AnyWireASLINK System Product Guide

A. Ver.1.1

ASLINKSENSOR [ASLINK Sensor]

B284SB-J1-1K□□P30

■Note on use ⇒ A separate Address Writer is required to set addresses and other data.
＊For more information, refer to [Various Settings] on page 8.

[Type]

B284SB-J1-1KPP30	Positive pressure (0 to 1000kPa)	Bit input: 16 points or Word input: 1 word + Bit input: 3 points max.＊1
B284SB-J1-1KNP30	Negative pressure (0 to -100kPa)	
B284SB-J1-1KLP30	Compound pressure (-100 to 100kPa)	
B284SB-J1-1KPLP30	Low positive pressure (0 to 100kPa)	

＊1 The number of occupied points varies depending on address or parameter setting.

[Notes on Safety]

Precautions that must be observed in order to use this system safely are indicated as shown below. You must observe these precautions.

⚠ **WARNING** A WARNING indicates a potentially hazardous situation which, if not handled correctly, could result in death or serious injury.

⚠ **CAUTION** A CAUTION indicates a potentially hazardous situation which, if not handled correctly, may result in personal injury or property damage.

⚠ **WARNING**
○ System Safety
This system is intended for general industrial applications. It does not have functions for supporting applications requiring higher levels of safety such as safety-related devices or accident prevention systems. The product must not be used for these purposes.
○ Always turn off the power in installing or replacing the system.
○ Prolonged continuous flow of a rated load current or higher or a transit current due to load short-circuit, etc., in the hybrid unit including the output unit and the output circuit may result in smoking or firing. An external safety device such as a fuse must be installed.

⚠ **CAUTION**
○ System power supply
Use a stable, 24V DC power supply. Use of an unstable power supply may cause problems with the system.
○ Separately route high-voltage and power cables
Although the AnyWireASLINK has a high noise margin, install the transmission line and I/O cables away from high-voltage and power cables.
○ Connectors and terminals
 - Consider the length and securing method of cables so that the cables and connectors would not be subjected to any stress and, even if they are under stress, they would not become loose.
 - Make sure to prevent any metal objects from getting inside the connectors or the terminal blocks.
 - Short-circuits caused by metal objects or mis-wiring are likely to damage the device.
○ Do not impose any external loads on the units. Doing so may cause a failure.
○ Do not disconnect or reconnect between the transmission line and remote units when the transmission line is active. A malfunction may occur.
○ Use the AnyWireASLINK within the range of the specifications and conditions shown below.

[Warranty]

■Warranty period
The warranty period of the delivered product shall be one year after delivery to the place specified by the customer.
■Scope of warranty
If a fault occurs with the product under the normal operating conditions assumed in the product specifications and according to the instructions of this manual within the above warranty period, faulty parts shall be replaced or repaired free of charge.
Note: The following cases are exempted from the scope of warranty:
(1) User's improper handling or use of the product
(2) When the fault is caused by any factor other than the delivered product
(3) When the fault is caused by modification or repair of the product by any person other than the supplier
(4) When the fault is caused by a natural disaster or other factor which is not attributable to the supplier

The term "Warranty" mentioned here means warranty of the delivered product only. We shall not be liable for incidental damage resulting from a fault of the delivered product.
■Repair at user's cost
Investigations and repairs after elapse of the warranty period shall be conducted at user's cost.
Even in the warranty period, we shall accept order of repair of a fault or investigation of a cause of a fault beyond the above scope of warranty at user's cost.
■Changes in the product specifications and the descriptions in the manual
The descriptions in this manual may be subject to change without notice.

[About AnyWireASLINK Ver. 1.1]

New functions have been added to AnyWireASLINK products in May 2019 onward. Also, for the purpose of differentiation of compatible functions, indication of product lot number (lot No.) has been changed.

Compatible functions vary depending on lot No. Please understand the following description thoroughly to use each product.

Functions added to Ver. 1.1 are as follows:

Functions available with Ver. 1.1
Word transmission＊2＊3
Single unit simplified replacement＊2

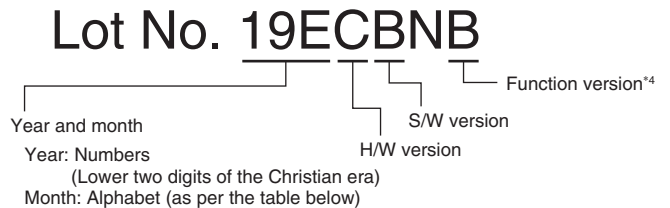＊2 To use these functions, the master unit compatible with each function is required.
For details, refer to this manual together with the manual for the master unit.
＊3 You can use this function with the word-transmission AnyWireASLINK system connected.
To handle word data, word address settings are required for remote units.
It depends on remote units whether word address setting is enabled or not.

[About Lot No.]

As a result of the addition of functions, indication of lot No. has been changed from 3 digits (conventional format: year and month only) to 6 digits or 7 digits.

Example:

Lot No. 19ECBNB

Year and month — Function version＊4
S/W version
H/W version
Year: Numbers
(Lower two digits of the Christian era)
Month: Alphabet (as per the table below)

Alphabet	A	B	C	D	E	F	G	H	I	J	K	L
Month	1	2	3	4	5	6	7	8	9	10	11	12

"19E" means May 2019.

＊4 Some products have no indication of function version.

[About Pictogram＊5]

A	Ver. 1.0＊6
A.	Compatible with Ver. 1.1

＊5 The pictogram may not be marked (or stuck) depending on the product.
＊6 AnyWireASLINK device not compatible with Ver. 1.1 (word transmission and single unit simplified replacement functions)
Some products, not marked with the Ver. 1.1 pictogram, are compatible with the functions included in Ver. 1.1. Refer to the lot No. and the product guide for ultimate confirmation.

[About Word Transmission]

The master unit compatible with the word transmission function provides areas for transmission and receiving of word data (numerical information) such as analog data and sensing level data.
Using this function enables reduction of occupancy of bit information area by word data.
To enable word transmission, it is necessary that the system should be configured only with remote units compatible with the word transmission function.
A remote unit incompatible with the word transmission function cannot be connected to the AnyWireASLINK system to conduct word transmission.
For remote units that handle word data, word address settings are required.
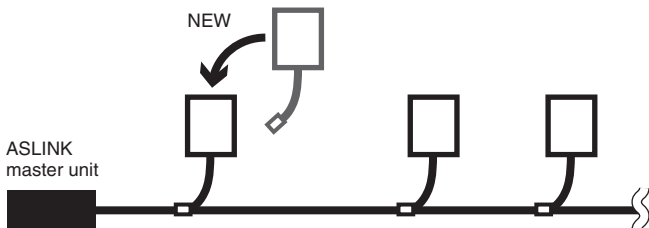
[About Single Unit Simplified Replacement]

During replacement of a remote unit, this function enables automatic settings of address and parameters of the existing remote unit into a new remote unit. (After replacement of the remote unit, address and parameter setting procedure using the address writer is not required.)

■Step 1　Turn OFF the 24V DC power supply for the master unit.

■Step 2　Disconnect a remote unit to be replaced.

ASLINK
master unit
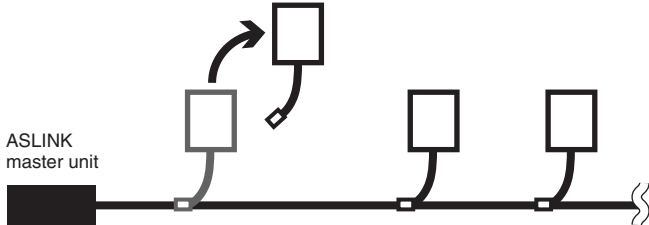
■Step 3　Connect a new remote unit.

NEW

ASLINK
master unit

■Step 4　Turn ON the 24V DC power supply for the master unit.

⚠ CAUTION

- It is necessary that both the master unit and remote unit should be compatible with the single unit simplified replacement function.
- Before disconnection and connection of the remote unit, be sure to turn OFF the power supply.
- For compatibility of a remote unit with the single unit simplified replacement function, see the lot No. and the manual for the remote unit.
- When a remote unit of a new function version is replaced with that of an old function version, the single unit simplified replacement function cannot be used.
- Operation is enabled in the case where the model of the remote unit before replacement is the same as that after replacement.
- If the model of the remote unit before replacement is different from that after replacement, a model mismatching error occurs, disabling address and parameter settings.
- Operation is enabled in the case where the address of the remote unit for replacement is the factory-set address (bit address 511).
- Several remote units cannot be simultaneously replaced. For replacement of several remote units, conduct the replacement procedure for each unit one by one.
- For a remote unit incompatible with the single unit simplified replacement function, set an address and parameters by using the address writer as in the conventional manner.
- For details of the single unit simplified replacement function (limitations, conditions, etc.), refer to the manual for the master unit.

■Identification of function version

Function version information is given on the lot label.
＊The design and contents of the lot label may vary depending on the product model and lot No.

Anywire Corporation

MODEL

DATE 2019-05

Lot　19ECBNB

（10）

MADE IN JAPAN

Function version:
When an equipment parameter is changed due to functional upgrading, etc., the function version will be updated (for example: A→B→C).
When a remote unit of a new function version is replaced with that of an old function version, the single unit simplified replacement function cannot be used.

[Functions]

Model	ASLINKSENSOR 2-wire type (non-isolated)	
Indication mode	Gage pressure	
Pipe connection bore diameter	M5 female thread	
Functions	Bit transmission	
	Word transmission*1*2	
	Single unit simplified replacement*1*2	
	Remote address change*1*2	
	Alarm bit*1	
	Threshold setting (upper limit, lower limit)*1	
	Operation mode setting (hysteresis mode, window comparator mode)*1	
	Input logic selection*1	
	Input response time setting*1	
	Alarm setting (upper limit, lower limit)*1	
	Alarm judgment time setting*1	
	Zero correction	
Address	Bit address setting	○
	Word address setting*1	○

＊1 It depends on lot No. whether this function is available or not.
＊2 To use these functions, a master unit that supports each function is required.
　　For details, refer to this manual together with the manual for the master unit.

■Detecting functions (Status details)

	Remote unit voltage drop	○
Functions	I/O cable disconnection	×
	I/O short-circuit	×
	Sensing level drop	×
	I/O power supply voltage drop	×

[Function Compatibility by Lot No.]

This unit has undergone addition of functions and change of specifications according to version upgrading. Available functions and specifications of the unit vary depending on lot No.

Function/specification	Lot No.
Remote address change	Available with lot No. that indicates year and month digits of "15I" or later.
Single unit simplified replacement	
Word transmission	Available with S/W version "B" or later version (If lot No. is indicated in 3 digits (year and month only), these functions are not available.)
Word address setting	
LED indication for single unit simplified replacement function*3	
Setting of the number of points of bit input in the case of word address setting*4	
Alarm bit setting	

＊3 In the case where a lot No. indicates year and month digits of "15I" or later, the single unit simplified replacement function works even if the lot number does not support the LED indication for the single unit simplified replacement function.
　　(When the master unit executes the single unit simplified replacement function, addresses/parameters will be written, if specified conditions are satisfied.)
＊4 This product is equipped with the input indicator (IN0, IN1).
　　For products whose S/W version is "A" or lot No. is indicated in 3 digits, the input indicator is not provided.

■How to check

Lot No. is indicated on the lot label.
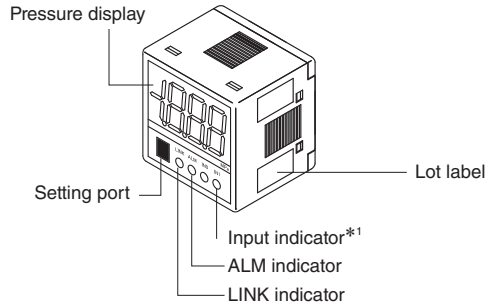
Side surface of this unit
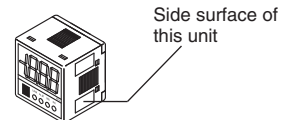
Example:

Lot No. 19ECBNB

Year and month

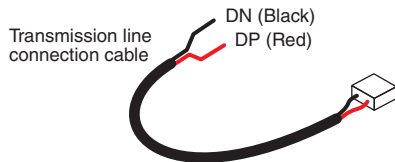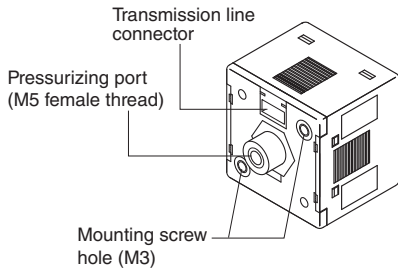S/W version

[Included in the Package]

| Sensor body … 1 |
| Transmission line connection cable (1000mm) … 1 |
| Panel mounting adaptor … 1 |

＊Prepare a metal bracket separately, if required.

[Name of Each Part]

- Pressure display
- Setting port
- Lot label
- Input indicator*1
- ALM indicator
- LINK indicator

*1 Provided for products of S/W version "B" or later version.
Not provided for products whose S/W version is "A" or lot No. is indicated in 3 digits.

- Transmission line connector
- Pressurizing port (M5 female thread)
- Mounting screw hole (M3)

- Transmission line connection cable
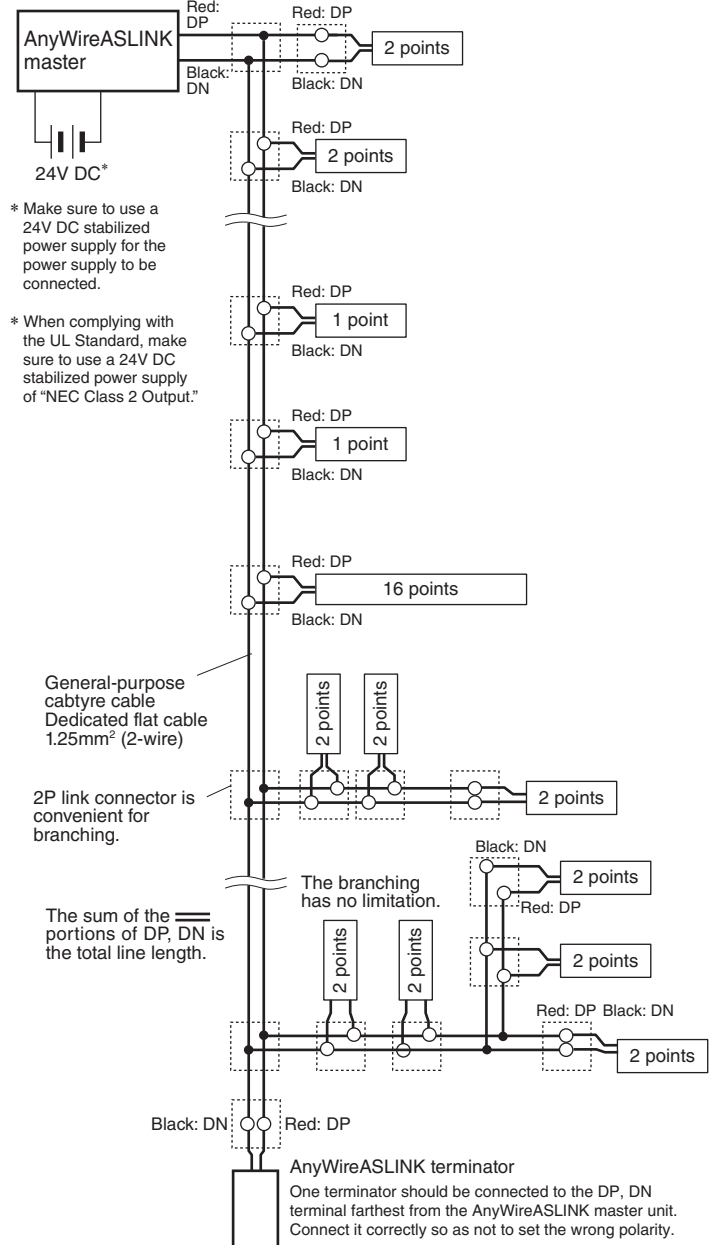- DN (Black)
- DP (Red)

[How to Connect AnyWireASLINK]

The AnyWireASLINK can employ a two-wire or four-wire terminal selectively depending on the load current.
If the load current is small, using a two-wire (non-isolated) terminal allows for achieving simplified wiring without local power supply.
In the case of prioritizing the sites of concentrated loads and/or the number of connections, hybridization with a four-wire (isolated) terminal, which supports local power supply, is also possible.
Make sure to use a four-wire (isolated) terminal in the case of input and load driving using an external power supply.

[System Configuration Example]
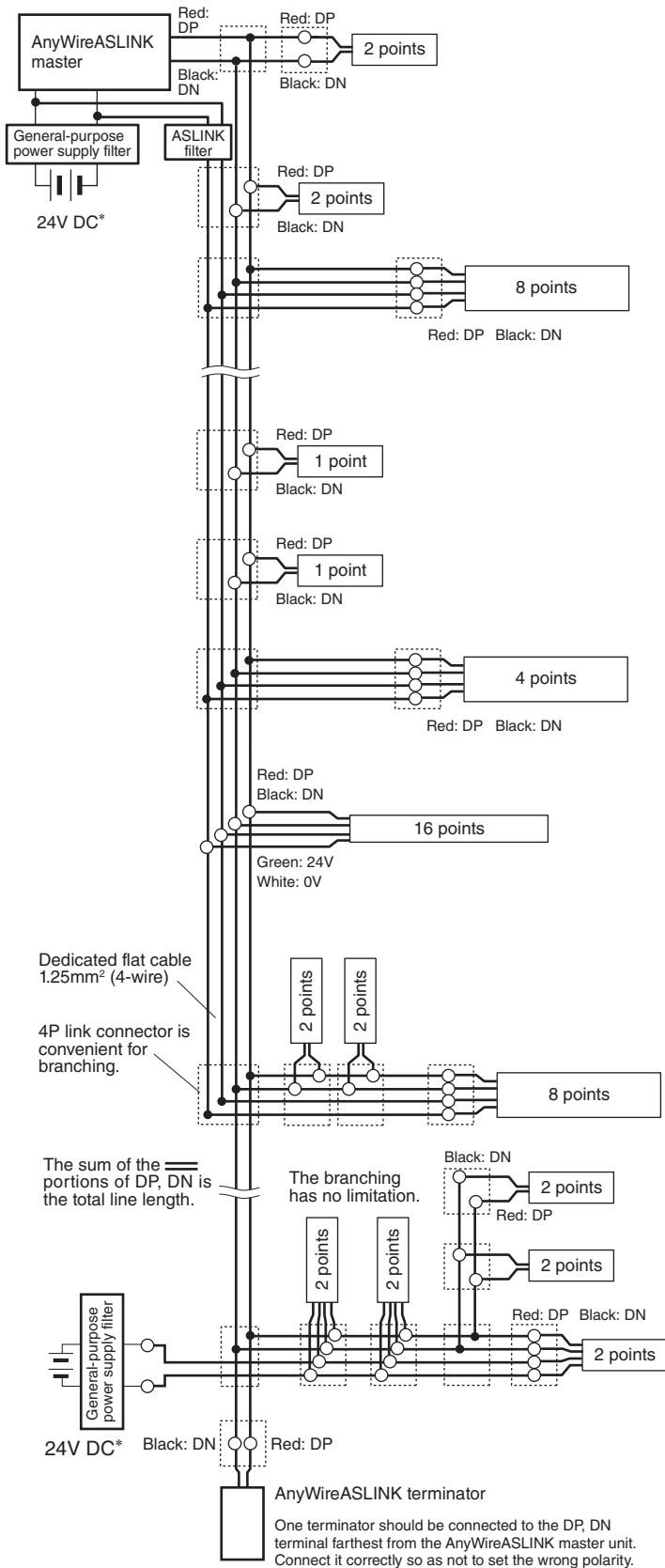
■Connection with 2-wire (non-isolated) terminals only

＊ Make sure to use a 24V DC stabilized power supply for the power supply to be connected.

＊ When complying with the UL Standard, make sure to use a 24V DC stabilized power supply of "NEC Class 2 Output."

- General-purpose cabtyre cable Dedicated flat cable 1.25mm² (2-wire)
- 2P link connector is convenient for branching.
- The sum of the ━━ portions of DP, DN is the total line length.
- The branching has no limitation.

AnyWireASLINK terminator
One terminator should be connected to the DP, DN terminal farthest from the AnyWireASLINK master unit. Connect it correctly so as not to set the wrong polarity.

■ Relationship between the size and length of the transmission line and the supply current (Table 1)

Size of the transmission line (DP, DN)	Supply current on the transmission line (DP, DN)		
	Total length: 50m or less	Total length: Over 50m, no longer than 100m	Total length: Over 100m, no longer than 200m
1.25mm²	MAX 2A	MAX 1A	MAX 0.5A
0.75mm²	MAX 1.2A	MAX 0.6A	MAX 0.3A
0.5mm²	MAX 0.8A	MAX 0.4A	MAX 0.2A

⚠ CAUTION
- Refer to Table 1 so that the size and length of the transmission line and the allowable supply current lie within an appropriate range.
- Connect the same symbols (DP, DN) correctly between the AnyWireASLINK master unit and each device.
- The branching length or branch number has no limitation.
- Include the length of the cable provided with the terminal in the "total line length."
- Connect the terminator (with polarity) on the transmission line terminal farthest from the AnyWireASLINK master unit.

■Example of mixed installation with 2-wire (non-isolated) and 4-wire (isolated) terminals

Red: DP
AnyWireASLINK master
Red: DP
Black: DN
Black: DN
2 points

General-purpose power supply filter
ASLINK filter

24V DC*

Red: DP
2 points
Black: DN

8 points
Red: DP   Black: DN

Red: DP
1 point
Black: DN

Red: DP
1 point
Black: DN

4 points
Red: DP   Black: DN

Red: DP
Black: DN
16 points
Green: 24V
White: 0V

Dedicated flat cable 1.25mm^2 (4-wire)

4P link connector is convenient for branching.

2 points
2 points
8 points

The sum of the portions of DP, DN is the total line length.

The branching has no limitation.

Black: DN
2 points
Red: DP

2 points
2 points

2 points
2 points

Red: DP   Black: DN
2 points

General-purpose power supply filter

24V DC*

Black: DN   Red: DP

AnyWireASLINK terminator

One terminator should be connected to the DP, DN terminal farthest from the AnyWireASLINK master unit. Connect it correctly so as not to set the wrong polarity.

⚠ CAUTION   To connect loads (e.g. I/O ports) that are controlled with a power supply other than the one used for the AnyWireASLINK system, always use a 4-wire (isolated) terminal. Otherwise, malfunction may be caused.

[Notes on Combined Use of 4-Wire (Isolated) Terminal]

If the total length of the sections where all the DP, DN, 24V, and 0V lines run in parallel in the power supply system is more than 50m, connect an ASLINK filter (Type ANF-01) or a filter manufactured by COSEL Co., Ltd. (Type EAC-06-472) in series to the 24V and 0V lines at a position where these four lines start running in parallel.
This will improve noise resistance, suppress the adverse effects of crosstalk caused by transmitted signals, and stabilize signals.
The above filters must be inserted regardless of whether power is supplied to all terminals collectively from the power supply for the master or power is supplied to each terminal individually from their local power supply.
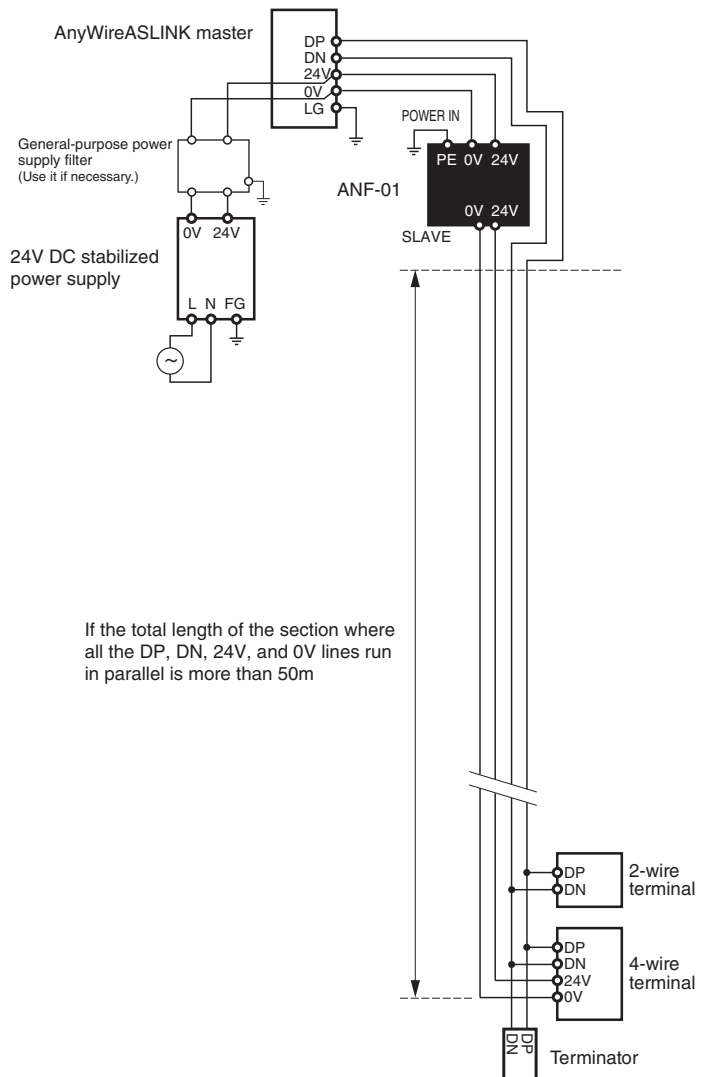
Insert the "ASLINK filter [Type ANF-01]" regardless of installation method and distance when complying with CE Standard.
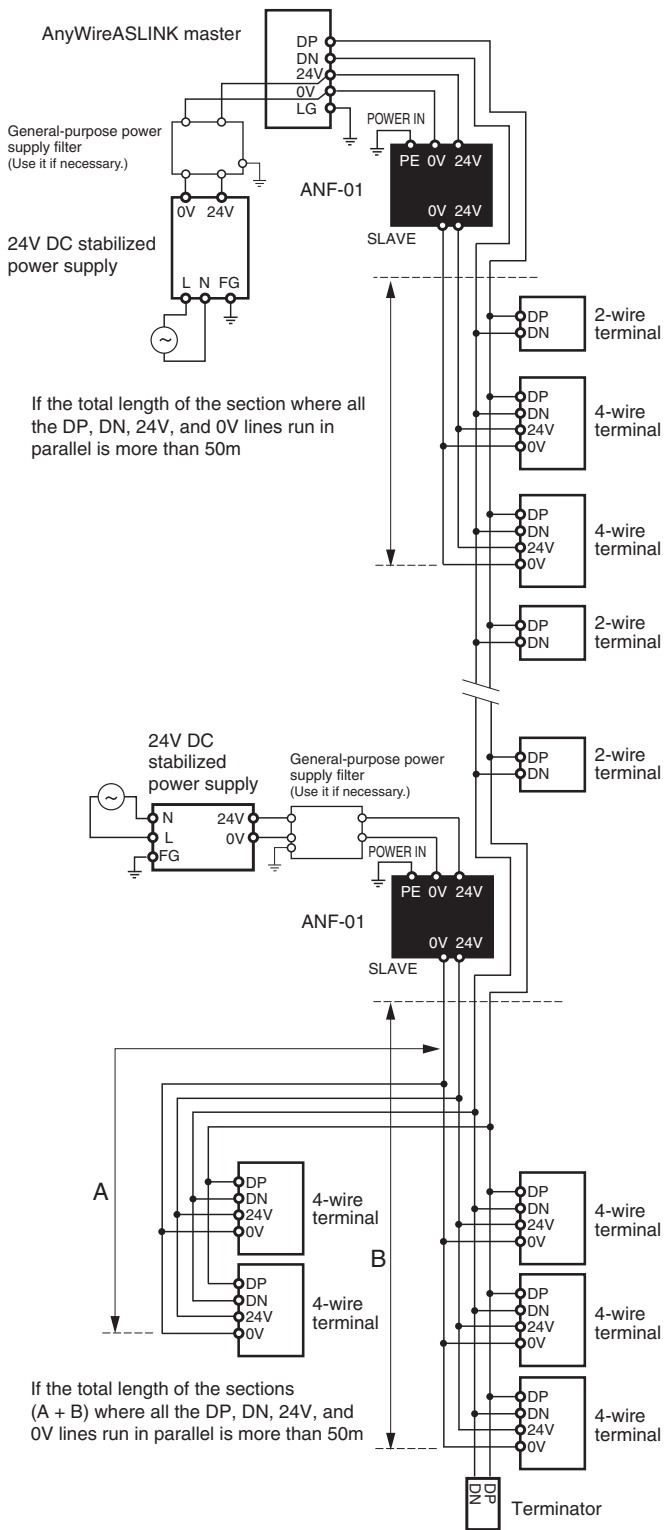
■Filter allowable current

Product	Type	Allowable current
ASLINK filter	ANF-01	MAX 5A/24V DC
Filter of COSEL Co., Ltd.	EAC-06-472	MAX 6A/24V DC

■AnyWire Type: ANF-01 Connection example

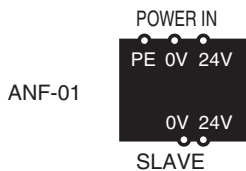①Power supply to the entire system

AnyWireASLINK master
DP
DN
24V
0V
LG

POWER IN

General-purpose power supply filter (Use it if necessary.)

PE 0V 24V
ANF-01
0V 24V
SLAVE

24V DC stabilized power supply

0V 24V

L N FG

If the total length of the section where all the DP, DN, 24V, and 0V lines run in parallel is more than 50m

DP
DN
2-wire terminal

DP
DN
24V
0V
4-wire terminal

DP
DN
Terminator

②Local power supply/branching

AnyWireASLINK master

DP
DN
24V
0V
LG

General-purpose power
supply filter
(Use it if necessary.)

ANF-01

POWER IN
PE 0V 24V
0V 24V
SLAVE

24V DC stabilized
power supply

0V 24V
L N FG

DP
DN
2-wire terminal

DP
DN
24V
0V
4-wire terminal

DP
DN
24V
0V
4-wire terminal

DP
DN
2-wire terminal

If the total length of the section where all
the DP, DN, 24V, and 0V lines run in
parallel is more than 50m

DP
DN
2-wire terminal

24V DC
stabilized
power supply

N 24V
L 0V
FG

General-purpose power
supply filter
(Use it if necessary.)

POWER IN
PE 0V 24V
0V 24V

ANF-01

SLAVE

A

DP
DN
24V
0V
4-wire terminal

DP
DN
24V
0V
4-wire terminal

B

DP
DN
24V
0V
4-wire terminal

DP
DN
24V
0V
4-wire terminal

DP
DN
24V
0V
4-wire terminal

If the total length of the sections
(A + B) where all the DP, DN, 24V, and
0V lines run in parallel is more than 50m

DP
DN
Terminator

■COSEL Co., Ltd. Type: EAC-06-472 Connection example

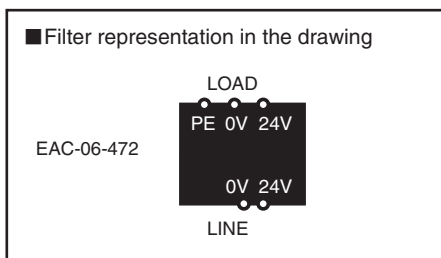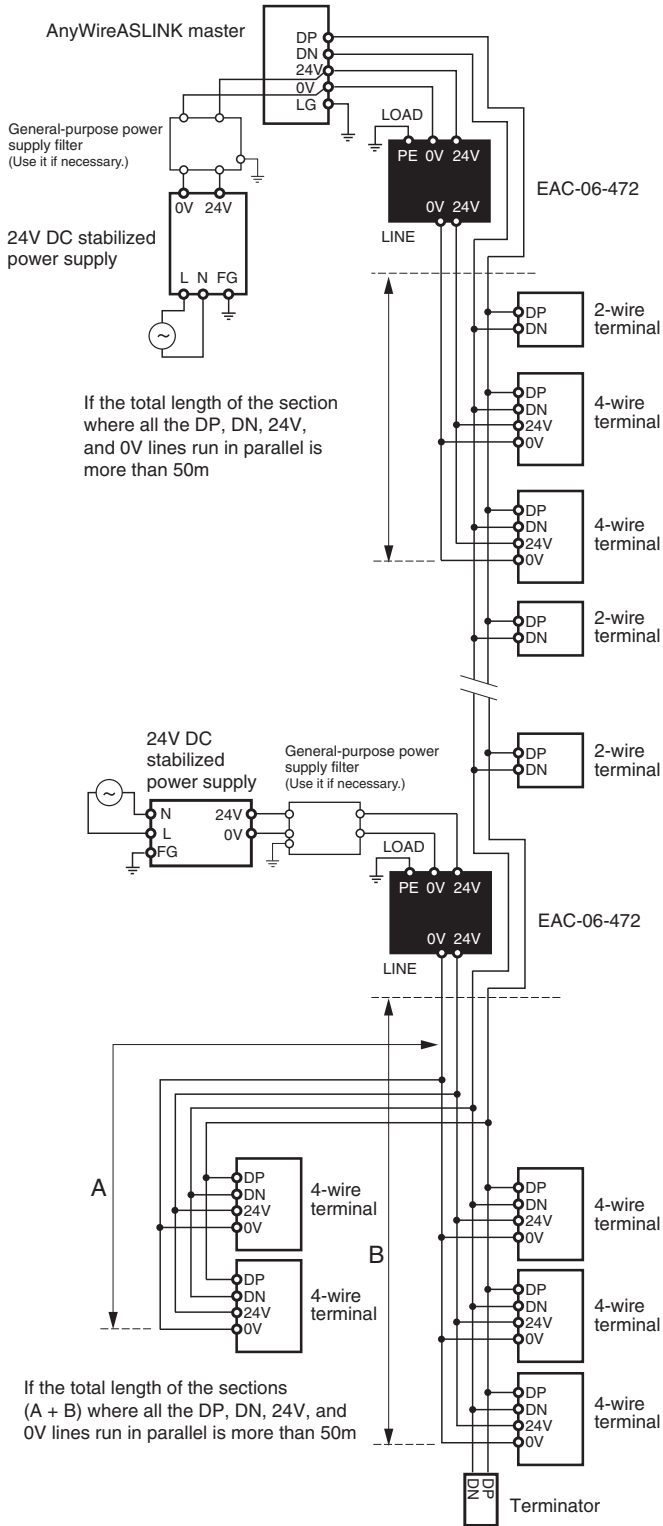①Power supply to the entire system

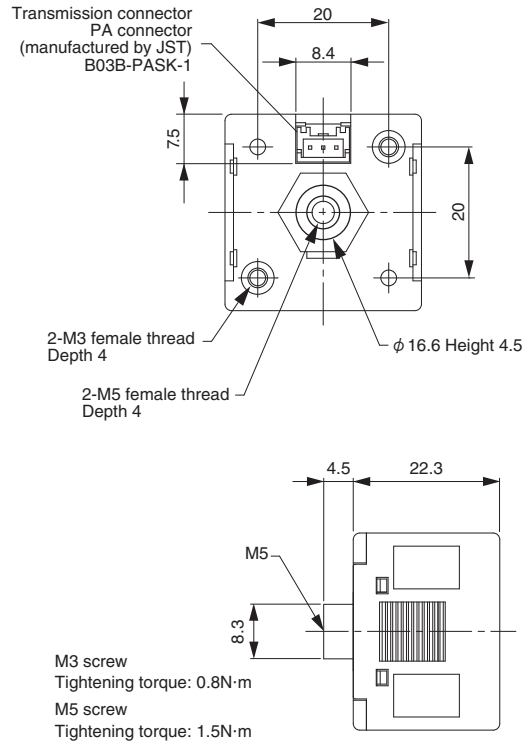＊When using this filter, please be careful of the positions of LOAD and LINE.

AnyWireASLINK master

DP
DN
24V
0V
LG

General-purpose power
supply filter
(Use it if necessary.)

LOAD
PE 0V 24V
0V 24V
LINE

EAC-06-472

24V DC stabilized
power supply

0V 24V
L N FG

If the total length of the section where
all the DP, DN, 24V, and 0V lines run
in parallel is more than 50m

DP
DN
2-wire terminal

DP
DN
24V
0V
4-wire terminal

DP
DN
Terminator

■Filter representation in the drawing

POWER IN
PE 0V 24V
0V 24V
SLAVE

ANF-01

For further information on
ANF-01, refer to the product
guide on ANF-01.

② Local power supply/branching -

∗ When using this filter, please be careful of the positions of LOAD and LINE.

AnyWireASLINK master

DP
DN
24V
0V
LG

LOAD

PE 0V 24V

EAC-06-472

0V 24V

LINE

General-purpose power supply filter
(Use it if necessary.)

0V 24V

24V DC stabilized power supply

L N FG

If the total length of the section where all the DP, DN, 24V, and 0V lines run in parallel is more than 50m

DP
DN
2-wire terminal

DP
DN
24V
0V
4-wire terminal

DP
DN
24V
0V
4-wire terminal

DP
DN
2-wire terminal

DP
DN
2-wire terminal

24V DC stabilized power supply

General-purpose power supply filter
(Use it if necessary.)

N 24V
L 0V
FG

LOAD

PE 0V 24V

EAC-06-472

0V 24V

LINE

A

DP
DN
24V
0V
4-wire terminal

DP
DN
24V
0V
4-wire terminal

B

DP
DN
24V
0V
4-wire terminal

DP
DN
24V
0V
4-wire terminal

DP
DN
24V
0V
4-wire terminal

If the total length of the sections (A + B) where all the DP, DN, 24V, and 0V lines run in parallel is more than 50m

DP
DN
Terminator

■ Filter representation in the drawing

LOAD

PE 0V 24V

EAC-06-472

0V 24V

LINE

[Installation]

To mount this product, use the panel mounting holder included in the product, or the mounting screw hole of the sensor body.
To use a metal bracket, please contact us for further information.

Transmission connector
PA connector
(manufactured by JST)
B03B-PASK-1

20

8.4

7.5

20

2-M3 female thread
Depth 4

ϕ16.6 Height 4.5

2-M5 female thread
Depth 4

4.5 22.3

M5

8.3

M3 screw
Tightening torque: 0.8N·m
M5 screw
Tightening torque: 1.5N·m

⚠CAUTION When you fasten the sensor body, provide a margin so as not to apply stress to the cable, connector, etc.
Do not excessively tighten the screws. Doing so may cause a fault of the equipment.

＜Panel cutout dimensions＞

To mount a single unit

$31^{+0}_{-0.4}$

$31^{+0}_{-0.4}$

To mount several units

$31 \times n + 3.5 \times (n - 1)$ (n: number of units)

$31^{+0}_{-0.4}$

55 or more

＜Panel mounting procedure＞
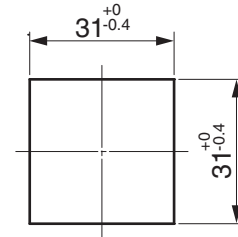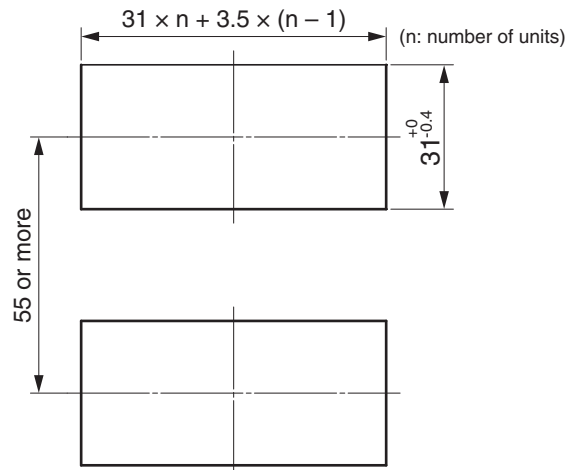
Put the mounting frame over the front of the sensor body, and fix the frame at the positions of grooves A.

A: Mounting frame fastening position
B: Mounting bracket fastening position

Sensor body
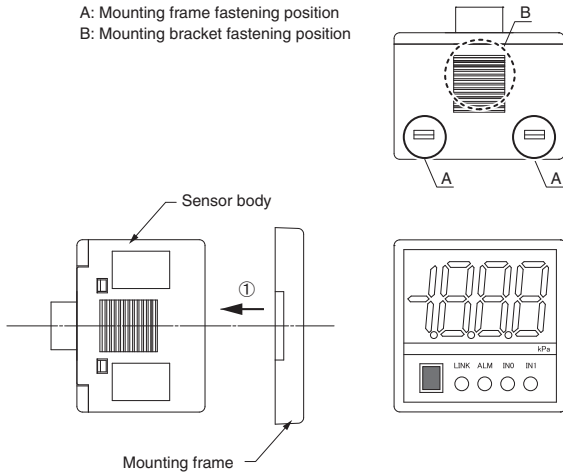
Mounting frame

Insert the sensor body with the mounting frame into the panel hole, and put the mounting bracket from the back of the panel. Fix the mounting bracket with groove B while adjusting the mounting position.
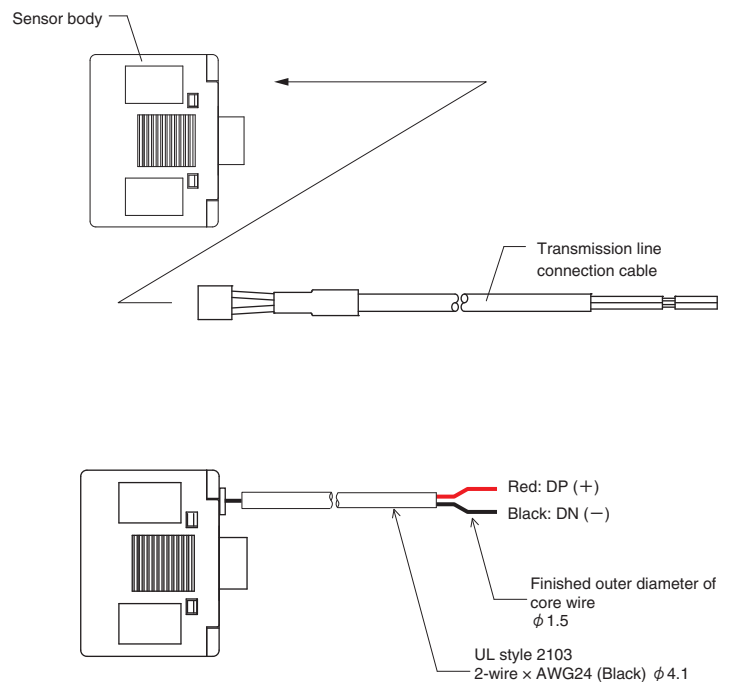

Mounting panel (1 to 6mm)

Mounting bracket
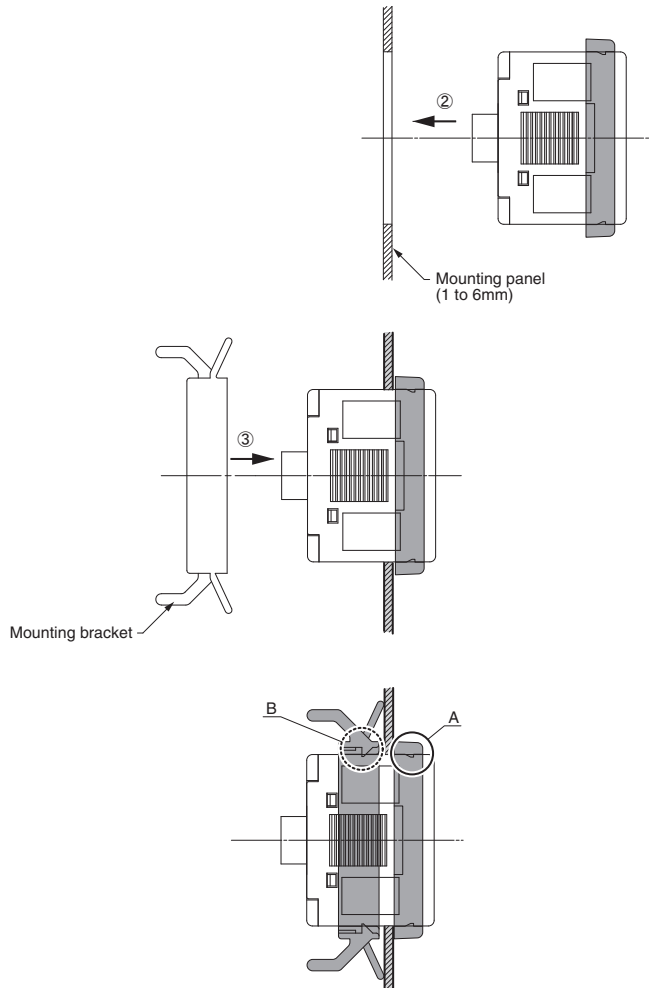
[Installation Location]

- Locations where this product is not directly subject to vibration or shock
- Locations where this product is not directly exposed to dust
- Locations where this product is not directly exposed to conductors, such as metal chips or spatters
- Locations without condensation
- Locations where the atmosphere is free of corrosive gases, flammable gases, and sulfur
- Locations far from high-voltage or high-current cables
- Locations far from servos, inverters, and other cables and controllers that generate high-frequency noise

[Precautions for Use]

- This terminal is intended for use in connection with the AnyWireASLINK transmission line.
  Even if this terminal is directly connected to an I/O card of PLC, etc., it does not work.
- Use this product in the proper voltage range.
- The transmission line included in the sensor body shall be included in the total line length.
- For address setting, make sure that the specified number of transmission points is not exceeded. If the specified number of transmission points is exceeded, detection is disabled.
- Before connecting the pipe to this terminal, eliminate dust remaining in the pipe by air blow.
- If foreign objects may enter the fluid, connect a filter or mist separator to the inlet of the pipe (source pressure side).

[Transmission Line Connection]

The sensor body is equipped with the transmission line connection cable.

Sensor body

Transmission line connection cable

Red: DP (＋)
Black: DN (－)

Finished outer diameter of core wire ϕ 1.5

UL style 2103
2-wire × AWG24 (Black) ϕ 4.1

■ Example of fitting the LP connector at the end of transmission line connection cable

[When 2-pole LP connector (LP2-PWH-10P) is used]

The LP connector (link connector) is a connector that integrates male and female terminals.
It makes it easy to "connect" and "branch" the line simply by connecting two connectors of the same type.
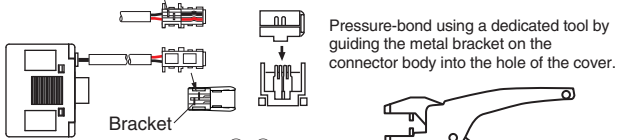
Pin No.	Description
1	DN
2	DP

Place the wires in the grooves so that the black wire (DN) is on the hinge side of the cover, fold A over B and engage the hook C to fasten it.
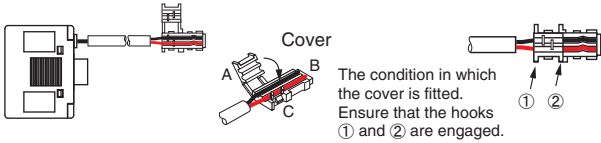
Cover

The condition in which the cover is fitted.
Ensure that the hooks ① and ② are engaged.

Bracket insertion hole

Pressure-bond using a dedicated tool by guiding the metal bracket on the connector body into the hole of the cover.
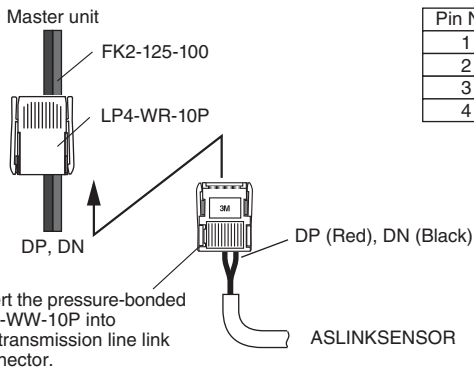
Bracket
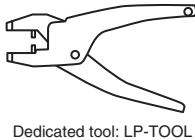
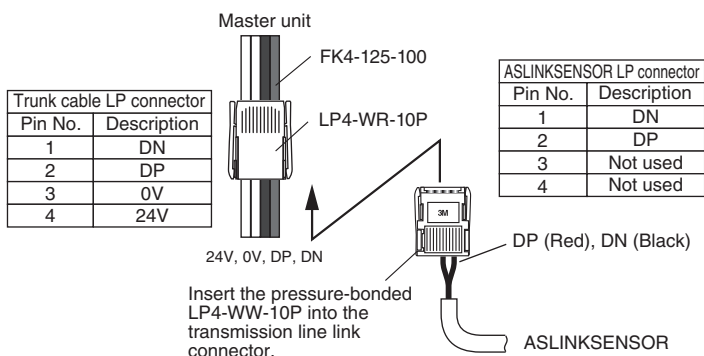After pressure-bonding, ensure that the hooks ③ to ⑥ are securely engaged.

Dedicated tool: LP-TOOL

Master unit

FK2-125-100

LP2-BR-10P

Insert the pressure-bonded LP2-PWH-10P into the transmission line link connector.

DP (Red), DN (Black)

DP, DN

ASLINKSENSOR
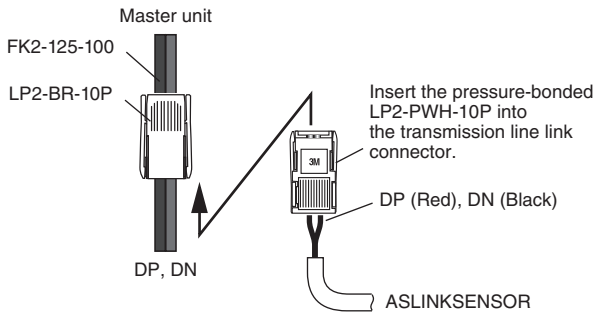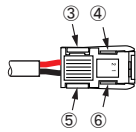
[When 4-pole LP connector (LP4-WW-10P) is used: Example of trunk cable with 2 wires]

Master unit

FK2-125-100

LP4-WR-10P

DP, DN

DP (Red), DN (Black)

Insert the pressure-bonded LP4-WW-10P into the transmission line link connector.

ASLINKSENSOR

Pin No.	Description
1	DN
2	DP
3	Not used
4	Not used

[When 4-pole LP connector (LP4-WW-10P) is used: Example of trunk cable with 4 wires]

Master unit

FK4-125-100

LP4-WR-10P

24V, 0V, DP, DN

DP (Red), DN (Black)

Insert the pressure-bonded LP4-WW-10P into the transmission line link connector.

ASLINKSENSOR

Trunk cable LP connector	
Pin No.	Description
1	DN
2	DP
3	0V
4	24V

ASLINKSENSOR LP connector	
Pin No.	Description
1	DN
2	DP
3	Not used
4	Not used

## [Various Settings]

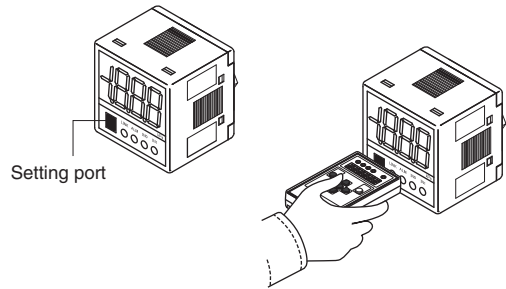| Address setting	Parameter setting

■ Common procedure for address writer operation

Be sure to connect to the AnyWireASLINK master unit to use.
ARW-04 (an address writer) of Rev. (Ver.) 2.01 or later is needed for word address setting.
ARW-04 of Rev. (Ver.) 1.01 or later will do for parameter settings other than word addresses.
For details of the operating method, refer to the product guide for ARW-04.

1. Connect this unit to the AnyWireASLINK master unit.
   A transmission signal is needed to write or read setting parameters.
   Set parameters with the address writer with a transmission signal connected to the transmission line (DP, DN) of the terminal.

Transmission signal

Red: DP

Black: DN

AnyWireASLINK master

24V DC＊

＊Use a 24V DC stabilized power supply.
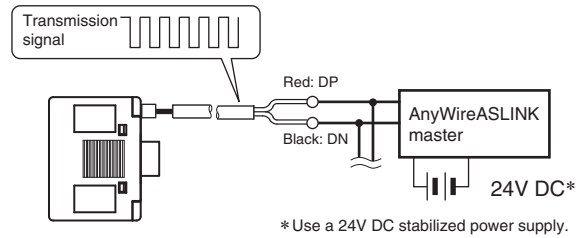
2. All AnyWireASLINK devices require settings.
   Specify settings while pointing the address writer at the setting port of this unit.
   (Hold the light emitting/receiving part as close to the setting port as possible.)

Setting port

Address setting

■ Address number setting

For address numbers, specify the leading number of the transmission frames to be allocated to the unit.
This unit is compatible with the setting of both bit and word addresses.
Note that the occupied area varies depending on the address to be set.

＊ Refer to the lot No. to check whether word address setting is enabled.

In the case where the unit is used with bit address setting (Bit input 16 points type)

Starting from the preset address number, 16 points of the bit input information area are occupied.

Bit input information area

0   15   48   63

Set address: "Bit 0"   Set address: "Bit 48"
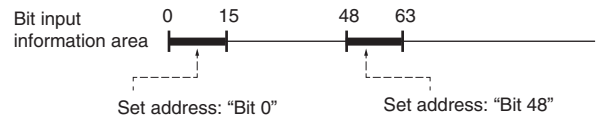
In the case where the unit is used with word address setting

Starting from the preset address number, <u>one word of the word input information area is occupied</u>, and a digital value of measured pressure is sent to the word input information area.
Also, <u>input ON/OFF and alarm bit ON/OFF are activated depending on the equipment parameter setting, and the ON/OFF status is sent to the bit input information area.</u>
<u>Word address setting determines an occupied part of the word input information area, and also automatically determines an occupied part of the bit input information area.</u>
Word address and bit address cannot be freely set each.
Relationship between the occupied part of the word input information area and the occupied part of the bit input information area depending on word address setting is shown below.

* Example: When input 0 is used
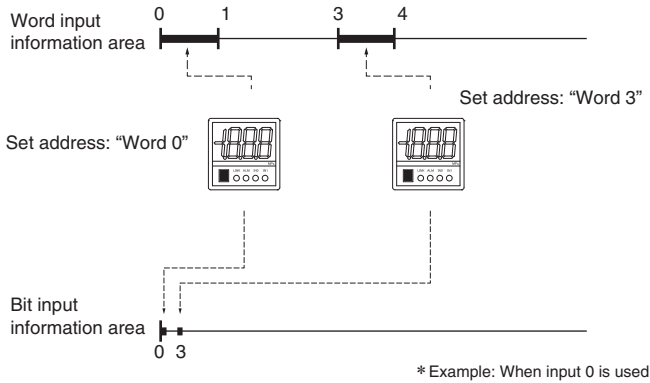
⚠ **CAUTION**

When you set a word address, make sure that the occupied parts of the word input information area and the bit input information area are not duplicated by those assigned to any other remote unit.

The factory-set address is "bit address 255" or "bit address 511," which indicates that an address has not been set.
The factory-set address varies depending on lot No., as follows:
   For S/W version "B" or later version: Bit address 511
   For S/W version "A" or 3-digit lot No.: Bit address 255
Input and output operations are disabled with the factory-set address.

Example: **Lot No. 19ECBNB**
             └ S/W version

Parameter setting

■ Alarm bit selection setting [Equipment parameter 1]

This parameter is used to send an alarm bit into the bit input information area.
Alarm detecting conditions are specified by equipment parameters 11, 12 and 14.
∗ For S/W version "B" or later version, this function is available.
  For S/W version "A" or 3-digit lot No., this function is not available.
  This function is enabled when this unit is used with word address setting.

Variable	Description
0	Alarm bit disabled
100	Alarm bit enabled

Factory setting: 0

[When enabled]

	Bit input information area
Offset address	n + value of equipment parameter 6
Description	Alarm bit

n: Word address number assigned to this unit

■ Input 0 upper limit setting [Equipment parameter 2]

This parameter is used to set an upper limit value of pressure detection input 0.
For both hysteresis mode and window comparator mode → Refer to equipment parameter 8.
To use this function, setting equipment parameter 6 is required.
∗ For S/W version "B" or later version, this function is available.
  For S/W version "A" or 3-digit lot No., this function is not available.
  This function is enabled when this unit is used with word address setting.

■B284SB-J1-1KPP30

Variable	Description
0 to 1000	0 to 1000kPa

Factory setting: 600 (600kPa)

■B284SB-J1-1KNP30

Variable	Description
0 to 1000	0 to -100kPa

Factory setting: 600 (-60kPa)

■B284SB-J1-1KLP30

Variable	Description
0 to 1000	-100 to 100kPa

Factory setting: 600 (20kPa)

■B284SB-J1-1KPLP30

Variable	Description
0 to 1000	0 to 100kPa

Factory setting: 600 (60kPa)

■ Input 0 lower limit setting [Equipment parameter 3]

This parameter is used to set a lower limit value of pressure detection input 0.
For both hysteresis mode and window comparator mode → Refer to equipment parameter 8.
To use this function, setting equipment parameter 6 is required.
∗ For S/W version "B" or later version, this function is available.
  For S/W version "A" or 3-digit lot No., this function is not available.
  This function is enabled when this unit is used with word address setting.

■B284SB-J1-1KPP30

Variable	Description
0 to 1000	0 to 1000kPa

Factory setting: 400 (400kPa)

■B284SB-J1-1KNP30

Variable	Description
0 to 1000	0 to -100kPa

Factory setting: 400 (-40kPa)

■B284SB-J1-1KLP30

Variable	Description
0 to 1000	-100 to 100kPa

Factory setting: 400 (-20kPa)

■B284SB-J1-1KPLP30

Variable	Description
0 to 1000	0 to 100kPa

Factory setting: 400 (40kPa)

∗ This parameter cannot be set larger than the input 0 upper limit value (equipment parameter 2).

■ Input 1 upper limit setting [Equipment parameter 4]

This parameter is used to set an upper limit value of pressure detection input 1.
For both hysteresis mode and window comparator mode → Refer to equipment parameter 8.
To use this function, setting equipment parameter 6 is required.
∗ For S/W version "B" or later version, this function is available.
  For S/W version "A" or 3-digit lot No., this function is not available.
  This function is enabled when this unit is used with word address setting.

■B284SB-J1-1KPP30

Variable	Description
0 to 1000	0 to 1000kPa

Factory setting: 600 (600kPa)

■B284SB-J1-1KNP30

Variable	Description
0 to 1000	0 to -100kPa

Factory setting: 600 (-60kPa)

■B284SB-J1-1KLP30

Variable	Description
0 to 1000	-100 to 100kPa

Factory setting: 600 (20kPa)

■B284SB-J1-1KPLP30

Variable	Description
0 to 1000	0 to 100kPa

Factory setting: 600 (60kPa)

■ Input 1 lower limit setting [Equipment parameter 5]

This parameter is used to set a lower limit value of pressure detection input 1.
For both hysteresis mode and window comparator mode → Refer to equipment parameter 8.
To use this function, setting equipment parameter 6 is required.
∗ For S/W version "B" or later version, this function is available.
  For S/W version "A" or 3-digit lot No., this function is not available.
  This function is enabled when this unit is used with word address setting.

■ B284SB-J1-1KPP30

Variable	Description
0 to 1000	0 to 1000kPa

Factory setting: 400 (400kPa)

■ B284SB-J1-1KNP30

Variable	Description
0 to 1000	0 to -100kPa

Factory setting: 400 (-40kPa)

■ B284SB-J1-1KLP30

Variable	Description
0 to 1000	-100 to 100kPa

Factory setting: 400 (-20kPa)

■ B284SB-J1-1KPLP30

Variable	Description
0 to 1000	0 to 100kPa

Factory setting: 400 (40kPa)

∗ This parameter cannot be set larger than the input 1 upper limit value (equipment parameter 4).

■ Selection of the number of points of bit input in the case of word address setting [Equipment parameter 6]

When this unit is used for word address setting, a signal can be also sent to the bit input information area. Input ON conditions are specified by equipment parameters 2 to 5, 8 and 9.
∗ For S/W version "B" or later version, this function is available.
  For S/W version "A" or 3-digit lot No., this function is not available.
  This function is enabled when this unit is used with word address setting.

Variable	Description
0	Bit input: 0 points
1	Bit input: 1 point (using input 0 only)
2	Bit input: 2 points (using both input 0 and input 1)

Factory setting: 0

■ Operation mode selection [Equipment parameter 8]

This parameter is used to set the hysteresis mode and/or window comparator mode of input 0 and input 1.
To use this function, setting equipment parameter 6 is required.
∗ For S/W version "B" or later version, this function is available.
  For S/W version "A" or 3-digit lot No., this function is not available.
  This function is enabled when this unit is used with word address setting.
∗ For details, refer to pages 12 to 13.

■ When 1 point of bit input is used

Variable	Description
0	Hysteresis mode
1	Window comparator mode

Factory setting: 0

■ When 2 points of bit input are used

Variable	Description
0	Input 0: Hysteresis mode, Input 1: Hysteresis mode
1	Input 0: Window comparator mode, Input 1: Hysteresis mode
2	Input 0: Hysteresis mode, Input 1: Window comparator mode
3	Input 0: Window comparator mode, Input 1: Window comparator mode

Factory setting: 0

■ Input logic selection [Equipment parameter 9]

This parameter is used to set detection logic of input 0 and input 1.
To use this function, setting equipment parameter 6 is required.
∗ For S/W version "B" or later version, this function is available.
  For S/W version "A" or 3-digit lot No., this function is not available.
  This function is enabled when this unit is used with word address setting.

■ When 1 point of bit input is used

Variable	Description
0	Hysteresis mode Positive logic (sensor value > upper limit value → ON) Hysteresis is set from the input lower limit value (equipment parameter 3). Window comparator mode Positive logic (upper limit value > sensor value > lower limit value → ON)
1	Hysteresis mode Negative logic (sensor value < upper limit value → ON) Hysteresis is set from the input lower limit value (equipment parameter 3). Window comparator mode Negative logic (sensor value > upper limit value, lower limit value > sensor value → ON)

Factory setting: 0

■ When 2 points of bit input are used

Variable	Description
0	Hysteresis mode Both input 0 and input 1: Positive logic (sensor value > upper limit value → ON) ∗ Hysteresis is set from the input lower limit value (equipment parameter 3). Window comparator mode Both input 0 and input 1: Positive logic (upper limit value > sensor value > lower limit value → ON)
1	Hysteresis mode Input 0: Negative logic (sensor value < upper limit value → ON) Input 1: Positive logic (sensor value > upper limit value → ON) ∗ Hysteresis is set from the input lower limit value (equipment parameter 3). Window comparator mode Input 0: Negative logic (sensor value > upper limit value, lower limit value > sensor value → ON) Input 1: Positive logic (upper limit value > sensor value > lower limit value → ON)
2	Hysteresis mode Input 0: Positive logic (sensor value > upper limit value → ON) Input 1: Negative logic (sensor value < upper limit value → ON) ∗ Hysteresis is set from the input lower limit value (equipment parameter 3). Window comparator mode Input 0: Positive logic (sensor value > upper limit value, lower limit value > sensor value → ON) Input 1: Negative logic (upper limit value > sensor value > lower limit value → ON)
3	Hysteresis mode Both input 0 and input 1: Negative logic (sensor value < upper limit value → ON) ∗ Hysteresis is set from the input lower limit value (equipment parameter 3). Window comparator mode Both input 0 and input 1: Negative logic (sensor value > upper limit value, lower limit value > sensor value → ON)

Factory setting: 0

■ Input response time selection [Equipment parameter 10]

This parameter is used to set a time required to turn ON or OFF input relative to an upper/lower limit value. (The preset response time applies to both ON and OFF operations.)
To use this function, setting equipment parameter 6 is required.
∗ For S/W version "B" or later version, this function is available.
  For S/W version "A" or 3-digit lot No., this function is not available.
  This function is enabled when this unit is used with word address setting.

Variable	Unit
0 to 255	10ms

Factory setting: 1

■ Alarm monitoring time setting [Equipment parameter 11]

This parameter is used to set an alarm judgment monitoring time.
Alarm detection judgment is based on the settings of equipment parameters 11, 12 and 14.
When an alarm condition is detected, the sensing level drop signal is sent to the master unit.
∗ For S/W version "B" or later version, this function is available.
  For S/W version "A" or 3-digit lot No., this function is not available.
  This function is enabled when this unit is used with word address setting.
∗ For details, refer to pages 11 to 13.

Variable	Unit
3 to 255	100ms

Factory setting: 50

■ Alarm upper limit setting [Equipment parameter 12]

This parameter is used to set an upper limit value for alarm judgment.
Alarm detection judgment is based on the settings of equipment parameters 11, 12 and 14.
When an alarm condition is detected, the sensing level drop signal is sent to the master unit.

∗ For S/W version "B" or later version, this function is available.
  For S/W version "A" or 3-digit lot No., this function is not available.
  This function is enabled when this unit is used with word address setting.

∗ For details, refer to pages 11 to 13.

■ B284SB-J1-1KPP30

Variable	Description
0 to 999	0 to 999kPa
1000	Alarm judgment disabled

Factory setting: 1000

■ B284SB-J1-1KNP30

Variable	Description
0 to 999	0 to -99.9kPa
1000	Alarm judgment disabled

Factory setting: 1000

■ B284SB-J1-1KLP30

Variable	Description
0 to 999	-100 to 99.8kPa
1000	Alarm judgment disabled

Factory setting: 1000

■ B284SB-J1-1KPLP30

Variable	Description
0 to 999	0 to 99.9kPa
1000	Alarm judgment disabled

Factory setting: 1000

■ Alarm lower limit setting [Equipment parameter 14]

This parameter is used to set a lower limit value for alarm judgment.
Alarm detection judgment is based on the settings of equipment parameters 11, 12 and 14.
When an alarm condition is detected, the sensing level drop signal is sent to the master unit.

∗ For S/W version "B" or later version, this function is available.
  For S/W version "A" or 3-digit lot No., this function is not available.
  This function is enabled when this unit is used with word address setting.

∗ For details, refer to pages 11 to 13.

■ B284SB-J1-1KPP30

Variable	Description
0	Alarm judgment disabled
1 to 1000	1 to 1000kPa

Factory setting: 0

■ B284SB-J1-1KNP30

Variable	Description
0	Alarm judgment disabled
1 to 1000	-0.1 to -100kPa

Factory setting: 0

■ B284SB-J1-1KLP30

Variable	Description
0	Alarm judgment disabled
1 to 1000	-99.8 to 100kPa

Factory setting: 0

■ B284SB-J1-1KPLP30

Variable	Description
0	Alarm judgment disabled
1 to 1000	0.1 to 100kPa

Factory setting: 0

■ Zero correction command [Equipment parameter 15]

If 0kPa is not attained with the pressure released, 0kPa can be attained by "execution of zero correction."
∗ Correction can be executed when the error in release status is within ±2.5% of the rated pressure.

Variable	Description
0	Normal use
1	Execution of zero correction

Factory setting: 0

∗ After execution of zero correction, be sure to reset the variable to 0.
∗ When you use the address writer for setting, perform the setting in the DIRECT WRITE mode.

[Data Configuration]

＜In the case where the unit is used with bit address setting＞

Data is sent by using the bit input information area.
The sent data will be updated every bit transmission cycle time × 2.

Bit input information area   ∗ n = Bit address number set in this unit

Address offset	n+15	n+14	n+13	n+12	n+11	n+10	n+9	n+8	n+7	n+6	n+5	n+4	n+3	n+2	n+1	n
Description	Digital value of measured pressure (16-bit binary data)															

Digital value of measured pressure: 0 to 1023 (0Hex to 3FFHex)

＜In the case where the unit is used with word address setting∗1＞

Data is sent by using the word input information area and bit input information area.
The word input information data will be updated every word transmission cycle time × 1.

Word input information area   ∗ n = Word address number set in this unit

Address offset	Description
n	Digital value of measured pressure (16-bit binary data)

Digital value of measured pressure: 0 to 1023 (0Hex to 3FFHex)

Bit input information area

Address offset	n+2	n+1	n
Description	Alarm bit	Input 1	Input 0

∗1 Both master unit and remote unit must be compatible with the word transmission function.

＜Items common to both bit address setting and word address setting＞

■ Sensing level

This unit also sends a digital value of measured pressure to the "sensing level area∗2" on the master unit.

Sensing level	Digital value of measured pressure (16-bit binary data)

Digital value of measured pressure: 0 to 1023 (0Hex to 3FFHex)

■ Status details

The contents of an alarm detected with this unit can be checked with the "status detail area∗2" on the master unit.
A bit corresponding to the status detail area turns ON depending on the contents of the alarm.

Status detail area of the master unit

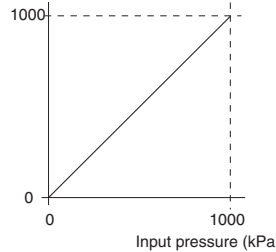| Status details	b15	b14	b13	b12	b11	b10	b9	b8	b7	b6	b5	b4	b3	b2	b1	b0

b0: Remote unit voltage drop (DP-DN-side voltage drop)

b1: Sensing level drop

∗2 This can be used on the master unit having the sensing level and the status detail area.
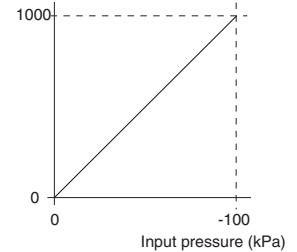   For details, refer to the manual for the master unit.

■ B284SB-J1-1KPP30
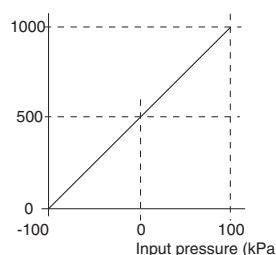Sensing level
Digital value of measured pressure

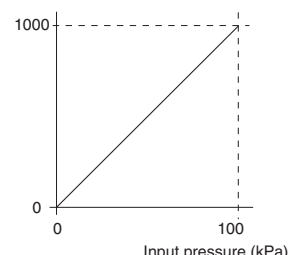■ B284SB-J1-1KNP30
Sensing level
Digital value of measured pressure

■ B284SB-J1-1KLP30
Sensing level
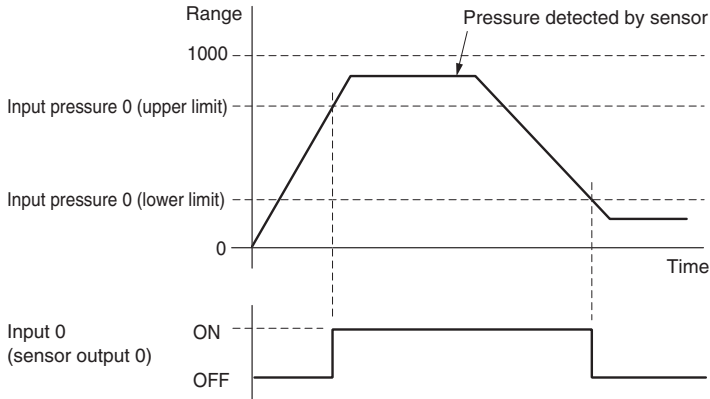Digital value of measured pressure

■ B284SB-J1-1KPLP30
Sensing level
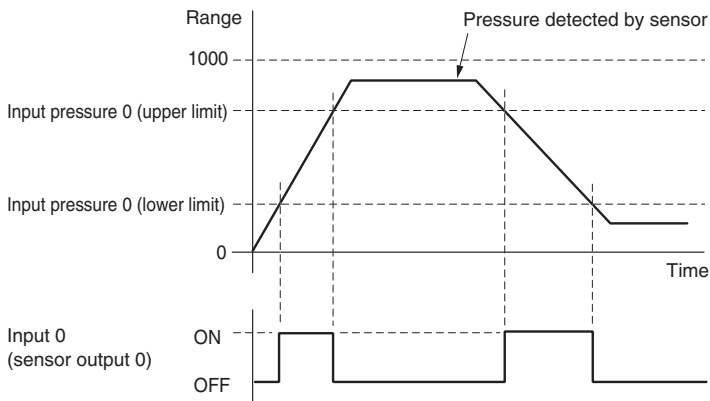Digital value of measured pressure

[Examples of Operations]

■ When 1 point of bit input is used

Hysteresis mode (Equipment parameter 8: 0)
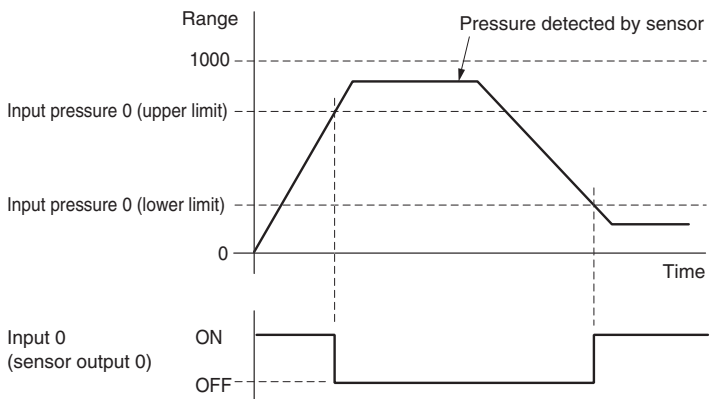Positive logic (Equipment parameter 9: 0)

■ When 1 point of bit input is used

Window comparator mode (Equipment parameter 8: 1)
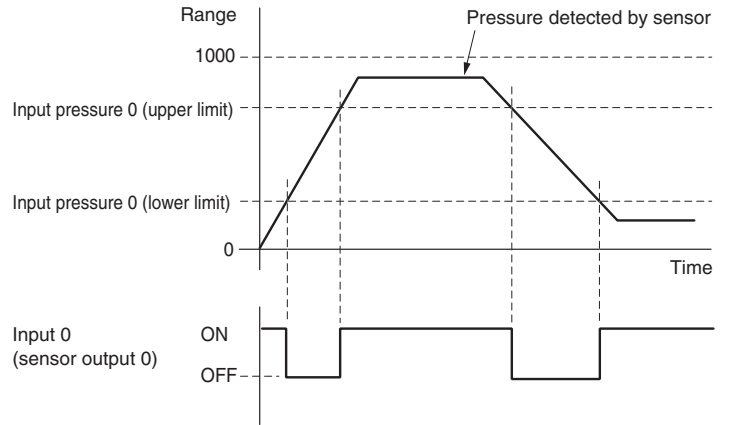Positive logic (Equipment parameter 9: 0)

■ When 1 point of bit input is used

Hysteresis mode (Equipment parameter 8: 0)
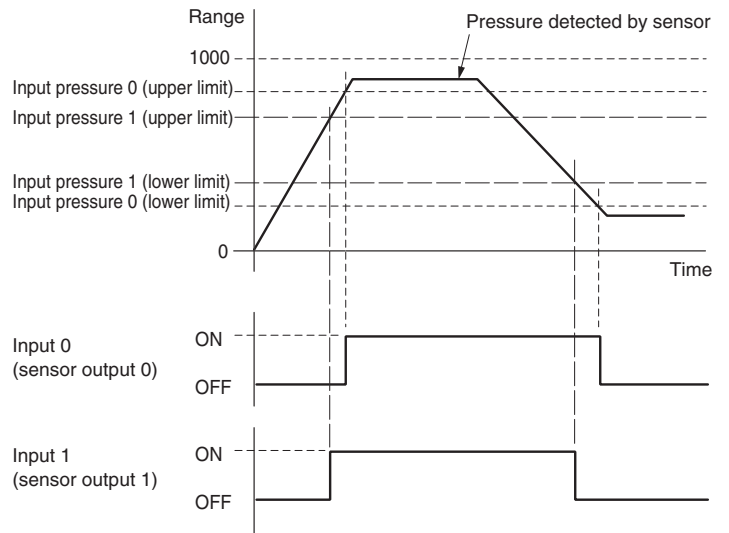Negative logic (Equipment parameter 9: 1)

■ When 1 point of bit input is used

Window comparator mode (Equipment parameter 8: 0)
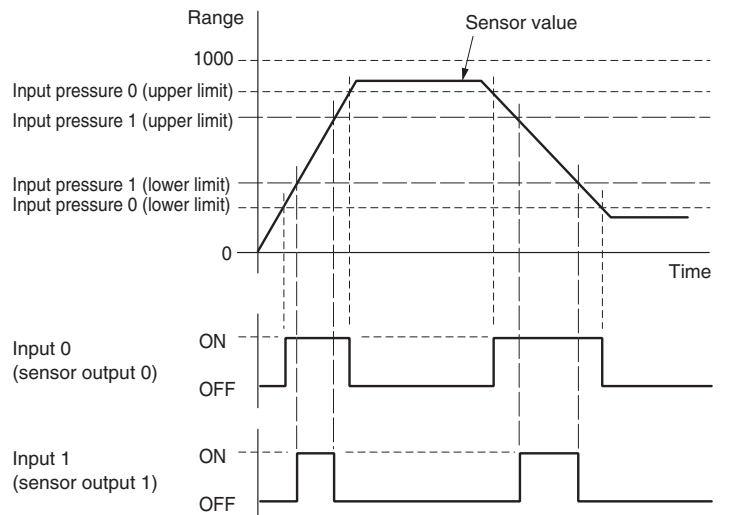Negative logic (Equipment parameter 9: 1)

■ When 2 points of bit input are used

For both input 0 and input 1
Hysteresis mode (Equipment parameter 8: 0)
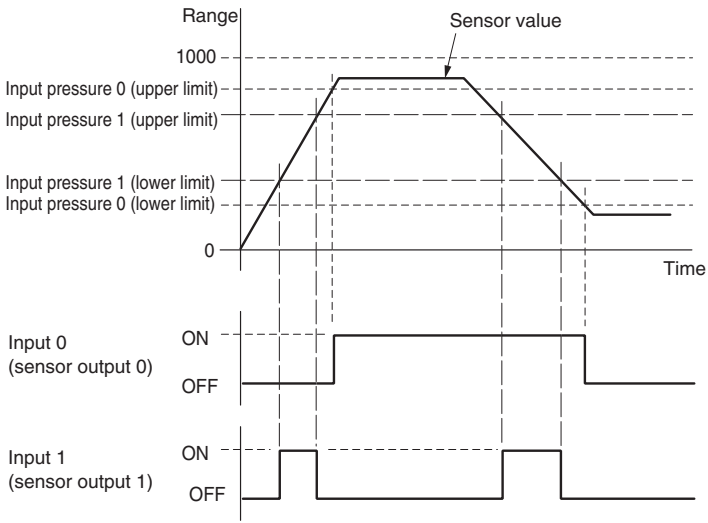Positive logic (Equipment parameter 9: 0)

■ When 2 points of bit input are used

For both input 0 and input 1
Window comparator mode (Equipment parameter 8: 1)
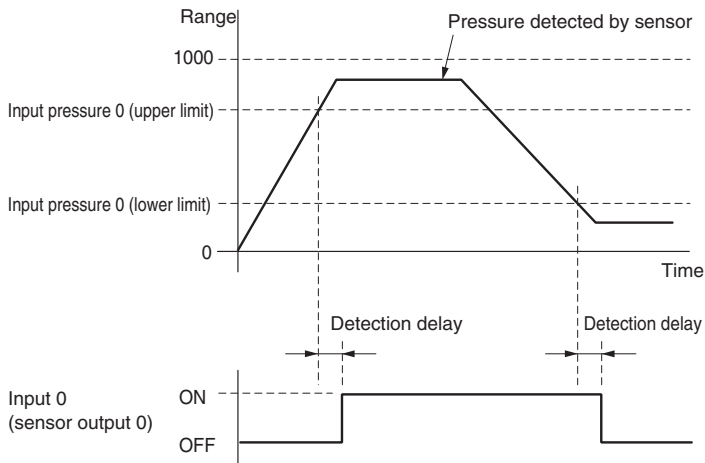Positive logic (Equipment parameter 9: 0)

■When 2 points of bit input are used

Input 0 Hysteresis mode (Equipment parameter 8: 2)
        Positive logic   (Equipment parameter 9: 0)
Input 1 Window comparator mode (Equipment parameter 8: 2)
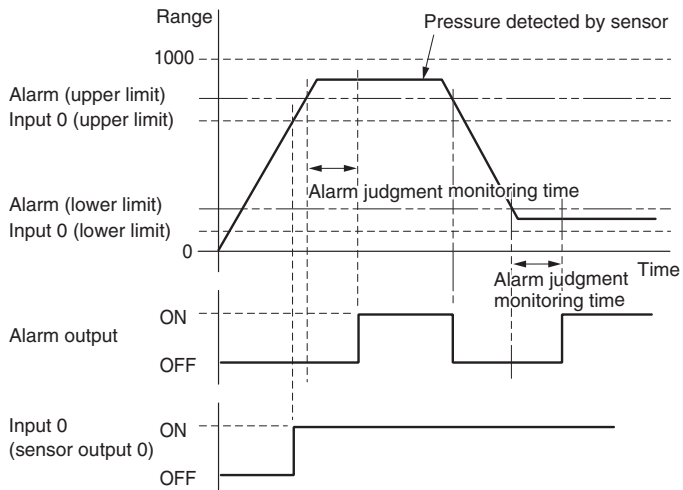   Positive logic   (Equipment parameter 9: 0)

Range
1000
Input pressure 0 (upper limit)
Input pressure 1 (upper limit)
Sensor value

Input pressure 1 (lower limit)
Input pressure 0 (lower limit)
0
Time

Input 0 (sensor output 0) — ON / OFF
Input 1 (sensor output 1) — ON / OFF

■When 1 point of bit input is used

Hysteresis mode (Equipment parameter 8: 0)
Positive logic   (Equipment parameter 9: 0)
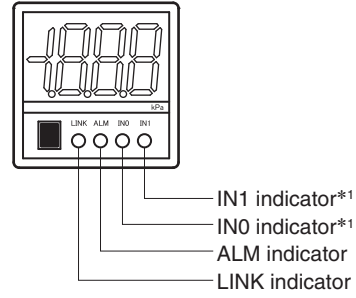Detection delay   (Equipment parameter 10: 0 to 255)

Range
1000
Pressure detected by sensor
Input pressure 0 (upper limit)

Input pressure 0 (lower limit)
0
Time

Detection delay / Detection delay

Input 0 (sensor output 0) — ON / OFF

■When 1 point of bit input is used

Hysteresis mode (Equipment parameter 8: 0)
Positive logic   (Equipment parameter 9: 0)
Alarm upper limit (Equipment parameter 12: 0 to 1000)
Alarm lower limit (Equipment parameter 14: 0 to 1000)

Range
1000
Pressure detected by sensor
Alarm (upper limit)
Input 0 (upper limit)

Alarm judgment monitoring time

Alarm (lower limit)
Input 0 (lower limit)
0
Time
Alarm judgment monitoring time

Alarm output — ON / OFF

Input 0 (sensor output 0) — ON / OFF

[Monitor Display]

IN1 indicator*1
IN0 indicator*1
ALM indicator
LINK indicator

LED name	Display status		Description
LINK (Green)	Lit	▬	Transmission signal error / Model mismatching error*2
	Flashing	┈┈	Transmission signal received
	Unlit	☐	No transmission signal (disconnection and reverse connection of DP and DN lines included)
ALM (Red)	Lit	▬	Sensing level drop
	Flashing	┈	Remote unit voltage drop / Model mismatching error*2
	Unlit	☐	No ALM available
LINK ALM	Alternate flashing LINK ┈ / ALM ┈		ID duplicated*3 or ID unregistered*4
LINK ALM	LINK ▬ / ALM ┈		Model mismatching error*2
IN*1 (Orange)	Lit	▬	ON*5
	Unlit	☐	OFF

*1 Provided for products of S/W version "B" or later version.
  Not provided for products whose S/W version is "A" or lot No. is indicated in 3 digits.
*2 This indication appears when the use of the single unit simplified replacement function fails.
  (This operation occurs on the S/W version "B" or later version.)
*3 The duplication is detected when the master unit executes automatic address recognition.
*4 For S/W version "B" or later version: This indication appears when transmission signal and power supply are normally connected, and the unit is set to the factory-set address (bit address 511).
  For S/W version "A" or 3-digit lot No.: This indication appears when the master unit is set to the factory-set address (bit address 255) during execution of automatic address recognition.
*5 ON conditions depend on the settings of equipment parameters 2 to 5, 8 and 9.

Example:

Lot No. 19ECBNB

S/W version

[Troubleshooting]

LINK	ALM	Cause	Remedy
○ Unlit	○ Unlit	- The AnyWireASLINK transmission signal is not connected. - The AnyWireASLINK system is not turned on.	- Check if a disconnection has occurred between this unit and the AnyWireASLINK system, and repair the connections as required. - Check the power supply to the AnyWireASLINK system, and supply power to it.
● Lit	○ Unlit	- The DP-DN line is directly connected to the 24-0V power supply. - A unit incompatible with Ver. 1.1 is connected to the AnyWireASLINK system for word transmission.	- Reconnect the power to the AnyWireASLINK system. - A remote unit incompatible with Ver. 1.1 cannot be used in connection to the AnyWireASLINK system for word transmission. Check the setting of the master unit, and lot No. of the remote unit.
◎ Flashing	● Lit	- The sensing level is low.	- Check the ASLINKSENSOR status.
—	◎ Flashing (Lit for 0.2 sec., unlit for 1.0 sec.)	- The voltage of the internal power supply to this unit (DP-DN) is dropped.	- Reduce the number of units connected to the same AnyWireASLINK system. - Shorten the transmission line between this unit and the master unit.
◎ Flashing (alternates with a 0.5 sec. interval)	◎ Flashing (alternates with a 0.5 sec. interval)	- The address of this unit remains unchanged from the factory-set address. - The address of this unit duplicates that of another remote unit.	- Set an address correctly. ＊ You cannot use the unit with the address before shipment. - Set the address again so that it does not duplicate another unit's address.
● Lit	◎ Flashing (Lit for 0.5 sec., unlit for 0.5 sec.)	- Single unit simplified replacement has failed.	- Defective connections and the like may have caused single unit simplified replacement to fail. Remove the remote unit after replacement, and make connections again. - When two or more replacement remote units are simultaneously connected, the single unit simplified replacement function does not work. - Check if the replacement remote unit is of the same type as that of the remote unit before the replacement. - Check if the function version for the replacement remote unit is older than that of the remote unit before the replacement. ＊ If the function version of the replacement remote unit is older, the single unit simplified replacement function does not work. - Check if the address of the replacement remote unit is the same as the address before shipment (a bit address of 511). ＊ If the address of the replacement remote unit is not the same as the address before shipment, the single unit simplified replacement function does not work. - When replacing a remote unit, check if the equipment parameter 17 of the master unit is set at 0. If the equipment parameter 17 of the master unit is set at a number other than 0 (zero), the single unit simplified replacement function does not work.

- If the following error is indicated on ARW-04, take the following action.

Display	Cause	Remedy
【E-0303】	The parameter setting is incorrect.	Refer to the parameter correspondence table and correct the setting.

- Should any of the following apply, take the following actions.

Symptom	Remedy
Detection is disabled	- Is the wiring correct? → Make sure that the ASLINKSENSOR transmission line is correctly connected to the AnyWireASLINK transmission line (DP, DN). - Are the AnyWireASLINK master unit and remote units supplied with appropriate power? → Check the power supply. - Is the unit used in the rated detection range? → Use it within the rated range. - Does the address setting exceed the specified number of transmission points? → Set the address within the specified number of transmission points.
Setting cannot be made with the address writer	- Is the wiring correct? → Re-check the connection of the ASLINKSENSOR transmission line. - Is the power supplied to the AnyWireASLINK system? → Check the power supply. - Are the parameters set correctly? → Refer to the parameter correspondence table and correct the setting.

[Equipment Parameters and Their Settings]

Equipment parameter	Variable	Description	Factory-set variable
【1】 Alarm bit	0	Alarm bit disabled	0
	100	Alarm bit enabled	
【2】 Input 0 upper limit value	0 to 1000	Upper limit setting of pressure detection input 0	600
【3】 Input 0 lower limit value	0 to 1000	Lower limit setting of pressure detection input 0	400
【4】 Input 1 upper limit value	0 to 1000	Upper limit setting of pressure detection input 1	600
【5】 Input 1 lower limit value	0 to 1000	Lower limit setting of pressure detection input 1	400
【6】 Selection of the number of points of bit input in the case of word address setting	0	Bit input: 0 points	0
	1	Bit input: 1 point (using input 0 only)	
	2	Bit input: 2 points (using input 0 and input 1)	
【8】 Operation mode ＊When 1 point of input is used	0	Hysteresis mode	0
	1	Window comparator mode	
【8】 Operation mode ＊When 2 points of input are used	0	Input 1: Hysteresis mode, Input 2: Hysteresis mode	
	1	Input 1: Window comparator mode, Input 2: Hysteresis mode	
	2	Input 1: Hysteresis mode, Input 2: Window comparator mode	
	3	Input 1: Window comparator mode, Input 2: Window comparator mode	
【9】 Input logic ＊When 1 point of input is used	0	Hysteresis mode: Positive logic Window comparator mode: Positive logic	0
	1	Hysteresis mode: Negative logic Window comparator mode: Negative logic	
【9】 Input logic ＊When 2 points of input are used	0	Hysteresis mode: Positive logic Window comparator mode: Positive logic	
	1	Hysteresis mode/Input 1: Negative logic Hysteresis mode/Input 2: Positive logic Window comparator mode/Input 1: Negative logic Window comparator mode/Input 2: Positive logic	
	2	Hysteresis mode/Input 1: Positive logic Hysteresis mode/Input 2: Negative logic Window comparator mode/Input 1: Positive logic Window comparator mode/Input 2: Negative logic	
	3	Hysteresis mode: Negative logic Window comparator mode: Negative logic	
【10】 Input response time	0 to 255	Setting a time required to turn ON or OFF input	1
【11】 Alarm monitoring time	3 to 255	Setting a monitoring time for alarm judgement	50
【12】 Alarm upper limit value	0 to 1000	Setting an upper limit value for alarm judgment	1000
【14】 Alarm lower limit value	0 to 1000	Setting a lower limit value for alarm judgment	0
【15】 Zero correction command	0	Normal use	0
	1	Execution of zero correction	

[Specifications]

■General specifications

Operating ambient temperature/humidity	0 to 55°C, 10 to 90%RH No condensation
Storing ambient temperature/humidity	-25 to 75°C, 10 to 90%RH No condensation
Vibration resistance	0 to 55Hz 1.5-mm double amplitude 2h in each of X, Y, and Z directions
Shock resistance	500m/s2 3 times in each of X, Y, and Z directions
Operating atmosphere	No corrosive gas
Operating altitude*1	0 to 2000m
Pollution level*2	2 or less

*1 Do not use or store AnyWireASLINK devices in an environment where the pressure exceeds the atmospheric pressure at an altitude of 0 meters. Doing so may result in malfunction.
*2 "Pollution level" is an index that indicates the degree of occurrence of conductive substances in the environment where the device is used.
   Pollution level 2 means the occurrence of only pollution by non-conductive substances.
   In such an environment, however, electrical conduction could occur due to accidental condensation.

■Transmission specifications

Service power supply voltage	24V DC +15% to -10% (21.6 to 27.6V DC) with a ripple of 0.5Vp-p or less
Transmission method	DC power supply superimposed total frame/cyclic method
Synchronization method	Frame/bit synchronization method
Transmission procedure	AnyWireASLINK protocol
Connection mode	Bus type (Multi-drop method, T-branch method, Tree branch method)
Number of connection points*3	Number of bit points: 1024 points max. (IN: 512 bits, OUT: 512 bits) Number of word points: 1024 words max. (IN: 512 words, OUT: 512 words)
Number of connection units*3	Up to 256 units
RAS function	Detection of transmission line disconnection, transmission line short-circuit, transmission power supply voltage drop, and duplicated/unregistered ID

*3 The number differs depending on the master unit. Be sure to refer to the manual of the master unit for the number.

■Individual specifications

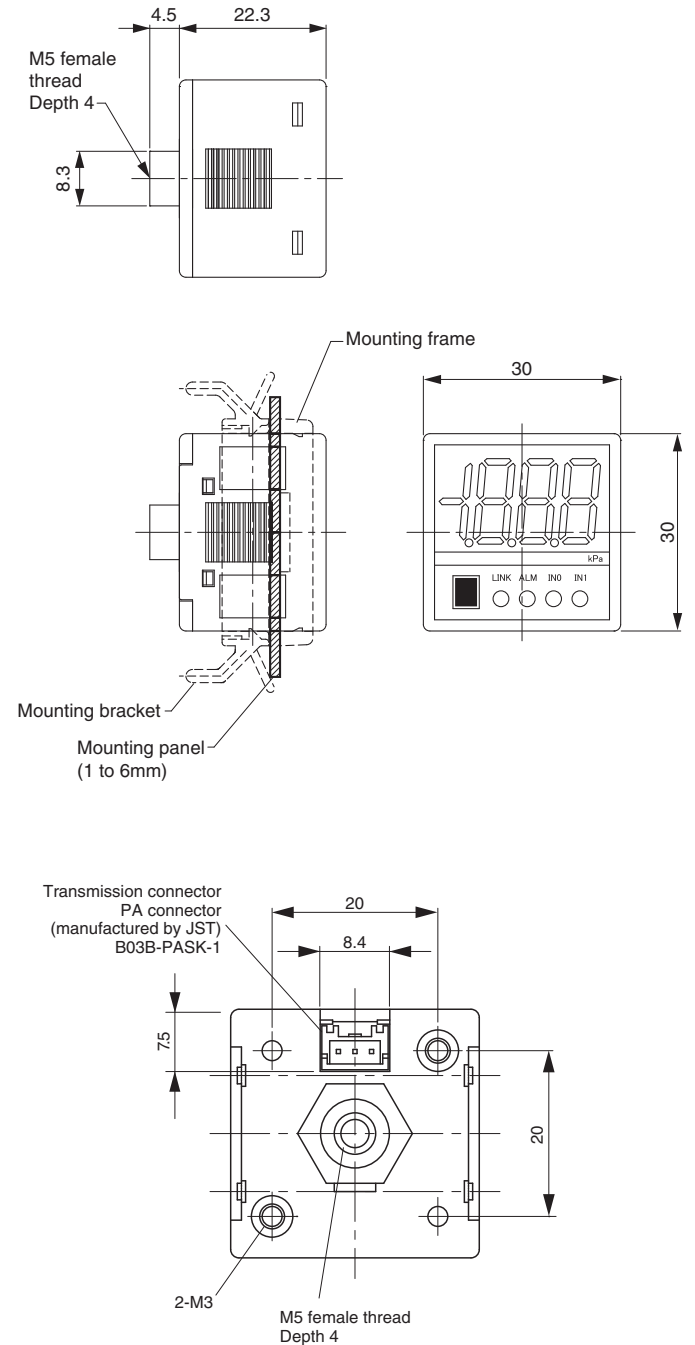|		
Number of occupied points	At the bit address setting: 　　Bit input: 16 points At the word address setting*4: 　　Word input: 1 word 　　Bit input: 1 to 3 points 　　(Input 2 points*5 + Alarm bit 1 point*6)	
Response time*7	10ms max.	
Detection function	Remote unit voltage drop (DP-DN voltage drop)	
Current consumption	Transmission side (DP-DN): 20.0mA	
Weight	25g	
Protection rating	IP40	
Pipe connection bore diameter	M5 female thread	
Withstand pressure	B284SB-J1-1KPP30	1500kPa
	B284SB-J1-1KNP30	200kPa
	B284SB-J1-1KLP30	200kPa
	B284SB-J1-1KPLP30	200kPa
Repeatability	±0.5%F.S.	
Temperature characteristic	±2.5%F.S.	
Unit model number*8	B284SB-J1-1KPP30	2909
	B284SB-J1-1KNP30	2939
	B284SB-J1-1KLP30	2969
	B284SB-J1-1KPLP30	2918

*4 It depends on lot No. whether word address setting is enabled or not.
*5 When 2 points of bit input are used
*6 When alarm bit is enabled
*7 Indicates the internal processing time of this unit.
   For signal of the bit information area,
   the maximum transmission delay time is defined as "this time + bit transmission cycle time × 2."
   For signal of the word information area,
   the maximum transmission delay time is defined as "this time + word transmission cycle time.
*8 Code (hexadecimal) specific to each model
   It can be monitored by reading the parameter from the master unit. For details, refer to the manual for the master unit.
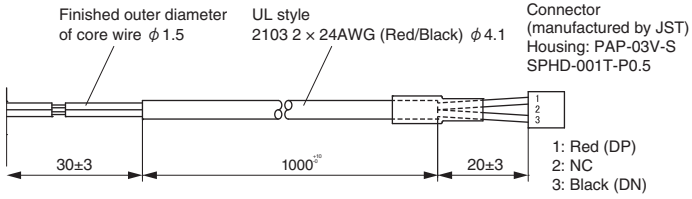
■Sensing specifications

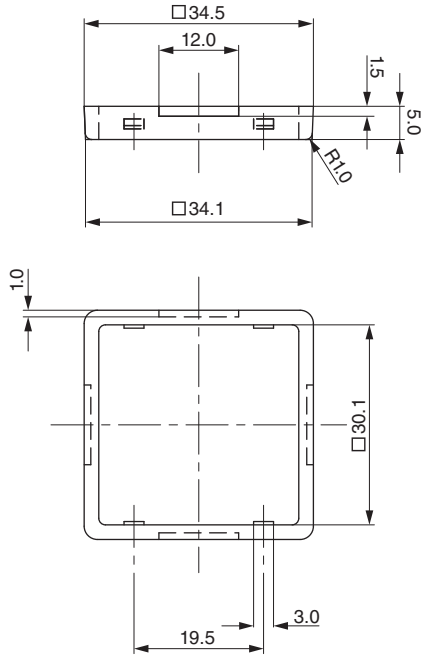| Model	Rated pressure range	Pressure setting range	Resolution
B284SB-J1-1KPP30	Positive pressure (0 to 1000kPa)	0 to 1000kPa (Unit: 1kPa)	1kPa
B284SB-J1-1KNP30	Negative pressure (0 to -100kPa)	0 to -100kPa (Unit: -0.1kPa)	0.1kPa
B284SB-J1-1KLP30	Compound pressure (-100 to 100kPa)	-100 to 100kPa (Unit: 0.2kPa)	0.2kPa
B284SB-J1-1KPLP30	Low positive pressure (0 to 100kPa)	0 to 100kPa (Unit: 0.1kPa)	0.1kPa

[Outside Dimensions]

Unit: mm
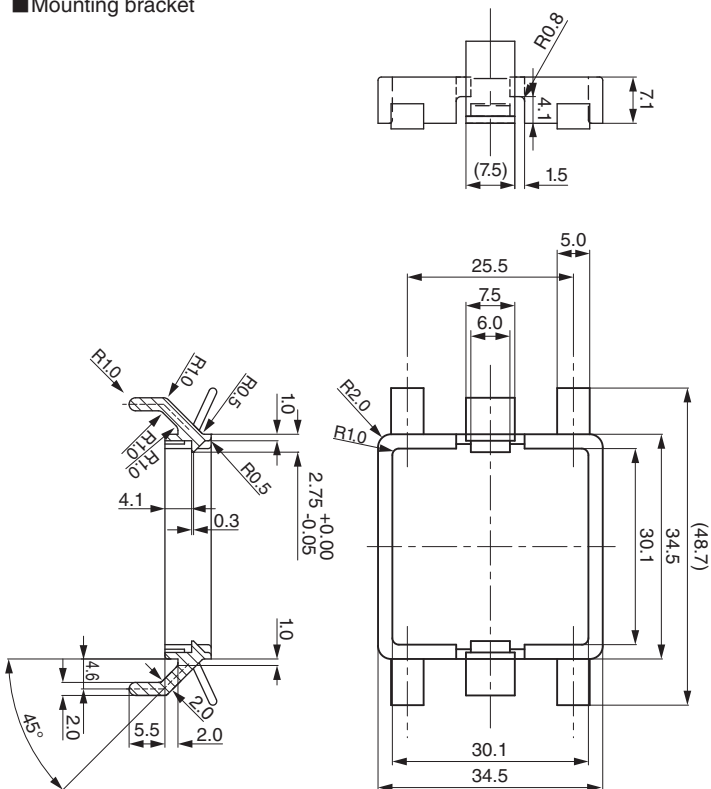

M5 female thread Depth 4
4.5
22.3
8.3

Mounting frame
Mounting bracket
Mounting panel (1 to 6mm)
30
30
LINK ALM IN0 IN1
kPa

Transmission connector
PA connector
(manufactured by JST)
B03B-PASK-1
20
8.4
7.5
20
2-M3
M5 female thread Depth 4

■Transmission line connection cable

Finished outer diameter of core wire φ1.5

UL style
2103 2 × 24AWG (Red/Black) φ4.1

Connector
(manufactured by JST)
Housing: PAP-03V-S
SPHD-001T-P0.5

30±3　　1000$_{0}^{+10}$　　20±3

1: Red (DP)
2: NC
3: Black (DN)

■Mounting frame

□34.5
12.0
1.5
5.0
R1.0
□34.1

1.0
□30.1
19.5
3.0

■Mounting bracket

R0.8
7.1
4.1
(7.5)　1.5

5.0
25.5
7.5
6.0
R2.0
R1.0

R1.0　R1.0　R0.5　1.0
R1.0
R1.0　R0.5
4.1
0.3
2.75 $_{-0.05}^{+0.00}$
34.5
30.1
(48.7)
30.1
34.5

1.0
4.6
2.0
45°
2.0
5.5　2.0

<Panel cutout dimensions>

Unit: mm

To mount a single unit

31 $_{-0.4}^{+0}$
31 $_{-0.4}^{+0}$

To mount several units

31 × n + 3.5 × (n − 1)　　(n: number of units)

31 $_{-0.4}^{+0}$

55 or more
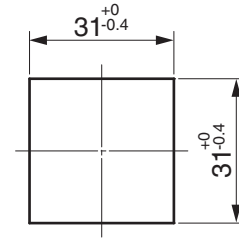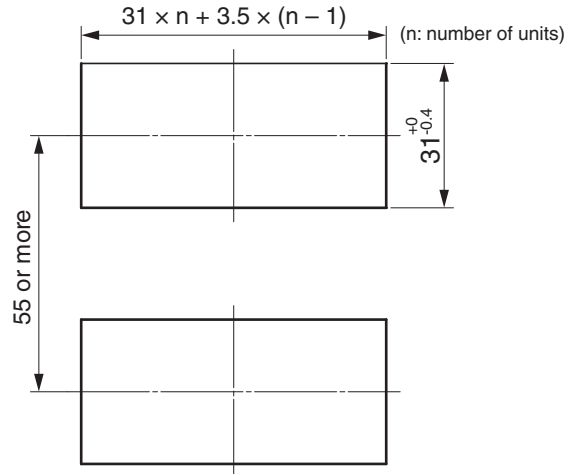
[Directive on Waste Electrical and Electronic Equipment (WEEE)]

Note: This symbol mark is for EU countries only.
This symbol mark is according to the directive 2012/19/ EU Article 14 Information for users and Annex IX.

This symbol means that electrical and electronic equipment, at their end-of-life,
should be disposed of separately from your household waste.

【中国版RoHS指令】

的产品中有害物质的名称及含量

部件名称	有害物质					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬[Cr(VI)]	多溴联苯(PBB)	多溴二苯醚(PBDE)
安装基板	×	○	○	○	○	○
框架	○	○	○	○	○	○

本表格依据SJ/T11364的规定编制。

○：表示该有害物质在该部件所有均质材料中的含量均在GB/T26572规定的限量要求以下。

×：表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T26572规定的限量要求。

基于中国标准法的参考规格：GB/T15969.2

[Address]

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