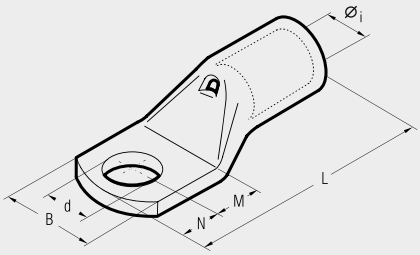
COPPER TUBE CRIMPING LUGS

A-M

for Copper conductors

File no. E125401



A-M series lugs are manufactured from electrolytic Copper tube.
The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.
Cembre lugs are annealed to guarantee optimum ductility which is an absolute necessity for connectors which will have to withstand the severe deformation arising when compressed and any bending of the palm during installation.
In applications subject to vibration, lugs still have to provide a reliable connection and annealing plays a vital role in avoiding cracking or breaks between the barrel and palm.
The presence of an inspection hole facilitates full insertion of the conductor, whilst the barrel length has been designed to allow easy and accurate positioning of the dies during the crimping operation.
Lugs are electrolytically tinplated to avoid oxidation.
A-M series lugs form an important part of Cembre crimping systems for power carrying conductors, details of the appropriate crimping tools and dies are shown opposite and in detail on pages 178 to 179.
Our technicians are always available to provide any technical advice which may be required.
The enclosed table is only indicative of the range and many variations in stud fixing and palm lengths are also available.

Cond. Size sqmm low stranded	Cond. Size sqmm flexible *	Ø Stud mm	Ref.	Dimensions mm Øi	B	M	N	L	d	Quantity Box/Bag	Mechanical Tools: HN1	HN5	HN-A25	TN 70 SE	TN 120 SE	Hydraulic Tools: B 15MDE	B 35-45MDE	B 35-50MDE	HT 45E	B 500E	B 550E	HT 51	RH 50	HT 81-U	RHU 81	HT 120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU 520
0,25÷1,5		3	A 03-M 3◆	1,8	6,0	4,5	3,5	16,0	3,2	5.000/100																		
		3,5	A 03-M 3.5◆	1,8	6,5	4,5	3,5	16,0	3,7	5.000/100																		
		4	A 03-M 4◆	1,8	6,5	5,0	4,0	17,0	4,3	5.000/100																		
		5	A 03-M 5◆	1,8	7,5	5,5	4,5	18,0	5,3	5.000/100																		
		6	A 03-M 6◆	1,8	9,0	6,0	5,0	19,0	6,4	5.000/100																		
1,5÷2,5		3	A 06-M 3◆	2,4	6,0	4,5	3,5	17,0	3,2	4.000/100																		
		3,5	A 06-M 3.5◆	2,4	6,5	4,5	3,5	17,0	3,7	4.000/100																		
		4	A 06-M 4◆	2,4	7,5	5,0	4,0	18,0	4,3	4.000/100																		
		5	A 06-M 5◆	2,4	8,5	5,5	4,5	19,0	5,3	4.000/100																		
		6	A 06-M 6◆	2,4	9,0	6,0	5,0	20,0	6,4	4.000/100																		
		8	A 06-M 8◆	2,4	12,0	9,0	8,0	26,0	8,4	2.500/100																		
4÷6		3	A 1-M 3	3,6	7,5	4,5	3,5	20,5	3,2	2.000/100	●			●		●												
		3,5	A 1-M 3.5	3,6	7,5	4,5	3,5	20,5	3,7	2.000/100	●			●		●												
		4	A 1-M 4	3,6	8,0	5,0	4,0	21,5	4,3	2.000/100	●			●		●												
		5	A 1-M 5	3,6	9,0	6,5	6,0	25,0	5,3	2.000/100	●			●		●												
		6	A 1-M 6	3,6	11,0	7,0	6,0	25,5	6,4	2.000/100	●			●		●												
		8	A 1-M 8	3,6	14,0	9,0	8,0	29,5	8,4	1.500/100	●			●		●												
		10	A 1-M 10	3,6	16,5	11,0	10,0	33,5	10,5	1.000/100	●			●		●												
10		4	A 2-M 4	4,6	10,0	5,0	4,0	22,5	4,3	1.500/100		●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
		5	A 2-M 5	4,6	10,0	6,5	6,0	26,0	5,3	1.500/100		●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
		6	A 2-M 6	4,6	11,0	7,0	6,0	26,5	6,4	1.500/100		●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
		8	A 2-M 8	4,6	15,0	9,0	8,0	30,5	8,4	1.000/100		●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
		10	A 2-M 10	4,6	18,0	11,0	10,0	34,5	10,5	1.000/100		●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
		12	A 2-M 12	4,6	19,0	14,0	12,0	39,5	13,2	500/100		●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
16		4	A 3-M 4	5,8	11,5	5,0	4,0	25,5	4,3	1.000/100		●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
		5	A 3-M 5	5,8	11,5	6,5	6,0	29,0	5,3	1.000/100		●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
		6	A 3-M 6	5,8	11,5	7,0	6,0	29,5	6,4	1.000/100		●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
		8	A 3-M 8	5,8	15,0	9,0	8,0	33,5	8,4	500/100		●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
		10	A 3-M 10	5,8	18,0	11,0	10,0	37,5	10,5	500/100		●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
		12	A 3-M 12	5,8	20,0	14,0	12,0	42,5	13,2	500/100		●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
25		4	A 5-M 4	7,0	14,0	5,0	4,0	28,0	4,3	1.000/100				●		●	●	●	●	●	●	●	●	●	●	●	●	●
		5	A 5-M 5	7,0	14,0	6,5	6,0	31,5	5,3	500/100				●		●	●	●	●	●	●	●	●	●	●	●	●	●
		6	A 5-M 6	7,0	14,0	7,0	6,0	32,0	6,4	500/100				●		●	●	●	●	●	●	●	●	●	●	●	●	●
		8	A 5-M 8	7,0	15,0	9,0	8,0	36,0	8,4	500/100				●		●	●	●	●	●	●	●	●	●	●	●	●	●
		10	A 5-M 10	7,0	18,0	11,0	10,0	40,0	10,5	500/100				●		●	●	●	●	●	●	●	●	●	●	●	●	●
		12	A 5-M 12	7,0	21,0	14,0	12,0	45,0	13,2	500/100				●		●	●	●	●	●	●	●	●	●	●	●	●	●
35	25 35	5	A 7-M 5	8,9	17,0	6,5	6,0	34,0	5,3	500/100						●	●	●	●	●	●	●	●	●	●	●	●	●
		6	A 7-M 6	8,9	17,0	7,0	6,0	34,5	6,4	500/100						●	●	●	●	●	●	●	●	●	●	●	●	●
		8	A 7-M 8	8,9	17,0	9,0	8,0	38,5	8,4	400/100						●	●	●	●	●	●	●	●	●	●	●	●	●
		10	A 7-M 10	8,9	19,0	11,0	10,0	42,5	10,5	400/100						●	●	●	●	●	●	●	●	●	●	●	●	●
		12	A 7-M 12	8,9	21,0	14,0	12,0	47,5	13,2	300/50						●	●	●	●	●	●	●	●	●	●	●	●	●
50	35 50	6	A 10-M 6	10,0	19,0	8,0	7,0	38,5	6,4	200/50						●	●	●	●	●	●	●	●	●	●	●	●	●
		8	A 10-M 8	10,0	19,0	9,0	8,0	40,5	8,4	200/50						●	●	●	●	●	●	●	●	●	●	●	●	●
		10	A 10-M 10	10,0	20,0	11,5	9,5	44,5	10,5	200/50						●	●	●	●	●	●	●	●	●	●	●	●	●
		12	A 10-M 12	10,0	21,0	12,0	12,0	47,5	13,2	200/50						●	●	●	●	●	●	●	●	●	●	●	●	●
		14	A 10-M 14	10,0	25,0	16,0	14,0	55,5	15,0	200/50						●	●	●	●	●	●	●	●	●	●	●	●	●
		16	A 10-M 16	10,0	26,0	18,0	16,0	59,5	17,0	200/50						●	●	●	●	●	●	●	●	●	●	●	●	●
70	50 70	6	A 14-M 6	11,3	21,0	8,0	7,0	44,0	6,4	200/50						●	●	●	●	●	●	●	●	●	●	●	●	●
		8	A 14-M 8	11,3	21,0	9,0	8,0	46,0	8,4	200/50						●	●	●	●	●	●	●	●	●	●	●	●	●
		10	A 14-M 10	11,3	21,0	11,0	10,0	50,0	10,5	200/50						●	●	●	●	●	●	●	●	●	●	●	●	●
		12	A 14-M 12	11,3	22,0	14,0	12,0	55,0	13,2	150/50						●	●	●	●	●	●	●	●	●	●	●	●	●
		14	A 14-M 14	11,3	25,0	16,0	14,0	59,0	15,0	100/50						●	●	●	●	●	●	●	●	●	●	●	●	●
		16	A 14-M 16	11,3	26,0	18,0	16,0	63,0	17,0	100/50						●	●	●	●	●	●	●	●	●	●	●	●	●

◆*Not UL approved*

DIE SELECTOR CHART

HYDRAULIC TOOLS

APPLICATION	CONDUCTOR Low str.	CONDUCTOR Flex	CONNECTOR TERMINAL	CONNECTOR TERMINAL	CONNECTOR SPLICE	B 15MDE DIE SET	B 35-45MDE NEST	B 35-45MDE INDEN-TOR	B 35-45MDE DIE SET	B 35-50MDE NEST	B 35-50MDE INDENTOR	B 35-50MDE DIE SET	HT 45-E NEST	HT 45-E INDENTOR	HT 45-E DIE SET
COPPER CONDUCTORS  A..-M..	0,25 ÷ 2,5		A 03-M.. A 06-M..		L 03-M / L 03-P L 06-M / L 06-P	ME03/2-15 (1) MA03/3-15 (1)									
	4 ÷ 6		A 1-M.. A 1-L..		L 1-M L 1-P	ME03/2-15 (1) MA03/3-15 (1)	MA 1 (1)	PA 1	ME 1 (1)	MA 1-50 (1)	PA 1-50	ME 1-50 (1)	MA 1 (1)	PA 1	ME 1 (1)
	10		A 2-M.. A 2-L..	A 2-P12	L 2-M L 2-P	ME03/2-15 (1) ME2/3-15 (1) MA03/3-15 (1)	MA 2.3 (1)		ME 2 (1)	MA 2.3-50 (1)		ME 2-50 (1)	MA 2.3 (1)		ME 2 (1)
 A..-2M..	16		A 3-M.. A 3-L..	A 3-P14	L 3-M L 3-P	ME2/3-15 (1) MA03/3-15 (1)		PA 5	ME 3 (1)		PA 5-50	ME 3-50 (1)		PA 5	ME 3 (1)
	25		A 5-M.. A 5-L..	A 5-P16	L 5-M L 5-P		MA 5 (1)		ME 5 (1)	MA 5-50 (1)		ME 5-50 (1)	MA 5 (1)		ME 5 (1)
	35	25* 35	A 7-..M.. A 7-L..	A 7-P20	L 7-M L 7-P		MA 7 (1)	PA 10	ME 7 (1)	MA 7-50 (1)	PA 10-50	ME 7-50 (1)	MA 7 (1)	PA 10	ME 7 (1)
	50	35* 50	A 10-..M.. A 10-L..	A 10-P25	L 10-M L 10-P		MA 10 (1)		ME 10 (2)	MA 10-50 (1)		ME 10-50 (2)	MA 10 (1)		ME 10 (2)
 A..-P..	70	50* 70	A 14-..M.. A 14-L..		L 14-M L 14-P				ME 14 (2)	MA 14-50 (1)		ME 14-50 (2)			ME 14 (2)
				A 14-P30					ME 17 (2)		PA 19-50	ME 17-50 (2)			ME 17 (2)
	95	70* 95	A 19-..M.. A 19-L..		L 19-M L 19-P				ME 19 (2)	MA 19-50 (1)		ME 19-50 (2)			ME 19 (2)
	120	95* 120	A 24-..M.. A 24-L..		L 24-M L 24-P				ME 24L (2)	MA 24-50 (1)	PA 24-50	ME 24L-50 (2)			ME 24 (2)
 L..-M..	150	120* 150	A 30-..M.. A 30-L..		L 30-M L 30-P				ME 30L (3)			ME 30L-50 (3)			ME 30 (3)
	185	150* 185	A 37-..M.. A 37-L..	A 37-4ESI	L 37-M L 37-P										
	240	185* 240	A 48-..M.. A 48-L..	A 48-4ESI	L 48-M L 48-P										
 L..-P..	300	240 300	A 60-..M.. A 60-L..	A 60-4ESI	L 60-M L 60-P										
	400	300 400	A 80-..M..	A 80-4ESI	L 80-M										
	500	400 500	A 100-..M..	A 100-4ESI	L 100-M										
 A..-4ESI	630	500 630	A 120-..M..	A 120-4ESI	L 120-M										
	800	630	A 160-..M..	A 160-4ESI	L 160-M										
	1000	800	A 200-M..		L 200-M										
EXTRA FLEXIBLE COPPER CONDUCTORS		35	A 9-M..				MA 9 (1)	PA 10	ME 9 (1)	MA 9-50 (1)	PA 10-50	ME 9-50 (1)	MA 9 (1)	PA 10	ME 9 (1)
 A..-M..		50	A 12-M..						ME 12 (2)	MA 12-50 (1)		ME 12-50 (2)			ME 12 (2)
		70	A 17-M..						ME 17 (2)	MA 17-50 (1)	PA 19-50	ME 17-50 (2)			ME 17 (2)
		95	A 20-M..						ME 20 (2)	MA 20-50 (1)		ME 20-50 (2)			ME 20 (2)
		120	A 29-M..						ME 29 (3)			ME 29-50 (3)			ME 29 (3)
		150	A 35-M..												
		185	A 40-M..												

HYDRAULIC TOOLS

CONDUCTOR Low str.	CONDUCTOR Flex	HT 51 RH 50 B 500E B 550E NEST	HT 51 RH 50 B 500E B 550E INDENTOR	HT 51 RH 50 B 500E B 550E DIE SET	HT 81-U RHU 81 DIE SET	HT 81-U RHU 81 DIE SET	HT 120 and tools and heads with 130 kN crimping force NEST	HT 120 INDENTOR	HT 120 DIE SET	ECW-H3D NEST	ECW-H3D INDENTOR	ECW-H3D DIE SET	RHU 520 NEST	RHU 520 INDENTOR	RHU 520 DIE SET
0,25 ÷ 2,5															
4 ÷ 6		MA 1-50 (1)	PA 1-50	ME 1-50 (1)											
10		MA 2.3-50 (1)		ME 2-50 (1)		ME 2.19-U (1)	MA 2-C (1)		ME 2-C (1)						
16			PA 5-50	ME 3-50 (1)	MA 3.5-U (1)	ME 3.14-U (1)	MA 3-C (1)		ME 3-C (1)						
25		MA 5-50 (1)		ME 5-50 (1)		ME 5.7-U (1)	MA 5-C (1)	PA 10-C	ME 5-C (1)						
35	25* 35	MA 7-50 (1)	PA 10-50	ME 7-50 (1)	MA 7.14-U (1)		MA 7-C (1)		ME 7-C (1)						
50	35* 50	MA 10-50 (1)		ME 10-50 (2)	MA 10.19-U (1)	ME 10.24-U (2)	MA 10-C (1)		ME 10-C (1)						
70	50* 70	MA 14-50 (1)		ME 14-50 (2)	MA 7.14-U (1)	ME 3.14-U (2)	MA 14-C (1)		ME 14-C (1)	Adaptor AU 230-130 D with die set **MA..-C** and indentor **PA..-C**		Adaptor AU 230-130 D with die set **ME..-C**	Adaptor AU 520-130 C with die set **MA..-C** and indentor **PA..-C**		Adaptor AU 520-130 C with die set **ME..-C**
			PA 19-50	ME 17-50 (2)					ME 17-C (1)						
95	70* 95	MA 19-50 (1)		ME 19-50 (2)	MA 10.19-U MA 19-U (1)	ME 2.19-U (2)	MA 19-C (1)	PA 24-C	ME 19-C (1)						
120	95* 120	MA 24-50 (1)	PA 24-50	ME 24-50 (2)	MA 24-U (1)	ME 10.24-U (2)	MA 24-C (1)		ME 24-C (1)						
150	120* 150			ME 30-50 (3)	MA 30.80-U (1)	ME 30-U (2)	MA 30-C (1)		ME 30-C (1)						
185	150* 185			ME 37-50 (3)	MA 37-U (2)	ME 37-U (2)	MA 37-C (1)	PA 48-C	ME 37-C (1)						
240	185* 240			ME 48-50 (3)	MA 48-U (3)	ME 48-U (3)	MA 48-C (1)		ME 48-C (2)						
300	240 300			ME 60-50** (4)			MA 60-C (1)	PA 60-C	ME 60-C (3)						
400	300 400								ME 80-C (3)	MA 80-3D (1)	PA 100-3D	ME 80-3D (2)	MA 80-520 (1)		ME 80-520 (2)
500	400 500									MA 100-3D (1)		ME 100-3D (2)	MA 100-520 (1)	PA 120-520	ME 100-520 (2)
630	500 630									MA 120-3D (1)	PA 120-3D	ME 120-3D (2)	MA 120-520 (1)		ME 120-520 (2)
800	630												MA 160-520 (1)	PA 200-520	ME 160-520 (2)
1000	800												MA 200-520 (1)		ME 200-520 (2)
	35	MA 9-50 (1)	PA 10-50	ME 9-50 (1)	MA 9.17-U (1)	ME 9.20-U (1)	MA 9-C (1)	PA 10-C	ME 9-C (1)						
	50	MA 12-50 (1)		ME 12-50 (2)	MA 12.20-U (1)	ME 12.17-U (2)	MA 12-C (1)		ME 12-C (1)						
	70	MA 17-50 (1)	PA 19-50	ME 17-50 (2)	MA 9.17-U (1)	ME 12.17-U (2)	MA 17-C (1)	PA 24-C	ME 17-C (1)	Adaptor AU 230-130 D with die set **MA..-C** and indentor **PA..-C**		Adaptor AU 230-130 D with die set **ME..-C**	Adaptor AU 520-130 C with die set **MA..-C** and indentor **PA..-C**		Adaptor AU 520-130 C with die set **ME..-C**
	95	MA 20-50 (1)		ME 20-50 (2)	MA 12.20-U (1)	ME 9.20-U (2)	MA 20-C (1)		ME 20-C (1)						
	120			ME 29-50 (3)	MA 29.80-U (1)	ME 29-U (2)	MA 29-C (1)		ME 29-C (1)						
	150			ME 35-50 (3)	MA 35-U (2)	ME 35-U (2)	MA 35-C (1)	PA 48-C	ME 35-C (1)						
	185			ME 40-50 (3)	MA 40-U (2)	ME 40-U (3)	MA 40-C (1)		ME 40-C (1)						

⬡ Hexagonal crimp (use one size up with fine stranded conductors, E.G.: 95□ fine stranded use A19-.. + ME 19 or A 20-.. + ME 20)

Indent crimp

** Contact Cembre for appropriate die set*

***N.B.:** Number inside symbol indicates the number of crimps on A-M barrel, L-P and each side of L-M products*

** Only for B 500 and RH 50.