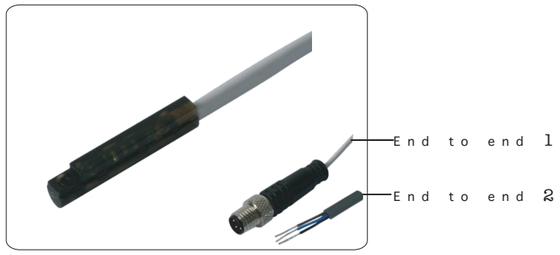
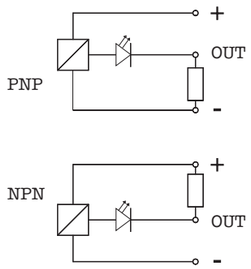
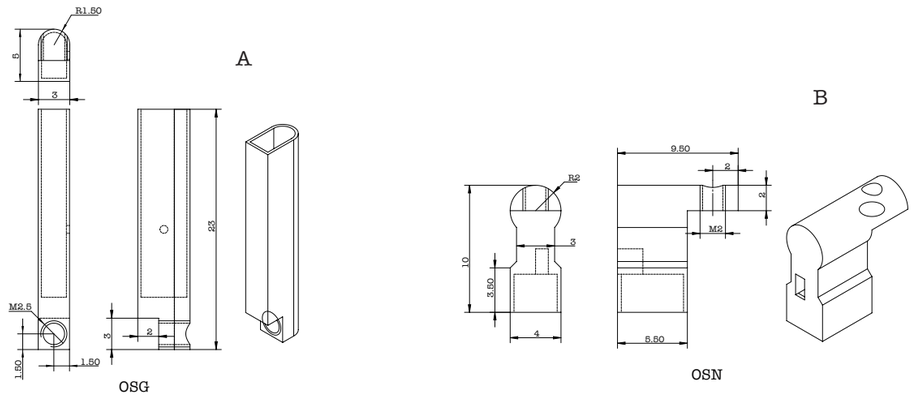
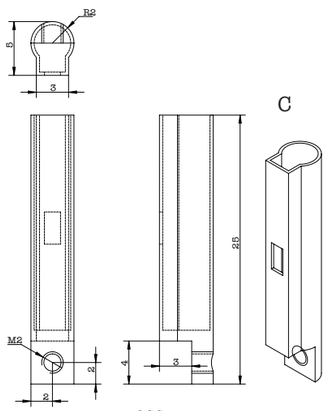
Magneticswitch

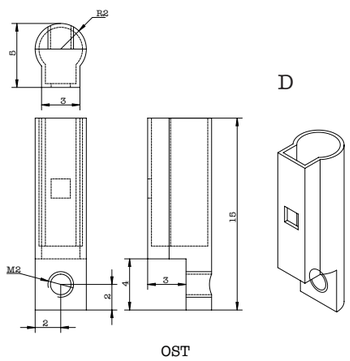




Schematic diagram



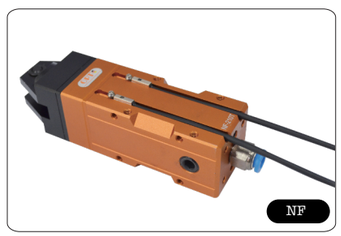


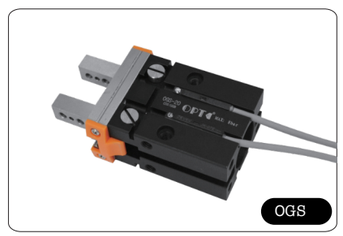


Magneticswitch

Model	Line	Power source	Current consumption	Load voltage	Load current	
OSS203N-G	2 wire	-	-	DC24V(DC10~28V)	5-40mA	
OSN203N-G					5-40mA	
OSG203N-G					5-40mA	
OSN203M-PNP	3 wire	DC : 5V,12V,24V	10mAc	DC : 28V	<80mA	
OSN203M-NPN					<40mA	
OSS203M-PNP					<80mA	
OSS203M-NPN					<40mA	
OSG203M-PNP					<80mA	
OSG203M-NPN					<40mA	
OST203M-PNP					<80mA	
OST203M-NPN					<40mA	
OSG205M-PNP					<80mA	
OSG205M-NPN					<40mA	

Application example





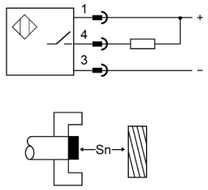
www.opt-automation.com

Photoelectric switch

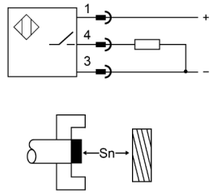
Photoelectric switch features

- Φ3mm,Φ4mm inductive sensors with clean design profile;
- PNP or NPN logic output;
- 1.5mm sensing distance;
- The detection succeeds in emitting the light source;
- It is not affected by the surrounding working environment and still functions normally in harsh environments.

INS8



INS5



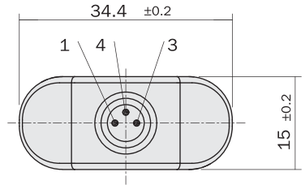
Model	Appearance data	Rated detection distance	Reliable detection distance	DC Three-wire NPN	DC Three-wire PNP	Service voltage	Load current	Current consumption	Switching frecuency	Operating temperature	protection class	connection mode	
INS5-NPN	M5x1mm	0.8mm	0至0.6mm	Normally open		DC10-30V	<200mA	<10mA	2000Hz	-25°C 至 +70°C	IP67	2m wire	
INS5-PNP					Normally open	DC10-30V	<200mA	<10mA	2000Hz		IP67		
INS8-NPN	M8x1mm	1mm	0至0.8mm	Normally open		DC10-30V	<200mA	<10mA	2000Hz		IP67	M8 20CM PVCwire	
INS8-PNP					Normally open	DC10-30V	<200mA	<10mA	2000Hz		IP67		

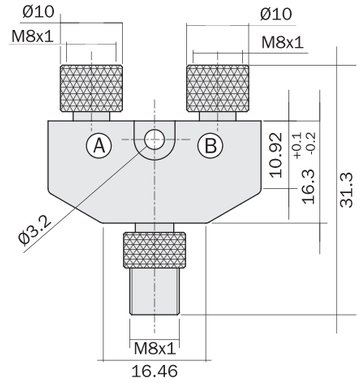
Application example

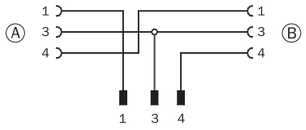
AUTOMATION The modular system
Sensor

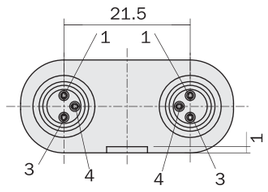
T-coupler M8,3poles

T-coupler useful to create the logical series of the outputs of 2 normally open sensors (NO) of PNP or REED type.





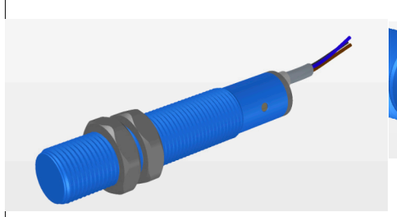


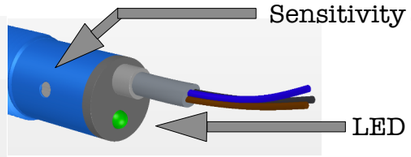


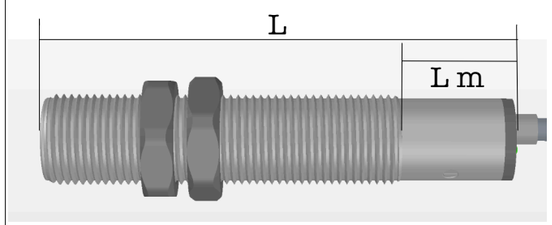
Model	Housing material	Contacts material	Coupling nut material	Circuit type	Rated voltage	Rated current	Environmental degree	Drop voltage	
OFGM8OFGM8X2Y	Polypropylene	Gold plated	Brass	Logical series of 2 PNP / Reed sensors	60 V AC/DC	4 A	IP67 (EN60529)	max 3 V	

Capacitive Sensor IP67 (ABS) DC 10V - 30V

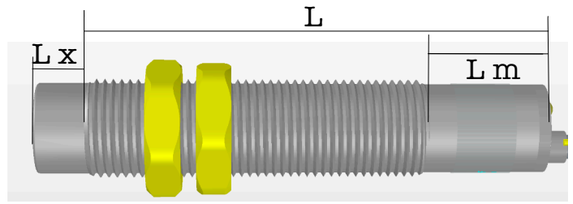
Capacitive proximity sensors are non-contact devices that can detect the
presence or absence of virtually any object regardless of material.
They utilize the electrical property of capacitance and the change
of capacitance based on a change in the electrical field around the active face of the sensor.







-F Type



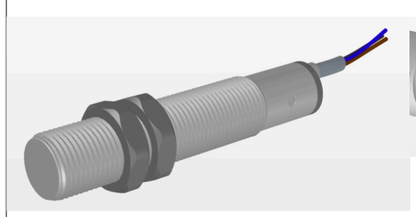
NPN	PNP	NO NC	Thread	Sensing range mm	Frequency Hz	Installation	L [mm]	Lm	Lx
KCR12R-02E1	KCR12R-02F1	NO	M12 x 1	2	50		58	10	
KCR12R-02E2	KCR12R-02F2	NC							
KCR12R-03E1	KCR12R-03F1	NO	M12 x 1	3	50		58	10	
KCR12R-03E2	KCR12R-03F2	NC							
KCR12R-04E1-F	KCR12R-04F1-F	NO	M12 x 1	4	50		63	10	4
KCR12R-04E2-F	KCR12R-04F2-F	NC							
KCR12R-06E1-F	KCR12R-06F1-F	NO	M12 x 1	6	50		63	10	4
KCR12R-06E2-F	KCR12R-06F2-F	NC							
KCR18R-05E1	KCR18R-05F1	NO	M18 x 1	5	50		75	13	
KCR18R-05E2	KCR18R-05F2	NC							
KCR18R-08E1	KCR18R-08F1	NO	M18 x 1	8	50		75	13	
KCR18R-08E2	KCR18R-08F2	NC							
KCR18R-08E1-F	KCR18R-08F1-F	NO	M18 x 1	8	50		75	17	8
KCR18R-08E2-F	KCR18R-08F2-F	NC							
KCR18R-15E1-F	KCR18R-15F1-F	NO	M18 x 1	15	50		75	17	8
KCR18R-15E2-F	KCR18R-15F2-F	NC							

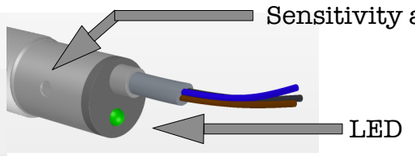
All Sensors will be delivered with 2m cable

AUTOMATION The modular system
Sensor

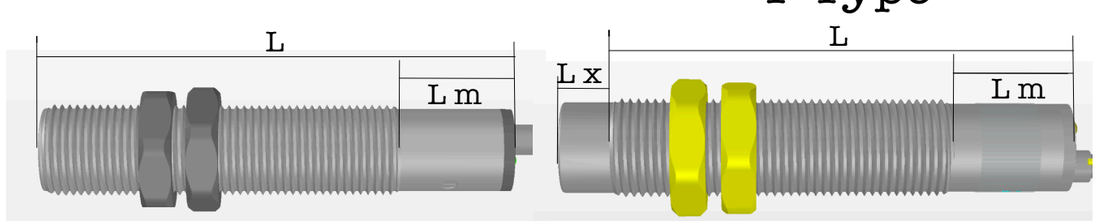
DC 10V - 30V Capacitive Sensor IP67 (Teflon)

Capacitive proximity sensors are non-contact devices that can detect the
presence or absence of virtually any object regardless of material.
They utilize the electrical property of capacitance and the change
of capacitance based on a change in the electrical field around the active face of the sensor.





-F Type



NPN	PNP	NO NC	Thread	Sensing range mm	Frequency Hz	Installation	L [mm]	Lm	Lx
KCR12PR-03E1	KCR12PR-03F1	NO	M12 x 1	2	50		62	15	
KCR12PR-03E2	KCR12PR-03F2	NC							
KCR12PR-06E1-F	KCR12PR-06F1-F	NO	M12 x 1	6	50		62	15	6
KCR12PR-06E2-F	KCR12PR-06F2-F	NC							
KCR18PR-08E1	KCR18PR-08F1	NO	M18 x 1	8	50		76	15	
KCR18PR-08E2	KCR18PR-08F2	NC							
KCR18PR-15E1-F	KCR18PR-15F1-F	NO	M18 x 1	15	50		76	15	8
KCR18PR-15E2-F	KCR18PR-15F2-F	NC							

All Sensors will be delivered with 2m cable

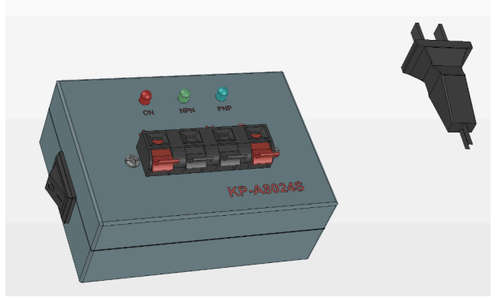
Sensor tester (for all kind of Sensors)

KP-D8018

- 18V DC 0.2A
- Battery 9 V (internl transformer)
- NPN / PNP (automatic dedection)
- Buzzer (build in)
- 170g
- Short
- circuit protection

KP-A8024S

- 24V DC 1A
- AC 220 V (internl transformer)
- NPN / PNP (automatic dedection)
- Buzzer (build in)
- 230g
- Short
- circuit protection



Connector code

OF G M8 00 3 25 P

Series
OF

Type
G Metal
S Snap

Thread
M8 M8xl
M12 M12xl

Angle
00 0°
90 90°

PIN number
2
3
4

Cable length
... 0 m
25 2.5 m
30 3 m
50 5 m
1K 10 m

Personalization
... PVC
P PUR

Connector type	Temperature range	Cable	Environmental protection degree	Reference norm
PVC/gold plated brass	-25 ÷ 75°C	PVC CEI 20-22II O.R 0.25mm ² / AWG 26 / 32 x 0.1 mm 2	IP67 EN60529	CEI 20/22 II O.R. CEI EN 60947-5-2

QJ -16R-1

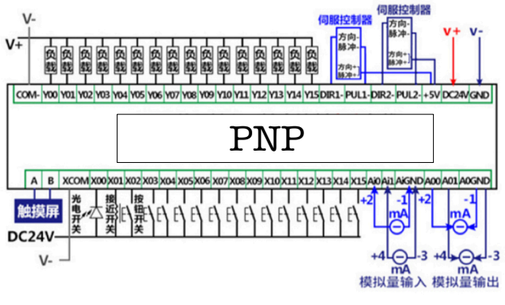
8 in - 8 out

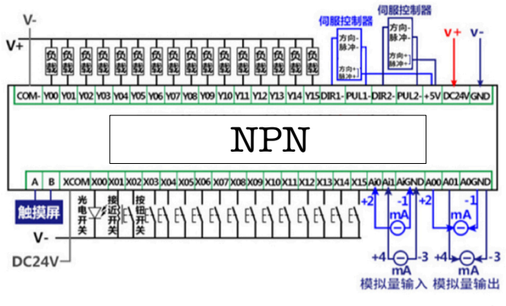
QJ -24R-1

12 in - 12 out

QJ -32R-1

16 in - 16 out





PLC / Terminal Box

General Specification

1. Support of 2 channel pulse output, each frequency channel is adjustable from 100HZ to 150khz
2. Chinese and English supported
3. Support for logic and, or, add, substract operation
4. 20 Programs can work parallel
5. 19 external registers (access to external devices) data exchange and processing
6. 0.01sec delay time
7. 25 timers and 50 counters
8. Input NPN or PNP
9. Support for jump trigger
10. Support RS485 communication module
11. Touch screen connection supported
12. Calendar control
13. No ladder programming

Technical Specification

1. Power supply oc controller: DC - DC is used for constant voltage work internally after step-down,with Anti- reverse connection.
2. Load power supply: The output end needs additional access to power supply. If the simple PLC power supply is consistend with the output power supply voltage, the same powers supply can be Used. If voltage is different additional power supply is necessary.

I / O specification

Input Port:
It can be used for button connection, proximity switch, magnetic switch, relay contact,
Photo electric sensor, phan sensor and other switch isolation input, built in 5V pull up and overflow voltage protection

Output Port:
Can be connected to various switching load, contactors, solenoid valves, relays, LED, alarm devices, etc.
The model with Analog output can also be controlled by 0V-10V converter speed regulation, high speed pulse can also be controlled by stepping motor, servo motor, etc.