# M12 5-pin Connector Distribution Boxes



# **PT Series**

# **CATALOG**

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

#### **Features**

- Easy check operation by operation indicator (red/green)
- Single power operates several sensors
- $\bullet$  Convenient wiring and power line
- IP67 protection structure with water-proof cover (IP52 protection structure with protection cover)
- Supports 1-signal, 2-signal (DC 4-wire)

# **Ordering Information**

This is only for reference, the actual product does not support all combinations. For selecting the specified model, follow the Autonics website.



• No. of ports

4: 4 6: 6 8: 8 **4 Input logic**N: NPN

N: NPN P: PNP

2 External signal connection No mark: Cable type

C: Connector type
S: Spring terminal type
P: Pluggable screw terminal type
Output type
D: DC 3-wire (1 signal)
D: DC 4-wire (2 signal)

**ᢒ Case color** 5: Blue 5K: Black

G Cable length (cable type) 5:5 m 10:10 m **6** Hood cover (Pluggable screw terminal type) No mark: Hood cover included B: Hood cover excluded

• Nameplate sticker  $\times$  1

# **Product Components**

Product
 Instruction manu

• Bolt  $\times$  4 • Nut  $\times$  4

#### roduct components

# Specifications

#### ■ Cable type

Model	PT4- 3D□5-□	PT4- 4D 5-	PT6- 3D□5-□	PT6- 4D□5-□	PT8- 3D□5-□	PT8- 4D□5-□
No. of port	4	4	6	6	8	8
Output type 01)	3-wire (1 signal)	4-wire (2 signal)	3-wire (1 signal)	4-wire (2 signal)	3-wire (1 signal)	4-wire (2 signal)
Output logic <sup>01)</sup>	NPN/PNP model					
Material	Case: PBT (G15 %), name plate: PC, general cable (black): PVC					
Approval	C€ EHI					
Unit weight (packaged) (22)	≈ 900 g (≈ 1100 g)	≈ 1200 g (≈ 1400 g)	≈ 930 g (≈ 1130 g)	≈ 1230 g (≈ 1430 g)	≈ 960 g (≈ 1160 g)	≈ 1260 g (≈ 1460 g)

<sup>01)</sup> Connect the sensor to the proper output type and logic.

#### ■ Connector type

Model	PT4- C3D□5	PT4- C4D□5	PT6- C3D□5	PT6- C4D□5	PT8- C3D□5	PT8- C4D□5
No. of port	4	4	6	6	8	8
Output type 01)	3-wire (1 signal)	4-wire (2 signal)	3-wire (1 signal)	4-wire (2 signal)	3-wire (1 signal)	4-wire (2 signal)
Output logic <sup>01)</sup>	NPN/PNP model					
Material	Case: PBT (G15 %), name plate: PC, general cable (black): PVC					
Approval	JHI ∋ >					
Unit weight (packaged)	≈ 120 g (≈ 230 g)	≈ 125 g (≈ 235 g)	≈ 150 g (≈ 260 g)	≈ 155 g (≈ 265 g)	≈ 180 g (≈ 290 g)	≈ 185 g (≈ 295 g)

<sup>01)</sup> Connect the sensor to the proper output type and logic.

# ■ Spring terminal type

Model	PT4-S3D	PT6-S3D	PT8-S3D				
No. of port	4	6	8				
Output type 01)	3-wire (1 signal)						
Output logic <sup>01)</sup>	NPN/PNP model	NPN/PNP model					
Material	Case: PBT (G15 %), name plate: PC, cover: PBT (G15 %), cover bolt: PA6 (G15 %)						
Applicable cable out diameter	$10.5\mathrm{mm}\pm0.3$						
Approval	C € EHI						
Unit weight (packaged)	≈ 140 g (≈ 270 g)	≈ 165 g (≈ 292 g)	≈ 190 g (≈ 314 g)				

<sup>01)</sup> Connect the sensor to the proper output type and logic.

# ■ Pluggable screw terminal type

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Model	PT4-P3D	PT6-P3D	PT8-P3D			
No. of port	4	6	8			
Output type 01)	3-wire (1 signal)	-wire (1 signal)				
Output logic <sup>01)</sup>	NPN/PNP model					
Material	Case: PBT (G15 %), name p	Case: PBT (G15 %), name plate: PC, cover: PBT (G15 %), cover bolt: PA6 (G15 %)				
Applicable cable out diameter	10.5 mm ± 0.3					
Approval	C € ERI					
Unit weight (packaged)	≈ 150 g (≈ 280 g)	≈ 175 g (≈ 302 g)	≈ 210 g (≈ 334 g)			

<sup>01)</sup> Connect the sensor to the proper output type and logic.

<sup>02)</sup> It is based on 5 m cable

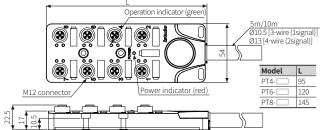
Power supply	12-24 VDC==
Rated current	Cable type / connector type: 2 A (per signal), 4 A (per port), 10 A (body)     Spring / pluggable screw terminal type: 2 A (per signal), 2 A (per port), 7 A (body)
Leakage current	≤ 0.5 mA (only applicable for the cable type / connector type)
Current consumption	≤5 mA
Connection life cycle	≥ 200 operations
Insulation resistance	$\geq$ 100 M $\Omega$ (500 VDC== megger)
Dielectric strength	$500\mathrm{VAC}\sim50/60\mathrm{Hz}$ for 1 minute
Vibration	3 mm amplitude at frequency of 10 to 55Hz (for 1 min) in each X, Y, Z direction for 2 hours
Shock	500 m/s² (≈ 50 G) X, Y, Z in each X, Y, Z direction for 3 times
Indicator	Power indicator: red / operation indicator: green
Ambient temperature	-25 to 75 °C, storage: -30 to 80 °C (a non freezing or condensation environment)
Ambient humidity	35 to 95 %RH, storage: 35 to 95 %RH (a non freezing or condensation environment)
Protection structure 01)	With connector / waterproof cover: IP67 (IEC standard)     With protection cover: IP52 (IEC standard)

01) This is not applicable when connectors and protection/waterproof covers are not mounted.

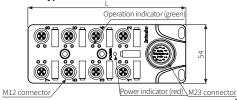
# **Dimensions**

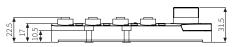
- Unit: mm, For the detailed drawings, follow the Autonics website.
- It is based on the 8-port model.

#### ■ Cable type



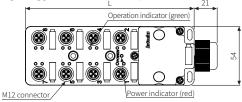
# ■ Connector type

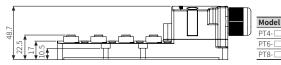




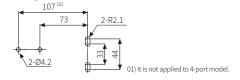
Model	L
PT4	95
PT6-	120
PT8-	145

#### ■ Spring / Pluggable screw terminal type





## ■ Mounting hole



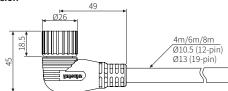
# **Sold Separately**

- Protection cover (CAP-PT)
- Waterproof cover (P96-M12-1)
- M23 cable connector

# Sold Separately: M23 Cable Connector

• Unit: mm, For the detailed drawings, follow the Autonics website.

## **■** Dimension



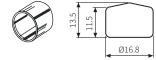
#### **■** Specification

Cable length is option.

Model	CLDH12C -040	CLDH12C -060	CLDH12C -080	CLDH19C -040	CLDH19C -060	CLDH19C -080
Cable Length	4m	6m	8m	4m	6m	8m
Pin no	12-pin			19-pin		
Pin arrangement			7 3			9 8
	Pin no	Wire color	AWG	Pin no	Wire color	AWG
	1	White		1	Purple	
	2	Green		2	Red	AWG22
	3	Yellow	1	3	Gray	
	4	Gray	1,14,622	4	Red/Blue	
	5	Pink	AWG22	5	Green	
	6	Red		6	Blue	AWG17
	7	Black	1	7	Gray/Pink	
	8	Purple	1	8	White/Green	1
Connection	9	Blue		9	White/Yellow	AWG22
wiring	10	-	AWG17	10	White/Gray	7
	11	Brown	JVANOT1	11	Black	
	12	Green/Yellow		12	Green/Yellow	AWG17
				13	Yellow/Brown	
				14	Brown/Green	
				15	White	1,,,,,,,,,,
				16	Yellow	AWG22
	I			17	Pink	
				1		
				18	Gray/Brown	1

# Sold Separately: Protection Cover (CAP-PT)

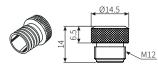
 $\bullet\,$  Unit: mm, For the detailed drawings, follow the Autonics website.



- This protection cover is used for protecting connection holes from dust or particle, etc. Please push it into hole.
- If using protection covers, protection structure of the sensor distribution box is IP52.

# Sold Separately: Waterproof Cover (P96-M12-1)

• Unit: mm, For the detailed drawings, follow the Autonics website.



- This waterproof cover is used for protecting unused connection hole from water or oil, etc. Please tighten it when applying to the ports.
- If using waterproof covers, protection structure of the sensor distribution box is IP67.