

# Junction Box

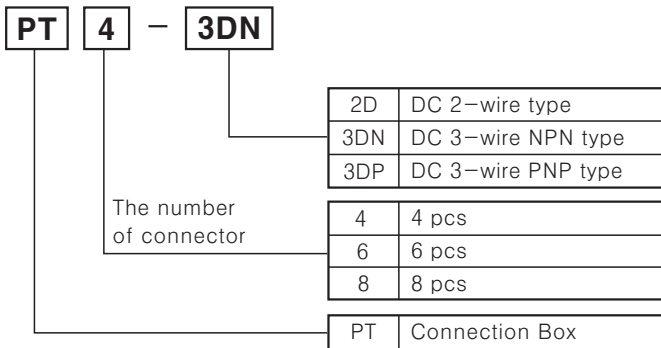
## Features

- Red LED status indication
- Able to drive multiple sensors by single power
- Realization of convenience for wiring or power line
- IP67 rated waterproof structure (IEC standard) and IP66 for protection cover



**⚠ Please read "Caution for your safety" in operation manual before using.**

## Ordering information



## Type

Appearances	Model	
	DC 2-wire type	<b>PT4-2D</b>
	DC 3-wire type	<b>PT4-3DN</b> <b>PT4-3DP</b>
	DC 2-wire type	<b>PT6-2D</b>
	DC 3-wire type	<b>PT6-3DN</b> <b>PT6-3DP</b>
	DC 2-wire type	<b>PT8-2D</b>
	DC 3-wire type	<b>PT8-3DN</b> <b>PT8-3DP</b>

## Specifications

Model	PT4-2D	PT4-3DN PT4-3DP	PT6-2D	PT6-3DN PT6-3DP	PT8-2D	PT8-3DN PT8-3DP
Power supply (Operating voltage)	12-24VDC (10-30VDC)					
Leakage current	0.5mA					
Connection life cycle	Min. 200 times					
Cable tensile strength	10kgf(98N) / 15s					
Insulation resistance	Min. 50MΩ (at 500VDC mega)					
Dielectric strength	1500VAC 50/60Hz for 1minute					
Vibration	1mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 2 hours					
Shock	500m/s <sup>2</sup> (50G) in X, Y, Z direction for 3 times					
Indicator	Power indicator : Green, Operation indicator : Red					
Ambient temperature	-25 ~ +70℃ (at non-freezing status)					
Storage temperature	-30 ~ +80℃ (at non-freezing status)					
Ambient humidity	35 ~ 95%RH					
Protection	<b>(★)</b> IP66 (IEC standard)					
Unit weight	Approx. 630g		Approx. 690g		Approx. 745g	

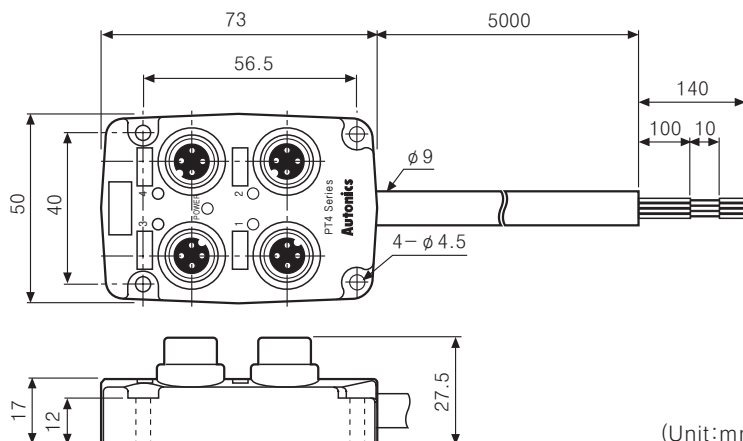
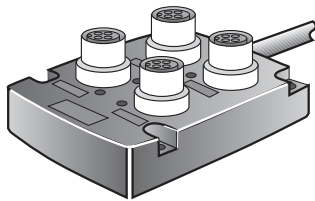
※ **(★)** When using a cover for waterproof : IP67 (IEC standard)

- (A) Counter
- (B) Timer
- (C) Temp. controller
- (D) Power controller
- (E) Panel meter
- (F) Tacho/Speed/Pulse meter
- (G) Display unit
- (H) Sensor controller
- (I) Switching power supply
- (J) Proximity sensor**
- (K) Photo electric sensor
- (L) Pressure sensor
- (M) Rotary encoder
- (N) Stepping motor & Driver & Controller
- (O) Graphic panel
- (P) Production stoppage models & replacement

# PT Series

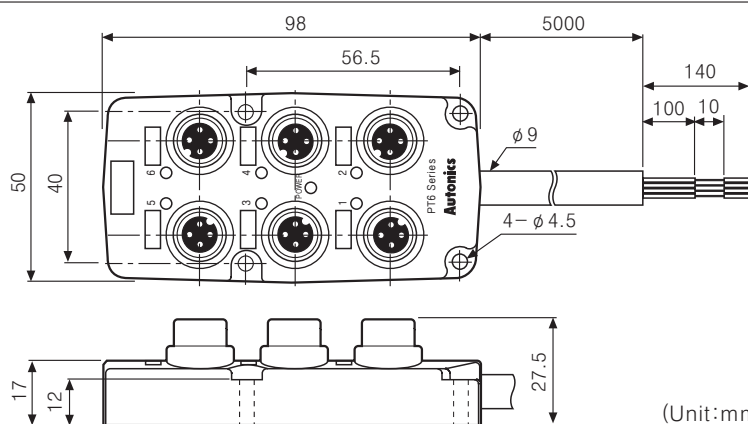
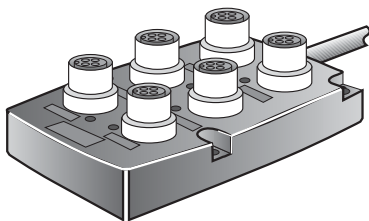
## Dimensions

●PT4-□□



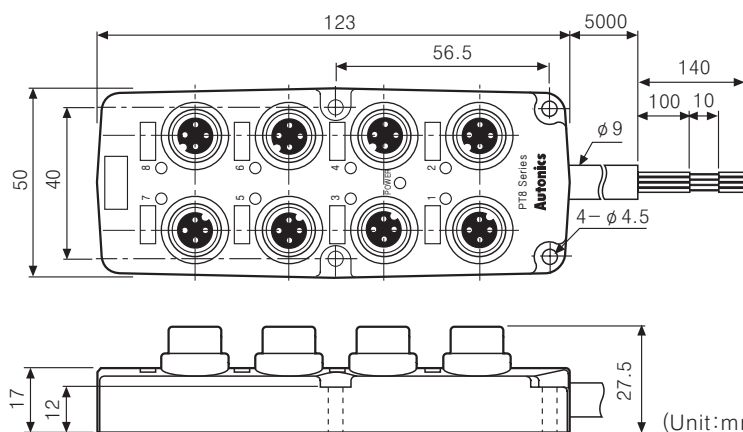
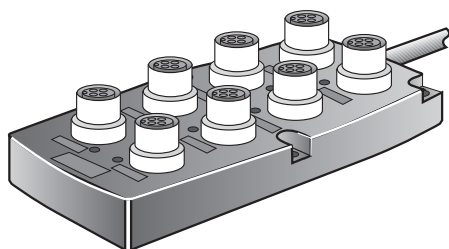
(Unit:mm)

●PT6-□□



(Unit:mm)

●PT8-□□



(Unit:mm)

## Waterproof cover

Form	Model	Applicable model
	<b>P96-M12-1</b>	<ul style="list-style-type: none"> <li>●PT4-□□□</li> <li>●PT6-□□□</li> <li>●PT8-□□□</li> </ul>
<p>※ This protection cover is used for protecting unused connection hole from water or oil etc.</p> <p>※ If using waterproof cover, IP67 is available.</p> <p>※ Please tighten it.</p>		

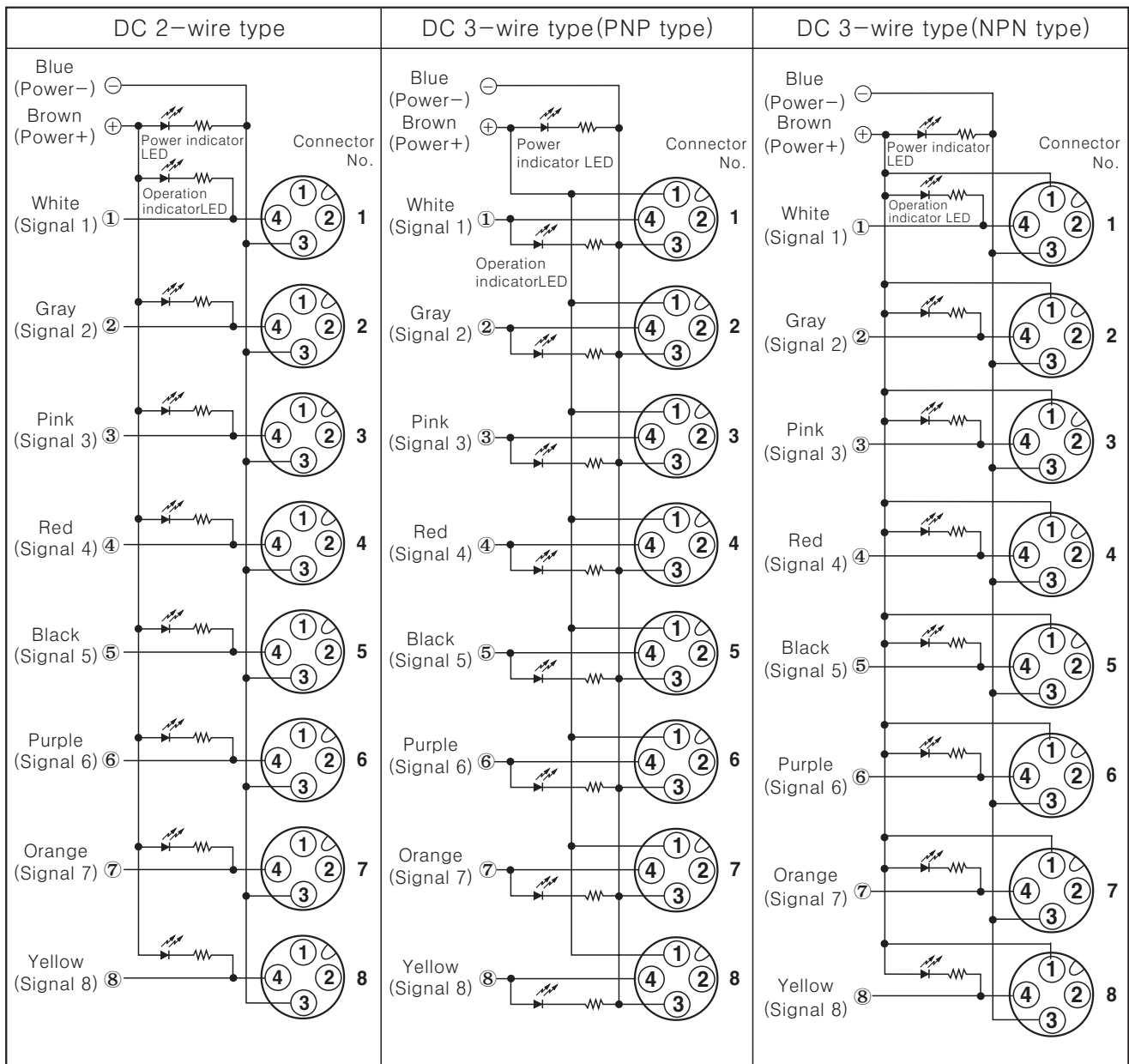
※ Waterproof cover is sold separately.

## Protection cover

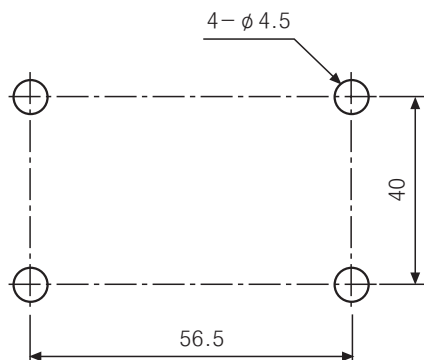
Form	Applicable model
	<ul style="list-style-type: none"> <li>●PT4-□□□</li> <li>●PT6-□□□</li> <li>●PT8-□□□</li> </ul>
<p>※ This protection cover is used for protecting unused connection hole from dust or particle etc. (IP67 is not available)</p> <p>※ Please push it into hole.</p>	

# Junction Box

## Connections



## Mounting dimensions



\*installation 4 / 6 / 8 holes are same.

(Unit:mm)

(A) Counter

(B) Timer

(C) Temp. controller

(D) Power controller

(E) Panel meter

(F) Tacho/ Speed/ Pulse meter

(G) Display unit

(H) Sensor controller

(I) Switching power supply

(J) Proximity sensor

(K) Photo electric sensor

(L) Pressure sensor

(M) Rotary encoder

(N) Stepping motor & Driver & Controller

(O) Graphic panel

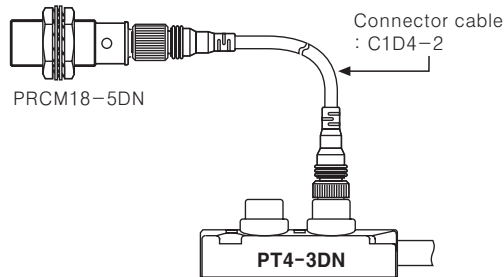
(P) Production stoppage models & replacement

# PT Series

## ■ Connections

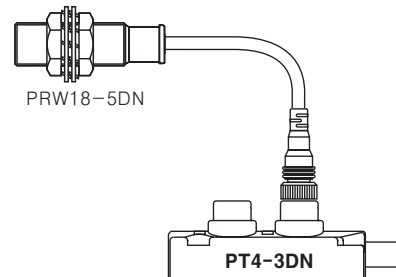
### ● Connector type (PRCM Series)

Connection cable should be used for connector type of proximity sensor.



### ● Cable outgoing type (PRW Series)

Cable outgoing type can be connected directly but when the installation distance is longer, please use connection cable.



## ■ Applicable models

Junction box	Applicable proximity sensor		Connection
PT□-2D	DC 2-wire type	PRCMT12-2DO/DC, PRCMT12-4DO/DC, PRCMT18-5DO/DC, PRCMT18-8DO/DC, PRCMT30-10DO/DC, PRCMT30-15DO/DC	• Connection cable
		PRWT12-2DO/DC, PRWT12-4DO/DC, PRWT18-5DO/DC, PRWT18-8DO/DC, PRWT30-10DO/DC, PRWT30-15DO/DC	• Direct connection • Connection cable
PT□-3DN	DC 3-wire type (NPN type)	PRCM12-2DN/DN2, PRCM12-4DN/DN2, PRCM18-5DN/DN2, PRCM18-8DN/DN2, PRCM30-10DN/DN2, PRCM30-15DN/DN2, PRCML18-5DN/DN2, PRCML18-8DN/DN2, PRCML30-10DN/DN2, PRCML30-15DN/DN2.	• Connection cable
		PRW12-2DN/DN2, PRW12-4DN/DN2, PRW18-5DN/DN2, PRW18-8DN/DN2, PRW30-10DN/DN2, PRW30-15DN/DN2, PRWL18-5DN/DN2, PRWL18-8DN/DN2, PRWL30-10DN/DN2, PRWL30-15DN/DN2.	• Direct connection • Connection cable
PT□-3DP	DC 3-wire type (PNP type)	PRCM12-2DP/DP2, PRCM12-4DP/DP2, PRCM18-5DP/DP2, PRCM18-8DP/DP2, PRCM30-10DP/DP2, PRCM30-15DP/DP2, PRCML18-5DP/DP2, PRCML18-8DP/DP2, PRCML30-10DP/DP2, PRCML30-15DP/DP2.	• Connection cable
		PRW12-2DP/DP2, PRW12-4DP/DP2, PRW18-5DP/DP2, PRW18-8DP/DP2, PRW30-10DP/DP2, PRW30-15DP/DP2, PRWL18-5DP/DP2, PRWL18-8DP/DP2, PRWL30-10DP/DP2, PRWL30-15DP/DP2.	• Direct connection • Connection cable

\*It is enable to use general outgoing cable type of proximity sensor with junction box, if plug type connector cable is used.

## ■ Proper usage

1. Junction box is only for DC power, do not use with AC power.
2. Be careful to use DC 2-wire and DC 3-wire type separately and NPN / PNP types are separated in DC 3-wire type.
3. Please be sure of correct wiring of power cable (Blue : -, Brown : +).
4. Green LED will not turn on when the power polarity is reversed.
5. Please connect signal line following the diagram and load must be installed when operating sensor.
6. Please check Red LED when operating sensor.
7. Please use protection cover or waterproof cover (P96-M12-1) on unused connectors.

\*The protection cover is attached on connection part of the box. Please be careful to keep this cover.

\*Waterproof cover (P96-M12-1) is sold separately.