TL-N/TL-Q/TL-G

A Wealth of Models for All Types of **Applications**

- Easy installation, high-speed pulse generator, high-speed rotation control, and more.
- Direct mounted to metal (-N Models).
- A wealth of models ideal for limit control, counting control, and other applications (-N Models).



(excluding TL-G)

Be sure to read Safety Precautions on 🗥 page 9.

Ordering Information

Sensors

DC 2-Wire Models

						Model	
Appearance		Sensing distance				Operation mode	
				NO	NC		
	17 × 17	5 r	nm			TL-Q5MD1 2M	TL-Q5MD2 2M
Unshielded	25 × 25	7	mm			TL-N7MD1 2M	TL-N7MD2 2M
	30 × 30		12 mi	m		TL-N12MD1 2M	TL-N12MD2 2M
	40 × 40			20 mm		TL-N20MD1 2M	TL-N20MD2 2M

Note: Models with a different frequency are available to prevent mutual interference. The model numbers are TL-N\(\sum MD\)\(\subseteq 5 and TL-Q5MD\)\(\subseteq 5 (e.g., TL-N7MD15).

DC 3-Wire and AC 2-Wire Models

	Appearance		Sensing distance			Model Operation mode	
Appear					Output configuration		
						NO	NC
	8×9	2 mn	า		DC 3-wire, NPN	TL-Q2MC1 2M	_
	17×17	5 mm			DO O WIIO, IN IN	TL-Q5MC1 2M *2	TL-Q5MC2 2M
	25 × 25 Unshielded 30 × 30		-		DC 3-wire, NPN	TL-N5ME1 2M *2	TL-N5ME2 2M *1
Unahialdad		5 mm			AC 2-wire	TL-N5MY1 2M	TL-N5MY2 2M
Orisineided			10		DC 3-wire, NPN	TL-N10ME1 2M *2	TL-N10ME2 2M *1
30 × 30 40 × 40		10 mm	J mm	AC 2-wire	TL-N10MY1 2M	TL-N10MY2 2M	
	40 × 40			00	DC 3-wire, NPN	TL-N20ME1 2M *2	TL-N20ME2 2M
				20 mm	AC 2-wire	TL-N20MY1 2M	TL-N20MY2 2M
	Grooved		7.5 mm		DC 3-wire, NPN	TL-G3D-3 1M	_

Note: Models with a different frequency are available to prevent mutual interference. Models numbers for Sensors with different frequencies are TL-□□M□□5 (example: TL-N5ME15).

^{*1.} Models are also available with 5-m cables. Add the cable length to the model number (example: TL-N5ME1 5M).

^{*2.} Models with robotics cables are also available. Add -R to the end of the model number (example: TL-N5ME1-R).

Accessories (Order Separately)

Mounting Brackets

Туре	Model	Applicable	Sensors
Туре	Woder	Provided with these Sensors	Order separately
	Y92E-C5	TL-N5ME□, TL-N7MD□	TL-N5MY□
Mounting Brackets	Y92E-C10	TL-N10ME□, TL-N12MD□	TL-N10MY□
	Y92E-C20	TL-N20ME□, TL-N20MD□	TL-N20MY□
Mounting Brackets for Conduits	Y92E-N5C15		TL-N5ME□, TL-N5MY□
Mounting Brackets for Conduits	Y92E-N10C15		TL-N10ME□, TL-N10MY□

Ratings and Specifications

DC 2-Wire Models

Item	Model	TL-Q5MD□	TL-N7MD□	TL-N12MD□	TL-N20MD□			
Sensing di	istance	5 mm ±10%	7 mm ±10%	12 mm ±10%	20 mm ±10%			
Set distand	се	0 to 4 mm	0 to 5.6 mm	0 to 9.6 mm	0 to 16 mm			
Differentia	l travel	10% max. of sensing distance						
Detectable	object	Ferrous metal (The sensing distance decreases with non-ferrous metal. Refer to Engineering Data on page 5.)						
Standard sensing object		Iron, 18 × 18 × 1 mm	Iron, 30 × 30 × 1 mm	Iron, 40 × 40 × 1 mm	Iron, 50 × 50 × 1 mm			
Response frequency		500 Hz			300 Hz			
Power supply voltage (operating voltage range) 12 to 24 VDC (10 to 30 VDC), ripple (p-p): 10% max.								
Leakage c	urrent	0.8 mA max.						
Control	Load current	3 to 100 mA						
output	Residual voltage	3.3 V max. (Load current: 100 mA, Cable length: 2 m)						
Indicators		D1 Models: Operation indicator (red), Setting indicator (green) D2 Models: Operation indicator (red)						
Operation (with sens approachi	ing object	D1 Models: NO D2 Models: NC Refer to the timing charts under <i>I/O Circuit Diagrams</i> on page 7 for details.						
Protection	circuits	Load short-circuit protection, Surg	ge suppressor					
Ambient temperatu	re range	Operating/Storage: -25 to 70°C (with no icing or condensation)					
Ambient humidity ra	ange	Operating/Storage: 35% to 95% (with no condensation)					
Temperatu	ire influence	$\pm 10\%$ max. of sensing distance a	t 23°C in the temperature range of	–25 to 70°C				
Voltage in	fluence	$\pm 2.5\%$ max. of sensing distance a	at rated voltage in the rated voltage	±15% range				
Insulation	resistance	$50~\text{M}\Omega$ min. (at 500 VDC) between	n current-carrying parts and case					
Dielectric :	strength	1,000 VAC for 1 min between cur	rent-carrying parts and case					
Vibration resistance		Destruction: 10 to 55 Hz, 1.5-mm	double amplitude for 2 hours each	in X, Y, and Z directions				
Shock resi	istance	Destruction: 500 m/s ² 3 times each in X, Y, and Z directions	Destruction: 1,000 m/s ² 10 times	each in X, Y, and Z directions				
Degree of	protection	ection IEC 60529 IP67, in-house standards: oil-resistant						
Connectio	n method	Pre-wired Models (Standard cable	e length: 2 m)					
Weight (pa	cked state)	Approx. 45 g	Approx. 145 g	Approx. 170 g	Approx. 240 g			
	Case							
Materials	Sensing surface	Heat-resistant ABS						
Accessorie	es	Instruction manual	Mounting Bracket, Instruction ma	nual				

*The response frequency is an average value.

Measurement conditions are as follows: standard sensing object, a distance of twice the standard sensing object, and a set distance of half the sensing distance.



DC 3-Wire Models

Item	Model	TL-Q2MC1	TL-Q5MC□	TL-G3D-3	
Sensing		2 mm ±15%	5 mm ±10%	7.5±0.5mm	
Set dist	tance	0 to 1.5 mm	0 to 4 mm	10 mm	
Differen	ntial travel	10% max. of sensing distance		1	
Detecta	ble object	Ferrous metal (The sensing distance de	Engineering Data on page 6.)		
Standard sensing object		Iron, $8 \times 8 \times 1$ mm Iron, $15 \times 15 \times 1$ mm		Iron, $10 \times 5 \times 0.5$ mm	
Respon	nse time		2 ms max.	1 ms max.	
Response frequency *			500 Hz		
Power supply voltage (operating voltage range)		12 to 24 VDC (10 to 30 VDC), ripple (p-p	p): 10% max.	12 to 24 VDC, ripple (p-p): 5% max.	
Current consumption		15 mA max. at 24 VDC (no-load)	10 mA max. at 24 VDC	2 mA max. at 24 VDC (no-load)	
Con- trol	Load current	NPN open collector 100 mA max. at 30 VDC max.	NPN open collector 50 mA max. at 30 VDC max.	NPN transistor output 20 mA max.	
output	Residual voltage	1 V max. (under load current of 100 mA with cable length of 2 m)	1 V max. (under load current of 50 mA with cable length of 2 m)		
Indicators		Detection indicator (red)			
Operation mode (with sensing ob-		NO	NO		
ject app	proaching)	Refer to the timing charts under I/O Circ			
Protecti circuits		Reverse polarity protection, Surge suppl	everse polarity protection, Surge suppressor		
Ambien tempera range		Operating/Storage: -10 to 60°C (with no icing or condensation)	Operating/Storage: -25 to 70°C (with no	o icing or condensation)	
Ambien humidit	nt ty range	Operating/Storage: 35% to 95% (with no	condensation)		
Temper influence		$\pm 10\%$ max. of sensing distance at 23°C in the temperature range of -10 to 60 °C	$\begin{array}{c} \pm 20\% \text{ max. of sensing distance at } 23^{\circ}\text{C} \\ \text{in the temperature range of } -25 \text{ to } 70^{\circ}\text{C} \end{array} \\ \begin{array}{c} \pm 10\% \text{ max. of sensing distance at } 23^{\circ}\text{C} \\ \text{in the temperature range of } -10 \text{ to } 30^{\circ}\text{C} \end{array}$		
Voltage influence		±2.5% max. of sensing distance at rated	voltage in rated voltage ±10% range		
Insulati resistar		$50~\text{M}\Omega$ min. (at 500 VDC) between current-carrying parts and case	5 M Ω min. (at 500 VDC) between currer	nt-carrying parts and case	
Dielectr strengtl		1,000 VAC for 1 min between current-carrying parts and case	500 VAC, 50/60 Hz for 1 min between c	urrent-carrying parts and case	
Vibratio resistar		Destruction: 10 to 55 Hz, 1.5-mm double	e amplitude for 2 hours each in X, Y, and	Z directions	
Shock r	resistance	Destruction: 1,000 m/s² 10 times each in X, Y, and Z directions	Destruction: 200 m/s ² 10 times each in 2	X, Y, and Z directions	
Degree protecti		IEC 60529 IP67, in-house standards: oil-resistant	IEC IP67	IEC IP66	
Connection method		Pre-wired Models (Standard cable length	n: 2 m)	Pre-wired Models (Standard cable length: 1m)	
Weight (packed		Approx. 30 g	Approx. 60 g	Approx. 30 g	
Mate- rials	Case Sensing surface	Heat-resistant ABS		PPO	
Access	ories	Instruction manual			

^{*} The response frequency is an average value. Measurement conditions are as follows: standard sensing object, a distance of twice the standard sensing object, and a set distance of half the sensing distance.

Item	Model	TL-N5ME□, TL-N5MY□	TL-N10ME□, TL-N10MY□	TL-N20ME□, TL-N20MY□			
Sensing		5 mm ±10%	10 mm ±10%	20 mm ±10%			
Set dista		0 to 4 mm	0 to 8 mm	0 to 16 mm			
Differenti		15% max. of sensing distance					
		ŭ	creases with non-ferrous metal. Refer to	Engineering Data on pages 6 and 7)			
Standard sensing object				Iron, 50 × 50 × 1 mm			
Response frequency *1		E Models: 500 Hz Y Models: 10 Hz		E Models: 40 Hz Y Models: 10 Hz			
Power su voltage ** (operatin range)		E Models: 12 to 24 VDC (10 to 30 VDC) Y Models: 100 to 220 VAC (90 to 250 V					
Current	tion	E Models: 8 mA max. at 12 VDC, 15 mA	max. at 24 VDC				
Leakage	current	Y Models: Refer to Engineering Data on	page 5.				
Control	Load current	E Models: 100 mA max. at 12 VDC, 200 Y Models: 10 to 200 mA	mA max. at 24 VDC				
output	Residual voltage	E Models: 1 V max. (load current: 200 m Y Models: Refer to <i>Engineering Data</i> on					
Indicator	S	E Models: Detection indicator (red) Y Models: Operation indicator (red)					
Operation	sing ob-	E1/Y1 Models: NO E2/Y2 Models: NC					
ject approaching)		Refer to the timing charts under I/O Circuit Diagrams on page 8 for details.					
Protectio	E Models: Reverse polarity protection, Surge suppressor Y Models: Surge suppressor						
Ambient temperat	ure range	Operating/Storage: -25 to 70°C (with no	cing or condensation)				
Ambient humidity	range	Operating/Storage: 35% to 95% (with no	o condensation)				
Temperation influence		±10% max. of sensing distance at 23°C in the temperature range of –25 to 70°C					
Voltage i	nfluence	E Models: ±2.5% max. of sensing distance at rated voltage in rated voltage ±10% range Y Models: ±1% max. of sensing distance at rated voltage in rated voltage ±10% range					
Insulation resistance		50 M Ω min. (at 500 VDC) between curre	ent-carrying parts and case				
Dielectric	strength		n between current-carrying parts and ca in between current-carrying parts and ca				
Vibration resistance		Destruction: 10 to 55 Hz, 1.5-mm double amplitude for 2 hours each in X, Y, and Z directions					
Shock re	sistance	Destruction: 500 m/s ² 10 times each in 2	K, Y, and Z directions				
Degree o protectio							
Connection method Pre-wired Models (Standard cable length: 2 m)							
Weight (packed s	state)	Approx. 145 g	Approx. 170 g	Approx. 240 g			
Materi- als	Case Sensing surface	Heat-resistant ABS					
Accessor		E Models: Mounting Bracket, Instruction Y Models: Instruction manual	manual				

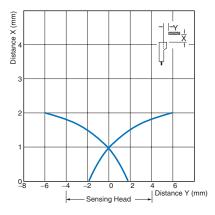
^{*1.} The response frequency is an average value. Measurement conditions are as follows: standard sensing object, a distance of twice the standard sensing object, and a set distance of half the sensing distance.
*2. E Models (DC switching models): A full-wave rectification power supply of 24 VDC ±10% (average value) can be used.



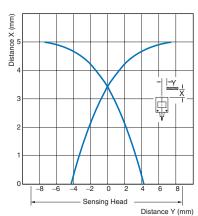
Engineering Data (Typical)

Sensing Area

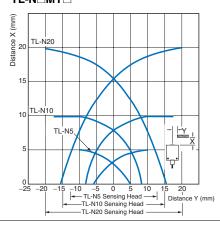
TL-Q2MC1



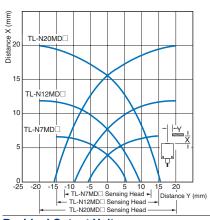
TL-Q5M□□



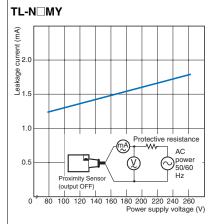
TL-N
ME
TL-N
MY



$\mathsf{TL} ext{-}\mathsf{N}\square\mathsf{MD}\square$

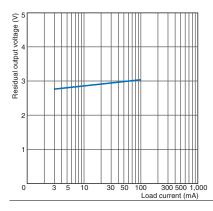


Leakage Current

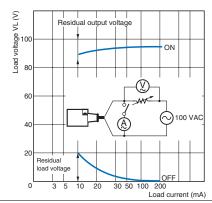


Residual Output Voltage

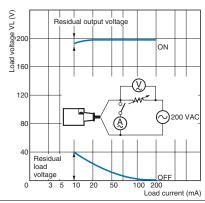
$\mathsf{TL}\text{-}\mathsf{N}\square\mathsf{MD}$



TL-N□MY at 100 VAC



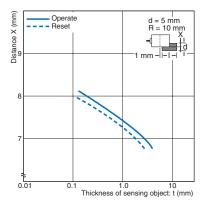
TL-N□MY at 200 VAC



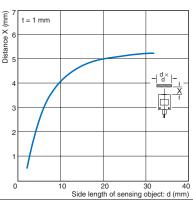
Thickness of Sensing Object vs. **Sensing Distance**

Sensing Object Size vs. Sensing Distance

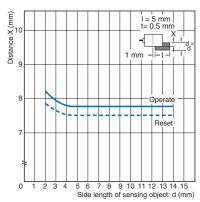
TL-G3D-3





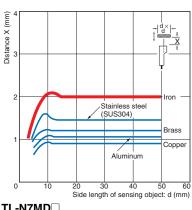


TL-G3D-3

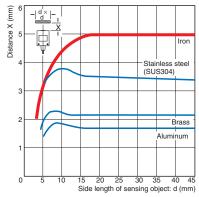


Influence of Sensing Object Size and Material

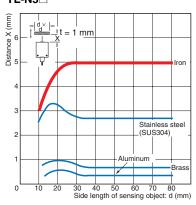
TL-Q2MC1



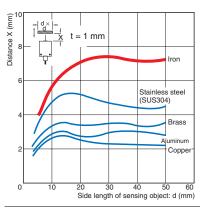
TL-Q5M□□



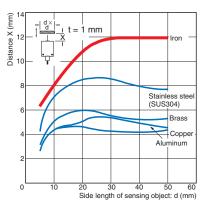
TL-N5



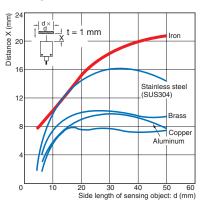
TL-N7MD



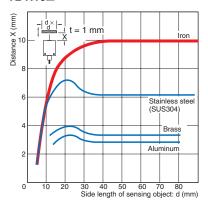
TL-N12MD

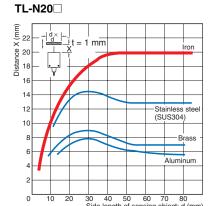


TL-N20MD□



TL-N10□





I/O Circuit Diagrams

DC 2-Wire Models

Operation mode	Model	Timing chart	Output circuit
NO	TL-Q5MD1 TL-N7MD1 TL-N12MD1 TL-N20MD1	Unstable Set position Stable sensing area Sensing object (%) 100 80 (TYP) 0 Rated sensing distance ON Setting indicator OFF (green) ON Operation indicator OFF (red) ON Control output	Proximity Sensor main circuit
NC	TL-Q5MD2 TL-N7MD2 TL-N12MD2 TL-N20MD2	Non-sensing area Sensing area Sensing object (%) 100 0 Rated sensing distance ON Operation indicator OFF (red) ON Control output	Note: The load can be connected to either the +V or 0 V side.

DC 3-Wire Models

Operation mode	Model	Timing chart	Output circuit
NO	TL-Q2MC1 TL-Q5MC1	Sensing object Present Not present Output transistor (load) OFF Detection indicator (red) OFF	Proximity Sensor Brown +V Load Black
NC	TL-Q5MC2	Sensing object Not present Output transistor (load) Detection indicator (red) OFF	* Load current: 100 mA max., TL-Q2MC1 Load current: 50 mA max., TL-Q5MC1
NO	TL-N5ME1 TL-N10ME1 TL-N20ME1	Sensing object Not present Load (between brown operate and black leads) Output voltage (between black and blue leads) Detection indicator (red) Present Not present Neset Operate Reset Low ON OFF	Proximity Sensor main 2.2 Ω Qurput
NC	TL-N5ME2 TL-N10ME2 TL-N20ME2	Sensing object Not present Load (between brown and black leads) Output voltage (between black and blue leads) Detection indicator (red) Present Not present Reset Output voltage (between bligh black and blue leads) ON OFF	Output 1. Tr 2.2.12 Output 1. Tr 2.3.14 Output 2. Tr 2.4.15 Output 2. Tr 2.5.15 Output 2. Tr 2.6.15 Output 2. Tr 2.7.15 Output
Transistor output	TL-G3D-3	Sensing object Present Not present Output transistor ON (load) OFF	Proximity Sensor main circuit Load current: 20 mA max.

AC 2-Wire Models

Operation mode	Model	Timing chart	Output circuit
NO	TL-N5MY1 TL-N10MY1 TL-N20MY1	Sensing object Not present Load Operate Reset ON Operation indicator (red) OFF	Proximity Sensor
NC TL-	TL-N5MY2 TL-N10MY2 TL-N20MY2	Sensing object Not present Load Operate Reset Operation indicator (red) OFF	main circuit

Safety Precautions

Refer to Warranty and Limitations of Liability.

♠ WARNING

This product is not designed or rated for ensuring safety of persons either directly or indirectly. Do not use it for such purposes.



- Do not short-circuit the load, otherwise the Sensor may be damaged.
- Do not supply power to the Sensor with no load, otherwise the Sensor may be damaged.
 Applicable Models: AC 2-Wire Models



Precautions for Correct Use

Do not use this product under ambient conditions that exceed the ratings.

Design

Influence of Surrounding Metal

When mounting the Sensor within a metal panel, ensure that the clearances given in the following table are maintained. Failure to maintain these distances may cause deterioration in the performance of the Sensor.



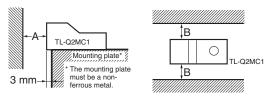




Influence of Surrounding Metal (Unit: mm)

Model Distance	Α	B *1
TL-Q5M□□	20	20
TL-N7MD□	40	35
TL-N12MD□	50	40
TL-N20MD□	70	60
TL-N5ME□, TL-N5MY□	20	23
TL-N10ME□, TL-N10MY□	40	30
TL-N20ME□, TL-N20MY□	80	45

- *1. Dimension B is the same value as the value on the sides and the top. (The construction is symmetric around a point.)
- *2. The values for A or B for the TL-N apply when there is metal on only one side of the sensor. If there is metal on two or more sides, the value must be multiplied by two or more.



Influence of Surrounding Metal (Unit: mm)

Model	Distance	Α	В
TL-Q2MC1		12	3

Grooved Model

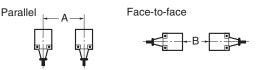


Influence of Surrounding Metal (Unit: mm)

Model	Distance	Α	В
TL-G3D-3		11	17

Mutual Interference

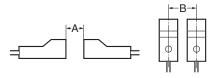
When installing Sensors face-to-face or side-by-side, ensure that the minimum distances given in the following table are maintained.



Mutual Interference (Unit: mm)

Model Distance	e A*	B *
TL-Q5MC□	60 (17)	120 (60)
TL-Q5MD□	60 (30)	120 (80)
TL-N7MD□	100 (50)	120 (60)
TL-N12MD□	120 (60)	200 (100)
TL-N20MD□	200 (100)	200 (100)
TL-N5ME□	80 (40)	80 (40)
TL-N5MY□	80 (40)	90 (40)
TL-N10ME□, TL-N10MY□	120 (60)	120 (60)
TL-N20ME□, TL-N20MY□	200 (100)	120 (60)

^{*} Values in parentheses apply to Sensors operating at different frequencies.



Mutual Interference (Unit: mm)

Model	Distance	Α	В
TL-Q2MC1		30 (8)	90 (45)

Grooved Model



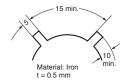


Mutual Interference (Unit: mm)

Model	Distance	Α	В
TL-G3D-3		31	25

Designing the Sensing Object for TL-G3D-3 Grooved Model

For high-speed response to a toothed metal plate, the sensing objects must be at least the size of the standard sensing object and there must be sufficient distance between sensing objects. The response frequency for a toothed wheel like the one shown at the right is 1 kHz min. The response frequency will be reduced if the wheel is smaller or the width of the teeth or the distance between the teeth is reduced.



Mounting

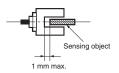
When tightening the mounting screws, do not exceed the torque in the following table.

Model	Torque
TL-Q2MC1	0.59 N·m
TL-Q5M□□	0.59 11.111
TL-N\(\Bar{\text{M}}\(\Bar{\text{Q}}\)	0.9 to 1.5 N·m
TL-G3D-3	2 N⋅m

Adjustment

Sensing Object Passing Position for the TL-G3D-3 Grooved Model

The gap between the sensing object and the bottom of the groove must be 1 mm or less.

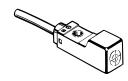


Dimensions

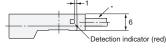
(Unit: mm) Tolerance class IT16 applies to dimensions in this data sheet unless otherwise specified.

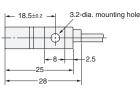
Sensors

TL-Q2MC1



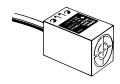


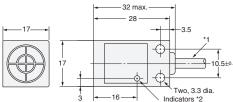




* 2.9-dia. vinyl-insulated round cable with 3 conductors (Conductor cross section: 0.15 mm², Insulator diameter: 0.9 mm), Standard length: 2 m

TL-Q5M□□





- † Two, 3.3 dia. Indicators *2

 *1. C Models: 4-dia. vinyl-insulated round cable with 3 conductors (Conductor cross section: 0.2 mm², Insulator diameter: 1.2 mm), Standard length: 2 m

 D Models: 4-dia. vinyl-insulated round cable with 2 conductors (Conductor cross section: 0.3 mm², Insulator diameter: 1.3 mm), Standard length: 2 m
- *2. C Models: Detection indicator (red)

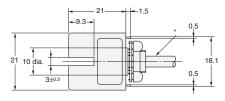
 D Models: Operation indicator (red), Setting indicator (green)

Mounting Hole Dimensions



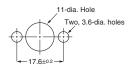
TL-G3D-3



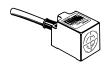


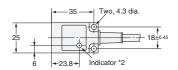
Toothed washer Lock nut M8 × 0.75 (slightly thin) * 4-dia. vinyl-insulated round cable with 3 conductors (Conductor cross section: 0.2 mm², Insulator diameter: 1.2 mm), -29.8 Standard length: 1 m

Mounting Hole Dimensions



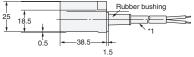
TL-N7MD□, TL-N5ME□





Mounting Hole Dimensions





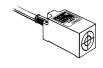
*1. D Models: 6-dia. vinyl-insulated round cable with 2 conductors (Conductor cross section: 0.5 mm², Insulator diameter: 1.9 mm), Standard length: 2 m

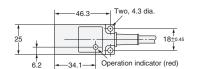
E Models: 6-dia. vinyl-insulated round cable with 3 conductors (Conductor cross section: 0.5 mm²,

Insulator diameter: 1.9 mm), Standard length: 2 m

*2. D1 Models: Operation indicator (red), Setting indicator (green)
D2 Models: Operation indicator (red)
E Models: Detection indicator (red)

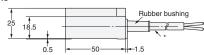
TL-N5MY





Mounting Hole Dimensions

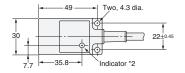




* 6-dia. vinyl-insulated round cable with 2 conductors (Conductor cross section: 0.5 mm², Insulator diameter: 1.9 mm), Standard length: 2 m

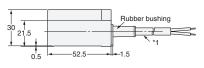
TL-N12MD□, TL-N10ME□, TL-N10MY





Mounting Hole Dimensions

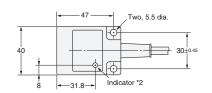


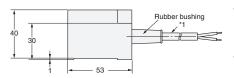


*1. D/Y Models: 6-dia. vinyl-insulated round cable with 2 conductors (Conductor cross section: 0.5 mm², Insulator diameter: 1.9 mm), Standard length: 2 m E Models: 6-dia. vinyl-insulated round cable with 3 conductors (Conductor cross section: 0.5 mm², Insulator diameter: 1.9 mm), Standard length: 2 m 2. D1 Models: Operation indicator (red) and Setting indicator (green) D2 Models: Operation indicator (red) Coperation indicator (red) Operation indicator (red)

TL-N20MD□, TL-N20ME□, TL-N20MY□







Mounting Hole Dimensions



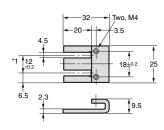
*1. D/Y Models: 6-dia. vinyl-insulated round cable with 2 conductors (Conductor cross section: 0.5 mm², Insulator (Conductor cross section: 0.5 mm², insulator diameter: 1.9 mm), Standard length: 2 m E Models: 6-dia. vinyl-insulated round cable with 3 conductors (Conductor cross section: 0.5 mm², Insulator diameter: 1.9 mm), Standard length: 2 m

Operation indicator (red) and Setting indicator (green)
Operation indicator (red)
Detection indicator (red) *2. D1 Models: Y Models: Operation indicator (red)

Accessories (Order Separately)

Mounting Bracket

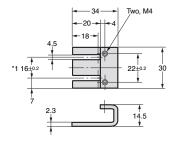
Y92E-C5



Applicable Models: TL-N5ME□ *2 Applicable Models: TL-N5MY□ Applicable Models: TL-N7MD

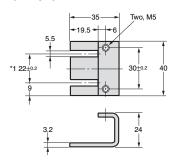
*2
Material: Zinc-plated iron

Y92E-C10



Applicable Models: TL-N10ME□ *2 Applicable Models: TL-N10MY□ Applicable Models: TL-N12MD□ *2 Material: Zinc-plated iron

Y92E-C20

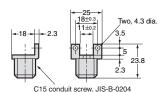


Applicable Models: TL-N20ME□ *2 Applicable Models: TL-N20MY□ Applicable Models: TL-N20MD□ *2

Material: Zinc-plated iron

Mounting Brackets for Wiring Conduit Use (Sold Separately)

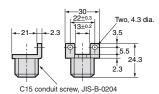
Y92E-N5C15



Applicable Models: TL-N5ME□ Applicable Models: TL-N5MY□ Applicable Models: TL-N7MD□

Material: Zinc-plated iron

Y92E-N10C15



Applicable Models: TL-N10ME□

Applicable Models: TL-N10MY□ Applicable Models: TL-N12MD□

Material: Zinc-plated iron

^{*1.} These are the mounting dimensions of the base of the Mounting Bracket. *2. Provided with the product.

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