

# Accessories



- Analog current, voltage, and switchable modes are selectable
- Some products support IO-Link/EtherCAT/Profibus bus standards
- Capable of handling custom requirements such as welding slag resistance, oil resistance, IP69K rating, with LED lights, shielding, and more



Basic features	Detection Type	NPN/PNP	Automatic Recognition
	Battery Capacity	2500mAH	
	Charging Time	2.5h	
Electrical data	Output Voltage	4.5~5.5V	Select 5V Output
		11~13V	Select 12V Output
		22~26V	Select 24V Output
	Output Current	$\leq 0.55A$	5V Output
		$\leq 0.5A$	12V Output
$\leq 0.25A$		24V Output	
Protection Circuit	Output Short Circuit Protection		
Environmental conditions	Operating Temperature	-10~45°C	
Mechanical data	Other Features	Silent Mode, Sleep Mode	
	Dimensions	125x62x23mm	
	Weight	145g	
	Model	WT-3	

- 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

#### Sensor tester kit

- Switch Type
- Analog type

#### Connecting Cable

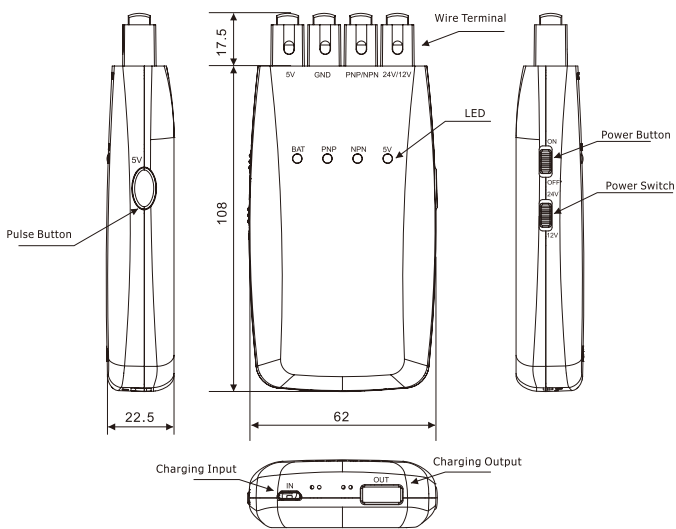
- M8
- M12
- Other

#### Signal conversion Cable

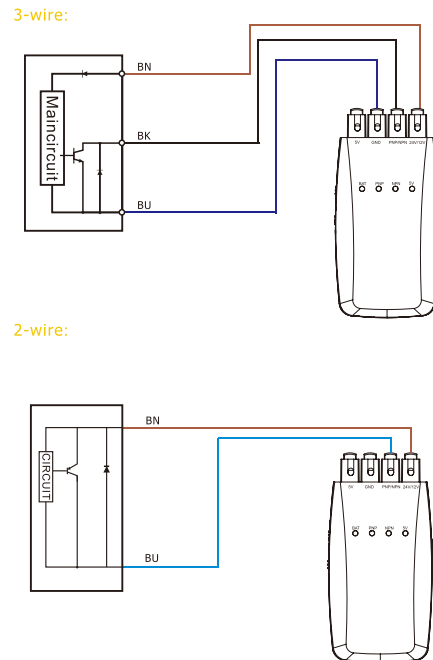
- M8 Cable

### Dimensions

Unit: mm



### Circuit diagram



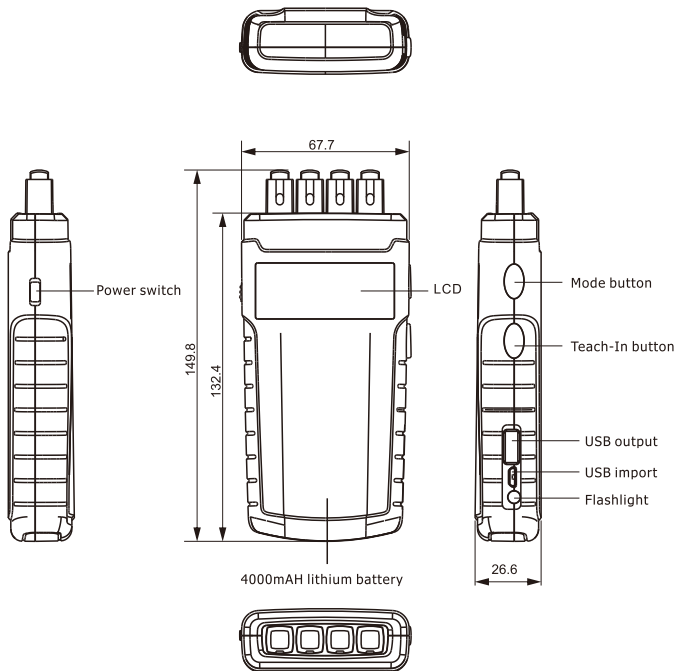
# Analog Type



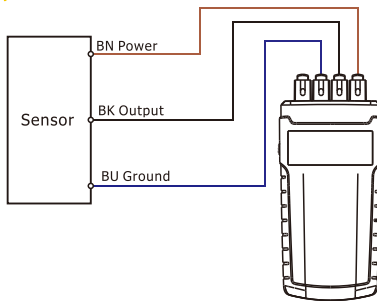
Basic features	Detection Type	NPN/PNP	Automatic Recognition
	Battery Capacity	4000mAH	
	Charging Time	9h	
Electrical data	Output Voltage	19V~24V	Brown Output Terminal
		4.8V~5V	USB Output Terminal
	Output Current	≤160mA	Brown Output Terminal
		≤500mA	USB Output Terminal
Protection Circuit	Power Overcurrent Protection		
Environmental conditions	Operating Temperature	-10°C~+45°C	
Mechanical data	Other Features	Sleep Function,Silent Function,Flashlight	
	Dimensions	67.7x26.6x149.8mm	
	Weight	200g	
Special features	Measurement Range	0~10V	Voltage Mode
		0~20mA	Current Mode
	Measurement Accuracy	≤0.04V(Full Range)	Voltage Mode
		≤0.04mA(Full Range)	Current Mode
	Scan Cycle	22ms	Digital Mode
		140ms	Current Mode
140ms		Voltage Mode	
Model	WD-1		

## Dimensions

Unit: mm

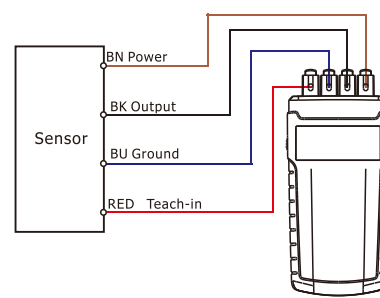


3-wire system:

**Common measurement**

- 1 Connect the terminals of the corresponding functions and turn on the power.
2. Select the corresponding measurement mode (voltage, current, digital).
3. The measurement results are displayed on the screen.

4-wire system:

**Teach-in button**

- 1 Connect the corresponding function terminals and turn on the power
- 2 Press the Teach-in button, the screen Teach-in area displays ON, then the red terminal will output high level, release the Teach-in button, the screen Teach-in area displays OFF, then the red terminal will output low level
- 3 Select the corresponding measurement mode (voltage V, current I, switch D)
- 4 The measurement result is displayed on the screen

## Function description

**1 Mode switching**

Press the MODE button shortly to switch the test box in three modes: current (I), voltage (V), and switch (D). Customer can select the correct mode and connection according to the sensor type, the test result will be displayed on the screen, and the test box will store the current test mode, and will restore the previous state when it is restarted.

**2. Battery**

Battery status will be displayed on the upper right corner. The number of grids represents the remaining power. Grids flashing indicates that the power is insufficient and needs to be charged. The flashing during charging indicates the charging progress, when the charging is done, the whole grids will flash.

**3. Sleeping mode**

If the test box does not operate for more than 10 minutes, the test box automatically enters the sleeping state, the 24V power supply and the screen will be turned off, press the Mode button or the Teach-IN button, and the test box returns to the operable state.

**4. Powerbank mode**

Press the mode button in the off state, turn on the power button, the buzzer will sound twice, the sleep of the test box function will be invalid, the function has no memory, and the sleep function is enabled by default when it is turned on again.

**5. Mute mode**

Press and hold Teach-in for more than 6s, the buzzer will sound once, and the test box has entered silent mode. In the same operation, the buzzer will sound twice to indicate that the mute mode has been excited, and the test box will store the state, and will remain in the last state when it is turned on again.

**6. Teach-in function**

Press the teach button, the Teach-in (red) terminal will output a high level voltage, and the voltage logic will match the brown terminal voltage. When the button is released, the Teach-in (red) terminal will output a low level voltage, and the LCD will display the current Teach-in logic state.

**7. Flashlight function**

Press and hold the mode button for more than 2s, the light will be on, and the same operation can turn off the light.

**8. Short circuit protection**

When the output current is too high, short circuit protection will be inspired, and the screen will display 'SCP' during short circuit protection. After the short circuit condition is withdrawn, the test box will automatically return to normal state.

Fiber Optic
Slot Sensors
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Laser
Proximity
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Magnetic
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Area
Ultrasonic
AI Image
Code Readers
Vibration
Temperature
RFID
Safety door lock
Pressure Switch
Communication

## Accessories

## Guidance

## Sensor tester kit

Switch Type

Analog type

## Connecting Cable

M8

M12

Other

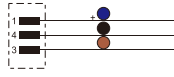
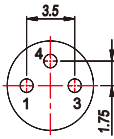
## Signal conversion Cable

M8 Cable

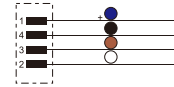
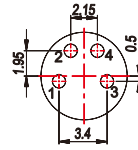
# M8 Cables



3 Pin Female



4 Pin Female



## Type

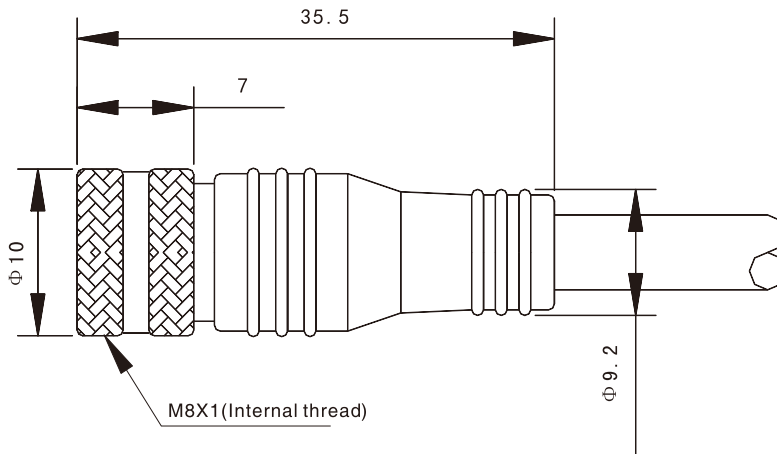
Type	3 Pin		4 Pin	
	2m cable	5m cable	2m cable	5m cable
PVC	CA08-S3F2C	CA08-S3F5C	CA08-S4F2C	CA08-S4F5C
PUR	CA08-S3F2R	CA08-S3F5R	CA08-S4F2R	CA08-S4F5R

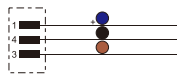
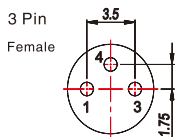
## Specifications

Type	M8 straight cable
Coding type	A coding
Rated voltage	60V(3Pin)/30V(4Pin)
Rated current	3A
Pin Material	Gold-plated phosphor copper
Coupling screw	Nickel plated brass

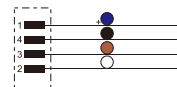
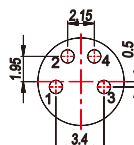
Insulation resistance	≥100MΩ
Cable Material	PVC/PUR
Cable length	Standard 2 or 5 m, customizable
Cores	0.25mm <sup>2</sup>
Degree of protection	IP67/68
Operating temperature	-25~+ 85°C

## Dimensions(Unit:mm)





4 Pin Female



## Type

Female, Right angle

	3 Pin		4 Pin	
	2m cable	5m cable	2m cable	5m cable
PVC	CA08-R3F2C	CA08-R3F5C	CA08-R4F2C	CA08-R4F5C
PUR	CA08-R3F2R	CA08-R3F5R	CA08-R4F2R	CA08-R4F5R

## Specifications

Type M8 Right angle Cable

Coding type A coding

Rated voltage 60V(3Pin)/30V(4Pin)

Rated current 3A

Pin Material Gold-plated phosphor copper

Coupling screw Nickel plated brass

Insulation resistance  $\geq 100M\Omega$

Cable Material PVC/PUR

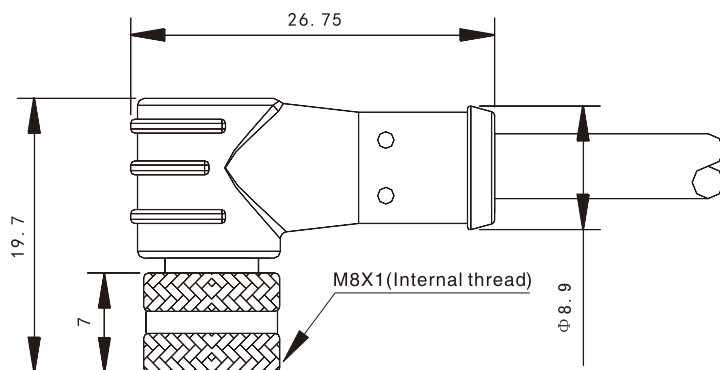
Cable length Standard 2 or 5 m, customizable

Cores 0.25mm<sup>2</sup>

Degree of protection IP67/68

Operating temperature -25~+ 85°C

## Dimensions(Unit:mm)



- Fiber Optic
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- Safety door lock
- Pressure Switch
- Communication

### Accessories

#### Guidance

#### Sensor tester kit

Switch Type

Analog type

#### Connecting Cable

M8

M12

Other

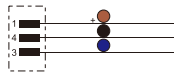
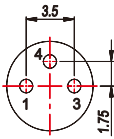
#### Signal conversion Cable

M8 Cable

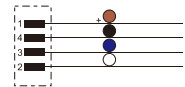
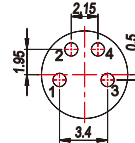
# M8 Cables



3 Pin Female



4 Pin Female



## Type

Female, Right angle, LED, PNP

## 3 Pin

2m cable

5m cable

PVC  
PUR

CA08-R3F2C-LP  
CA08-R3F2R-LP

CA08-R3F5C-LP  
CA08-R3F5R-LP

## 4 Pin

2m cable

5m cable

CA08-R4F2C-LP  
CA08-R4F2R-LP

CA08-R4F5C-LP  
CA08-R4F5R-LP

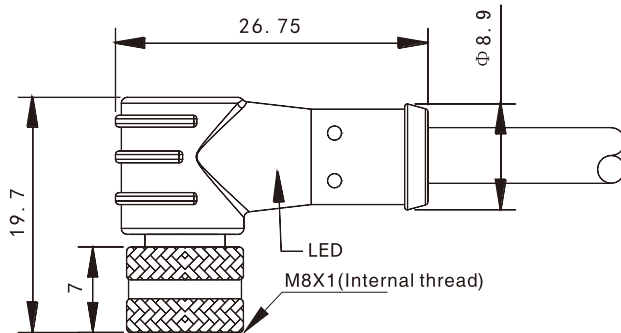
## Specifications

Type	Cable with LED
Coding type	A coding
Rated voltage	60V(3Pin)/30V(4Pin)
Rated current	3A
Pin Material	Gold-plated phosphor copper
Coupling screw	Nickel plated brass

Insulation resistance	≥100MΩ
Cable Material	PVC/PUR
Cable length	Standard 2 or 5 m, customizable
Cores	0.25mm <sup>2</sup>
Degree of protection	IP67/68
Operating temperature	-25~+ 85°C

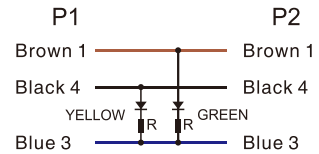
## Dimensions(Unit:mm)

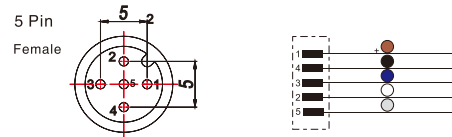
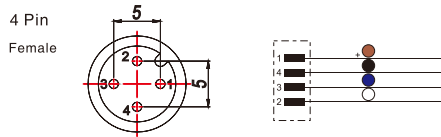
Female, Right angle, LED, PNP



PNP

### WIRE LIST





## Type

Female, Straight, Shielded

PVC  
PUR

Female, Straight

PVC  
PUR

## 4 Pin

2m cable

CA12-S4F2C-S  
CA12-S4F2R-S

5m cable

CA12-S4F5C-S  
CA12-S4F5R-S

## 5 Pin

2m cable

CA12-S5F2C-5-S  
CA12-S5F2R-5-S

5m cable

CA12-S5F5C-5-S  
CA12-S5F5R-5-S

2m cable

CA12-S4F2C  
CA12-S4F2R

5m cable

CA12-S4F5C  
CA12-S4F5R

2m cable

CA12-S5F2C-5  
CA12-S5F2R-5

5m cable

CA12-S5F5C-5  
CA12-S5F5R-5

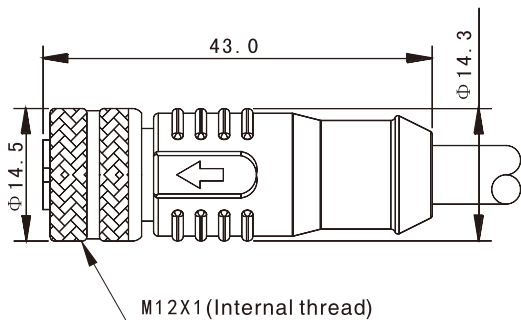
## Specifications

Type	M12 Straight Cable
Coding type	A coding
Rated voltage	250V
Rated current	4A
Pin Material	Gold-plated phosphor copper
Coupling screw	Nickel plated brass

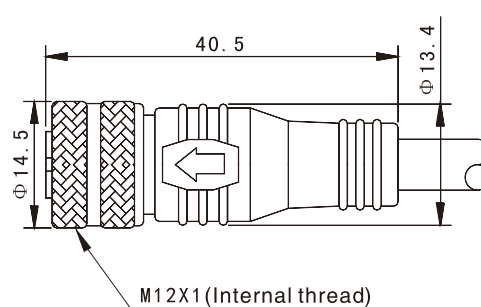
Insulation resistance	≥100MΩ
Cable Material	PVC/PUR
Cable length	Standard 2 or 5 m,customizable
Cores	0.34mm <sup>2</sup>
Degree of protection	IP67/68
Operating temperature	-25~+85°C

## Dimensions(Unit:mm)

M12 Female, Straight, Shielded



M12 Female, Straight



- Fiber Optic
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- Safety door lock
- Pressure Switch
- Communication

## Accessories

### Guidance

### Sensor tester kit

- Switch Type
- Analog type

### Connecting Cable

- M8
- M12**
- Other

### Signal conversion Cable

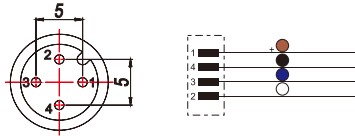
- M8 Cable



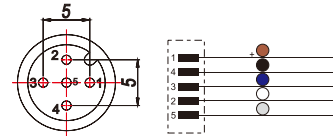
# M12 Cables



4 Pin  
Female



5 Pin  
Female



## Type

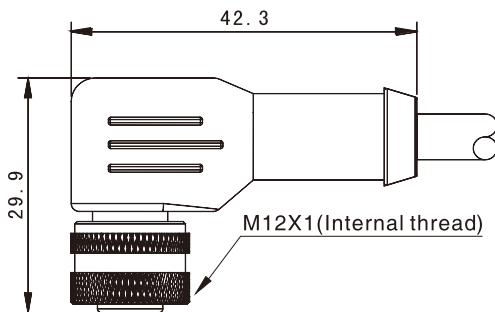
Type	4 Pin		5 Pin		
	Female, Right angle	2m cable	5m cable	2m cable	5m cable
PVC		CA12-R4F2C	CA12-R4F5C	CA12-R5F2C-5	CA12-R5F5C-5
PUR		CA12-R4F2R	CA12-R4F5R	CA12-R5F2R-5	CA12-R5F5R-5

## Specifications

Type	M12 Straight, Shielded
Coding type	A coding
Rated voltage	250V
Rated current	4A
Pin Material	Gold-plated phosphor copper
Coupling screw	Nickel plated brass

Insulation resistance	≥100MΩ
Cable Material	PVC/PUR
Cable length	Standard 2 or 5 m, customizable
Cores	0.34mm <sup>2</sup>
Degree of protection	IP67/68
Operating temperature	-25~+85°C

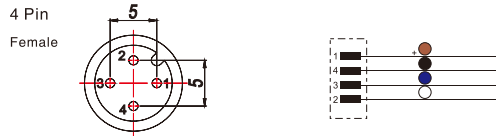
## Dimensions(Unit:mm)



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### Guidance

- Sensor tester kit
  - Switch Type
  - Analog type
- Connecting Cable
  - M8
  - M12
  - Other
- Signal conversion Cable
  - M8 Cable



### Type

Female, Right angle, LED	4 Pin	
	2m cable	5m cable
PNP	CA12-R4F2C-LP	CA12-R4F5C-LP
NPN	CA12-R4F2C-LN	CA12-R4F5C-LN

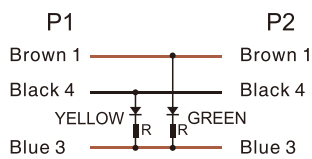
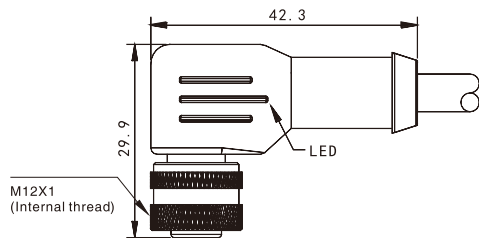
### Specifications

Type	M12 Female, Right angle, LED
Coding type	A coding
Rated voltage	250V
Rated current	4A
Pin Material	Gold-plated phosphor copper
Coupling screw	Nickel plated brass

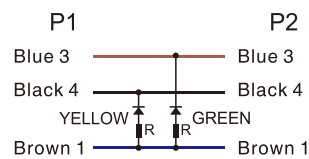
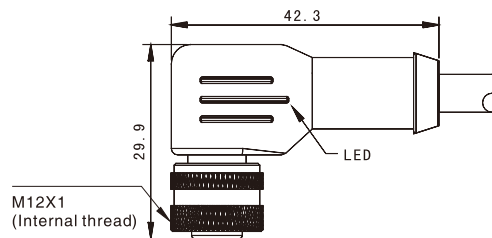
Insulation resistance	$\geq 100M\Omega$
Cable Material	PVC/PUR
Cable length	Standard 2 or 5 m, customizable
Cores	0.34mm <sup>2</sup>
Degree of protection	IP67/68
Operating temperature	-25°C~+85°C

### Dimensions (Unit: mm)

M12 Female, Right angle, LED, PNP



M12 Female, Right angle, LED, NPN



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- Switch Type
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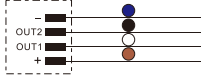
#### Connecting Cable

- MB
- M12
- Other

#### Signal conversion Cable

- MB Cable

# Other



## Type

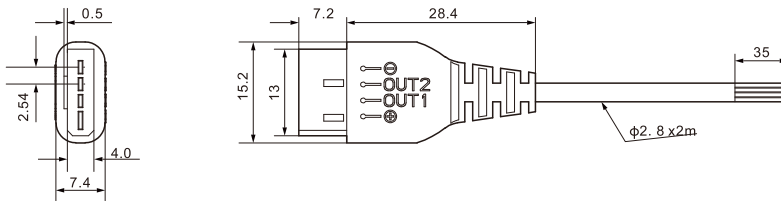
ME-1007

## Specifications

Insertion force	<18N
Pull-out force(cover retention)	25N
Cover material	PVC
Contact point	Phosphor bronze

## Dimensions(Unit:mm)

ME-1007



Fiber Optic

Slot Sensors

Photoelectric

Laser

Proximity

Displacement

Magnetic

Contact

Area

Ultrasonic

AI Image

Code Readers

Vibration

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Safety door lock

Pressure Switch

Communication

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Guidance

Sensor tester kit

Switch Type

Analog type

Connecting Cable

M8

M12

Other

Signal conversion Cable

M8 Cable



## Type

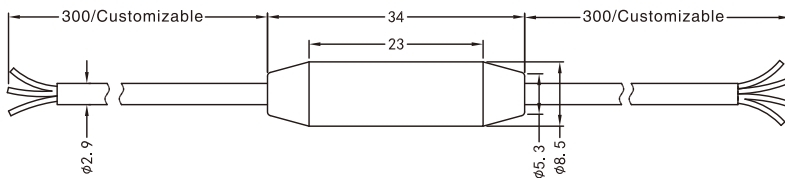
NPN converting to PNP	CTC-N2P
PNP converting to NPN	CTC-P2N

## Specifications

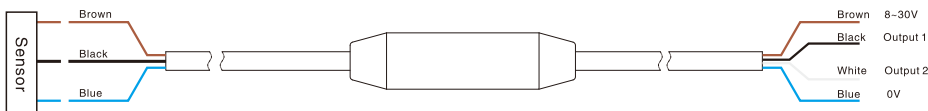
Protective circuit	Reverse polarity protection
Operating temperature	-20°C~+60°C
Storage temperature	-40°C~+85°C
Input voltage	8~30V

Load current	≤150mA
Voltage drop	≤1V
Switch output	≤5KHz

## Dimensions(Unit:mm)



## Wiring diagram



Sensor's output state before converting	Corresponding output state after converting
NO	Black: NO White: NC
NC	Black: NC White: NO

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