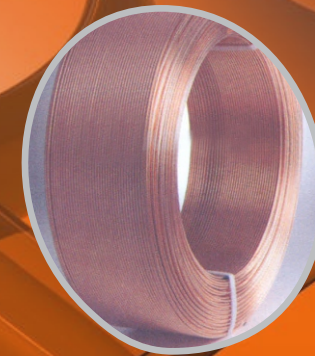
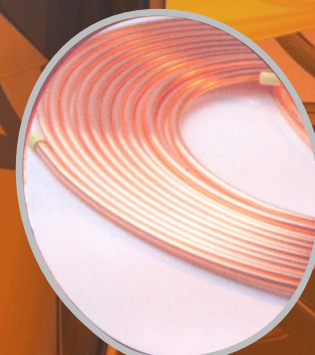
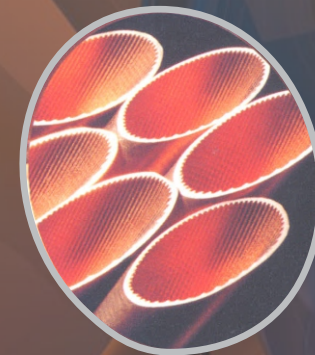


# KUPFER

Premium Air Conditioner Materials

# KUPFER

Premium Air Conditioner Materials



Authorized Dealer

# KUPFER



# KUPFER

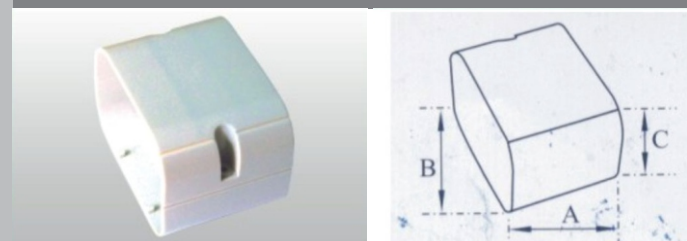
## Features

- Ellegant design with clean and neat decoration effect.
- Provide protection for insulated pipe, cable, and duct system against weather.
- Protect insulation material from direct sun light (prevent aging effect).
- Durable anti-aging PVC material (UV Stabilized).
- Easy installation and provide easy maintenance access for replacement (when needed).
- Fire retardant materials for fire hazard safety protection.

## Specification

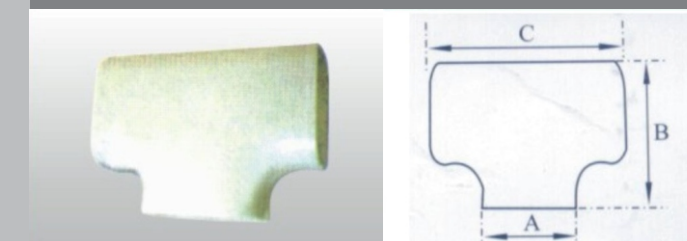
Density	400kg/m <sup>3</sup>	<ul style="list-style-type: none"> <li>• Standard color is white</li> <li>• Standard length : 2m per piece</li> <li>• Custom color is available</li> </ul>
Softening point	>78°C	
Elongation	>100%	
Oxygen index	46	
Tensile strength	>37Mpa	

## Straight Joint Socket: LMSJ



Product No.	A	B	C
LMSJ-76	82mm	60mm	69mm
LMSJ-103	110mm	78mm	79mm
LMSJ-150	160mm	98mm	90mm

## T Joint: LMTJ



Product No.	A	B	C
LMTJ-76	82mm	120mm	180mm
LMTJ-103	110mm	155mm	200mm
LMTJ-150	160mm	210mm	260mm

## Flexible Duct : LMFD



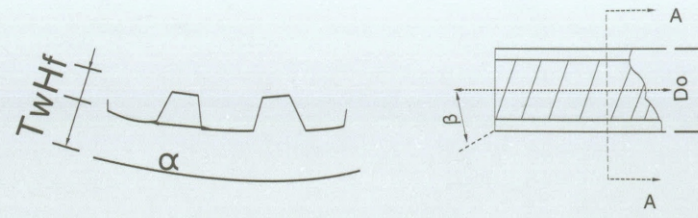
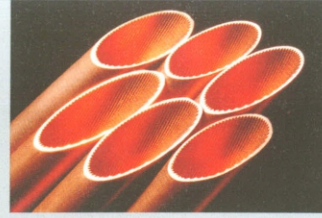
Product No.	A	B	C	D	E
LMFD-76	73mm	48mm	500mm	50mm	600mm
LMFD-103	98mm	73mm	500mm	50mm	600mm
LMFD-150	145mm	80mm	500mm	50mm	600mm

## End Cap: LMEC



Product No.	A	B	C	D	E
LMEC-76	82mm	69mm	45mm	35mm	150mm
LMEC-103	110mm	79mm	70mm	40mm	180mm
LMEC-150	160mm	80mm	85mm	55mm	210mm

LWC FOR ACR SERIES (INNER GROOVED)



SPECIFICATIONS(FOR REFERENCE ONLY)

Specifications	Unit weight	O.D	I.D	Bottom Wall Thickness Tw	Fin Groove Depth Hf	Total wall Thickness	Apex Angle	Helix Angle	Number of Tooth
φ5.00×0.20+0.15-18°	33	5.00	4.30	0.20	0.15	0.35	40	18	40
φ7.00×0.25+0.10-15°	52	7.00	6.30	0.25	0.10	0.35	40	15	65
φ7.00×0.25+0.18-18°	57	7.00	6.14	0.25	0.18	0.43	40	18	50
φ7.00×0.25+0.22-16°	58	7.00	6.06	0.25	0.22	0.47	22	16	54
φ7.00×0.27+0.15-18°	60	7.00	6.16	0.27	0.15	0.42	53	18	60
φ7.94×0.25+0.18-18°	65	7.94	7.08	0.25	0.18	0.43	40	18	50
φ7.94×0.25+0.20-18°	66	7.94	7.04	0.25	0.20	0.45	40	18	50
φ7.94×0.26+0.17-18°	66	7.94	7.08	0.26	0.17	0.43	40	18	50
φ7.94×0.28+0.20-18°	72	7.94	6.98	0.28	0.20	0.48	40	18	50
φ7.94×0.30+0.20-18°	76	7.94	6.94	0.30	0.20	0.50	40	18	50
φ9.52×0.27+0.16-18°	82	9.52	8.66	0.27	0.16	0.43	30	18	70
φ9.52×0.28+0.12-15°	80	9.52	8.72	0.28	0.12	0.40	53	15	65
φ9.52×0.28+0.15-18°	83	9.52	8.66	0.28	0.15	0.43	53	18	60
φ9.52×0.28+0.15-25°	88	9.52	8.66	0.28	0.15	0.43	90	25	65
φ9.52×0.28+0.20-18°	85	9.52	8.56	0.28	0.20	0.48	25	18	55
φ9.52×0.28+0.20-18°	88	9.52	8.56	0.28	0.20	0.48	40	18	60
φ9.52×0.30+0.20-18°	90	9.52	8.52	0.30	0.20	0.50	30	18	60
φ9.52×0.30+0.20-18°	94	9.52	8.52	0.30	0.20	0.50	53	18	60
φ9.52×0.34+0.15-25°	104	9.52	8.54	0.34	0.15	0.49	90	25	65
φ9.52×0.40+0.25-18°	123	9.52	8.22	0.40	0.25	0.65	40	18	60
φ12.00×0.36+0.25-18°	140	12.00	10.78	0.36	0.25	0.61	40	18	70
φ12.70×0.35+0.25-18°	155	12.70	11.50	0.35	0.25	0.60	53	18	70
φ12.70×0.40+0.25-18°	170	12.70	11.40	0.40	0.25	0.65	53	18	70
φ12.70×0.50+0.25-18°	201	12.70	11.20	0.50	0.25	0.75	53	18	75
φ12.75×0.36+0.21/0.25-20°	150	12.75	11.53	0.36	0.25	0.61	48	20	70



• General Packing



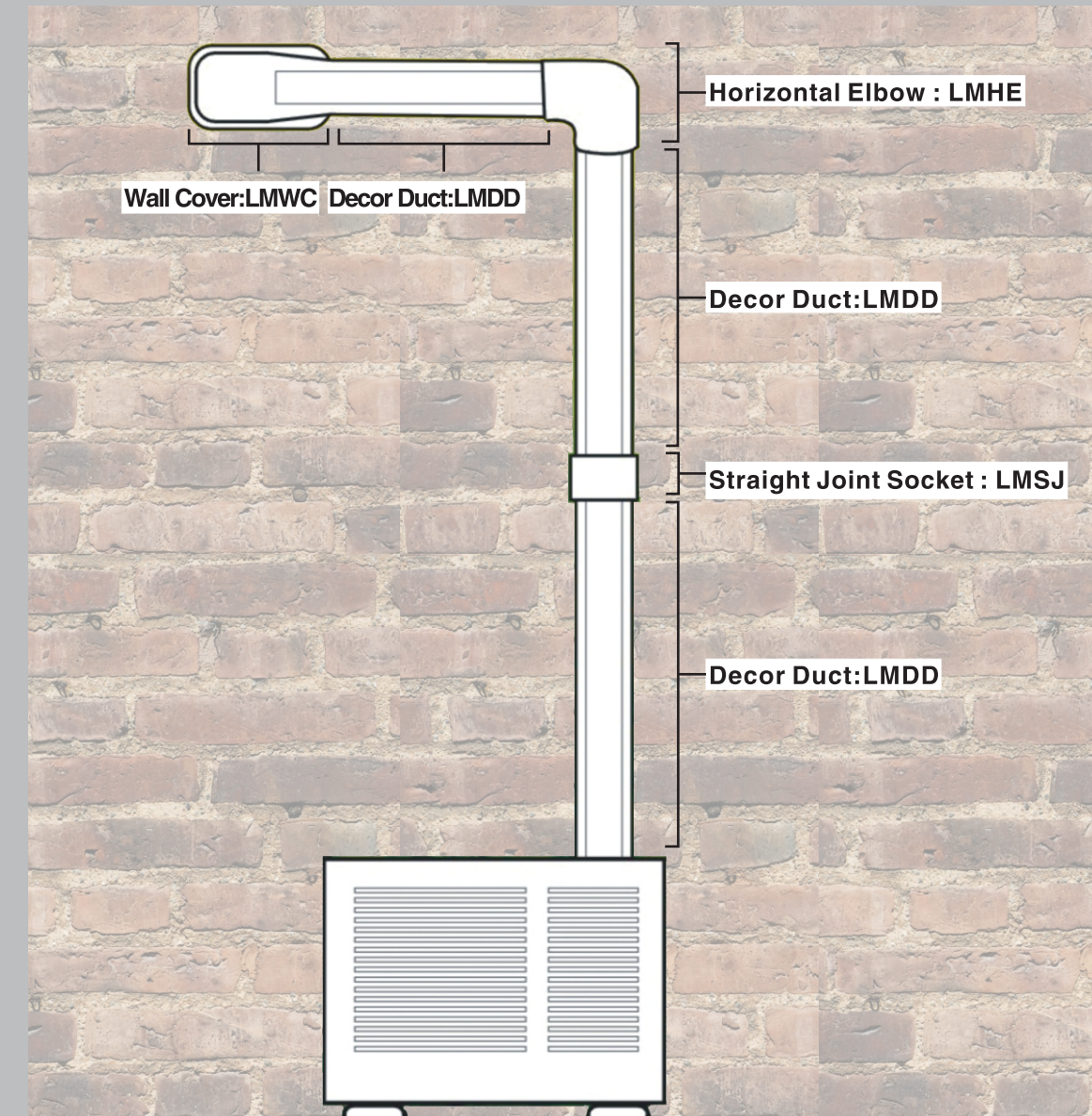
• General Doubled Pallets Packing (X+X)

PACKING WAYS(LWC)

	Packing ways	Wooden pallets	plates		Way of placing strings		Winding way		Hailiang	Neutral
			Cardboard Reels	Reels (I.D.Payout)	Draw from I.D.	Draw from O.D.	Clockwise	Anti-Clockwise		
Hailiang	General packing	□	□	□	□	□	□	□	□	□
	Simple Packing	□						□	□	
	Draw from I.D.Packing	□		□	□	□	□	□	□	
Neutral	General double pallets packing	□	□	□				□	□	□
	General Packing	□	□	□				□	□	□
	Simple Packing	□		□				□	□	□
	Draw from I.D.Packing	□		□	□	□	□	□	□	□
	General double pallets packing	□	□	□				□	□	□

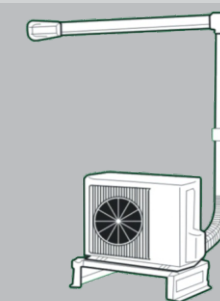
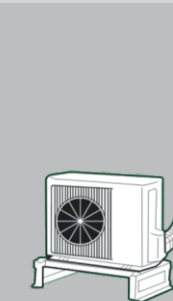
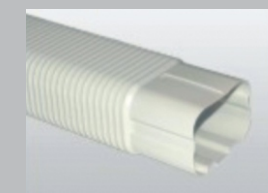
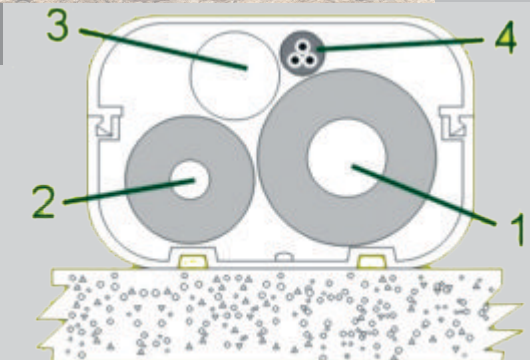
# KUPFER PVC Decor Duct

Wall-mounted

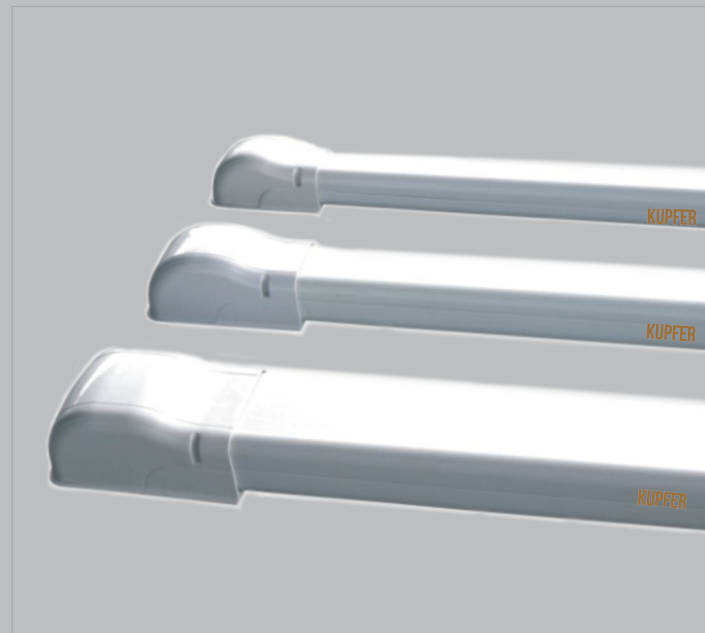


## Cross Section Diagram

- 1 Insulated Copper pipe (Gas state coolant)
- 2 Insulated Copper pipe (Liquid state coolant)
- 3 Condensated water pipe
- 4 Electric cables



# KUPFER PVC Decor Duct



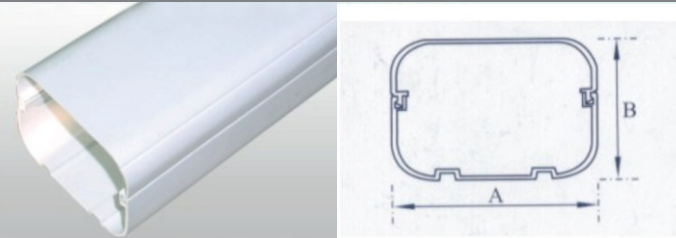
**KUPFER** Decor Duct is made by fire retardants and anti-aging PVC materials, and produced by high precision extrusion process.

**KUPFER** Decor Duct come with complete set that will include wall cover, straight joint socket, T-join, flexible duct, horizontal elbow joint, and vertical elbow joint will form an elegant decoration for duct work of split type air-conditioning system.

**KUPFER** Decor Duct provide very good protection for insulated pipe and cable system against Ultra Violet radiation from Indonesian tropical sun.

**KUPFER** Decor Duct is built to last with fire retardant materials for maximum safety against fire hazard.

PVC Decor Duct : LMDD



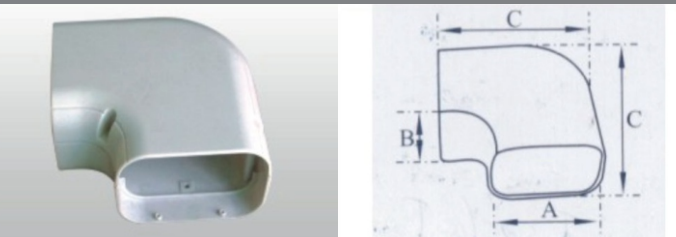
Product No.	A	B
LMDD-76	76mm	63mm
LMDD-103	103mm	77mm
LMDD-150	150mm	85mm

Wall Coner : LMWC



Product No.	A	B	C
LMWC-76	93mm	180mm	85mm
LMWC-103	119mm	232mm	100mm
LMWC-150	170mm	262mm	112mm

Horizontal Elbow : LMHE



Product No.	A	B	C
LMHE-76	92mm	60mm	120mm
LMHE-103	110mm	73mm	155mm
LMHE-150	160mm	90mm	210mm

Vertical Elbow : LMVE



Product No.	A	B	C
LMVE-76	93mm	180mm	85mm
LMVE-103	119mm	232mm	100mm
LMVE-150	171mm	262mm	113mm

# COPPER TUBE SERIES

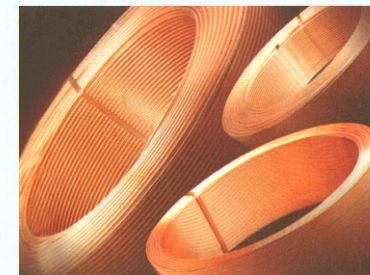
Standard	Alloy No.	Temper				Chemical Composition Cu%	
		H	1/2H	OL	O		
JIS H3300	C1220	H	1/2H	OL	O	Minimum 99.90	
JIS H3300							
BS2871	C106	H	1/2H	/	O		
EN12735-2	CU-DHP	Y080	/	Y040	Y035		
EN12735-1	or CW024A	R360	R290	R250	/		R220
En1057		R360	R290	R250	/		R220
EN 12449	CU-DHP	R360	R290	R250	/		R220/R200
	or CW024A	H110	H095	H070	/		H040
DIN	SF-Cu	F36	F25	F22	O		
	B68	/	/	O50	O60		
	B88	H58					
ASTM	B75	C12200	H80和H58	H55	O50		O60
	B280		H58	/	O60		
	B743-92a		H58	/	O50	O60	

● STRAIGHT TUBES SERIES

SPECIFICATIONS

Thickness O.D.	0.013 " to 0.023 "	0.023 " to 0.031 "	0.031 " to 0.039 "	0.039 " to 0.047 "	0.047 " to 0.059 "	0.059 " to 0.078 "	0.078 " to 0.12 "	0.12 " to 0.16 "	0.16 " to 0.22 "	0.22 " to 0.27 "	0.27 " to 0.37 "
1/4 " to 1/2 "	O	O	O	O	O						
1/2 " to 3/4 "	O	O	O	O	O	O					
3/4 " to 1 "	O	O	O	O	O	O	O	O			
1 " to 1-3/8 "		O	O	O	O	O	O	O	O		
1-3/8 " to 1-1/2 "			O	O	O	O	O	O	O		
1-1/2 " to 1-19/20 "			O	O	O	O	O	O	O	O	
1-19/20 " to 2-1/2 "			O	O	O	O	O	O	O	O	
2-1/2 " to 2-3/4 "				O	O	O	O	O	O	O	O
2-3/4 " to 3-3/8 "					O	O	O	O	O	O	O
3-3/8 " to 4 "						O	O	O	O	O	O
4 " to 5-3/8 "							O	O	O	O	O
5-3/8 " to 6-1/4 "								O	O	O	O
6-1/4 " to 8-5/8 "									O	O	

● LWC FOR ACR SERIES (PLAIN)



SPECIFICATIONS(FOR REFERENCE ONLY)

O.D.		WALL THICKNESS		COIL WEIGHT
mm	inch	mm	inch	kg
3.8	5/32	0.28-0.60	0.011-0.024	90-130 130-180 >180(as per customer's requirements)
4.76	3/16	0.28-0.81	0.011-0.032	
6.35	1/4	0.28-1.07	0.011-0.042	
7.94	5/16	0.28-1.5	0.011-0.059	
9.52	3/8	0.28-1.5	0.011-0.059	
12.7	1/2	0.35-2.00	0.014-0.079	
15.88	5/8	0.46-2.00	0.018-0.079	
19.05	3/4	0.71-2.00	0.028-0.079	
22.22	7/8	0.89-2.00	0.035-0.079	

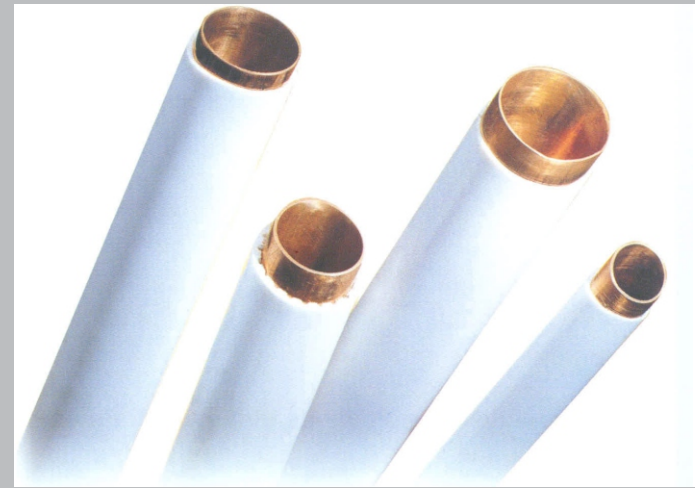
● PANCAKE COILS SERIES



SPECIFICATIONS

O.D(inch)	Thickness(inch)	Length(ft)
1/8 " to 1 1/8 "	0.014 " to 0.059 "	≤100

# INSULATED COPPER TUBES PLASTIC-COATED COPPER TUBES



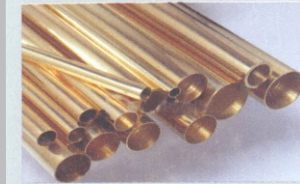
Main Purposes:  
Air Conditioning,  
Water, Gas, etc.

STANDARD SIZE(INCH)						
Type	Size d2 x t2/d1 x t1	O.D.of the tube d1 d2 d3	Thickness of Insulator t1t2t3t4	Length	Material	Weight Pounds/feet
-P2320	1/4 " x 0.032	1.02 " 0.87 " 1.89 "	0.35 " 0.2 "	30ft to 100ft	0	0.233
-P2330	3/8 " x 0.032					
-P2420	1/4 " x 0.032	1.30 " 0.87 " 2.17 "	0.394 " 0.2 "	30ft to 100ft	0	0.286
-P2430	1/2 " x 0.032					
-P2520	1/4 " x 0.032 5/8 " x 0.039	1.42 " 0.87 " 2.29 "	0.394 " 0.2 "	30ft to 100ft	0	0.390
-P3520	3/8 " x 0.032 5/8 " x 0.039	1.42 " 1.02 " 2.44 "	0.394 " 0.2 "	30ft to 100ft	0	0.440
-P3620	3/8 " x 0.032 3/4 " x 0.039	1.54 " 1.02 " 2.56 "	0.394 " 0.2 "	30ft to 100ft	0	0.569
-P4620	1/2 " x 0.032 3/4 " x 0.039	1.54 " 1.30 " 2.84 "	0.394 " 0.2 "	30ft to 100ft	0	0.629

PLASTIC-COATED COPPER TUBES MADE ACCORDING TO EN1057 OR ASTM B88								
DN (mm)	O.D. (mm)	Thickness (mm)	Gear-shaped Loop (mm)	Parallel Loop (mm)	Foam (mm)	Maximum Deviation (mm)	Length	Maximum Deviation (mm)
15	15	0.7	18.6	17	21.5	± 0.20	2.9 to 5.8	0 to +10
20	22	0.9	25.6	24	28.5			
25	28		31.6	30				
32	35	1.2		37.6		± 0.30		
40	42		44.6					
50	54		56.8			± 0.40		
65	67	1.5		69.8		± 0.50		
80	76		78.8					

# COPPER ALLOY SERIES

## • BRASS STRAIGHT TUBE



Main Purposes:  
Buildings, Sanitation, Marine,  
Desalt Sea Water Seawater  
Desalination Projects, etc.

### MAIN STANDARD AND COPPER ALLOY NO .

Standard	copper Alloy No.	Temper	Standard	copper Alloy No.	Temper
ASTM B111	C44300	O61	BS EN12451 (BS2871)	CuZn28Sn1As(CZ111)	R320/H060/R360/H080
	C68700	O61		CuZn20A12As(CZ110)	R340/H070/R390/H085
	C70600	O61/H55		CuNi10Fe1Mn(CN102)	R290/H075/R310/H105/R480/H150
	C71500	O61		CuNi30Fe1Mn(CN107)	R370/H090/R480/H120
	C71640	O61/Hr50		CuNi30Fe2Mn2(CN102)	R420/H090
JIS H3300	C4430	O	ASTM B135	C33000	O 1/2H H
	C6870	O		C28000	
	C7060	O		C27000/C27200/C27400	
	C7150	O		C26000/C26200/C26800	
	C7164	O		C23000	

## • HIGH ACCURACY COPPER ALLOY TUBE Main Products: Admiralty Brass Tube C44300 • Al-Brass Tube C68700 • CuNi Tube C70600 • CuNi Tube C71500/C71640

### SPECIFICATION SCOPE OF HIGH ACCURACY COPPER ALLOY TUBE

O.D.(mm)	Thickness (unit:mm)											Length (mm)
	0.4	0.4-1.0	1.0-2.0	2.0-3.0	3.0-4.0	4.0-5.0	5.0-6.0	6.0-7.0	7.0-8.0	8.0-10.0	10.0-12.0	
4.74-10	O	O										≤25000
>10-20	O	O	O	O	O							≤25000
>20-50		O	O	O	O	O	O	O				≤25000
>50-100			O	O	O	O	O	O	O	O		≤15000
>100-200				O	O	O	O	O	O	O	O	≤12000
>200-300					O	O	O	O	O	O	O	≤6000
>300-419						O	O	O	O	O	O	≤6000

### CHEMICAL COMPOSITION OF HIGH ACCURACY COPPER ALLOY TUBE

Standard	Name	Copper Alloy No	Chemical Composition(%)													
			Cu	Sn	Pb	Fe	Al	Zn	Mn	Ni	As	C	Co	P	S	Others
ASTM B111	Admiralty Brass Tube	C44300	70.0-73.0	0.9-1.2	≤0.07	≤0.06	-	Remainder	-	-	0.02-0.06	-	-	-	-	
	Al-Brass Tube	C68700	76.0-79.0	-	≤0.07	≤0.06	1.8-2.5	Remainder	-	-	0.02-0.06	-	-	-	-	
	90-10 Cuni Tube	C70600	Remainder	-	≤0.05	1.0-1.8	-	≤1.0	≤1.0	9.0-11.0	-	-	-	-	-	
	70-30 Cuni Tube	C71500	Remainder	-	≤0.05	0.04-1.0	-	≤1.0	≤1.0	29.0-33.0	-	-	-	-	-	
JIS H3300	Condenser Brass Tube	C4430	70.0-73.0	0.9-1.2	≤0.05	≤0.05	-	Remainder	-	-	0.02-0.06	-	-	-	-	
		C6870	76.0-79.0	-	≤0.05	≤0.05	1.8-2.5	Remainder	-	-	0.02-0.06	-	-	-	-	
	Condenser CuNi Tube	C7060	Remainder	-	≤0.05	1.0-1.8	-	≤0.50	0.20-1.0	9.0-11.0	-	-	-	-	Cu+Fe+Mn +Ni ≥ 99.5	
		C7150	Remainder	-	≤0.05	0.04-1.0	-	≤0.50	0.20-1.0	29.0-33.0	-	-	-	-	Cu+Fe+Mn +Ni ≥ 99.5	
BS EN12451 (B2871)	Condenser Brass Tube	CuZn28Sn1As (Cz111)	70.0-72.5	0.9-1.3	≤0.05	≤0.07	-	Remainder	≤0.1	≤0.1	0.20-0.06	-	-	≤0.1	≤0.3	
		CuZn20A12As (Cz110)	76-79.0	-	≤0.05	≤0.07	1.8-2.3	Remainder	≤0.1	≤0.1	0.02-0.06	-	-	≤0.1	≤0.3	
	Condenser CuNi Tube	CuNi10Fe1Mn (Cn102)	Remainder	≤0.03	≤0.02	1.0-2.0	-	≤0.05	0.50-1.0	9.0-11.0	-	≤0.05	≤0.1	≤0.02	≤0.05	≤0.2
		CuNi30Fe1Mn (Cn107)	Remainder	≤0.05	≤0.02	0.4-1.0	-	≤0.05	0.50-1.5	30.0-32.0	-	≤0.05	≤0.1	≤0.02	≤0.05	≤0.2
		CuNi30Fe1Mn (Cn108)	Remainder	≤0.05	≤0.02	1.5-2.5	-	≤0.05	1.5-2.5	29.0-32.0	-	≤0.05	≤0.1	≤0.02	≤0.05	≤0.2

• BRASS STRAIGHT TUBE	Thickness	0.019 "	0.023 "	0.031 "	0.039 "	0.047 "	0.059 "	0.078 "	0.12 "
	O.D.	to 0.023 "	to 0.031 "	to 0.039 "	to 0.047 "	to 0.059 "	to 0.078 "	to 0.12 "	to 0.16 "
	1/4 " to 1/2 "	○	○	○	○	○			
	1/2 " to 3/4 "	○	○	○	○	○	○		
	3/4 " to 1 "		○	○	○	○	○	○	○
	1 " to 1-3/8 "			○	○	○	○	○	○
	1-3/8 " to 2 "				○	○	○	○	
	2 " to 2-3/4 "				○	○	○	○	



• PAC ING WAYS

## FITTING SERIES

SPECIFICATION	NORMAL SIZE(inch)	STANDARD
45° Elbow C×C	1/8 to 6	ASME B 16.22
90° Elbow C×C	1/8 to 2×11/2	
90° Long Elbow C×C	1/8 to 4	
Coupling w/stop C×C Dimple	1/8 to 8	
Coupling Less/stop C×C Dimple	1/8 to 5	
Flush Bushings FTG×C	1/4×1/8 to 2×11/2	
Coupling W/stop rolled	1/8 to 8	
Reducing coupling w/stop C×C	5/8×1/4 to 6×3	
Fitting Reducer FTG×C	5/8×1/4 to 4×11/4	
TUBE STRAP	1/8 to 2	
Fitting End Plugs	3/8 to 11/4	
45° Street Elbow FTG×C	1/8 to 4	
90° Street Elbow FTG×C	1/4 to 4	
90° Street Long Elbow FTG×C	1/8 to 3	
TEE C×C×C	1/8 to 8	
P-TRAP	1/2 to 2	
U-BEND	1 to 2	
CAP	1/8 to 6	
MALE ADAPTER C×M	1/4×1/8 to 2×2	
REDUCING TEE	1/4×1/8 to 8×8×4	
FEMALE ADAPTER C×F	3/8×3/8 to 2×2	
UNION BTASS	3/8 to 1	
FEMALE ADAPTER FTG×F	1/4×1/4 To 2-1/2×2-3/8	EN1254-1
MALE ADAPTER FTG×M	1/4×1/4 to 2-1/2×2-3/8	
45° Equal Elbow C×C E10ECC	8 to 308	
90° Equal Elbow C×C HLE11ECC	6 to 308	
45° Street Elbow FTG×C E13EFC	8 to 159	
90° Street Elbow FTG×C E14EFC	6 to 219	
90° Long Radius Street Elbow C×FTG E15ELFC	12 to 108	
90° Long Radius Street Elbow C×C E12ELLC	12 to 108	
Cross C×C×C×C E60CCCC	15 22 28 35	
Equal Tee C×C×C E30TCC	6 to 308	
Reducing Tee C×C×C E31TRC	42×42×42 to 219×219×159	
Stop End E40CAP	8 to 159	
Reducing Coupler C×C E21RRC	15×10 to 219×108	
Fitting Reducer C×FTG E22RCF	16×12 to 219×159	
Equal Coupler C×C E20CC	C6 to 308	

### • COPPER FITTINGS



Main Purposes:  
Air Conditioning,  
Water, gas, etc



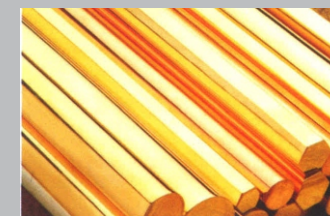
### • BRASS FITTINGS

Threaded Fittings		
Nipple F×M	Cap	Coupling M×M
3/8" 1/2" 3/4" 1"	3/8" 1/2" 3/4" 1"	3/8" 1/2" 3/4" 1"
Coupling F×F	Coupling M×F	Elbow F×F
3/8" 1/2" 3/4" 1"	3/8" 1/2" 3/4" 1"	3/8" 1/2" 3/4" 1"
Elbow M×F	Elbow M×M	Tee F×F×F
3/8" 1/2" 3/4" 1"	3/8" 1/2" 3/4" 1"	3/8" 1/2" 3/4" 1"
Reducing Bush F×F	Reducing Adapter M×M	
1/2" × 3/8" 3/4" × 1/2"	1/2" × 3/8" 3/4" × 1/2"	
1" × 1/2" 1" × 3/4"	1" × 1/2"	
11/4" × 3/4" 11/4" × 1/2"	11/4" × 3/4" 11/4" × 1/2"	
3Piece Adapter M×F	3Pieceadapter F×F	3 Piece Adapter M×M
3/8" 1/2" 3/4" 1"	3/8" 1/2" 3/4" 1"	3/8" 1/2" 3/4" 1"
3PIECE ADAPTER M×M	NUT	
3/8" 1/2" 3/4" 1"	16" 1/2" 20×3/4"	
Female Adapter		
1/2" F×1/2" /16	1/2" F×3/4" /20	3/4" F×3/4" /20
Male Elbow		
1/2" /16×1/2" /16	1/2" F×1/2" /16	3/4" F×1/2" /16
3/4" /20×3/4" /20	1/2" F×3/4" /20	3/4" F×3/4" /20
Female Tee		
1/2" /16×1/2" F×1/2" /16	3/4" /20×1/2" F×3/4" /20	
	3/4" /20×3/4" F×3/4" /20	
Male Tee		
1/2" /16×1/2" /12" /16		
3/4" /20×1/2" ×3/4" /20		

## SMALL FURBISHED BRASS ROD SERIES

DESIGNATION, CHEMICAL COMPOSITION OF SMALL FURBISHED BRASS RODS			
copper Alloy No.		Designation	Width or Diameter (mm)
JIS	UNS		
C2700	C27000	-	Round Rod 5 to 80
C2800	C28000	-	
-	C34000 C34500 C35000 C35300	ASTM B453	
-	C36000	ASTM B16	
C3601	C36000	-	
C3602	C36000	-	
C3603	-	-	
C3604	-	-	
C3605	-	-	
C3712	C37100	-	
C3771	C37700	-	
C4622	C46200	-	
C4641	C46400	-	
-	C48500	ASTM B21	
-	C67300 C67600	ASTM B138	
C6782	-	-	
C6783	-	-	

### • SMALL FURBISHED BRASS RODS



Main Purposes :  
Air Conditioning, Electricity,  
Machinery, Etc.

Ftting Series	
Brass capillary fitting	
Male Coupling	Female Coupling
15mm×1/2" M 22mm×3/4" M	15mm×1/2" F 22mm×3/4" F
28mm×1" M 15mm×3/4" M	28mm×1" F 15mm×3/4" F
22mm×1" M	
Male Elbow	Female Elbow
15mm×1/2" M 22mm×3/4" M	15mm×1/2" F 22mm×3/4" F
28mm×1" M 15mm×3/4" M	28mm×1" F 15mm×3/4" F
Female Tee	Wall Plated Elbow
15mm×15×1/2" F 22mm×22×3/4" F	15mm×1/2" F
28mm×28×1" F	22mm×3/4" F
Brass Comereession Fittings	
Male Couping And Female Coupling	
15mm×1/2" M/F	22mm×3/4" M/F
28mm×1" M/F	15mm×3/4" M/F
Coupling	Male Elbow
15mm×15mm 22mm×22mm	15mm×1/2" M 22mm×3/4" M
28mm×28mm 22mm×15mm	28mm×1" M 15mm×3/4" M
28mm×22mm	
Female Elbow	Elbow
15mm×1/2" F 22mm×3/4" F	15mm×15mm 22mm×22mm
28mm×1" F 15mm×3/4" F	28mm×28mm 22mm×15mm
	28mm×22mm
Tee	Wall Plated Elbow
15mm×15mm×1/2" F	15mm×1/2" F 22mm×3/4" F
22mm×22mm×3/4" F	
22mm×22mm×1/2" F	
28mm×28mm×1" F	
15mm×15mm×15mm	
22mm×22mm×22mm	
28mm×28mm×28mm	
22mm×22mm×15mm	
22mm×15mm×22mm	