





Standard Distance

Pre-wired

Appearance											
Mounting	Shielded					Unshielded					
Housing size	φ 6.5	M8	M12	M18	M30	φ 6.5	M8	M12	M18	M30	
Sensing distance	1.5mm ± 10%	1.5mm ± 10%	2mm ± 10%	5mm ± 10%	10mm ± 10%	2mm ± 10%	2mm ± 10%	4mm ± 10%	8mm ± 10%	15mm ± 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								< 20mA		
Leakage current	< 0.01mA										
Switch frequency	2KHz		1KHz		300Hz	2KHz	1KHz	800Hz	500Hz	150Hz	
Repeat accuracy	< 1.0% (Sr)							< 5.0% (Sr)		< 1.0% (Sr)	
Hysteresis	< 15% (Sr)										
Sensing surface material	PBT										
Operating temperature	-25℃~+75℃										
Protective circuit	Short circuit										
Degree of protection	IP67										
Model No.	NPN Normally open	TRF6.5-1.5NO	TRF08-1.5NO	TRF12-02NO	TRF18-05NO	TRF30-10NO	TRN6.5-02NO	TRN08-02NO	TRN12-04NO	TRN18-08NO	TRN30-15NO
	Others	NO: NPN Normally open		NC: NPN Normally closed		PO: PNP Normally open		PC: PNP Normally closed			

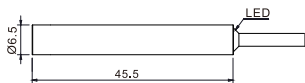
Connector Type

Appearance									
Mounting	Shielded				Unshielded				
Housing size	M8	M12	M18	M30	M8	M12	M18	M30	
Sensing distance	1.5mm ± 10%	2mm ± 10%	5mm ± 10%	10mm ± 10%	2mm ± 10%	4mm ± 10%	8mm ± 10%	15mm ± 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	300Hz	2KHz	1KHz	500Hz	150Hz	
Repeat accuracy	< 1.0%(Sr)								
Hysteresis	< 15%(Sr)								
Sensing surface material	PBT								
Operating temperature	-25℃~+75℃								
Protective circuit	Short circuit								
Degree of protection	IP67								
Model No.	NPN Normally open	TRF08-1.5NO-E1	TRF12-02NO-E2	TRF18-05NO-E2	TRF30-10NO-E2	TRN08-02NO-E1	TRN12-04NO-E2	TRN18-08NO-E2	TRN30-15NO-E2
	Others	NO:NPN Normally open		NC:NPN Normally closed		PO:PNP Normally open		PC:PNP Normally closed	

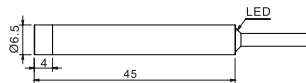
Dimensions- Pre-wired Type (Unit:mm)

φ 6.5

TRF6.5-1.5□□

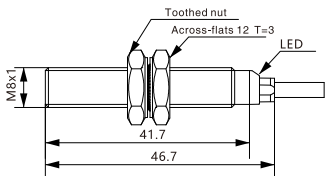


TRN6.5-02□□

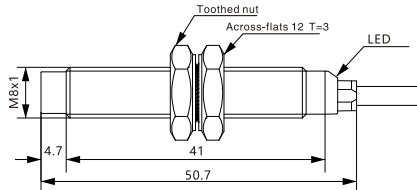


M8

TRF08-1.5□□

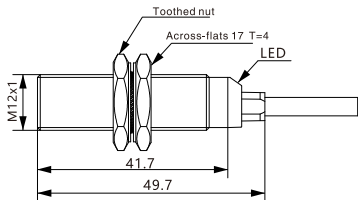


TRN08-02□□

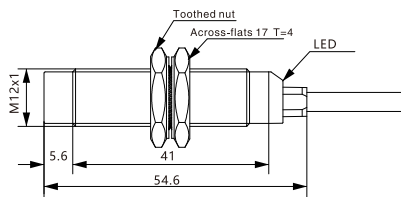


M12

TRF12-02□□

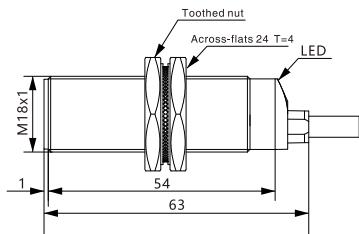


TRN12-04□□

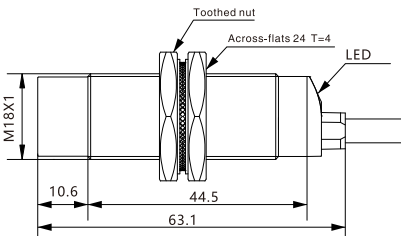


M18

TRF18-05□□

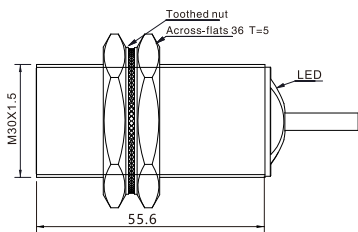


TRN18-08□□

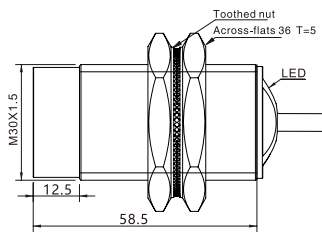


M30

TRF30-10□□



TRN30-15□□



Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

Vibration

Temperature

Cables

Tester

Guidance

Inductive sensors

Standard distance

Extended distance

Long distance

Square

Mini square

Mini-cylindrical

Short-body

Ring-type

Metal face

Temperature

Analog output

DC 2 wires

IP69K high protection

Capacitive sensors

Cylindrical

Correction

resistanc type

Flat type

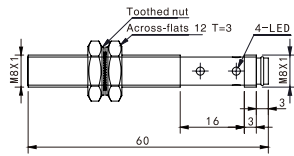
Level detection

Standard Distance

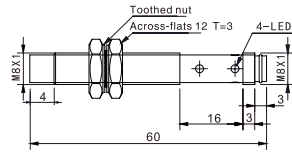
Dimensions- Connector Type (Unit:mm)

M8

TRF08-1.5□□-E1

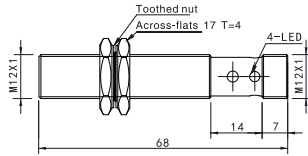


TRN08-02□□-E1

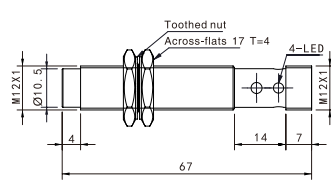


M12

TRF12-02□□-E2

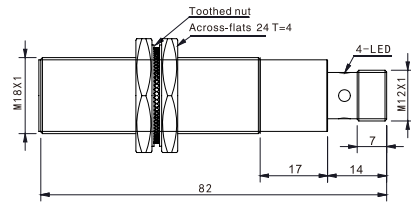


TRN12-04□□-E2

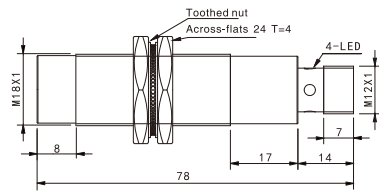


M18

TRF18-05□□-E2

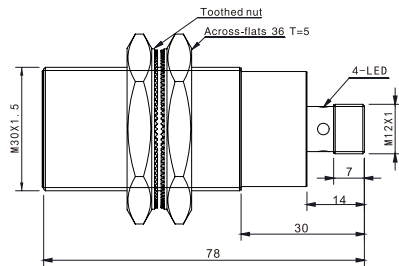


TRN18-08□□-E2

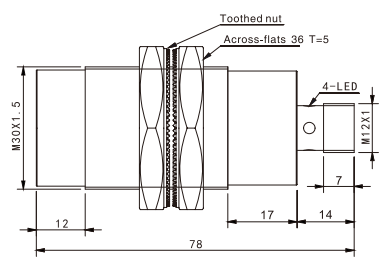


M30

TRF30-10□□-E2



TRN30-15□□-E2



Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

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Vibration

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Standard distance

Extended distance

Long distance

Square

Mini square

Mini-cylindrical

Short-body

Ring-type

Metal face

Temperature

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