

DC 2-wire-TD Series

Pre-wired



Basic Features	Working principle	Inductive sensor				
	Housing	Cylindrical				
	Installation type	Flush				
	Sensing distance	1.0mm/2.0mm ± 10%	1.0mm/2.0mm ± 10%	2.0mm/4.0mm ± 10%	5.0mm/8.0mm ± 10%	10mm/16mm ± 10%
	Thread size	φ6.5	M8	M12	M18	M30
	Sensing surface material	PBT				
	Detected objects	Metal				
	Indicator	Operation Status: LED				
	Sensing range adjustment	None				
Electrical data	Switching output	Normally Open or Normally Closed				
	Output mode	Reed switch				
	External input	None				
	Switching frequency	2kHz		1kHz		0.5kHz
	Repeatability	2%				
	Hysteresis	15%				
	Operating Voltage	10~30V DC ± 10%		10~60V DC ± 10%		
	Current consumption	3~100mA				
	Residual Voltage	<4.0V		<6.0V		
	Load current	≤120mA				
	Leakage current	<0.8mA				
	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/2-core Cable				
	Dimension	Ø6.5x45.0mm	M8x45.0mm	M12x45.0mm	M18x54.0mm	M30x54.0mm
	Material	Stainless steel+PBT		Copper–nickel alloy+PBT		
	Weight	0.009kg	0.012kg	0.05kg	0.08kg	0.12kg
	Accessories	–	Nut M8x1.0	Nut M12x1.0	Nut M18x1.0	Nut M30x1.5
Model	Normally closed	TDF6.5-01HO/TDF6.5-02HO	TDF08-01HO/TDF08-02HO	TDF12-02HO/TDF12-04HO	TDF18-05HO/TDF18-08HO	TDF30-10HO/TDF30-16HO
	Normally open	TDF6.5-01HC/TDF6.5-02HC	TDF08-01HC/TDF08-02HC	TDF12-02HC/TDF12-04HC	TDF18-05HC/TDF18-08HC	TDF30-10HC/TDF30-16HC



Basic Features	Working principle	Inductive sensor				
	Housing	Cylindrical				
	Installation type	Non-flush				
	Sensing distance	2.0mm/4.0mm ± 10%		4.0mm/8.0mm ± 10%	8.0mm/16mm ± 10%	15mm/25mm ± 10%
	Thread size	φ6.5	M8	M12	M18	M30
	Sensing surface material	PBT				
	Detected objects	Metal				
	Indicator	Operation Status: LED				
	Sensing range adjustment	None				
Electrical data	Switching output	Normally Open or Normally Closed				
	Output mode	Reed switch				
	External input	None				
	Switching frequency	2kHz		1kHz	0.5kHz	0.2kHz
	Repeatability	2%				
	Hysteresis	15%				
	Operating Voltage	10~30V DC ± 10%		10~60V DC ± 10%		
	Current consumption	3~100mA				
	Residual Voltage	<4.0V		<6.0V		
	Load current	≤120mA				
	Leakage current	<0.8mA				
	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				
	Environmental conditions	Circuit Protection	Short circuit protection			
Operating Temperature		-25~75℃				
Operating Humidity		35~85%				
Enclosure rating		IP67				
Mechanical data	Connection type	2m/2-core Cable				
	Dimension	Ø6.5x44.0mm	M8x44.0mm	M12x44.0mm	M18x54.0/M18x59.0mm	M30x58.0/M30x61.0mm
	Material	Stainless steel+PBT		Copper-nickel alloy+PBT		
	Weight	0.009kg	0.012kg	0.05kg	0.08kg	0.12kg
	Accessories	—	Nut M8x1.0	Nut M12x1.0	Nut M18x1.0	Nut M30x1.5
Model	Normally closed	TDN6.5-02HO/TDN6.5-04HO	TDN08-02HO/TDN08-04HO	TDN12-04HO/TDN12-08HO	TDN18-08HO/TDN18-16HO	TDN30-15HO/TDN30-25HO
	Normally open	TDN6.5-02HC/TDN6.5-04HC	TDN08-02HC/TDN08-04HC	TDN12-04HC/TDN12-08HC	TDN18-08HC/TDN18-16HC	TDN30-15HC/TDN30-25HC

Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

AI Image

Code Readers

Vibration

Temperature

RFID

Safety doorlock

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

resistance type

Flat type

Level detection

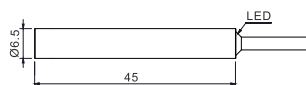
DC 2-wire-TD Series

Dimensions

Unit:mm

φ6.5

TDF6.5-01/02 □ □

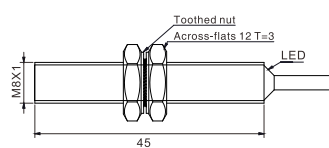


TDN6.5-02/04 □ □

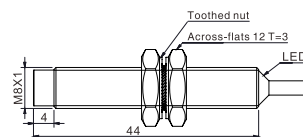


M8

TDF08-01/02 □ □

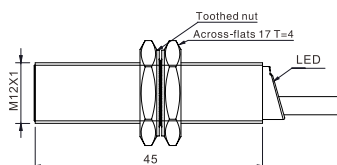


TDN08-02/04 □ □

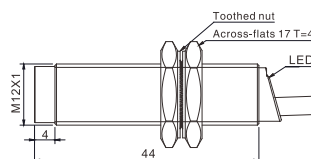


M12

TDF12-02/04 □ □

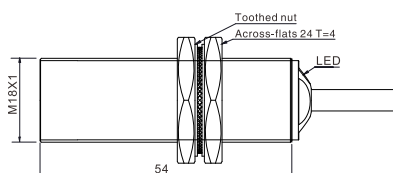


TDN12-04/08 □ □

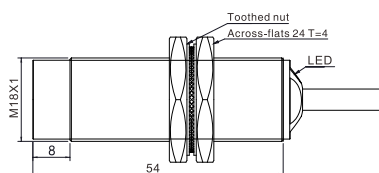


M18

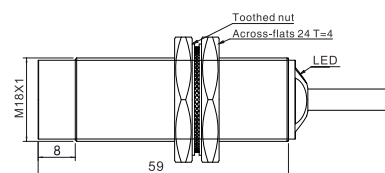
TDF18-05/08 □ □



TDN18-08 □ □

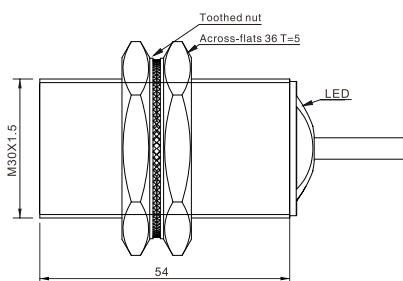


TDN18-16 □ □

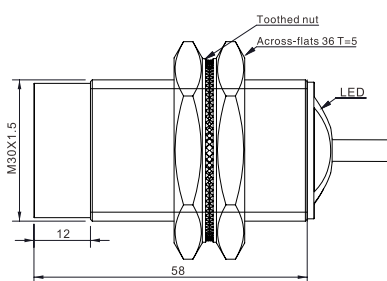


M30

TDF30-10/16 □ □



TDN30-15 □ □



TDN30-25 □ □

