

Installation manual

Lineset Cover System SLIMDUCT PD

March 18, 2020

Inaba Denki Sangyo. Co., Ltd.

Research & development division

<u>Table of contents</u>	Page#
1. Precautions	2
2. Installation basis of PD system	3
2-1. Estimation for containable capacity and interval between supports	3
2-2. Installation procedure of PD system	4
2-3. Installation procedure of T-Branch (PDJTN)	8
2-4. Installation procedure of Reinforcement Accessory for Notch (PDK)	11
2-5. Installation procedure of Wall Flange (PSP)	13
2-6. Installation procedure for SUPPORTER BAND (PDY)	14
2-7. Installation procedure for Duct Fixing Saddle (PDU)	15
2-8. Installation procedure for PD-SD COUPLER (PSDR)	16
2-9. Installation procedure for REDUCER (PDI)	17
2-10. Installation procedure for Mounting Coupler for U-Clamp (PDBK)	18

1. Precautions :

- Please read SLIMDUCT PD SPECIFICATIONS carefully before use.
- All dimensions mentioned in INCH(″) on this manual are just for reference. The system is originally engineered in metric.
- SLIMDUCT PD is not waterproof. Please be sure to conduct water-proofing by caulking treatment or fill of putty such as at wall penetration points where there is a risk of water invasion.
- Please use under the circumstances within the temperature range of -20~60°C on the surface of product.
- Please use under the circumstances within the temperature range of -20~60°C on the surface of product.
- Wear safety gear such as working clothes, helmet, and gloves whenever installing SLIMDUCT PD. Besides, wear protective goggles or similar gears to prevent eyes from dust when cutting SLIMDUCT PD by hacksaw or else.
- Pay attention carefully when fixing a screw by impact screwdriver. It may cause damage to products. (Torque screwdriver is recommended for fixing.) Do not use impact screwdriver when fixing especially onto uneven wall surface because of a possibility for damage to products.
- Please pay attention that even stainless steel becomes rusty in salt damage area, by a contact with different metal or under the strong acid circumstances although stainless steel is resistant to rusting.
- In severe winter season, cut straight ducts after making them warm due to a possibility of break.

■Heat Deformation of SLIMDUCT PD

1. What is heat deformation?

SLIMDUCT PD is made of resin and it would start softening when temperature exceeds 60°C(140°F). Especially in the condition with load applied, it would sometimes start softening even at the lower temperature than its softening temperature.

2. Duct Temperature:

Duct temperature is determined by such as the ambient temperature and the radiant heat by direct sunlight.

Duct temperature would become high receiving the radiant heat of sunlight especially if there is such a metal hood located around the duct.

3. Precautionary Points:

●Precaution for storage

Please avoid the storage where ambient temperature becomes higher than the softening temperature of material such as in a car shut tightly under a blazing sun. Besides, do not keep the products in the condition with a load applied.

●Precaution for installation site

* Please avoid an installation where the duct temperature becomes high by the radiant heat at the edge of eaves finished by metallic materials.

* Please avoid an installation on the heat storage wall and on the wall painted by heat insulation paint where the duct temperature is expected to become high by radiant heat.

* Please avoid an installation in the poorly ventilated narrow space and around the heat generating equipment where the duct temperature is expected to become high.

It would be difficult for us to owe a responsibility for any heat deformation troubles which will be occurred not conforming to above precautions. We appreciate kind understanding for it in advance.

2. Installation basis of PD system

2-1. Estimation for Containable Capacity and pitch among brackets

(1) <Premise of PD size and pipe clamp>*

PD-90 : Applicable to pipe clamp $\phi 89.1\text{mm}$ (3-1/2") or less. (Referred to as **80A**)

PD-120 : Applicable to pipe clamp $\phi 114.3\text{mm}$ (4-1/2") or less. (Referred to as **100A**)

PD-140 : Applicable to pipe clamp $\phi 139.8\text{mm}$ (5-1/2") or less. (Referred to as **125A**)

Table-1. Duct size and capacity of linesets

Duct Size	Suitable Pipe Clamp	Copper size (Suction × Gas)			
		Insulation wall 10mm×10mm	Insulation wall 10mm×20mm	Insulation wall 1/2×1/2	Insulation wall 3/4×3/4
PD-90	80A or less	5/8×1-1/8	3/8×3/4	3/8×3/4	—
PD-120	100A or less	3/4×1-1/2	3/4×31.75	7/8×1-1/2	3/8×3/4
PD-140	125A or less	1×2-1/8 3/4×1-1/4 (2 lines)	22.22×44.45	7/8×1-5/8	3/4×1-1/2

*Refer to Page 11 in case of use with **REINFORCEMENT ACCESSORY FOR NOTCH (PDK)** and to Page 14 in case of use with **SUPPORTER BAND (PDY)**.

(2) Interval between pipe supports

Table-2. Method of PD installation and interval between pipe supports

	Vertical Piping	Horizontal Piping	Suspension Piping
When using Mounting Coupler (PDB-N)	1500mm (59-1/16")	1000mm (39-3/8")	1000mm (39-3/8")
When using Mounting Coupler (PDBK)	1500mm (59-1/16")	1500mm (59-1/16")	—
When using Supporter Band (PDY)	1500mm (59-1/16")	1000mm (39-3/8")	1000mm (39-3/8")
When using PD Duct Fixing Saddle(PDU)*	—	1000mm (39-3/8")	—

*At least 2 or more pipe support is needed.

2-2. Installation procedure of PD system

(1) Install Pipe Clamp Brackets

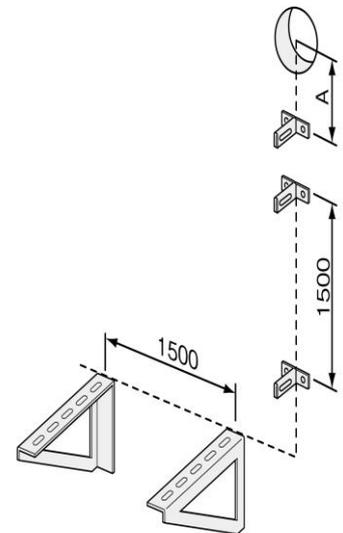
According to the piping line, install tee brackets with interval between brackets shown in Table-3.

Table-3 Interval between brackets

Vertical Piping	1500mm (59-1/16")
Horizontal Piping	1500mm (59-1/16")

A*	PD-90	112mm (4-13/32")
	PD-120	128mm (5-11/32")
	PD-140	147mm (5-25/32")

※In case with PDE+PDH+PWP-N used.



Caution:

- In case of use with Supporter Band (PDY), please be sure to follow "2-6. Installation Procedure for SUPPORTER BAND (PDY)" in page 14.
- In case of use with Duct Fixing Saddle (PDU), please be sure to follow "2-7. Installation Procedure for Duct Fixing Saddle (PDU)" in page 15.

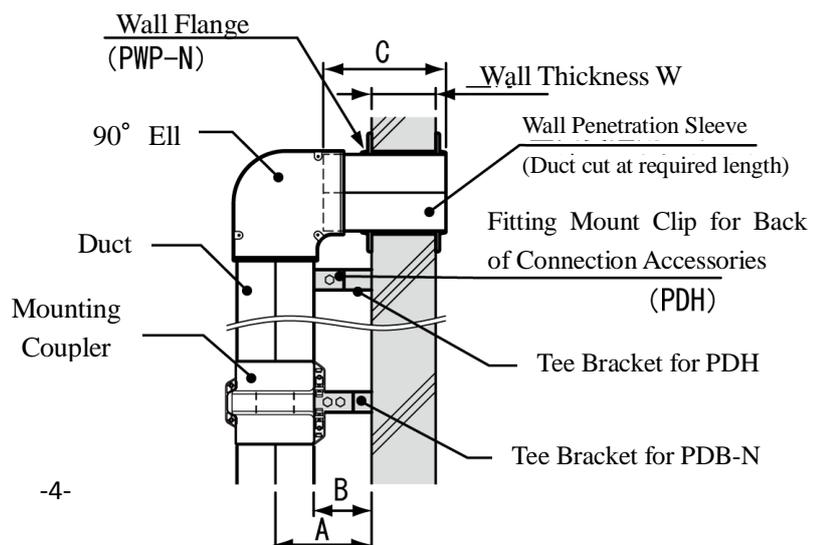
◎ Selection Guideline for Pipe Support Fittings

Please select tee bracket from Table-4 according to the distance between Duct and wall surface.

Table-4 Selection Guide for Tee Bracket

Combination of Pipe Support Fittings			Height from Duct Center A	Distance between Duct and Wall B	Sleeve Length C
Pipe Clamp	Tee Bracket for PDB	Tee Bracket for PDH			
80A	60mm (2-23/64")	50mm (1-61/64")	106mm (4-11/64")	60mm (2-23/64")	64mm (2-33/64")+ Wall thickness W
	80mm (3-9/64")	60mm (2-23/64")	126mm (4-61/64")	80mm (3-9/64")	84mm (3-19/64")+ Wall thickness W
	100mm (3-59/64")	80mm (3-9/64")	146mm (5-47/64")	100mm (3-59/64")	104mm (4-3/32")+ Wall thickness W
100A	60mm (2-23/64")	50mm (1-61/64")	120mm (4-23/32")	60mm (2-23/64")	61mm (2-25/64")+ Wall thickness W
	80mm (3-9/64")	60mm (2-23/64")	140mm (5-1/2")	80mm (3-9/64")	81mm (3-3/16")+ Wall thickness W
	100mm (3-59/64")	80mm (3-9/64")	160mm (6-19/64")	100mm (3-59/64")	101mm (3-31/32")+ Wall thickness W
125A	60mm (2-23/64")	50mm (1-61/64")	131mm (5-5/32")	60mm (2-23/64")	59mm (2-5/16")+ Wall thickness W
	80mm (3-9/64")	60mm (2-23/64")	151mm (5-15/16")	80mm (3-9/64")	79mm (3-7/64")+ Wall thickness W
	100mm (3-59/64")	80mm (3-9/64")	171 (6-23/32")	100mm (3-59/64")	99mm (3-57/64")+ Wall thickness W

Caution: In case of use with Wall Flange (PSP), please be sure to follow "2-5. Installation procedure for WALL FLANGE (PSP)" in page 13.



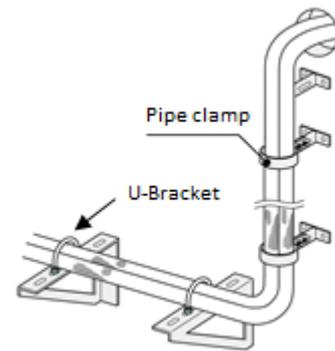
(2) Install Lineset

Set up linesets by supporting with pipe clamp.

*Do not install Fitting Mount Clip (PDL) / Fitting Mount Clip for Back of Connection Accessories (PDH) at this point yet.

*For installation of U-Bracket, please be sure to follow "2-10.

Installation procedure for Mounting Coupler for U-Bracket (PDBK) in page 18.



(3) Fix Duct onto Lineset

Select Duct to fit to pipe clamp (Table-5) and fix Duct of suitable length for bracket interval (referring to Table-6, please cut Duct at required length by such as a hand saw if necessary).

(Please refer to Table-7 for Duct length for the use between Fittings of SLIMDUCT PD.)

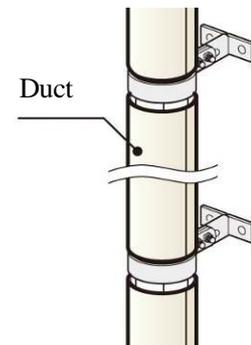


Table-5 Selection Table for Duct Size

Pipe Clamp Size	Duct Size
80A	PD-90
100A	PD-120
125A	PD-140

Caution : Please be sure to follow Page 11 in case of use with Reinforcement Accessory for Notch (PDK) and Page 14 in case of use with Supporter Band (PDY).

Table-6 Example of Duct Length after cut (in case of use with Pipe Clamp)

Supporting Interval P	Duct Length L		
	Pipe Clamp Width W = 25mm(63/64")	Pipe Clamp Width W = 32mm(1-1/4")	Pipe Clamp Width W = 38mm(1-31/64")
1000mm(39-3/8")	965-975mm (37-63/64"-38-25/64")	958-968mm (37-23/32"-38-7/64")	952-962mm (37-23/32"-38-7/64")
1500mm(59-1/16")	1465-1475mm (57-43/64"-58-5/64")	1458-1468mm (57-13/32"-57-51/64")	1452-1462mm (57-11/64"-57-9/16")

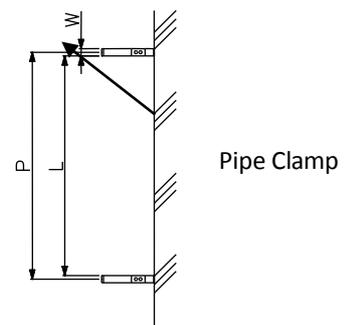
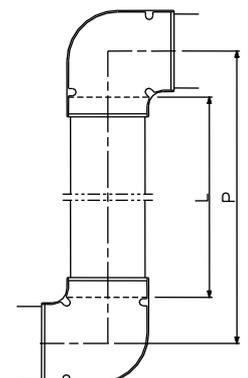


Table-7 Example of Duct Length after cut (in case of use with Fittings of SLIMDUCT PD)

Supporting Interval P	Duct Length L		
	Duct Size PD-90	Duct Size PD-120	Duct Size PD-140
1000mm(39-3/8")	874-884mm (34-13/32"-34-51/64")	840-850mm (33-5/64"-33-15/32")	818-828mm (32-13/64"-32-19/32")
1500mm(59-1/16")	1374-1384mm (54-3/32"-54-31/64")	1340-1350mm (52-3/4"-53-5/32")	1318-1328mm (51-57/64"-52-9/32")

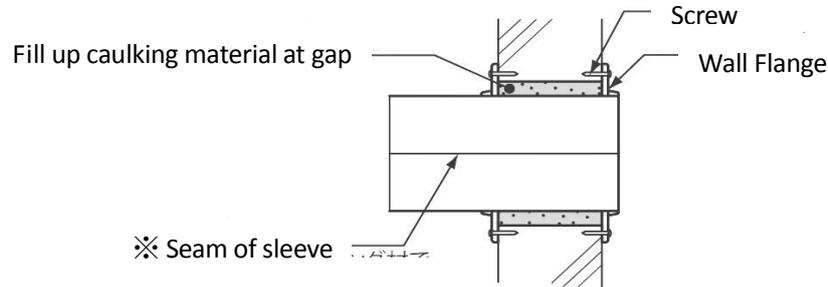
Duct Length L (PD-90) = Supporting Interval P – (minus) 126-116mm(4-61/64"-4-9/16")
 Duct Length L (PD-120) = Supporting Interval P – (minus) 160-150mm(6-19/64"-5-57/64")
 Duct Length L (PD-140) = Supporting Interval P – (minus) 182-172mm(7-5/32"-6-49/64")



(4) Install Sleeve on wall, Conduct Water Guard Treatment and Fix Wall Flanges

Set sleeve (Duct cut at stipulated length) through wall penetration hole, fill up caulking material at gap and conduct water guard treatment simultaneously fixing sleeve through the wall.

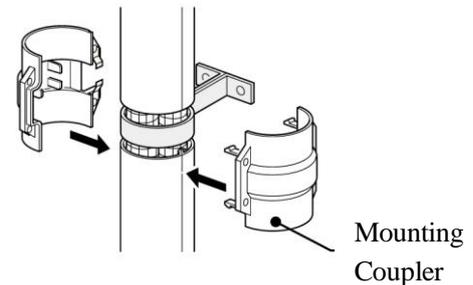
If there is a risk of water invasion from the seam of sleeve (※), conduct water guard treatment with caulking material also at the seam of sleeve. Fix Wall Flanges on both ends of wall with screws before caulking material become hardened.



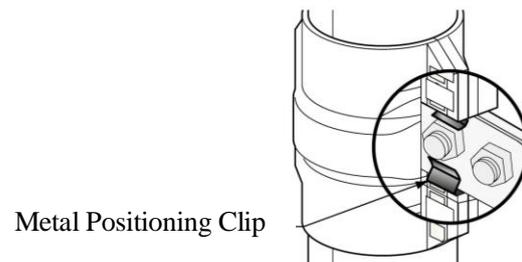
(Conduct water guard treatment with caulking material also at the seam of sleeve)

(5) Install Mounting Coupler

- ① Install Mounting Coupler onto pipe clamp.
Mounting Coupler has tentatively fastened construction between base and cover part.

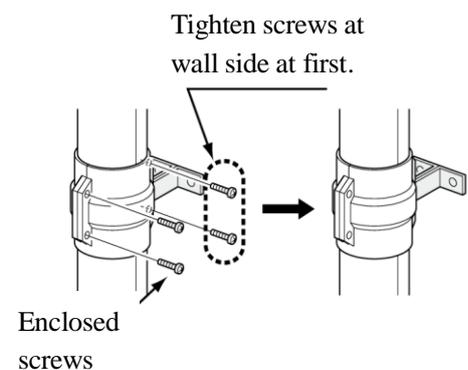


- ② Set the Metal Positioning Clip of Mounting Coupler at the center position of pipe clamp not to touch with bolts nor nuts of pipe clamp.



- ③ Fix Duct firmly by tightening enclosed screws (※).
※Enclosed screw : M3.5×20
(temporarily attached on cover part)

Caution: Please tighten screws at wall side at first.
Thread ridge of screws on wall side might be broken if opposite side of screws are tightened first.

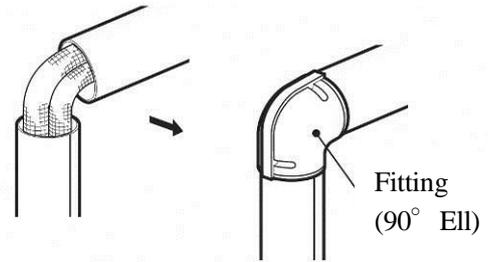


(6) Install Mounting Coupler for U-Bracket (PDBK)

For installation of U-Bracket, please be sure to follow "2-10. Installation procedure for Mounting Coupler for U-Bracket (PDBK) in page 18.

(7) Install Fittings

Install fittings onto Duct.
 Fix Duct firmly by tightening screws enclosed (※).
 ※Enclosed screw : M3.5×20
 (temporally attached on cover part)



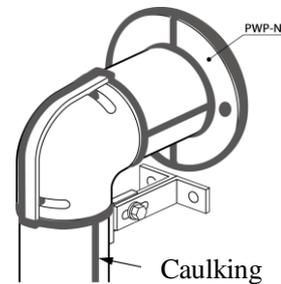
(8) Install Fitting Mount Clip for Back of Connection Accessories
 Insert Fitting Mount Clip for Back of Connection Accessories (PDH) into the gap between fitting and Duct. Insert Fitting Mount Clip for Back of Connection Accessories (PDH) firmly until the end point not to be come off.
 Then, mount onto the wall surface fixing to such as tee bracket etc. installed beforehand.



(9) Conduct Caulking Treatment

SLIMDUCT PD is not waterproof.
Please be sure to conduct caulking treatment at connection and fitting points where there is a risk of water invasion.

Please notice that it would be a cause of water invasion into the room if caulking treatment is missed especially at the places marked in the right drawing.



<Reference> Finish Dimensions for ELL Combination

Finish dimensions for 2pcs. combination of 45°ELL and 90°ELL are shown in Table-8.

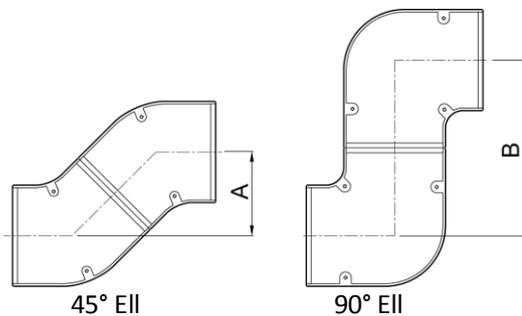


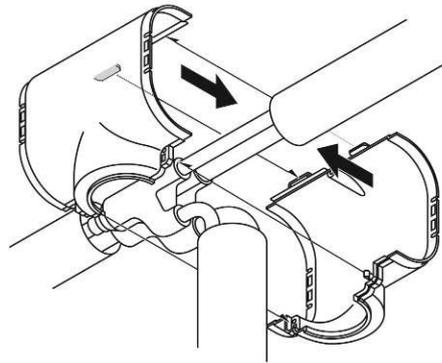
Table-8 Finish Dimensions for ELL

Size	45° ELL (Dimension A)	90° ELL (Dimension B)
90	86mm (3-3/8")	180mm (7-5/64")
120	93mm (3-21/32")	213mm(8-3/8")
140	112mm (4-13/32")	251mm(9-7/8")

※In case of installation, Duct cut shortly shall be set between ells.

(4) Install Tee

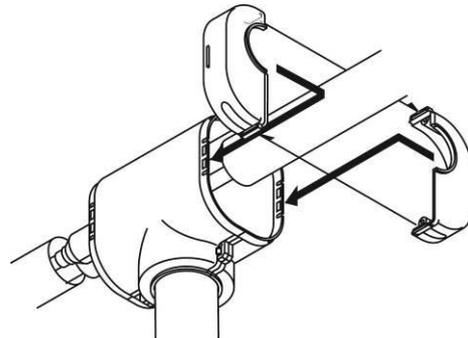
Fix the base and the cover of Tee part tentatively (4 points).



(5) Mount End Fitting

Fix the base and the cover of End Fitting tentatively (2 points).

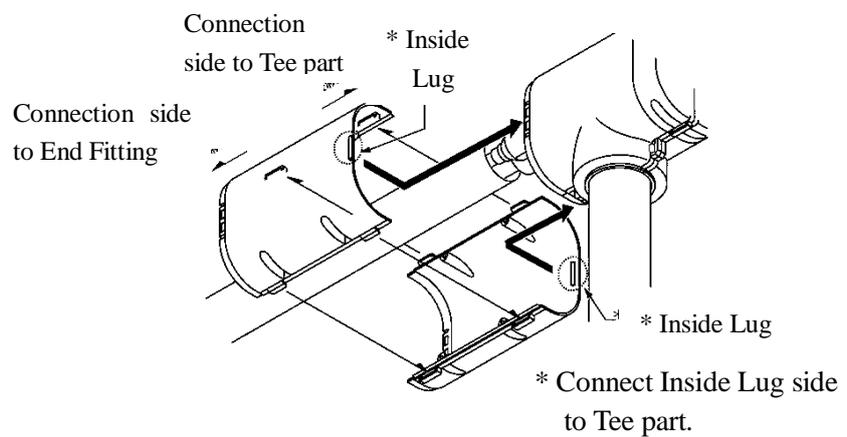
Mount End Fitting sliding to Tee part.



(6) Fix Socket Joint

Fix the base and the cover of Socket Joint tentatively (4 points)

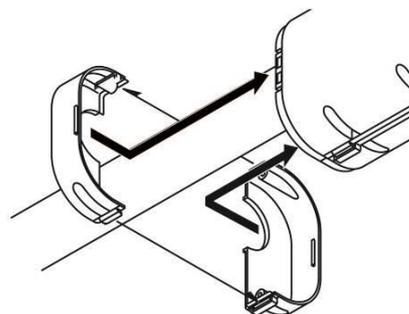
Mount Socket Joint sliding to Tee part.



(7) Mount End Fitting

Same as above (5), fix End Fitting tentatively (2 points).

Mount End Fitting sliding to Socket Joint.

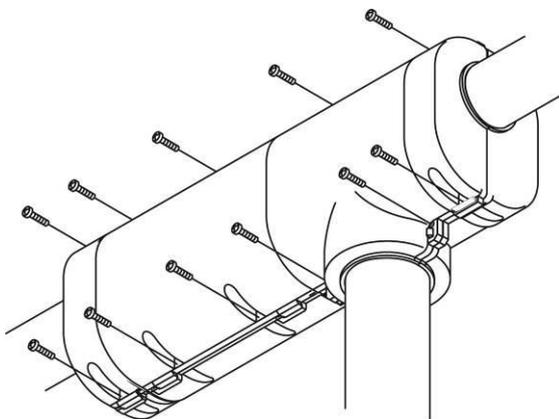


(8) Fix screws

Please be sure to fix screws to prevent falling down.

Please pay attention not to tighten screws too strongly. Thread ridge of screws might be broken if screws are tightened too strongly.

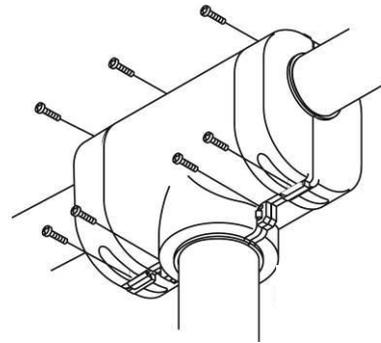
【In case with Socket Joint used】



(Screw fixing at 11 points)

【In case without Socket Joint】

Installation is possible without using Socket Joint.
(Please use Socket Joint depending on the length of branching connection.)



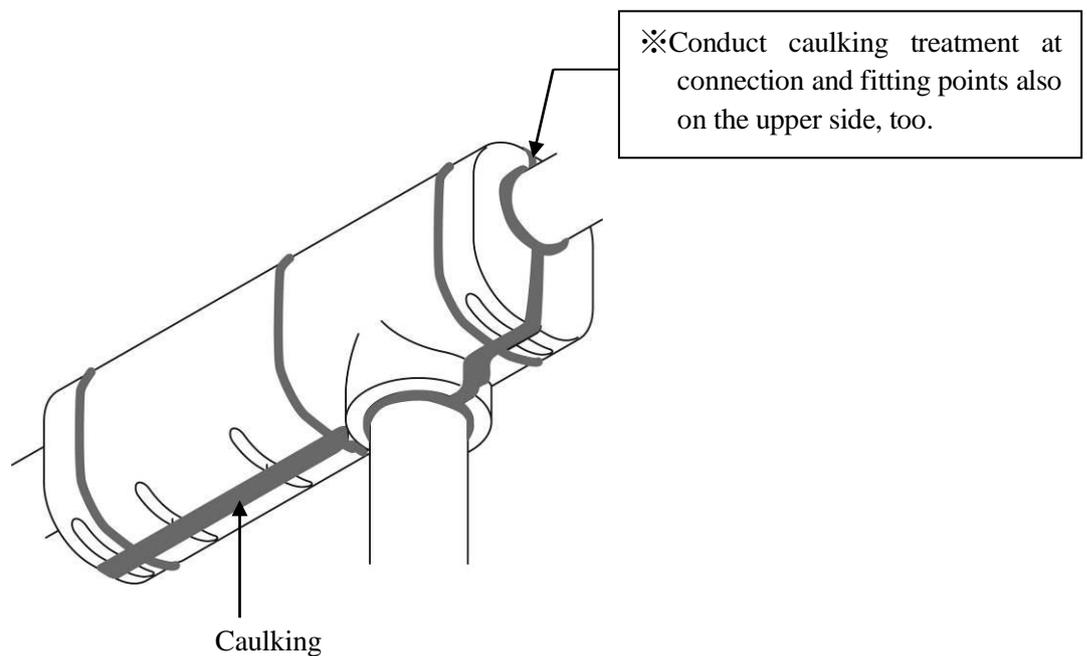
(Screw fixing at 7 points)

(9) Conduct Caulking Treatment

T-Branch for SLIMDUCT PD is not waterproof.

Please be sure to conduct caulking treatment at connection and fitting points where there is a risk of water invasion.

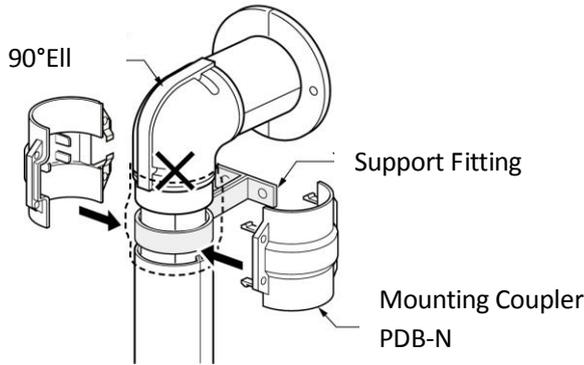
Please notice that it would be a cause of water invasion into the room if caulking treatment is missed especially at the places marked in the drawing below; ※



2-4. Installation procedure of Reinforcement Accessory for Notch (PDK)

<Application>

Please use Reinforcement Accessory for Notch (PDK) in case that Mounting Coupler (PDB-N) can not be used due to a support fitting is too close to Ell. Please install using with Mounting Coupler (PDB-N) in other cases.



Example:
Because the upper part of Mounting Coupler interferes with Ell, Mounting Coupler (PDB-N) cannot be used.

(1) Selection for Pipe Clamp

Please use suitable Pipe Clamp shown below in case Reinforcement Accessory for Notch (PDK) is used.

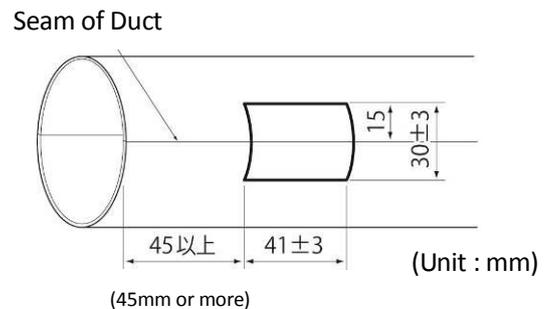
Table-9
Suitable Pipe Clamp and Estimation for Containable Sizes of Linesets

Duct Size	Suitable Pipe Clamp	Max. Size of Copper Pipe (Suction x Gas)		
		Insulation Wall Thickness		
		10×10	10×20	20×20
PD-90	50A (φ52.9mm≠ 2-5/64") or less	3/8×5/8	—	—
PD-120	80A or less	5/8×1-1/8	3/8×3/4	—
PD-140	100A or less	3/4×1-1/2	3/4×1-1/4	3/8×3/4

(2) Draw Cutting Line on Duct

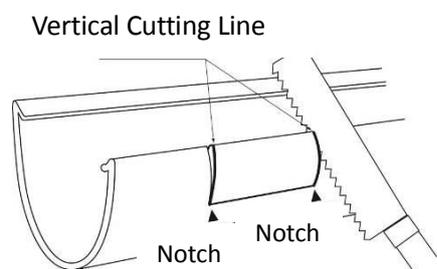
Please draw cutting line on the Duct for notch work.

(Caution) Centering the seam of Duct, draw the line keeping the indicated dimensions.



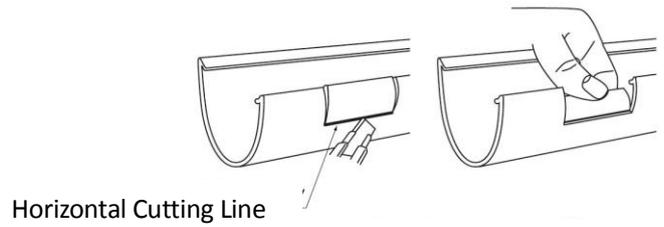
(3) Cut Notches

Cut notches by a saw according to the vertical cutting line.
(Both the base and the cover of Duct)



(4) Snap off

Draw a line by a cutter knife according to the horizontal cutting line and snap off the cutting part.



Horizontal Cutting Line

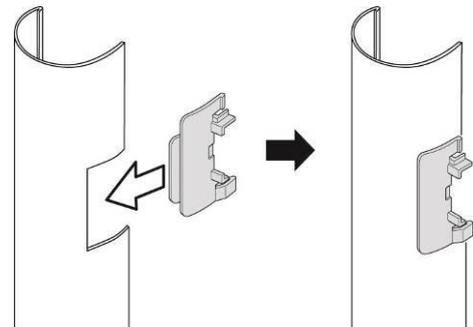
(Caution)

Pay attention not to be injured by a cutter knife.

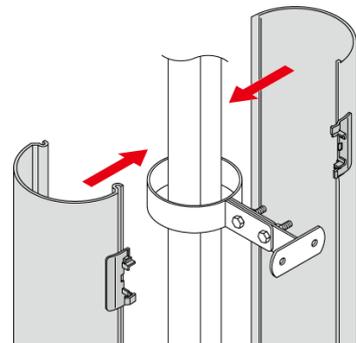
(5) Set up Reinforcement Accessory for Notch

Set up Reinforcement Accessory for Notch inserting to the cut part on Duct.

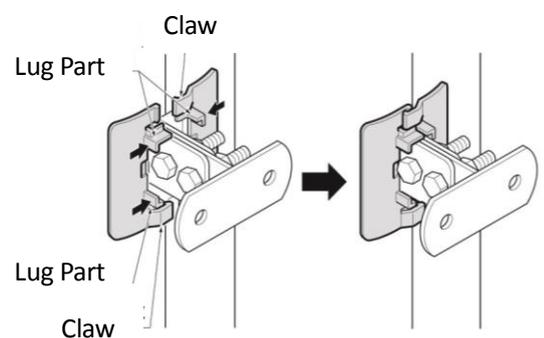
(Both the base and the cover of Duct)

**(6) Mount Duct**

Mount the base and the cover of Duct holding Pipe Clamp inside.

**(7) Fit Claw of Reinforcement Accessory for Notch**

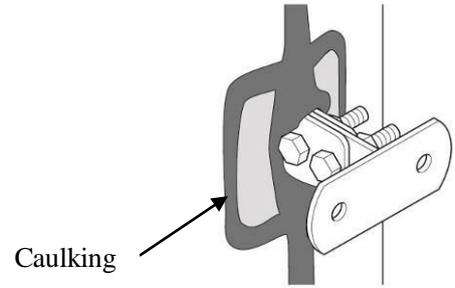
Push the lug part from both sides and fit the claw of Reinforcement Accessory for Notch.



(8) Conduct Caulking Treatment

Reinforcement Accessory for Notch is not waterproof. Please be sure to conduct caulking treatment at connection and fitting points where there is a risk of water invasion.

Please notice that it would be a cause of water invasion into the room if caulking treatment is missed especially at the places marked in the right drawing.

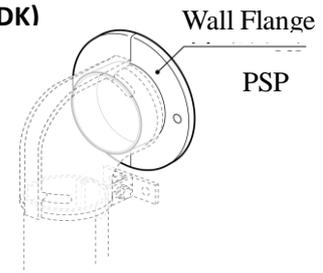


2-5. Installation procedure of Reinforcement Accessory for Notch (PDK)

< Application >

Fittings of SLIMDUCT PD can be fixed directly to Wall Flange (PSP).

Lower rising height from the wall surface is possible than Wall Flange PWP-N.



◎ Selection Guideline for Pipe Support Fittings

Please select tee bracket according to the distance between Duct and wall surface.

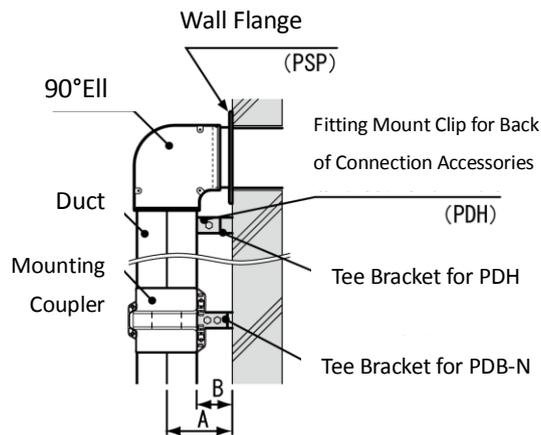


Table-10
Selection Guide for Tee Bracket

Combination of Pipe Support Fittings			Height from Duct Center A	Distance between Duct and Wall B
Pipe Clamp	Tee Bracket for PDB	Tee Bracket for PDH		
80A	50mm (1-61/64")	30mm (1-11/64")	98mm (3-27/32")	52mm (2-3/64")
	60mm (2-23/64")	40mm (1-9/16")	110mm (4-21/64")	64mm (2-33/64")
	70mm (2-3/4")	50mm (1-61/64")	120mm (4-23/32")	74mm (2-29/32")
100A	50mm (1-61/64")	30mm (1-11/64")	115mm (4-33/64")	54mm (2-1/8")
	60mm (2-23/64")	40mm (1-9/16")	127mm (5")	66mm (2-19/32")
	70mm (2-3/4")	50mm (1-61/64")	137mm (5-25/64")	76mm (2-63/64")

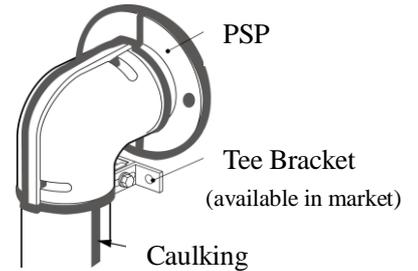
(Caution)

※1 Please be sure to fix fittings, which is to be fitted to Wall Flange (PSP), firmly by Fitting Mount Clip for Back of Connection Accessories PDH or Fitting Mount Clip PDL.

※2 SLIMDUCT PD is not waterproof.

Please be sure to conduct caulking treatment at connection and fitting points where there is a risk of water invasion.

Please notice that it would be a cause of water invasion into the room if caulking treatment is missed especially at the places marked in the right drawing.



2-6. Installation procedure for SUPPORTER BAND (PDY)

<Application>

Winding to SLIMDUCT PD, Supporter Band PDY supports the Duct from outside. It can be fastened even after the completion of ducting work.

(1) Install Pipe Clamp Brackets

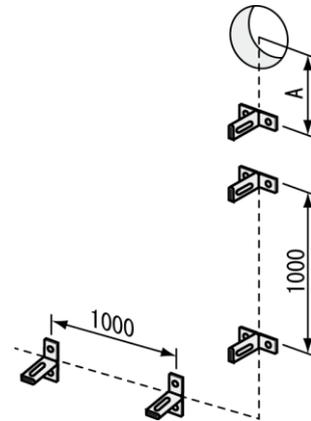
According to the piping line, install tee brackets with interval between brackets shown in the table below;

Table-11
Interval between brackets

Vertical Piping	1500mm (59-1/16")
Horizontal Piping	1000mm (39-3/8")
Suspension Piping	1000mm (39-3/8")

A*	PD-90	112mm (4-13/32")
	PD-120	128mm (5-11/32")
	PD-140	147mm (5-25/32")

※In case with PDE+PDH+PWP-N used.



Caution: In case of use with Supporter Band (PDY), please be sure to use 2pcs. PDY per one piece of SLIMDUCT PD.

(2) Selection for Pipe Clamp

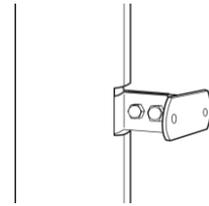
Please use suitable Pipe Clamp shown below in case Supporter Band (PDY) is used.

Table-12
Suitable Pipe Clamp and Estimation for Containable Sizes of Linesets

Duct Size	Suitable Pipe Clamp	Max. Size of Copper Pipe (Suction x Gas)		
		Insulation Wall Thickness		
		10×10	10×20	20×20
PD-90	50A or less	3/8×5/8	—	—
PD-120	80A or less	5/8×1-1/8	3/8×3/4	—
PD-140	100A or less	3/4×1-1/2	3/4×1-1/4	3/8×3/4

(3) Mount Duct

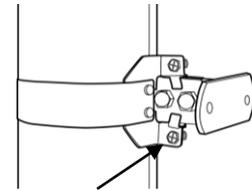
After piping, mount Duct which is notched according to the pipe clamp used.



(4) Fix Supporter Band (PDY)

Wind Support Band (PDY) onto Duct and fix by hexagon head bolt enclosed.

(Caution) To support Duct, please be sure to use 2pcs. PDY per one piece of SLIMDUCT PD.



Hexagon Head Bolt (enclosed)

2-7. Installation procedure for Duct Fixing Saddle (PDU)

<Application>

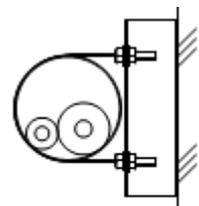
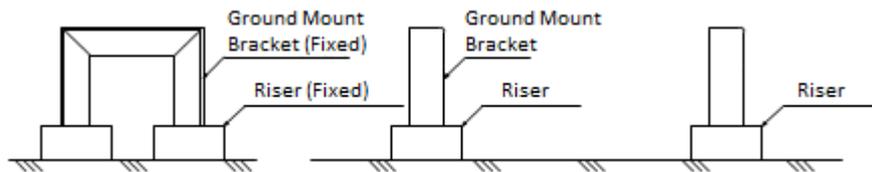
Fixing SLIMDUCT PD to ground mount bracket.

***Cannot be used for horizontal wall mount installation.**

(1) Set the ground mount bracket

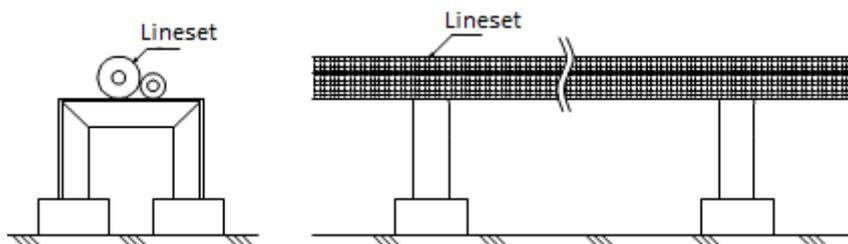
Set the ground mount bracket in accordance with the designated interval.

Fix the bracket firmly on the ground.



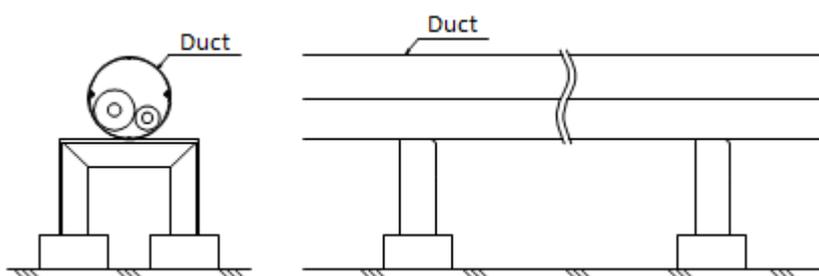
Forbidden Installation

(2) Install linesets

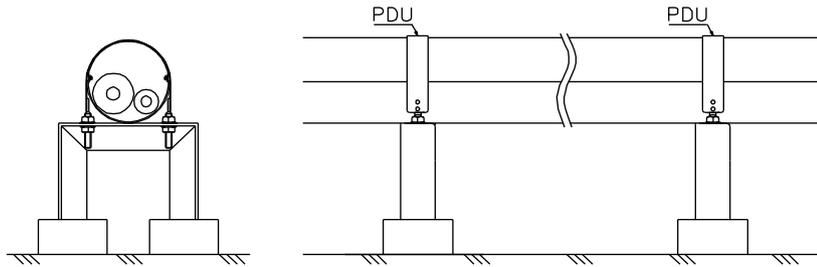


(3) Install duct

Install the duct by being sure to support two points per length.



(4) Install Duct Fixing Saddle (PDU)



Caution) ∴ Be sure to fix PDU at two points.

∴ Do not tighten the saddle too tight since it may result in deformation.

2-8. Installation procedure for PD-SD COUPLER (PSDR)

< Application >

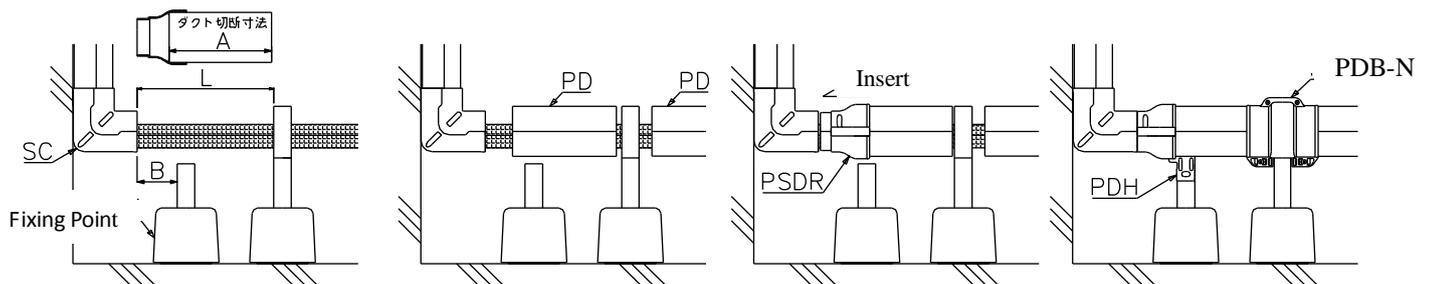
To be used for the connection of SLIMDUCT PD and SLIMDUCT SD.

And it also connects PD Duct and fittings of SLIMDUCT SD. Conversion size is shown in below;

Item No.	SLIMDUCT PD Side	SLIMDUCT SD Side
PSDR-90-100	PD-90 Duct	Fitting of SD-100
PSDR-120-140	PD-120 Duct	Fitting of SD-140

● In case of connection with SC Fitting ;

Cut dimension for PD Duct (A)



- ① Cut PD Duct according to the distance from SC Fitting to Pipe Clamp.
Fix Tee Bracket for PDH.

- ② Mount PD Duct.

- ③ Insert to SC Fitting after PSDR is fixed to PD Duct by screw.

- ④ Install PDB-N.
Insert PDH between PSDR and PD Duct and then fix to Tee Bracket etc.

- In case of connection with SCF Fitting ;

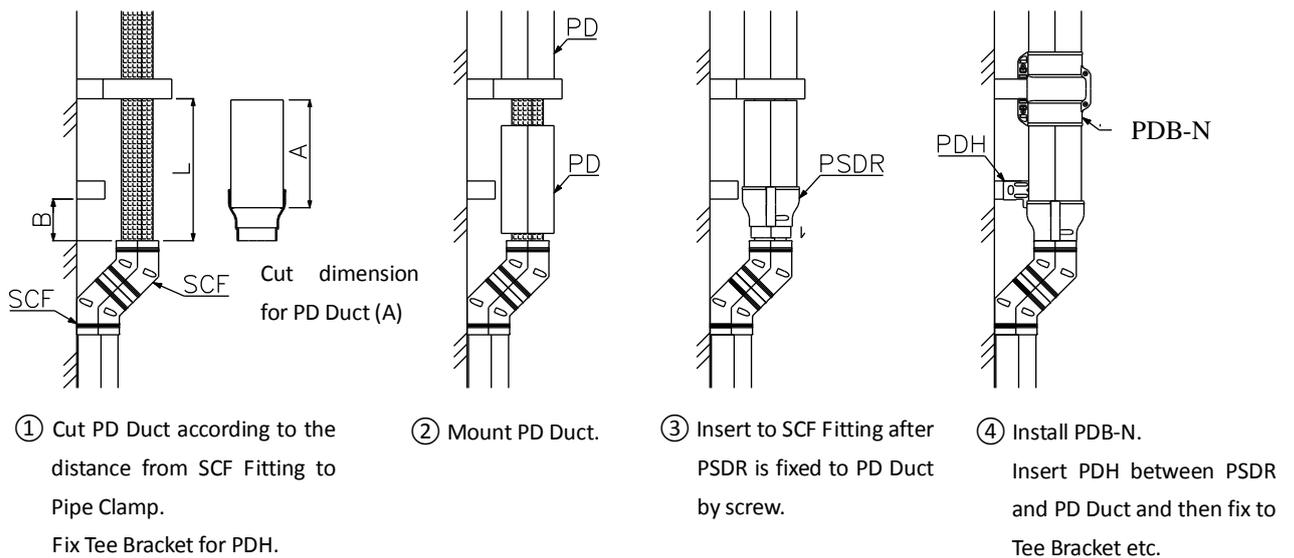


Table-13

Cut Dimension for PD Duct and Positioning Dimension for Tee Bracket

Item No.	Cut Dimension for PD Duct A	Positioning Dimension for Tee Bracket B
PSDR-90-100	L length — (minus) 63mm(2-15/32")	73mm (2-55/64")
PSDR-120-140	L length — (minus) 68mm(2-43/64")	78mm (3-1/16")

【Caution】 Please fix PSDR with using Fitting Mount Clip for Back of Connection Accessories PDH.

2-9. Installation procedure for REDUCER (PDI)

PDI is a Reducer fitting to reduce Duct size for 120→90 and 140→120 at fitting connection part.

Applicable Fittings : PDJ, PDE, PDF, PDI※ (enclosed with PDT)

Not applicable Fittings : PDB-N, PDJT

※In case of reduction from 140 to 90 size, conversion is possible by using both PDI-140-120 and PDI-120-90 to be connected to the fitting.

2-10. Installation procedure for Mounting Coupler for U-Clamp (PDBK)

< Application >

To be used when fixing SLIMDUCT PD on mounting bracket.

(1) Install Duct Fixing Saddle (PDU)

Fix the lineset on the mounting bracket by using U-Clamp.

Caution) • Be sure to tighten the bolt of U-Clamp to the top. Otherwise the mounting coupler will not fit.

• Be sure to use washer and bolt nut when fixing U-clamp.

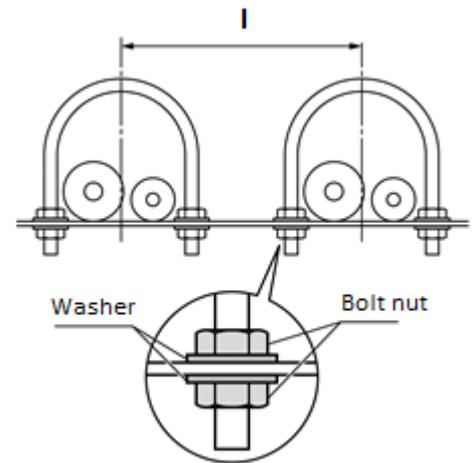
Without washer, mounting coupler will not become unfirm.

• Be sure to follow the designated interval when installing 2 clamps side to side.

Table-14
Interval between U-clamp

Item No.	I
PDBK-90	175mm (6-7/8")
PDBK-120	213mm (8-3/8")

*Please use M10 washer ($\phi 22\text{mm}$ <55/64">) or W3/8 size ($\phi 25\text{mm}$ <31/32">).



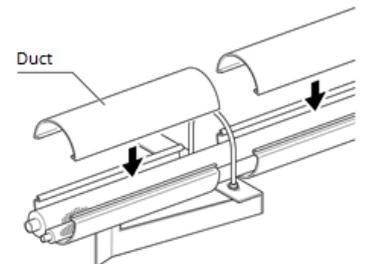
(2) Install Duct

Install the duct after cutting in accordance with the length of clamp interval and dimension of the clamp.

Use hack saw if needed.

Table-15 Cutting length of duct

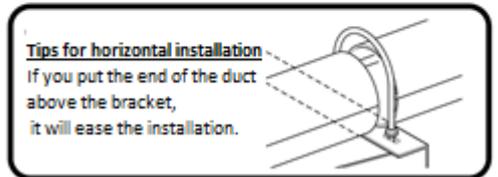
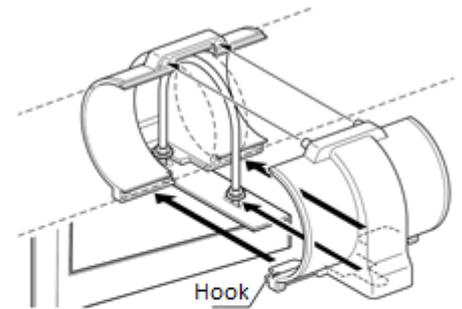
Interval	Duct Length	
	When using U-clamp	When using U-clamp Width 25mm (31/32")
1000mm (39-3/8")	975-985mm (38-25/64" - 38-25/32")	965-975mm (37-63/64" - 38-25/64")
1500mm (59-1/16")	1475-1485mm (58-5/64" - 58-15/32")	1465-1475mm (57-43/64" - 58-5/64")



*The duct may fall out if the cutting length is insufficient.

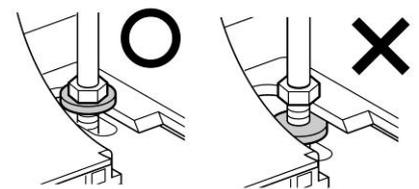
(3) Install Mounting Coupler

① Loose the bolt nut and slide in the bottom of the mounting coupler below the washer. Install the mounting coupler by engaging the hook.



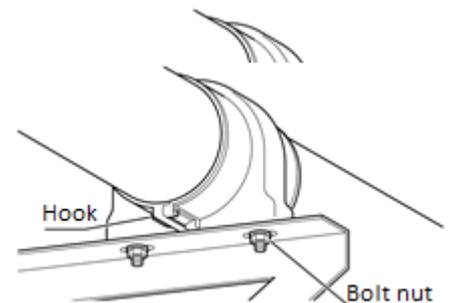
Caution) • If the mounting coupler slides in above the washer, the coupler could float above the bracket, or could be unfirm.

- Mounting coupler cannot be installed if the duct is inside the clamp.

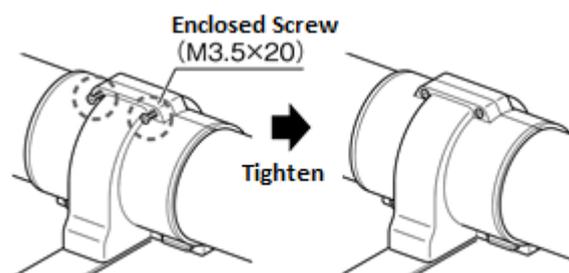


② Tighten the bolt nut of the clamp, after making sure the coupler is engaged.

Caution) • If the bolt nut is tighten when the hook is Cautionngaged, the coupler won't support the duct stably.



③ Securely tighten the enclosed screw (M3.5×20).



Caution)

• Be sure to support the weight of lineset by bracket .
If load applies directly on duct or U-clamp, it could result in deformation.

- Be sure to fix washer when using U-clamp to support lineset.

- Be sure the washer will come above the mounting coupler.
If the mounting coupler slides in above the washer,
the coupler could float above the bracket, or could be unfirm.
- When installing U-clamp side to side, be sure to follow the designated interval between the clamps.
Otherwise, the mounting coupler cannot be fixed appropriately.
- When bending the lineset, be sure to install mounting coupler nearby.
If there's no space to install the coupler, fix the fitting by using mounting clip for fittings.
Duct and fitting could fall out if there's a distance between the bended lineset and supporting point.
- Cut the duct at the suitable length according to the interval of each supports.
The duct may fall out if the cutting length is insufficient.
- It may result in deformation or crack if the screws are tighten excessively.