







### Pre-wired Type

Appearance												
Mounting	Shielded		Shielded			Unshielded		Unshielded				
Housing size	φ 6.5	M8	M12	M18	M30	φ 6.5	M8	M12	M18	M30		
Sensing distance	2mm ± 10%	2mm ± 10%	4mm ± 10%	8mm ± 10%	16mm ± 10%	4mm ± 10%	4mm ± 10%	8mm ± 10%	16mm ± 10%	25mm ± 10%		
Housing material	Stainless steel		Nickel copper alloy			Stainless steel		Nickel copper alloy				
Operating voltage	10~30V DC(Ripple < 10%)											
Voltage drop	< 1.5V	< 2.0V			< 1.5V		< 2.0V					
Load Current, Max	150mA											
Current consumption	< 10mA											
Leakage current	< 0.01mA											
Switch frequency	2KHz	1KHz	800Hz	500Hz	150Hz	1KHz	800Hz	300Hz	150Hz	100Hz		
Repeat accuracy	< 1.0% (Sr)		< 5.0% (Sr)		< 1.0% (Sr)		< 5.0% (Sr)		< 1.0% (Sr)			
Hysteresis	< 15% (Sr)											
Sensing surface material	PBT											
Operating temperature	-25°C~+75°C											
Protective circuit	Short circuit											
Degree of protection	IP67											
Model No.	NPN Normally open		TLF6.5-02	TLF08-02	TLF12-04	TLF18-08	TLF30-16	TLN6.5-04	TLN08-04	TLN12-08	TLN18-16	TLN30-25
Others	<span style="color: green;">NO</span> :NPN Normally open <span style="color: green;">NC</span> :NPN Normally closed <span style="color: green;">PO</span> :PNP Normally open <span style="color: green;">PC</span> :PNP Normally closed											

### Connector Type

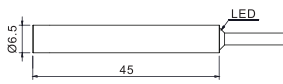
Appearance										
Mounting	Shielded				Unshielded					
Housing size	M8	M12	M18	M30	M8	M12	M18	M30		
Sensing distance	2mm ± 10%	4mm ± 10%	8mm ± 10%	16mm ± 10%	4mm ± 10%	8mm ± 10%	16mm ± 10%	25mm ± 10%		
Housing material	Stainless steel	Nickel copper alloy			Stainless steel	Nickel copper alloy				
Operating voltage	10~30V DC(Ripple < 10%)									
Voltage drop	< 1.5V									
Load Current, Max	150mA									
Current consumption	< 10mA									
Leakage current	< 0.01mA									
Switch frequency	2KHz	1KHz	500Hz	150Hz	1KHz	500Hz	150Hz	100Hz		
Repeat accuracy	< 1.0% (Sr)									
Hysteresis	< 15% (Sr)									
Sensing surface material	PBT									
Operating temperature	-25°C~+75°C									
Protective circuit	Short circuit									
Degree of protection	IP67									
Model No.	NPN Normally open		TLF08-02	TLF12-04	TLF18-08	TLF30-16	TLN08-04	TLN12-08	TLN18-16	TLN30-25
Others	<span style="color: green;">NO</span> :NPN Normally open <span style="color: green;">NC</span> :NPN Normally closed <span style="color: green;">PO</span> :PNP Normally open <span style="color: green;">PC</span> :PNP Normally closed									

# Extended Distance

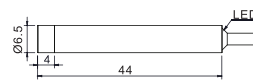
## Dimensions-Pre-wired Type (Unit:mm)

φ6.5

TLF6.5-02□□

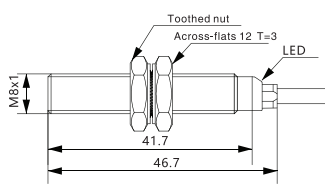


TLN6.5-04□□

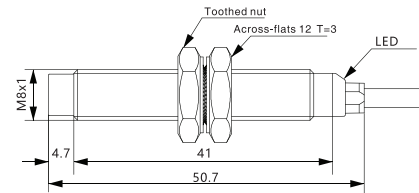


M8

TLF08-02□□

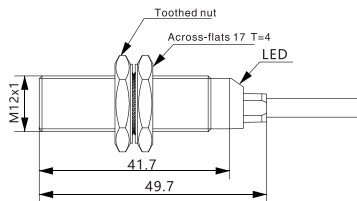


TLN08-04□□

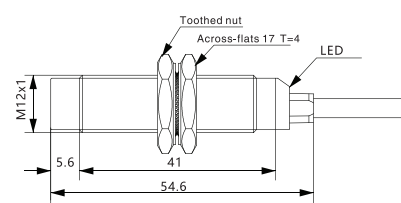


M12

TLF12-04□□

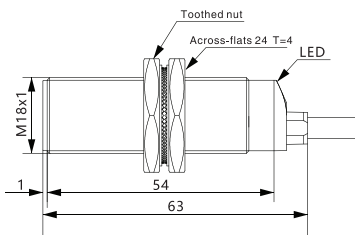


TLN12-08□□

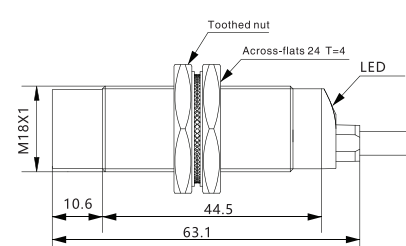


M18

TLF18-08□□

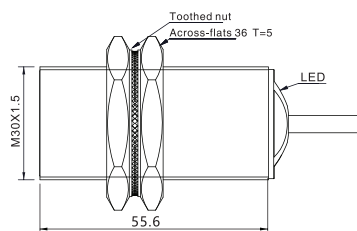


TLN18-16□□

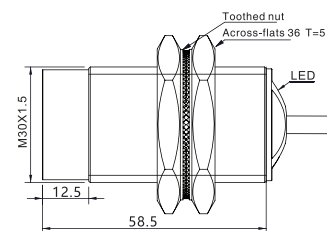


M30

TLF30-16□□



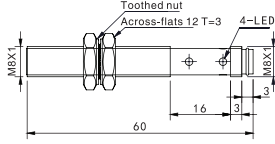
TLN30-25□□



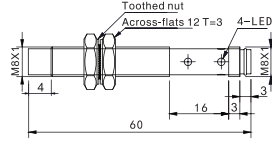
## Dimensions- Connector Type (Unit:mm)

M8

TLF08-02□□-E1



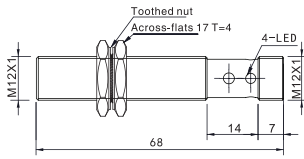
TLN08-04□□-E1



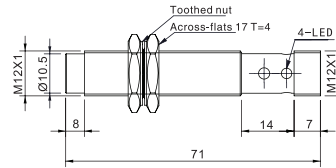
M8 3 Pin

M12

TLF12-04□□-E2



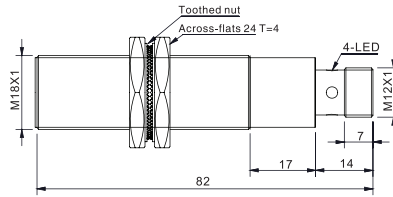
TLN12-08□□-E2



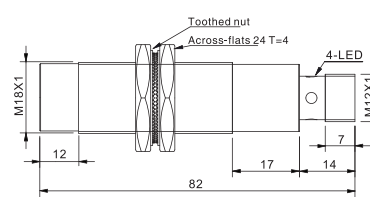
M12 4 Pin

M18

TLF18-08□□-E2



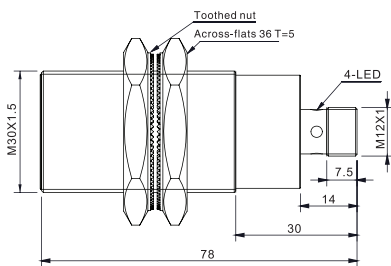
TLN18-16□□-E2



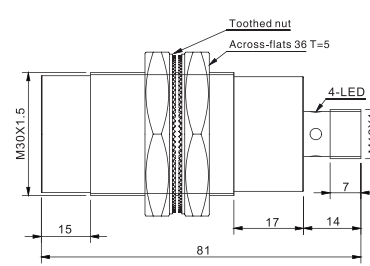
M12 4 Pin

M30

TLF30-16□□-E2



TLN30-25□□-E2



M12 4 Pin