

Connection Box

■ Features

- Able to check the status of operation by Red indicator
- Able to drive multiple sensors by single power
- Realization of convenience for wiring or power line
- When use water resistive cover, water proof structure will be IP67
(When use protection cover, water proof structure will be IP 66)



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

■ Ordering information

| | | | | |
|-----------|----------|----------|------------|--------------------|
| PT | 4 | - | 3DN | |
| | | | | Connector |
| | | | 2D | DC 2-wire type |
| | | | 3DN | DC 3-wire NPN type |
| | | | 3DP | DC 3-wire PNP type |
| | 4 | | | 4pcs |
| | 6 | | | 6pcs |
| | 8 | | | 8pcs |
| | | | PT | Connection Box |

■ Type

| Appearances | | Model |
|-------------|----------------|----------------|
| | DC 2-wire type | PT4-2D |
| | DC 3-wire type | PT4-3DN |
| | | PT4-3DP |
| | DC 2-wire type | PT6-2D |
| | DC 3-wire type | PT6-3DN |
| | | PT6-3DP |
| | DC 2-wire type | PT8-2D |
| | DC 3-wire type | PT8-3DN |
| | | PT8-3DP |

■ 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) | | | | | |
| 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 ² (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 | IP67 (IEC specification) | | | | | |
| Weight | Approx. 630g | | Approx. 690g | | Approx. 745g | |

※When using a cover for water-proof : IP67(IEC standards)

(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)
Proximity
sensor

(J)
Photo
electric
sensor

(K)
Pressure
sensor

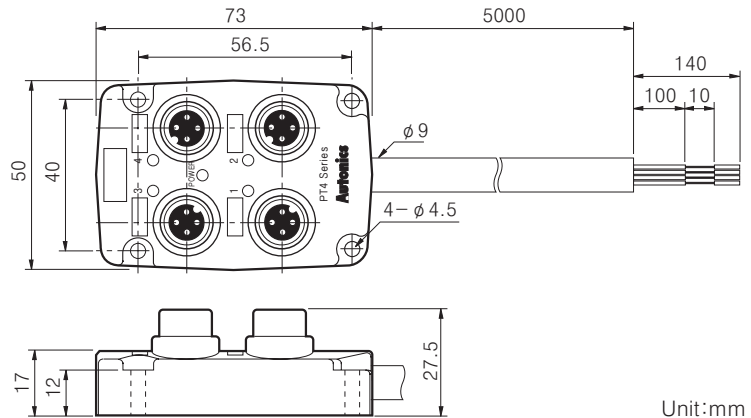
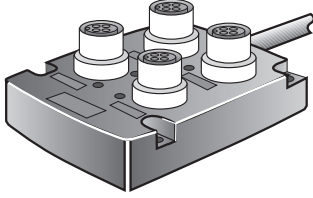
(L)
Rotary
encoder

(M)
5-Phase
stepping
motor &
Driver &
Controller

PT Series

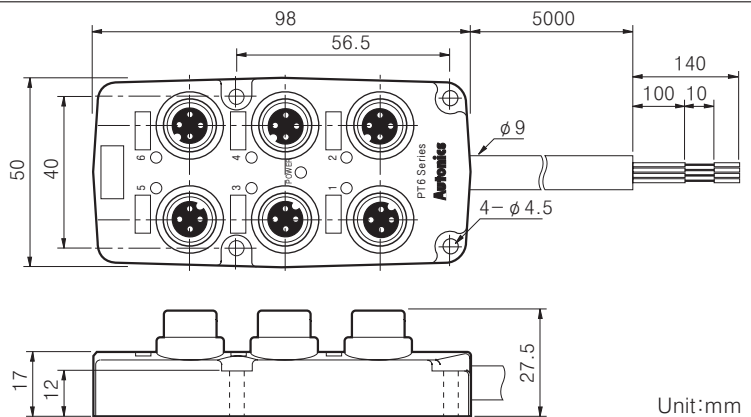
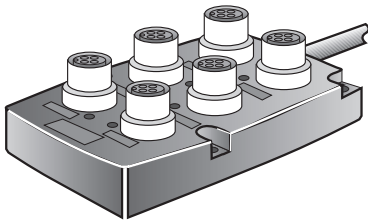
■ Dimensions

● PT4-□□



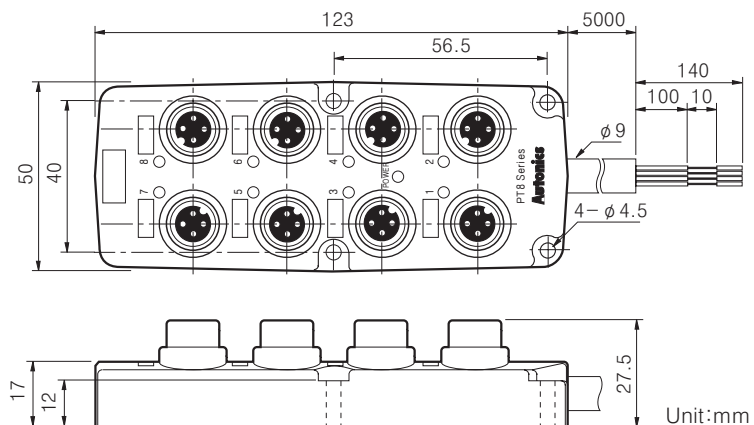
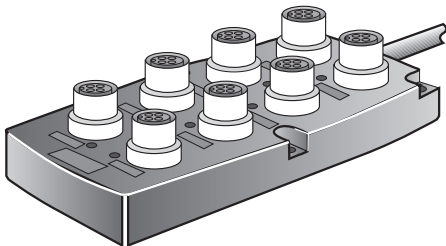
Unit:mm

● PT6-□□



Unit:mm

● PT8-□□



Unit:mm

■ Water resistive cover

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

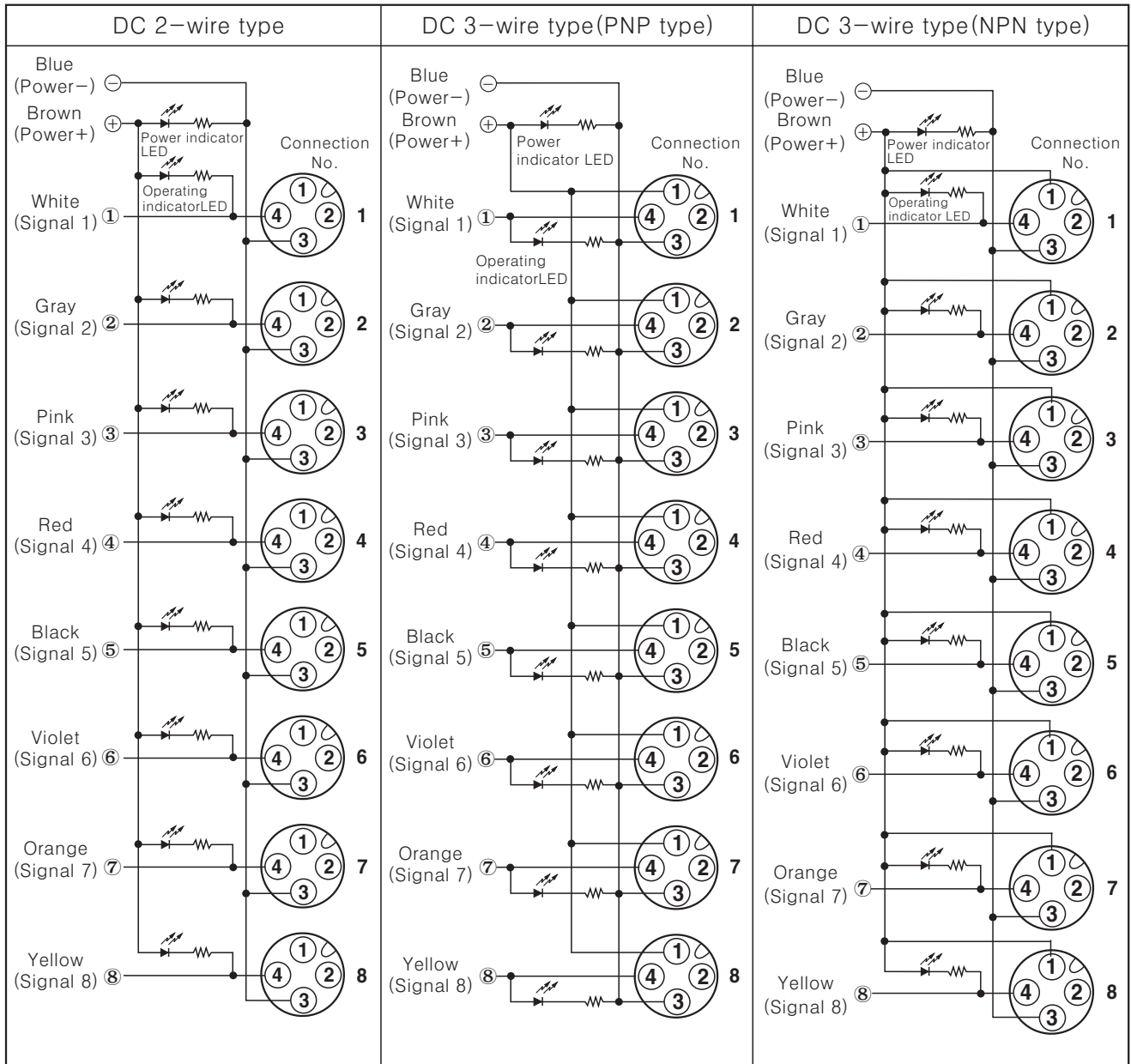
※ Water resistive cover is optional.

■ Protective cover

| Form | Applicable model |
|--|---|
| | <ul style="list-style-type: none"> ● PT4-□□□ ● PT6-□□□ ● PT8-□□□ |
| <p>※ This protection cover is used for protecting unused connection hole from dust or particle etc. (IP66 is available)</p> <p>※ Please push it into hole.</p> | |

Connection Box

Connections



(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) Proximity sensor

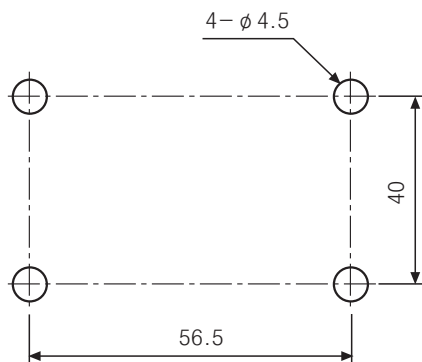
(J) Photo electric sensor

(K) Pressure sensor

(L) Rotary encoder

(M) 5-Phase stepping motor & Driver & Controller

Mounting dimensions



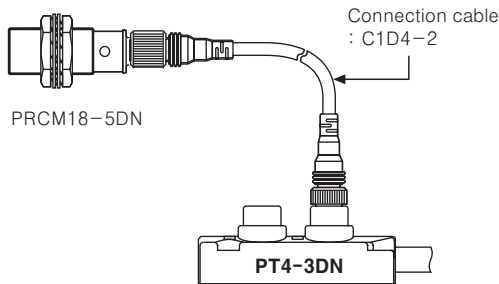
※ 4 / 6 / 8 holes size are the same.

PT Series

■ Connections

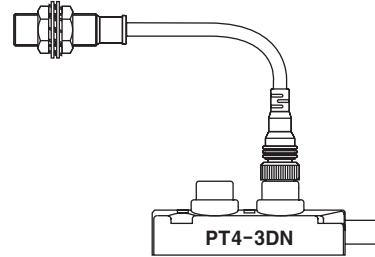
●PRCM Series(Connector type)

Connection cable should be used for connector type proximity sensor.



●PRW Series(Cable outgoing type)

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



■ Applicable models

| Distribution box | Applicable models | | 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 able to use lead type proximity sensor with connection box, if use plug type connector cable.

■ Proper usage

1. Connection box is only for DC power, Do not use with AC power.
2. Please do not mix DC 2-wire and DC 3-wire types.
Remember, there are NPN /PNP type in DC 3-wire type.
3. Please be sure of correct wiring. 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 water-resistive cover (P96-M12-1) on unused connectors.

※Water resistive cover(P96-M12-1) is optional.