# Piping Installation

## M SERIES

Single type

Series	Class	Maximum Piping Length(m)	Maximum Height Difference(m)	Maximum Number of Bends	
Jelles	<outdoor unit=""></outdoor>	Total length(A)	Outdoor unit - Indoor unit(H)	Total number	
MSZ-F	25 / 35	20	12	10	
MFZ-KJ	50	30	15	10	
MSZ-E	25 / 35 / 42 20		12	10	
	50	30	15	10	
MSZ-S	25 / 35 / 42	20	12	10	
	50	30	15	10	
MSZ-G	60 / 71	30	15	10	
MSZ-H	25 / 35 / 50	20	12	10	

## S SERIES & P SERIES

Single type

Series	Class	Maximum Piping Length(m)	Maximum Height Difference(m)	Maximum Number of Bends
	<outdoor unit=""></outdoor>	Total length(A)	Outdoor unit - Indoor unit(H)	Total number
ZUBADAN (PUHZ-SHW)	80 / 112 / 140	75	30	15
POWER INVERTER (PUHZ-ZRP/RP)	35 / 50 / 60 / 71	50	30	15
	100 / 125 / 140	75	30	15
	200 / 250	100	30	15
STANDARD INVERTER	25 / 35	20	12	10
(PUHZ-P & SUZ)	50 / 60 / 71	30	30	10
	100 / 125 / 140	50	30	15
	200 / 250	70	30	15

Twin type

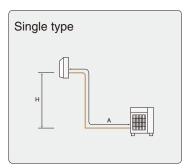
		Maximum Piping Length(m)			Maximum Height Difference(m)		Maximum Number of Bends
Series	Class <outdoor unit=""></outdoor>	Total length A+B+C	Pipe length difference from distribution pipe IB-CI	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
ZUBADAN (PUHZ-SHW)	80 / 112 / 140	75	8	20	30	1	15
POWER INVERTER (PUHZ-ZRP/RP)	71	50	8	20	30	1	15
	100 / 125 / 140	75	8	20	30	1	15
	200 / 250	120	8	30	30	1	15
STANDARD INVERTER (PUHZ-P)	100 / 125 / 140	50	8	20	30	1	15
	200 / 250	70	8	30	30	1	15

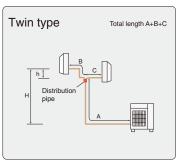
Triple type

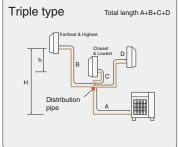
		Maximum Piping Length(m)			Maximum Height Difference(m)		Maximum Number of Bends
Series	Class <outdoor unit=""></outdoor>	Total length A+B+C+D	Pipe length difference from distribution pipe IB-CI	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
POWER INVERTER (PUHZ-ZRP/RP)	140	75	8	20	30	1	15
	200 / 250	120	8	30	30	1	15
STANDARD INVERTER (PUHZ-P)	140	50	8	20	30	1	15
	200 / 250	70	8	28	30	1	15

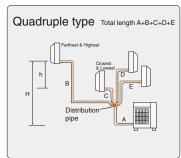
Quadruple type

		Maximum Piping Length(m)			Maximum Height Difference(m)		Maximum Number of Bends
Series	Class <outdoor unit=""></outdoor>	Total length A+B+C+D+E	Pipe length difference from distribution pipe IB-CI	Indoor unit - Distribution pipe B	Outdoor unit - Indoor unit H	Indoor unit - Indoor unit h	Total number
POWER INVERTER (PUHZ-RP)	200 / 250	120	8	30	30	1	15
STANDARD INVERTER (PUHZ-P)	200 / 250	70	8	22	30	1	15









## **MXZ** SERIES

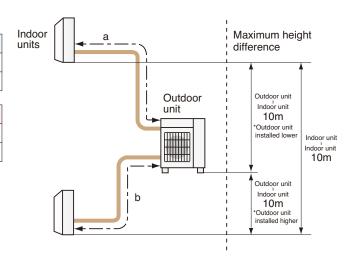
## MXZ-2D33VA

Maximum Piping Length				
Outdoor unit - Indoor unit (a,b)	15m			
Total length (a+b)	20m			

Maximum Number of Bends		
Outdoor unit - Indoor unit (a,b)	15	
Total number (a+b)	20	

<sup>\*</sup> When connecting the MFZ-KJ Series indoor unit, additional refrigerant is required. For details, please contact Mitsubishi Electric.

Regarding MXZ-2D33, the second unit should be a different type in the case of selecting one MFZ-KJ.



## MXZ-2D42VA

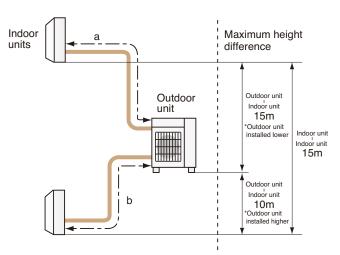
Maximum Piping Length			
Outdoor unit - Indoor unit (a,b)	20m		
Total length (a+b)	30m		

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b)	20
Total number (a+b)	30

#### MXZ-2D53VA(H)

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b)	20m
Total length (a+b)	30m

Maximum Number of Bends			
Outdoor unit - Indoor unit (a,b) 20			
Total number (a+b)	30		



<sup>\*</sup> When connecting the MFZ-KJ Series indoor unit, additional refrigerant is required. For details, please contact Mitsubishi Electric.

## MXZ-3D54VA2

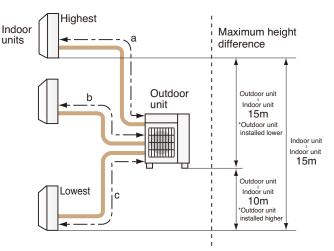
Maximum Piping Length			
Outdoor unit - Indoor unit (a,b,c)	25m		
Total length (a+b+c)	50m		

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c) 25	
Total number (a+b+c) 50	

## MXZ-3D68VA

Maximum Piping Length		
Outdoor unit - Indoor unit (a,b,c)	25m	
Total length (a+b+c)	60m	

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c)	25
Total number (a+b+c)	60



\* When connecting the MFZ-KJ Series indoor unit, additional refrigerant is required. For details, please contact Mitsubishi Electric.

## MXZ-4D72VA

Maximum Piping Length		
Outdoor unit - Indoor unit (a,b,c,d)	25m	
Total length (a+b+c+d)	60m	

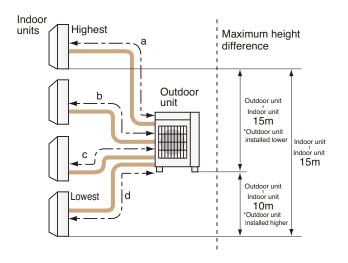
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d) 25	
Total number (a+b+c+d)	60

<sup>\*</sup> When connecting the MFZ-KJ Series indoor unit, additional refrigerant is required. For details, please contact Mitsubishi Electric.

## MXZ-4D83VA

Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c,d)	25m
Total length (a+b+c+d)	70m

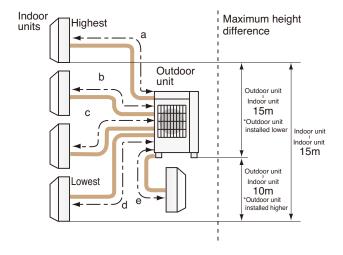
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d)	25
Total number (a+b+c+d)	70



## MXZ-5D102VA

Maximum Piping Length		
Outdoor unit - Indoor unit (a,b	,c,d,e) 25m	
Total length (a+b+c+d+e)	80m	

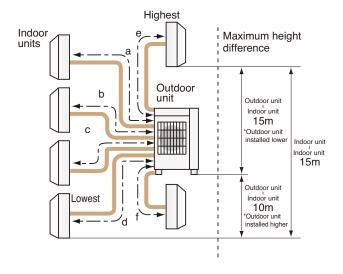
Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d,e)	25
Total number (a+b+c+d+e)	80



## MXZ-6C122VA

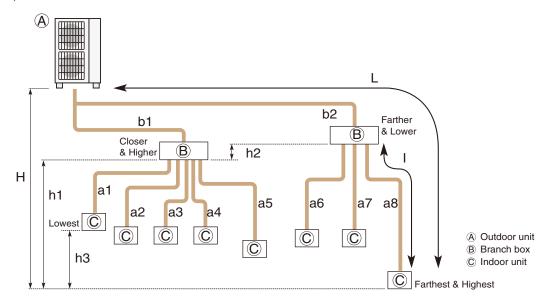
Maximum Piping Length	
Outdoor unit - Indoor unit (a,b,c,d,e,f) 25m	
Total length (a+b+c+d+e+f)	80m

Maximum Number of Bends	
Outdoor unit - Indoor unit (a,b,c,d,e,f)	25
Total number (a+b+c+d+e+f)	80



## **MXZ** SERIES

## MXZ-8B140VA/YA, 8B160VA/YA



	Total length	$b1 + b2 + a1 + a2 + a3 + a4 + a5 + a6 + a7 + a8 \le 115m$
Maximum	Outdoor unit - Branch box -	$b2 + a8 \le 70 \text{m} (b2 \le 55 \text{m}, a8 \le 15 \text{m})$
Piping Length	Indoor unit (L)	
	Outdoor unit - Branch box	b1 + b2 ≤ 55m
	Branch box - Indoor unit (I)	a8 ≦15m
	Total pipe length after the branch box	$a1+a2+a3+a4+a5+a6$ $a7+a8 \le 60m$
	Outdoor unit - Indoor unit (H) %1	H≦30m (when outdoor unit is set higher than indoor unit)
Maximum Height		H≦20m (when outdoor unit is set lower than indoor unit)
Difference	Branch box - Indoor unit (h1)	h1 + h2 ≦15m
	Branch box - Branch box (h2)	h2≦15m
	Indoor unit - Indoor unit (h3)	h3≦12m
Maximum Number	Total number	b1 + a1  ,  b1 + a2  ,  b1 + a3  ,  b1 + a4  ,  b1 + a5  ,  b2 + a6  ,
of Bends		$  b2 + a7  ,   b2 + a8   \le 15$

## **Explanation of Terminology**

## Maximum piping length:

This is the maximum allowable length of the refrigerant piping. The amount of refrigerant pipe used cannot be longer than the length specified.

#### Total length:

The maximum allowable combined length of all the refrigerant piping between the outdoor unit and indoor unit(s).

#### **Outdoor Unit - Indoor Unit:**

The maximum allowable length of the refrigerant piping between the outdoor unit and indoor units installed when multiple units are connected to a single outdoor unit. This distance limitation refers to the maximum length between the outdoor unit and the farthest indoor unit.

#### Pipe length difference from distribution pipe:

The maximum allowable difference in refrigerant piping length from the distribution pipe to the farthest indoor unit and from the distribution pipe to the closest indoor unit when multiple indoor units are connected to a single outdoor unit using a distribution pipe.

#### **Indoor Unit - Distribution Pipe:**

The maximum allowable length of the refrigerant piping between indoor units and the distribution pipe when multiple indoor units are connected to a single outdoor unit.

### Outdoor unit - Branch box:

The maximum allowable length of the refrigerant piping between the branch box and outdoor unit when a branch box is used to connect multiple indoor units to a single outdoor unit.

#### Branch box - Indoor unit:

The maximum allowable length of the refrigerant piping between the branch box and the indoor unit farthest from it when a branch box is used to connect multiple indoor units to a single outdoor unit.

#### Outdoor unit - Branch box - Indoor unit:

The maximum allowable length of the refrigerant piping from the outdoor unit to the farthest indoor unit when a branch box is used to connect multiple indoor units with a single outdoor unit.

### Total pipe length after the branch box:

The maximum allowable length of the refrigerant piping between the branch box and all indoor units combined when a branch box is used to connect multiple indoor units with a single outdoor unit.

#### Maximum height difference:

This is the maximum allowable height difference. It is necessary to install the air conditioning system so that the height distance is no more than the difference specified. (Specified differences may vary if the outdoor unit is installed higher or lower than the indoor units).

#### **Outdoor unit - Indoor unit:**

The maximum allowable difference in height between the outdoor unit and indoor units when installed (when multiple indoor units are connected to a single outdoor unit, this distance limitation refers to the maximum height difference between the outdoor unit and an indoor unit).

#### Indoor unit - Indoor unit:

The maximum allowable difference between the heights of indoor units when multiple indoor units are connected to a single outdoor unit.

### Branch box - Indoor unit:

The maximum allowable difference between the heights of the branch box and an indoor unit when multiple indoor units are connected to a single outdoor unit.

#### Branch box - Branch box:

The maximum allowable difference between the heights of the branch boxes when two branch boxes are used to connect multiple indoor units to a single outdoor unit.

## Maximum number of bends:

This is the maximum allowable number of bends in the refrigerant piping. The total number of bends in the refrigerant piping used cannot exceed the number specified.

## Total number:

The maximum allowable number of bends for all refrigerant piping between the outdoor unit and indoor units.

## Outdoor unit - Indoor unit:

The maximum allowable number of bends between the outdoor unit and each indoor unit when multiple indoor units are connected to a single outdoor unit.