

# KEMBLA

## MEDICAL GAS

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COPPER FITTINGS TO  
EUROPEAN STANDARD

**BS EN 1254**





MM Kembla was established in 1916 at Port Kembla, NSW, Australia, and it was from this locality that the famous **KEMBLA**<sup>®</sup> brand name originated. MM Kembla is Australasia's largest and most highly regarded manufacturer of copper products, including rod, wire, tube, fittings and accessories.

Included in the **KEMBLA**<sup>®</sup> range are Medical Gas copper fittings manufactured and tested for cleanliness in accordance with European Standard BS EN 1254-1: fittings with ends for capillary soldering or capillary brazing to copper tubes. These fittings comply with the requirements of HTM 02-01 Medical Gas Pipeline Systems: Part A Design, installation, validation.

All bags of fittings are marked as suitable for Medical Gas purposes and ensuring that the critical cleanliness is achieved and maintained until it is ready to be installed.

**KEMBLA**<sup>®</sup> fittings are marketed under the famous **KEMBLA**<sup>®</sup> and K Tick brand marks. A full range of fittings is available to suit **KEMBLA**<sup>®</sup> BS EN 13348 Medical Gas tube from 8mm to 159mm.



MM Kembla has been accredited by SAI Global Limited, of Australia, as a Quality Endorsed Company, to ISO 9001, Lic 0002/01, and as such has a quality management system in place that ensures all manufactured product complies with the relevant specification.



StandardsMark  
Licence  
BS EN 13348:2001  
SMKP21386  
SAI Global

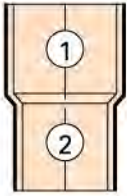


Quality  
Endorsed  
Company  
ISO 9001 Lic.0002/01  
SAI Global

# Capillary

## Bushings - Male/Female

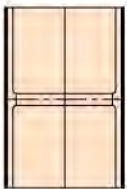
Model: ENN



Nominal Size (mm)
10 x 8
12 x 8
12 x 10
15 x 8
15 x 10
15 x 12
22 x 10
22 x 15
28 x 15
28 x 22
* 35 x 15
35 x 22
35 x 28
42 x 22
42 x 28
42 x 35
54 x 22
54 x 28
54 x 35
54 x 42
* 67 x 22
67 x 28
67 x 35
67 x 42
67 x 54
* 76 x 22
* 76 x 28
* 76 x 35
76 x 42
76 x 54
76 x 67
* 108 x 42
108 x 54
108 x 67
108 x 76
* 159 x 54
* 159 x 67
159 x 76
159 x 108

## Connectors - Female/Female

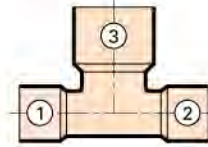
Model: ECC



Nominal Size (mm)
8
10
12
15
22
28
35
42
54
67
76
108
159

## Tee - Reducing Female/Female /Female

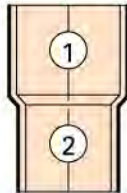
Model: ETR



Nominal Size (mm)
1 2 3
22 x 22 x 28

## Reducers - Female/Female

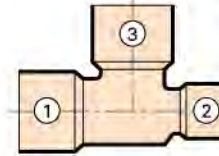
Model: ERR



Nominal Size (mm)
10 x 8
12 x 8
12 x 10
15 x 8
15 x 10
15 x 12
22 x 10
22 x 15
28 x 15
28 x 22
* 35 x 15
35 x 22
35 x 28
42 x 22
42 x 28
42 x 35
54 x 22
54 x 28
54 x 35
54 x 42
* 67 x 22
67 x 28
67 x 35
67 x 42
67 x 54
* 76 x 22
* 76 x 28
* 76 x 35
76 x 42
76 x 54
76 x 67
* 108 x 42
108 x 54
108 x 67
108 x 76
* 159 x 54
* 159 x 67
159 x 76
159 x 108

## Tee - In Line Reduction

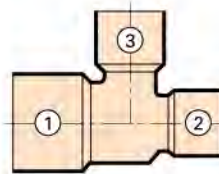
Model: ETR



Nominal Size (mm)
1 2 3
22 x 15 x 22
28 x 22 x 28

## Tee - In Line & Branch Reduction

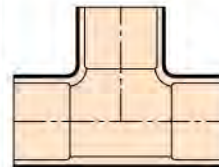
Model: ETR



Nominal Size (mm)
1 2 3
22 x 15 x 15
28 x 22 x 22

## Tees - Equal Female/Female/ Female

Model: ETE

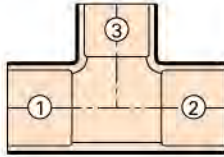


Nominal Size (mm)
8
10
12
15
22
28
35
42
54
67
76
108
159

# Capillary

## Tees - Reducing Female/Female/Female

Model: ETR



Nominal Size (mm)		
1	2	3
12	x 12	x 10
15	x 15	x 8
15	x 15	x 10
15	x 15	x 12
22	x 22	x 15
28	x 28	x 15
28	x 28	x 22
35	x 35	x 15
35	x 35	x 22
35	x 35	x 28
42	x 42	x 15
42	x 42	x 22
42	x 42	x 28
42	x 42	x 35
54	x 54	x 15
54	x 54	x 22
54	x 54	x 28
54	x 54	x 35
54	x 54	x 42
67	x 67	x 15
67	x 67	x 22
67	x 67	x 28
67	x 67	x 35
67	x 67	x 42
67	x 67	x 54
* 76	x 76	x 15
76	x 76	x 22
76	x 76	x 28
76	x 76	x 35
76	x 76	x 42
76	x 76	x 54
76	x 76	x 67
108	x 108	x 22
108	x 108	x 28
108	x 108	x 35
108	x 108	x 42
108	x 108	x 54
108	x 108	x 67
108	x 108	x 76
159	x 159	x 54
159	x 159	x 67
159	x 159	x 76
159	x 159	x 108

## 45° Elbows - Short Radius Female/Female

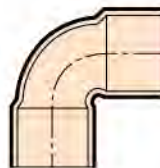
Model: EEFS



Nominal Size (mm)
8
10
12
15
22
28
35
42
54
67
76
108
159

## 90° Elbows - Short Radius Female/Female

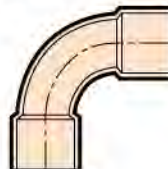
Model: EENS



Nominal Size (mm)
8
10
12
15
22
28
35
42
54
67
76
108
159

## 90° Elbows - Long Radius Female/Female

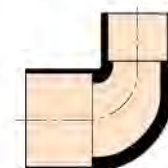
Model: EEN



Nominal Size (mm)
* 8
* 10
* 12
* 15
* 22
* 28
* 35
* 42
* 54
* 67
* 76
* 108
* 159

## Elbow - Reduction

Model: REN



Nominal Size (mm)
22 x 15

## Specifications

Capillary fittings are manufactured to meet the requirements of British Standard BS EN 1254-1 and 1254-5.

## Working Temperature and Pressure

Maximum operation pressure for corresponding service temperature refers to BS EN 1254-1

## Female and Male End Dimensions



Nominal Size (mm)	Female End		Male End		Length (A)	Wall Thickness (x)
	Internal Diameter (D)		External Diameter (O)			
	Max	Min	Max	Min		
8	8.15	8.06	8.04	7.95	6.8	0.6
10	10.15	10.06	10.04	9.95	7.8	0.6
12	12.15	12.06	12.04	11.95	8.6	0.6
15	15.15	15.06	15.04	14.95	10.6	0.7
22	22.18	22.07	22.05	21.94	15.4	0.9
28	28.18	28.07	28.05	27.94	18.4	0.9
35	35.23	35.09	35.06	34.93	23.0	1.0
42	42.23	42.09	42.06	41.93	27.0	1.1
54	54.23	54.09	54.06	53.93	32.0	1.2
67	67.03	66.80	67.77	66.62	33.5	1.4
76	76.43	76.20	76.17	76.02	33.5	1.6
108	108.33	108.10	108.07	107.92	47.5	2.1
*159	159.70	159.23	159.20	158.80	21.0	2.6

Remark: \*Size 159 according to BS EN 1254-5



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