



Basic Features	Working principle	Inductive sensor			
	Housing	Cylindrical			
	Installation type	Flush			
	Sensing distance	1.0mm/2.0mm ± 10%	2.0mm/4.0mm ± 10%	5.0mm/8.0mm ± 10%	10mm/16mm ± 10%
	Thread size	M8	M12	M18	M30
	Sensing surface material	Stainless Steel			
	Detected objects	Metal			
	Indicator	Operation Status: LED			
	Sensing range adjustment	None			
Electrical data	Switching output	Normally Open or Normally Closed			
	Output mode	NPN or PNP Open Collector			
	External input	None			
	Switching frequency	2kHz	1kHz	1kHz/0.5kHz	0.3kHz/0.15kHz
	Repeatability	1%			
	Hysteresis	15%			
	Operating Voltage	10~30V DC ± 10%			
	Current consumption	≤10mA			
	Residual Voltage	≤1.5V			
	Load current	150mA			
	Leakage current	<0.01mA			
	Insulation resistance	≥50MΩ with 500V DC between power terminals and enclosure			
	Dielectric strength	1,000 VAC, 50/60 Hz for 1 min between power terminals and enclosure			
	Vibration resistance	10 to 55 Hz, 1.5 mm double amplitude, 2 hours for each X, Y, and Z directions			
	Circuit Protection	Short circuit protection			
Environmental conditions	Operating Temperature	-25~+75°C			
	Operating Humidity	35~85%			
	Enclosure rating	IP67			
Mechanical data	Connection type	2m/3-core Cable			
	Dimension	M8x45.0mm	M12x45.0mm	M18x54.0mm	M30x54.0mm
	Material	Stainless Steel			
	Weight	0.012kg	0.05kg	0.08kg	0.12kg
	Accessories	Nut M8x1.0	Nut M12x1.0	Nut M18x1.0	Nut M30x1.5
Model	NPN NO	TMF08-01[NO] / TMF08-02[NO]	TMF12-02[NO] / TMF12-04[NO]	TMF18-05[NO] / TMF18-08[NO]	TMF30-10[NO] / TMF30-16[NO]
	Others	[NO]:NPN Normally open	[NC]:NPN Normally closed	[PO]:PNP Normally open	[PC]:PNP Normally closed

Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

AI Image

Code Readers

Vibration

Temperature

RFID

Safety door lock

Pressure Switch

Communication

Accessories

Guidance

Inductive sensors

Standard distance

Extended distance

Long distance

Square

Mini square

Mini-cylindrical

Short-body

Ring-type

Metal face

Temperature

resistance type

IP69K high protection

Anti-Slag

Analog output

DC 2 wires

Capacitive sensors

Cylindrical

Correction

resistant type

Flat type

Level detection

Metal Face-TM Series

Pre-wired



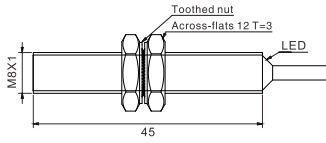
Basic Features	Working principle	Inductive sensor			
	Housing	Cylindrical			
	Installation type	Non-flush			
	Sensing distance	2.0mm/3.0mm ± 10%	4.0mm/8.0mm ± 10%	8.0mm/16mm ± 10%	15mm/25mm ± 10%
	Thread size	M8	M12	M18	M30
	Sensing surface material	Stainless Steel			
	Detected objects	Metal			
	Indicator	Operation Status: LED			
	Sensing range adjustment	None			
Electrical data	Switching output	Normally Open or Normally Closed			
	Output mode	NPN or PNP Open Collector			
	External input	None			
	Switching frequency	2kHz/1kHz	1kHz/0.5kHz	0.5kHz/0.15kHz	0.15kHz/0.1kHz
	Repeatability	1%			
	Hysteresis	15%			
	Operating Voltage	10~30V DC ± 10%			
	Current consumption	≤10mA			
	Residual Voltage	≤1.5V			
	Load current	150mA			
	Leakage current	<0.01mA			
	Insulation resistance	≥50MΩ with 500V DC between power terminals and enclosure			
	Dielectric strength	1,000 VAC, 50/60 Hz for 1 min between power terminals and enclosure			
	Vibration resistance	10 to 55 Hz, 1.5 mm double amplitude, 2 hours for each X, Y, and Z directions			
	Circuit Protection	Short circuit protection			
Environmental conditions	Operating Temperature	-25~+75℃			
	Operating Humidity	35~85%			
	Enclosure rating	IP67			
Mechanical data	Connection type	2m/3-core Cable			
	Dimension	M8x49.0mm	M12x54.0mm	M18x62.0mm	M30x66.0mm
	Material	Stainless Steel			
	Weight	0.012kg	0.05kg	0.08kg	0.12kg
	Accessories	Nut M8x1.0	Nut M12x1.0	Nut M18x1.0	Nut M30x1.5
Model	NPN NO	TMN08-02[NO] / TMN08-03[NO]	TMN12-04[NO] / TMN12-08[NO]	TMN18-08[NO] / TMN18-16[NO]	TMN30-15[NO] / TMN30-25[NO]
	Others	[NO]:NPN Normally open	[NC]:NPN Normally closed	[PO]:PNP Normally open	[PC]:PNP Normally closed

Unit:mm

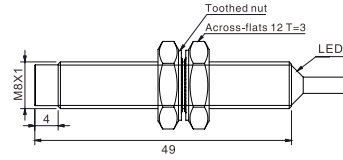
Dimensions

M8

TMF08-01/02□□

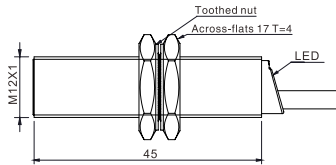


TMN08-02/03□□

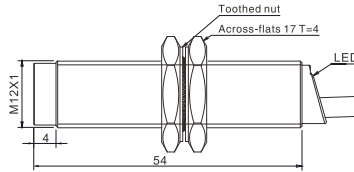


M12

TMF12-02/04□□

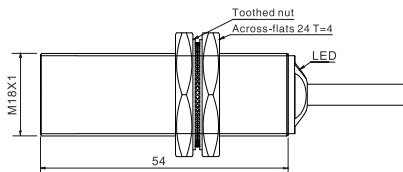


TMN12-04/08□□

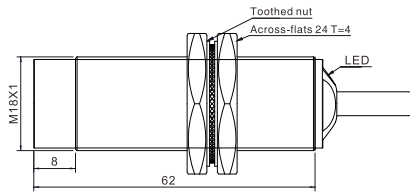


M18

TMF18-05/08□□

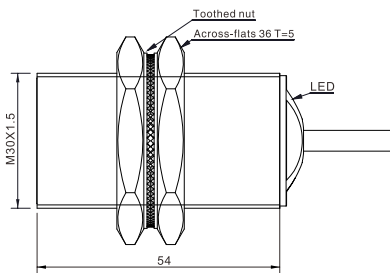


TMN18-08/16□□

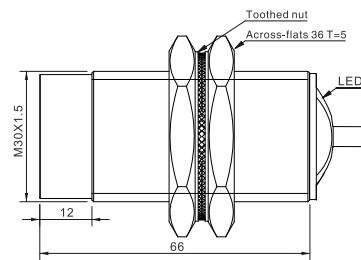


M30

TMF30-10/16□□



TMN30-15/25□□



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Proximity
Displacement
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Ultrasonic
AI Image
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Vibration
Temperature
RFID
Safety door lock
Pressure Switch
Communication
Accessories

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