

- BG** Инструкция за монтаж и експлоатация
- ENG** Instruction for installation and use
- RO** Instrucțiune de instalare și utilizare
- SRB** Uputstvo za ugradnju i upotrebu
- HR** Uputstvo za ugradnju i upotrebu
- BIH** Uputstvo za ugradnju i upotrebu
- HU** Szerelési és kezelési utasítás
- SLO** Navodilo za vgradnjo in uporabo
- GR** Οδηγιοσ για την εγκατασταςη και τη χρηση
- MK** Упатство за вградување и употреба
- SK** Návod na montáž a používanie
- PL** Instrukcja instalacji i użytkowania
- P** Instrução para instalação e uso
- IT** Istruzioni per l'installazione e l'uso



- BG** Фотоелектрични датчици
- ENG** Photoelectrical sensor
- RO** Senzori fotoelectrici
- SRB** Fotoelektrični senzor
- HR** Senzorήρες
- BIH** Fotoelektrični senzor
- HU** Fotoelektromos érzékelők
- SLO** Fotoelektrični senzor
- GR** Φωτοηλεκτρικοί αισθητήρες
- MK** Фотоелектричен сензор
- SK** Fotoelektrični senzor
- PL** Czujnik fotoelektryczny
- P** Sensor fotoelétrico
- IT** Sensore fotoelettrico



EL-G12



EL-G18



EL-G30



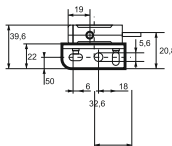
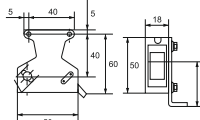
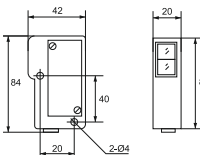
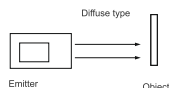
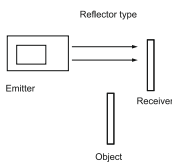
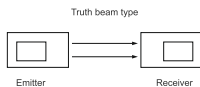
EL-G35



EL-G50



EL-BZJ



Type	Start distance	Power supply voltage	Type of transition	Type of contact	Type of sensor
EL-G12-3A07NA	70 mm	10~30VDC	NPN	Ø12; I=50	Diffuse
EL-G12-3A07PA	70 mm	10~30VDC	PNP	Ø12; I=50	Diffuse
EL-G12-3C3NA	3 m	10~30VDC	NPN	Ø12; I=50	Truth beam
EL-G12-3C3PA	3 m	10~30VDC	PNP	Ø12; I=50	Truth beam
EL-G18-3A10NA	100 mm	10~30VDC	NPN	Ø18; I=70	Diffuse
EL-G18-3A10PA	100 mm	10~30VDC	PNP	Ø18; I=70	Diffuse
EL-G18-3B2NA	2 m	10~30VDC	NPN	Ø18; I=70	Reflector
EL-G18-3B2PA	2 m	10~30VDC	PNP	Ø18; I=70	Reflector
EL-G18-3C5NA	5 m	10~30VDC	NPN	Ø18; I=70	Truth beam
EL-G18-3C5PA	5 m	10~30VDC	PNP	Ø18; I=70	Truth beam
EL-G30-3A70NA	500 mm	10~30VDC	NPN	Ø22; I=70	Diffuse
EL-G30-3A70PA	500 mm	10~30VDC	PNP	Ø22; I=70	Diffuse
EL-G30-3B3NA	3 m	10~30VDC	NPN	Ø22; I=70	Reflector
EL-G30-3B3PA	3 m	10~30VDC	PNP	Ø22; I=70	Reflector
EL-G30-3C101NA	10 m	10~30VDC	NPN	Ø22; I=70	Truth beam
EL-G30-3C101PA	10 m	10~30VDC	PNP	Ø22; I=70	Truth beam
EL-G35-3A50NA	500 mm	10~30VDC	NPN	NO	Diffuse
EL-G35-3A50PA	500 mm	10~30VDC	PNP	NO	Diffuse
EL-G35-3B3NA	3 m	10~30VDC	NPN	NO	Reflector
EL-G35-3B3PA	3 m	10~30VDC	PNP	NO	Reflector
EL-G35-3C5NA	5 m	10~30VDC	NPN	NO	Truth beam
EL-G35-3C5PA	5 m	10~30VDC	PNP	NO	Truth beam
EL-G50-3A30NA	500 mm	10~30VDC	NPN	NO	Diffuse
EL-G50-3A30PA	500 mm	10~30VDC	PNP	NO	Diffuse
EL-G50-3B4NA	4 m	10~30VDC	NPN	NO	Reflector
EL-G50-3B4PA	4 m	10~30VDC	PNP	NO	Reflector
EL-G50-3C5NA	5 m	10~30VDC	NPN	NO	Truth beam
EL-G50-3C5PA	5 m	10~30VDC	PNP	NO	Truth beam
EL-BZJ-211	10 mm	10~30VDC	Reflector	NO	Colour detector
EL-BZJ-311	9mm	10~30VDC	Reflector	NO	Colour detector
EL-BZJ-411	9mm	10~30VDC	Reflector	NO	Colour detector

**BG** - В интерес на вашата безопасност, монтирането и настройването да се извършват само от специалист! **EN** - For your safety, installation and tuning are performed only by a specialist! **ВН** - Za vašu sigurnost, ugradnju i tuning vrši samo stručnjak! **GR** - Για την ασφάλειά σας, η εγκατάσταση και η τοποθέτηση γίνονται μόνο από ειδικούς! **D** - Zu Ihrer Sicherheit werden Installation und Wartung nur von einem Fachmann durchgeführt! **RO** - Pentru siguranța dvs., instalarea și reglarea sunt efectuate numai de către un specialist! **SK** - Pre vašu bezpečnosť, inštalácia a ladenie vykonáva iba špecialista! **SLO** - Za vašo varnost, inštalacijo in nastavitve opravlja samo strokovnjak! **SRB** - Za vašu sigurnost, instalacija i podešavanje izvode samo specijalista! **HU** - Az Ön biztonsága érdekében a telepítést és a hangolást csak szakember végezheti! **HR** - Za vašu sigurnost, instalacije i ugađanje izvodi samo stručna osoba! **MK** - Za vašu bezbednost, instalacija i podesuвање se izveduва samo od specijalista! **PL** - Ze względów bezpieczeństwa instalację i strojenie wykonuje tylko specjalista! **P** - Para sua segurança, a instalação e o ajuste são realizados apenas por um especialista! **IT** - Per la tua sicurezza, l'installazione e la messa a punto vengono eseguite solo da uno specialista!

■ About proximity switch

- Honorable consumers, thanks for selecting and using the sensor of our company. When using the products of our company, please refer to the instruction first in order to avoid unnecessary losses caused by misoperation. Because
  - the product is improved unceasingly, the sensor of you get may be different from the drawing in the instruction.
- Uses: It is suitable for controlling the limit machine tool, detecting, counting, velocity measurement, liquid level, signal and automatic line for locating sending signal, etc. It is also widely used in machinery, mine metallurgy, plastics, textile, chemical industry, light industry, tobacco, electric power, railway and war industry and so on departments

Model explanation of proximity switch.

L		M 18		- 30		05		N		A		□	
switch category	out ward appearance code	working voltage		etection distance		output form		output state		subsidiary functions			
L	inductance type	M □ cylinder type	30	6-36 VDC	01	1mm	N	three-wire DC.NPN output	A	NO	T	with aviation socket	
C	capacitance type		310	5-24 VDC			05	5mm	P	three-wire DC.PNP output		B	NC
S	Hall type		320	12-60 VDC	20	90-250 VAC			L	two-wire DC output	C	NO+NC	I
A	safety explosion-proof type	20	90-250 VAC	210					24-250 VAC	□		AC two-wire output	
X	mimic Linear type	210	24-250 VAC		220	380VAC	W	AC three-wire output		MI	Mimic current		
H	reed type	220	380VAC	4			12-240VDC 24-240VAC	J	Relay contact output				
R	ring type	4	12-240VDC 24-240VAC		10	10mm		NP	NPN+PNP double output				

For example: LM18-3005NA

The above indicates inductance type proximity switch. M18 indicates cylinder type whose diameter is 18mm. 30 indicates DC6-36V 05 indicates that the detecting distance is 5mm and N indicates NPN negative logic. A is NO output.

■ Setting operating distance (Sn)

- Please set the operating distance of the switch within 80% of standard operating distance to protect the switch from being affected by temperature and voltage.
- When detecting other metals, the switch has different operating distances (Diagram 1).
- When the switch is used for measuring operating frequency or used in other high-speed places, please set the operating distance of the switch within 1/2 of standard operating distance. At this position, the switch can reach max operating frequency.
- please refer to the instruction manual of capacitive proximity switch for setting its operating distance.

Ratio of inducing different materials

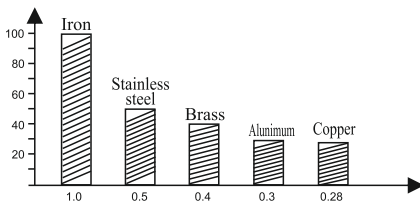


Diagram 1

Effect that the size of the detecting object to the detecting distance

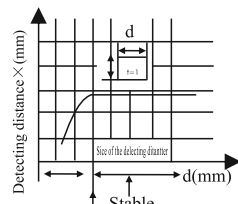
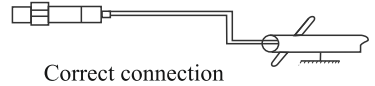
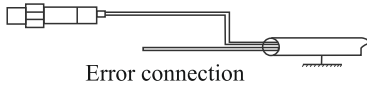


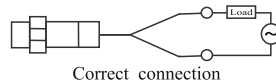
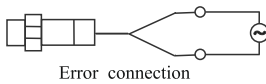
Diagram 2

■ Points for attention when using the switch

- DC power supply must use insulated transformer. Please do not use autotransformer..
- It is strictly forbidden to connect on live line. Wire must be connected strictly according to the color code on the connection diagram.
- If there is an electric line of force, and when the power line passes near the switch lead, the metal pipe should be covered on the switch lead and grounded to protect the switch from misoperation and damaging.



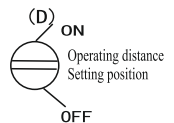
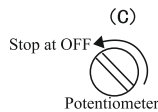
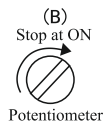
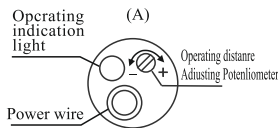
- AC proximity switch generally is not suitable for connecting in parallel and series. We suggest you to use relay in parallel and series.
- AC switch, DC two-line system switch must pass load to connect switch power supply. If directly connect the switch with power supply, the switch will be damaged.



- The length of the leading wire of the proximity switch should be below 200m for fear that voltage drop is too big.
- Instruction for capacitance proximity switch.

The capacitance proximity switch can be used to check metal, as well as plastics, glass, water, oil and so on substances. Because the conductivity, water absorption and volume of all kinds of detecting objects are different, the corresponding detecting distances are different, too. The max detecting distance is available to the ground metal.

- Different detecting objects and detecting distances
- In order to avoid misoperation, the capacitance proximity switch is not suitable for installing near high frequency electric field, such as near high frequency welder, supersonic generator and so on. The operating distance of the capacitance proximity switch generally can be adjusted to adapt different detecting objects. Therefore, when installing, it should be adjusted. please refer to the following steps for the adjustment method:



A. When the supersonic generator is rotated to the right, the detecting distance will enlarge and when it is rotated to the left, it will lessen. The adjustment revolution is 10 circles

B. Under without detecting object the potentiometer should be rotated slowly to the right do not stop until in the position of ON of the proximity switch.

C. When closing to the detecting object, the potentiometer should be rotated to the left; do not stop until in the position of OFF of the proximity switch.

D. Adjust the potentiometer between ON and OFF. At this time, the adjustment of operating distance is end.

## ■ Installation demand

When installing the proximity switch, please install it larger than the diameter in the diagram if there is metal around of when the switch is placed opposite of parallel, so that the reliable operation will not be affected.

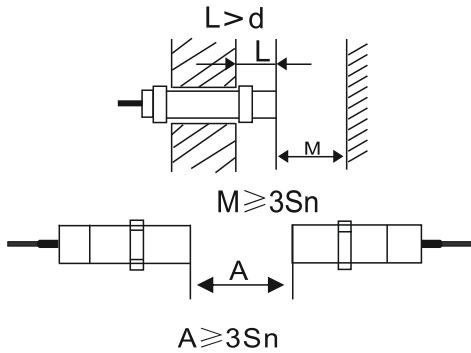
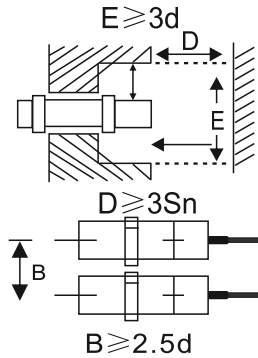


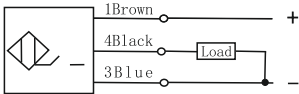
Diagram: Rated operating distance



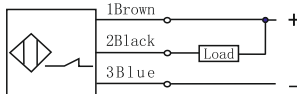
d: Diameter of induction surface

## ■ Diagram of connection mode

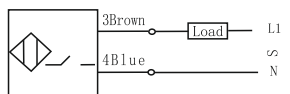
1、PNP NO type



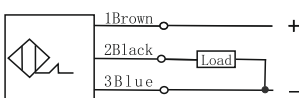
5、NPN NC type



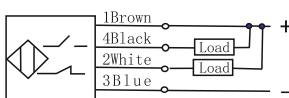
9、AC two-wire NO type



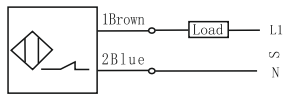
2、PNP NC type



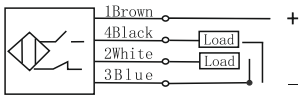
6、NPN NO+NC type



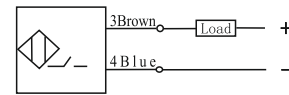
10、DC two-wire NC type



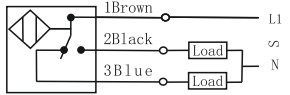
3、PNP NO+NC type



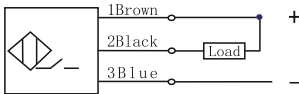
7、DC two-wire NO type



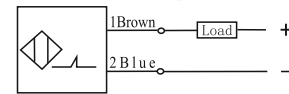
11、AC three-wire type



4、NPN NO type



8、DC two-wire NC type



12、Five-wire relay output type

