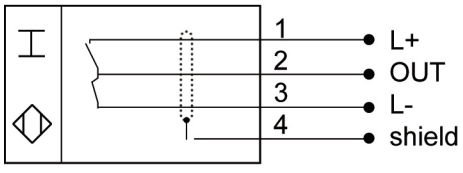
感应距离/Sensing Distance	1.5mm
检测物体/Sensing Object	齿轮/Gear
响应频率/Response Frequency	0.1-33KHz
工作电压/Voltage	10~30V DC
输出类型/Output	NPN/PNP
输出状态/Output State	Pulse
连接方式/Connection	4线制/5线制/4 wires/5 wires
外壳材料/Housing	PBT/CuZn
工作环境温度/Operating Temperature	-25℃~85℃

尺寸图 （单位:mm）

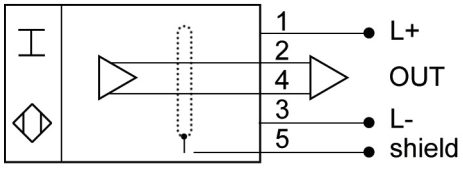


电气接线图/Wiring diagram

4线制/4 wires



5线制/5 wires



齿轮测速传感器
Gear speed sensor

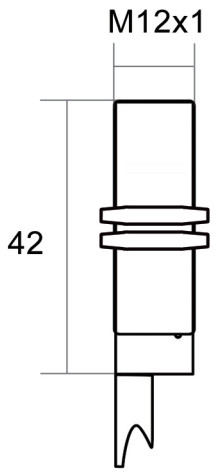
凯基特齿轮测速传感器非接触式检测金属物体，可避免探头磨损，抗振动。用在齿轮、齿条或凹凸不平的导磁金属上，可以计数、定位、检测。
KJT gear speed sensor can detect metal objects without contact, which can avoid probe wear and anti vibration. It can be used on gears, racks or uneven magnetic conductive metal for counting, positioning and testing.



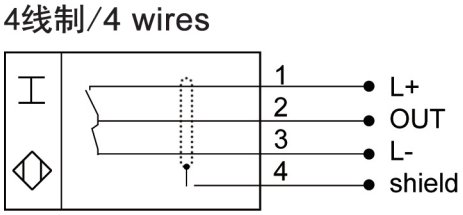
参数性能/Parameter

感应距离/Sensing Distance	2.5mm
检测物体/Sensing Object	齿轮/Gear
响应频率/Response Frequency	0.1-33KHz
工作电压/Voltage	10~30V DC
输出类型/Output	NPN/PNP
输出状态/Output State	Pulse
连接方式/Connection	4线制/4 wires
外壳材料/Housing	铜/Brass
工作环境温度/Operating Temperature	-25℃~85℃

尺寸图/Dimensions （单位:mm）



电气接线图/Wiring diagram



齿轮测速传感器
Gear speed sensor

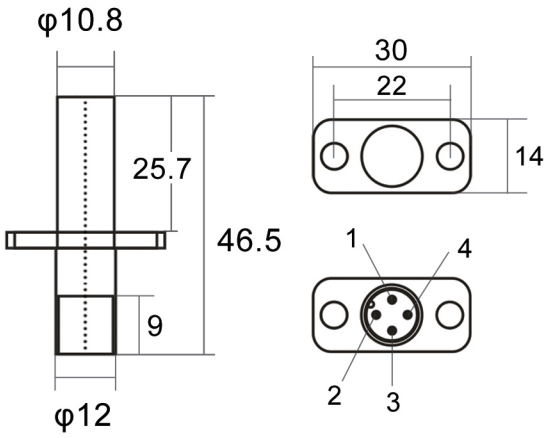
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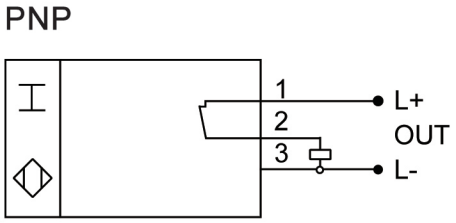
参数性能/Parameter

感应距离/Sensing Distance	1.5mm
检测物体/Sensing Object	齿轮/Gear
响应频率/Response Frequency	2kHZ
工作电压/Voltage	10~30V DC
工作电流/Current	35mA
输出类型/Output	NPN/PNP
输出状态/Output State	NO
连接方式/Connection	带线插头连接/Plug with cable
外壳材料/Housing	铜/Brass
工作环境温度/Operating Temperature	-25℃~85℃

尺寸图/Dimensions （单位:mm）



电气接线图/Wiring diagram



齿轮测速传感器
Gear speed sensor

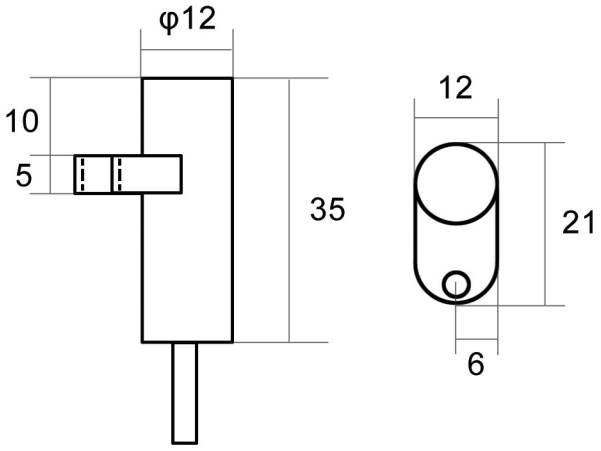
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KJT gear speed sensor can detect metal objects without contact, which can avoid probe wear and anti vibration. It can be used on gears, racks or uneven magnetic conductive metal for counting, positioning and testing.



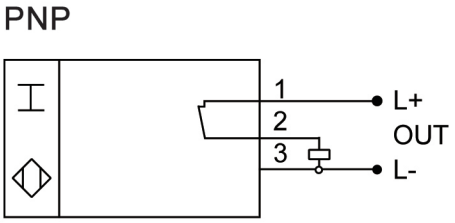
参数性能/Parameter

感应距离/Sensing Distance	1.5mm
检测物体/Sensing Object	齿轮/Gear
响应频率/Response Frequency	2kHZ
工作电压/Voltage	10~30V DC
工作电流/Current	35mA
输出类型/Output	NPN/PNP
输出状态/Output State	NO
连接方式/Connection	带线插头连接/Plug with cable
外壳材料/Housing	铜/Brass
工作环境温度/Operating Temperature	-25℃~85℃

尺寸图/Dimensions （单位:mm）



电气接线图/Wiring diagram



齿轮测速传感器
Gear speed sensor

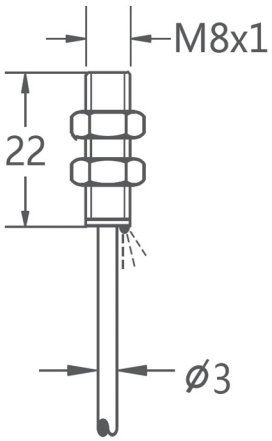
凯基特齿轮测速传感器非接触式检测金属物体，可避免探头磨损，抗振动。用在齿轮、齿条或凹凸不平的导磁金属上，可以计数、定位、检测。
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参数性能/Parameter

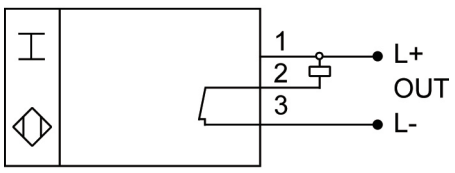
感应距离/Sensing Distance	1.5mm
响应频率/Response Frequency	3kHZ
工作电压/Voltage	10~30V DC
输出类型/Output	NPN/PNP
输出状态/Output State	Pulse
连接方式/Connection	4线制/4 wires
外壳材料/Housing	铜/Brass
工作环境温度/Operating Temperature	-25℃~100℃

尺寸图/Dimensions（单位:mm）

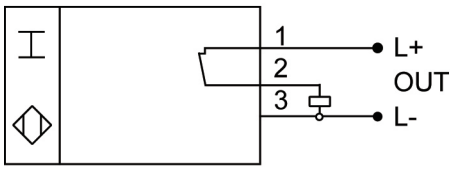


电气接线图/Wiring diagram

NPN

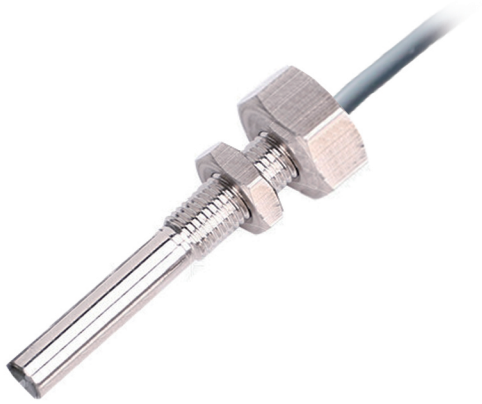


PNP



齿轮测速传感器
Gear speed sensor

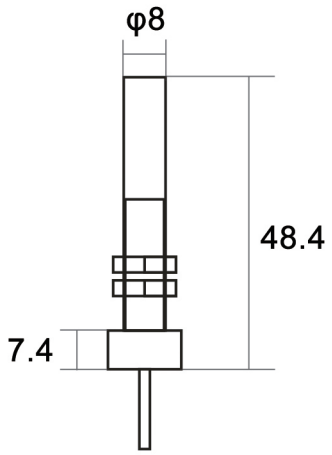
凯基特齿轮测速传感器非接触式检测金属物体，可避免探头磨损，抗振动。用在齿轮、齿条或凹凸不平的导磁金属上，可以计数、定位、检测。
KJT gear speed sensor can detect metal objects without contact, which can avoid probe wear and anti vibration. It can be used on gears, racks or uneven magnetic conductive metal for counting, positioning and testing.



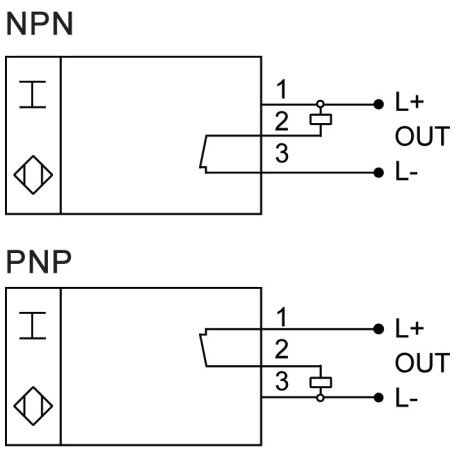
参数性能/Parameter

感应距离/Sensing Distance	1.5mm
响应频率/Response Frequency	3kHZ
工作电压/Voltage	10~30V DC
工作电流/Current	10mA
输出类型/Output	NPN/PNP
输出状态/Output State	NO
工作环境温度/Operating Temperature	-25℃~100℃

尺寸图/Dimensions（单位:mm）



电气接线图/Wiring diagram



霍尔开关
Hall Sensor

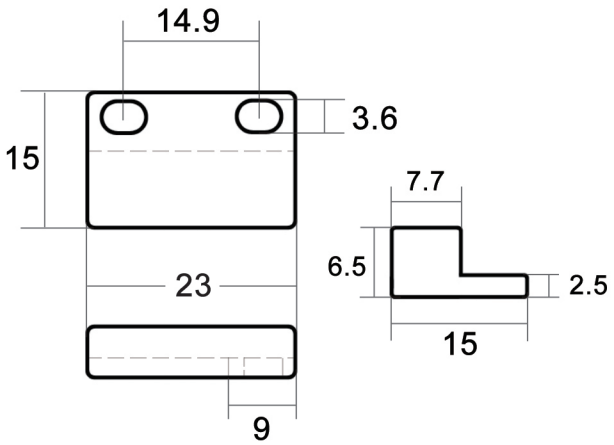


凯基特霍尔传感器由于磁性物体接近产生的霍尔效应改变开关内部电路的状态，进而控制开关的通断。
KJT hall sensor changes the state of the internal circuit of the switch due to the Hall effect generated by the proximity of the magnetic object, thereby controlling the on-off of the switch.

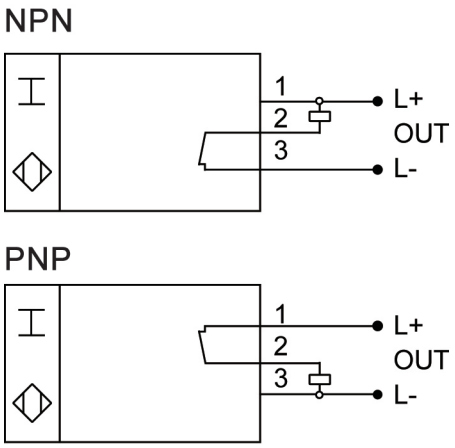
参数性能/Parameter

供电电压/Voltage	10~30V DC
供电电流/Current	30mA
输出类型/Output	NPN/PNP
检测功能/Detection	走纱/断纱/Running/Break
外壳材质/Housing	PBT/ABS
工作环境温度/Operating Temperature	0℃~55℃
工作环境湿度/Operating Humidity	up to 75%
连接方式/Connection	带线插头连接/Plug with cable
安装孔/Mounting Pitch	14.9mm

尺寸图/Dimensions （单位:mm）



电气接线图/Wiring diagram



接近开关
Inductive Proximity Sensor

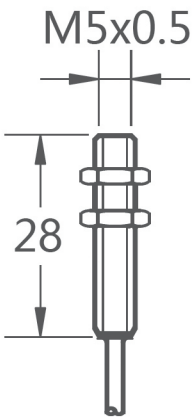
凯基特标准型接近开关，动作可靠，性能稳定，频率响应快，应用寿命长，抗干扰能力强.
KJT standard proximity sensor has reliable action, stable performance, fast frequency response, long service life and strong anti-interference ability.



参数性能/Parameter

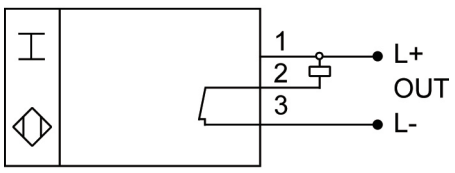
感应距离/Sensing Distance	0.8mm
响应频率/Response Frequency	1.5kHZ
供电电压/Voltage	10~30V DC
供电电流/Current	30mA
输出类型/Output	NPN/PNP
外壳材质/Housing	金属/Ferrous
工作环境温度/Operating Temperature	-25℃~70℃
工作环境湿度/Operating Humidity	up to 85%

尺寸图/Dimensions （单位:mm）

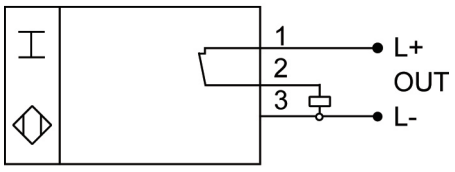


电气接线图/Wiring diagram

NPN



PNP



接近开关
Inductive Proximity Sensor

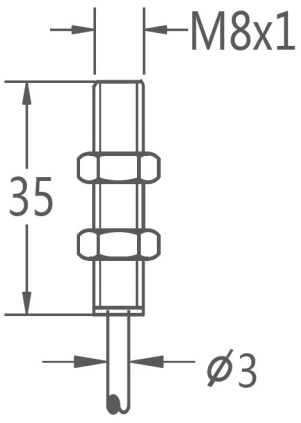
凯基特标准型接近开关，动作可靠，性能稳定，频率响应快，应用寿命长，抗干扰能力强.
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参数性能

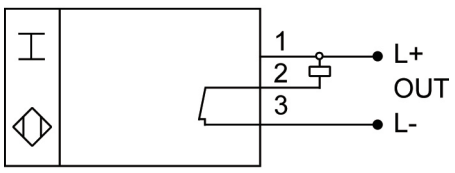
感应距离/Sensing Distance	1/1.5/2 mm
响应频率/Response Frequency	1.5kHZ
供电电压/Voltage	10~30V DC
供电电流/Current	30mA
输出类型/Output	NPN/PNP
外壳材质/Housing	金属/Ferrous
工作环境温度/Operating Temperature	-25℃~70℃
工作环境湿度/Operating Humidity	up to 85%

尺寸图 （单位:mm）

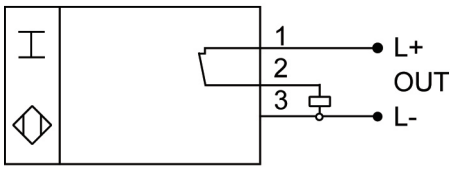


电气接线图

NPN



PNP



接近开关
Inductive Proximity Sensor

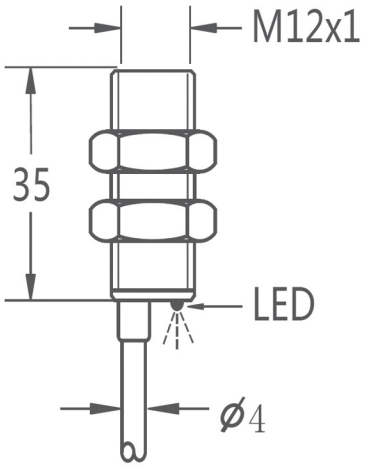
凯基特标准型接近开关，动作可靠，性能稳定，频率响应快，应用寿命长，抗干扰能力强.
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参数性能/Parameter

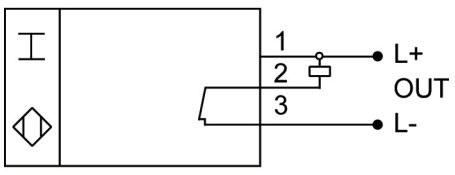
感应距离/Sensing Distance	2/4 mm
响应频率/Response Frequency	1.5kHZ
供电电压/Voltage	10~30V DC
供电电流/Current	30mA
输出类型/Output	NPN/PNP
外壳材质/Housing	金属/Ferrous
工作环境温度/Operating Temperature	-25℃~70℃
工作环境湿度/Operating Humidity	up to 85%

尺寸图/Dimensions（单位:mm）

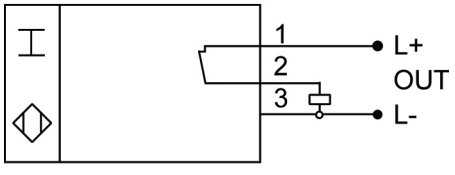


电气接线图/Wiring diagram

NPN



PNP



模拟量位移传感器
Analog Output Proximity Sensor

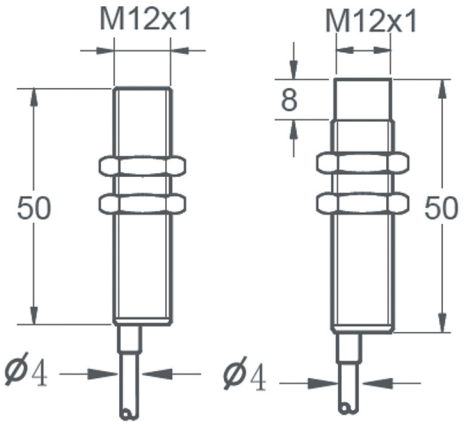
凯基特模拟量接近开关，当金属物体接近模拟量传感器检测面时，随着距离的变化，其输出一个与距离成线关系变化的电信号，从而达到检测与监控的目的。
When the metal object approaches the detection surface of the analog sensor, with the change of distance, it outputs an electrical signal that changes linearly with the distance, so as to achieve the purpose of detection and monitoring.



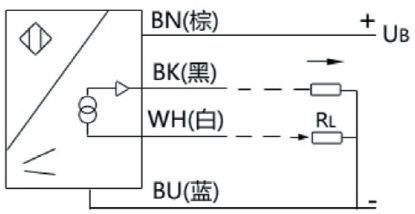
参数性能/Parameter

感应距离/Sensing Distance	齐平/Flush	非齐平/Non-flush
	0.1~3 mm	0.1~4mm
输出形式/Output	PNP-ANALOG	
输出电压/Output voltage	0-10V	
输出电流/Output current	4-20mA	
响应频率/Response Frequency	500HZ	
供电电压/Voltage	10~36V DC	
重复精度/Repeat Accuracy	0.02mA	
感应面材质/Sensing surface material	POM	
工作环境温度/Operating Temperature	-25℃~70℃	
工作环境湿度/Operating Humidity	up to 85%	

尺寸图/Dimensions （单位:mm）

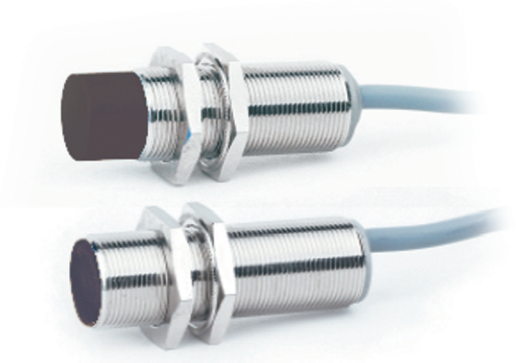


电气接线图/Wiring diagram



模拟量位移传感器
Analog Output Proximity Sensor

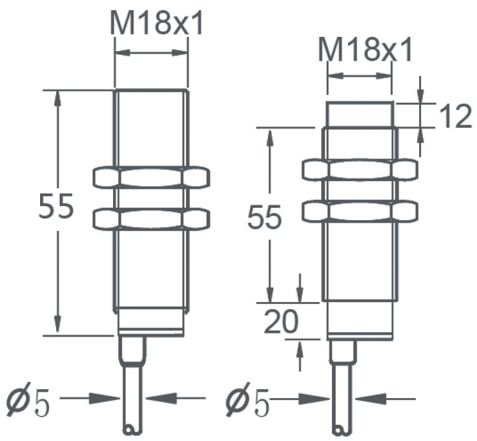
凯基特模拟量接近开关，当金属物体接近模拟量传感器检测面时，随着距离的变化，其输出一个与距离成线关系变化的电信号，从而达到检测与监控的目的。
When the metal object approaches the detection surface of the analog sensor, with the change of distance, it outputs an electrical signal that changes linearly with the distance, so as to achieve the purpose of detection and monitoring.



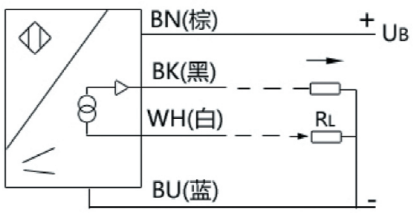
参数性能/Parameter

感应距离/Sensing Distance	齐平/Flush	非齐平/Non-flush
	1~4 mm	1~7mm
输出形式/Output	PNP-ANALOG	
输出电压/Output voltage	0-10V	
输出电流/Output current	4-20mA	
响应频率/Response Frequency	500HZ	
供电电压/Voltage	10~36V DC	
重复精度/Repeat Accuracy	0.02mA	
感应面材质/Sensing surface material	POM	
工作环境温度/Operating Temperature	-25℃~70℃	
工作环境湿度/Operating Humidity	up to 85%	

尺寸图/Dimensions （单位:mm）



电气接线图/Wiring diagram



圆柱形光电开关
Cylindrical Photoelectric Sensor

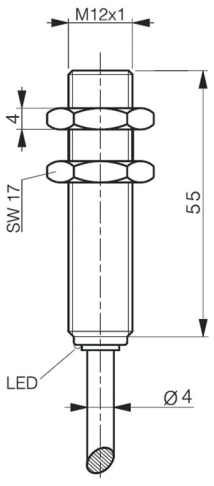
凯基特光电开关产品种类齐全，漫反射式，镜反射式，对射式，圆柱形，方形，槽型，继电器输出等。
KJT photoelectric switch has a complete range of products, including diffused type, mirror reflection type, through beam type, cylindrical, square, slot type, relay output, etc.



参数性能/Parameter

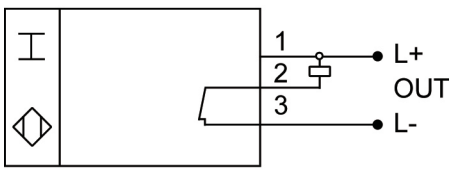
感应距离/Sensing Distance	漫反射 Diffuse reflection	镜反射 Retro reflection	对射 Through beam
	0.1 m	1 m	4 m
响应频率/Response Frequency	500HZ		
供电电压/Voltage	10~30V DC / 交流		
供电电流/Current	30mA		
输出类型/Output	NPN/PNP		
外壳材质/Housing	金属/Ferrous		
工作环境温度/Operating Temperature	-25℃~70℃		
工作环境湿度/Operating Humidity	up to 85%		

尺寸图/Dimensions（单位:mm）

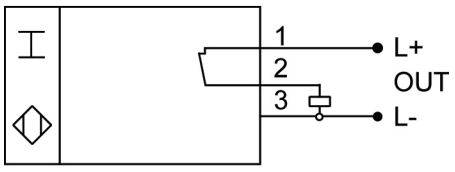


电气接线图/Wiring diagram

NPN



PNP



圆柱形光电开关
Cylindrical Photoelectric Sensor

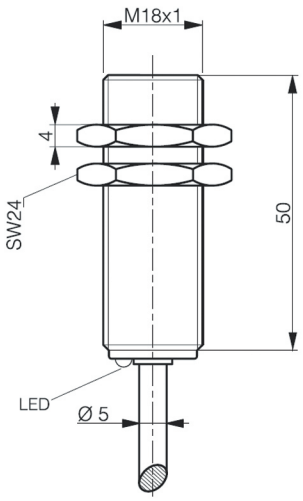
凯基特光电开关产品种类齐全，漫反射式，镜反射式，对射式，圆柱形，方形，槽型，继电器输出等。
KJT photoelectric switch has a complete range of products, including diffused type, mirror reflection type, through beam type, cylindrical, square, slot type, relay output, etc.



参数性能/Parameter

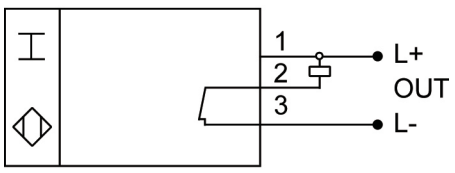
	漫反射 Diffuse reflection	镜反射 Retro reflection	对射 Through beam
感应距离/Sensing Distance	0.3/0.7/1.0/1.5 m	3 m	5/10 m
响应频率/Response Frequency	500HZ		
供电电压/Voltage	10~30V DC / 交流		
供电电流/Current	30mA		
输出类型/Output	NPN/PNP		
外壳材质/Housing	金属/Ferrous		
工作环境温度/Operating Temperature	-25℃~70℃		
工作环境湿度/Operating Humidity	up to 85%		

尺寸图/Dimensions （单位:mm）

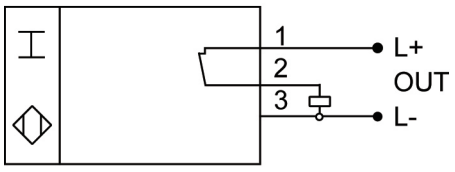


电气接线图/Wiring diagram

NPN



PNP



方形光电开关
Square Photoelectric Sensor

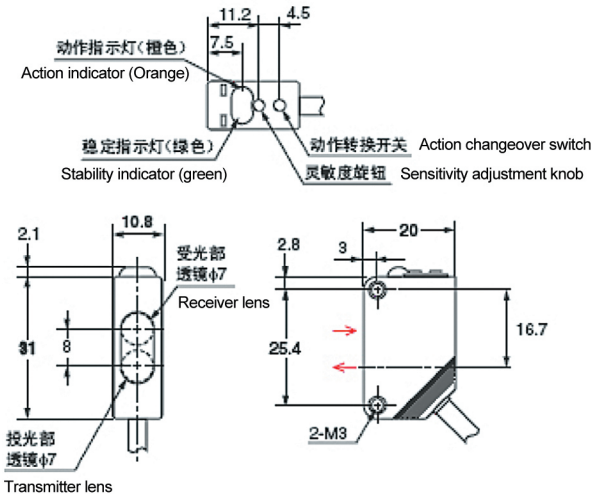
凯基特光电开关产品种类齐全，漫反射式，镜反射式，对射式，圆柱形，方形，槽型，继电器输出等。
KJT photoelectric switch has a complete range of products, including diffused type, mirror reflection type, through beam type, cylindrical, square, slot type, relay output, etc.



参数性能/Parameter

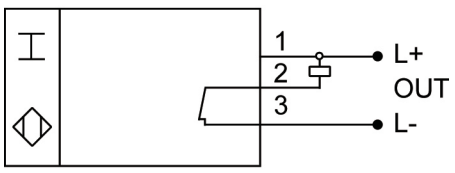
	漫反射 Diffuse reflection	镜反射 Retro reflection	对射 Through beam
感应距离/Sensing Distance	0.3/1.0/1.5/2.0 m	3 m	5/10/20 m
响应频率/Response Frequency	500HZ		
供电电压/Voltage	10~30V DC / 220V AC		
供电电流/Current	30mA		
输出类型/Output	NPN/PNP		
外壳材质/Housing	ABS		
工作环境温度/Operating Temperature	-25℃~70℃		
工作环境湿度/Operating Humidity	up to 85%		

尺寸图/Dimensions（单位:mm）

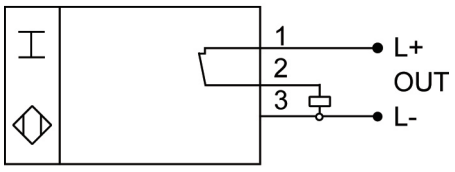


电气接线图/Wiring diagram

NPN



PNP



方形光电开关
Square Photoelectric Sensor

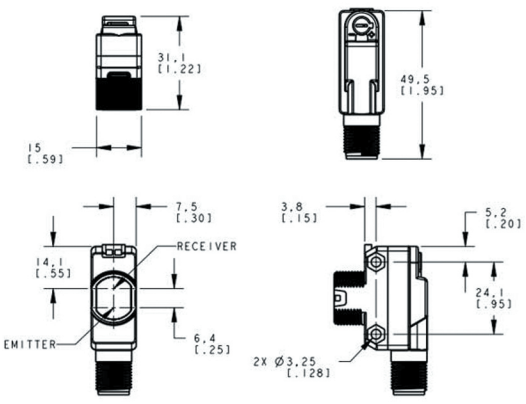
凯基特光电开关产品种类齐全，漫反射式，镜反射式，对射式，圆柱形，方形，槽型，继电器输出等。
KJT photoelectric switch has a complete range of products, including diffused type, mirror reflection type, through beam type, cylindrical, square, slot type, relay output, etc.



参数性能/Parameter

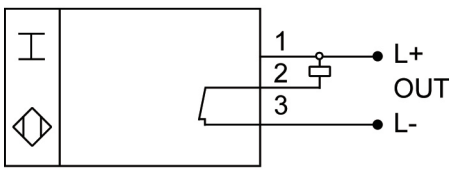
检测方式/Detection method	漫反射/Diffuse reflection
感应距离/Sensing Distance	3.5 m
响应频率/Response Frequency	500HZ
供电电压/Voltage	10~30V DC / 220V AC
供电电流/Current	30mA
输出类型/Output	NPN/PNP
外壳材质/Housing	ABS
工作环境温度/Operating Temperature	-25℃~70℃
工作环境湿度/Operating Humidity	up to 85%

尺寸图/Dimensions（单位:mm）

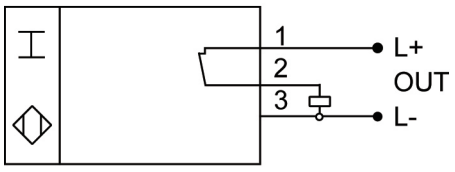


电气接线图/Wiring diagram

NPN



PNP



TOF型光电开关
Time of Flight Photoelectric Sensor

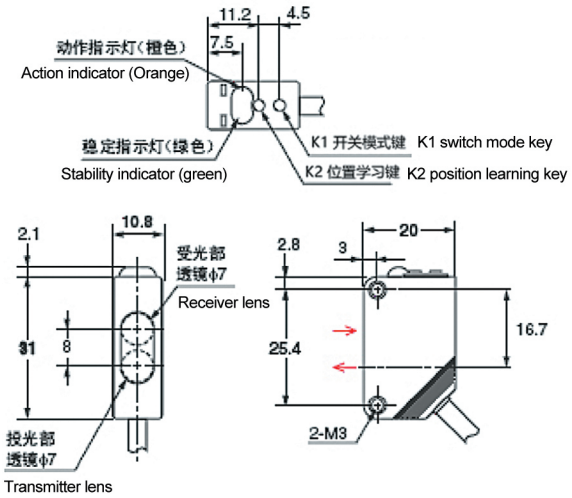
凯基特TOF型光电开关不受物体表面颜色、弧度、环境等引起的干扰影响，实现更远的检测距离，1m/2m/4m可选。
KJT TOF photoelectric sensor is not affected by the surface color, radian, environment, etc. of the object, and can achieve a longer detection distance, 1m/2m/4m optional.



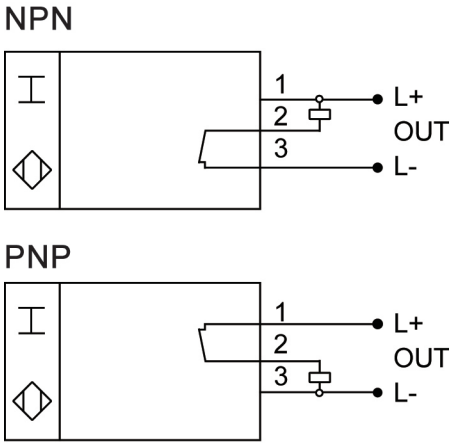
参数性能/Parameter

检测方式/Detection method	漫反射/Diffuse reflection
感应距离/Sensing Distance	1/2/4 m
响应频率/Response Frequency	10HZ
供电电压/Voltage	10~30V DC / 交流
供电电流/Current	30mA
输出类型/Output	开关量/模拟量/模拟量带显示 Switch/Analog/Analog with display
外壳材质/Housing	ABS
工作环境温度/Operating Temperature	-25℃~70℃
工作环境湿度/Operating Humidity	up to 85%

尺寸图/Dimensions （单位:mm）



电气接线图/Wiring diagram

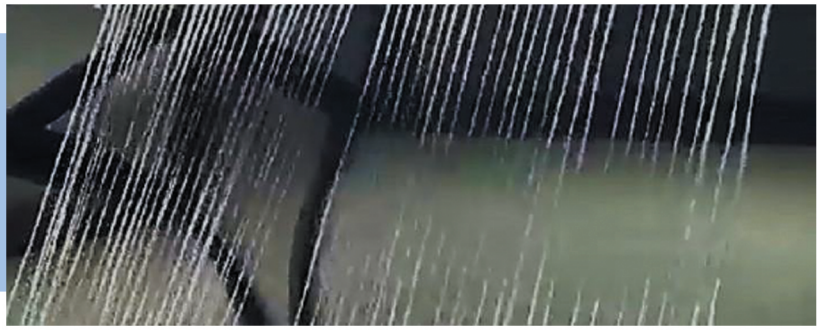


视觉检测纱线缺陷

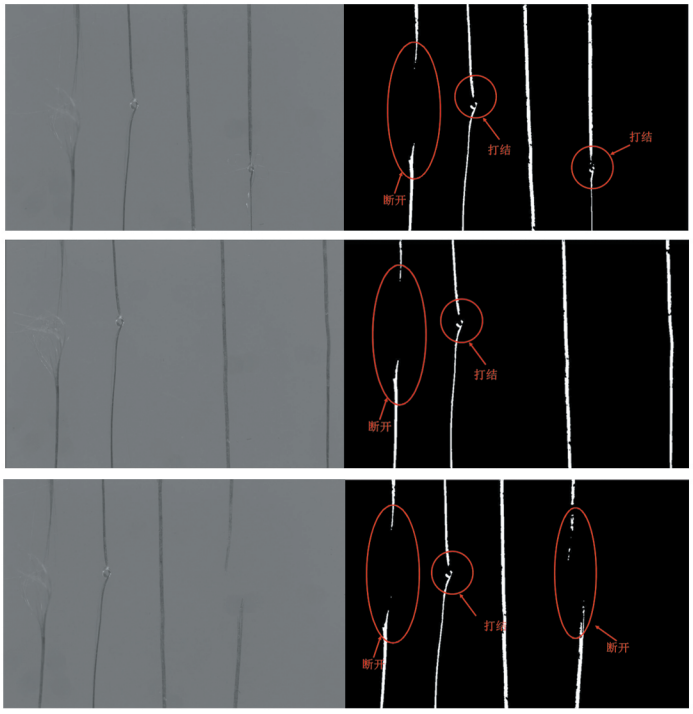
纱线打结及断开检测

检测宽0.2~0.5mm的纱线是否打结或断开

• 检测范围：一排线宽60~100cm



解决方案



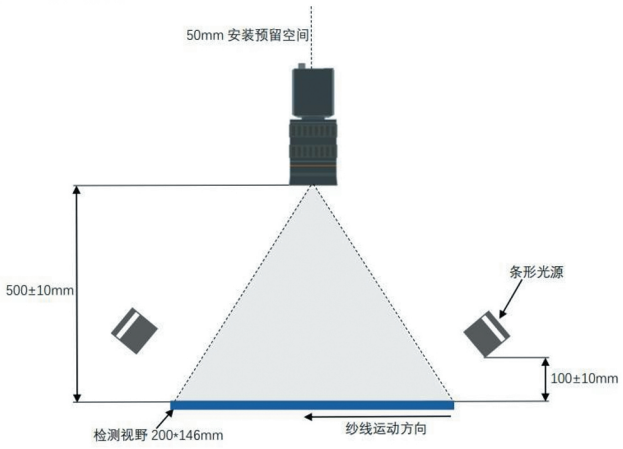
对产品使用对射打光，用2D黑白相机进行检测

• 图像扫描：

将相机置于产品上方，对检测产品进行动态取相

• 算法检测：

对获取的图像进行二值化处理，分析纱线是否存在打结或断开



产品参数

相机	1200万像素黑白相机	镜头工作距离	100mm
镜头	35mm	相机帧率	23fps
光源	条形光*2	相机视野大小	200*196mm
光源工作距离	50mm	理论精度	0.07mm

可以实现对0.2~0.5mm宽的纱线进行打结及断开检测

南京凯基特电气有限公司 Nanjing KJT Electric Co.,LTD.

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