an INFINITE brand

Proximity Sensor

Connector Type SERIES

V1.0

User's manual

Thank you for choosing L-com. Please read the manual carefully before using this product.

- The product should be applied by someone with a certain level of electrical knowledge.
- Please read and make sure that you understand how to operate the product before using it.
- Please keep this manual readily accessible for future reference when needed.

WARNING

Please comply with the warnings indicated below for they are important.

Please do not exceed maximum rated voltage during usage in order to prevent tester malfunction or fire.

Please do not apply AC power supply to avoid breakage.

Please do not subject the product to high temperature to avoid scalding.

SAFETY PRECAUTIONS

For your safety, please comply with the tips listed below.

- Please do not use it in flammable or explosive environments.
- Please do not use it in environments with water, oil, chemicals or steams.
- Please do not disassemble, repair or alter this product.
- Please do not exceed the rated voltage and current.
- Please do not exceed the rated environment.
- Please observe electrical polarity when making connections.
- Please connect load correctly.
- Please avoid short-circuiting the load.
- Please do not operate it ,if the housing is broken.
- When disposing the tester, please treat it as an industrial waste.

NOTICE FOR USE

Do not use in the following environments:

Daylight
High humidity, easy to open places
Place containing corrosive gases
Vibration, shock directly to the product body of the place

- This product wire and power lines used in the same piping, will be disturbed, malfunction or even destroyed.
- The extension wire must use a wire with a cross-sectional area of 0.3 mm2 or more and a length of 100 m or less. When the Korean S-mark certification model is used as a certification product, please set it below 10m.
- For the force applied to the wire, please refer to: below 40N, 0.1N.m torque less, 20N or less, and 3Kg below the bending.
- When the power is turned on, the product can be detected within 200ms. So if the load and product connected to a different power supply, you must first turn on the product power.
- When the power is turned off, the output pulse may be generated, so please cut of power supply of the load or load line.
- Please do not use thinner, gasoline, acetone, kerosene and other solvents to clean up.

PACKAGE CONTENTS

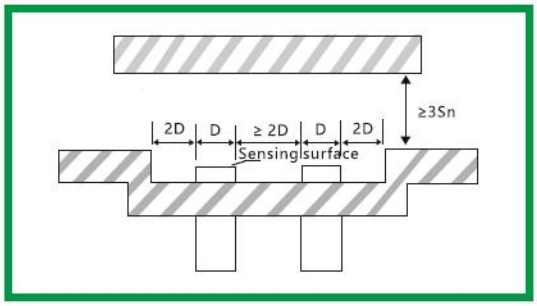
- Sensor 1pcs
- User's manual 1pcs

SPECIFICATION

Model No.	PXINDTLN08-04NO-E1	PXINDTLN12-08NO-E2	PXINDTLN18-16NO-E2	PXINDTLN30-25NO-E1	PXINDTRN08-02NO-E1	PXINDTRN12-04NO-E2
	NC:NPN Normally open					
Mounting	Unshielded					
Size	M8	M12	M18	M30	M8	M12
Sensing distance	4mm±10%	8mm±10%	16mm±10%	25mm±10%	2mm±10%	4mm±10%
Housing material	Stainless steel	Nickel copper alloy			Stainless steel	Nickel copper alloy
Operating voltage	10~30V DC(Ripple<10%)					
Voltage drop	<1.5V					
Load Current, Max	150mA					
Current consumption	<10mA					
Leakage current	<0.01mA					
Switch frequency	800Hz	500Hz	150Hz	100Hz	1KHz	
Repeat accuracy	<1.0%(Sr)					
Hysteresis	<15%(Sr)					
Sensing surface material	PBT					
Operating temperature	-25℃~+75℃					
Circuit Protection	Short circuit					
Degree of protection	IP67					

Model No.	PXINDTYN08-06NO-E1	PXINDTYN12-10NO-E2	PXINDTYN18-20NO-E2	PXINDTYN30-40NO-E2
	NC:NPN Normally open			
Mounting	Unshielded			
Size	M8	M12	M18	M30
Sensing distance	6mm±10%	10mm±10%	20mm±10%	40mm±10%
Housing material	Stainless steel	Nickel copper alloy		
Operating voltage	10~30V DC(Ripple<10%)			
Voltage drop	<1.5V			
Load Current, Max	150mA			
Current consumption	<10mA			
Leakage current	<0.01mA			
Switch frequency	500Hz	400Hz	100Hz	
Repeat accuracy	<5.0%(Sr)			
Hysteresis	<15%(Sr)			
Sensing surface material	PBT			
Operating temperature	-25℃~+75℃			
Circuit Protection	Short circuit			
Degree of protection	IP67			

Model No.	PXINDTPN18-08NR/PR-E2	PXINDTPN12-08NR/PR-E2
Mounting	Unshielded	
Sensing distance	8mm	8mm
Working distance	0~6.5mm	0~6.5mm
Hysteresis	1~20%	
Standard target	18×18mm FE360	24×24mm FE360
Repeatability	5%	
Operating Voltage	10~30V DC	
Output type	NPN or PNP-NO+NC or NO	
Maximum ripple content	≤10%	
Output current	≤200mA	
Output voltage drop	≤2V	
No-load current	≤15mA	
Leakage current	≤10uA	≤15uA
Operating frequency	15kHz	2kHz
Start delay	50ms	
Ambient temperature range	-40℃~+80℃ in a short time (within 15 seconds) up to 100℃ 10%	
Thermal drift	10%	
Shock and vibration	IEC 60947-5-5/7.4	
Weight	30g	
LEDs	NO output status/without led -25℃~+110℃	
Degree of protection	IP67,IP68(1m,7days); IP69K (in line with DIN 40050-9 standard)	
Electromagnetic compatibility/EMC	Comply with EMC directive requirements and comply with IEC 60947-5-2 specification	
Housing material	Stainless steel	
Sensing surface material	PPS (FDA certification)	
Connection method	M12 connector with gold-plated pins	
Tightening torque	25Nm	



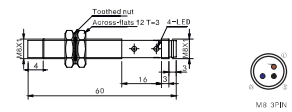
Unshielded Mounting Proximity Sensors

The distance between sensing surface to surrounding metals must be more than 2 times sensing distance

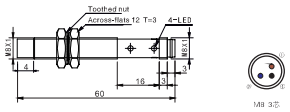
(Go to next page)

DIMENSION

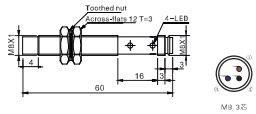
PXINDTLN08-04NO-E1



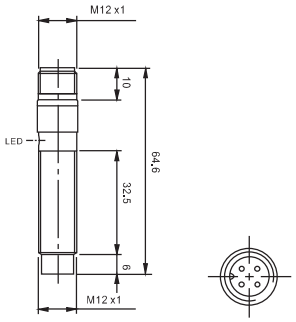
PXINDTRN08-02NO-E1



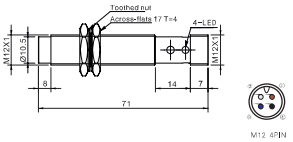
PXINDTYN08-06NO-E1



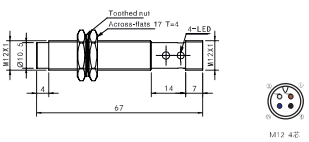
PXINDTPN12-08NR/PR-E2



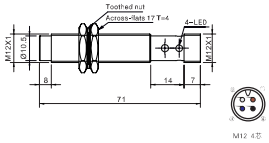
PXINDTLN12-08NO-E2



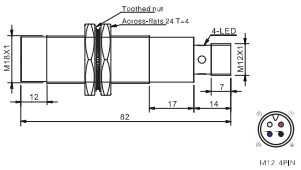
PXINDTRN12-04NO-E2



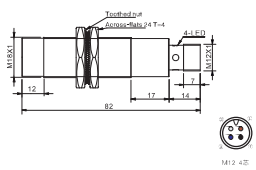
PXINDTYN12-10NO-E2



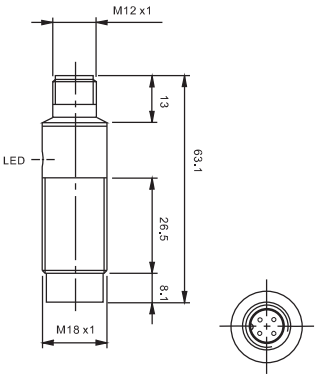
PXINDTLN18-16NO-E2



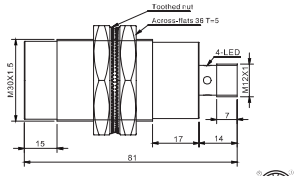
PXINDTYN18-20NO-E2



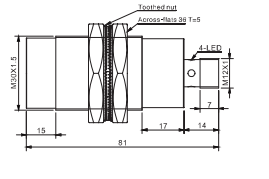
PXINDTPN18-08NR/PR-E2



PXINDTLN30-25NO-E2



PXINDTYN30-40NO-E2



PRECAUTIONS

- Make sure that the power is turned off when connecting the device.
- Make sure that the supply voltage changes within the rated range.
- If the power supply is supplied by a commercial switch regulator, make sure that the power supply ground terminal (F.G) is grounded,
- Be sure to ground the device ground terminal (F.G)
- Do not use within 0.5 sec of switching on the power.
- Do not run the line with a high voltage line or a power cord or in a wire tube, which may cause malfunction due to induction.
- Protect the device from dust and humidity.
- Avoid exposure or direct contact with water, oil, grease or organic solvents such as thinner.

WARRANTY

Warranty period

- The product warranty period is one year, from the date of delivery of the product to the date of purchase.

Warranty range

1. L-com will repair the product free of cost if there is a malfunction caused by L-com Company within the above-mentioned warranty period. But the following will not be covered by the warranty:

- Damage caused due to failure in following operating instructions or user manual specifically when the L-com company has fulfilled the technical requirements in the given environment.
- Malfunction that occurs due to purchaser's equipment or software rather than product defects.
- Malfunction caused by modifications or repairs by non-L-com company personnel. (Please ensure that correct repair or replacement of wearing parts is done in accordance with the operating instructions or provided user manual to avoid malfunction.)
- Malfunction or inefficiency of the product after delivery caused due to unpredictable changes in science and technology.
- Damage or malfunction caused by fire, earthquake, floods and/or other natural disasters or abnormal voltage and other external factors.

2. The warranty is limited to the conditions specified in Article (1), and L-com Company shall not be liable for any indirect loss (damage to equipment, loss of opportunity, loss of profits, etc.) or other loss caused by its equipment.

When installing a threaded sensor, please do not e

Model No.	Tightening torque N
M4*0.5	1.5
M5*0.5	1.5
M8*1	3.5
M12*1	16
M18*1	28
M30*1.5	150