

# PT Series

## Connection box

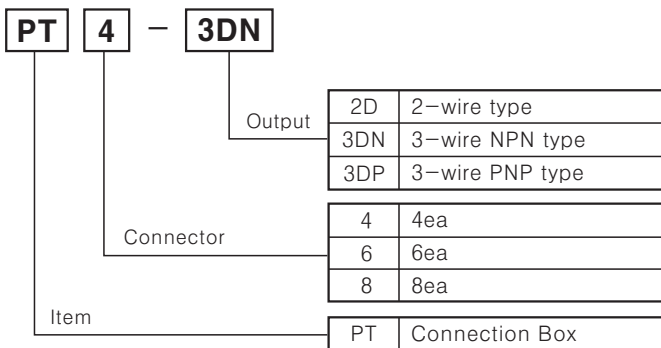
### ■ Features

- Red LED status indication
- Allows to drive multiple sensors by single power
- Realization of convenience for wiring or power line
- Waterproof structure IP67 (IEC standard) with waterproof cover, and waterproof structure IP66 with 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	Max. 0.5mA					
Connection life cycle	Min. 200 times					
Cable tensile strength	10kgf(98N) / 15sec.					
Insulation resistance	Min. 50MΩ (at 500VDC megger)					
Dielectric strength	1500VAC 50/60Hz for 1minute					
Vibration	1mm amplitude at frequency of 10 to 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 to 70°C (at non-freezing status)					
Storage temperature	-30 to 80°C (at non-freezing status)					
Ambient humidity	35 to 95%RH					
Protection	<b>(★)</b> IP66 (IEC standard)					
Unit weight	Approx. 630g		Approx. 690g		Approx. 745g	

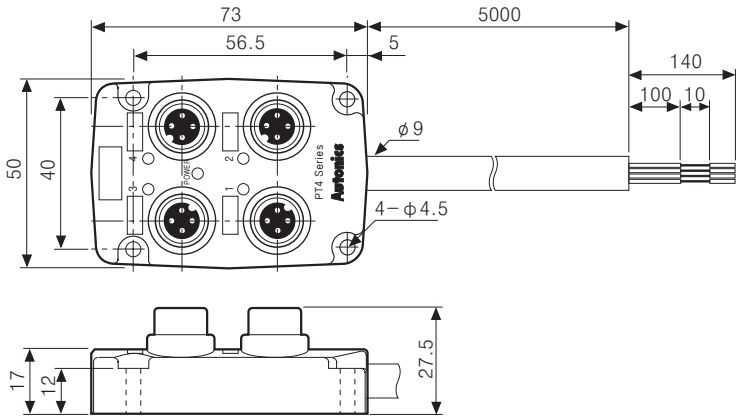
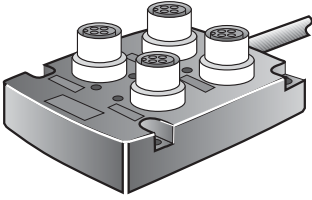
※ **(★)** When using a cover for waterproof (P96-M12-1, sold separately) : IP67 (IEC standard)

# Connection Box

## Dimensions

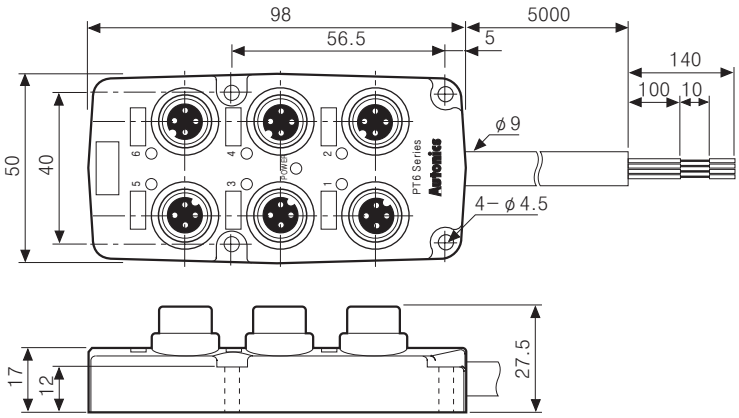
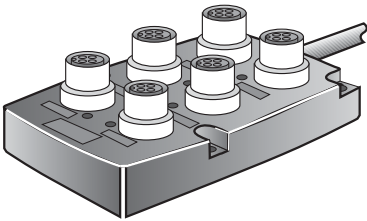
(Unit:mm)

### ●PT4-□□



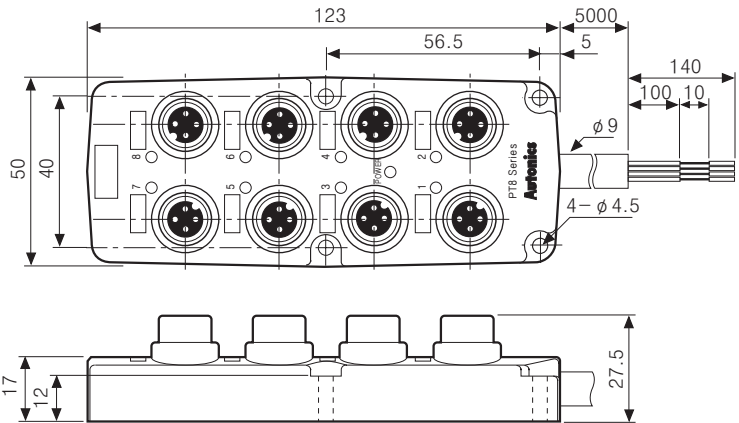
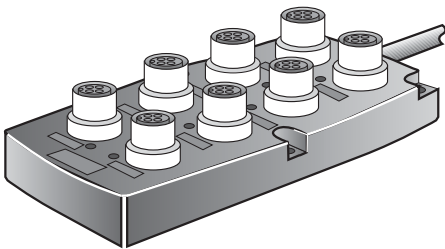
※Cable specification : φ 9, 6 cores  
(Conductor cross section: 0.3mm<sup>2</sup>,  
Insulator diameter: φ 1.67)

### ●PT6-□□



※Cable specification : φ 9, 8 cores  
(Conductor cross section: 0.3mm<sup>2</sup>,  
Insulator diameter: φ 1.67)

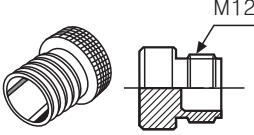
### ●PT8-□□



※Cable specification : φ 9, 10 cores  
(Conductor cross section: 0.3mm<sup>2</sup>,  
Insulator diameter: φ 1.67)

- (A) Photo electric sensor
- (B) Fiber optic sensor
- (C) Door/Area sensor
- (D) Proximity sensor
- (E) Pressure sensor
- (F) Rotary encoder
- (G) Connector/Socket**
- (H) Temp. controller
- (I) SSR/ Power controller
- (J) Counter
- (K) Timer
- (L) Panel meter
- (M) Tacho/ Speed/ Pulse meter
- (N) Display unit
- (O) Sensor controller
- (P) Switching power supply
- (Q) Stepping motor & Driver & Controller
- (R) Graphic/ Logic panel
- (S) Field network device
- (T) Production stoppage models & replacement

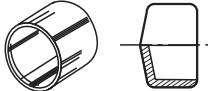
## Waterproof cover

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>

※ This protection cover is used for protecting unused connection hole from water or oil etc.  
 ※ If using waterproof cover, IP67 is available.  
 ※ Please tighten it.

※ Waterproof cover is sold separately.

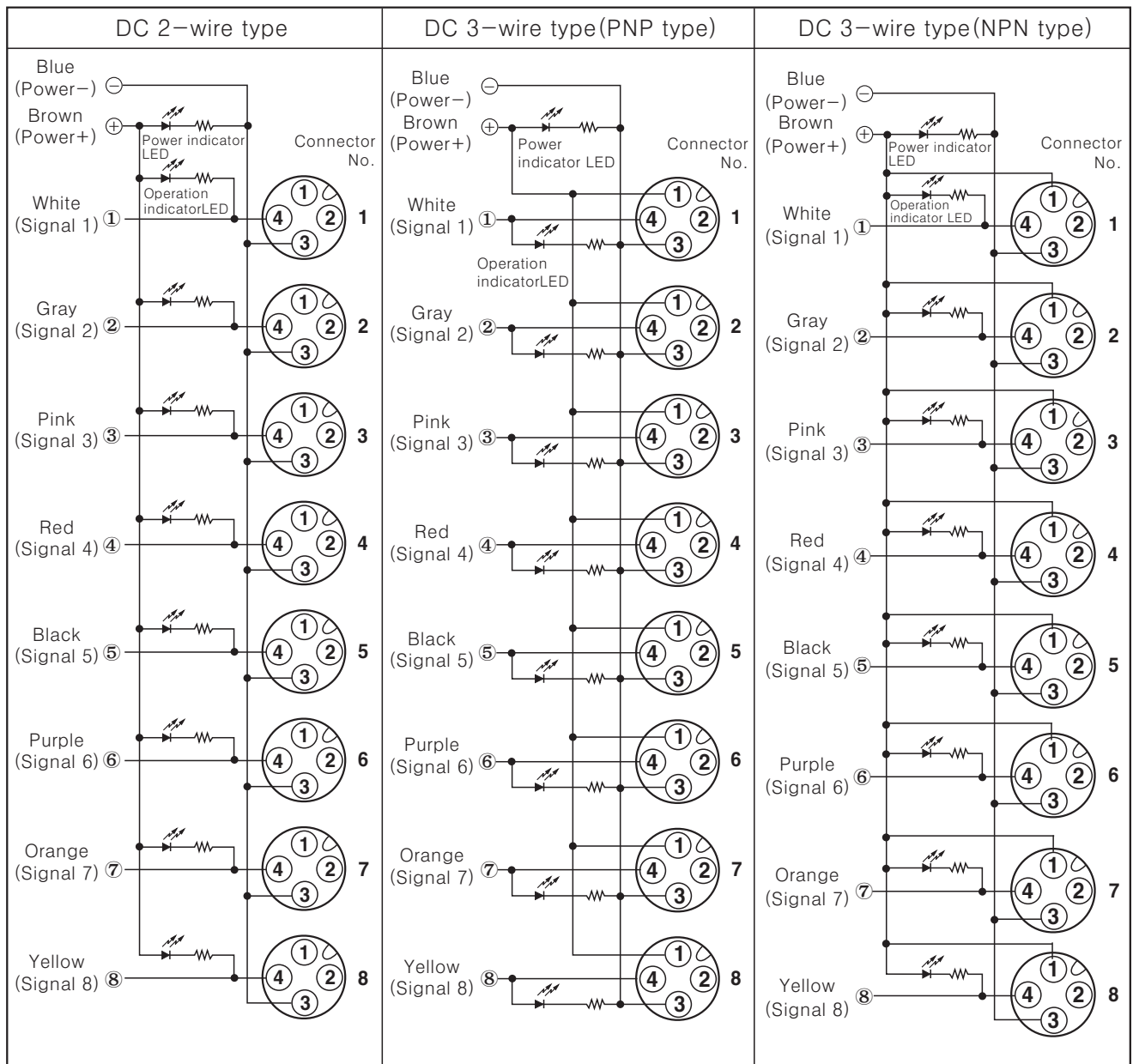
## Protection cover

Form	Applicable model
	<ul style="list-style-type: none"> <li>●PT4-□□□</li> <li>●PT6-□□□</li> <li>●PT8-□□□</li> </ul>

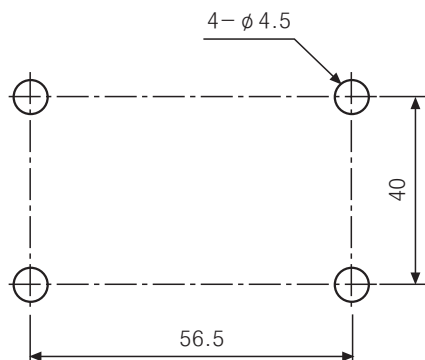
※ This protection cover is used for protecting unused connection hole from dust or particle etc.  
(IP67 is not available)  
 ※ Please push it into hole.

# PT Series

## ■ Connections



## ■ Mounting dimensions



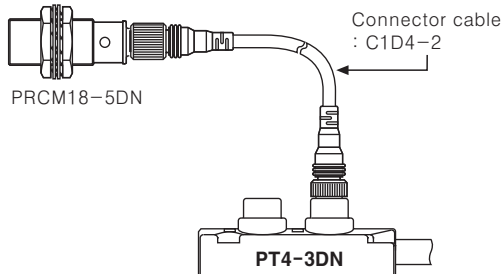
\*installation 4 / 6 / 8 holes are same.

(Unit:mm)

## ■ Connections

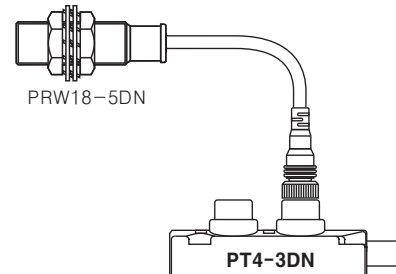
### ● Connector type (PRCM Series)

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



### ● Outgoing cable type (PRW Series)

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



## ■ Applicable models

Connection box	Applicable proximity sensor		Connection
PT□-2D	DC 2-wire type	PRDCMT18-7DO/DC, PRDCMT18-14DO/DC, PRDCMT30-15DO/DC, PRDCMT30-25DO/DC, PRDCMLT18-14DO/DC, PRDCMLT18-7DO/DC, PRDCMLT30-15DO/DC, PRDCMLT30-25DO/DC, PRCMT12-2DO/DC, PRCMT12-4DO/DC, PRCMT18-5DO/DC, PRCMT18-8DO/DC, PRCMT30-10DO/DC, PRCMT30-15DO/DC	Connection cable
		PRDAWT18-7DO/7DC, PRDAWT30-15DO/DC, PRDWT12-4DO/DC, PRDWT12-8DO/DC, PRDWT18-7DO/DC, PRDWT18-14DO/DC, PRDWT30-15DO/DC, PRDWT30-25DO/DC, PRAWT12-2DO/DC, PRAWT18-5DO/DC, PRAWT30-10DO/DC, 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)	PRDCM12-4DN/DN2, PRDCM12-8DN/DN2, PRDCM18-7DN/DN2, PRDCM18-14DN/DN2, PRDCM30-15DN/DN2, PRDCM30-25DN/DN2, PRDCML12-4DN/DN2, PRDCML12-8DN/DN2, PRDCML18-7DN/DN2, PRDCML18-14DN/DN2, PRDCML30-15DN/DN2, PRDCML30-25DN/DN2, 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
		PRDW12-4DN/DN2, PRDW12-8DN/DN2, PRDW18-7DN/DN2, PRDW18-14DN/DN2, PRDW30-15DN/DN2, PRDW30-25DN/DN2, PRDWL18-7DN/DN2, PRDWL18-14DN/DN2, PRDWL30-15DN/DN2, PRDWL30-25DN/DN2, 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)	PRDCM12-4DP/DP2, PRDCM12-8DP/DP2, PRDCM18-7DP/DP2, PRDCM18-14DP/DP2, PRDCM30-15DP/DP2, PRDCM30-25DP/DP2, PRDCML12-4DP/DP2, PRDCML12-8DP/DP2, PRDCML18-7DP/DP2, PRDCML18-14DP/DP2, PRDCML30-15DP/DP2, PRDCML30-25DP/DP2, 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
		PRDW12-4DP, PRDW12-8DP, PRDW18-7DP, PRDW18-14DP, PRDW30-15DP, PRDW30-25DP, PRDWL12-4DP, PRDWL12-8DP, PRDWL18-7DP, PRDWL18-14DP, PRDWL30-15DP, PRDWL30-25DP, 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, PRDW12-4DP/DP2, PRDW12-8DP/DP2, PRDW18-7DP/DP2, PRDW18-14DP/DP2, PRDW30-15DP/DP2, PRDW30-25DP/DP2, PRDWL18-7DP/DP2, PRDWL18-14DP/DP2, PRDWL30-15DP/DP2, PRDWL30-25DP/DP2	Direct connection Connection cable

※ It is able to use general outgoing cable type of proximity sensor with connection box, if plug type connector cable is used.

## ■ Proper usage

1. Connection 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.

(A)	Photo electric sensor
(B)	Fiber optic sensor
(C)	Door/Area sensor
(D)	Proximity sensor
(E)	Pressure sensor
(F)	Rotary encoder
(G)	Connector/Socket
(H)	Temp. controller
(I)	SSR/Power controller
(J)	Counter
(K)	Timer
(L)	Panel meter
(M)	Tacho/Speed/Pulse meter
(N)	Display unit
(O)	Sensor controller
(P)	Switching power supply
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