

Dec. 2019 4th Edition



Rigid PVC Pipe and Fittings with anti water condensation layer for air conditioning drainage

# ESLON® AC DRAIN PIPE ESLON® AC DRAIN Fittings ESLON® Transparent AC DRAIN Fittings



## Most suitable piping material for air conditioning drainage is

Eslon AC Drain Pipe and Fittings prevent water condensation and do not require any insulation work. It is a perfect fit for air conditioning drainage in office, hotel and hospital, etc.

## **Problems**

on conventional air conditioning drainage.



## Eslon AC Drain Pipe & Fittings solve all problems!

Insulation work



It is a time consuming for insulation work.

Secure the installation



Cannot check joint and slope angle.

Threading work



Threading is painful work.



#### o not need insulation work

Eslon AC Drainage Pipe and Fittings have a function of thermal insulation. Therefore you do not need any insulation work.







Insulation Work

Drainage Work

## asy to Install and Improve the Quality

Insulation Work

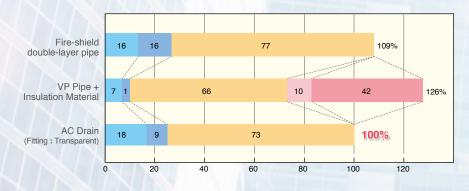
Installation is identical to a conventional DV connection. There is no outer insulation material. Therefore, inspection work on joint and slope setting is much easy. In addition, visual inspection and securing the joint works are feasible by using Transparent Fittings.

C

### ost Saving

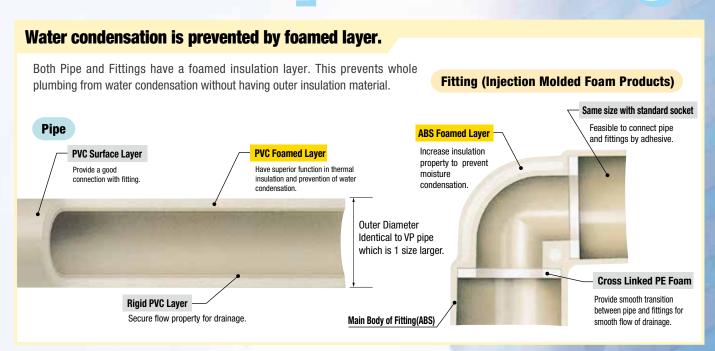
Eslon AC Drain Pipe and Fittings System is economical because of easy installation and elimination of insulation work.

Cold and Hot Wate

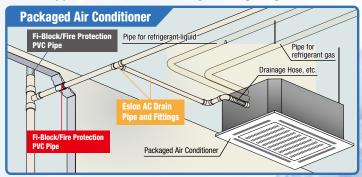


- Pipe material cost
  - Fitting material cost
- Piping construction cost
- Thermal insulation material costs
- Thermal insulation construction cost
- Price is based on actual price
- Trial calculation for 3 floors(The nominal diameter is 50 for vertical pipes, the nominal diameter is 25-50 for horizontal piping, and the total number of FCU devices is assumed to be 45)
- Construction costs are set with reference to the public building construction standards

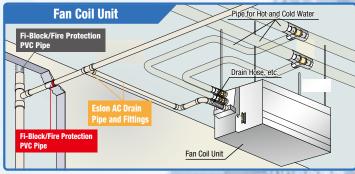
# **AC Drain Pipe and Fittings!**



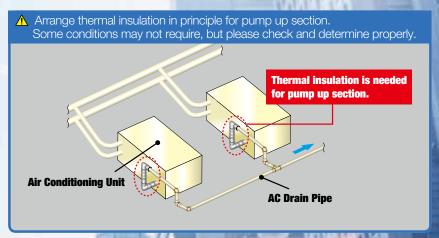
#### Can be applied for air conditioning drainage regardless whether the system is packaged air conditioner or fan coil unit.











#### Applicable Range

Category	Condition
Application	for Air Conditioning Drainage
Water Pressure	Under no pressure (Note)
Water Temperature	Normal Temperature (5-35°C)
Nominal Diameter	20-50

Note: Except pump up whose length is less than 1 meter

#### Mark in this brochure

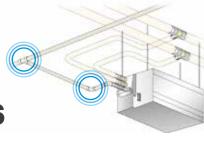
In case left hand mark is stated, it may cause serious Caution injury or burn wound unless properly treated



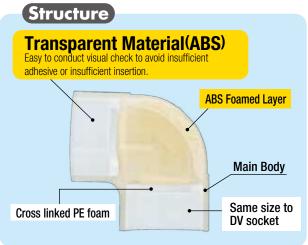
Items with left hand mark is precaution statement to secure the performance of material



# **Transparent AC Drain Fittings**







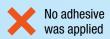
**Easy to check connecting condition** 

Refer Page 4, 5, 6, 7 for product line and specification.







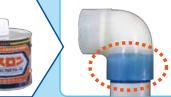




Adhesive No. 73S Blue



Adhesive No. 75S Blue N





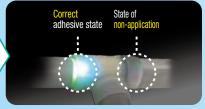


In case of luminous adhesive



Adhesive No.73S UV

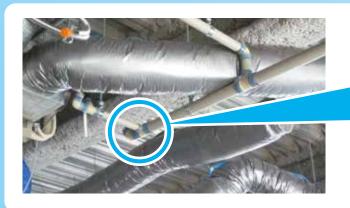


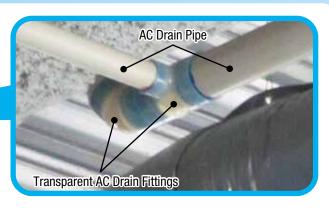




Be sure to use adhesive No.73S Blue, No.75S Blue N, or No.73S UV for transparent AC drain fittings.

## **Example of plumbing**

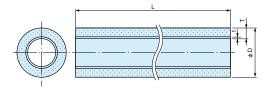




## **Eslon AC Drain Pipe and Fittings Product Lineup**

#### Straight Pipe





Munsell No. 2.5Y7.5/1

/1	Unit:mm	
tity r age	Price	
	3,450 yen	
	0.004	

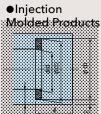
Limitem

										OTITORINI
	Product Number	Nominal Diameter	Outer Diameter pD	Tube Thickness T	Thickness of Rigid PVC Layer t	Approximate inner diameter (reference)	Length L	Reference Mass (kg/m)	Quantity per Package	Price
	ACD20P	20	32.0	6.5	1.7	19.0		0.32	16	3,450 yen
	ACD25P	25	38.0	6.5	2.0	25.0		0.50	12	3,864 yen
	ACD30P	30	48.0	8.5	2.0	31.0	4.000	0.72	9	4,830 yen
	ACD40P	40	60.0	9.0	2.2	42.0	4,000	1.00	6	6,279 yen
	ACD50P	50	76.0	9.5	2.5	57.0		1.41	4	8,211 yen
W	ACD65P	65	89.0	10.0	2.6	69.0		1.77	4	11,286 yen

#### Fittings

Socket Dimensions (Common)



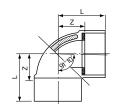


						Oriit.	
Nominal	Inn	er Diameter		Socket	Thickness t1	Socket Thickness	
Diameter	φd1	φd2	φd	Length ℓ	(minimum)	t2 (minimum)	
20	32.25±0.25	31.85±0.25	19.0	23	8.5	2.7	
25	38.25±0.25	37.85±0.25	25.0	23	8.5	2.7	
30	48.30±0.30	47.80±0.30	31.0	27	0.7	2.7	
40	60.35±0.30	59.75±0.30	42.0	30	9.1	3.1	
50	76.40±0.30	75.70±0.30	57.0	40	9.4	3,1	
₩ 65	89.45±0.30	88.65±0.30	69.0	44	10.0	3.6	
	20 25 30 40 50	Diameter	Diameter         фd1         фd2           20         32.25±0.25         31.85±0.25           25         38.25±0.25         37.85±0.25           30         48.30±0.30         47.80±0.30           40         60.35±0.30         59.75±0.30           50         76.40±0.30         75.70±0.30	Diameter         фd1         фd2         фd           20         32.25±0.25         31.85±0.25         19.0           25         38.25±0.25         37.85±0.25         25.0           30         48.30±0.30         47.80±0.30         31.0           40         60.35±0.30         59.75±0.30         42.0           50         76.40±0.30         75.70±0.30         57.0	Diameter         φd1         φd2         φd         Length ℓ           20         32.25±0.25         31.85±0.25         19.0         23           25         38.25±0.25         37.85±0.25         25.0         23           30         48.30±0.30         47.80±0.30         31.0         27           40         60.35±0.30         59.75±0.30         42.0         30           50         76.40±0.30         75.70±0.30         57.0         40	Diameter         φd1         φd2         φd         Length ℓ         (minimum)           20         32.25±0.25         31.85±0.25         19.0         23         8.5           25         38.25±0.25         37.85±0.25         25.0         23         8.5           30         48.30±0.30         47.80±0.30         31.0         27         0.7           40         60.35±0.30         59.75±0.30         42.0         30         9.1           50         76.40±0.30         75.70±0.30         57.0         40         9.4	

⟨ABS Foam Injection Molded Product⟩

#### 90 °Elbow

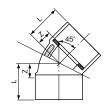




								Unit:mm	
	Nominal	Effective	Full	Quantity per	Ivory C	Colored	Transparent		
	Diameter	Length Z	Length L	Package	No.	Price	No.	Price	
	20	23	42	80	ACL20N	621 yen	ACL20S	713 yen	
	25	26	45	160	ACL25N	665 yen	ACL25S	759 yen	
	30	31	54	100	ACL30N	786 yen	ACL30S	909 yen	
	40	37	63	50	ACL40N	1,076 yen	ACL40S	1,242 yen	
	50	46	82	20	ACL50N 1,265 yen		ACL50S	1,461 yen	
NEV	65	52	92	16	ACL65N	1,610 yen	ACL65S	1,850 yen	

45 °Elbow

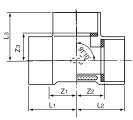




								Unit:mm
	Nominal	Effective	Full	Quantity per	Ivory C	Colored	Trans	parent
	Diameter	Length Z	Length L	Package	No.	Price	No.	Price
	20	14 33		80	AC4L20N	621 yen	AC4L20S	713 yen
	25	16	35	160	AC4L25N	665 yen	AC4L25S	759 yen
	30	18	41	100	AC4L30N	786 yen	AC4L30S	909 yen
	40	22	48	60	AC4L40N	1,076 yen	AC4L40S	1,242 yen
	50	26 62		30	AC4L50N	1,265 yen	AC4L50S	1,461 yen
NEV	65	29	69	20	AC4L65N	1,610yen	AC4L65S	1,850 yen

Tees



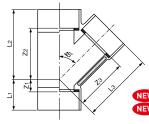


											Unit:mm
Nominal	Effec	tive Le	ength	Full	Leng	gth	Quantity	Ivory Co	olored	Trans	parent
Diameter	Z1	Z2	Z3	L1	L2	L3	per Package	No.	Price	No.	Price
20	23	23	23	42	42	42	40	ACT20N	748 yen	ACT20S	851 yen
25	26	26	26	45	45	45	100	ACT25N	786 yen	ACT25S	897 yen
25×20	23	23	26	42	42	45	40	ACT251N	874 yen	ACT251S	1,001 yen
30	31	31	31	54	54	54	60	ACT30N	907 yen	ACT30S	1,035 yen
30×20	23	23	31	46	46	50	24	ACT302N	907 yen	ACT302S	1,035 yen
30×25	26	26	31	49	49	50	60	ACT301N	907 yen	ACT301S	1,035 yen
40	38	38	38	64	64	64	30	ACT40N	1,265 yen	ACT40S	1,461 yen
40×20	23	23	38	49	49	57	20	ACT403N	1,208 yen	ACT403S	1,380 yen
40×25	26	26	37	52	52	56	40	ACT402N	1,208 yen	ACT402S	1,380 yen
40×30	31	31	37	57	57	60	40	ACT401N	1,208 yen	ACT401S	1,380 yen
50	46	47	46	82	83	82	20	ACT50N	1,668 yen	ACT50S	1,921 yen
50×20	23	24	46	59	60	65	20	ACT504N	1,610 yen	ACT504S	1,840 yen
50×25	26	27	46	62	63	64	20	ACT503N	1,610 yen	ACT503S	1,840 yen
50×30	31	32	46	67	68	69	20	ACT502N	1,610 yen	ACT502S	1,840 yen
50×40	38	39	46	74	75	72	20	ACT501N	1,610 yen	ACT501S	1,840 yen
65	52	53	52	93	94	93	10	ACT65N	2,120 yen	ACT65S	2,440 yen
65×25	28	29	53	68	69	72	18	ACT654N	1,940 yen	ACT654S	2,440 yen
65×30	33	34	53	73	74	76	16	ACT653N	1,940 yen	ACT653S	2,440 yen
65×40	40	41	53	80	81	79	14	ACT652N	1,940 yen	ACT652S	2,440 yen
65×50	46	47	53	86	87	89	12	ACT651N	1,940 yen	ACT651S	2,440 yen

## **Eslon AC Drain Pipe and Fittings Product Lineup**

#### 45 °Y





	U												
	Nominal	Effec	tive L	ength	Full Length			Quantity per	Ivory Colored		Transparent		
	Diameter	Z1	Z2	Z3	L1	L2	L3	Package	No.	Price	No.	Price	
	30	16	62	66	39	39 85 89		30	ACY30N	1,495 yen	ACY30S	1,725 yen	
	40	24	76	82	50	102 108		25	ACY40N	1,610 yen	ACY40S	1,852 yen	
	50	24	96	102	60	132	138	14	ACY50N	1,725 yen	ACY50S	1,990 yen	
	50×40	12	84	92	48	120	118	15	ACY501N	1,668 yen	ACY501S	1,921 yen	
N	65	30	110	119	70	150	161	8	ACY65N	2,190 yen	ACY65S	2,520 yen	
N	65×50	18	102	110	58	142	146	8	ACY651N	2,120 yen	ACY651S	2,440 yen	

#### ⟨Rigid PVC Injection Molded Product⟩

#### Socket





								Unit:mm
	Nominal	Effective				Ivory Colored		parent
	Diameter	Length Z	Length L	per Package	No.	Price	No.	Price
	20	11	49	120	ACS20N	495 yen	ACS20S	541 yen
	25	25 11		240	ACS25N	544 yen	ACS25S	598 yen
	30	11	57	160	ACS30N	628 yen	ACS30S	690 yen
	40	11	63	80	ACS40N	907 yen	ACS40S	978 yen
	50	11	83	40	ACS50N	1,027 yen	ACS50S	1,116 yen
IE۷	65	12	92	10	ACS65N	1,300 yen	ACS65S	1,420 yen

#### Reducing Socket





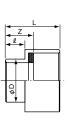
_								Unit:mm	
	Nominal	Effective	Full	Quantity per	IVOLY	Colored	Transparent		
	Diameter	Length Z	Length L	Package	No.	Price	No.	Price	
	25×20	13	51	80	ACS251N	518yen	ACS251S	564 yen	
	30×25	12	54	180	ACS301N	628 yen	ACS301S	690 yen	
	40×30	13	62	100	ACS401N	907yen	ACS401S	978yen	
	50×40	13	75	60	ACS501N	1,027yen	ACS501S	1,116yen	
NEW	65×50	13	89	10	ACS651N	1,300 yen	ACS651S	1,420 yen	

#### Adapter (Transition Fitting to PVC Pipe) Nominal

Nominal Diameters 20, 25







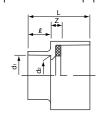
											Unit:mm
	Nominal	Effective	Spigot		Full Length	Spigot Side Connection		Ivory Co	lored	Transparent	
	Diameter	Length Z	φD	l	Lengui	Fitting	Package	No.	Price	No.	Price
	20	41	26.0	34	60.0	TS20	100	ACDA20	276 yen	ACA20S	299 yen
	25	5 46 32.0 39		65.0	65.0 TS25		ACDA25	288 yen	ACA25S 322ye		
	30	24	38.0	17	47.5	DV30	80	ACDA30	345 yen	ACA30S	380 yen
	40	29	48.0	21	55.0	DV40	50	ACDA40	403 yen	ACA40S	437 yen
	50	32	60.0	24	64.5	DV50	30	ACDA50	460 yen	ACA50S	495 yen
NE	W 65	45	76.0	37	85.0	DV65	10	ACDA65	590 yen	ACA65S	630 yen

Unit:mm

#### Dual Conversion Adapter (PVC Pipe VP and Directly Convertible Fittings)

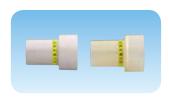
\* A PVC TS / DV fitting is not required for PVC pipe conversion.

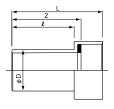




									0
AC Drain	Effective	Full	VP Socket	١	/P Socke	t	Quantity	Transp	arent
Nominal Diameter	Length Z	Length L	Size	d1	d2	l	per Package	No.	Price
25	8	45	25	32.25	31.85	18	80	ACVP25	450 yen
30	8	49	25	32.25	31.85	18	80	ACVP30	580 yen

#### MD Fitting Connection Adapter





										Unit:mm		
Nominal	Effective	Spi	got	Full Spigot Side			Ivory (	Colored	Transp	arent		
Diameter	Length Z	φD	)   &   -	L	Fitting			Package	No.	Price	No.	Price
40	80	48	72	105	MDaaa40	25	ACMD40	920 yen	ACMD40S	989 yen		
50	84	60	76	119	MDaaa50	12	ACMD50	1.047 ven	ACMD50S	1.139 ven		

- Remarks: 1. Connect an AC drain pipe of the same nominal diameter to the socket side. Connect an MD fitting to the spigot side. (Do not connect a TS fitting or DV fitting to the spigot side.)

  2. Do not cut the spigot and use.

  3. Thermally insulate the spigot part separately.

Remarks: 1. Please refer to page 11 for how to use.
2. Connect an AC drain pipe of the same nominal diameter to the socket side. Connect TS fittings to the spigot side with nominal diameters of 20 and 25, and connect DV fittings to the spigot side with nominal diameters of 30, 40 and 50 (as these are for use with DV socket measurements, TS fittings cannot be used).

#### Expansion Fitting for Vertical Pipe



Rubber R	D1	7
•	D3	

													Unit:mm
	Nominal	D <sub>1</sub>	D2	Дз	d	1	l <sub>1</sub>	<b>l</b> 2	Quantity	Ivory Co	olored	Transpa	arent
	Diameter	וט	۷	Do	3	_	ų.		per Package	No.	Price	No.	Price
	30	69	60	92	48.6	106	61	75	6	ACSS30N	1,830 yen	ACSS30S	2,100 yen
	40	85	76	106	60.8	113	62	78	5	ACSS40N	2,510 yen	ACSS40S	2,890 yen
	50	106	89	123	77.1	129	67	84	16	ACSS50N	2,830 yen	ACSS50S	3,250 yen
NE	W 65	120	114	137	90	132	65	83	12	ACSS65N	3,840 yen	ACSS65S	3,950 yen

Remarks: 1. This is a fitting exclusively for vertical pipes. It cannot be used for horizontal pipes.

2. Please also refer to the construction standards and precautions on page 10.

#### Vertical Trap





							Unit:mm	
	Nominal			L2	Quantity per	Transparent		
	Diameter	LI		Lz	Package	No.	Price	
	30	147	101	53	40	ACTT340	6,250 yen	
	40	141	89	53	40	AC11340	6,250 yen	
	50	162	90	53	40	ACTT50	7,500 yen	
N	₩ 65	195	115	53	20	ACTT65	9,000 yen	

Remarks: 1. Nominal diameters 30 and 40 are used in combination. When connecting a 30A pipe, fix the supplied conversion adapter to the main unit socket with adhesive.

- The item with nominal diameter of size 30 connects the conversion adapter to the main unit.
- Please also refer to the construction standards and precautions on p.10.

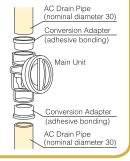


		-	φ67.4
29	26		282
			φ60

#### How to use the conversion adapter

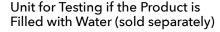
When connecting an AC drain pipe with a nominal diameter of 30, connect the supplied conversion adapter to the vertical trap 30-40 A.

▲ Vertical traps require periodic inspection and cleaning and may need to be replaced. When replacing, use an inspection port unit sold separately.



## Inspection Port Unit Only (sold separately)









Upper Part

 Quantity per Package
 Transparent No.
 Price

	Product Name	per	папорагені			
	Floudet Name	Package	No.	Price		
ī	nspection Port Unit	10	ACTTF35	3,500 yen		
	Unit for Testing if the Product is Filled with Water	10	ACTTM35	2,780 yen		

Remarks: 1. The inspection port unit is set in advance in the vertical trap.
2. The inspection port unit is used when repairing or replacing the unit set in the vertical trap.

 Testing whether the product is filled with water cannot be performed simply by installing the test unit. A separate water stop jig is required.

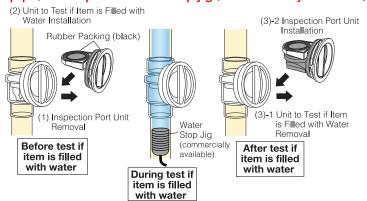
#### How to Use the Unit for Testing if the Product is Filled with Water

This product is used in exchange for the inspection port unit connected to the vertical trap during the test to see if the product is filled with water.

There is no water stop function in the vertical pipe, so a separate water stop jig (commercially available)

is required to perform the test to check if the product is filled with water.

- (1) Turn the inspection port unit counterclockwise to unlock and pull it out.
- (2) Install a unit for testing if the product is filled with water. When installing, make sure that two types of rubber packing (black) are set, and lock it by turning it clockwise while pushing the handle until it is vertical or horizontal.
- (3) After stopping the water in the pipe on the floor below the trap and performing a test to see if it is filled with water, be sure to re-set the inspection port unit removed in (1). At that time, make sure that the two types of rubber packing (black) are set, and there is no abnormality in the self-closing membrane.



▲Since the vertical trap has a self-closing membrane, it is not possible to vent the downstream side, so use this product during a test to see if an item is filled with water.

## **Eslon AC Drain Pipe and Fittings Product Lineup**

#### **Related Parts**

#### Screw-Type Cleaning Port (Rigid PVC Injection Molded Product)

Unit:mm Clamp Torque (N·m) Quantity per Package Ivory Colored D1 D2 Dз L1 L2 L3 20 41 27 32 19 42.5 17.5 2 JNCO25N 350 yen ПП 200 길리 JNCO30N 25 45 32 38 19 41.2 19.5 2 200 380 yen 30 55 41 48 23 44.5 24.0 4 240 JNCO40N 380 yen 40 68 51 60 26 47.5 29.0 132 JNCO50N 440 yen 730 yen 76 36 57.5 36.0 50 69 JNCO65N 84 68 98 81 89 41 65.0 42.0 48 JNCO75N 1,090 yen

Remarks: 1. Do not use where contacting water continuously, as water condensation may occur.
2. A nominal diameter of one size larger for the AC drain is indicated on the product.

# Example of using the screw-type cleaning port: AC drain nominal diameter 50 case \*The nominal diameter of the screw-type cleaning port used is one size larger than the AC drain fitting nominal diameter. AC Drain Pipe Nominal Diameter 50 AC Drain Fitting Nominal Diameter 50

#### **Eslon Adhesive**

Please use it as a standard adhesive for AC drain pipe connection.



## No.75S Blue N (Colored low viscosity type) Capacity: 500g can (with brush) 1kg can (with brush)









### Lights up when checking construction!

The adhesive shines when illuminated with a black light. You can see at a glance whether or not it has been applied even in a dark place, which is useful for confirmation of nonapplication.



- ⚠ Before using No.73S UV, make sure that the color shows.
- ⚠ This is an adhesive for use with drainage. Do not use it for water supply or pressurized pipes.
- ⚠ If it spills on the floor, wipe it up immediately.

<sup>\*</sup>Be sure to use adhesive No.73S Blue, No.75S Blue N, or No.73S UV for transparent AC drain fittings.





By cutting the AC drain pipe while turning it, it can be cut without damaging the foam layer.



(For nominal diameter 20-50)







\*Can handle up to a nominal diameter of 50.



No crushing of the foam layer! No burrs! Handles nominal diameters of 20-50! No chips! No diagonal breaks!

Product Name	Price
AC Drain Cutter (standard type)	37,300 yen
AC Drain Cutter (small)	34,000 yen
Spare Blade	9,200 yen

\*The AC drain cutter product is handled by SEKISUI CHEMICAL CO., LTD.

## **Eslon AC Drain Pipe & Fittings Construction Procedure**

#### ■ Construction Procedure

Cut with a PVC saw

## Cut Cut with the AC drain cutter

Mark the part to be cut all around, then cut at right angles to the axis of the pipe using the

AC drain cutter or a PVC saw.



Do not use a PVC cutter, etc., as it will cause cracks and fissures.

In the case of a diagonal cut, drain water may enter from the end of the pipe, and there is a risk of water leaking from minute cuts on the outer surface of the pipe.

If there are any scratches, dents or flattened parts on the pipe, cut and remove those parts.

When using an AC drain cutter (shown on page 8), be sure to refer to the accompanying instruction manual.

(Handles up to a nominal diameter of 50)

#### Application of Adhesive



Adhesive application to pipe end surface

pipe outer surface

Adhesive application to the

Marked

Insertion Line

Apply ESLON adhesive (No.73S Blue, No.75S Blue N, No.73S, No. 75S, No.73S UV) evenly to the inner surface of the fittings, the pipe end surfaces and the outer surface of the pipe.

Be sure to use adhesive No.73S Blue, No.75S Blue N, or No.73S UV for transparent AC drain fittings.

Apply adhesive not only to the inner surface of the fittings and the outer surface of the pipe but also to the pipe ends. If the adhesive is not applied, drain water may enter from the pipe end and may leak due to minute cuts on the outer surface of the





#### Chamfer



Chamfer the threads at the end of the pipe on both the inner and outer surfaces.

If it is not chamfered, the adhesive on the socket will be scraped off when connected, which may cause the thread to come off. So please be sure to chamfer the thread.

#### 6 Insertion



<Ivory Colored> Insert as far into the pipe as possible.

<Transparent> Insert as far into the pipe as possible.

#### Cleaning Process



Wipe off with a dry cloth any dirt such as sand, earth, and dust and moisture, etc., adhering to the inside of the fittings socket or the pipe spigot.

#### 7 Holding (wiping off adhesive, ventilating)



Hold the pipe and fittings until the pipe can no longer come out of the fitting. (Hold for 30 seconds or more)

Also, wipe off any protruding adhesive with a waste cloth. Additionally, ventilate the piping thoroughly after installation.

#### • The outer diameter of the AC drain pipe is the same size as the outer diameter of a PVC pipe that is one caliber larger in nominal diameter, so support brackets for use with the PVC pipe can be used.

• Install the AC drain pipe supports at the same interval as the PVC pipe (VP)

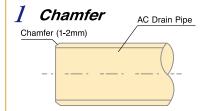
#### 4 Record Insertion Length



Record the insertion length shown in the table below in the pipe spigot.

Reference: Insertion length (marked line recorded length) Unit:mm							
Nominal Diameter	20	25	30	40	50	65	
Insertion Length	19	19	23	26	36	40	

#### ■ Installation Procedure for Expansion ■ Vertical Trap Installation Procedure Fittings for Vertical Pipes



Chamfer the pipe end about 1-2mm.

#### Inspection Port Unit Removal



Please remove the inspection port unit before installation.



If the trap is installed without removing it and the adhesive sticks to the inspection port unit, it may not work.

### $oldsymbol{2}$ Application of Silicone Sealant

Apply silicone sealant evenly to the pipe end surface.

If it is not applied, drain water may enter from the pipe end and may leak from minute cuts on the outer surface of the pipe.

#### 3 Insertion

Please insert up to the standard insertion length for each nominal diameter in the table on the right.

Nominal Diameter	Insertion Length
30	54mm
40	57mm
50	64mm
65	63mm

## Adhesive Bonding

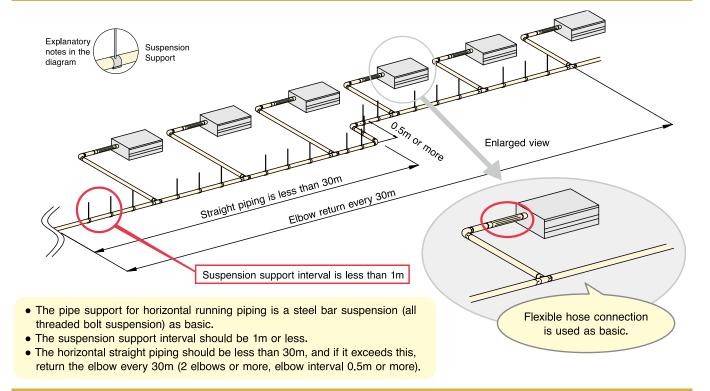
Bond to the AC drain pipe with adhesive.

#### Inspection Port Unit Installation

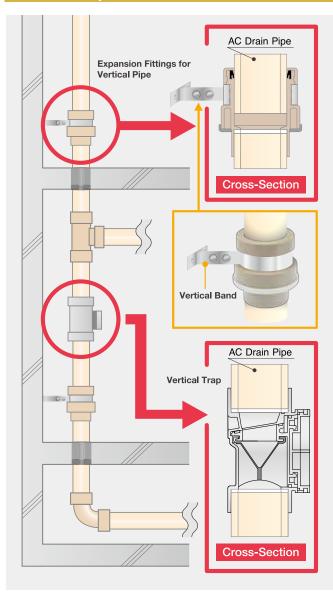


Attach the removed inspection port unit. When installing, while pushing the handle until it is vertical or horizontal, turn it clockwise to lock it.

#### **Horizontal Pipe Installation Standard**



#### Vertical Pipe Installation Standard



## Common precautions for the vertical pipe expansion fittings and vertical traps

- This product is a fitting exclusively for vertical pipes. Do not use it for horizontal pipes.
- •The direction of the arrow on the main unit is the direction of flow of the drain water. Install the pipe with the arrow in the downward direction.
- •When connecting, chamfer (deburr) the inner and outer surfaces of the pipe end.
- pipe end.
  •Remove any foreign matter adhering to the pipe or packing.
- •When inserting the pipe into the fitting, do not insert it with force, such as oblique insertion or hammering.
- After installation, be sure to run water through the pipe and check that water flows.

#### **Expansion Fittings for Vertical Pipe**

#### Installation Standard

- •Install the expansion fittings on the slab at one place on each floor.
- •If the pipe is not fixed to the penetration part and has no junction, install one expansion fitting every 10 m.
- •Support the expansion fittings and directly under the expansion fittings.

#### **Installation Precautions**

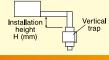
- Application of lubricant is not required for the rubber ring part.
- •Insert the AC drain pipe to the specified insertion length.
- Apply silicone sealant to the end surface of the pipe that is inserted upstream of the expansion fittings for vertical pipes.

Nominal Diameter	Insertion Length
30	54mm
40	57mm
50	64mm
65	63mm

#### **Vertical Trap**

#### Installation Standard

- •The installation height (H) of the air conditioner and this product should be 50mm or more. However, the installation height (H) is required to be in accordance with the internal static pressure (negative pressure) of the connected air conditioner.H [mm] = Internal static pressure
- (negative pressure) [Pa] ÷ 9.8 [Pa / mmAq] + 50 [mm]
- This product requires periodic inspection and cleaning, and may require replacement. Provide sufficient space around the product for maintenance.



#### Installation Precautions

- •Please attach this product to the AC drain pipe using an ESLON adhesive. Be careful of dripping due to excessive application of adhesive. If the adhesive sticks to the self-closing film, it may not work, so remove the inspection port unit before the parts are attached together with adhesive.
- •When using the conversion adapter (30A), attach it to the main unit with an ESLON adhesive.

## (1) When connecting VP pipes (TS joints) of nominal diameters 20 and 25 to AC drain pipes

Connect the adapter fitting and TS fitting in combination.

▲ The VP pipe and TS fitting require separate thermal insulation.

\*This can also be used when connecting to a drain hose.

## (2) When connecting VP pipes (DV fittings) of nominal diameters 30, 40, 50 and 65 to AC drain pipes

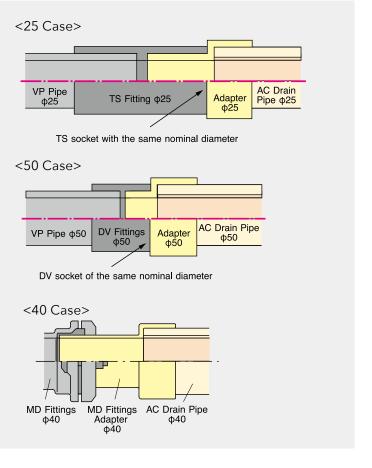
Connect adapter fittings and DV fittings in combination.

- ▲ The VP pipe and DV fitting require separate thermal insulation.
- ▲ Since the spigot is the size of the DV socket, it cannot be connected to TS fittings.

## (3) When connecting MD fittings and the AC drain pipe

Connect using the MD fitting adapter.

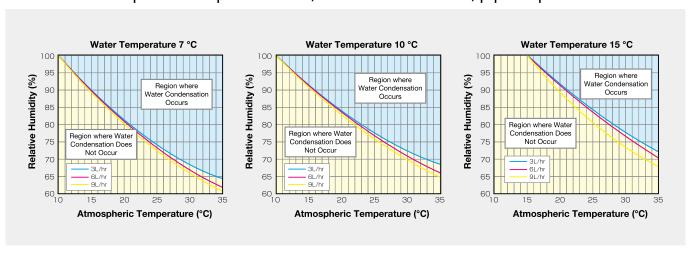
- $\Lambda$  Do not cut the spigot and use it.
- ▲ Do not connect TS fittings or DV fittings to the spigot side.
- ▲ The MD fitting adapter spigot part and the MD fittings require separate thermal insulation.



## **Eslon AC Drain Pipe and Fittings Performance**

#### << Design >>

• Condensation prevention performance, nominal diameter 25, pipe slope 1/50 case



A Performance of AC drain pipe and fittings when using horizontal pipe.

When using an AC drain pipe and fittings for a full pipe such as an upwardly draining part, as a general rule, provide separate thermal insulation.

#### **⚠** Usage Precautions

#### 1. Precautions Based on Design

This is a dedicated pipe for air conditioner drain piping. Never use it for pressurized pipe applications other than an upwardly draining section (1m or less).

In the section of inner pipe of an upwardly draining section that fills with water, water condensation may occur in the AC drain pipe and fittings single unit, so as a general rule, thermally insulate them separately.

This is a pipe for indoor use only. Do not use outdoors.

In places where the fire protection section is penetrated, fire protection section penetration handling is required using Fiblock.

The pipe support for horizontal running piping is a steel bar suspension (all threaded bolt suspension) as basic.

Horizontal straight piping should be less than 30m, and if it exceeds this, return the elbow every 30m (2 elbows or more, elbow interval 0.5m or more).

For a vertical pipe, handle stretching using an expansion fittings for use with vertical types at one place on each floor.

Under the following operating environment conditions, there is a risk of condensation on the AC drain pipe and fittings. Check the operating conditions and environmental conditions.

•In an environment where outside air flows in, the environment around the piping is also easily affected by the outside air, which may result in temperature and humidity conditions that cause condensation.

•In places where high temperatures and high humidity are expected even indoors (under a roof, near an outer wall, etc.), the environment around the piping may be easily affected, which may result in temperature and humidity conditions that cause condensation.

•There is a risk of condensation in drainage water that flows at a high rate (for example, drained water from the air handling unit).

#### 2. Storage Precautions

Install the AC drain pipe support at the same interval as the PVC pipe (VP) of the same nominal diameter,

⚠ Be sure to store the pipes and fittings indoors. When storage outdoors is unavoidable, in order to avoid direct sunlight, please use some method to ensure that they are not confined in hot air such as covering with a sheet

⚠ Do not use fire in the storage area. Pipes and fittings may deteriorate due to sparks or heat.

⚠ Do not place solvent or paint in the storage area. If an organic solvent adheres to the pipes or fittings, they may deteriorate.

#### 3. Transportation Precautions

Since the AC drain pipe has a foam layer which is soft, the packaging specification requires cardboard packaging over the full surface. Even more care should be taken when handling than with PVC (VP) pipes. Never drag or throw, etc.

## 4. Precautions for Installation of AC Drain Pipe and Fittings

Mease use Eslon adhesives No.73S Blue, No.75S Blue N, No. 73S, No. 75S or No.73S UV.

⚠ Be sure to use adhesives No.73S Blue, No.75S Blue N, or No.73S UV for transparent AC drain fittings.

Be sure to follow the installation procedure (P.9) in the Eslon AC drain pipe and fittings catalog.

The connection between the AC drain pipe and the DV fittings (TS fittings) for PVC pipes may cause accumulation of water or condensation due to steps in the pipe, so please observe the following items

•Be sure to use an AC drain pipe and AC drain fittings in combination for the AC drain piping system.

•When connecting an AC drain pipe and a PVC pipe, use an adapter fitting (see page 5).

#### Precautions for Installation of Expansion Fittings for Vertical Pipes

Since the direction of the arrow on the main unit indicates the direction of drain water flow, install with the arrow pointing downwards.

⚠ Chamfer (deburr) the inner and outer surfaces of the pipe end.

Application of lubricant is not required.

A Remove any foreign matter from the tube or packing.

Insert the specified amount of the AC drain pipe.

Nominal Diameter	Insertion Length
30A	54mm
40A	57mm
50A	64mm
65A	63mm

Do not insert forcefully, such as inserting diagonally or hammering.

#### 6. Precautions for Installation of Vertical Trap

Since the direction of the arrow on the main unit indicates the direction of drain water flow, install with the arrow pointing downwards.

⚠ Join this product with an AC drain pipe using an ESLON adhesive.

Please beware of dripping due to excessive application of adhesive. If the adhesive sticks to the self-closing film, it may not work, so remove the inspection port unit before applying the adhesive.

After installation, be sure to check the operation of the self-closing film and check that water flows.

#### 7. Other Precautions

If there are any scratches, dents or flattened parts on the pipe, cut and remove those parts.

If the pipe or fittings touch organic solvents such as creosote, asphalt, preservatives, waterproofing agents, ketones, castor oil or glycol ethers, they may swell and break, so do not apply or put these solvents in contact with the pipe or fittings.

Do not flush with chemicals such as solvents, ethanols, chlorinates, glycol ethers, or castor oil. The pipeline may be damaged and water leakage may occur. Be especially careful when cleaning the inside of the air conditioner body with liquid chemicals.

Do not step on or hang from the pipe.

Keep away from fire such as electric welding sparks, and in torch lamps and gas burners.

For the separation distance between gas appliances such as gas water heaters and the surrounding piping, please observe the standards stated in the gas equipment installation standards and practical guidelines (Japan Gas Appliances Inspection Association). In addition, since the standard may be relaxed depending on the model of the gas water heater, check with your gas company or gas equipment manufacturer for the specific separation distance.

Do not place pipes near open flames such as gas stoves.

#### ▲ Precautions

If the amount of adhesive used per hour exceeds the permissible amount indoors, the "Organic Solvent Poisoning Prevention Rules" will apply and you will need to be qualified as an "Organic Solvent Handling Manager". For details, check with your local Labour Safety Standards Inspection Office.

Since organic solvents such as adhesives are used during installation, be careful not to cause a fire.

When using an adhesive, be sure to provide adequate ventilation. If you get adhesive on your skin, remove it immediately. If you feel unwell or that you have something wrong physically, consult a doctor immediately.

In sealing materials used when piping penetrates the building foundations, walls, floors, etc., there are substances (for example, polyurethane sealants) that include plasticizers (phthalate ester, DOP, etc.) and organic solvents (xylene, toluene, etc.) that may adversely affect AC drain pipes and fittings. Do not use sealing materials containing these components as they may adversely affect PVC pipes and fittings. (Recommended products: Silicone Sealant made by Sekisui Fuller Co., Ltd, Modified Silicone Sealant)

Do not allow the pipe and fittings to contact directly with the covered wire (cord / covered support metal and vinyl tape) containing the plasticizer as it may immerse the pipe and fittings.

Please contact your nearest sales office regarding usage other than that described in this document.

When performing a test to check if an item is filled with water, be sure to carry it out with a hydraulic head of 3m (30kPa) and pay attention to the following items."

 Note that if there is uneven application of the adhesive at the pipe end or if there is a gap between the fittings and the pipe,

then water may enter from the pipe end.

•When a test to check if an item is filled with water is performed, be sure to visually check and touch the connecting part.

## MEMO

#### https://eslontimes.com/en

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