



# symbol description

## electrical connectors

	Insulation sleeve in Polyvinylchloride		Aluminium connectors of of a purity equal to or greater than 99,5%.
	Insulation sleeve in Polycarbonate		Aldrey connectors
	Insulation sleeve in Nylon PA6.6		Zinc Plated Steel connectors
	Insulation sleeve in Polyethylene High Density		Internal surface is filled with special grease so as to avoid oxidation of the connector
	Heat shrinkable		Low and medium voltage connectors
	Insulation sleeve form to allow easy "introduction" of the conductor		Connector provided with central stop
	Manufactured from electrolytic Copper strip with a purity greater than 99.9%		Colour coded connectors
	Manufactured from Brass strip with a purity greater than 99.9%		Facilitated introduction of the conductor
	Manufactured from electrolytic Copper tube with a purity greater than 99.9%		Inspection hole for checking the correct introduction of the conductor
	Manufactured from electrolytic Copper wire with a purity greater than 99.9%		Contained palm connectors
	Brazed seam		Annealed material
	Brass connectors		Electrolytically tin plated to avoid oxidation; min 3µm
	Bimetallic connectors, Aluminium and Copper.		Lugs angled

# symbol description

## electrical connectors



Zinc Plated Steel screws



Zinc Plated Steel nuts



Hexagonal crimp



Radial crimp



Indent crimp



Deep indent crimp



Oval crimp



Trapezium crimp



Circular crimp



Semicircular crimp



Indent crimp



Operating temperature range



Degree of protection



UL LISTING Marking valid in USA & CANADA



UL LISTING Marking valid in USA & CANADA



In accordance with DIN 46235



Meets the requirements for fire testing of materials and components for trains EN 45545-2:2015



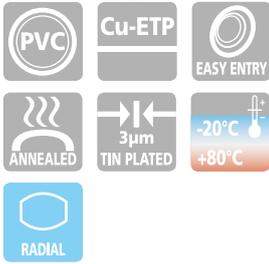
Halogen free



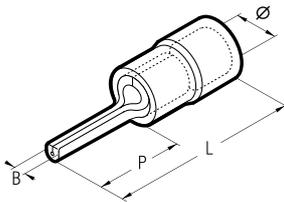


The unique funnel shaped PVC sleeve guarantees total insertion of the conductor strands into the terminal barrel, creating a secure and reliable, electrical and mechanical connection. The internal surface of the barrel is rifled to improve contact with conductor strands when crimped and to increase tensile strength. The "F" range of terminals offers a wide selection of rings, forks, pins and blades, designed to meet the ever changing end user requirements.

The PVC insulation, is a self extinguishing thermoplastic material class V0 (UL 94). The operating temperature range is -20 to +80°C (Surge +90°C). Recommended crimping tools are shown on pages 144 to 173, 260.

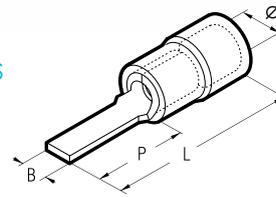


pin terminals



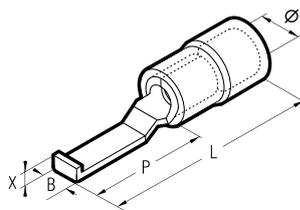
Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity Box/Bag
		Ø	B	P	L	
0,25÷1,5 (22÷16)	RF-P8	4,0	1,6	8,0	17,8	3.000/100
	RF-P10	4,0	1,6	10,0	19,8	3.000/100
	RF-P12	4,0	1,6	12,0	22,0	3.000/100
1,5÷2,5 (16÷14)	BF-P8	4,9	1,6	8,0	17,8	2.500/100
	BF-P10	4,9	1,6	10,0	19,8	2.500/100
	BF-P12	4,9	1,6	12,0	21,8	2.500/100
4÷6 (12÷10)	GF-P10	6,6	2,2	10,0	24,5	1.000/100
	GF-P12	6,6	2,2	12,0	26,7	1.000/100
	GF-P14	6,6	2,2	14,0	28,7	1.000/100

blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity Box/Bag
		Ø	B	P	L	
0,25÷1,5 (22÷16)	RF-PP12	4,0	3,0	12,8	22,8	3.000/100
	RF-PP12/1	4,0	3,0	11,3	21,3	3.000/100
	RF-PP12/19	4,0	1,9	13,2	23,2	3.000/100
	RF-PP12/23	4,0	2,3	13,2	23,2	2.500/100
	RF-PP14	4,0	3,0	14,8	24,8	2.500/100
	RF-PP16/23	4,0	2,3	17,2	27,2	2.500/100
1,5÷2,5 (16÷14)	BF-PP10	4,9	3,5	10,0	20,0	2.500/100
	BF-PP12	4,9	3,5	12,8	22,8	2.500/100
	BF-PP12/25	4,9	2,5	13,3	23,3	2.000/100
	BF-PP12/29*	4,9	2,9	13,3	23,3	2.500/100
	BF-PP16/25	4,9	2,5	17,2	27,2	2.500/100
	GF-PP12	6,6	4,0	13,3	27,4	1.000/100
4÷6 (12÷10)	GF-PP17	6,6	2,9	19,2	33,3	1.000/100

hooked blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm					Quantity Box/Bag
		Ø	B	P	L	X	
0,25÷1,5 (22÷16)	RF-PPL30*	4,0	3,0	17,5	28,3	1,7	2.500/100
	RF-PPL46*	4,0	4,6	17,5	28,3	1,7	2.500/100
1,5÷2,5 (16÷14)	BF-PPL30*	4,9	3,0	17,5	28,3	1,7	2.000/100
	BF-PPL46*	4,9	4,6	17,5	28,3	1,7	2.000/100
4÷6 (12÷10)	GF-PPL46*	6,6	4,6	17,5	32,6	1,9	1.000/100

\*Not UL approved

# PVC INSULATED CRIMP TERMINALS

RF BF GF

F range funnel entry - for Copper conductors



NEW

VALSTAR-N4

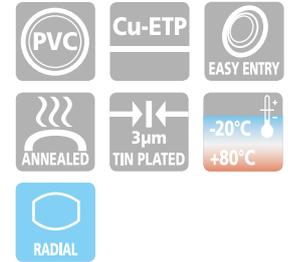


Robust plastic case with compartments, containing:

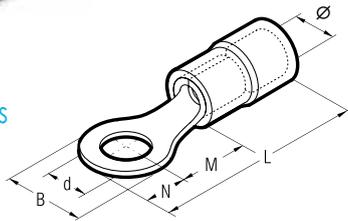
- An assortment of PVC insulated crimp terminals for conductor sizes 0,25 to 6 mm<sup>2</sup> (22÷10 AWG).
- Cable ties
- Tool Crimpstar® HP3.

Connectors included:

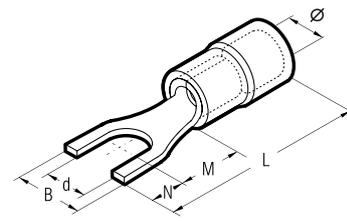
- Qty 100 terminals RF-M4
- Qty 100 terminals BF-M5
- Qty 100 terminals GF-M6
- Qty 100 terminals RF-F608P
- Qty 100 terminals BF-F608P
- Qty 100 connectors PL03-M
- Qty 100 cable ties G100X2.5



ring terminals



fork/spade terminals



Conductor Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Ø	B	M	N	L	d	
0,25÷1,5 (22÷16)	4,0	2 RF-M2**	4,0	5,6	4,5	2,8	17,3	2,2	3.000/100
		3 RF-M3	4,0	5,6	4,5	2,8	17,3	3,2	3.000/100
		3,5 RF-M3.5	4,0	5,6	4,5	2,8	17,3	3,7	3.000/100
		3,5 RF-M3.5/1	4,0	6,2	7,1	3,1	20,2	3,7	3.000/100
		4 RF-M4	4,0	7,0	6,5	3,5	20,0	4,3	3.000/100
		4 RF-M4/3*	4,0	7,8	7,1	3,9	21,0	4,3	3.000/100
		5 RF-M5	4,0	7,8	7,1	3,9	21,0	5,3	2.500/100
		6 RF-M6	4,0	9,4	8,1	4,7	22,8	6,4	2.500/100
		6 RF-M6/1	4,0	12,0	10,3	6,0	26,3	6,4	2.000/100
		7 RF-M7	4,0	9,4	8,1	4,7	22,8	7,2	2.500/100
		8 RF-M8	4,0	12,0	10,3	6,0	26,3	8,4	2.000/100
		10 RF-M10	4,0	15,5	13,0	7,7	30,8	10,5	1.500/100
12 RF-M12	4,0	18,0	15,5	9,0	34,5	13,0	1.500/100		
1,5÷2,5 (16÷14)	4,9	2 BF-M2**	4,9	5,6	5,0	2,8	17,8	2,2	3.000/100
		3 BF-M3	4,9	5,6	5,0	2,8	17,8	3,2	2.500/100
		3,5 BF-M3.5	4,9	5,6	5,0	2,8	17,8	3,7	2.500/100
		3,5 BF-M3.5/1	4,9	6,2	6,5	3,1	19,6	3,7	2.500/100
		4 BF-M4	4,9	8,0	6,5	4,0	20,5	4,3	2.500/100
		5 BF-M5	4,9	8,0	7,5	4,0	21,5	5,3	2.000/100
		6 BF-M6	4,9	9,4	8,6	4,7	23,3	6,4	2.000/100
		6 BF-M6/1	4,9	12,0	10,3	6,0	26,3	6,4	2.000/100
		6 BF-M6/2**	4,9	8,4	5,4	4,2	19,6	6,4	2.500/100
		7 BF-M7	4,9	10,0	7,8	5,0	22,8	7,2	2.000/100
		8 BF-M8	4,9	12,0	10,3	6,0	26,3	8,4	1.500/100
		10 BF-M10	4,9	15,5	13,0	7,7	30,8	10,5	1.500/100
12 BF-M12	4,9	18,0	15,5	9,0	34,5	13,0	1.000/100		
4÷6 (12÷10)	6,6	3 GF-M3	6,6	8,0	8,1	4,0	26,2	3,2	1.000/100
		3,5 GF-M3.5	6,6	8,0	8,1	4,0	26,2	3,7	1.000/100
		4 GF-M4	6,6	9,0	8,1	4,5	26,7	4,3	1.000/100
		5 GF-M5	6,6	9,0	8,1	4,5	26,7	5,3	1.000/100
		6 GF-M6	6,6	11,0	11,1	5,5	30,7	6,4	1.000/100
		6 GF-M6/1	6,6	11,0	8,1	5,5	27,7	6,4	1.000/100
		7 GF-M7	6,6	11,0	11,1	5,5	30,7	7,2	1.000/100
		8 GF-M8	6,6	13,6	12,1	6,8	33,0	8,4	800/100
		8 GF-M8/1**	6,6	11,0	8,1	5,5	27,7	8,4	1.000/100
		10 GF-M10	6,6	13,6	12,1	6,8	33,0	10,5	800/100
		10 GF-M10/1	6,6	15,5	13,8	7,7	35,7	10,5	800/100
		12 GF-M12	6,6	19,0	15,1	9,5	38,7	13,0	500/100
		14 GF-M14	6,6	21,0	16,1	10,5	40,7	15,0	500/100
		16 GF-M16	6,6	24,0	17,1	12,0	43,2	17,0	500/100

Conductor Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Ø	B	M	N	L	d	
0,25÷1,5 (22÷16)	4,0	3 RF-U3	4,0	5,5	5,5	4,0	19,5	3,2	3.000/100
		3,5 RF-U3.5	4,0	6,0	6,5	3,8	20,3	3,7	3.000/100
		3,5 RF-U3.5/1	4,0	7,2	6,5	3,8	20,3	3,7	3.000/100
		3,5 RF-U3.5/2*	4,0	6,4	6,5	3,8	20,3	3,7	3.000/100
		4 RF-U4	4,0	6,5	7,5	3,7	21,2	4,3	3.000/100
		4 RF-U4/1	4,0	8,5	7,5	3,7	21,2	4,3	3.000/100
		4 RF-U4/2	4,0	7,5	7,5	3,7	21,2	4,3	3.000/100
		5 RF-U5	4,0	8,5	7,5	3,7	21,2	5,3	2.500/100
		5 RF-U5/1**	4,0	9,4	7,5	3,7	21,2	5,3	3.000/100
		6 RF-U6	4,0	9,4	8,1	4,7	22,8	6,4	2.000/100
		6 RF-U6/1	4,0	12,0	9,2	7,1	26,3	6,4	2.000/100
		8 RF-U8	4,0	14,0	10,0	6,3	26,3	8,4	2.000/100
10 RF-U10	4,0	17,5	13,0	7,7	30,8	10,5	1.500/100		
12 RF-U12	4,0	20,0	15,5	9,0	34,5	13,0	1.500/100		
1,5÷2,5 (16÷14)	4,9	3 BF-U3	4,9	5,5	5,5	4,0	19,5	3,2	2.500/100
		3,5 BF-U3.5	4,9	6,4	6,5	3,8	20,3	3,7	2.500/100
		3,5 BF-U3.5/1*	4,9	7,2	6,5	3,8	20,3	3,7	3.000/100
		4 BF-U4	4,9	6,5	7,5	3,7	21,2	4,3	3.000/100
		4 BF-U4/1	4,9	8,5	7,5	3,7	21,2	4,3	2.000/100
		4 BF-U4/2	4,9	7,5	7,5	3,7	21,2	4,3	2.000/100
		5 BF-U5	4,9	8,5	7,5	3,7	21,2	5,3	2.000/100
		5 BF-U5/2*	4,9	12,0	11,3	5,0	26,3	5,3	1.500/100
		6 BF-U6	4,9	9,4	8,1	4,7	22,8	6,4	2.000/100
		6 BF-U6/1	4,9	12,0	9,2	7,1	26,3	6,4	2.000/100
		8 BF-U8	4,9	14,0	10,0	6,3	26,3	8,4	1.500/100
		10 BF-U10	4,9	17,5	13,0	7,7	30,8	10,5	1.000/100
12 BF-U12	4,9	20,0	15,5	9,0	34,5	13,0	1.000/100		
4÷6 (12÷10)	6,6	3,5 GF-U3.5	6,6	7,5	8,5	3,9	26,5	3,7	1.000/100
		4 GF-U4	6,6	7,5	8,0	4,4	26,5	4,3	1.000/100
		5 GF-U5	6,6	9,5	8,0	4,4	26,5	5,3	1.000/100
		6 GF-U6	6,6	10,0	11,0	5,5	30,6	6,4	1.000/100
		8 GF-U8	6,6	13,5	12,0	8,0	34,1	8,4	800/100
		10 GF-U10	6,6	15,5	13,0	8,0	35,1	10,5	1.000/100
		10 GF-U10/1	6,6	17,5	13,8	7,7	35,7	10,5	1.000/100
		12 GF-U12	6,6	21,0	15,1	9,5	38,7	13,0	500/100
14 GF-U14	6,6	23,0	16,1	10,5	40,7	15,0	500/100		
16 GF-U16	6,6	26,0	17,1	11,5	42,7	17,0	500/100		

\*Not UL approved \*Made to order

# RF-F BF-F GF-F



\* Material: Polycarbonate type PC10500AC certified EN45545-2

## FEMALE DISCONNECT TERMINALS

for Copper conductors

Recommended crimping tools are shown on pages 144 to 173, 260.



Polycarbonate\* insulated terminals partially reinforced with Copper sleeve

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RF-F305	2,8 x 0,5	3.000/100
	RF-F308*	2,8 x 0,8	3.000/100
	RF-F405	4,8 x 0,5	2.500/100
	RF-F408	4,8 x 0,8	2.500/100
1,5÷2,5 (16÷14)	RF-F608	6,35 x 0,8	2.500/100
	BF-F405	4,8 x 0,5	2.500/100
	BF-F408	4,8 x 0,8	2.500/100
4÷6 (12÷10)	BF-F608	6,35 x 0,8	1.500/100
	GF-F608	6,35 x 0,8	1.000/100

Polycarbonate\* fully insulated terminals partially reinforced with Copper sleeve

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RF-F305P	2,8 x 0,5	2.000/100
	RF-F308P*	2,8 x 0,8	2.000/100
	RF-F405P	4,8 x 0,5	1.500/100
	RF-F408P	4,8 x 0,8	1.500/100
1,5÷2,5 (16÷14)	RF-F608P	6,35 x 0,8	1.000/100
	BF-F405P	4,8 x 0,5	1.500/100
	BF-F408P	4,8 x 0,8	1.500/100
4÷6 (12÷10)	BF-F608P	6,35 x 0,8	1.000/100
	GF-F608P	6,35 x 0,8	800/100

# RF-M BF-M GF-M



\* Material: Polycarbonate type PC10500AC certified EN45545-2

## MALE DISCONNECT TERMINALS

for Copper conductors

Recommended crimping tools are shown on pages 144 to 173, 260.



Polycarbonate\* insulated terminals partially reinforced with Copper sleeve

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RF-M608	6,35 x 0,8	3.000/100
1,5÷2,5 (16÷14)	BF-M608	6,35 x 0,8	2.000/100
4÷6 (12÷10)	GF-M608	6,35 x 0,8	1.000/100

Polycarbonate\* fully insulated terminals partially reinforced with Copper sleeve

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RF-M608P	6,35 x 0,8	1.000/100
1,5÷2,5 (16÷14)	BF-M608P	6,35 x 0,8	800/100

# RF-FM BF-FM RF-B BF-B



\* Material: Polycarbonate type PC10500AC certified EN45545-2

## MALE/FEMALE

for Copper conductors

Recommended crimping tools are shown on pages 144 to 173, 260.

Polycarbonate\* insulated terminals partially reinforced with Copper sleeve

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RF-FM608	6,35 x 0,8	1.000/100
1,5÷2,5 (16÷14)	BF-FM608	6,35 x 0,8	1.000/100

## BULLET AND SOCKET

for Copper conductors



Polycarbonate\* insulated terminals partially reinforced with Copper sleeve

Conductor Size sqmm (AWG)	Type	Ø mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RF-BM4*	4,0	2.500/100
	RF-BF4*	3,95	800/100
1,5÷2,5 (16÷14)	BF-BM5*	5,0	2.000/100
	BF-BF5*	4,95	800/100

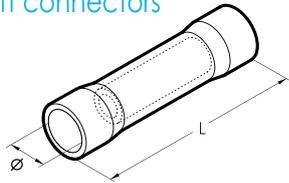
\*Not UL approved

## BUTT AND PARALLEL CONNECTORS

for Copper conductors



butt connectors

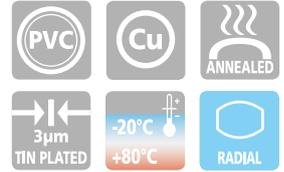


parallel connectors

Recommended crimping tools are shown on pages 144 to 173, 260.

PVC insulated

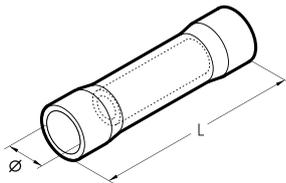
Conductor Size sqmm (AWG)	Type	Ø mm	L mm	Quantity Box/Bag
0,2÷0,5 (24÷20)	PL01-M*	3,0	25,0	3.000/100
0,25÷1,5 (22÷16)	PL03-M	4,0	25,0	1.000/100
1,5÷2,5 (16÷14)	PL06-M	5,0	25,0	1.500/100
4÷6 (12÷10)	PL1-M	6,5	32,0	500/100
0,25÷1,5 (22÷16)	PL03-P*	4,0	20,0	3.000/100
1,5÷2,5 (16÷14)	PL06-P*	5,0	16,0	2.000/100



## BUTT CONNECTORS

for Copper conductors

Recommended crimping tools are shown on pages 144 to 173, 260.

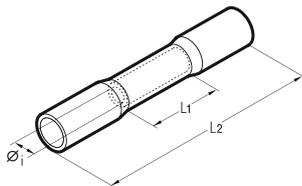


Polyamide PA6.6 insulated

Conductor Size sqmm (AWG)	Type	Ø mm	L mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	NL03-M	4,0	25,0	1.000/100
1,5÷2,5 (16÷14)	NL06-M	5,4	25,5	1.500/100
4÷6 (12÷10)	NL1-M	7,6	32,0	500/100
10 (8÷7)	NL2-M	8,0	43,0	500/100
16 (6÷5)	NL3-M	9,2	44,0	400/100



Recommended crimping tools are shown on pages 146, 158-159.



PE HD insulated, heat shrinkable

Conductor Size sqmm (AWG)	Type	Ø mm	L1 mm	L2 mm	Quantity Box/Bag
0,5÷1,5 (20÷16)	WL03-M	1,7	15,0	36,0	1.500/100
1,5÷2,5 (16÷14)	WL06-M	2,3	15,0	36,0	1.000/100
4÷6 (12÷10)	WL1-M	3,5	15,0	41,0	500/100

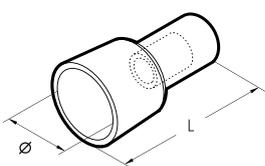
- Max operating voltage: 600 V
- Shrink temperature: 150 °C
- Protection: IP68



## CLOSE END CONNECTORS

for Copper conductors

Recommended crimping tools are shown on pages 144 to 173, 260.



Polyamide PA6.6 insulated

Conductor Size sqmm (AWG)	Type	Ø mm	L mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	NL03-P	7,9	21,0	1.000/100
1,5÷2,5 (16÷14)	NL06-P	7,9	19,9	1.000/100
	NL06-PB	6,5	13,6	1.500/100
4÷6 (12÷10)	NL1-P	10,5	21,5	500/100
	NL1-PG	9,0	17,8	1.000/100

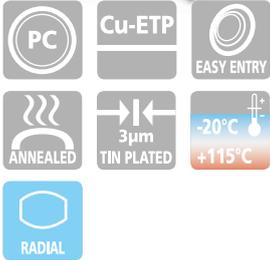


\*Not UL approved

# VP RP BP GP

## HALOGEN FREE INSULATED TERMINALS

P range funnel entry - for Copper conductors



The "P" range of terminals has been designed, to meet the increasing demands for improved safety and reliability of electrical connectors.

The Polycarbonate insulation type PC10500AC certified EN45545-2, is a Halogen free, self extinguishing thermoplastic material class V0 (UL 94). The unique funnel shaped entry of the insulation sleeve, guarantees total insertion of the con-

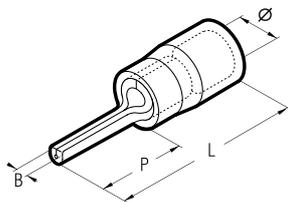
ductor strands into the terminal barrel, creating a secure and reliable, electrical and mechanical connection.

The operating temperature range is -20 to +115°C (Surge +130°C).

Recommended crimping tools are shown on pages 144 to 173, 260.

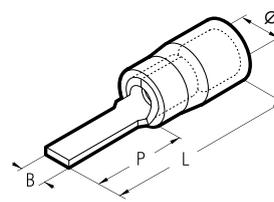


### pin terminals



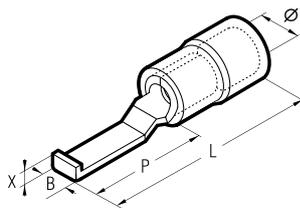
Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity Box/Bag
		Ø	B	P	L	
0,2÷0,5 (24÷20)	VP-P10	3,0	1,0	9,8	20,2	4.000/100
0,25÷1,5 (22÷16)	RP-P8	4,0	1,6	7,8	17,9	3.000/100
	RP-P10	4,0	1,6	9,8	19,9	3.000/100
1,5÷2,5 (16÷14)	RP-P12	4,0	1,6	12,0	22,1	3.000/100
	BP-P8	4,9	1,6	7,8	17,9	3.000/100
4÷6 (12÷10)	BP-P10	4,9	1,6	9,8	19,9	3.000/100
	BP-P12	4,9	1,6	11,8	21,9	2.500/100
4÷6 (12÷10)	GP-P10	6,6	2,2	10,4	24,5	1.000/100
	GP-P12	6,6	2,2	12,6	26,7	1.000/100
	GP-P14	6,6	2,2	14,6	28,7	1.000/100

### blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity Box/Bag
		Ø	B	P	L	
0,2÷0,5 (24÷20)	VP-PP12/19	3,0	1,9	12,4	22,4	4.000/100
0,25÷1,5 (22÷16)	RP-PP12	4,0	3,0	12,8	22,9	3.000/100
	RP-PP12/1	4,0	3,0	11,3	21,4	3.000/100
	RP-PP12/19	4,0	1,9	13,2	23,3	3.000/100
	RP-PP12/23	4,0	2,3	13,2	23,3	2.500/100
	RP-PP14	4,0	3,0	14,8	24,9	2.500/100
	RP-PP16/23	4,0	2,3	17,2	27,3	2.500/100
1,5÷2,5 (16÷14)	BP-PP12	4,9	3,5	12,8	22,9	2.500/100
	BP-PP12/25	4,9	2,5	13,3	23,4	2.000/100
	BP-PP12/29	4,9	2,9	13,3	23,4	2.500/100
	BP-PP16/25	4,9	2,5	17,2	27,3	2.500/100
4÷6 (12÷10)	GP-PP12	6,6	4,0	13,3	27,4	1.000/100
	GP-PP17	6,6	2,9	19,1	33,2	1.000/100

### hooked blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm					Quantity Box/Bag
		Ø	B	P	L	X	
0,25÷1,5 (22÷16)	RP-PPL30	4,0	3,0	17,5	28,3	1,7	3.000/100
	RP-PPL46	4,0	4,6	17,5	28,3	1,7	3.000/100
1,5÷2,5 (16÷14)	BP-PPL30	4,9	3,0	17,5	28,3	1,7	2.500/100
	BP-PPL46	4,9	4,6	17,5	28,8	1,7	2.500/100
4÷6 (12÷10)	GP-PPL46	6,6	4,6	17,5	32,6	1,9	1.000/100

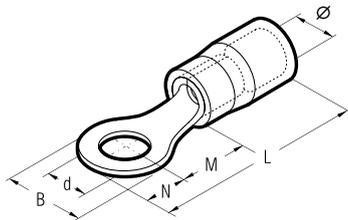
\*Not UL approved

# HALOGEN FREE INSULATED TERMINALS

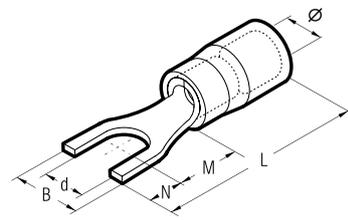
P range funnel entry - for Copper conductors

VP RP  
BP GP

## ring terminals



## fork/spade terminals



Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Ø	B	M	N	L	d	
0,25÷0,5 (24÷20)	3,0	2 VP-M2*	3,0	5,6	4,5	2,8	17,5	2,2	4.000/100
		3 VP-M3	3,0	5,6	4,5	2,8	17,5	3,2	4.000/100
		3,5 VP-M3.5	3,0	5,6	4,5	2,8	17,5	3,7	4.000/100
		4 VP-M4	3,0	7,0	6,5	3,5	20,2	4,3	4.000/100
		5 VP-M5	3,0	7,8	7,1	3,9	21,2	5,3	4.000/100
		6 VP-M6*	3,0	9,4	8,1	4,7	23,0	6,4	4.000/100
0,25÷1,5 (22÷16)	4,0	2 RP-M2*	4,0	5,6	4,5	2,8	17,4	2,2	3.000/100
		3 RP-M3	4,0	5,6	4,5	2,8	17,4	3,2	3.000/100
		3,5 RP-M3.5	4,0	5,6	4,5	2,8	17,4	3,7	3.000/100
		3,5 RP-M3.5/1	4,0	6,2	7,1	3,1	20,2	3,7	3.000/100
		4 RP-M4	4,0	7,0	6,5	3,5	20,1	4,3	3.000/100
		4 RP-M4/3	4,0	7,8	7,1	3,9	21,1	4,3	3.000/100
		5 RP-M5	4,0	7,8	7,1	3,9	21,1	5,3	2.500/100
		6 RP-M6	4,0	9,4	8,1	4,7	22,9	6,4	2.500/100
		6 RP-M6/1	4,0	12,0	10,3	6,0	26,4	6,4	2.000/100
		7 RP-M7	4,0	9,4	8,1	4,7	22,9	7,2	2.500/100
		8 RP-M8	4,0	12,0	10,3	6,0	26,4	8,4	2.500/100
		10 RP-M10	4,0	15,5	13,0	7,7	30,9	10,5	1.500/100
12 RP-M12	4,0	18,0	15,5	9,0	34,6	13,0	1.500/100		
1,5÷2,5 (16÷14)	4,9	2 BP-M2*	4,9	5,6	5,0	2,8	17,9	2,2	2.500/100
		3 BP-M3	4,9	5,6	5,0	2,8	17,9	3,2	2.500/100
		3,5 BP-M3.5	4,9	5,6	5,0	2,8	17,9	3,7	3.000/100
		3,5 BP-M3.5/1	4,9	6,2	6,5	3,1	19,7	3,7	2.500/100
		4 BP-M4	4,9	8,0	6,5	4,0	20,6	4,3	2.500/100
		5 BP-M5	4,9	8,0	7,5	4,0	21,6	5,3	2.000/100
		6 BP-M6	4,9	9,4	8,6	4,7	23,4	6,4	2.000/100
		6 BP-M6/1	4,9	12,0	10,3	6,0	26,4	6,4	2.000/100
		6 BP-M6/2*	4,9	8,4	5,4	4,2	19,7	6,4	2.500/100
		7 BP-M7	4,9	10,0	7,8	5,0	22,9	7,2	2.500/100
		8 BP-M8	4,9	12,0	10,3	6,0	26,4	8,4	1.500/100
		10 BP-M10	4,9	15,5	13,0	7,7	30,9	10,5	1.500/100
12 BP-M12	4,9	18,0	15,5	9,0	34,6	13,0	1.000/100		
4÷6 (12÷10)	6,6	3 GP-M3	6,6	8,0	8,1	4,0	26,2	3,2	1.000/100
		3,5 GP-M3.5	6,6	8,0	8,1	4,0	26,2	3,7	1.500/100
		4 GP-M4	6,6	9,0	8,1	4,5	26,7	4,3	1.000/100
		5 GP-M5	6,6	9,0	8,1	4,5	26,7	5,3	1.000/100
		6 GP-M6	6,6	11,0	11,1	5,5	30,7	6,4	1.000/100
		6 GP-M6/1	6,6	11,0	11,1	5,5	27,7	6,4	1.000/100
		7 GP-M7	6,6	11,0	11,1	5,5	30,7	7,2	1.000/100
		8 GP-M8	6,6	13,6	12,1	6,8	33,0	8,4	800/100
		8 GP-M8/1*	6,6	11,0	8,1	5,5	27,7	8,4	1.000/100
		10 GP-M10	6,6	13,6	12,1	6,8	33,0	10,5	1.000/100
		10 GP-M10/1	6,6	15,5	13,8	7,7	35,7	10,5	1.000/100
		12 GP-M12	6,6	19,0	15,1	9,5	38,7	13,0	500/100
		14 GP-M14	6,6	21,0	16,1	10,5	40,7	15,0	500/100
		16 GP-M16	6,6	24,0	17,1	12,0	43,2	17,0	500/100

Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag		
			Ø	B	M	N	L	d			
0,2÷0,5 (24÷20)	3,0	3 VP-U3	3,0	5,5	5,5	4,0	18,7	3,2	4.000/100		
		3,5 VP-U3.5	3,0	6,0	6,5	3,8	19,5	3,7	4.000/100		
		4 VP-U4	3,0	6,5	7,5	3,7	20,4	4,3	4.000/100		
		3 RP-U3	4,0	5,5	5,5	4,0	19,6	3,2	3.000/100		
0,25÷1,5 (22÷16)	4,0	3,5 RP-U3.5	4,0	6,0	6,5	3,8	20,4	3,7	3.000/100		
		3,5 RP-U3.5/2	4,0	6,4	6,5	3,8	20,4	3,7	3.000/100		
		4 RP-U4	4,0	6,5	7,5	3,7	21,3	4,3	3.000/100		
		4 RP-U4/1	4,0	8,5	7,5	3,7	21,3	4,3	3.000/100		
		4 RP-U4/2	4,0	7,5	7,5	3,7	21,3	4,3	3.500/100		
		5 RP-U5	4,0	8,5	7,5	3,7	21,3	5,3	3.000/100		
		5 RP-U5/1*	4,0	9,4	7,5	3,7	21,3	5,3	3.000/100		
		6 RP-U6	4,0	9,4	8,1	4,7	22,9	6,4	2.000/100		
		6 RP-U6/1	4,0	12,0	9,2	7,1	26,4	6,4	2.000/100		
		8 RP-U8	4,0	14,0	10,0	6,3	26,4	8,4	2.000/100		
		10 RP-U10	4,0	17,5	13,0	7,7	30,9	10,5	1.500/100		
		12 RP-U12	4,0	20,0	15,5	9,0	34,6	13,0	1.500/100		
		1,5÷2,5 (16÷14)	4,9	3 BP-U3	4,9	5,5	5,5	4,0	19,6	3,2	2.500/100
				3,5 BP-U3.5	4,9	6,4	6,5	3,8	20,4	3,7	2.500/100
				3,5 BP-U3.5/1*	4,9	7,2	6,5	3,8	20,4	3,7	2.500/100
				4 BP-U4	4,9	6,5	7,5	3,7	21,3	4,3	2.500/100
4 BP-U4/1	4,9			8,5	7,5	3,7	21,3	4,3	3.000/100		
4 BP-U4/2	4,9			7,5	7,5	3,7	21,3	4,3	2.000/100		
5 BP-U5	4,9			8,5	7,5	3,7	21,3	5,3	2.000/100		
6 BP-U6	4,9			9,4	8,1	4,7	22,9	6,4	2.000/100		
6 BP-U6/1	4,9			12,0	9,2	7,1	26,4	6,4	2.000/100		
8 BP-U8	4,9			14,0	10,0	6,3	26,4	8,4	1.500/100		
10 BP-U10	4,9			17,5	13,0	7,7	30,9	10,5	1.000/100		
12 BP-U12	4,9			20	15,5	9,0	34,6	13,0	1.500/100		
4÷6 (12÷10)	6,6			3,5 GP-U3.5	6,6	7,5	8,5	3,9	26,5	3,7	1.000/100
				4 GP-U4	6,6	7,5	8,0	4,4	26,5	4,3	1.000/100
				5 GP-U5	6,6	9,5	8,0	4,4	26,5	5,3	1.000/100
				6 GP-U6	6,6	10,0	11,0	5,5	30,6	6,4	1.000/100
		8 GP-U8	6,6	13,5	12,0	8,0	34,1	8,4	1.000/100		
		10 GP-U10	6,6	15,5	13,0	8,0	35,1	10,5	1.000/100		
		10 GP-U10/1	6,6	17,5	13,8	7,7	35,7	10,5	1.000/100		
		12 GP-U12	6,6	21,0	15,1	9,5	38,7	13,0	500/100		
		14 GP-U14	6,6	23,0	16,1	10,5	40,7	15,0	500/100		
		16 GP-U16	6,6	26,0	17,1	11,5	42,7	17,0	500/100		

\*Made to order

# CRP CBP CGP

## INSULATED CHAIN TERMINALS

CP range with easy entry - for Copper conductors



The "CP" range of terminals has been designed to meet the increasing demands for improved safety and reliability of electrical connectors. Developed for use with production equipment, to give a quick and reliable crimped joint, the Polycarbonate insulation type PC10500AC certified EN45545-2, is a Halogen free, self extinguishing thermoplastic material class V0 (UL 94). The unique funnel shaped entry of the insulation sleeve guarantees

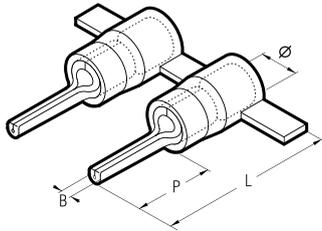
strands into the terminal barrel, creating a secure and reliable, electrical and mechanical connection. The operating temperature range is -20 to +115°C (Surge +130°C).

stands into the terminal barrel, creating a secure and reliable, electrical and mechanical connection. The operating temperature range is -20 to +115°C (Surge +130°C).

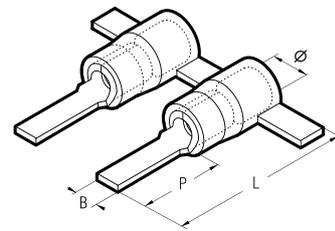


- PC**
- Cu-ETP**
- EASY ENTRY**
- EN 45545-2**
- HF HALOGEN FREE**
- ANNEALED**
- 3µm TIN PLATED**
- 20°C to +115°C**
- RADIAL**

### pin terminals



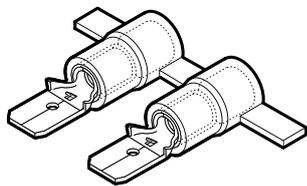
### blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity
		Ø	B	P	L	
0,25÷1,5 (22÷16)	CRP-P8	4,0	1,6	8,0	17,9	2.000
	CRP-P10	4,0	1,6	10,0	19,9	2.000
	CRP-P12	4,0	1,6	12,0	22,1	2.000
1,5÷2,5 (16÷14)	CBP-P8	4,9	1,6	8,0	17,9	1.750
	CBP-P10	4,9	1,6	10,0	19,9	1.750
	CBP-P12	4,9	1,6	12,0	21,9	1.750
4÷6 (12÷10)	CGP-P10	6,6	2,2	10,0	24,5	1.250
	CGP-P12	6,6	2,2	12,0	26,7	1.250
	CGP-P14	6,6	2,2	14,0	28,7	1.250

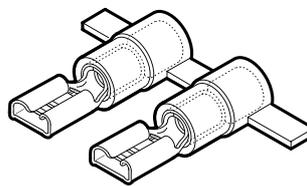
Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity
		Ø	B	P	L	
0,25÷1,5 (22÷16)	CRP-PP12	4,0	3,0	12,8	22,9	2.000
	CRP-PP12/1*	4,0	3,0	11,3	21,4	2.000
	CRP-PP12/23*	4,0	2,3	13,2	23,3	2.000
	CRP-PP14	4,0	3,0	14,8	24,9	2.000
1,5÷2,5 (16÷14)	CBP-PP12	4,9	3,5	12,8	22,9	1.750
	CBP-PP12/25*	4,9	2,5	13,3	23,4	1.750
4÷6 (12÷10)	CGP-PP12	6,6	4,0	13,3	27,4	1.250
	CGP-PP17*	6,6	2,9	19,1	33,2	1.250

### male disconnect terminals



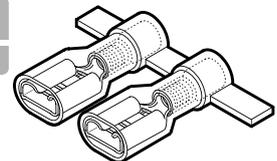
Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity
0,25÷1,5 (22÷16)	CRP-M608	6,35 x 0,8	2.000
	CBP-M608	6,35 x 0,8	1.750
4÷6 (12÷10)	CGP-M608	6,35 x 0,8	1.250

### female disconnect terminals



Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity
0,25÷1,5 (22÷16)	CRP-F305	2,8 x 0,5	2.000
	CRP-F308	2,8 x 0,8	2.000
	CRP-F405	4,8 x 0,5	2.000
	CRP-F408	4,8 x 0,8	2.000
	CRP-F608	6,35 x 0,8	2.000
1,5÷2,5 (16÷14)	CBP-F405	4,8 x 0,5	1.750
	CBP-F408	4,8 x 0,8	1.750
	CBP-F608	6,35 x 0,8	1.750
4÷6 (12÷10)	CGP-F608	6,35 x 0,8	1.250

### female disconnect terminals fully insulated



Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity
0,25÷1,5 (22÷16)	CRP-F405P*	4,8 x 0,5	2.000
	CRP-F408P*	4,8 x 0,8	2.000
	CRP-F608P*	6,35 x 0,8	1.500
1,5÷2,5 (16÷14)	CBP-F408P*	4,8 x 0,8	1.500
	CBP-F608P*	6,35 x 0,8	1.500
4÷6 (12÷10)	CGP-F608P*	6,35 x 0,8	1.250

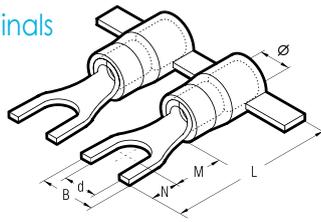
\*Not UL approved \*Made to order

# INSULATED CHAIN TERMINALS

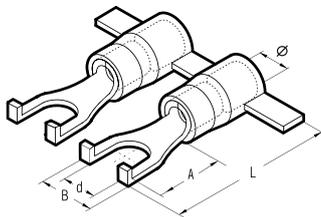
CP range with easy entry - for Copper conductors

# CRP CBP CGP

## fork/spade terminals

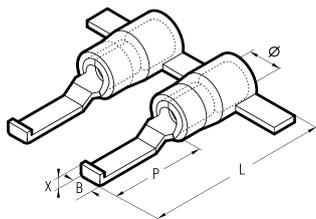


Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm					Quantity	
			Ø	B	M	N	L		d
0,25÷1,5 (22÷16)	3	CRP-U3	4,0	5,5	5,5	4,0	19,6	3,2	2.000
	3,5	CRP-U3.5	4,0	6,0	6,5	3,8	20,4	3,7	2.000
	3,5	CRP-U3.5/2*	4,0	6,4	6,5	3,8	20,4	3,7	2.000
	4	CRP-U4	4,0	6,5	7,5	3,7	21,3	4,3	2.000
	4	CRP-U4/1*	4,0	8,5	7,5	3,7	21,3	4,3	2.000
	4	CRP-U4/2*	4,0	7,5	7,5	3,7	21,3	4,3	2.000
	5	CRP-U5	4,0	8,5	7,5	3,7	21,3	5,3	2.000
	6	CRP-U6	4,0	9,4	8,1	4,7	22,9	6,4	2.000
1,5÷2,5 (16÷14)	6	CRP-U6/1*	4,0	12,0	9,2	7,1	26,4	6,4	2.000
	8	CRP-U8*	4,0	14,0	10,0	6,3	26,4	8,4	2.000
	3	CBP-U3	4,9	5,5	5,5	4,0	19,6	3,2	1.750
	3,5	CBP-U3.5	4,9	6,4	6,5	3,8	20,4	3,7	1.750
	4	CBP-U4	4,9	6,5	7,5	3,7	21,3	4,3	1.750
	4	CBP-U4/1*	4,9	8,5	7,5	3,7	21,3	4,3	1.750
4÷6 (12÷10)	4	CBP-U4/2*	4,9	7,5	7,5	3,7	21,3	4,3	1.750
	5	CBP-U5	4,9	8,5	7,5	3,7	21,3	5,3	1.750
	6	CBP-U6	4,9	9,4	8,1	4,7	22,9	6,4	1.750
	3,5	CGP-U3.5*	6,6	7,5	8,5	3,9	26,5	3,7	1.250
4	CGP-U4*	6,6	7,5	8,0	4,4	26,5	4,3	1.250	
5	CGP-U5	6,6	9,5	8,0	4,4	26,5	5,3	1.250	
6	CGP-U6	6,6	10,0	11,0	5,5	30,6	6,4	1.250	



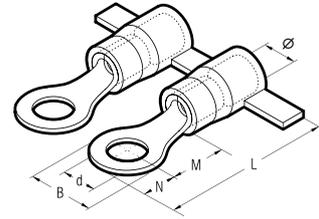
Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm					Quantity
			Ø	B	A	L	d	
1,5÷2,5 (16÷14)	4	CBP-U 4/3L*	4,9	6,5	9,5	14,5	4,3	1.750

## hooked blade terminals



Cond. Size sqmm (AWG)	Type	Dimensions mm					Quantity
		Ø	B	P	L	X	
0,25÷1,5 (22÷16)	CRP-PPL30*	4,0	3,0	17,5	28,8	1,7	2.000
1,5÷2,5 (16÷14)	CBP-PPL30*	4,9	3,0	17,5	28,8	1,7	1.750

## ring terminals



Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm					Quantity	
			Ø	B	M	N	L		d
0,25÷1,5 (22÷16)	3	CRP-M3	4,0	5,6	4,5	2,8	17,4	3,2	2.000
	3,5	CRP-M3.5*	4,0	5,6	4,5	2,8	17,4	3,7	2.000
	3,5	CRP-M3.5/1	4,0	6,2	7,1	3,1	20,2	3,7	2.000
	4	CRP-M4	4,0	7,0	6,5	3,5	20,1	4,3	2.000
	4	CRP-M4/3*	4,0	7,8	7,1	3,9	21,1	4,3	2.000
	5	CRP-M5	4,0	7,8	7,1	3,9	21,1	5,3	2.000
	6	CRP-M6	4,0	9,4	8,1	4,7	22,9	6,4	2.000
	6	CRP-M6/1*	4,0	12,0	10,3	6,0	26,4	6,4	2.000
1,5÷2,5 (16÷14)	7	CRP-M7	4,0	9,4	8,1	4,7	22,9	7,2	2.000
	8	CRP-M8	4,0	12,0	10,3	6,0	26,4	8,4	2.000
	3	CBP-M3	4,9	5,6	5,0	2,8	17,9	3,2	1.750
	3,5	CBP-M3.5	4,9	5,6	5,0	2,8	17,9	3,7	1.750
	3,5	CBP-M3.5/1*	4,9	6,2	6,5	3,1	19,6	3,7	1.750
	4	CBP-M4	4,9	8,0	6,5	4,0	20,6	4,3	1.750
	5	CBP-M5	4,9	8,0	7,5	4,0	21,6	5,3	1.750
	6	CBP-M6	4,9	9,4	8,6	4,7	23,4	6,4	1.750
4÷6 (12÷10)	6	CBP-M6/1*	4,9	12,0	10,3	6,0	26,4	6,4	1.750
	7	CBP-M7	4,9	10,0	7,8	5,0	22,9	7,2	1.750
	8	CBP-M8	4,9	12,0	10,3	6,0	26,4	8,4	1.750
	3	CGP-M3	6,6	8,0	8,1	4,0	26,2	3,2	1.250
	3,5	CGP-M3.5	6,6	8,0	8,1	4,0	26,2	3,7	1.250
	4	CGP-M4	6,6	9,0	8,1	4,5	26,7	4,3	1.250
	5	CGP-M5	6,6	9,0	8,1	4,5	26,7	5,3	1.250
	6	CGP-M6	6,6	11,0	11,1	5,5	30,7	6,4	1.250
	6	CGP-M6/1*	6,6	11,0	8,1	5,5	27,7	6,4	1.250
	7	CGP-M7	6,6	11,0	11,1	5,5	30,7	7,2	1.000
8	CGP-M8	6,6	13,6	12,1	6,8	33,0	8,4	1.250	
8	CGP-M8/1*	6,6	11,0	8,1	5,5	27,7	8,4	1.250	
10	CGP-M10	6,6	13,6	12,1	6,8	33,0	10,5	1.250	



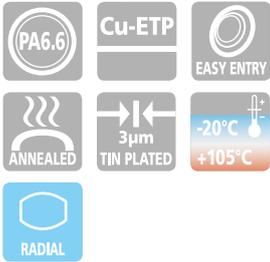
Interchangeable application heads are available for crimping these terminals with the bench press ELB-3 (see page 176).

\*Not UL approved \*Made to order

# RKY BKY GKY

## REINFORCED PA 6.6 INSULATED TERMINALS

KY range - for Copper conductors



'KY' type terminals are designed to offer improved mechanical and electrical integrity under heavy-duty application.

This is achieved via a Copper sleeve located between the Copper barrel and Polyamide insulation of the terminal. Then, during crimping, the insulation of the conductor is integrated into the crimp due to the Copper sleeve being deformed around it to maintain the level of 'grip' required in applications subject to continuous mechanical vibrations (e.g: mobile plant, vehicles, moving components).

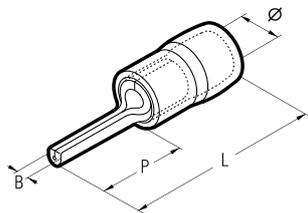
The operating temperature range

is -20 to +105°C (Surge +110°C). Recommended crimping tools are shown on pages 144 to 173, 260.



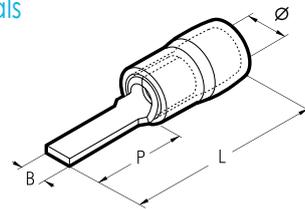
**HF**  
HALOGEN  
FREE

### pin terminals



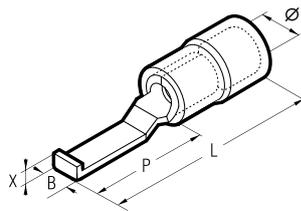
Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity Box/Bag
		Ø	B	P	L	
0,25÷1,5 (22÷16)	RKY-P8	4,5	1,9	9,0	19,8	3.000/100
	RKY-P10	4,5	1,9	10,0	20,8	3.500/100
	RKY-P12	4,5	1,9	12,0	22,8	3.000/100
1,5÷2,5 (16÷14)	BKY-P8	5,2	1,9	9,0	19,8	3.000/100
	BKY-P10	5,2	1,9	10,0	20,8	3.000/100
	BKY-P12	5,2	1,9	12,0	22,8	3.000/100
4÷6 (12÷10)	GKY-P14	7,0	2,8	14,0	27,0	1.000/100

### blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity Box/Bag
		Ø	B	P	L	
0,25÷1,5 (22÷16)	RKY-PP12	4,5	3,0	13,0	23,8	3.000/100
	RKY-PP12/19	4,5	2,0	18,0	28,8	3.000/100
	RKY-PP16/23	4,5	2,2	18,0	28,8	2.500/100
1,5÷2,5 (16÷14)	BKY-PP12	5,2	3,0	13,0	23,8	2.500/100
	BKY-PP12/25	5,2	2,4	13,0	23,8	2.000/100
	BKY-PP16/23	5,2	2,2	18,0	28,8	2.500/100
4÷6 (12÷10)	GKY-PP12	7,0	4,0	14,0	27,0	1.000/100
	GKY-PP17	7,0	2,0	18,0	31,0	1.000/100

### hooked blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm					Quantity Box/Bag
		Ø	B	P	L	X	
0,25÷1,5 (22÷16)	RKY-PPL30	4,5	3,0	16,8	28,2	2,1	3.000/100
	RKY-PPL46	4,5	4,6	16,8	28,2	2,1	3.000/100
1,5÷2,5 (16÷14)	BKY-PPL30	5,2	3,0	16,8	28,2	2,1	2.500/100
	BKY-PPL46	5,2	4,6	16,8	28,2	2,1	2.500/100
4÷6 (12÷10)	GKY-PPL46	7,0	4,6	17,2	30,2	2,4	1.000/100

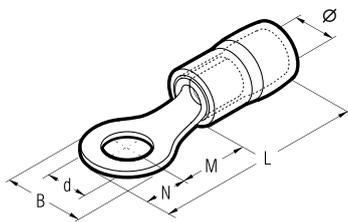
Consult CEMBRE for a wider range of pin and blade dimensions.

# REINFORCED PA 6.6 INSULATED TERMINALS

KY range - for Copper conductors

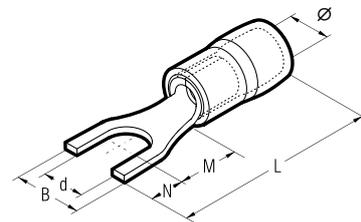
# RKY BKY GKY

## ring terminals



Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Ø	B	M	N	L	d	
0,25÷1,5 (22÷16)	3	RKY-M3	4,5	5,5	5,0	2,5	18,5	3,2	3.000/100
	3,5	RKY-M3.5	4,5	5,5	5,0	2,5	18,5	3,7	3.000/100
	3,5	RKY-M3.5/1	4,5	6,6	6,3	3,1	20,4	3,7	3.000/100
	4	RKY-M4	4,5	6,6	6,3	3,1	20,4	4,3	3.000/100
	5	RKY-M5	4,5	8,0	7,0	3,8	21,8	5,3	2.500/100
	6	RKY-M6/1	4,5	11,6	11,0	5,8	27,8	6,4	2.000/100
	8	RKY-M8	4,5	11,6	11,0	5,8	27,8	8,4	2.500/100
	10	RKY-M10	4,5	13,6	13,9	6,6	31,5	10,5	1.500/100
	12	RKY-M12	4,5	19,6	16,0	9,4	36,4	13,0	1.500/100
	3	BKY-M3	5,2	6,6	4,8	3,0	18,8	3,2	2.500/100
	3,5	BKY-M3.5	5,2	6,6	4,8	3,0	18,8	3,7	2.500/100
	1,5÷2,5 (16÷14)	3,5	BKY-M3.5/1	5,2	6,6	6,3	3,1	20,4	3,7
4		BKY-M4	5,2	8,5	7,8	4,0	22,8	4,3	2.500/100
5		BKY-M5	5,2	8,5	7,8	4,0	22,8	5,3	2.500/100
6		BKY-M6/1	5,2	12,0	11,0	5,8	27,8	6,4	2.000/100
8		BKY-M8	5,2	12,0	11,0	5,8	27,8	8,4	1.500/100
10		BKY-M10	5,2	13,6	13,9	6,6	31,5	10,5	1.500/100
4÷6 (12÷10)	12	BKY-M12	5,2	19,2	16,0	9,4	36,4	13,0	1.000/100
	3,5	GKY-M3.5	7,0	7,2	6,1	3,6	22,7	3,7	1.000/100
	4	GKY-M4	7,0	9,5	9,1	4,5	26,6	4,3	1.000/100
	5	GKY-M5	7,0	9,5	9,1	4,5	26,6	5,3	1.000/100
	6	GKY-M6	7,0	12,0	10,5	6,0	29,5	6,4	1.000/100
	8	GKY-M8	7,0	15,0	13,5	7,5	34,0	8,4	1.000/100
	10	GKY-M10	7,0	15,0	13,5	7,5	34,0	10,5	1.000/100
	12	GKY-M12	7,0	19,2	16,0	9,6	38,6	13,0	1.000/100
14	GKY-M14	7,0	32,0	25,2	16,0	54,2	15,0	500/100	
16	GKY-M16	7,0	32,0	25,2	16,0	54,2	17,0	500/100	

## fork/spade terminals



Cond. Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Ø	B	M	N	L	d	
0,25÷1,5 (22÷16)	3	RKY-U3	4,5	5,7	6,5	4,5	22,0	3,2	2.500/100
	3,5	RKY-U3.5	4,5	5,7	6,5	4,5	22,0	3,7	2.500/100
	4	RKY-U4	4,5	6,4	6,5	4,5	22,0	4,3	3.000/100
	5	RKY-U5	4,5	8,1	6,5	4,5	22,0	5,3	3.000/100
	6	RKY-U6	4,5	9,5	6,5	4,5	22,0	6,4	2.000/100
	6	RKY-U6/1	4,5	12,0	11,0	6,0	28,0	6,4	2.000/100
1,5÷2,5 (16÷14)	3	BKY-U3	5,2	5,7	6,5	4,5	22,0	3,2	2.500/100
	3,5	BKY-U3.5	5,2	6,0	6,5	4,5	22,0	3,7	2.500/100
	4	BKY-U4	5,2	6,4	6,5	4,5	22,0	4,3	2.500/100
	5	BKY-U5	5,2	7,9	6,5	4,5	22,0	5,3	2.000/100
	6	BKY-U6	5,2	9,3	6,5	4,5	22,0	6,4	2.000/100
	6	BKY-U6/1	5,2	12,0	11,0	6,0	28,0	6,4	2.000/100
4÷6 (12÷10)	3,5	GKY-U3.5	7,0	7,2	7,5	3,9	24,4	3,7	1.000/100
	4	GKY-U4	7,0	7,2	7,5	3,9	24,4	4,3	1.000/100
	5	GKY-U5	7,0	9,0	7,0	5,5	25,5	5,3	1.000/100
	6	GKY-U6	7,0	12,0	12,0	6,5	31,5	6,4	1.000/100
8	GKY-U8	7,0	14,0	10,5	7,0	30,5	8,4	1.000/100	

Consult CEMBRE for a wider range of pin and blade dimensions.

# RKF-F BKF-F GK-F



Recommended crimping tools are shown on pages 144 to 173, 260.

female connectors, fully reinforced with Copper sleeve

PA6.6 insulated terminals

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RKF-F305	2,8 x 0,5	3.000/100
	RKF-F308	2,8 x 0,8	3.000/100
	RKF-F405	4,8 x 0,5	2.500/100
	RKF-F408	4,8 x 0,8	2.500/100
1,5÷2,5 (16÷14)	RKF-F608	6,35 x 0,8	2.500/100
	BKF-F405	4,8 x 0,5	2.500/100
	BKF-F408	4,8 x 0,8	2.500/100
4÷6 (12÷10)	BKF-F608	6,35 x 0,8	2.000/100
	GK-F608	6,35 x 0,8	1.500/100

PA6.6 fully insulated terminals

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RKF-F405P	4,8 x 0,5	1.500/100
	RKF-F408P	4,8 x 0,8	2.000/100
1,5÷2,5 (16÷14)	RKF-F608P	6,35 x 0,8	1.000/100
	BKF-F405P	4,8 x 0,5	1.500/100
4÷6 (12÷10)	BKF-F408P	4,8 x 0,8	2.000/100
	BKF-F608P	6,35 x 0,8	1.000/100
4÷6 (12÷10)	GK-F608P	6,35 x 0,8	1.000/100

HF  
HALOGEN  
FREE

# RKF BKF GKF



male connectors, fully reinforced with Copper sleeve - PA6.6 insulated terminals

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RKF-M608	6,35 x 0,8	3.000/100
1,5÷2,5 (16÷14)	BKF-M608	6,35 x 0,8	2.500/100
4÷6 (12÷10)	GKF-M608	6,35 x 0,8	1.000/100

male/female connectors, fully reinforced with Copper sleeve PA6.6 insulated terminals

Conductor Size sqmm (AWG)	Type	Tab Size mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RKF-FM608	6,35 x 0,8	1.500/100
1,5÷2,5 (16÷14)	BKF-FM608	6,35 x 0,8	1.500/100

Recommended crimping tools are shown on pages 144 to 173, 260.

HF  
HALOGEN  
FREE

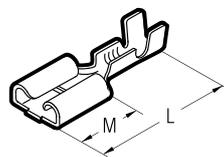
bullet and socket connectors fully reinforced with Copper sleeve PA6.6 insulated terminals

Conductor Size sqmm (AWG)	Type	Ø mm	Quantity Box/Bag
0,25÷1,5 (22÷16)	RKF-BM4	4,0	2.500/100
	RKF-BF4	3,95	1.000/100
1,5÷2,5 (16÷14)	BKF-BM4	4,0	2.000/100
	BKF-BF4	3,95	800/100

# RN-FA BN-FA



Recommended crimping tools are shown on pages 144 to 173, 260.



# FEMALE CONNECTORS

for Copper conductors

Conductor Size sqmm (AWG)	Type	Tab Size mm	M mm	L mm	Quantity Box/Bag
0,5÷1 (20÷17)	RN-FA305	2,8 x 0,5	6,3	15,0	6.000/100
	RN-FA405	4,8 x 0,5	6,3	15,0	5.000/100
	RN-FA608	6,3 x 0,8	7,7	19,0	3.000/100
1÷2,5 (17÷14)	BN-FA608	6,3 x 0,8	7,7	19,0	2.000/100
	BN-FAB608*	6,3 x 0,8	7,7	15,5	2.000/100
	BN-FAR608**	6,3 x 0,8	7,7	19,0	3.000/100

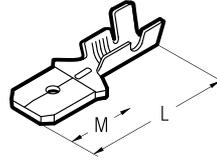
\*flag type \*\*with retainer

## MALE CONNECTORS

open barrel - for Copper conductors

Conductor Size sqmm (AWG)	Type	Tab Size mm	M mm	L mm	Quantity Box/Bag
0,5÷1 (20÷17)	RN-MA305	2,8 x 0,5	5,8	13,0	6.000/100
	RN-MA405	4,8 x 0,5	6,3	17,3	5.000/100
	RN-MA608	6,3 x 0,8	7,9	19,7	4.000/100
1÷2,5 (17÷14)	BN-MA608	6,3 x 0,8	7,9	20,0	4.000/100

Recommended crimping tools are shown on pages 144 to 173, 260.



## RN-MA BN-MA

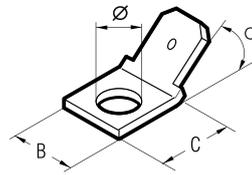


## MALE TABS

for board mounting - for Copper conductors

Type	Tab Size mm	Ø Stud mm	B mm	C mm	α	Quantity Box/Bag
MP608	6,3 x 0,8	4,0	8,0	11,0	0°	5.000/100
MP608/45	6,3 x 0,8	4,0	8,0	8,5	45°	6.000/100
MP608/90	6,3 x 0,8	4,0	8,0	8,5	90°	5.000/100
MP608D*	6,3 x 0,8	5,0	8,0	14,0	0°	5.000/100

\*double tab



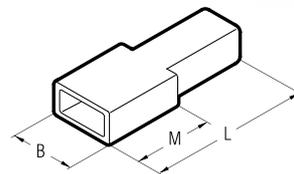
## MP MPD



## CONNECTOR SLEEVES

Type	Connector	B mm	M mm	L mm	Material	Quantity Box/Bag
CFA300	Female 2,8	5,5	7	18	Polyethylene	3.000/100
CFA400*	Female 4,8	7,5	9	20	Polyethylene	2.000/100
CFA600*	Female 6,3	9,0	11	24	Polyethylene	1.000/100
CFA2-600**	Female 6,3	9,0	9	22	Polyethylene	1.000/100
CFAR600	Female 6,3 with retainer	9,0	12	25	Polyamide 6.6	500/100
CFAB600	Female 6,3 flag	10,0	-	18	Polyamide 6.6	500/50
CMA600*	Male 6,3	12,0	11	22	Polyethylene	500/100

## CFA CMA



\*For a single cable.  
Colours available:  
Transparent: no suffix  
Red: add suffix R  
Black: add suffix N

\*\*For twin cables.  
Colours available:  
Transparent: no suffix  
Red: add suffix R  
Black: add suffix N  
Green: add suffix V  
Blue: add suffix B  
Yellow: add suffix G

Max operating temperature:

- CFA300; CFA400; CFA600;  
CFA2-600; CMA600 (PE) 65°C
- CFAR600; CFAB600 (PA.6.6) 105°C

# PKD



## VALSTAR-N3 NEW

Comprising:

- a selection of end sleeves PKD conductor size 1÷6 sqmm
- Cable ties type G100X2
- tool ZKE610N.

## VALSTAR-N2 NEW

Comprising:

- a selection of end sleeves PKC conductor size 1÷6 sqmm
- Cable ties type G100X2
- tool ZKE610N

## VALSTAR-N1 NEW

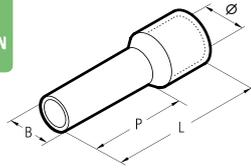
Comprising:

- a selection of end sleeves PKC conductor size 1÷6 sqmm
- Cable ties type G100X2
- tool ZKE610N

The PK.. range of end sleeves is manufactured from Tin plated electrolytic Copper with a purity greater than 99.9%.

Designed and developed to reinforce fine wire strands when terminating a cable into a connector block. The PKD series of insulated end sleeves comply with specification DIN 46228/4.

The operating temperature range is - 20 to + 115°C (Surge + 130°C). Recommended crimping tools are shown on pages 144 to 175, 227-229, 260, 262, 264-267.

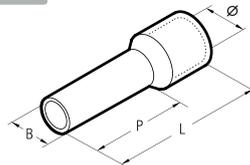


# PA6 INSULATED END SLEEVES

for flexible Copper conductors

Conductor Size sqmm	Type	Dimensions mm				Insulation Colour	Quantity Box/Bag
		Ø	B	P	L		
0,3÷0,5	PKD506	2,6	1,4	6,0	12,0	○ white	10.000/500
	PKD508	2,6	1,4	8,0	14,0		10.000/500
	PKD510	2,6	1,4	10,0	16,0		10.000/500
0,75	PKD7506	2,8	1,6	6,0	12,0	● grey	10.000/500
	PKD7508	2,8	1,6	8,0	14,0		10.000/500
	PKD7510	2,8	1,6	10,0	16,0		10.000/500
	PKD7512	2,8	1,6	12,0	18,0		10.000/500
1	PKD106	3,0	1,8	6,0	12,0	● red	10.000/500
	PKD108	3,0	1,8	8,0	14,0		10.000/500
	PKD110	3,0	1,8	10,0	16,0		10.000/500
	PKD112	3,0	1,8	12,0	18,0		8.000/500
	PKD1508	3,5	2,1	8,0	14,0		5.000/500
1,5	PKD1510	3,5	2,1	10,0	16,0	● black	5.000/500
	PKD1512	3,5	2,1	12,0	18,0		5.000/500
	PKD1518	3,5	2,1	18,0	24,0		5.000/500
2,5	PKD2508	4,2	2,6	8,0	14,0	● blue	5.000/500
	PKD2512	4,2	2,6	12,0	18,0		4.000/500
	PKD2518	4,2	2,6	18,0	24,0		5.000/500
4	PKD410	4,8	3,3	10,0	18,0	● grey	3.000/200
	PKD412	4,8	3,3	12,0	20,0		3.000/200
	PKD418	4,8	3,3	18,0	26,0		3.000/200
6	PKD612	6,3	4,0	12,0	20,0	● yellow	1.500/100
	PKD618	6,3	4,0	18,0	26,0		1.500/100
10	PKD1012	7,6	5,0	12,0	22,0	● red	1.000/100
	PKD1018	7,6	5,0	18,0	28,0		1.000/100
16	PKD1612	8,8	6,4	12,0	24,0	● blue	800/100
	PKD1618	8,8	6,4	18,0	28,0		1.000/100
25	PKD25016	11,2	7,9	16,0	30,0	● yellow	400/50
	PKD25022	11,2	7,9	22,0	36,0		400/50
35	PKD35016	12,7	8,9	16,0	30,0	● red	300/50
	PKD35025	12,7	8,9	25,0	39,0		200/50
50	PKD50020	15,0	11,0	20,0	36,0	● blue	200/50
	PKD50025	15,0	11,0	25,0	41,0		200/50

# PKE



# PA6 INSULATED END SLEEVES

for flexible Copper conductors

Conductor Size sqmm	Type	Dimensions mm				Insulation Colour	Quantity Box/Bag
		Ø	B	P	L		
0,1÷0,3	PKE308*	1,9	1,1	8,0	12,0	● yellow	20.000/500
0,3÷0,5	PKE508*	2,6	1,4	8,0	14,0	○ white	10.000/500
0,75	PKE7508	2,8	1,6	8,0	14,0	● blue	10.000/500
1	PKE108*	3,0	1,8	8,0	14,0	● red	10.000/500
	PKE1508*	3,5	2,1	8,0	14,0		5.000/500
1,5	PKE1510*	3,5	2,1	10,0	16,0	● black	5.000/500
	PKE1518*	3,5	2,1	18,0	24,0		5.000/500
2,5	PKE2508	4,2	2,6	8,0	14,0	● grey	5.000/500
	PKE2512	4,2	2,6	12,0	18,0		4.000/500
	PKE2518	4,2	2,6	18,0	24,0		3.000/500
4	PKE410	4,8	3,3	10,0	18,0	● orange	3.000/200
	PKE412	4,8	3,3	12,0	20,0		3.000/200
	PKE418	4,8	3,3	18,0	26,0		3.000/200
6	PKE612	6,3	4,0	12,0	20,0	● green	1.500/100
	PKE618	6,3	4,0	18,0	26,0		1.500/100
10	PKE1012	7,6	5,0	12,0	22,0	● brown	1.000/100
	PKE1018	7,6	5,0	18,0	28,0		1.000/100
16	PKE1612	8,8	6,2	12,0	23,0	○ ivory	800/100
	PKE1618	8,8	6,2	18,0	29,0		1.000/100
25	PKE25016	11,2	7,9	16,0	30,0	● black	400/50
	PKE25022	11,2	7,9	22,0	36,0		400/50

\*to DIN standard 46 228/4 \*Not UL approved

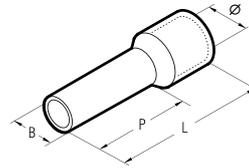
# PA6 INSULATED END SLEEVES

for flexible Copper conductors

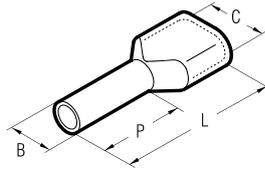
# PKC

Conductor Size sqmm	Type	Dimensions mm				Insulation Colour	Quantity Box/Bag
		Ø	B	P	L		
0,1÷0,3	PKC306*	1,9	1,1	6,0	10,0	● turquoise	20.000/500
	PKC308*	1,9	1,1	8,0	12,0		20.000/500
0,3÷0,5	PKC508	2,6	1,4	8,0	14,0	● orange	10.000/500
	PKC510	2,6	1,4	10,0	16,0		10.000/500
0,75	PKC7508	2,8	1,6	8,0	14,0	○ white	10.000/500
	PKC7512	2,8	1,6	12,0	18,0		10.000/500
1	PKC108	3,0	1,8	8,0	14,0	● yellow	10.000/500
	PKC112	3,0	1,8	12,0	18,0		7.500/500
1,5	PKC1508	3,5	2,1	8,0	14,0	● red	5.000/500
	PKC1510	3,5	2,1	10,0	16,0		5.000/500
	PKC1518	3,5	2,1	18,0	24,0		5.000/500
2,5	PKC2508*	4,2	2,6	8,0	14,0	● blue	5.000/500
	PKC2512*	4,2	2,6	12,0	18,0		5.000/500
	PKC2518*	4,2	2,6	18,0	24,0		5.000/500
4	PKC410*	4,8	3,3	10,0	18,0	● grey	3.000/200
	PKC412*	4,8	3,3	12,0	20,0		3.000/200
	PKC418*	4,8	3,3	18,0	26,0		3.000/200
6	PKC612	6,3	4,0	12,0	20,0	● black	1.500/100
	PKC618	6,3	4,0	18,0	26,0		1.500/100
10	PKC1012	7,6	5,0	12,0	22,0	○ ivory	1.000/100
	PKC1018	7,6	5,0	18,0	28,0		1.000/100
16	PKC1612	8,8	6,2	12,0	23,0	● green	800/100
	PKC1618	8,8	6,2	18,0	29,0		1.000/100
25	PKC25016	11,2	7,9	16,0	30,0	● brown	400/50
	PKC25022	11,2	7,9	22,0	36,0		500/50
35	PKC35016	12,7	8,9	16,0	30,0	● beige	300/50
	PKC35025	12,7	8,9	25,0	39,0		300/50
50	PKC50020	15,0	11,0	20,0	36,0	● olive	200/50
	PKC50025	15,0	11,0	25,0	41,0		200/50
70	PKC70022*	16,0	14,3	22,0	38,0	● yellow	100/25
95	PKC95025*	18,0	15,7	25,0	44,0	● red	100/25
120	PKC120027*	21,0	17,5	27,0	48,0	● blue	100/25

\*to DIN standard 46 228/4 \*Not UL approved



for fine stranded conductors



for International Market (excluding UK)



Type PKT range of end sleeves is manufactured from Tin plated electrolytic Copper.

Designed to accommodate two cables terminating in the same sleeve.

The operating temperature range is -20 to +115°C (Surge +130°C).

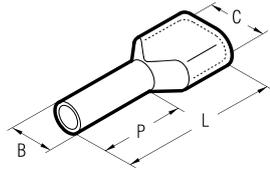
Recommended crimping tools are shown on pages 144 to 175, 227-229, 260, 262, 264-267.

Conductor Size sqmm	Type	Dimensions mm				Insulation Colour	ND1,ND2,ND3, ND4 and HNKE 50 Compression Aperture	Quantity Box/Bag
		C	B	P	L			
2 x 0,5	PKT508	4,7x2,6	1,8	8,0	14,0	○ white	1	5.000/500
	PKT510*	4,7x2,6	1,8	10,0	18,0			5.000/500
2 x 0,75	PKT7508	5,0x2,8	2,1	8,0	15,0	● grey	1,5	2.500/100
	PKT7510	5,0x2,8	2,1	10,0	17,0			2.500/100
2 x 1	PKT108	5,4x3,4	2,4	8,0	16,0	● red	2,5	2.500/100
	PKT110	5,4x3,4	2,4	10,0	18,0			2.500/100
2 x 1,5	PKT1508	6,6x3,6	2,6	8,0	16,0	● black	2,5	2.500/100
	PKT1512	6,6x3,6	2,6	12,0	20,0			2.500/100
2 x 2,5	PKT2510	7,8x4,2	3,2	10,0	20,0	● blue	4	2.000/100
	PKT2512	7,8x4,2	3,2	12,0	22,0			1.500/100
2 x 4	PKT412	8,8x4,9	4,2	12,0	23,0	● grey	6	1.000/100
2 x 6	PKT614	10,0x6,9	5,3	14,0	26,0	● yellow	10	800/100
2 x 10	PKT1014*	13,3x7,5	6,2	12,0	24,0	● red	16	500/50
2 x 16	PKT1614	18,6x9,6	8,9	14,0	30,0	● blue	35	300/50

\*Not UL approved

# "TWIN" POLYPROPYLENE INSULATED END SLEEVES

for fine stranded conductors - for UK Market



## PKET PKCT



for UK Market 

Conductor Size sqmm	Type	Dimensions mm				Insulation Colour	ND1,ND2,ND3, ND4 and HNKE 50 Compression Aperture	Quantity Box/Bag
		C	B	P	L			
2 x 0,5	PKET508	4,6x2,4	1,8	8,0	15,0	○ white	1	500
2 x 0,75	PKET7508	5,4x2,7	2,1	8,0	15,0	● blue	1,5	500
	PKET7512	5,4x2,7	2,1	12,0	19,0			500
2 x 1	PKET108	5,3x2,3	2,35	8,0	15,0	● red	2,5	500
	PKET112	5,3x3,3	2,35	12,0	19,0			500
2 x 1,5	PKET1508	6,5x3,5	2,6	8,0	16,0	● black	2,5	500
	PKET1512	6,5x3,5	2,6	12,0	20,0		2,4	500
2 x 2,5	PKET2510	7,7x4,1	3,3	10,0	19,0	● grey	4	250
	PKET2512	7,7x4,1	3,3	12,0	22,0			250
2 x 4	PKET412	8,7x4,9	4,2	12,0	23,0	● orange	6	100
2 x 6	PKET614	9,9x6,1	5,3	14,0	25,0	● green	10	100
2 x 10	PKET1014	12,9x7,1	6,9	14,0	26,0	● brown	16	100
2 x 16	PKET1616	16,8x9,8	8,9	16,0	31,0	○ white	35	100

Conductor Size sqmm	Type	Dimensions mm				Insulation Colour	ND1,ND2,ND3, ND4 and HNKE 50 Compression Aperture	Quantity Box/Bag
		C	B	P	L			
2 x 0,5	PKCT508	4,6x2,4	1,8	8,0	15,0	● orange	1	500
2 x 0,75	PKCT7508	5,4x2,7	2,1	8,0	15,0	○ white	1,5	500
	PKCT7512	5,4x2,7	2,1	12,0	19,0			500
2 x 1	PKCT108	5,3x2,3	2,35	8,0	15,0	● yellow	2,5	500
	PKCT112	5,3x3,3	2,35	12,0	19,0			500
2 x 1,5	PKCT1508	6,5x3,5	2,6	8,0	16,0	● red	2,5	500
	PKCT1512	6,5x3,5	2,6	12,0	20,0		2,4	500
2 x 2,5	PKCT2510	7,7x4,1	3,3	10,0	19,0	● blue	4	250
	PKCT2512	7,7x4,1	3,3	12,0	22,0			250
2 x 4	PKCT412	8,7x4,9	4,2	12,0	23,0	● grey	6	100
2 x 6	PKCT614	9,9x6,1	5,3	14,0	25,0	● black	10	100
2 x 10	PKCT1014	12,9x7,1	6,9	14,0	26,0	○ ivory	16	100
2 x 16	PKCT1616	16,8x9,8	8,9	16,0	31,0	● green	35	100



Type PKET, PKCT ranges of twin end sleeves are manufactured from Tin plated electrolytic Copper with a purity greater than 99.9%. Designed to accommodate two cables terminating in the same sleeve they are ideal for looping conductors. The operating temperature range is -20 to +105°C (Surge +110°C).

Recommended crimping tools are shown on pages 144 to 175, 227-229, 260, 262, 264-267.

# CPKD CPKC

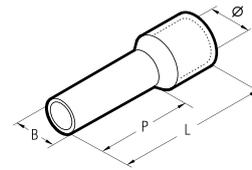
## POLYPROPYLENE INSULATED CHAIN END SLEEVES

for flexible Copper conductors



Conforms to DIN standard 46228/4.

Interchangeable application heads are available for crimping these terminals with the bench press ELB-3 (see page 176).



**HF**  
HALOGEN  
FREE

Conductor Size sqmm	Type	Dimensions mm				Insulation Colour	Quantity Box/Bag
		Ø	B	P	L		
0,3±0,5	CPKD508	2,6	1,3	8,0	14,0	○ white	5.000
0,75	CPKD7508	2,8	1,5	8,0	14,0	● grey	5.000
0,75	CPKC7508	2,8	1,5	8,0	14,0	○ white	5.000
1	CPKD108	3,0	1,7	8,0	14,0	● red	5.000
1,5	CPKD1508	3,5	2,0	8,0	14,0	● black	5.000
2,5	CPKD2508	4,2	2,5	8,0	14,0	● blue	3.000



# KE

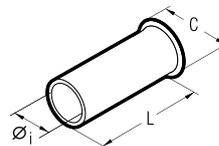
## UNINSULATED END SLEEVES

for flexible Copper conductors



KE series end sleeves are manufactured from Tin plated electrolytic Copper of grade CW024A according to EN 12449, with purity greater than 99%. The compact geometry of the range allows for the termination of flexible conductors in confined spaces.

Recommended crimping tools are shown on pages 144 to 175, 227-229, 260, 262, 264-267.



Conductor Size sqmm	Type	Dimensions mm			Quantity Box/Bag
		Ø	L	C	
0,5	KE506ST*	1,0	6,0	1,9	50.000/500
	KE508ST	1,0	8,0	1,9	50.000/500
0,75	KE7506ST*	1,2	6,0	2,2	40.000/500
	KE7508ST	1,2	8,0	2,2	40.000/500
1	KE106ST*	1,4	6,0	2,4	25.000/500
	KE110ST*	1,4	10,0	2,4	25.000/500
1,5	KE1508ST	1,7	8,0	2,8	25.000/500
	KE1510ST*	1,7	10,0	2,8	25.000/500
2,5	KE2508ST	2,2	8,0	3,4	20.000/500
	KE2510ST*	2,2	10,0	3,4	15.000/500
4	KE410ST	2,8	10,0	4,0	12.500/500
	KE412ST*	2,8	12,0	4,0	10.000/500
6	KE610ST*	3,5	10,0	4,7	10.000/500
	KE612ST*	3,5	12,0	4,7	7.500/500
	KE616ST*	3,5	15,0	4,7	5.000/500
10	KE1016ST*	4,5	15,0	5,8	4.000/250
16	KE1616ST*	5,8	15,0	7,5	3.000/250
25	KE25015ST	7,3	15,0	9,5	1.500/100
	KE25018ST*	7,3	18,0	9,5	1.500/100
35	KE35012ST	8,3	12,0	10,5	1.500/100
	KE35015ST	8,3	16,0	10,5	1.500/100
	KE35018ST*	8,3	18,0	10,5	1.000/100

\*to DIN standard 46 228/1

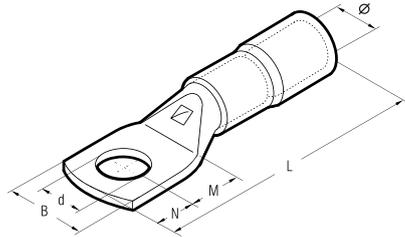
# COPPER TUBE CRIMPING LUGS PC INSULATED

P-M

for flexible Copper conductors - tested according to EN 45545-2:2013

HF  
HALOGEN  
FREE

EN  
45545



Conductor Size Flexible sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Insulation Colour	Quantity Box/Bag
			Ø	B	M	N	L	d		
0,25÷1,5 (22÷16)	3	P03-M3	4,0	6,0	4,5	3,5	22,0	3,2	Red	100
	3,5	P03-M3,5	4,0	6,5	4,5	3,5	22,0	3,7		100
	4	P03-M4	4,0	6,5	5,0	4,0	23,0	4,3		100
	5	P03-M5	4,0	7,5	5,5	4,5	24,0	5,3		100
1,5÷2,5 (16÷14)	6	P03-M6	4,0	9,0	6,0	5,0	25,0	6,4	Blue	100
	3	P06-M3	4,9	6,0	4,5	3,5	22,6	3,2		100
	3,5	P06-M3,5	4,9	6,5	4,5	3,5	22,6	3,7		100
	4	P06-M4	4,9	7,5	5,0	4,0	23,6	4,3		100
	5	P06-M5	4,9	8,5	5,5	4,5	24,6	5,3		100
	6	P06-M6	4,9	9,0	6,0	5,0	25,6	6,4		100
4÷6 (12÷10)	8	P06-M8	4,9	12,0	9,0	8,0	31,3	8,4	yellow	100
	3	P1-M3	6,7	7,5	4,5	3,5	28,0	3,2		100
	3,5	P1-M3,5	6,7	7,5	4,5	3,5	28,0	3,7		100
	4	P1-M4	6,7	8,0	5,0	4,0	30,0	4,3		100
	5	P1-M5	6,7	9,0	6,5	6,0	32,3	5,3		100
	6	P1-M6	6,7	11,0	7,0	6,0	32,8	6,4		100
	8	P1-M8	6,7	14,0	9,0	8,0	36,8	8,4		100
	10	P1-M10	6,7	16,5	11,0	10,0	41,4	10,5		100
12	P1-M12	6,7	20,0	16,0	12,0	53,5	13,2	100		



P-M series lugs are manufactured from electrolytic Copper tube with a purity greater than 99.9%, annealed and Tin plated.

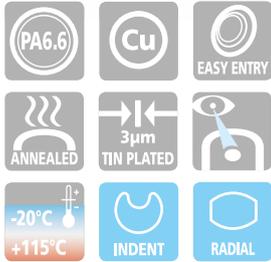
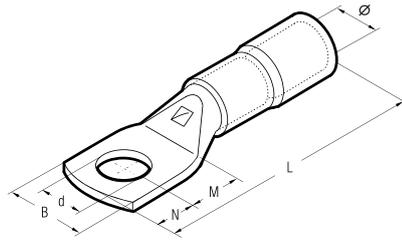
The interior of the PA6.6 insulated sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands. The P-M series lugs have the insulating sleeve in EN45545-2 certified PC10500AC type Polycarbonate, a halogen-free thermoplastic characterized, among other things, by a particular molecular structure which gives greater toughness compared to PVC and PA6.6.

- The operating temperature range is - 20 to + 115°C (Surge + 130°C).
- To install the P-M series lugs, use the HP3 or HP5 tools (see pages 144-145).

# ANE-M

## POLYAMIDE PA6.6 INSULATED COPPER TUBE LUGS

for Copper conductors



ANE-M series lugs are manufactured from electrolytic Copper tube with a purity greater than 99.9%, annealed and Tin plated. The interior of the PA6.6 insulated sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands. It also eliminates the need to insulate the terminal using either tape or heat shrinkable tubing. Furthermore the PA6.6 sleeve avoids the possibility of conductor breakage at the barrel entrance. The operating temperature range is -20 to +115°C (Surge +130°C). In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by CEMBRE.

Details of the appropriate crimping tools and dies are shown on pages 314 to 315.

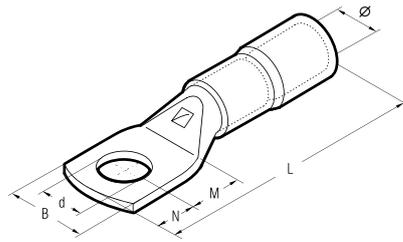
Cond. Size Flexible sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools		Hydraulic Tools	
			Ø	B	M	N	L	d					
10	4	ANE2-M4	8,0	10,0	5,0	4,0	34,1	4,3	500/100	HNN3	HNN4	B15MD	
	5	ANE2-M5	8,0	10,0	6,5	6,0	37,6	5,3	500/100				
	6	ANE2-M6	8,0	11,0	7,0	6,0	38,1	6,4	500/100				
	8	ANE2-M8	8,0	15,0	9,0	8,0	42,1	8,4	500/100				
	10	ANE2-M10	8,0	18,0	11,0	10,0	46,1	10,5	500/100				
16	4	ANE3-M4	9,2	11,5	5,0	4,0	38,6	4,3	400/100	HNN4	B15MD		
	5	ANE3-M5	9,2	11,5	6,5	6,0	42,1	5,3	400/100				
	6	ANE3-M6	9,2	11,5	7,0	6,0	42,6	6,4	400/100				
	8	ANE3-M8	9,2	15,0	9,0	8,0	46,6	8,4	400/100				
	10	ANE3-M10	9,2	18,0	11,0	10,0	50,6	10,5	300/100				
25	4	ANE5-M4	11,1	14,0	5,0	4,0	41,0	4,3	300/100	TNN70	B15MD		
	5	ANE5-M5	11,1	14,0	6,5	6,0	44,5	5,3	300/100				
	6	ANE5-M6	11,1	14,0	7,0	6,0	45,0	6,4	300/100				
	8	ANE5-M8	11,1	15,0	9,0	8,0	49,0	8,4	300/100				
	10	ANE5-M10	11,1	18,0	11,0	10,0	53,0	10,5	200/100				
35	6	ANE7-M6	13,6	17,0	7,0	6,0	50,0	6,4	100/50	TNN120	B15MD		
	8	ANE7-M8	13,6	17,0	9,0	8,0	54,0	8,4	100/50				
	10	ANE7-M10	13,6	19,0	11,0	10,0	58,0	10,5	100/50				
	12	ANE7-M12	13,6	21,0	14,0	12,0	63,0	13,2	100/50				
	50	6	ANE10-M6	13,8	19,0	8,0	7,0	53,0	6,4				150/50
8		ANE10-M8	13,8	19,0	9,0	8,0	55,0	8,4	150/50				
10		ANE10-M10	13,8	20,0	11,5	9,5	59,0	10,5	150/50				
12		ANE10-M12	13,8	21,0	12,0	12,0	62,0	13,2	150/50				
70		6	ANE14-M6	15,8	21,0	8,0	7,0	61,0	6,4	75/25	TNN120	B15MD	
	8	ANE14-M8	15,8	21,0	9,0	8,0	63,0	8,0	75/25				
	10	ANE14-M10	15,8	21,0	11,0	10,0	67,0	10,5	75/25				
	12	ANE14-M12	15,8	22,0	14,0	12,0	72,0	13,2	75/25				
	14	ANE14-M14	15,8	25,0	16,0	14,0	76,0	15,0	100/25				
95	8	ANE19-M8	18,0	25,0	9,0	8,0	73,0	8,4	50/25	TNN120	B15MD		
	10	ANE19-M10	18,0	25,0	11,0	10,0	77,0	10,5	50/25				
	12	ANE19-M12	18,0	25,0	14,0	12,0	82,0	13,2	50/25				
	14	ANE19-M14	18,0	25,0	16,0	14,0	86,0	15,0	50/25				
	16	ANE19-M16	18,0	27,0	18,0	16,0	80,0	17,0	50/25				
120	10	ANE24-M10	20,0	28,5	11,0	10,0	77,7	10,5	50/25	TNN120	B15MD		
	12	ANE24-M12	20,0	28,5	14,0	12,0	86,5	13,2	50/25				
	14	ANE24-M14	20,0	28,5	16,0	14,0	88,5	15,0	50/25				
	16	ANE24-M16	20,0	28,5	18,0	16,0	90,5	17,0	50/25				
150	12	ANE30-M12	23,0	31,5	16,0	14,0	101,0	13,2	20/10	TNN120	B15MD		
	14	ANE30-M14	23,0	31,5	18,0	16,0	105,0	15,0	30/15				
	16	ANE30-M16	23,0	31,5	19,0	17,0	107,0	17,0	30/15				
	20	ANE30-M20	23,0	31,5	22,0	20,0	113,0	21,0	30/15				

# POLYAMIDE PA6.6 INSULATED COPPER TUBE LUGS

# ANE-M

for extra flexible Copper conductors

• for fine stranded •  
**SPECIAL**  
flexible conductors



Conductor Size Extra Flexible sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools	Hydraulic Tools				
			Ø	B	M	N	L	d							
35	6	ANE9-M6/15*	13,6	15,0	8,0	7,0	54,0	6,4	150/50	TNN70	HT51 RH50 B500ND				
	8	ANE9-M8	13,6	17,0	9,0	8,0	56,0	8,4	150/50						
	10	ANE9-M10	13,6	18,5	11,0	10,0	60,0	10,5	150/50						
	12	ANE9-M12	13,6	21,0	14,0	12,0	65,0	13,2	150/50						
50	6	ANE12-M6/15*	15,7	15,0	8,0	7,0	59,5	6,4	50/25			TNN120	HT51 RH50 B500ND		
	8	ANE12-M8	15,7	19,8	9,0	8,0	61,5	8,4	50/25						
	10	ANE12-M10	15,7	19,8	11,0	10,0	65,5	10,5	50/25						
	10	ANE12-M10/19*	15,7	19,0	11,0	10,0	65,5	10,5	50/25						
70	12	ANE12-M12	15,7	22,0	14,0	12,0	70,5	13,2	50/25					ECW-H3D	HT120 and tools and heads with 130 kN crimping force
	6	ANE17-M6	17,9	23,0	8,0	7,0	63,8	6,4	100/25						
	8	ANE17-M8	17,9	23,0	9,0	8,0	65,8	8,4	50/25						
	10	ANE17-M10	17,9	23,0	11,0	10,0	69,8	10,5	50/25						
	10	ANE17-M10/19*	17,9	19,0	11,0	10,0	69,8	10,5	100/25						
	12	ANE17-M12	17,9	23,0	14,0	12,0	74,8	13,2	50/25						
95	14	ANE17-M14	17,9	25,0	15,5	12,0	76,3	15,0	50/25	ECW-H3D	HT120 and tools and heads with 130 kN crimping force				
	16	ANE17-M16	17,9	27,0	16,5	13,5	78,8	17,0	50/25						
	8	ANE20-M8	20,0	27,0	9,0	8,0	70,6	8,4	50/25						
	10	ANE20-M10	20,0	27,0	11,0	10,0	74,6	10,5	50/25						
	12	ANE20-M12	20,0	27,0	14,0	12,0	79,6	13,2	50/25						
120	14	ANE20-M14	20,0	27,0	15,5	12,0	81,1	15,0	50/25			ECW-H3D	HT120 and tools and heads with 130 kN crimping force		
	16	ANE20-M16	20,0	27,0	16,5	13,5	83,6	17,0	50/25						
	10	ANE29-M10	22,4	30,0	11,0	10,0	81,5	10,5	30/15						
	12	ANE29-M12	22,4	30,0	14,0	12,0	86,5	13,2	30/15						
150	14	ANE29-M14	22,4	30,0	15,5	12,0	88,5	15,0	50/25					ECW-H3D	HT120 and tools and heads with 130 kN crimping force
	16	ANE29-M16	22,4	30,0	16,5	13,5	90,5	17,0	50/25						
	20	ANE29-M20	22,4	30,0	22,0	20,0	102,5	21,0	40/20						
	12	ANE35-M12	25,0	34,2	16,0	14,0	95,0	13,2	30/15						
	14	ANE35-M14	25,0	34,2	18,0	16,0	99,0	15,0	30/15						
	16	ANE35-M16	25,0	34,2	19,0	17,0	101,0	17,0	30/15						
150	20	ANE35-M20	25,0	34,2	22,0	20,0	107,0	21,0	30/15	ECW-H3D	HT120 and tools and heads with 130 kN crimping force				



These lugs are particularly recommended for use with extra flexible conductors on for instance, welding machines.

ANE-M series lugs are manufactured from electrolytic Copper tube with a purity greater than 99.9%, annealed and Tin plated.

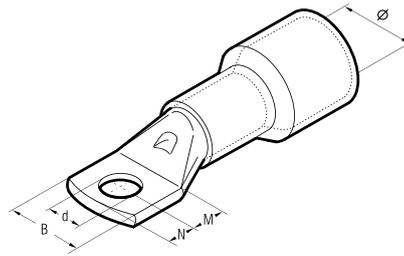
The interior of the PA6.6 insulated sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands. It also eliminates the need to insulate the terminal using either tape or heat shrinkable tubing.

Furthermore the PA6.6 sleeve avoids the possibility of conductor breakage at the barrel entrance.

The operating temperature range is -20 to +115°C (Surge +130°C). In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by CEMBRE.

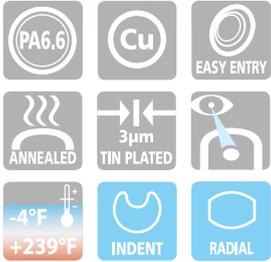
Details of the appropriate crimping tools and dies are shown on pages 314 to 315.

# AN-M IN-M EN-M



## POLYAMIDE PA6.6 INSULATED COPPER TUBE LUGS

for Copper conductors



These terminals are particularly recommended for use with flexible conductors.

They are manufactured from electrolytic copper tube with a purity greater than 99.9% and with dimension so as to ensure both a good electrical connection and an adequate resistance to vibrations and traction; they are annealed and tin plated.

For the same cable section are available different types of connectors with PA6.6 sleeve entry of different diameters so as to accept conductors with various insulation thickness.

The insulated sleeve additionally will accept the conductor so avoiding a sudden bending of the conductor itself at the connector entry, highly increasing its resistance to the mechanical solicitations that could break the conductor strands.

The operating temperature range is -20 to +115°C (Surge +130°C).

- To complete the type of connectors add the screw diameter expressed in mm to the M reference.
- The M, N, and B dimensions concerning the palm are the same as the A-M connector ones.

These connectors can be used also on low stranded conductors if crimped with radial containment dies of the MN..RF-C series.

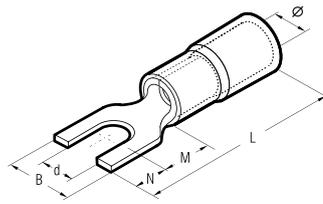
In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by CEMBRE (see page 314 to 315).

Conductor Size mm <sup>2</sup>	Type	Insulation		Mechanical Tools	Hydraulic Tools										
		Ø mm	colour												
1,5÷2,5 F	AN06-M.....	4,1	● blue	HNN3											
	IN06-M.....	5,3	● green												
	ENR06-M.....	6,0	● blue												
4÷6 F	AN06-M.....	6,9	● blue			HNN4	B15MD								
	AN1-M.....	5,3	● yellow												
	IN1-M.....	6,6	○ neutral												
	ON1-M.....	7,6	● blue												
	UN1-M.....	8,7	● blue												
	EN1-M.....	14,1	● red												
10 F	AN2-M.....	8,0	● red					TNN70 TNN71	HT51 RH50 B500ND						
	IN2-M.....	10,8	● blue												
10 R	ENR2-M.....	12,5	● blue							TNN120	HT120 and tools and heads with 130 kN crimping force				
	EN2-M.....	15,1	● red												
16 F	AN3-M.....	9,2	● blue	ECW-H3D											
	IN3-M.....	11,7	● blue												
16 R	EN3-M.....	16,9	● red												
	IN3-M.....	16,9	● red												
25 F 25 R	AN5-M.....	11,1	● yellow												
	AN7-M.....	11,9	● red												
25÷35 F	EN7-M.....	13,0	● blue												
	IN7-M.....	18,7	● red												
35 R	AN10-M.....	13,8	○ neutral												
	IN10-M.....	15,0	● blue												
35 F	ENR10-M.....	17,3	● blue												
	IN10-M.....	20,2	● red												
50 R	AN14-M.....	15,8	● blue												
	IN14-M.....	16,9	● blue												
50 F	EN14-M.....	21,9	● red												
	IN14-M.....	21,9	● red												
70 R	AN19-M.....	18,0	● blue												
	EN19-M.....	19,6	● blue												
70 F	IN19-M.....	24,3	● red												
	EN19-M.....	19,6	● blue												
95 R	AN24-M.....	20,0	● red												
	IN24-M.....	22,2	● blue												
95 F	EN24-M.....	27,1	● red												
	IN24-M.....	27,1	● red												
120 R	AN30-M.....	23,0	● red												
	EN30-M.....	24,5	● blue												
120 F	IN30-M.....	29,0	● red												
	EN30-M.....	24,5	● blue												
150 R	INR37-M.....	29,0	● blue												
	IN37-M.....	31,6	● red												
150 F	EN48-M.....	29,4	● red												
	IN48-M.....	34,5	● red												
185 R	EN60-M.....	33,5	● red												
	IN60-M.....	38,0	● red												
185 F	EN80-M.....	37,7	● blue												
	IN80-M.....	41,1	● red												
240 F	EN80-M.....	37,7	● blue												
	IN80-M.....	41,1	● red												
300 F	EN80-M.....	37,7	● blue												
	IN80-M.....	41,1	● red												

R = Rigid conductor F = Flexible conductor

## POLYAMIDE PA6.6 INSULATED FORK TERMINALS

for Copper conductors



Conductor Size Flexible sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools		Hydraulic Tools					
			Ø	B	M	N	L	d									
10	4	ANE2-U4	8,0	9,8	7,5	7,0	35,1	4,3	500/100	HNN3	HNN4	TNN70	TNN120	B15MD	HT51 RH50 B500 B500ND	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
	5	ANE2-U5	8,0	11,5	7,5	7,0	35,1	5,3	500/100								
16	4	ANE3-U4	9,2	10,0	10,0	8,0	41,1	4,3	400/100	HNN3	HNN4	TNN70	TNN120	B15MD	HT51 RH50 B500 B500ND	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
	5	ANE3-U5	9,2	11,5	10,0	8,0	41,1	5,3	400/100								

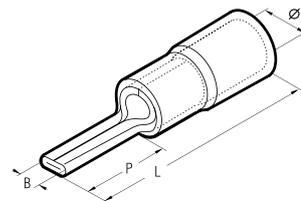


ANE-U series terminals are made from electrolytic Copper with a purity greater than 99.9%, rolled, Tin plated and brazed. The interior of the PA6.6 insulated sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands. The operating temperature range is -20 to +115°C (Surge +130°C).

In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by CEMBRE. Details of the appropriate crimping tools and dies are shown on pages 314 to 315.

## POLYAMIDE PA6.6 INSULATED PIN TERMINALS

for Copper conductors



Conductor Size Flexible sqmm	Type	Dimensions mm				Quantity Box/Bag	Mechanical Tools		Hydraulic Tools					
		Ø	B	P	L									
10	ANE2-P12	8,0	4,3	14,5	35,1	500/100	HNN3	HNN4	TNN70	TNN120	B15MD	HT51 RH50 B500 B500ND	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
16	ANE3-P14	9,2	5,5	18,0	41,1	400/100								
25	ANE5-P16	11,1	7,0	20,3	45,0	300/100	HNN3	HNN4	TNN70	TNN120	B15MD	HT51 RH50 B500 B500ND	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
35	ANE7-P20	13,6	8,0	24,5	55,0	150/50								



ANE-P series terminals are made from electrolytic Copper with a purity greater than 99.9%, rolled, Tin plated and brazed. The interior of the PA6.6 insulated sleeve is funnel shaped so as to ensure complete and easy introduction of the conductor strands. The operating temperature range is -20 to +115°C (Surge +130°C).

In order to achieve the best electrical and mechanical performance it is suggested that they are crimped using dies and tools specifically developed for this purpose by CEMBRE. Details of the appropriate crimping tools and dies are shown on pages 314 to 315.

# S

## UNINSULATED TERMINALS

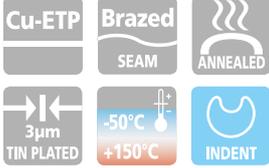
S range - brazed seam - for Copper conductors



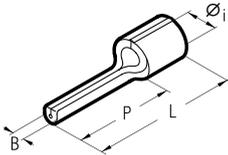
S range terminals are manufactured from electrolytic Copper strip with a purity greater than 99.9% and Tin plated.

The seam is brazed to provide uniform mechanical strength. The terminal barrel is rifled to enhance electrical contact and to improve mechanical strength.

Recommended crimping tools are shown on pages 144 to 173, 260.

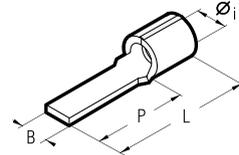


### pin terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity Box/Bag
		Øi	B	P	L	
0,25÷1,5 [22÷16]	S1.5-P8	1,8	1,6	8,0	12,0	8.000/100
	S1.5-P10	1,8	1,6	10,0	14,0	8.000/100
	S1.5-P12	1,8	1,6	12,0	16,2	8.000/100
1,5÷2,5 [16÷14]	S2.5-P8	2,4	1,6	8,0	12,0	7.000/100
	S2.5-P10	2,4	1,6	10,0	14,0	7.000/100
	S2.5-P12	2,4	1,6	12,0	16,0	7.000/100
4÷6 [12÷10]	S6-P10	3,6	2,2	10,0	16,8	4.000/100
	S6-P12	3,6	2,2	12,0	19,0	4.000/100
	S6-P14	3,6	2,2	14,0	21,0	3.500/100

### blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity Box/Bag
		Øi	B	P	L	
0,25÷1,5 [22÷16]	S1.5-PP12	1,8	3,0	12,8	17,0	8.000/100
	S1.5-PP12/1*	1,8	3,0	11,3	15,5	8.000/100
	S1.5-PP12/19	1,8	1,9	13,2	17,4	8.000/100
	S1.5-PP14	1,8	3,0	14,8	19,0	8.000/100
1,5÷2,5 [16÷14]	S2.5-PP12	2,4	3,5	12,8	17,0	7.000/100
	S2.5-PP12/25	2,4	2,5	13,3	17,5	7.000/100
	S2.5-PP16/25	2,4	2,5	17,2	21,4	7.000/100
4÷6 [12÷10]	S6-PP12	3,6	4,0	13,3	19,7	4.000/100
	S6-PP17	3,6	2,9	19,1	25,5	4.000/100

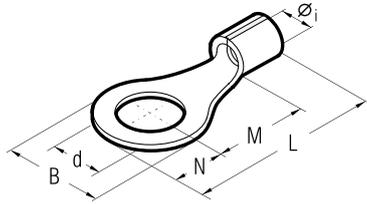
\*Made to order

# UNINSULATED TERMINALS

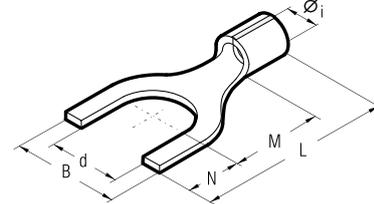
S

S range - brazed seam - for Copper conductors

## ring terminals



## fork/spade terminals



Conductor Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Øi	B	M	N	L	d	
0,25÷1,5 [22÷16]	2	S1.5-M2*	1,8	5,6	4,5	2,8	11,5	2,2	7.000/100
	3	S1.5-M3	1,8	5,6	4,5	2,8	11,5	3,2	7.000/100
	3,5	S1.5-M3.5	1,8	5,6	4,5	2,8	11,5	3,7	7.000/100
	3,5	S1.5-M3.5/1*	1,8	6,2	7,1	3,1	14,4	3,7	7.000/100
	4	S1.5-M4	1,8	7,0	6,5	3,5	14,2	4,3	7.000/100
	4	S1.5-M4/3*	1,8	7,8	7,1	3,9	15,2	4,3	7.000/100
	5	S1.5-M5	1,8	7,8	7,1	3,9	15,2	5,3	7.000/100
	6	S1.5-M6	1,8	9,4	8,1	4,7	17,0	6,4	6.000/100
	6	S1.5-M6/1	1,8	12,0	10,3	6,0	20,5	6,4	5.000/100
	7	S1.5-M7	1,8	9,4	8,1	4,7	17,0	7,2	6.000/100
	8	S1.5-M8	1,8	12,0	10,3	6,0	20,5	8,4	4.000/100
	10	S1.5-M10	1,8	15,5	13,0	7,7	25,0	10,5	3.000/100
12	S1.5-M12	1,8	18,0	15,5	9,0	28,7	13,0	2.000/100	
1,5÷2,5 [16÷14]	3	S2.5-M3	2,4	5,6	5,0	2,8	12,0	3,2	6.000/100
	3,5	S2.5-M3.5	2,4	5,6	5,0	2,8	12,0	3,7	6.000/100
	3,5	S2.5-M3.5/1*	2,4	6,2	6,5	3,1	13,8	3,7	5.000/100
	4	S2.5-M4	2,4	8,0	6,5	4,0	14,7	4,3	5.000/100
	5	S2.5-M5	2,4	8,0	7,5	4,0	15,7	5,3	5.000/100
	6	S2.5-M6	2,4	9,4	8,6	4,7	17,5	6,4	5.000/100
	6	S2.5-M6/1	2,4	12,0	10,3	6,0	20,5	6,4	5.000/100
	7	S2.5-M7	2,4	10,0	7,8	5,0	17,0	7,2	5.000/100
	8	S2.5-M8	2,4	12,0	10,3	6,0	20,5	8,4	4.000/100
	10	S2.5-M10	2,4	15,5	13,0	7,7	25,0	10,5	2.500/100
	12	S2.5-M12	2,4	18,0	15,5	9,0	28,7	13,0	2.000/100
	4÷6 [12÷10]	3	S6-M3	3,6	8,0	8,1	4,0	18,5	3,2
3,5		S6-M3.5	3,6	8,0	8,1	4,0	18,5	3,7	3.000/100
4		S6-M4	3,6	9,0	8,1	4,5	19,0	4,3	3.000/100
5		S6-M5	3,6	9,0	8,1	4,5	19,0	5,3	2.500/100
6		S6-M6	3,6	11,0	11,1	5,5	23,0	6,4	2.500/100
6		S6-M6/1*	3,6	11,0	8,1	5,5	20,0	6,4	2.500/100
7		S6-M7	3,6	11,0	11,1	5,5	23,0	7,2	2.500/100
8		S6-M8	3,6	13,6	12,1	6,8	25,3	8,4	2.000/100
8		S6-M8/1*	3,6	11,0	8,1	5,5	20,0	8,4	2.500/100
10		S6-M10	3,6	13,6	12,1	6,8	25,3	10,5	2.000/100
10		S6-M10/1	3,6	15,5	13,8	7,7	28,0	10,5	2.000/100
12		S6-M12	3,6	19,0	15,1	9,5	31,0	13,0	1.000/100
14	S6-M14	3,6	21,0	16,1	10,5	33,0	15,0	1.000/100	
16	S6-M16	3,6	24,0	17,1	12,0	35,5	17,0	1.000/100	
10 (8)	4	S10-M4	4,8	11,5	9,0	5,8	23,8	4,3	2.000/100
	5	S10-M5	4,8	11,5	9,0	5,8	23,8	5,3	2.000/100
	6	S10-M6	4,8	11,5	9,0	5,8	23,8	6,4	2.000/100
	7	S10-M7	4,8	11,5	9,0	5,8	23,8	7,2	1.500/100

Conductor Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Øi	B	M	N	L	d	
0,25÷1,5 [22÷16]	3	S1.5-U3	1,8	5,5	5,5	4,0	13,7	3,2	7.000/100
	3,5	S1.5-U3.5	1,8	6,0	6,5	3,8	14,5	3,7	7.000/100
	3,5	S1.5-U3.5/2*	1,8	6,4	6,5	3,8	14,5	3,7	7.000/100
	4	S1.5-U4	1,8	6,5	7,5	3,7	15,4	4,3	7.000/100
	4	S1.5-U4/1*	1,8	8,5	7,5	3,7	15,4	4,3	7.000/100
	4	S1.5-U4/2	1,8	7,5	7,5	3,7	15,4	4,3	7.000/100
	5	S1.5-U5	1,8	8,5	7,5	3,7	15,4	5,3	7.000/100
	5	S1.5-U5/1	1,8	9,4	7,5	3,7	15,4	5,3	7.000/100
	6	S1.5-U6	1,8	9,4	8,1	4,7	17,0	6,4	6.000/100
	6	S1.5-U6/1*	1,8	12,0	9,2	7,1	20,5	6,4	6.000/100
	8	S1.5-U8	1,8	14,0	10,0	6,3	20,5	8,4	3.000/100
	10	S1.5-U10	1,8	17,5	13,0	7,7	25,0	10,5	2.500/100
12	S1.5-U12	1,8	20,0	15,5	9,0	28,7	13,0	2.000/100	
1,5÷2,5 [16÷14]	3	S2.5-U3	2,4	5,5	5,5	4,0	13,7	3,2	6.000/100
	3,5	S2.5-U3.5	2,4	6,4	6,5	3,8	14,5	3,7	6.000/100
	3,5	S2.5-U3.5/1*	2,4	7,2	6,5	3,8	14,5	3,7	6.000/100
	4	S2.5-U4	2,4	6,5	7,5	3,7	15,4	4,3	5.000/100
	4	S2.5-U4/1*	2,4	8,5	7,5	3,7	15,4	4,3	6.000/100
	4	S2.5-U4/2*	2,4	7,5	7,5	3,7	15,4	4,3	6.000/100
	5	S2.5-U5	2,4	8,5	7,5	3,7	15,4	5,3	6.000/100
	6	S2.5-U6	2,4	9,4	8,1	4,7	17,0	6,4	5.000/100
	6	S2.5-U6/1*	2,4	12,0	9,2	7,1	20,5	6,4	4.000/100
	8	S2.5-U8	2,4	14,0	10,0	6,3	20,5	8,4	2.500/100
	10	S2.5-U10	2,4	17,5	13,0	7,7	25,0	10,5	2.000/100
	12	S2.5-U12	2,4	20,0	15,5	9,0	28,7	13,0	2.000/100
4÷6 [12÷10]	3,5	S6-U3.5	3,6	7,5	8,5	3,9	18,8	3,7	3.000/100
	4	S6-U4	3,6	7,5	8,0	4,4	18,8	4,3	3.000/100
	5	S6-U5	3,6	9,5	8,0	4,4	18,8	5,3	2.500/100
	6	S6-U6	3,6	10,0	11,0	5,5	22,9	6,4	2.500/100
	8	S6-U8	3,6	13,5	12,0	8,0	26,4	8,4	2.000/100
	10	S6-U10	3,6	15,5	13,0	8,0	27,4	10,5	2.000/100
	10	S6-U10/1*	3,6	17,5	13,8	7,7	28,0	10,5	2.000/100
	12	S6-U12	3,6	21,0	15,1	9,5	31,0	13,0	1.000/100
	14	S6-U14	3,6	23,0	16,1	10,5	33,0	15,0	1.000/100
	16	S6-U16*	3,6	26,0	17,1	11,5	35,0	17,0	1.000/100

\*Made to order



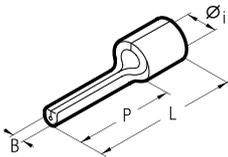
RN, BN, GN range terminals are manufactured from electrolytic Copper strip with a purity greater than 99.9% and Tin plated. The seam is unbraced.

The terminal barrel is rifled to enhance electrical contact and to improve mechanical strength.

Recommended crimping tools are shown on pages 144 to 173, 260.

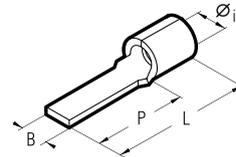


## pin terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity Box/Bag
		Øi	B	P	L	
0,25÷1,5 [22÷16]	RN-P8	1,8	1,6	8,0	12,0	8.000/100
	RN-P10	1,8	1,6	10,0	14,0	8.000/100
	RN-P12	1,8	1,6	12,0	16,2	8.000/100
1,5÷2,5 [16÷14]	BN-P8	2,4	1,6	8,0	12,0	7.000/100
	BN-P10	2,4	1,6	10,0	14,0	7.000/100
	BN-P12	2,4	1,6	12,0	16,0	7.000/100
4÷6 [12÷10]	GN-P10	3,6	2,2	10,0	16,8	4.000/100
	GN-P12	3,6	2,2	12,0	19,0	4.000/100
	GN-P14	3,6	2,2	14,0	21,0	3.500/100

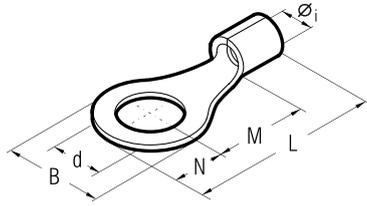
## blade terminals



Conductor Size sqmm (AWG)	Type	Dimensions mm				Quantity Box/Bag
		Øi	B	P	L	
0,25÷1,5 [22÷16]	RN-PP12	1,8	3,0	12,8	17,0	8.000/100
	RN-PP12/1	1,8	3,0	11,3	15,5	8.000/100
	RN-PP12/19	1,8	1,9	13,2	17,4	8.000/100
	RN-PP14	1,8	3,0	14,8	19,0	8.000/100
	RN-PP16/23	1,8	2,3	17,2	21,4	8.000/100
1,5÷2,5 [16÷14]	BN-PP12	2,4	3,5	12,8	17,0	7.000/100
	BN-PP12/25	2,4	2,5	13,3	17,5	7.000/100
	BN-PP16/25	2,4	2,5	17,2	21,4	7.000/100
4÷6 [12÷10]	GN-PP12	3,6	4,0	13,3	19,7	4.000/100
	GN-PP17	3,6	2,9	19,1	25,5	3.000/100

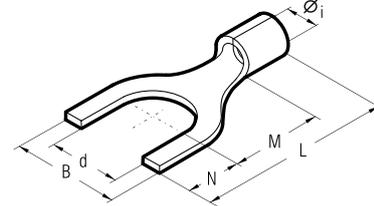
RN, BN, GN range - unbraced - for Copper conductors

## ring terminals



Conductor Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Øi	B	M	N	L	d	
0,25÷1,5 (22÷16)	2	RN-M2*	1,8	5,6	4,5	2,8	11,5	2,2	7.000/100
	3	RN-M3	1,8	5,6	4,5	2,8	11,5	3,2	7.000/100
	3,5	RN-M3.5	1,8	5,6	4,5	2,8	11,5	3,7	7.000/100
	3,5	RN-M3.5/1	1,8	6,2	7,1	3,1	14,4	3,7	7.000/100
	4	RN-M4	1,8	7,0	6,5	3,5	14,2	4,3	7.000/100
	4	RN-M4/3	1,8	7,8	7,1	3,9	15,2	4,3	7.000/100
	5	RN-M5	1,8	7,8	7,1	3,9	15,2	5,3	7.000/100
	6	RN-M6	1,8	9,4	8,1	4,7	17,0	6,4	6.000/100
	6	RN-M6/1	1,8	12,0	10,3	6,0	20,5	6,4	4.000/100
	7	RN-M7	1,8	9,4	8,1	4,7	17,0	7,2	6.000/100
	8	RN-M8	1,8	12,0	10,3	6,0	20,5	8,4	4.000/100
	10	RN-M10	1,8	15,5	13,0	7,7	25,0	10,5	2.000/100
12	RN-M12	1,8	18,0	15,5	9,0	28,7	13,0	2.000/100	
1,5÷2,5 (16÷14)	2	BN-M2*	2,4	5,6	5,0	2,8	12,0	2,2	6.000/100
	3	BN-M3	2,4	5,6	5,0	2,8	12,0	3,2	6.000/100
	3,5	BN-M3.5	2,4	5,6	5,0	2,8	12,0	3,7	6.000/100
	3,5	BN-M3.5/1	2,4	6,2	6,5	3,1	13,8	3,7	6.000/100
	4	BN-M4	2,4	8,0	6,5	4,0	14,7	4,3	5.000/100
	5	BN-M5	2,4	8,0	7,5	4,0	15,7	5,3	5.000/100
	6	BN-M6	2,4	9,4	8,6	4,7	17,5	6,4	5.000/100
	6	BN-M6/1	2,4	12,0	10,3	6,0	20,5	6,4	5.000/100
	7	BN-M7	2,4	10,0	7,8	5,0	17,0	7,2	5.000/100
	8	BN-M8	2,4	12,0	10,3	6,0	20,5	8,4	4.000/100
	10	BN-M10	2,4	15,5	13,0	7,7	25,0	10,5	2.500/100
	12	BN-M12	2,4	18,0	15,5	9,0	28,7	13,0	2.000/100
4÷6 (12÷10)	3	GN-M3	3,6	8,0	8,1	4,0	18,5	3,2	3.000/100
	3,5	GN-M3.5	3,6	8,0	8,1	4,0	18,5	3,7	3.000/100
	4	GN-M4	3,6	9,0	8,1	4,5	19,0	4,3	3.000/100
	5	GN-M5	3,6	9,0	8,1	4,5	19,0	5,3	2.500/100
	6	GN-M6	3,6	11,0	11,1	5,5	23,0	6,4	2.500/100
	6	GN-M6/1	3,6	11,0	8,1	5,5	20,0	6,4	2.500/100
	7	GN-M7	3,6	11,0	11,1	5,5	23,0	7,2	2.500/100
	8	GN-M8	3,6	13,6	12,1	6,8	25,3	8,4	2.000/100
	8	GN-M8/1*	3,6	11,0	8,1	5,5	20,0	8,4	2.500/100
	10	GN-M10	3,6	13,6	12,1	6,8	25,3	10,5	2.000/100
	10	GN-M10/1	3,6	15,5	13,8	7,7	28,0	10,5	2.000/100
	12	GN-M12	3,6	19,0	15,1	9,5	31,0	13,0	1.000/100
14	GN-M14	3,6	21,0	16,1	10,5	33,0	15,0	1.000/100	
16	GN-M16	3,6	24,0	17,1	12,0	35,5	17,0	1.000/100	

## fork/spade terminals



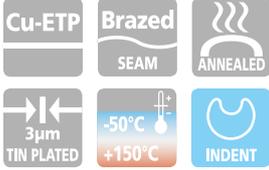
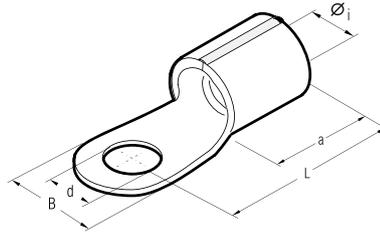
Conductor Size sqmm (AWG)	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag
			Øi	B	M	N	L	d	
0,25÷1,5 (22÷16)	3	RN-U3	1,8	5,5	5,5	4,0	13,7	3,2	7.000/100
	3,5	RN-U3.5	1,8	6,0	6,5	3,8	14,5	3,7	7.000/100
	3,5	RN-U3.5/2	1,8	6,4	6,5	3,8	14,5	3,7	7.000/100
	4	RN-U4	1,8	6,5	7,5	3,7	15,4	4,3	7.000/100
	4	RN-U4/1	1,8	8,5	7,5	3,7	15,4	4,3	7.000/100
	4	RN-U4/2	1,8	7,5	7,5	3,7	15,4	4,3	7.000/100
	5	RN-U5	1,8	8,5	7,5	3,7	15,4	5,3	5.000/100
	5	RN-U5/1*	1,8	9,4	7,5	3,7	15,4	5,3	5.000/100
	6	RN-U6	1,8	9,4	8,1	4,7	17,0	6,4	6.000/100
	6	RN-U6/1	1,8	12,0	9,2	7,1	20,5	6,4	3.000/100
	8	RN-U8	1,8	14,0	10,0	6,3	20,5	8,4	2.500/100
	10	RN-U10	1,8	17,5	13,0	7,7	25,0	10,5	2.000/100
12	RN-U12	1,8	20,0	15,5	9,0	28,7	13,0	2.000/100	
1,5÷2,5 (16÷14)	3	BN-U3	2,4	5,5	5,5	4,0	13,7	3,2	6.000/100
	3,5	BN-U3.5	2,4	6,4	6,5	3,8	14,5	3,7	6.000/100
	3,5	BN-U3.5/1*	2,4	7,2	6,5	3,8	14,5	3,7	6.000/100
	4	BN-U4	2,4	6,5	7,5	3,7	15,4	4,3	6.000/100
	4	BN-U4/1	2,4	8,5	7,5	3,7	15,4	4,3	6.000/100
	4	BN-U4/2	2,4	7,5	7,5	3,7	15,4	4,3	6.000/100
	5	BN-U5	2,4	8,5	7,5	3,7	15,4	5,3	5.000/100
	6	BN-U6	2,4	9,4	8,1	4,7	17,0	6,4	5.000/100
	6	BN-U6/1	2,4	12,0	9,2	7,1	20,5	6,4	4.000/100
	8	BN-U8	2,4	14,0	10,0	6,3	20,5	8,4	4.000/100
	10	BN-U10	2,4	17,5	13,0	7,7	25,0	10,5	2.000/100
	12	BN-U12	2,4	20,0	15,5	9,0	28,7	13,0	2.000/100
4÷6 (12÷10)	3,5	GN-U3.5	3,6	7,5	8,5	3,9	18,8	3,7	3.000/100
	4	GN-U4	3,6	7,5	8,0	4,4	18,8	4,3	3.000/100
	5	GN-U5	3,6	9,5	8,0	4,4	18,8	5,3	2.500/100
	6	GN-U6	3,6	10,0	11,0	5,5	22,9	6,4	2.500/100
	8	GN-U8	3,6	13,5	12,0	8,0	26,4	8,4	2.000/100
	10	GN-U10	3,6	15,5	13,0	8,0	27,4	10,5	2.000/100
	10	GN-U10/1	3,6	17,5	13,8	7,7	28,0	10,5	2.000/100
	12	GN-U12	3,6	21,0	15,1	9,5	31,0	13,0	1.000/100
	14	GN-U14	3,6	23,0	16,1	10,5	33,0	15,0	1.000/100
	16	GN-U16	3,6	26,0	17,1	11,5	35,0	17,0	1.000/100

\*Made to order



# CRIMPING CONNECTORS ACCORDING TO DIN 46234

for Copper conductors



Q type connectors are manufactured from electrolytic Copper strip with a purity greater than 99.9%, annealed and surface protected by tin plating; dimensions are compliant with DIN 46234; the sleeve is brazed with a silver-Copper alloy.

Details of the conductor csa and stud diameter are engraved on the palm.

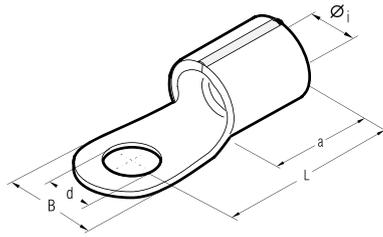
Details of the appropriate crimping tools and dies are shown on page 320.

Consult us for special requirements.

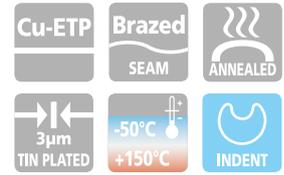
Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm					Quantity Box/Bag	Mechanical Tools	Hydraulic Tools				
			Øi	d	L	B	a							
6÷10	4	Q10-4	4,5	4,3	16,0	10,0	8,0	1.500/100	HNS*	RHU81D	RHU81D	RH60C B600C B600CND	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
	5	Q10-5	4,5	5,3	16,0	10,0	8,0	1.500/100						
	6	Q10-6	4,5	6,5	17,0	11,0	8,0	1.000/100						
	8	Q10-8	4,5	8,4	20,0	14,0	8,0	1.000/100						
	10	Q10-10	4,5	10,5	21,0	18,0	8,0	1.000/100						
10÷16	12	Q10-12	4,5	13,0	22,0	22,0	8,0	500/100						
	5	Q16-5	5,8	5,3	20,0	11,0	10,0	1.000/100						
	6	Q16-6	5,8	6,5	20,0	11,0	10,0	1.000/100						
	8	Q16-8	5,8	8,4	22,0	14,0	10,0	500/100						
16÷25	10	Q16-10	5,8	10,5	24,0	18,0	10,0	500/100						
	12	Q16-12	5,8	13,0	26,0	22,0	10,0	500/100						
	5	Q25-5	7,5	5,3	25,0	12,0	11,0	500/100						
	6	Q25-6	7,5	6,5	25,0	12,0	11,0	500/100						
	8	Q25-8	7,5	8,4	25,0	16,0	11,0	500/100						
25÷35	10	Q25-10	7,5	10,5	26,0	18,0	11,0	500/100						
	12	Q25-12	7,5	13,0	31,0	22,0	11,0	500/100						
	16	Q25-16	7,5	17,0	35,0	28,0	11,0	200/100						
	6	Q35-6	9,0	6,5	26,0	15,0	12,0	400/100						
	8	Q35-8	9,0	8,4	26,0	16,0	12,0	400/100						
35÷50	10	Q35-10	9,0	10,5	27,0	18,0	12,0	300/100						
	12	Q35-12	9,0	13,0	31,0	22,0	12,0	250/50						
	16	Q35-16	9,0	17,0	36,0	28,0	12,0	200/50						
	6	Q50-6	11,0	6,5	34,0	18,0	16,0	200/50						
	8	Q50-8	11,0	8,4	34,0	18,0	16,0	200/50						
50÷70	10	Q50-10	11,0	10,5	34,0	18,0	16,0	200/50						
	12	Q50-12	11,0	13,0	36,0	22,0	16,0	200/50						
	16	Q50-16	11,0	17,0	40,0	28,0	16,0	200/50						
	6	Q70-6	13,0	6,5	38,0	22,0	18,0	100/50						
70÷95	8	Q70-8	13,0	8,4	38,0	22,0	18,0	100/50						
	10	Q70-10	13,0	10,5	38,0	22,0	18,0	100/50						
	12	Q70-12	13,0	13,0	38,0	22,0	18,0	100/50						
	16	Q70-16	13,0	17,0	42,0	28,0	18,0	100/50						
70÷95	8	Q95-8	15,0	8,4	42,0	24,0	20,0	100/25						
	10	Q95-10	15,0	10,5	42,0	24,0	20,0	100/25						
	12	Q95-12	15,0	13,0	44,0	24,0	20,0	100/25						
	16	Q95-16	15,0	17,0	70,0	28,0	20,0	100/25						

# CRIMPING CONNECTORS ACCORDING TO DIN 46234

for Copper conductors



Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm					Quantity Box/Bag	Hydraulic Tools	
			Øi	d	L	B	a		HT120 and tools and heads with 130 kN crimping force	ECW-H3D
95÷120	8	Q120-8	16,5	8,4	44,0	24,0	22,0	100/25		
	10	Q120-10	16,5	10,5	44,0	24,0	22,0	100/25		
	12	Q120-12	16,5	13,0	44,0	24,0	22,0	100/25		
	16	Q120-16	16,5	17,0	48,0	28,0	22,0	50/25		
120:150	10	Q150-10	19,0	10,5	50,0	30,0	24,0	50/25		
	12	Q150-12	19,0	13,0	50,0	30,0	24,0	50/25		
	16	Q150-16	19,0	17,0	50,0	30,0	24,0	50/25		
150÷185	10	Q185-10	21,0	10,5	50,0	36,0	28,0	40/20		
	12	Q185-12	21,0	13,0	50,0	36,0	28,0	40/20		
	16	Q185-16	21,0	17,0	50,0	36,0	28,0	30/15		
185÷240	10	Q240-10	23,5	10,5	56,0	38,0	32,0	10/10		
	12	Q240-12	23,5	13,0	56,0	38,0	32,0	10/10		
	16	Q240-16	23,5	17,0	56,0	38,0	32,0	10/10		



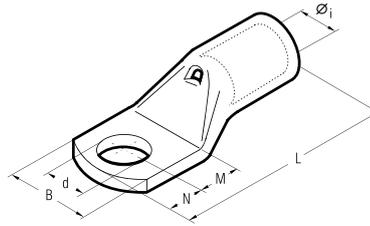
Consult us for special requirements.

Consult us for further information.

# A-M

## COPPER TUBE CRIMPING LUGS

for Copper conductors



A-M series lugs are manufactured from electrolytic Copper tube with a purity greater than 99.9%.

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 Tin plated 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 312 to 313.

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.

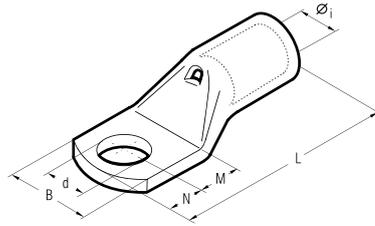
Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
			Øi	B	M	N	L	d			
0,25÷1,5	3	A03-M3*	1,8	6,0	4,5	3,5	16,0	3,2	5.000/100	HN1	B15MD
	3,5	A03-M3.5*	1,8	6,5	4,5	3,5	16,0	3,7	5.000/100		
	4	A03-M4*	1,8	6,5	5,0	4,0	17,0	4,3	5.000/100		
	5	A03-M5*	1,8	7,5	5,5	4,5	18,0	5,3	5.000/100		
	6	A03-M6*	1,8	9,0	6,0	5,0	19,0	6,4	5.000/100		
	3	A06-M3*	2,4	6,0	4,5	3,5	17,0	3,2	4.000/100		
1,5÷2,5	3,5	A06-M3.5*	2,4	6,5	4,5	3,5	17,0	3,7	4.000/100	HN5	B15MD
	4	A06-M4*	2,4	7,5	5,0	4,0	18,0	4,3	4.000/100		
	5	A06-M5*	2,4	8,5	5,5	4,5	19,0	5,3	4.000/100		
	6	A06-M6*	2,4	9,0	6,0	5,0	20,0	6,4	4.000/100		
	8	A06-M8*	2,4	12,0	9,0	8,0	26,0	8,4	2.500/100		
	3	A1-M3	3,6	7,5	4,5	3,5	20,5	3,2	2.000/100		
3,5	A1-M3.5	3,6	7,5	4,5	3,5	20,5	3,7	2.000/100			
4	A1-M4	3,6	8,0	5,0	4,0	21,5	4,3	2.000/100			
5	A1-M5	3,6	9,0	6,5	6,0	25,0	5,3	2.000/100			
6	A1-M6	3,6	11,0	7,0	6,0	25,5	6,4	1.500/100			
8	A1-M8	3,6	14,0	9,0	8,0	29,5	8,4	1.500/100			
4÷6	10	A1-M10	3,6	16,5	11,0	10,0	34,0	10,5	1.000/100	HN5	B15MD
	4	A2-M4	4,6	10,0	5,0	4,0	22,5	4,3	1.500/100		
	5	A2-M5	4,6	10,0	6,5	6,0	26,0	5,3	1.000/100		
	6	A2-M6	4,6	11,0	7,0	6,0	26,5	6,4	1.000/100		
	8	A2-M8	4,6	15,0	9,0	8,0	30,5	8,4	1.000/100		
	10	A2-M10	4,6	18,0	11,0	10,0	34,5	10,5	500/100		
10	12	A2-M12	4,6	19,0	14,0	12,0	39,5	13,2	500/100	HN425	B15MD
	4	A3-M4	5,8	11,5	5,0	4,0	25,5	4,3	1.000/100		
	5	A3-M5	5,8	11,5	6,5	6,0	29,0	5,3	1.000/100		
	6	A3-M6	5,8	11,5	7,0	6,0	29,5	6,4	1.000/100		
	8	A3-M8	5,8	15,0	9,0	8,0	33,5	8,4	500/100		
	10	A3-M10	5,8	18,0	11,0	10,0	37,5	10,5	500/100		
16	12	A3-M12	5,8	20,0	14,0	12,0	44,0	13,2	500/100	TN70SE	B15MD
	4	A5-M4	7,0	14,0	5,0	4,0	28,0	4,3	500/100		
	5	A5-M5	7,0	14,0	6,5	6,0	31,5	5,3	500/100		
	6	A5-M6	7,0	14,0	7,0	6,0	32,0	6,4	500/100		
	8	A5-M8	7,0	15,0	9,0	8,0	36,0	8,4	500/100		
	10	A5-M10	7,0	18,0	11,0	10,0	40,0	10,5	500/100		
25	12	A5-M12	7,0	21,0	14,0	12,0	45,0	13,2	400/100	TN120SE	B15MD
	5	A7-M5	8,9	17,0	6,5	6,0	34,0	5,3	400/100		
	6	A7-M6	8,9	17,0	7,0	6,0	34,5	6,4	400/100		
	8	A7-M8	8,9	17,0	9,0	8,0	38,5	8,4	400/100		
	10	A7-M10	8,9	19,0	11,0	10,0	42,5	10,5	300/100		
	12	A7-M12	8,9	21,0	14,0	12,0	47,5	13,2	200/50		
35	6	A10-M6	10,0	19,0	8,0	7,0	38,5	6,4	200/50	TN120SE	B15MD
	8	A10-M8	10,0	19,0	9,0	8,0	40,5	8,4	200/50		
	10	A10-M10	10,0	20,0	11,5	9,5	44,5	10,5	200/50		
	12	A10-M12	10,0	21,0	12,0	12,0	47,5	13,2	200/50		
	14	A10-M14	10,0	25,0	16,0	14,0	55,5	15,0	200/50		
	16	A10-M16	10,0	26,0	18,0	16,0	59,5	17,0	100/50		
50	6	A14-M6	11,3	21,0	8,0	7,0	44,0	6,4	200/50	TN120SE	B15MD
	8	A14-M8	11,3	21,0	9,0	8,0	46,0	8,4	200/50		
	10	A14-M10	11,3	21,0	11,0	10,0	50,0	10,5	200/50		
	12	A14-M12	11,3	22,0	14,0	12,0	55,0	13,2	150/50		
	14	A14-M14	11,3	25,0	16,0	14,0	59,0	15,0	100/50		
	16	A14-M16	11,3	26,0	18,0	16,0	63,0	17,0	100/50		
70	6	A14-M6	11,3	21,0	8,0	7,0	44,0	6,4	200/50	TN120SE	B15MD
	8	A14-M8	11,3	21,0	9,0	8,0	46,0	8,4	200/50		
	10	A14-M10	11,3	21,0	11,0	10,0	50,0	10,5	200/50		
	12	A14-M12	11,3	22,0	14,0	12,0	55,0	13,2	150/50		
	14	A14-M14	11,3	25,0	16,0	14,0	59,0	15,0	100/50		
	16	A14-M16	11,3	26,0	18,0	16,0	63,0	17,0	100/50		

\*Not UL approved

# COPPER TUBE CRIMPING LUGS

for Copper conductors

A-M



Conductor Size sqmm		Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools	Hydraulic Tools	
Low Str.	Flex*		Øi	B	M	N	L	d				
95	70 95	6 A19-M6	13,5	25,0	8,0	7,0	50,5	6,4	100/25	TNI20SE** HT45-E B450ND-BV	HT51	RH50 B500ND RH60C HT60C B600CND RH81-U RHU81
		8 A19-M8	13,5	25,0	9,0	8,0	52,5	8,4	100/25			
		10 A19-M10	13,5	25,0	11,0	10,0	56,5	10,5	100/25			
		12 A19-M12	13,5	25,0	14,0	12,0	61,5	13,2	100/25			
		14 A19-M14	13,5	25,0	16,0	14,0	65,5	15,0	100/25			
		16 A19-M16	13,5	27,0	18,0	16,0	69,5	17,0	50/25			
		20 A19-M20	13,5	29,5	22,0	20,0	77,5	21,0	50/25			
120	95 120	8 A24-M8	15,2	28,5	9,0	8,0	54,0	8,4	75/25			
		10 A24-M10	15,2	28,5	11,0	10,0	58,0	10,5	75/25			
		12 A24-M12	15,2	28,5	14,0	12,0	63,0	13,2	75/25			
		14 A24-M14	15,2	28,5	16,0	14,0	67,0	15,0	50/25			
		16 A24-M16	15,2	28,5	18,0	16,0	71,0	17,0	50/25			
		20 A24-M20	15,2	30,0	22,0	20,0	79,0	21,0	50/25			
150	120 150	8 A30-M8	16,7	31,5	13,0	11,0	69,0	8,4	50/25			
		10 A30-M10	16,7	31,5	13,0	11,0	69,0	10,5	50/25			
		12 A30-M12	16,7	31,5	16,0	14,0	75,0	13,2	50/25			
		14 A30-M14	16,7	31,5	18,0	16,0	79,0	15,0	50/25			
		16 A30-M16	16,7	31,5	19,0	17,0	81,0	17,0	50/25			
		20 A30-M20	16,7	31,5	22,0	20,0	87,0	21,0	50/25			
185	150 185	8 A37-M8	19,2	35,5	13,0	11,0	76,0	8,4	30/15			
		10 A37-M10	19,2	35,5	13,0	11,0	76,0	10,5	30/15			
		12 A37-M12	19,2	35,5	16,0	14,0	82,0	13,2	30/15			
		14 A37-M14	19,2	35,5	18,0	16,0	86,0	15,0	30/15			
		16 A37-M16	19,2	35,5	19,0	17,0	88,0	17,0	30/15			
		20 A37-M20	19,2	35,5	22,0	20,0	94,0	21,0	30/15			
240	185 240	8 A48-M8	21,1	39,0	13,0	11,0	77,5	8,4	20/10			
		10 A48-M10	21,1	39,0	13,0	11,0	77,5	10,5	20/10			
		12 A48-M12	21,1	39,0	14,0	12,0	79,5	13,2	20/10			
		14 A48-M14	21,1	39,0	18,0	16,0	92,0	15,0	20/10			
		16 A48-M16	21,1	39,0	19,0	17,0	94,0	17,0	20/10			
		20 A48-M20	21,1	39,0	22,0	20,0	100,0	21,0	20/10			
300	240 300	10 A60-M10	23,7	44,0	20,0	11,0	96,0	10,5	20/10			
		12 A60-M12	23,7	44,0	20,0	14,0	99,0	13,2	20/10			
		14 A60-M14	23,7	44,0	22,0	16,0	103,0	15,0	20/10			
		16 A60-M16	23,7	44,0	22,0	19,0	106,0	17,0	20/10			
		20 A60-M20	23,7	44,0	24,0	23,0	112,0	21,0	20/10			
400	300 400	12 A80-M12	27,0	51,0	22,0	19,0	113,0	13,2	15/5			
		14 A80-M14	27,0	51,0	22,0	19,0	113,0	15,0	15/5			
		16 A80-M16	27,0	51,0	22,0	19,0	113,0	17,0	15/5			
		20 A80-M20	27,0	51,0	24,0	23,0	119,0	21,0	15/5			
500	400 500	16 A100-M16	30,3	56,5	22,0	19,0	117,0	17,0	10/1			
		20 A100-M20	30,3	56,5	24,0	23,0	123,0	21,0	10/1			
630	500 630	16 A120-M16*	33,4	61,6	22,0	19,0	128,0	17,0	9/1			
		20 A120-M20*	33,4	61,6	24,0	23,0	134,0	21,0	9/1			
800	630	16 A160-M16*	38,0	72,0	24,0	19,0	141,0	17,0	5/1			
		20 A160-M20*	38,0	72,0	24,0	23,0	145,0	21,0	6/1			
1000	800	16 A200-M16*	44,0	80,0	24,0	19,0	158,0	17,0	5/1			
		20 A200-M20*	44,0	80,0	24,0	23,0	162,0	21,0	5/1			

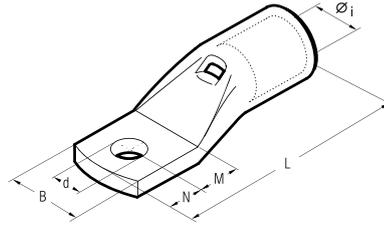
\*Actual conductor section may require a larger lug eg for 120mm<sup>2</sup> size use A30-... lug.

\*\*See page 161



\*Not UL approved

for L.V. circuit breakers - for Copper conductors



Cond. Size Flexible sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
			Øi	B	M	N	L	d			
10	5	A2-M5/9	4,6	9,0	6,5	6,0	26,0	5,3	1.000/100	HN5	B15MD
16	5	A3-M5/9	5,8	9,0	6,5	6,0	30,5	5,3	1.000/100		
25	5	A5-M5/9	7,0	9,0	6,5	6,0	31,5	5,3	500/100	HN-A25	B15MD
35	6	A7B-M6/11.5*	8,9	11,5	8,0	7,0	36,5	6,4	400/100		
50	6	A10B-M6/11.5*	10,0	11,5	8,0	7,0	40,5	6,4	200/50	TN70SE	B15MD
70	6	A14B-M6/11.5*	11,3	11,5	8,0	7,0	44,5	6,4	200/50		
95	8	A19B-M8/15.5*	13,5	15,5	9,0	8,0	52,5	8,4	100/25	TN120SE	B15MD
120	8	A24B-M8/19*	15,2	19,0	14,0	9,0	60,0	8,4	75/25		
120	10	A24B-M10/19*	15,2	19,0	14,0	9,0	60,0	10,5	75/25	HT45-E B450ND-BV	HT51
150	8	A30B-M8/19*	16,7	19,0	18,0	9,0	70,0	8,4	50/25		
150	10	A30B-M10/19*	16,7	19,0	18,0	9,0	70,0	10,5	50/25	RH50 B500 B500ND	RH60C B600C B600CND
185	10	A37B-M10/24.5*	19,2	24,5	18,0	9,0	77,0	10,5	30/15		
240	10	A48-M10/31	21,1	31,0	13,0	9,0	80,0	10,5	20/10	RH60C B600C B600CND	HT81-U RHU81
240	12	A48-M12/31	21,1	31,0	16,0	12,0	86,0	13,2	20/10		
240	16	A48-M16/31	21,1	31,0	19,0	17,0	94,0	17,0	20/10		
300	10	A60B-M10/31*	23,7	31,0	16,0	12,0	95,0	10,5	20/10	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
300	12	A60B-M12/31*	23,7	31,0	16,0	12,0	95,0	13,2	20/10		

\*Without inspection hole

This range of terminals features contained palm width and has been specifically developed for application on L.V. circuit breakers with reduced space terminal blocks.

The contained palm width allows an immediate and easier installation.

CEMBRE terminals are manufactured from electrolytic Copper tube with a purity greater than 99.9%.

The specifically designed section of the barrel and the choice of principal dimensions are optimising the best combination of mechanical strength and electrical conductivity.

These terminals are annealed to

guarantee optimum ductility and are electrolytically Tin plated to avoid oxidation.

The barrel is provided with an internal taper to ease the introduction of the conductor; furthermore, its length grants a comfortable and correct positioning between dies, during crimping operations.

Each palm is marked with the CEMBRE logo and part number.

Details of the appropriate crimping tools and dies are shown on pages 312 to 313.

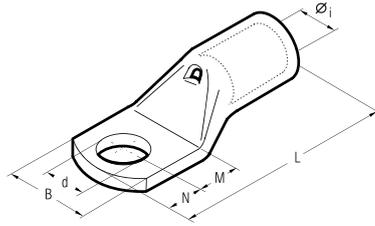


# COPPER TUBE CRIMPING LUGS

for extra flexible Copper conductors

# A-M

• for fine stranded •  
**SPECIAL**  
flexible conductors



Conductor Size Extra Flexible sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools	Hydraulic Tools	
			Øi	B	M	N	L	d				
35	6	A9-M6/15	9,3	15,0	8,0	7,0	38,5	6,4	400/100	TN70SE TN120SE	HT45-E B450ND-BV HT51 RH50 B500 RH60C HT60C B600CND HT81-U RHU81	HT120 and tools and heads with 130kN crimping force ECW-H3D RHU520
	8	A9-M8	9,3	17,0	9,0	8,0	40,5	8,4	400/100			
	10	A9-M10	9,3	18,5	11,0	10,0	44,5	10,5	300/100			
	12	A9-M12	9,3	21,0	14,0	12,0	49,5	13,2	200/50			
50	6	A12-M6/15	11,0	15,0	8,0	7,0	40,5	6,4	200/50			
	8	A12-M8	11,0	19,3	9,0	8,0	42,5	8,4	200/50			
	10	A12-M10	11,0	19,3	11,0	10,0	46,5	10,5	200/50			
	10	A12-M10/19	11,0	19,0	11,0	10,0	46,5	10,5	200/50			
	12	A12-M12	11,0	22,0	14,0	12,0	51,5	13,2	200/50			
70	6	A17-M6	13,0	23,0	8,0	7,0	45,0	6,4	200/50			
	8	A17-M8	13,0	23,0	9,0	8,0	47,0	8,4	150/50			
	10	A17-M10	13,0	23,0	11,0	10,0	51,0	10,5	150/50			
	10	A17-M10/19	13,0	19,0	11,0	10,0	51,0	10,5	200/50			
	12	A17-M12	13,0	23,0	14,0	12,0	56,0	13,2	150/50			
	14	A17-M14	13,0	25,0	15,5	12,0	57,5	15,0	150/25			
95	16	A17-M16	13,0	27,0	16,5	13,5	60,0	17,0	100/25			
	8	A20-M8	15,0	27,0	9,0	8,0	50,0	8,4	100/25			
	10	A20-M10	15,0	27,0	11,0	10,0	54,0	10,5	100/25			
	12	A20-M12	15,0	27,0	14,0	12,0	59,0	13,2	100/25			
	14	A20-M14	15,0	27,0	15,5	12,0	60,5	15,0	100/25			
120	16	A20-M16	15,0	27,0	16,5	13,5	63,0	17,0	100/25			
	8	A29-M8	16,5	30,0	9,0	8,0	53,5	8,4	100/25			
	10	A29-M10	16,5	30,0	11,0	10,0	57,5	10,5	50/25			
	12	A29-M12	16,5	30,0	14,0	12,0	62,5	13,2	50/25			
	14	A29-M14	16,5	30,0	15,5	12,0	64,0	15,0	100/25			
	16	A29-M16	16,5	30,0	16,5	13,5	66,5	17,0	100/25			
150	20	A29-M20	16,5	30,0	22,0	20,0	78,5	21,0	75/25			
	10	A35-M10	19,2	34,2	13,0	11,0	65,5	10,5	50/25			
	12	A35-M12	19,2	34,2	16,0	14,0	71,5	13,2	50/25			
	14	A35-M14	19,2	34,2	18,0	16,0	75,5	15,0	50/25			
	16	A35-M16	19,2	34,2	19,0	17,0	77,5	17,0	30/15			
185	20	A35-M20	19,2	34,2	22,0	20,0	83,5	21,0	30/15			
	10	A40-M10	21,0	37,5	13,0	11,0	73,0	10,5	30/15			
	12	A40-M12	21,0	37,5	16,0	14,0	79,0	13,2	30/15			
	14	A40-M14	21,0	37,5	18,0	16,0	83,0	15,0	30/15			
	16	A40-M16	21,0	37,5	19,0	17,0	85,0	17,0	30/15			
	20	A40-M20	21,0	37,5	22,0	20,0	91,0	21,0	30/15			



These lugs are particularly recommended for use with extra flexible conductors on for instance, welding machines.

A-M series lugs are designed to suit panel applications.

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 and electrolytically Tin plated to avoid oxidation.

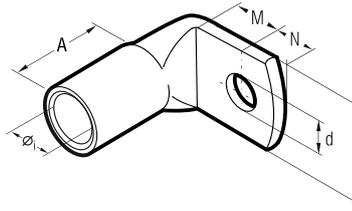
The presence of an inspection hole facilitates full insertion of the conductor.

Details of the appropriate crimping tools and dies are shown on pages 312 to 313.

# A-L

## COPPER TUBE CRIMPING LUGS ANGLED 90°

for Copper conductors



A-L series lugs angled 90° are manufactured from electrolytic Copper tube with a purity greater than 99.9%.

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, terminals still have to perform a reliable connection, 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 Tin plated to avoid oxidation.

Details of the appropriate crimping tools and dies are shown on pages 312 to 313.

Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools			Hydraulic Tools				
			Øi	B	M	N	A	d									
6	6	A1-L6*	3,6	11,0	7,0	6,0	8,0	6,4	2.000/100								
10	4	A2-L4	4,6	10,0	5,0	4,0	8,0	4,3	1.500/100								
	5	A2-L5	4,6	10,0	6,5	6,0	8,0	5,3	1.000/100								
	6	A2-L6	4,6	11,0	7,0	6,0	8,0	6,4	1.000/100								
16	8	A2-L8	4,6	15,0	9,0	8,0	8,0	8,4	500/100								
	5	A3-L5	5,8	11,5	6,5	6,0	11,5	5,3	1.000/100								
	6	A3-L6	5,8	11,5	7,0	6,0	11,5	6,4	1.000/100								
25	8	A3-L8	5,8	15,0	9,0	8,0	11,5	8,4	500/100								
	10	A3-L10	5,8	18,0	11,0	10,0	11,5	10,5	500/100								
	6	A5-L6	7,0	14,0	7,0	6,0	10,5	6,4	500/100								
35	8	A5-L8	7,0	15,0	9,0	8,0	10,5	8,4	500/100								
	10	A5-L10	7,0	18,0	11,0	10,0	10,5	10,5	500/100								
	6	A7-L6	8,9	17,0	7,0	6,0	13,2	6,4	300/100								
50	8	A7-L8	8,9	17,0	9,0	8,0	13,2	8,4	300/100								
	10	A7-L10	8,9	19,0	11,0	10,0	13,2	10,5	300/100								
	12	A7-L12	8,9	21,0	14,0	12,0	13,2	13,2	300/100								
70	6	A10-L6	10,0	19,0	8,0	7,0	16,5	6,4	300/100								
	8	A10-L8	10,0	19,0	9,0	8,0	16,5	8,4	200/100								
	10	A10-L10	10,0	20,0	11,5	9,5	16,5	10,5	200/50								
95	12	A10-L12	10,0	21,0	12,0	12,0	16,5	13,2	200/50								
	8	A14-L8	11,3	21,0	9,0	8,0	18,0	8,4	200/50								
	10	A14-L10	11,3	21,0	11,0	10,0	18,0	10,5	100/50								
120	12	A14-L12	11,3	22,0	14,0	12,0	18,0	13,2	100/50								
	16	A14-L16	11,3	26,0	18,0	16,0	18,0	17,0	150/50								
	8	A19-L8	13,5	25,0	9,0	8,0	22,5	8,4	100/25								
150	10	A19-L10	13,5	25,0	11,0	10,0	22,5	10,5	100/25								
	12	A19-L12	13,5	25,0	14,0	12,0	22,5	13,2	100/25								
	10	A24-L10	15,2	28,5	11,0	10,0	24,0	10,5	50/25								
185	12	A24-L12	15,2	28,5	14,0	12,0	24,0	13,2	50/25								
	10	A30-L10	16,7	31,5	13,0	11,0	26,5	10,5	50/25								
	12	A30-L12	16,7	31,5	16,0	14,0	26,5	13,2	50/25								
240	10	A37-L10	19,2	35,5	13,0	11,0	29,0	10,5	30/15								
	12	A37-L12	19,2	35,5	16,0	14,0	29,0	13,2	30/25								
	10	A48-L10	21,1	39,0	13,0	11,0	33,0	10,5	30/15								
300	12	A48-L12	21,1	39,0	16,0	14,0	33,0	13,2	20/10								
	12	A60-L12	23,7	44,0	20,0	14,0	40,0	13,2	20/10								

\*Actual conductor section may require a larger lug eg for 120mm<sup>2</sup> size use A30-... lug.

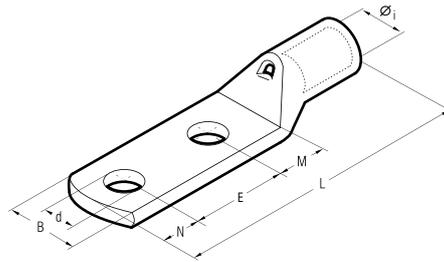
\*\*See page 161

\*Not UL approved

# COPPER TUBE CRIMPING LUGS

double hole fixing - for Copper conductors

# A-2M



Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm							Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
			Øi	B	M	N	E	L	d			
10	4	A2-2M4-12	4,6	10,0	5,0	4,0	12,0	36,5	4,3	100	HN1 HN5 HN-A25	B15MD
	8	A2-2M8-20	4,6	15,0	11,0	11,0	20,0	57,5	8,4	100		
16	8	A3-2M8-20	5,8	15,0	11,0	11,0	20,0	62,0	8,4	50	HN-A25	B15MD
	12	A3-2M12-40	5,8	20,0	14,0	12,0	40,0	82,5	13,2	200/50		
25	8	A5-2M8-20	7,0	15,0	9,0	11,0	20,0	59,0	8,4	400/100	TN70SE	B15MD
	8	A5-2M8-24-24	7,0	15,0	24,0	11,0	24,0	78,0	8,4	300/100		
25	10	A5-2M10-24-13	7,0	18,0	13,0	11,0	24,0	67,0	10,5	300/100	TN70SE	B15MD
	10	A7-2M10	8,9	19,0	11,0	10,0	44,5	87,0	10,5	100/50		
35	10	A7-2M10-25	8,9	19,0	12,0	11,0	25,0	69,5	10,5	100	TN70SE	B15MD
	12	A7-2M12	8,9	21,0	16,0	14,0	44,5	96,0	13,2	200/100		
35	12	A7-2M12-25	8,9	21,0	16,0	14,0	25,0	76,5	13,2	50	TN70SE	B15MD
	12	A7-2M12-40	8,9	21,0	16,0	14,0	40,0	91,5	13,2	150/50		
50	6	A10-2M6	10,0	19,0	8,0	11,0	44,5	89,0	6,4	50	TN70SE	B15MD
	8	A10-2M8	10,0	19,0	11,0	11,0	44,5	92,0	8,4	100/50		
50	8	A10-2M8-20	10,0	19,0	11,0	11,0	20,0	67,5	8,4	100/50	TN70SE	B15MD
	8	A10-2M8-22	10,0	19,0	11,0	11,0	22,0	69,5	8,4	150/50		
50	8	A10-2M8-30	10,0	19,0	11,0	11,0	30,0	77,5	8,4	150/50	TN70SE	B15MD
	8	A10-2M8-24-24	10,0	19,0	24,0	11,0	24,0	84,5	8,4	150/50		
50	10	A10-2M10	10,0	20,0	13,0	11,0	44,5	94,0	10,5	100/50	TN70SE	B15MD
	10	A10-2M10-24-13	10,0	19,0	13,0	11,0	24,0	73,5	10,5	150/50		
50	12	A10-2M12	10,0	21,0	16,0	14,0	44,5	100	13,2	100/50	TN70SE	B15MD
	12	A10-2M12-25	10,0	21,0	16,0	14,0	25,0	80,5	13,2	50		
70	8	A14-2M8	11,3	21,0	11,0	11,0	44,5	95,5	8,4	50	TN70SE	B15MD
	8	A14-2M8-24-24	11,3	21,0	24,0	11,0	24,0	88,0	8,4	100/50		
70	10	A14-2M10	11,3	21,0	13,0	11,0	44,5	97,5	10,5	100/50	TN70SE	B15MD
	10	A14-2M10-24	11,3	21,0	13,0	11,0	24,0	77,0	10,5	100/50		
70	12	A14-2M12	11,3	22,0	16,0	14,0	44,5	103,5	13,2	100/50	TN70SE	B15MD
	12	A14-2M12-25	11,3	22,0	16,0	14,0	25,0	84,0	13,2	50		
70	12	A14-2M12-30-29	11,3	22,0	29,0	14,0	30,0	102,0	13,2	100/50	TN70SE	B15MD
	12	A14-2M12-40	11,3	22,0	16,0	14,0	40,0	99,0	13,2	100/50		
70	14	A14-2M14	11,3	25,0	18,0	16,0	44,5	107,5	15,0	100/50	TN70SE	B15MD
	6	A19-2M6	13,5	25,0	10,0	11,0	44,5	101,0	6,4	25		
95	8	A19-2M8-50 S	13,5	25,0	15,0	15,0	50,0	115,5	8,4	75/25	TN70SE	B15MD
	10	A19-2M10	13,5	25,0	13,0	11,0	44,5	104,0	10,5	50/25		
95	10	A19-2M10-24-13	13,5	25,0	13,0	11,0	24,0	83,5	10,5	75/25	TN70SE	B15MD
	10	A19-2M10-24-26	13,5	25,0	26,0	11,0	24,0	96,5	10,5	50/25		
95	10	A19-2M10-40	13,5	25,0	13,0	11,0	40,0	99,5	10,5	75/25	TN70SE	B15MD
	12	A19-2M12	13,5	25,0	16,0	14,0	44,5	110,0	13,2	75/25		
95	12	A19-2M12-25	13,5	25,0	16,0	14,0	25,0	90,5	13,2	25	TN70SE	B15MD
	12	A19-2M12-30-29	13,5	25,0	29,0	14,0	30,0	108,5	13,2	50/25		
95	14	A19-2M14	13,5	25,0	18,0	16,0	44,5	114,0	15,0	100/25	TN70SE	B15MD
	14	A19-2M14-25	13,5	25,0	18,0	16,0	25,0	94,5	15,0	25		
120	16	A19-2M16	13,5	25,0	19,0	17,0	44,5	116,0	17,0	50/25	TN70SE	B15MD
	8	A24-2M8-20	15,2	28,5	11,0	11,0	20,0	79,0	8,4	25		
120	8	A24-2M8-24-29	15,2	28,5	29,0	11,0	24,0	101,0	8,4	50/25	TN70SE	B15MD
	10	A24-2M10	15,2	28,5	13,0	11,0	44,5	105,5	10,5	50/25		
120	10	A24-2M10-22	15,2	28,5	13,0	11,0	22,0	83,0	10,5	25	TN70SE	B15MD
	10	A24-2M10-25/24	15,2	24,0	13,0	11,0	25,0	86,0	10,5	50/25		
120	10	A24-2M10-33.5	15,2	28,5	13,0	11,0	33,5	94,5	10,5	50/25	TN70SE	B15MD
	10	A24L-2M10-30AS	15,2	28,5	13,0	11,0	30,0	91,0	10,5	25		
120	12	A24-2M12	15,2	28,5	16,0	14,0	44,5	113,0	13,2	50/25	TN70SE	B15MD
	12	A24-2M12-30-29	15,2	28,5	29,0	14,0	30,0	110,0	13,2	50/25		
120	12	A24-2M12-40	15,2	28,5	16,0	14,0	40,0	107,0	13,2	50/25	TN70SE	B15MD
	14	A24-2M14	15,2	28,5	18,0	16,0	44,5	115,5	15,0	50/25		
120	16	A24-2M16	15,2	28,5	19,0	17,0	44,5	117,5	17,0	50/25	TN70SE	B15MD



A-2M series lugs are manufactured from electrolytic copper tube with a purity greater than 99.9%.

The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.

The double hole fixing ensures greater mechanical stability even in the presence of electrodynamic stresses.

CEMBRE lugs are annealed to guarantee optimum ductility, an absolute necessity for connectors which will have to withstand the severe deformation arising when compressed and any bending of the palm during installation.

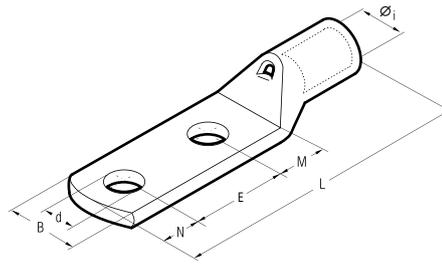
In applications subject to vibration, terminals still have to perform a reliable connection, annealing plays a vital role in avoiding cracking or breaks between the barrel and palm.

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-2M 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 page 312 to 313, whilst 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.

double hole fixing - for Copper conductors



Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm							Quantity Box/Bag	Mechanical Tools	Hydraulic Tools	
			Øi	B	M	N	E	L	d				
150	8	A30-2M8-20	16,7	31,5	13,0	11,0	20,0	89,0	8,4	50/25	TN120SE*	HT51	RH50 B500 B500ND RH60C HT60C B600CND RH81-U RHU81
	10	A30-2M10	16,7	31,5	13,0	11,0	44,5	113,5	10,5	50/25			
	10	A30-2M10-24-28	16,7	31,5	28,0	11,0	24,0	108,0	10,5	50/25			
	12	A30-2M12	16,7	31,5	16,0	14,0	44,5	119,5	13,2	50/25			
	12	A30-2M12-30	16,7	31,5	16,0	14,0	30,0	105,0	13,2	50/25			
	12	A30-2M12-30-29	16,7	31,5	29,0	14,0	30,0	118,0	13,2	30/15			
	12	A30-2M12-40	16,7	31,5	16,0	14,0	40,0	115,0	13,2	30/15			
	14	A30-2M14	16,7	31,5	18,0	16,0	44,5	123,5	15,0	50/25			
185	14	A30-2M14-33.5	16,7	31,5	18,0	16,0	33,5	112,5	15,0	50/25	HT51	RH50 B500 B500ND RH60C HT60C B600CND RH81-U RHU81	
	10	A37-2M10	19,2	35,5	13,0	11,0	44,5	120,5	10,5	30/15			
	10	A37-2M10-25	19,2	35,5	13,0	11,0	25,0	101,0	10,5	30/15			
	12	A37-2M12	19,2	35,5	16,0	14,0	44,5	126,5	13,2	30/15			
	12	A37-2M12-32	19,2	35,5	16,0	14,0	32,0	114,0	13,2	30/15			
	12	A37-2M12-30-31	19,2	35,5	31,0	14,0	30,0	127,0	13,2	30/15			
	14	A37-2M14	19,2	35,5	18,0	16,0	44,5	130,5	15,0	30/15			
	14	A37-2M14-35	19,2	35,5	18,0	16,0	35,0	121,0	15,0	30/15			
240	16	A37-2M16	19,2	35,5	19,0	17,0	44,5	132,5	17,0	30/15	HT51	RH50 B500 B500ND RH60C HT60C B600CND RH81-U RHU81	
	16	A37-2M16-40	19,2	35,5	19,0	17,0	40,0	128,0	17,0	30/15			
	10	A48-2M10	21,1	39,0	13,0	11,0	44,5	126,5	10,5	30/15			
	10	A48-2M10-20	21,1	39,0	13,0	11,0	20,0	102,0	10,5	30/15			
	10	A48-2M10-35	21,1	39,0	13,0	11,0	35,0	117,0	10,5	30/15			
	12	A48-2M12	21,1	39,0	16,0	14,0	44,5	132,5	13,2	30/15			
	12	A48-2M12-35	21,1	39,0	16,0	14,0	35,0	123,0	13,2	30/15			
	12	A48-2M12-40	21,1	39,0	16,0	14,0	40,0	128,0	13,2	30/15			
300	12	A48-2M12-30-31	21,1	39,0	31,0	14,0	30,0	133,0	13,2	20/10	HT51	RH50 B500 B500ND RH60C HT60C B600CND RH81-U RHU81	
	14	A48-2M14	21,1	39,0	18,0	16,0	44,5	136,5	15,0	30/15			
	14	A48-2M14-40	21,1	39,0	18,0	16,0	40,0	132,0	15,0	30/15			
	16	A48-2M16	21,1	39,0	19,0	17,0	44,5	138,5	17,0	30/15			
	10	A60-2M10	23,7	44,0	13,0	11,0	44,5	133,5	10,5	20/5			
	12	A60-2M12	23,7	44,0	20,0	14,0	44,5	143,5	13,2	20/5			
	12	A60-2M12-40	23,7	44,0	20,0	14,0	40,0	139,0	13,2	20/5			
	12	A60-2M12-30-38	23,7	44,0	38,0	14,0	30,0	147,0	13,2	20/5			
400	14	A60-2M14	23,7	44,0	22,0	16,0	44,5	147,5	15,0	20/5	HT51	RH50 B500 B500ND RH60C HT60C B600CND RH81-U RHU81	
	16	A60-2M16-40	23,7	44,0	22,0	17,0	40,0	144,0	17,0	20/5			
	16	A60-2M16	23,7	44,0	22,0	17,0	44,5	148,5	17,0	20/5			
	16	A60-2M16-35	23,7	44,0	22,0	17,0	35,0	139,0	17,0	20/5			
	16	A60-2M16/36	23,7	36,0	22,0	17,0	44,5	148,5	17,0	20/5			
	12	A80-2M12	27,0	51,0	22,0	14,0	44,5	152,5	13,2	15/5			
500	14	A80-2M14	27,0	51,0	22,0	16,0	44,5	154,5	15,0	15/5	HT51	RH50 B500 B500ND RH60C HT60C B600CND RH81-U RHU81	
	14	A80-2M14-40	27,0	51,0	22,0	16,0	40,0	150,0	15,0	15/5			
	16	A80-2M16	27,0	51,0	22,0	19,0	44,5	157,5	17,0	15/5			
	16	A80-2M16-40	27,0	51,0	22,0	19,0	40,0	153,0	17,0	15/5			
	16	A80-2M16/41	27,0	41,0	22,0	19,0	44,5	157,5	17,0	15/5			
	16	A80-2M16-50	27,0	51,0	22,0	19,0	50,0	163,0	17,0	5			
630	12	A100-2M12	30,3	56,5	20,0	14,0	44,5	152,0	13,2	10/1	HT51	RH50 B500 B500ND RH60C HT60C B600CND RH81-U RHU81	
	14	A100-2M14-40	30,3	56,5	17,0	16,0	40,0	149,0	15,0	1			
	14	A100-2M14	30,3	56,5	17,0	16,0	44,5	153,5	15,0	10/1			
800	16	A100-2M16	30,3	56,5	19,0	19,0	44,5	158,5	17,0	10/5	HT51	RH50 B500 B500ND RH60C HT60C B600CND RH81-U RHU81	
	12	A120-2M12*	33,4	61,6	22,0	14,0	44,5	167,5	13,2	20/5			
800	16	A120-2M16*	33,4	61,6	22,0	19,0	44,5	172,5	17,0	8/1	HT51	RH50 B500 B500ND RH60C HT60C B600CND RH81-U RHU81	
	12	A160-2M12*	38,0	72,0	20,0	14,0	44,5	176,5	13,2	9/3			
800	16	A160-2M16*	38,0	72,0	22,0	19,0	44,5	183,5	17,0	9/3	HT51	RHU520	

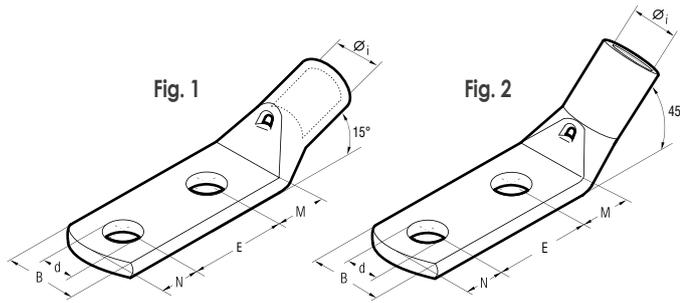
\*See page 161

\*Not UL approved

# COPPER TUBE CRIMPING LUGS ANGLED 315° and 345°

# A-2M

double hole fixing - for Copper conductors



Conductor Size sqmm	Ø Stud mm	Type	Fig. N.	Dimensions mm						Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
				Øi	B	M	N	E	d			
25	8	A5-2M8-24-24/345	1	7,0	15,0	24,0	11,0	24,0	8,4	300/100	HN-A25	HT45-E B450ND-BV
	12	A5-2M12-3029/345	1	7,0	21,0	29,0	14,0	30,0	13,2	200/100		
50	8	A10-2M8-2424/345	1	10,0	19,0	24,0	11,0	24,0	8,4	150/50	TN70SE	RH50 B500 B500ND RH60C HT60C B600C B600CND HT81-U RHU81
	10	A14-2M102426/315	2	11,3	21,0	26,0	11,0	24,0	10,5	100/50		
70	10	A14-2M102426/345	1	11,3	21,0	26,0	11,0	24,0	10,5	100/50	TN120SE*	HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	12	A14-2M123029/345	1	11,3	22,0	29,0	14,0	30,0	13,2	100/50		
95	8	A19-2M8-2424/345	1	13,5	25,0	24,0	11,0	24,0	8,4	75/25	TN120SE*	HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	10	A19-2M102426/345	1	13,5	25,0	26,0	11,0	24,0	10,5	25		
120	8	A24-2M8-2429/345	1	15,2	28,5	29,0	11,0	24,0	8,4	50/25	TN120SE*	HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	10	A24-2M102429/345	1	15,2	28,5	29,0	11,0	24,0	10,5	50/25		
150	8	A30-2M8-2429/345	1	16,7	31,5	29,0	11,0	24,0	8,4	30/15	TN120SE*	HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	10	A30-2M102428/345	1	16,7	31,5	28,0	11,0	24,0	10,5	50/25		
185	10	A37-2M10-25/315	2	19,2	35,5	13,0	11,0	25,0	10,5	15	TN120SE*	HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	12	A37-2M123031/345	1	19,2	35,5	31,0	14,0	30,0	13,2	30/15		
240	12	A48-2M12/345	1	21,1	39,0	16,0	14,0	44,5	13,2	20/10	TN120SE*	HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	12	A48-2M12-30/45	1	21,1	39,0	16,0	14,0	30,0	13,2	20/10		
300	12	A60-2M123038/345	1	23,7	44,0	38,0	14,0	30,0	13,2	20/10	TN120SE*	HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520

\*See page 161



A-2M series lugs angled 315° and 345° are manufactured from electrolytic copper tube with a purity greater than 99.9%.

The dimensions of the tube are designed to obtain the most efficient electrical conductivity and mechanical strength to resist vibration and pull out.

The double hole fixing ensures greater mechanical stability even in the presence of electrodynamic stresses.

CEMBRE lugs are annealed to guarantee optimum ductility, 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, terminals still have to perform a reliable connection, 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.

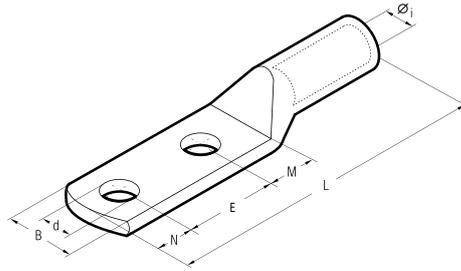
Details of the appropriate crimping tools and dies are shown on pages 312 to 313.



# HEAVY DUTY COPPER TUBE TERMINALS

# 2A-2M

double hole fixing - for Copper conductors



Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm							Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
			Øi	B	M	N	E	L	d			
50	12	2A10-2M12	10,0	21,0	14,0	12,0	44,5	112,5	13,2	75/25	TN70SE	B450ND-BV
70	12	2A14-2M12	11,3	22,0	16,0	14,0	44,5	123,5	13,2	50/25		
	14	2A14-2M14	11,3	25,0	18,0	16,0	44,5	127,5	15,0	75/25	TN120 SE*	B450ND-BV
95	12	2A19-2M12	13,5	25,0	16,0	14,0	44,5	128,0	13,2	50/25		
	14	2A19-2M14	13,5	25,0	18,0	16,0	44,5	132,0	15,0	50/25	HT45-E	HT51
120	12	2A24-2M12	15,2	28,5	16,0	14,0	44,5	135,5	13,2	50/25		
	14	2A24-2M14	15,2	28,5	18,0	16,0	44,5	139,5	15,0	50/25	RH50 B500	RH60C B600C
150	16	2A24-2M16	15,2	28,5	18,0	17,0	44,5	140,5	17,0	50/25		
	12	2A30-2M12	16,7	31,5	16,0	14,0	44,5	142,5	13,2	30/15	HT81-U	RHU81
	14	2A30-2M14	16,7	31,5	18,0	16,0	44,5	146,5	15,0	30/15		
185	12	2A37-2M12	19,2	35,5	16,0	14,0	44,5	152,5	13,2	30/15	RH50 B500	RH60C B600C
	14	2A37-2M14	19,2	35,5	18,0	16,0	44,5	156,5	15,0	30/15		
	16	2A37-2M16	19,2	35,5	19,0	17,0	44,5	158,5	17,0	30/15		
240	12	2A48-2M12	21,1	39,0	16,0	14,0	44,5	153,5	13,2	25/5	RH50 B500	RH60C B600C
	14	2A48-2M14	21,1	39,0	18,0	16,0	44,5	157,5	15,0	25/5		
	16	2A48-2M16	21,1	39,0	19,0	17,0	44,5	159,5	17,0	25/5		
	12	2A60-2M12	23,7	44,0	20,0	14,0	44,5	174,0	13,2	15/5	HT70 and tools and heads with 130 kN crimping force	ECW-H3D
300	14	2A60-2M14	23,7	44,0	22,0	16,0	44,5	178,0	15,0	20/5		
	16	2A60-2M16	23,7	44,0	19,0	17,0	44,5	176,0	17,0	20/5		
	12	2A80-2M12	27,0	51,0	20,0	14,0	44,5	177,5	13,2	15/5	RHU520	
400	14	2A80-2M14	27,0	51,0	22,0	16,0	44,5	181,5	15,0	10/5		
	16	2A80-2M16	27,0	51,0	22,0	19,0	44,5	184,5	17,0	15/5		
	12	2A100-2M12	30,3	56,5	20,0	14,0	44,5	178,5	13,2	10/5	RHU520	
500	14	2A100-2M14	30,3	56,5	22,0	16,0	44,5	182,5	15,0	10/1		
	16	2A100-2M16	30,3	56,5	22,0	19,0	44,5	185,5	17,0	8/1		
	12	2A120-2M12*	33,4	61,5	20,0	14,0	44,5	196,5	13,2	15/1	RHU520	
630	14	2A120-2M14*	33,4	61,5	22,0	19,0	44,5	200,5	15,0	15/1		
	16	2A120-2M16*	33,4	61,5	22,0	19,0	44,5	203,5	17,0	15/1		
	14	2A160-2M14*	38,0	72,0	22,0	19,0	44,5	225,5	15,0	10/1	RHU520	
800	16	2A160-2M16*	38,0	72,0	24,0	19,0	44,5	227,5	17,0	10/1		
	12	2A200-2M12*	44,0	80,0	20,0	14,0	44,5	233,5	13,2	6/2		
1000	16	2A200-2M16*	44,0	80,0	22,0	19,0	44,5	240,5	17,0	5/1	RHU520	
	20	2A200-2M20*	44,0	80,0	24,0	23,0	44,5	246,5	21,0	6/2		

\*See page 161



The 2A-2M series cable lugs are designed for heavy duty, for grounding structures and equipment both indoors and outdoors and for medium voltage applications up to 35 kV.

2A-2M series terminals are made from high purity Copper tube with a purity greater than 99.9%, and are annealed.

They feature a double length barrel for enhanced electrical and mechanical performance in heavy duty applications.

The double hole fixing ensures greater mechanical stability even in the presence of electrodynamic stresses.

The absence of an inspection hole prevents the entry of water or moisture into the crimped joint making these terminals suitable for outdoor applications.

The terminals are electrolytically Tin plated to prevent atmospheric corrosion.

Details of the appropriate crimping tools and dies are shown on pages 312 to 313.

\*Not UL approved

# L-M



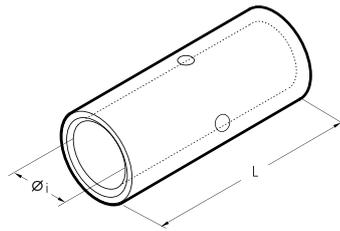
L-M range of connectors are designed for jointing low voltage conductors.

Made of electrolytic Copper tube with a purity greater than 99.9%, having the same dimension as A-M series lugs: L-M connectors are annealed and electrolytically Tin plated.

They feature an internal taper at both ends to ease the introduction of the conductor and a central stop to ensure correct positioning. Details of the appropriate crimping tools and dies are shown on pages 312 to 313.

# THROUGH CONNECTORS

for Copper conductors



Conductor Size sqmm		Type	Dimensions mm		Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
Low Stranded	Flexible		øi	L			
0,25÷1,5	0,25÷1,5	L03-M*	1,8	15	5.000/100	HN1	B15MD
1,5÷2,5	1,5÷2,5	L06-M*	2,4	15	4.000/100		
4÷6	4÷6	L1-M	3,6	22	2.000/100	HN5	B15MD
10	10	L2-M	4,6	25	1.000/100		
16	16	L3-M	5,8	27	500/100	HN-A25	B15MD
25	25	L5-M	7,0	29	500/100		
35	25÷35	L7-M	8,9	33	400/100	TN70SE	B15MD
50	35÷50	L10-M	10,0	37	200/50		
70	50÷70	L14-M	11,3	39	200/50	TN120 SE*	B15MD
95	70÷95	L19-M	13,5	43	100/25		
120	95÷120	L24-M	15,2	47	75/25	HT45-E B450ND-BV	HT51
150	120÷150	L30-M	16,7	58	50/25		
185	150÷185	L37-M	19,2	64	30/15	RH50 B500 B500ND	RH60C HT60C B600C B600CND
240	185÷240	L48-M	21,1	75	20/10		
300	240÷300	L60-M	23,7	90	20/10	RH60C HT60C B600C B600CND	RH50 B500 B500ND
400	300÷400	L80-M	27,0	94	15/5		
500	400÷500	L100-M	30,3	98	12/1	HT45-E B450ND-BV	HT51
630	500÷630	L120-M*	33,4	105	10/1		
800	600	L160-M*	38,0	112	6/1	RH50 B500 B500ND	RH60C HT60C B600C B600CND
1000	800	L200-M*	44,0	120	6/1		

\*See page 161

# L-P



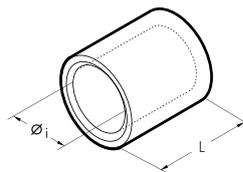
Made of electrolytic Copper tube with a purity greater than 99.9%, having the same dimensions as A-M series lugs, L-P connectors are annealed and electrolytically Tin plated.

They feature an internal taper to ease the introduction of the conductor.

Details of the appropriate crimping tools and dies are shown on pages 312 to 313.

# PARALLEL CONNECTORS

for Copper conductors



Total Conductor Size sqmm		Type	Dimensions mm		Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
Low Stranded	Flexible		øi	L			
0,25÷1,5	0,25÷1,5	L03-P	1,8	6,0	8.000/100	HN1	B15MD
1,5÷2,5	1,5÷2,5	L06-P	2,4	6,0	5.000/100		
4÷6	4÷6	L1-P	3,6	9,0	3.000/100	HN5	B15MD
10	10	L2-P	4,6	10,5	2.000/100		
16	16	L3-P	5,8	11,5	1.500/100	HN-A25	B15MD
25	25	L5-P	7,0	13,0	1.000/100		
35	25÷35	L7-P	8,9	14,0	500/100	TN70SE	B15MD
50	35÷50	L10-P	10,0	16,0	500/100		
70	50÷70	L14-P	11,3	18,0	500/100	TN120 SE*	B15MD
95	70÷95	L19-P	13,5	19,0	200/50		
120	95÷120	L24-P	15,2	22,0	200/50	HT45-E B450ND-BV	HT51
150	120÷150	L30-P	16,7	26,5	100/50		
185	150÷185	L37-P	19,2	26,5	100/50	RH50 B500 B500ND	RH60C HT60C B600C B600CND
240	185÷240	L48-P	21,1	34,0	60/15		
300	240÷300	L60-P	23,7	43,0	50/25	RH60C HT60C B600C B600CND	RH50 B500 B500ND

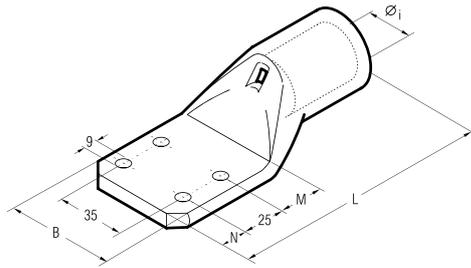
\*See page 161

\*Not UL approved

# COPPER TUBE LUGS 4-ESI FIXING

for Copper conductors

## A-4ESI



Conductor Size sqmm	Type	Dimensions mm					Quantity Box/Bag	Hydraulic Tools					
		Ø	B	M	N	L		HT51 B550	RH50 B500 B500ND	RH60C HT60C B600C B600CND	HT81-U RHU81	HT 120 and tools and heads with 130 kN crimping force	ECW-H3D
185	A 37-4ESI	19,2	61,0	20	15	124	20/10						
240	A 48-4ESI	21,1	61,0	20	15	128	20/10						
300	A 60-4ESI	23,7	61,0	20	15	133	15/5						
400	A 80-4ESI	27,0	61,0	20	15	134	15/5						
500	A 100-4ESI	30,3	61,0	20	15	139	10/5						
630	A 120-4ESI	33,4	61,6	20	15	144	10/5						
800	A 160-4ESI	38,0	61,0	20	15	158	8/1						



A-4ESI series lugs are made from electrolytic Copper tube with a purity greater than 99.9%, annealed and Tin plated.

The four hole stud fixing in accordance with E.A. specifications ensures compatibility with most transformer fixing arrangements.

Details of the appropriate crimping tools and dies are shown on pages 312 to 313.



# A-P

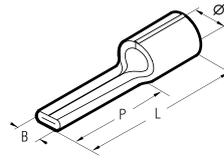


**Cu-ETP**  
**Brazed**  
 SEAM  
 ANNEALED  
 3µm  
 TIN PLATED  
 -50°C  
 +150°C  
 INDENT  
 HEXAGONAL

A-P series pin connectors are designed to terminate conductors into contact blocks. They are manufactured from Copper strip with a purity greater than 99.9%, rolled, brazed and Tin plated.

# UNINSULATED PIN CONNECTORS

for Copper conductors



Conductor Size sqmm		Type	Dimensions mm				Quantity Box/Bag	Mechanical Tools				Hydraulic Tools												
Low Stranded	Flex		Øi	B	P	L		HN1	HN5	HN-A25	TN70SE	TN120SE	B15MD	HT45-E	B450ND-BV	HT51	RH50	B500	B500ND	RH60C	HT60C	B600C	B600CND	HT120 and tools and heads with 130 kN crimping force
10	10	A2-P12	4,8	4,3	14,5	23,5	1.500/100																	
16	16	A3-P14	5,9	5,5	18,0	28,0	1.000/100																	
25	25	A5-P16	7,0	7,0	20,3	32,0	500/100																	
35	25÷35	A7-P20	8,9	8,0	24,5	39,0	500/100																	
50	35÷50	A10-P25	10,0	9,5	26,0	45,0	250/50																	
70	50÷70	A14-P30	11,5	11,0	31,0	55,0	200/50																	

Details of the appropriate crimping tools and dies are shown on pages 312 to 313.

# A-PR

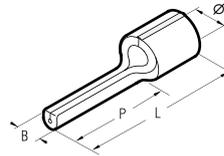


**Cu-ETP**  
**Brazed**  
 SEAM  
 ANNEALED  
 3µm  
 TIN PLATED  
 -50°C  
 +150°C  
 INDENT  
 HEXAGONAL

A-PR series pin connectors are designed to terminate conductors into contact blocks. They are manufactured from Copper strip with a purity greater than 99.9%, rolled, brazed and Tin plated.

# UNINSULATED ROUND PIN CONNECTORS

for Copper conductors

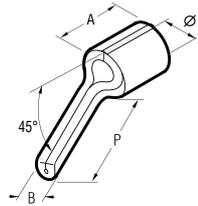


Conductor Size sqmm		Type	Dimensions mm				Quantity Box/Bag	Mechanical Tools				Hydraulic Tools												
Low Stranded	Flex		Øi	B	P	L		HN1	HN5	HN-A25	TN70SE	TN120SE	B15MD	HT45-E	B450ND-BV	HT51	RH50	B500	B500ND	RH60C	HT60C	B600C	B600CND	HT120 and tools and heads with 130 kN crimping force
16	16	A3-P22R	5,9	4,0	22,0	32,0	1.000/100																	
25	25	A5-P22R	7,0	4,0	22,0	33,7	500/100																	

Details of the appropriate crimping tools and dies are shown on pages 312 to 313.

## UNINSULATED ROUND PIN CONNECTORS ANGLED 45°

for Copper conductors



Conductor Size sqmm		Type	Dimensions mm				Quantity Box/Bag	Mechanical Tools				Hydraulic Tools										
Low Stranded	Flex		Øi	B	P	A		HNT	HNS	HN-A25	TN/0SE	TN120SE	BT15MD	HT45-E	B450ND-BV	HT51 RH50	B500 B500ND	RH60C	HT60C B600C	B600CND	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
16	16	A3-P22R/45	5,9	4,0	22,0	10,0	1.000/100															
25	25	A5-P22R/45	7,0	4,0	22,0	11,7	500/100															

## A-PR/45



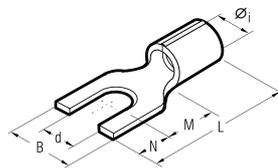
A-PR/45 series pin connectors are designed to terminate conductors into contact blocks.

They are manufactured from Copper strip with a purity greater than 99.9%, rolled, brazed and Tin plated.

Details of the appropriate crimping tools and dies are shown on pages 312 to 313.

## UNINSULATED FORK TERMINALS

for Copper conductors



Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools				Hydraulic Tools									
			Øi	B	M	N	L	d		HNT1	HNS	TN/0SE	TN120SE	BT15MD	HT45-E	B450ND-BV	HT51 RH50	B500 B500ND	RH60C	HT60C	B600CND	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
10	4	A2-U4	4,8	9,8	7,5	7,0	23,5	4,3	1.500/100														
	5	A2-U5	4,8	11,5	7,5	7,0	23,5	5,3	1.500/100														
16	4	A3-U4	5,9	10,0	10,0	8,0	28,0	4,3	1.000/100														
	5	A3-U5	5,9	11,5	10,0	8,0	28,0	5,3	1.000/100														

## A-U



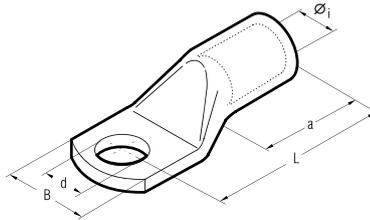
A-U series fork terminals are designed to terminate conductors into contact blocks.

Made from electrolytic Copper strip with a purity greater than 99.9%, rolled and Tin plated.

The seam is brazed to provide uniform mechanical strength.

The terminal barrel is rifled to enhance electrical contact and to improve mechanical strength. Recommended crimping tools are shown on pages 312 to 313.

for Copper conductors



DR series lugs are manufactured from electrolytic Copper tube with a purity greater than 99.9%, and designed to obtain high electrical conductivity combined with the mechanical strength required to resist vibration and pull out.

CEMBRE lugs are annealed and Tin plated for improved surface protection.

The annealing process optimises the structural features of the material allowing easier crimping and greater resistance to mechanical stresses.

Dimensions are according to DIN 46235.

The barrel entrance of the lug is chamfered to allow easy conductor insertion, while its length facilitates precise positioning in the crimping die.

Each lug is marked with:

- CEMBRE logo and part code.
- conductor type and csa (mm<sup>2</sup>).
- stud Ø (mm).
- crimping die code

Details of the appropriate crimping tools and dies are shown on page 320.

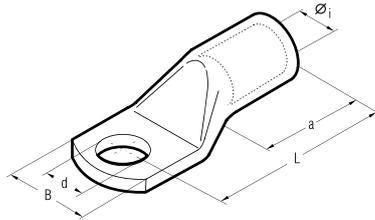
Consult us for special requirements

Conductor Size sqmm	Ø Stud mm	Type	Code	Dimensions mm					Quantity Box/Bag	Mechanical Tools	Hydraulic Tools						
				Øi	d	L	B	a									
6	5	DR6-5	5	3,8	5,3	25,0	8,5	10,0	800/100	HN-D25	B15MD						
	6	DR6-6	5	3,8	6,4	25,0	8,5	10,0	800/100								
	8	DR6-8*	5	3,8	8,4	25,0	12,5	10,0	800/100								
10	5	DR10-5	6	4,5	5,3	28,0	9,0	13,0	800/100			TNE-D50	B15MD				
	6	DR10-6	6	4,5	6,4	28,0	9,0	13,0	800/100								
	8	DR10-8*	6	4,5	8,4	28,0	13,0	13,0	800/100								
16	10	DR10-10*	6	4,5	10,5	28,0	17,0	13,0	800/100					TNE-D20	B15MD		
	6	DR16-6	8	5,5	6,4	37,0	13,0	20,0	400/100								
	8	DR16-8	8	5,5	8,4	37,0	13,0	20,0	400/100								
25	10	DR16-10	8	5,5	10,5	37,0	17,0	20,0	400/100							TNE-D120	B15MD
	12	DR16-12*	8	5,5	13,0	39,0	19,0	20,0	400/100								
	6	DR25-6	10	7,0	6,4	39,0	14,0	20,0	400/100								
35	8	DR25-8	10	7,0	8,4	39,0	16,0	20,0	300/100	TNE-D120	B15MD						
	10	DR25-10	10	7,0	10,5	39,0	17,0	20,0	200/100								
	12	DR25-12	10	7,0	13,0	40,0	19,0	20,0	200/100								
50	6	DR35-6*	12	8,2	6,4	41,0	17,0	20,0	200/100			TNE-D120	B15MD				
	8	DR35-8	12	8,2	8,4	43,0	17,0	20,0	200/100								
	10	DR35-10	12	8,2	10,5	43,0	19,0	20,0	200/100								
70	12	DR35-12	12	8,2	13,0	43,0	21,0	20,0	200/100					TNE-D120	B15MD		
	16	DR35-16*	12	8,2	17,0	47,0	26,0	20,0	200/100								
	6	DR50-6*	14	10,0	6,4	53,0	20,0	28,0	100/25								
95	8	DR50-8	14	10,0	8,4	53,0	20,0	28,0	100/25							TNE-D120	B15MD
	10	DR50-10	14	10,0	10,5	53,0	22,0	28,0	100/25								
	12	DR50-12	14	10,0	13,0	53,0	24,0	28,0	100/25								
120	16	DR50-16	14	10,0	17,0	53,0	28,0	28,0	100/25	TNE-D120	B15MD						
	8	DR70-8	16	11,5	8,4	56,0	24,0	28,0	50/25								
	10	DR70-10	16	11,5	10,5	56,0	24,0	28,0	50/25								
150	12	DR70-12	16	11,5	13,0	56,0	24,0	28,0	50/25			TNE-D120	B15MD				
	16	DR70-16	16	11,5	17,0	56,0	30,0	28,0	50/25								
	20	DR70-20*	16	11,5	21,0	64,0	30,0	28,0	50/25								
185	8	DR95-8*	18	13,5	8,4	66,0	28,0	35,0	50/25					TNE-D120	B15MD		
	10	DR95-10	18	13,5	10,5	66,0	28,0	35,0	50/25								
	12	DR95-12	18	13,5	13,0	66,0	28,0	35,0	50/25								
240	16	DR95-16	18	13,5	17,0	66,0	32,0	35,0	50/25							TNE-D120	B15MD
	20	DR95-20*	18	13,5	21,0	74,0	32,0	35,0	50/25								
	8	DR120-8*	20	15,5	8,4	71,0	30,0	35,0	50/25								
320	10	DR120-10	20	15,5	10,5	71,0	32,0	35,0	50/25	TNE-D120	B15MD						
	12	DR120-12	20	15,5	13,0	71,0	32,0	35,0	30/15								
	16	DR120-16	20	15,5	17,0	71,0	32,0	35,0	50/25								
400	20	DR120-20	20	15,5	21,0	70,5	38,0	35,0	50/25			TNE-D120	B15MD				
	10	DR150-10	22	17,0	10,5	79,0	34,0	39,0	30/15								
	12	DR150-12	22	17,0	13,0	79,0	34,0	39,0	30/15								
500	16	DR150-16	22	17,0	17,0	79,0	34,0	39,0	40/20					TNE-D120	B15MD		
	20	DR150-20	22	17,0	21,0	79,0	40,0	39,0	30/15								
	10	DR185-10	25	19,0	10,5	83,0	37,0	40,0	25/25								
630	12	DR185-12	25	19,0	13,0	83,0	37,0	40,0	25/25							TNE-D120	B15MD
	16	DR185-16	25	19,0	17,0	83,0	37,0	40,0	25/25								
	20	DR185-20	25	19,0	21,0	83,0	40,0	40,0	25/25								
800	10	DR240-10*	28	21,5	10,5	92,0	42,0	46,0	20/10	TNE-D120	B15MD						
	12	DR240-12	28	21,5	13,0	92,0	42,0	46,0	20/10								
	16	DR240-16	28	21,5	17,0	93,0	42,0	46,0	20/10								
1000	20	DR240-20	28	21,5	21,0	93,0	45,0	46,0	20/10			TNE-D120	B15MD				

\* Dimensions of the tube according to DIN 46235; Stud hole not included within the standard.

# COPPER TUBE CRIMPING LUGS ACCORDING TO DIN 46235

for Copper conductors



Conductor Size sqmm	Ø Stud mm	Type	Code	Dimensions mm					Quantity Box/Bag	Hydraulic Tools			
				Øi	d	L	B	a		RH50 B500 B500ND	RH60C HT60C B600C B600CND	HT120 and tools and heads with 130 kN crimping force	ECW-H3D RHU520
300	12	DR300-12*	32	24,5	13,0	101,0	48,0	51,0	10/5	ECW-H3D RHU520	HT120 and tools and heads with 130 kN crimping force	RH50 B500 B500ND	RH60C HT60C B600C B600CND
	16	DR300-16	32	24,5	17,0	101,0	48,0	51,0	10/5				
	20	DR300-20	32	24,5	21,0	101,0	48,0	51,0	10/5				
400	12	DR400-12**	38	27,5	13,0	116,0	55,0	70,0	5/5				
	16	DR400-16*	38	27,5	17,0	116,0	55,0	70,0	5/5				
	20	DR400-20*	38	27,5	21,0	116,0	55,0	70,0	5/5				
500	12	DR500-12**	42	31,0	13,0	125,0	60,0	70,0	5/5				
	16	DR500-16**	42	31,0	17,0	125,0	60,0	70,0	5/5				
	20	DR500-20*	42	31,0	21,0	125,0	60,0	70,0	5/5				
625	20	DR625-20*	44	34,5	21,0	136,0	60,0	80,0	5/5				
800	20	DR800-20*	52	40,0	21,0	166,0	75,0	100,0	5/5				
1.000	20	DR1000-20*	58	44,0	21,0	166,0	85,0	100,0	5/5				

\* Dimensions of the tube according to DIN 46235; Stud hole not included within the standard.

\*\*Not UL approved

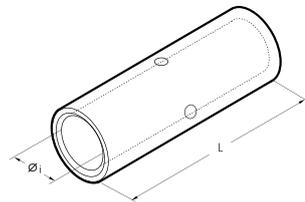
DR



Consult us for special requirements

# CRIMPING THROUGH CONNECTORS ACCORDING TO DIN 46267 T.1

for Copper conductors



Conductor Size sqmm	Type	Code	Dimensions mm		Quantity Box/Bag	Mechanical Tools	Hydraulic Tools							
			Øi	L			B15MD	HT45-E B450ND-BV	HT51	RH50 B500 B500ND	RH60C HT60C B600C B600CND	HT81-U RHU81	HT120 and tools and heads with 130 kN crimping force	
6	DSV6	5	3,7	30	1.200/100	HIN-D25 TNE-D50 TNE-D120	B15MD	HT45-E B450ND-BV	HT51	RH50 B500 B500ND	RH60C HT60C B600C B600CND	HT81-U RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D RHU520
10	DSV10	6	4,4	30	1.200/100									
16	DSV16	8	5,5	50	400/100									
25	DSV25	10	7,0	50	200/100									
35	DSV35	12	8,2	50	200/100									
50	DSV50	14	10,0	56	200/50									
70	DSV70	16	11,5	56	100/50									
95	DSV95	18	13,5	70	100/50									
120	DSV120	20	15,5	70	50/25									
150	DSV150	22	17,0	80	50/25									
185	DSV185	25	19,0	85	25/25									
240	DSV240	28	21,5	90	15/15									
300	DSV300	32	24,5	100	10/5									
400	DSV400	38	27,5	150	10/5									
500	DSV500	42	31,0	160	5/5									
625	DSV625	44	34,5	160	5/5									
800	DSV800	52	40,0	200	5/5									
1.000	DSV1000	58	44,0	200	5/5									



DSV



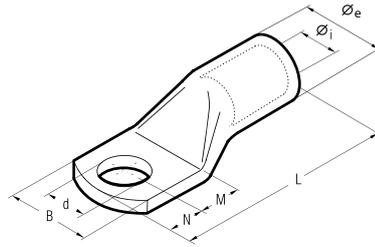
DSV series through connectors are manufactured from electrolytic Copper tube with a purity greater than 99.9%, annealed and surface protected by tin plating. Internal and external dimensions match those of DR series lugs. Chamfered ends and a central stop provide easy and correct insertion of the conductor. Details of the appropriate crimping tools and dies are shown on page 320.

Consult us for special requirements

# HR

## COPPER TUBE CRIMPING LUGS

for Copper conductors



HR series lugs are manufactured from electrolytic Copper tube with a purity greater than 99.9%, and designed to obtain high electrical conductivity combined with the mechanical strength required to resist vibration and pull out.

CEMBRE lugs are annealed and Tin plated for improved surface protection.

The annealing process optimises the structural features of the material allowing easier crimping and greater resistance to mechanical stresses.

The barrel entrance of the lug is chamfered to allow easy conductor insertion, while its length facilitates precise positioning in the crimping die.

Each lug is marked with:

- CEMBRE logo and part code.
- conductor type and csa (mm<sup>2</sup>).
- stud Ø (mm).
- crimping die code

Details of the appropriate crimping tools and dies are shown on page 320.

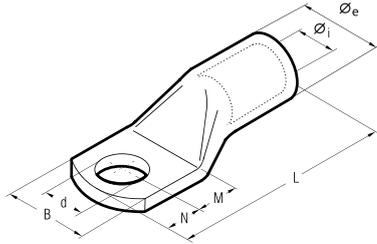
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Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm							Quantity Box/Bag	Mechanical Tools	Hydraulic Tools		
			Øi	Øe	B	M	N	L	d					
6	4	HR6-4	3,5	6,5	10,0	7,5	6,5	27,5	4,3	800/100	HN1	HN5	HN-H25	B15MD
	5	HR6-5	3,5	6,5	10,0	7,5	6,5	27,5	5,3	800/100				
	6	HR6-6	3,5	6,5	11,5	7,5	6,5	27,5	6,4	800/100				
	8	HR6-8	3,5	6,5	15,0	10,0	10,0	33,5	8,4	800/100				
	10	HR6-10	3,5	6,5	17,0	12,0	12,0	37,5	10,5	800/100				
	12	HR6-12	3,5	6,5	19,0	15,0	13,5	42,0	13,2	800/100				
10	4	HR10-4	4,5	7,0	12,0	7,5	6,5	28,5	4,3	800/100	HN1	HN5	HN-H25	B15MD
	5	HR10-5	4,5	7,0	12,0	7,5	6,5	28,5	5,3	800/100				
	6	HR10-6	4,5	7,0	12,0	7,5	6,5	28,5	6,4	800/100				
	8	HR10-8	4,5	7,0	15,0	10,0	10,0	34,5	8,4	800/100				
	10	HR10-10	4,5	7,0	17,0	12,0	12,0	38,5	10,5	800/100				
	12	HR10-12	4,5	7,0	19,0	13,0	13,0	40,5	13,2	800/100				
16	5	HR16-5	5,5	8,5	12,0	7,0	6,0	31,5	5,3	400/100	HN1	HN5	HN-H25	B15MD
	6	HR16-6	5,5	8,5	12,0	7,5	6,5	32,5	6,4	400/100				
	8	HR16-8	5,5	8,5	15,0	9,5	8,5	36,5	8,4	400/100				
	10	HR16-10	5,5	8,5	17,0	11,5	10,5	40,5	10,5	400/100				
	12	HR16-12	5,5	8,5	19,0	13,0	12,0	43,5	13,2	400/100				
	14	HR16-14	5,5	8,5	21,0	14,5	13,5	46,5	15,0	400/100				
25	5	HR25-5	7,0	10,0	14,0	7,5	7,5	37,0	5,3	400/100	HN1	HN5	HN-H25	B15MD
	6	HR25-6	7,0	10,0	14,0	7,5	7,5	37,0	6,4	400/100				
	8	HR25-8	7,0	10,0	16,0	10,0	10,0	42,0	8,4	400/100				
	10	HR25-10	7,0	10,0	18,0	12,0	12,0	46,0	10,5	400/100				
	12	HR25-12	7,0	10,0	19,0	13,0	13,0	48,0	13,2	400/100				
	14	HR25-14	7,0	10,0	21,0	14,0	14,5	50,5	15,0	400/100				
35	6	HR35-6	8,5	12,0	17,0	7,5	7,5	39	6,4	200/50	HN1	HN5	HN-H25	B15MD
	8	HR35-8	8,5	12,0	17,0	10,0	10,0	44	8,4	200/50				
	10	HR35-10	8,5	12,0	19,0	12,0	12,0	48	10,5	200/50				
	12	HR35-12	8,5	12,0	21,0	13,0	13,0	50	13,2	200/50				
	14	HR35-14	8,5	12,0	21,0	14,5	14,5	53	15,0	200/50				
	16	HR35-16	8,5	12,0	26,0	18,0	18,0	58	17,0	200/50				
50	6	HR50-6	10,0	14,0	20,0	10,0	10,0	47,0	6,4	200/50	HN1	HN5	HN-H25	B15MD
	8	HR50-8	10,0	14,0	20,0	10,0	10,0	47,0	8,4	200/50				
	10	HR50-10	10,0	14,0	20,0	12,0	12,0	51,0	10,5	200/50				
	12	HR50-12	10,0	14,0	23,0	13,0	13,0	53,0	13,2	200/50				
	14	HR50-14	10,0	14,0	23,0	14,5	14,5	56,0	15,0	200/50				
	16	HR50-16	10,0	14,0	28,0	16,0	16,0	59,0	17,0	100/50				
70	20	HR50-20	10,0	14,0	30,0	19,0	19,0	65,0	21,0	100/50	HN1	HN5	HN-H25	B15MD
	6	HR70-6	12,0	16,5	23,5	10,0	10,0	52,0	6,4	100/25				
	8	HR70-8	12,0	16,5	23,5	10,0	10,0	52,0	8,4	100/25				
	10	HR70-10	12,0	16,5	23,5	12,0	12,0	56,0	10,5	80/20				
	12	HR70-12	12,0	16,5	23,5	13,0	13,0	58,0	13,2	80/20				
	14	HR70-14	12,0	16,5	23,5	14,5	14,5	61,0	15,0	80/20				
95	16	HR70-16	12,0	16,5	28,0	16,0	16,0	64,0	17,0	60/15	HN1	HN5	HN-H25	B15MD
	20	HR70-20	12,0	16,5	30,5	19,0	19,0	70,0	21,0	60/15				
	8	HR95-8	13,5	18,0	26,0	12,0	12,0	60,0	8,4	100/25				
	10	HR95-10	13,5	18,0	26,0	12,0	12,0	60,0	10,5	100/25				
	12	HR95-12	13,5	18,0	26,0	13,0	13,0	62,0	13,2	100/25				
	14	HR95-14	13,5	18,0	26,0	14,5	14,5	65,0	15,0	100/25				
120	16	HR95-16	13,5	18,0	28,0	16,0	16,0	68,0	17,0	100/25	HN1	HN5	HN-H25	B15MD
	20	HR95-20	13,5	18,0	36,0	22,0	22,0	80,0	21,0	100/25				
	8	HR120-8	15,0	19,5	28,0	14,0	14,0	65,0	8,4	100/25				
	10	HR120-10	15,0	19,5	28,0	14,0	14,0	65,0	10,5	100/25				
	12	HR120-12	15,0	19,5	28,0	14,0	14,0	65,0	13,2	100/25				
	14	HR120-14	15,0	19,5	28,0	15,0	15,0	67,0	15,0	100/25				
150	16	HR120-16	15,0	19,5	30,0	16,0	16,0	69,0	17,0	100/25	HN1	HN5	HN-H25	B15MD
	20	HR120-20	15,0	19,5	36,0	22,0	22,0	81,0	21,0	50/25				
	8	HR150-8	16,5	21,0	31,0	14,0	14,0	70,0	8,4	40/10				
	10	HR150-10	16,5	21,0	31,0	14,0	14,0	70,0	10,5	40/10				
	12	HR150-12	16,5	21,0	31,0	15,0	15,0	72,0	13,2	40/10				
	14	HR150-14	16,5	21,0	31,0	15,0	15,0	72,0	15,0	40/10				
150	16	HR150-16	16,5	21,0	31,0	16,0	16,0	74,0	17,0	40/10	HN1	HN5	HN-H25	B15MD
	20	HR150-20	16,5	21,0	36,0	22,0	22,0	86,0	21,0	60/15				

HT45-E B450ND-BV  
HT51 RH50 B500ND RH60C HT60C B600C B600CND HT81-U RHU81  
HT120 and tools and heads with 130 kN crimping force  
ECW-H3D

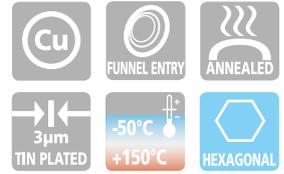
# COPPER TUBE CRIMPING LUGS

for Copper conductors



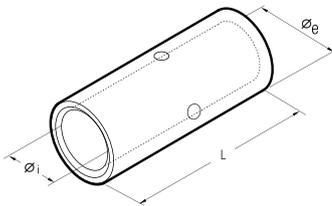
Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm							Quantity Box/Bag	Hydraulic Tools					
			Øi	Øe	B	M	N	L	d		HT51	RH50 B500 B500ND	RH60C B600C B600CND	HT81-U RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
185	10	HR185-10	19,0	24,0	35,0	18,0	18,0	83,0	10,5	40/10	HT51	RH50 B500 B500ND	RH60C B600C B600CND	HT81-U RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
	12	HR185-12	19,0	24,0	35,0	18,0	18,0	83,0	13,2	40/10						
	14	HR185-14	19,0	24,0	35,0	18,0	18,0	83,0	15,0	40/10						
	16	HR185-16	19,0	24,0	35,0	18,0	18,0	83,0	17,0	40/10						
	20	HR185-20	19,0	24,0	35,0	22,0	22,0	91,0	21,0	40/10						
240	10	HR240-10	21,0	26,0	39,0	19,0	21,5	93,5	10,5	40/10						
	12	HR240-12	21,0	26,0	39,0	19,0	21,5	93,5	13,2	40/10						
	14	HR240-14	21,0	26,0	39,0	19,0	21,5	93,5	15,0	40/10						
	16	HR240-16	21,0	26,0	39,0	19,0	21,5	93,5	17,0	40/10						
	20	HR240-20	21,0	26,0	39,0	19,0	21,5	93,5	21,0	40/10						
300	12	HR300-12	23,5	29,5	43,0	24,0	24,0	111,0	13,2	10/5						
	14	HR300-14	23,5	29,5	43,0	24,0	24,0	111,0	15,0	10/5						
	16	HR300-16	23,5	29,5	43,0	24,0	24,0	111,0	17,0	10/5						
	20	HR300-20	23,5	29,5	43,0	24,0	24,0	111,0	21,0	10/5						

# HR



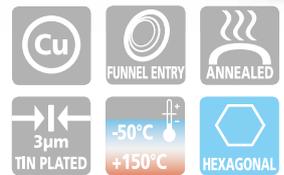
# CRIMPING THROUGH CONNECTORS

for Copper conductors



Conductor Size sqmm	Type	Dimensions mm			Quantity Box/Bag	Mechanical Tools				Hydraulic Tools							
		Øi	Øe	L		HN1	HN-5	HN-H25	TNE-H50	B15MD	HT45-E B450ND-BV	HT51	RH50 B500 B500ND	RH60C B600C B600CND	HT81-U RHU81	HT120 and tools and heads with 130 kN crimping force	ECW-H3D
10	HSV10	4,5	7,0	30	1200/100												
16	HSV16	5,5	8,5	35	800/100												
25	HSV25	7,0	10,0	40	400/100												
35	HSV35	8,5	12,0	45	200/50												
50	HSV50	10,0	14,0	50	200/50												
70	HSV70	12,0	16,5	55	160/40												
95	HSV95	13,5	18,0	60	80/10												
120	HSV120	15,0	19,5	65	80/10												
150	HSV150	16,5	21,0	70	80/10												
185	HSV185	19,0	24,0	75	40/20												
240	HSV240	21,0	26,0	85	40/20												
300	HSV300	23,5	29,5	100	20/10												

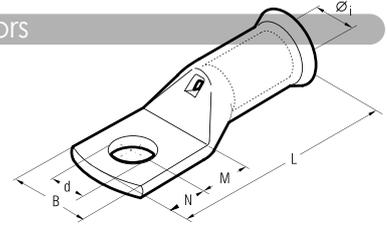
# HSV



HSV series through connectors are manufactured from electrolytic Copper tube with a purity greater than 99.9%, annealed and surface protected by tin plating. Internal and external dimensions match those of HR series lugs. Chamfered ends and a central stop provide easy and correct insertion of the conductor. Details of the appropriate crimping tools and dies are shown on page 320.

Consult us for special requirements

for Copper conductors



T-M series lugs are manufactured from electrolytic Copper tube with a purity greater than 99.9%.

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 insertion of the cable is facilitated by a tulip out.

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 Tin plated to avoid oxidation.

Our technicians are always available to provide any technical advice which may be required.

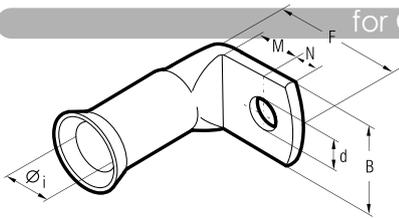
The enclosed table is only indicative of the range and many variations in stud fixing and palm lengths are also available.

Details of the appropriate crimping tools and dies are shown on page 322.

Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
			Øi	B	M	N	L	d			
4	4	T4-M4	2,7	9,0	7,0	6,0	27,5	4,2	1.200/100	HN1	B15MD
	5	T4-M5	2,7	9,0	7,0	6,0	27,5	5,2	2.000/100		
	6	T4-M6	2,7	12,0	9,0	8,0	32,0	6,4	1.200/100		
4÷6	4	T6-M4	3,3	10,0	6,5	6,0	30,0	4,2	1.200/100	HN1	B15MD
	5	T6-M5	3,3	13,0	6,5	6,0	30,0	5,2	1.200/100		
	6	T6-M6	3,3	13,0	9,0	8,0	34,5	6,4	800/100		
	8	T6-M8	3,3	13,0	11,0	10,0	38,5	8,3	800/100		
10	5	T10-M5	4,2	11,0	6,5	6,0	30,0	5,2	800/100	HN5	B15MD
	6	T10-M6	4,2	11,0	9,0	8,0	34,5	6,4	800/100		
	8	T10-M8	4,2	14,0	11,0	10,0	38,5	8,3	800/100		
	10	T10-M10	4,2	14,0	14,0	12,0	43,5	10,3	800/100		
16	5	T16-M5	5,3	12,0	6,5	6,0	34,0	5,2	800/100	HN-T25	B15MD
	6	T16-M6	5,3	12,0	9,0	8,0	38,5	6,4	400/100		
	8	T16-M8	5,3	16,0	11,0	10,0	42,5	8,3	400/100		
	10	T16-M10	5,3	16,0	14,0	12,0	47,5	10,3	400/100		
25	5	T25-M5	6,6	13,0	6,5	6,0	35,5	5,2	400/100	TNE-T50	B15MD
	6	T25-M6	6,6	13,0	9,0	8,0	40,0	6,4	400/100		
	8	T25-M8	6,6	16,0	11,0	10,0	44,0	8,3	400/100		
	10	T25-M10	6,6	16,0	14,0	12,0	49,0	10,3	400/100		
35	12	T25-M12	6,6	19,0	18,0	16,0	57,0	12,8	200/50	TNE-T50	B15MD
	6	T35-M6	7,9	15,0	9,0	8,0	41,0	6,4	200/50		
	8	T35-M8	7,9	17,0	11,0	10,0	45,0	8,3	200/50		
	10	T35-M10	7,9	17,0	14,0	12,0	50,0	10,3	200/50		
50	12	T35-M12	7,9	17,0	18,0	16,0	58,0	12,8	200/50	TNE-T120	B450ND-BV
	6	T50-M6	9,2	18,0	9,0	8,0	46,5	6,4	200/25		
	8	T50-M8	9,2	18,0	11,0	10,0	50,5	8,3	200/25		
	10	T50-M10	9,2	18,0	14,0	12,0	55,5	10,3	200/25		
70	12	T50-M12	9,2	19,0	18,0	16,0	63,5	12,8	100/25	TNE-T120	B450ND-BV
	8	T70-M8	11,0	21,0	11,0	10,0	54,0	8,3	100/25		
	10	T70-M10	11,0	21,0	14,0	12,0	59,0	10,3	100/25		
	12	T70-M12	11,0	21,0	18,0	16,0	67,0	12,8	100/25		
95	8	T95-M8	13,1	23,0	11,0	10,0	60,0	8,3	80/20	TNE-T120	B450ND-BV
	10	T95-M10	13,1	23,0	14,0	12,0	65,0	10,3	80/20		
	12	T95-M12	13,1	23,0	18,0	16,0	73,0	12,8	80/20		
	14	T95-M14	13,1	23,0	18,0	16,0	73,0	14,5	80/20		
120	16	T95-M16	13,1	23,0	19,0	17,0	75,0	16,5	80/20	TNE-T120	B450ND-BV
	8	T120-M8	14,5	28,0	11,0	10,0	63,0	8,3	100/25		
	10	T120-M10	14,5	28,0	14,0	12,0	68,0	10,3	50/25		
	12	T120-M12	14,5	28,0	18,0	16,0	76,0	12,8	50/25		
150	14	T120-M14	14,5	28,0	18,0	16,0	76,0	14,5	50/25	TNE-T120	B450ND-BV
	16	T120-M16	14,5	28,0	19,0	17,0	78,0	16,5	50/25		
	8	T150-M8	16,2	30,0	11,0	10,0	72,5	8,3	40/10		
	10	T150-M10	16,2	30,0	14,0	12,0	77,5	10,3	40/10		
185	12	T150-M12	16,2	30,0	18,0	16,0	85,5	12,8	40/10	TNE-T120	B450ND-BV
	14	T150-M14	16,2	30,0	18,0	16,0	85,5	14,5	40/10		
	16	T150-M16	16,2	30,0	19,0	17,0	87,5	16,5	40/10		
	10	T185-M10	18,0	33,0	14,0	12,0	83,5	10,3	40/10		
240	12	T185-M12	18,0	33,0	18,0	16,0	91,5	12,8	40/10	TNE-T120	B450ND-BV
	14	T185-M14	18,0	33,0	18,0	16,0	91,5	14,5	40/10		
	16	T185-M16	18,0	33,0	19,0	17,0	93,5	16,5	40/10		
	10	T240-M10	20,6	37,0	13,0	11,0	87,5	10,3	20/10		
300	12	T240-M12	20,6	37,0	16,0	14,0	93,5	12,8	20/10	TNE-T120	B450ND-BV
	14	T240-M14	20,6	37,0	18,0	16,0	97,5	14,5	20/10		
	16	T240-M16	20,6	37,0	19,0	17,0	99,5	16,5	20/10		
	20	T240-M20	20,6	37,0	22,0	20,0	105,5	21,0	20/10		
400	10	T300-M10	23,1	41,0	14,0	11,0	95,0	10,3	20/5	TNE-T120	B450ND-BV
	12	T300-M12	23,1	41,0	20,0	14,0	104,0	12,8	20/5		
	14	T300-M14	23,1	41,0	22,0	16,0	108,0	14,5	20/5		
	16	T300-M16	23,1	41,0	22,0	19,0	111,0	16,5	20/5		
400	20	T300-M20	23,1	41,0	24,0	23,0	117,0	21,0	10/5	TNE-T120	B450ND-BV
	14	T400-M14	26,1	47,0	22,0	19,0	119,0	14,5	10/5		
	16	T400-M16	26,1	47,0	22,0	19,0	119,0	16,5	10/5		
	20	T400-M20	26,1	47,0	24,0	23,0	125,0	21,0	10/5		

## COPPER TUBE CRIMPING LUGS ANGLED 90°

for Copper conductors



### T-L



Conductor Size sqmm		Type	Dimensions mm						Quantity Box/Bag	Mechanical Tools	Hydraulic Tools	
Low Str.	Flex		Øi	B	M	N	F*	d				
4÷6	6	T6-L6	3,3	13,0	9,0	8,0	23,6	6,4	800/100	HNT	B15MD	HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	5	T10-L5	4,2	11,0	6,0	6,0	20,3	5,2				
10	6	T10-L6	4,2	11,0	8,0	8,0	24,8	6,4	800/100	HNS	B15MD	HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	8	T10-L8	4,2	14,0	11,0	10,0	28,8	8,3				
16	6	T16-L6	5,3	12,0	9,0	8,0	26,5	6,4	400/100	HN-T25	B15MD	HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	8	T16-L8	5,3	16,0	11,0	10,0	30,5	8,3				
25	6	T25-L6	6,6	13,0	9,0	8,0	28,0	6,4	400/100	TNE-T50	B15MD	HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	8	T25-L8	6,6	16,0	11,0	10,0	32,0	8,3				
35	6	T35-L6	7,9	15,0	9,0	8,0	29,5	6,4	400/50	TNE-T120	B15MD	HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	8	T35-L8	7,9	17,0	11,0	10,0	33,5	8,3				
50	6	T50-L6	9,2	18,0	9,0	8,0	31,5	6,4	100/25	TNE-T120	B15MD	HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	8	T50-L8	9,2	18,0	10,0	10,0	35,5	8,3				
70	6	T70-L6	11,0	21,0	9,0	8,0	38,5	6,4	100/25	TNE-T120	B15MD	HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	8	T70-L8	11,0	21,0	11,0	10,0	38,5	8,3				
95	6	T95-L6	13,1	23,0	9,0	8,0	41,0	6,4	100/25	TNE-T120	B15MD	HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	8	T95-L8	13,1	23,0	11,0	10,0	41,0	8,3				
120	6	T120-L6	14,5	28,0	9,0	8,0	48,0	6,4	50/25	TNE-T120	B15MD	HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	8	T120-L8	14,5	28,0	11,0	10,0	48,0	8,3				
150	6	T150-L6	16,2	30,0	9,0	8,0	50,0	6,4	40/10	TNE-T120	B15MD	HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	8	T150-L8	16,2	30,0	11,0	10,0	50,0	8,3				
185	10	T185-L10	18,0	33,0	14,0	12,0	52,0	10,3	40/10	TNE-T120	B15MD	HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520



T-L series lugs angled 90° are manufactured from electrolytic Copper tube with a purity greater than 99.9%.

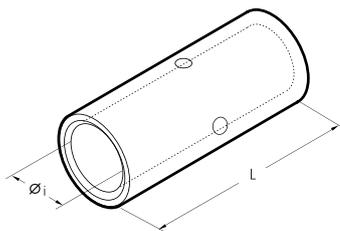
T-L series lugs having the same dimensions and characteristics as T-M series lugs.

F\* = indicative dimension

Details of the appropriate crimping tools and dies are shown on page 322.

## CRIMPING THROUGH CONNECTORS

for Copper conductors



### L-T



Total Conductor Size sqmm		Type	Dimensions mm		Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
Low Stranded	Flexible		Øi	L			
4	4	L4-T	2,7	22	2.000/100	HNT	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
4÷6	4÷6	L6-T	3,3	25	1.500/100	HNS	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
10	10	L10-T	4,2	27	1.000/100	HN-A25	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
16	16	L16-T	5,3	31	500/100	TNE-T50	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
25	25	L25-T	6,6	35	500/100	TNE-T120	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
35	25	L35-T	7,9	37	250/50	TNE-T120	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
50	35	L50-T	9,2	45	250/50	TNE-T120	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
70	50	L70-T	11,0	50	200/50	TNE-T120	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
95	70	L95-T	13,1	56	100/25	TNE-T120	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
120	95	L120-T	14,5	60	100/25	TNE-T120	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
150	120	L150-T	16,2	66	50/25	TNE-T120	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
185	150	L185-T	18,0	75	50/25	TNE-T120	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
240	185	L240-T	20,6	80	30/15	TNE-T120	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
300	240	L300-T	23,1	90	20/10	TNE-T120	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
400	300	L400-T	26,1	100	20/5	TNE-T120	B15MD HT45-E B450ND-BV HT51 RH50 B500 B500ND HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520



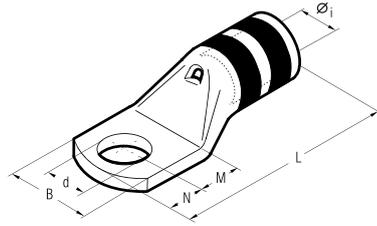
Made of electrolytic Copper tube with a purity greater than 99.9%, having the same dimensions as T-M series lugs, L-T connectors are annealed and electrolytically Tin plated. They feature an internal taper to ease the introduction of the conductor.

Details of the appropriate crimping tools and dies are shown on page 322.



# COLOUR CODED COPPER CRIMPING LUGS

for Copper conductors



C series lugs are manufactured from electrolytic Copper tube with a purity greater than 99.9%.

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, 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, terminals have to perform a reliable connection, the annealing process 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. The barrel length has been designed to allow easy and accurate positioning of the dies during the crimping operation.

Lugs are electrolytically Tin plated to avoid oxidation.

The tongue is clearly marked with wire size and die index for CEMBRE tools.

**UL listed for US and Canada per UL486A up to 35 KV.**

C series lugs are an important part of CEMBRE crimping systems for power carrying conductors.

Details of the appropriate crimping tools and dies are shown on page 321.

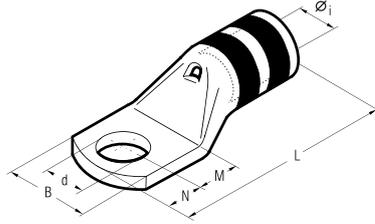
CEMBRE technicians are available to provide technical advice as required.

Please consult CEMBRE for products not listed.

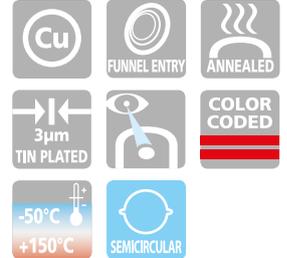
Cond. Size sqmm	Conductor		Type	Dimensions mm						Colour Code	Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
	AWG	Size		Ø Stud mm	Øi	B	M	N	L				
10	8	23	4 C8-8	4,6	10,0	5,0	4,0	22,5	4,3	RED	600/50	TN705E	B15MD
			5 C8-10	4,6	10,0	6,5	6,0	26,0	5,3		600/50		
			6 C8-14	4,6	11,0	7,0	6,0	26,5	6,4		600/50		
			8 C8-516	4,6	15,0	9,0	8,0	30,5	8,4		400/50		
			10 C8-38	4,6	18,0	11,0	10,0	34,5	10,5		600/50		
12 C8-12	4,6	19,0	14,0	12,0	39,5	13,2	600/50						
16	6	40	4 C6-8	5,8	11,5	5,0	4,0	25,5	4,3	BLUE	600/50		
			5 C6-10	5,8	11,5	6,5	6,0	29,0	5,3		600/50		
			6 C6-14	5,8	11,5	7,0	6,0	29,5	6,4		600/50		
			8 C6-516	5,8	15,0	9,0	8,0	33,5	8,4		600/50		
			10 C6-38	5,8	18,0	11,0	10,0	37,5	10,5		600/50		
12 C6-12	5,8	20,0	14,0	12,0	43,5	13,2	400/50						
25	4	40	4 C4-8	6,2	12,5	5,0	4,0	25,5	4,3	GREY	600/50		
			5 C4-10	6,2	12,5	6,5	6,0	29,0	5,3		600/50		
			6 C4-14	6,2	12,5	7,0	6,0	29,5	6,4		600/50		
			8 C4-516	6,2	15,0	9,0	8,0	33,5	8,4		600/50		
			10 C4-38	6,2	18,0	11,0	10,0	37,5	10,5		400/50		
12 C4-12	6,2	20,0	14,0	12,0	42,5	13,2	400/50						
	3	50	4 C3-8	7,0	14,0	5,0	4,0	28,0	4,3	WHITE	600/50		
			5 C3-10	7,0	14,0	6,5	6,0	31,5	5,3		600/50		
			6 C3-14	7,0	14,0	7,0	6,0	32,0	6,4		600/50		
			8 C3-516	7,0	15,0	9,0	8,0	36,0	8,4		600/50		
			10 C3-38	7,0	18,0	11,0	10,0	40,0	10,5		400/50		
12 C3-12	7,0	21,0	14,0	12,0	45,0	13,2	400/50						
35	2	60	5 C2-10	7,6	17,0	6,5	6,0	33,0	5,3	BROWN	400/50		
			6 C2-14	7,6	17,0	7,0	6,0	33,5	6,4		400/50		
			8 C2-516	7,6	17,0	9,0	8,0	37,5	8,4		400/50		
			10 C2-38	7,6	19,0	11,0	10,0	41,5	10,5		400/50		
			12 C2-12	7,6	21,0	14,0	12,0	46,5	13,2		200/50		
	1	75	6 C1-14	8,9	17,0	7,0	6,0	34,5	6,4	GREEN	400/50		
			8 C1-516	8,9	17,0	9,0	8,0	38,5	8,4		400/50		
			10 C1-38	8,9	19,0	11,0	10,0	42,5	10,5		200/50		
			12 C1-12	8,9	21,0	14,0	12,0	47,5	13,2		200/50		
			6 C1/0-14	10,0	19,0	8,0	7,0	40,5	6,4		200/25		
50	1/0	100	8 C1/0-516	10,0	19,0	9,0	8,0	42,5	8,4	PINK	200/25		
			10 C1/0-38	10,0	20,0	11,0	10,0	46,5	10,5		200/25		
			12 C1/0-12	10,0	21,0	14,0	12,0	51,5	13,2		200/25		
			14 C1/0-916	10,0	25,0	16,0	14,0	55,5	15,0		200/25		
			16 C1/0-58	10,0	26,0	18,0	16,0	59,5	17,0		200/25		
70	2/0	125	6 C2/0-14	11,3	21,0	8,0	7,0	44,0	6,4	BLACK	200/25		
			8 C2/0-516	11,3	21,0	9,0	8,0	46,0	8,4		200/25		
			10 C2/0-38	11,3	21,0	11,0	10,0	50,0	10,5		200/25		
			12 C2/0-12	11,3	22,0	14,0	12,0	55,0	13,2		200/25		
			14 C2/0-916	11,3	25,0	16,0	14,0	59,0	15,0		100/25		
			16 C2/0-58	11,3	26,0	18,0	16,0	63,0	17,0		100/25		
			20 C2/0-34	11,3	29,5	22,0	20,0	75,0	21,0		100/25		
95	3/0	150	6 C3/0-14	12,4	23,0	8,0	7,0	45,0	6,4	ORANGE	200/25		
			8 C3/0-516	12,4	23,0	9,0	8,0	47,0	8,4		100/25		
			10 C3/0-38	12,4	23,0	11,0	10,0	51,0	10,5		100/25		
			12 C3/0-12	12,4	24,0	14,0	12,0	56,0	13,2		100/25		
			14 C3/0-916	12,4	27,0	16,0	14,0	60,0	15,0		100/25		
			16 C3/0-58	12,4	28,0	18,0	16,0	64,0	17,0		100/25		
			20 C3/0-34	12,4	31,5	22,0	20,0	72,0	21,0		100/25		

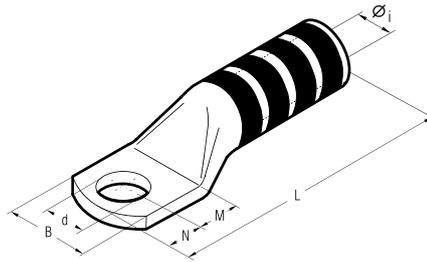
# COLOUR CODED COPPER CRIMPING LUGS

for Copper conductors



Cond. Size sqmm	Sez. Cond. AWG		Ø Stud mm	Type	Dimensions mm						Colour Code	Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
	Size	Navy			Øi	B	M	N	L	d				
4/0	200		6	C4/0-14	13,5	25,0	8,0	7,0	50,5	6,4	PURPLE	100/25	TNI20SE	HT51 RH50 B500ND HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
			8	C4/0-516	13,5	25,0	9,0	8,0	52,5	8,4		100/25		
			10	C4/0-38	13,5	25,0	11,0	10,0	56,5	10,5		100/25		
			12	C4/0-12	13,5	25,0	14,0	12,0	61,5	13,2		100/25		
			14	C4/0-916	13,5	25,0	16,0	14,0	65,5	15,0		100/25		
			16	C4/0-58	13,5	27,0	18,0	16,0	69,5	17,0		50/25		
120	250	MCM	20	C4/0-34	13,5	29,5	22,0	20,0	77,5	21,0	50/25			
			6	C250-14	15,2	28,5	8,0	7,0	52,0	6,4	100/25			
			8	C250-516	15,2	28,5	9,0	8,0	54,0	8,4	100/25			
			10	C250-38	15,2	28,5	11,0	10,0	58,0	10,5	100/25			
			12	C250-12	15,2	28,5	14,0	12,0	63,0	13,2	50/25			
			14	C250-916	15,2	28,5	16,0	14,0	67,0	15,0	50/25			
150	300	MCM	16	C250-58	15,2	28,5	18,0	16,0	71,0	17,0	50/25			
			20	C250-34	15,2	30,0	22,0	20,0	79,0	21,0	50/25			
			22	C250-78	15,2	32,0	24,0	23,0	84,0	23,0	50/25			
			8	C300-516	16,7	31,5	13,0	11,0	69,0	8,4	40/10			
			10	C300-38	16,7	31,5	13,0	11,0	69,0	10,5	40/10			
			12	C300-12	16,7	31,5	16,0	14,0	75,0	13,2	40/10			
185	350	MCM	14	C300-916	16,7	31,5	18,0	16,0	79,0	15,0	40/10			
			16	C300-58	16,7	31,5	19,0	17,0	81,0	17,0	40/10			
			20	C300-34	16,7	31,5	22,0	20,0	87,0	21,0	40/10			
			22	C300-78	16,7	31,5	24,0	23,0	92,0	23,0	40/10			
			10	C350-38	17,6	33,0	13,0	11,0	70,5	10,5	40/20			
			12	C350-12	17,6	33,0	16,0	14,0	76,5	13,2	40/20			
400	400	MCM	14	C350-916	17,6	33,0	18,0	16,0	80,5	15,0	40/20			
			16	C350-58	17,6	33,0	19,0	17,0	82,5	17,0	40/20			
			20	C350-34	17,6	33,0	22,0	20,0	88,5	21,0	40/20			
			22	C350-78	17,6	37,0	24,0	23,0	93,5	23,0	30/15			
			10	C400-38	19,2	35,5	13,0	11,0	76,0	10,5	40/20			
			12	C400-12	19,2	35,5	16,0	14,0	82,0	13,2	40/20			
240	500	MCM	14	C400-916	19,2	35,5	18,0	16,0	86,0	15,0	40/20			
			16	C400-58	19,2	35,5	19,0	17,0	88,0	17,0	40/20			
			20	C400-34	19,2	35,5	22,0	20,0	94,0	21,0	40/20			
			22	C400-78	19,2	35,5	24,0	23,0	99,0	23,0	40/20			
			10	C500-38	21,1	39,0	13,0	11,0	82,0	10,5	30/15			
			12	C500-12	21,1	39,0	16,0	14,0	88,0	13,2	30/15			
300	600	MCM	14	C500-916	21,1	39,0	18,0	16,0	92,0	15,0	30/15			
			16	C500-58	21,1	39,0	19,0	17,0	94,0	17,0	30/15			
			20	C500-34	21,1	39,0	22,0	20,0	100,0	21,0	20/10			
			22	C500-78	21,1	39,0	24,0	23,0	105,0	23,0	20/10			
			12	C600-12	23,7	44,0	20,0	14,0	99,0	13,2	20/10			
			14	C600-916	23,7	44,0	22,0	16,0	103,0	15,0	20/10			
750	MCM	16	C600-58	23,7	44,0	22,0	19,0	106,0	17,0	20/10				
		20	C600-34	23,7	44,0	24,0	23,0	112	21,0	10/5				
		22	C600-78	23,7	44,0	24,0	23,0	112,0	23,0	10/5				
		12	C750-12	26,0	48,0	22,0	19,0	113,0	13,2	10/5				
			16	C750-58	26,0	48,0	22,0	19,0	113,0	17,0	10/5			
			20	C750-34	26,0	48,0	24,0	23,0	119,0	21,0	10/5			
			22	C750-78	26,0	48,0	24,0	23,0	119,0	23,0	10/5			





CL series lugs are manufactured from electrolytic Copper tube with a purity greater than 99.9%, for use in heavy duty applications.

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, terminals have to perform a reliable connection, the annealing process plays a vital role in avoiding cracking or breaks between the barrel and palm.

The long barrel provides better mechanical pull-out strength. Lugs are electrolytically Tin plated to avoid oxidation.

The tongue is clearly marked with wire size and die index for CEMBRE tools.

**UL listed for US and Canada per UL486A up to 35 KV.**

CL series lugs are an important part of CEMBRE crimping systems for power carrying conductors.

Details of the appropriate crimping tools and dies are shown on page 321.

CEMBRE technicians are available to provide technical advice as required. Please consult CEMBRE for products not listed.

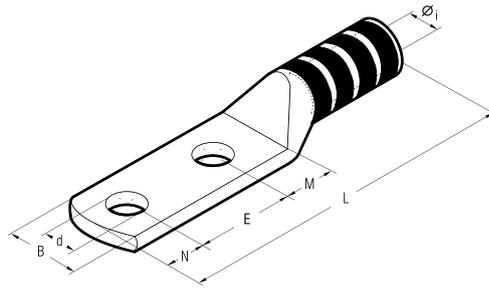
Cond. Size sqmm	Conductor AWG	Ø Stud mm	Type	Dimensions mm						Colour Code	Quantity Box/Bag	Mechanical Tools	Hydraulic Tools
				Øi	B	M	N	L	d				
10	8	23	5 CL8-10	4,6	10,0	6,5	6,0	37,5	5,3	RED	400/50	TN120SE	B15MD
			6 CL8-14	4,6	11,0	7,0	6,0	38,0	6,4		400/50		
			10 CL8-38	4,6	18,0	11,0	10,0	46,0	10,5		400/50		
16	6	60	5 CL6-10	5,8	11,5	6,5	6,0	40,0	5,3	BLUE	400/50		
			6 CL6-14	5,8	11,5	7,0	6,0	40,5	6,4		400/50		
			12 CL6-12	5,8	20,0	14,0	12,0	53,5	13,2		400/50		
25	4	40	5 CL4-10	6,2	12,5	6,5	6,0	47,0	5,3	GREY	400/50		
			6 CL4-14	6,2	12,5	7,0	6,0	47,5	6,4		400/50		
			10 CL4-38	6,2	18,0	11,0	10,0	55,5	10,5		400/50		
35	2	60	12 CL4-12	6,2	20,0	14,0	12,0	60,5	13,2	WHITE	400/50		
			6 CL3-14	7,0	14,0	7,0	6,0	47,5	6,4		200/100		
			8 CL3-516	7,0	15,0	9,0	8,0	51,5	8,4		200/100		
50	1/0	100	10 CL3-38	7,0	18,0	11,0	10,0	55,5	10,5	BROWN	200/50		
			12 CL3-12	7,0	21,0	14,0	12,0	60,5	13,2		200/100		
			5 CL2-10	7,6	17,0	6,5	6,0	46,0	5,3		200/50		
70	2/0	125	6 CL2-14	7,6	17,0	7,0	6,0	46,5	6,4	GREEN	200/50		
			8 CL2-516	7,6	17,0	9,0	8,0	50,5	8,4		200/50		
			12 CL2-12	7,6	21,0	14,0	12,0	59,5	13,2		200/50		
95	3/0	150	5 CL1-10	8,9	17,0	6,5	6,0	48,0	5,3	PINK	200/50		
			8 CL1-516	8,9	17,0	9,0	8,0	52,5	8,4		200/50		
			12 CL1-12	8,9	21,0	14,0	12,0	61,5	13,2		200/50		
120	250 MCM	250	10 CL1/0-10	10,0	19,0	8,0	7,0	53,5	5,3	BLACK	100/50		
			8 CL1/0-516	10,0	19,0	9,0	8,0	55,5	8,4		100/50		
			10 CL1/0-38	10,0	20,0	11,0	10,0	59,5	10,5		100/50		
150	300 MCM	300	12 CL1/0-12	10,0	21,0	14,0	12,0	64,5	13,2	ORANGE	100/50		
			10 CL2/0-38	11,3	21,0	11,0	10,0	67,5	10,5		100/50		
			12 CL2/0-12	11,3	22,0	14,0	12,0	72,5	13,2		100/50		
185	350 MCM	350	12 CL3/0-12	12,4	24,0	14,0	12,0	71,5	13,2	PURPLE	60/30		
			10 CL4/0-38	13,5	25,0	11,0	10,0	73,5	10,5		60/30		
			12 CL4/0-12	13,5	25,0	14,0	12,0	78,5	13,2		60/30		
240	500 MCM	500	12 CL250-12	15,2	28,5	14,0	12,0	84,0	13,2	YELLOW	50/25		
			12 CL300-12	16,7	31,5	16,0	14,0	98,0	13,2		30/15		
			12 CL350-12	17,6	33,0	16,0	14,0	98,0	13,2		30/15		
300	600 MCM	600	12 CL400-12	19,2	35,5	16,0	14,0	107,0	13,2	BLUE	20/10		
			16 CL400-58	19,2	35,5	19,0	17,0	113,0	17,0		20/10		
			12 CL500-12	21,1	39,0	16,0	14,0	108,0	13,2		20/10		
300	750 MCM	750	16 CL500-58	21,1	39,0	19,0	17,0	114,0	17,0	BROWN	20/10		
			12 CL600-12	23,7	44,0	20,0	14,0	128,5	13,2		10/5		
			16 CL600-58	23,7	44,0	22,0	19,0	135,5	17,0		10/5		
300	750 MCM	750	12 CL750-12	26,0	48,0	22,0	19,0	140,5	13,2	GREEN	10/5		
			16 CL750-58	26,0	48,0	22,0	19,0	140,5	17,0		10/5		

Also available with inspection hole.  
In case of order, add suffix IH to the part number.  
E.g.: CL250IH-12

# COLOUR CODED COPPER CRIMPING LUGS

# CL-D

double hole long barrel - for Copper conductors



Cond. Size sqmm	Conductor AWG Size	Ø Stud mm	Type	Dimensions mm							Colour Code	Quantity Box/Bag	Mechanical Tools	Hydraulic Tools						
				Øi	B	M	E	N	L	d										
10	8	23	6 CL8-D14	4,6	11,0	7,0	16,0	6,0	53,0	6,4	RED	400/50	B15MD							
			6 CL8-D141	4,6	11,0	7,0	19,0	6,0	56,0	6,4	RED	400/50								
			10 CL8-D38	4,6	18,0	11,0	25,5	10,0	70,5	10,5	RED	400/50								
16	6	40	6 CL6-D14	5,8	11,5	7,0	16,0	6,0	54,5	6,4	BLUE	400/50			B15MD					
			6 CL6-D141	5,8	11,5	7,0	19,0	6,0	57,5	6,4	BLUE	400/50								
			10 CL6-D38	5,8	18,0	11,0	25,5	10,0	72,0	10,5	BLUE	400/50								
25	4	60	12 CL6-DN	5,8	20,0	14,0	44,5	12,0	96,0	13,2	BLUE	400/50					B15MD			
			6 CL4-D14	6,2	12,5	7,0	16,0	6,0	62,0	6,4	GREY	200/50								
			6 CL4-D141	6,2	12,5	7,0	19,0	6,0	65,0	6,4	GREY	200/50								
3	50	100	12 CL4-DN	6,2	18,0	11,0	25,5	10,0	79,5	10,5	GREY	200/50							B15MD	
			10 CL3-D38	7,0	18,0	11,0	25,5	10,0	79,5	10,5	WHITE	200/50								
			12 CL3-DN	7,0	21,0	14,0	44,5	12,0	103,5	13,2	WHITE	200/50								
35	2	125	6 CL2-D14	7,6	17,0	7,0	16,0	6,0	61,0	6,4	BROWN	200/50	B15MD							
			6 CL2-D141	7,6	17,0	7,0	19,0	6,0	64,0	6,4	BROWN	200/50								
			10 CL2-D38	7,6	19,0	11,0	25,5	10,0	78,5	10,5	BROWN	100/50								
1	75	150	12 CL2-DN38	7,6	19,0	11,0	44,5	10,0	97,5	10,5	BROWN	100/50			B15MD					
			12 CL2-DN	7,6	21,0	14,0	44,5	12,0	102,5	13,2	BROWN	100/50								
			6 CL1-D14	8,9	17,0	7,0	16,0	6,0	63,0	6,4	GREEN	200/50								
50	1/0	200	6 CL1-D141	8,9	17,0	7,0	19,0	6,0	66,0	6,4	GREEN	200/50					B15MD			
			10 CL1-D38	8,9	19,0	11,0	25,5	10,0	80,5	10,5	GREEN	100/25								
			12 CL1-DN	8,9	21,0	14,0	44,5	12,0	104,5	13,2	GREEN	100/25								
70	2/0	250	6 CL1/0-D14	10,0	19,0	7,9	16,0	7,0	68,0	6,4	PINK	100/25							B15MD	
			6 CL1/0-D141	10,0	19,0	7,9	19,0	7,0	71,0	6,4	PINK	100/25								
			10 CL1/0-D38	10,0	20,0	10,9	25,5	10,0	83,5	10,5	PINK	100/25								
95	3/0	300	12 CL1/0-DN	10,0	21,0	14,0	44,5	12,0	107,5	13,2	PINK	100/25	B15MD							
			6 CL2/0-D14	11,3	21,0	7,8	16,0	7,0	76,0	6,4	BLACK	60/30								
			6 CL2/0-D141	11,3	21,0	7,8	19,0	7,0	79,0	6,4	BLACK	60/30								
120	MCM	350	10 CL2/0-D38	11,3	21,0	11,0	25,5	10,0	91,5	10,5	BLACK	60/30			B15MD					
			12 CL2/0-DN	11,3	22,0	14,0	44,5	12,0	115,5	13,2	BLACK	60/30								
			6 CL3/0-D141	12,4	23,3	8,0	19,0	7,0	82,0	6,4	ORANGE	60/30								
150	MCM	400	10 CL3/0-D38	12,4	23,3	11,0	25,5	10,0	94,5	10,5	ORANGE	60/30					B15MD			
			12 CL3/0-DN	12,4	24,0	14,0	44,5	12,0	118,5	13,2	ORANGE	60/30								
			6 CL4/0-D141	13,5	25,0	13,0	19,0	11,0	94,0	6,4	PURPLE	50/25								
185	MCM	450	10 CL4/0-D38	13,5	25,0	11,0	25,5	10,0	97,5	10,5	PURPLE	50/25							B15MD	
			10 CL4/0-DN38	13,5	25,0	11,0	44,5	10,0	116,5	10,5	PURPLE	50/25								
			12 CL4/0-DN	13,5	25,0	14,0	44,5	12,0	121,5	13,2	PURPLE	50/25								
240	MCM	500	10 CL250-D38	15,2	28,5	11,0	25,5	10,0	103,0	10,5	YELLOW	40/20	B15MD							
			12 CL250-DN	15,2	28,5	14,0	44,5	12,0	127,0	13,2	YELLOW	40/20								
			10 CL300-D38	16,7	31,5	13,0	25,5	11,0	116,0	10,5	WHITE	30/15								
300	MCM	600	12 CL300-DN	16,7	31,5	16,0	44,5	14,0	141,0	13,2	WHITE	30/15			B15MD					
			6 CL350-D141	17,6	33,0	13,0	19,0	11,0	109,5	6,4	RED	30/15								
			10 CL350-D38	17,6	33,0	13,0	25,5	11,0	116,0	10,5	RED	30/15								
300	MCM	750	12 CL350-DN	17,6	33,0	16,0	44,5	14,0	141,0	13,2	RED	30/15					B15MD			
			6 CL400-D141	19,2	35,5	13,0	19,0	11,0	118,5	6,4	BLUE	20/10								
			10 CL400-D38	19,2	35,5	13,0	25,5	11,0	125,0	10,5	BLUE	20/10								
300	MCM	900	12 CL400-DN	19,2	35,5	16,0	44,5	14,0	150,0	13,2	BLUE	20/10							B15MD	
			6 CL500-D141	21,1	39,0	13,0	19,0	11,0	119,5	6,4	BROWN	20/10								
			10 CL500-D38	21,1	39,0	13,0	25,5	11,0	126,0	10,5	BROWN	10/5								
300	MCM	1000	12 CL500-DN	21,1	39,0	16,0	44,5	14,0	151,0	13,2	BROWN	10/5	B15MD							
			10 CL600-D38	23,7	44,0	20,0	25,5	11,0	149,5	10,5	GREEN	20/5								
			12 CL600-DN	23,7	44,0	20,0	44,5	14,0	171,5	13,2	GREEN	20/5								
300	MCM	1200	10 CL750-DN38	26,0	48,0	20,0	44,5	11,0	173,5	10,5	BLACK	15/5			B15MD					
			10 CL750-D38	26,0	48,0	20,0	25,5	11,0	154,5	10,5	BLACK	15/5								
			12 CL750-DN	26,0	48,0	20,0	44,5	14,0	176,5	13,2	BLACK	15/5								



CL series lugs are manufactured from electrolytic Copper tube with a purity greater than 99.9%.

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, 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, terminals have to perform a reliable connection, the annealing process plays a vital role in avoiding cracking or breaks between the barrel and palm.

The barrel length has been designed to allow easy and accurate positioning of the dies during the crimping operation.

Lugs are electrolytically Tin plated to avoid oxidation.

The tongue is clearly marked with wire size and die index for CEMBRE tools.

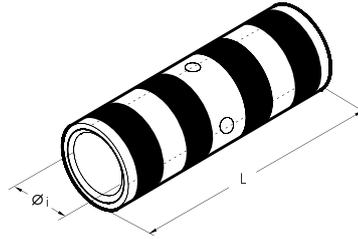
**UL listed for US and Canada per UL486A up to 35 KV.**

CL series lugs are an important part of CEMBRE crimping systems for power carrying conductors.

Details of the appropriate crimping tools and dies are shown on page 321.

CEMBRE technicians are available to provide technical advice as required.

Please consult CEMBRE for products not listed.



BSCL range of connectors are designed for jointing low voltage conductors in heavy duty applications. Made of electrolytic Copper tube with a purity greater than 99.9%, having the same dimension as C and CL series lugs, BSCL connectors are annealed and electrolytically Tin plated. They feature an internal taper at both ends to ease the introduction of the conductor and a central stop to ensure correct positioning. **UL listed for US and Canada per UL486A up to 35 KV.**

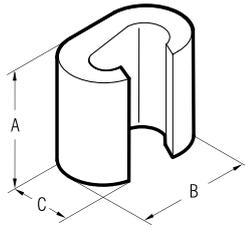
Appropriate crimping tools and dies are shown in details on page 321.

Conductor Size sqmm (AWG)	Conductor Size AWG	Type	Dimensions mm		Colour Code	Quantity Box/Bag	Mechanical Tools			Hydraulic Tools				
			Ø1	L			HN1	HN5	TN70	TN120S	B15MD	HT51 RH50 B500ND	HTT120 and tools and heads with 130 kN crimping force	ECW-HBD RHU520
10	8	BSCL8	4,6	50,5	RED	600/150	HN1	HN5	TN70	TN120S	B15MD	HT51 RH50 B500ND	HTT120 and tools and heads with 130 kN crimping force	ECW-HBD RHU520
16	6	BSCL6	5,8	50,5	BLUE	400/100								
25	4	BSCL4	6,2	60,5	GREY	200/100	HN1	HN5	TN70	TN120S	B15MD	HT51 RH50 B500ND	HTT120 and tools and heads with 130 kN crimping force	ECW-HBD RHU520
	3	BSCL3	7,0	60,5	WHITE	200/50								
35	2	BSCL2	7,6	60,5	BROWN	200/50	HN1	HN5	TN70	TN120S	B15MD	HT51 RH50 B500ND	HTT120 and tools and heads with 130 kN crimping force	ECW-HBD RHU520
	1	BSCL1	8,9	65,5	GREEN	200/50								
50	1/0	BSCL1/0	10,0	73,0	PINK	200/50	HN1	HN5	TN70	TN120S	B15MD	HT51 RH50 B500ND	HTT120 and tools and heads with 130 kN crimping force	ECW-HBD RHU520
70	2/0	BSCL2/0	11,3	79,0	BLACK	100/50								
95	3/0	BSCL3/0	12,4	79,0	ORANGE	80/40	HN1	HN5	TN70	TN120S	B15MD	HT51 RH50 B500ND	HTT120 and tools and heads with 130 kN crimping force	ECW-HBD RHU520
	4/0	BSCL4/0	13,5	85,5	PURPLE	50/25								
120	250 MCM	BSCL250	15,2	85,5	YELLOW	50/25	HN1	HN5	TN70	TN120S	B15MD	HT51 RH50 B500ND	HTT120 and tools and heads with 130 kN crimping force	ECW-HBD RHU520
150	300 MCM	BSCL300	16,7	104,5	WHITE	40/20								
185	350 MCM	BSCL350	17,6	104,5	RED	40/20	HN1	HN5	TN70	TN120S	B15MD	HT51 RH50 B500ND	HTT120 and tools and heads with 130 kN crimping force	ECW-HBD RHU520
	400 MCM	BSCL400	19,2	111,0	BLUE	20/10								
240	500 MCM	BSCL500	21,1	117,0	BROWN	20/10	HN1	HN5	TN70	TN120S	B15MD	HT51 RH50 B500ND	HTT120 and tools and heads with 130 kN crimping force	ECW-HBD RHU520
300	600 MCM	BSCL600	23,7	139,5	GREEN	20/10								
	750 MCM	BSCL750	26,0	149,0	BLACK	10/10	HN1	HN5	TN70	TN120S	B15MD	HT51 RH50 B500ND	HTT120 and tools and heads with 130 kN crimping force	ECW-HBD RHU520

# SLEEVE CONNECTORS

for Copper conductors

C-C



## tin plated version

Conductor Size sqmm		Type	Dimensions mm			Quantity Box/Bag	Mechanical Tools	Hydraulic Tools		
Run	Tap		A	B	C			HT45-E B450ND-BV HT45-E B500 B500ND HT51 RH50 RHU81	HT81-U RHU81	ECW-H3D
6÷2,5	6÷1,5	C6-C6ST*	9,0	9,8	6,4	1.000/100	HP4-C10			
10	10÷1,5	C10-C10ST*	12,0	12,6	8,4	500/100				
16	16÷1,5	C16-C16ST	17,0	19,4	12,0	500/100				
25÷16	10÷1,5	C25-C10ST	17,0	19,8	13,0	400/50				
25	25÷16	C25-C25ST	17,0	21,4	13,0	300/50				
40÷35	16÷1,5	C35-C16ST	21,0	24,6	15,4	200/25				
40÷35	40÷25	C35-C35ST	21,0	26,6	15,6	200/25				
50	25÷10									
70÷63	25÷1,5	C70-C25N-ST	21,0	26,4	17,5	200/50				
50	25÷4	C50-C25ST	25,0	32,9	21,0	100/25				
50	50÷35	C50-C50ST	26,0	33,0	21,0	100/25				
70÷50	40÷4	C70-C35ST	28,0	33,0	21,0	100/25				
70÷50	70÷35	C70-C70ST	28,0	34,0	21,0	100/25				
100÷95	40÷4	C95-C35ST	29,0	40,6	26,0	50/25				
100÷95	70÷40	C95-C70ST	29,0	41,0	26,0	50/25				
100÷95	100÷63	C95-C95ST	29,0	41,0	26,0	50/25				
125÷110	125÷25	C120-C120ST	30,0	45,0	28,0	30/15				
160÷150	125÷25	C150-C120ST	31,0	45,0	28,0	50/25				
125	125									
150	150÷63	C150-C150ST	30,0	45,0	28,0	50/25				
125	125									
185	100÷16	C185-C95ST	31,0	45,0	28,0	30/15				
185÷120	185÷120	C185-C185ST	22,6	68,0	34,0	30/15				
240÷150	120÷95	C240-C120ST	22,6	68,0	34,0	30/15				

\*Given the small size, on these connectors, only the type is engraved

## bright surface version

Conductor Size sqmm		Type	Dimensions mm			Quantity Box/Bag	Mechanical Tools	Hydraulic Tools		
Run	Tap		A	B	C			HT45-E B450ND-BV HT45-E B500 B500ND HT51 RH50 RHU81	HT81-U RHU81	ECW-H3D
6÷2,5	6÷1,5	C6-C6*	9,0	9,8	6,4	1.000/100	HP4-C10			
10	10÷1,5	C10-C10*	12,0	12,6	8,4	500/100				
16	16÷1,5	C16-C16	17,0	19,4	12,0	500/100				
25÷16	10÷1,5	C25-C10	17,0	19,8	13,0	400/50				
25	25÷16	C25-C25	17,0	21,4	13,0	300/50				
40÷35	16÷1,5	C35-C16	21,0	24,6	15,4	200/25				
40÷35	40÷25	C35-C35	21,0	26,6	15,6	200/25				
50	25÷10									
70÷63	25÷1,5	C70-C25N	21,0	26,4	17,5	200/25				
50	25÷4	C50-C25	25,0	32,9	21,0	100/25				
50	50÷35	C50-C50	26,0	33,0	21,0	100/25				
70÷50	40÷4	C70-C35	28,0	33,0	21,0	100/25				
70÷50	70÷35	C70-C70	28,0	34,0	21,0	100/25				
100÷95	40÷4	C95-C35	29,0	40,6	26,0	50/25				
100÷95	70÷40	C95-C70	29,0	41,0	26,0	50/25				
100÷95	100÷63	C95-C95	29,0	41,0	26,0	50/25				
125÷110	125÷25	C120-C120	30,0	45,0	28,0	30/15				
160÷150	125÷25	C150-C120	31,0	45,0	28,0	30/15				
125	125									
150	150÷63	C150-C150	30,0	45,0	28,0	30/15				
125	125									
185	100÷16	C185-C95	31,0	45,0	28,0	30/15				
185÷120	185÷120	C185-C185	22,6	68,0	34,0	30/15				
240÷150	120÷95	C240-C120	22,6	68,0	34,0	30/15				

\*Given the small size, on these connectors, only the type is engraved



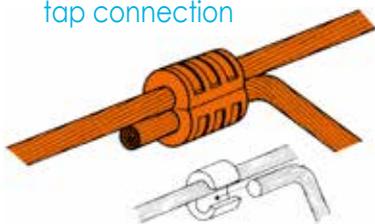
"C" connectors are manufactured from Copper profiles with a purity greater than 99.9%, and are suitable for a variety of uses either to create an earthing network or tapping off from overhead distribution lines. Each connector is marked as follows:

- CEMBRE trade mark
- Reference number
- Conductor size-Run
- Conductor size-Tap
- Number of crimps
- Die reference.

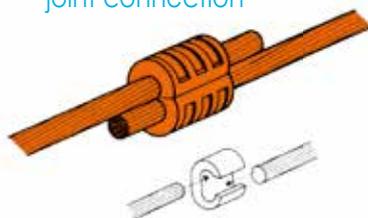
Details of the appropriate crimping tools and dies are shown on page 316.



### Example of tap connection

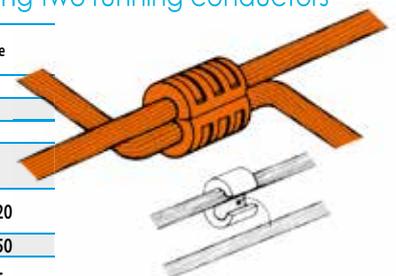


### Example of joint connection



### Example of joining two running conductors

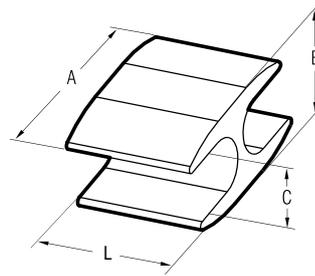
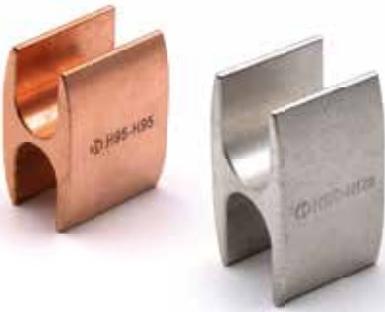
Conductor Size sqmm	Type
25-25	C35-C16
35-35	C35-C35
50-50	C70-C70
63-63	C95-C70
70-70	
95-95	C150-C120
120-120	C150-C150
120-120	C185-C95
125-125	



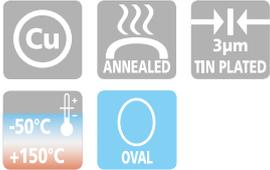
# H-H

## H CLAMPS

for Copper conductors



### tin plated version



Conductor Size mm <sup>2</sup>		Type	Dimensions mm				Quantity	Hydraulic Tools			
Run	Tap		A	B	C	L		HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU450	RHU520
70	70	H70-H70ST	34,0	17,0	10,8	28,0	25				
95	95	H95-H95ST	40,0	22,0	13,0	30,0	25				
120	120	H120-H120ST	43,0	24,0	15,5	25,0	15				

### bright surface version



Conductor Size mm <sup>2</sup>		Type	Dimensions mm				Quantity	Hydraulic Tools			
Run	Tap		A	B	C	L		HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU450	RHU520
70	70	H70-H70	34,0	17,0	10,8	28,0	25				
95	95	H95-H95	40,0	22,0	13,0	30,0	25				
120	120	H120-H120	43,0	24,0	15,5	25,0	15				

H clamps are manufactured from Copper profiles with a purity greater than 99.9%, and are suitable for a earthing systems.

Each connector is marked as follows:

- CEMBRE trade mark
- Reference number

**features:**

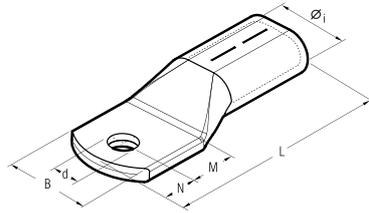
- H shape
- For Copper conductors DIN 48201
- Material: Cu ETP (CW004A) according to EN 13605
- Surface: bright and tin plated version
- Electrolytically tin plated to avoid oxidation; min 3µm

Details of the appropriate crimping tools and dies are shown on page 316.

# TWIN CABLE TERMINAL LUGS FOR ROUND CONDUCTORS

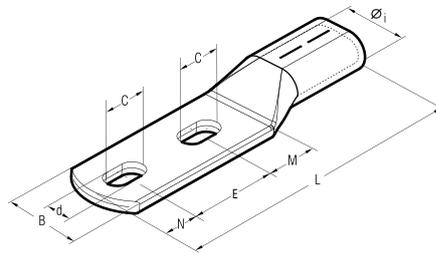
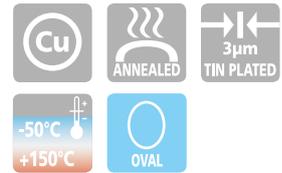
DK

for Copper conductors



with an M12 hole

Conductor Size mm <sup>2</sup>	Type	Dimensions mm						Quantity	Hydraulic Tools		
		Øi	B	M	N	L	d		HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU450
2 x 50	DK50-M12	20,6x10,75	34,0	22,0	14,5	93,5	13,0	10			
2 x 70	DK70-M12	23,0x12,0	37,0	22,0	14,5	97,5	13,0	10			
2 x 95	DK95-M12	26,5x12,8	42,0	23,0	16,0	108,0	13,0	10			
2 x 120	DK120-M12	29,5x15,5	48,0	24,0	14,5	115,5	13,0	5			



with 2 elongated holes

Conductor Size mm <sup>2</sup>	Type	Dimensions mm								Quantity	Hydraulic Tools		
		Øi	B	M	N	E	L	C	d		HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU450
2 x 70	DK70-2M12-51AS	23,0x12,0	37,0	25,5	21,5	51,0	159,0	24,0	13,0	10			
2 x 95	DK95-2M12-51AS	26,5x12,8	42,0	25,5	21,5	51,0	167,0	24,0	13,0	10			
2 x 120	DK120-2M12-51AS	29,5x15,5	48,0	25,5	21,5	51,0	175,0	24,0	13,0	10			

DK compression cable lugs are made from Copper tube with a purity greater than 99.9% and are suitable for the compression of 2 round conductors.

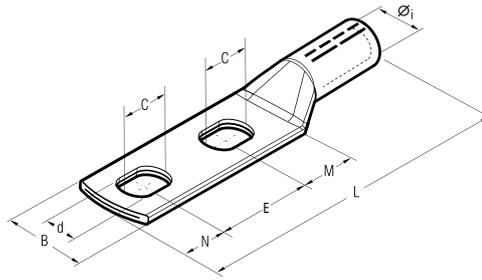
Cable lugs with an M12 hole or with 2 elongated holes are available (see tables). The elongated holes 2xM12 allow easy assembly with different fastening points. This enables flexible use in earthing systems.

**features:**

- For copper conductors DIN 48201
- Material: Cu ETP (CW004A) according to EN13605
- Electrolytically tin plated to avoid oxidation; min 3µm
- Marking: CEMBRE logo; Type, die type (MRD ..- C); Press positions

Details of the appropriate crimping tools and dies are shown on page 316.

for Copper conductors



with 2 elongated holes



DR compression cable lugs are made from Copper tube with a purity greater than 99.9%. They are available with 2 slotted holes (see tables). The slotted holes 2xM12 enable easy installation with different attachment points.

**features:**

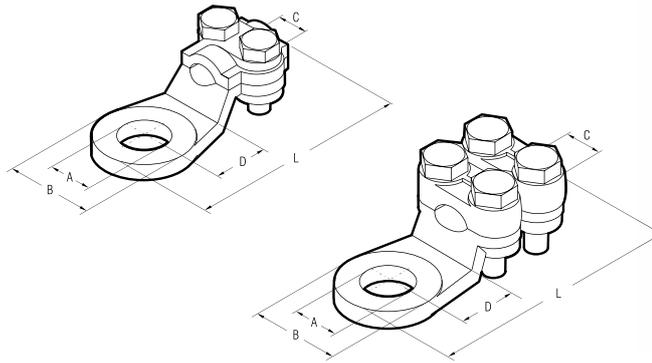
- For copper conductors DIN 48201
- Material: Cu ETP (CW004A) according to EN13605
- Electrolytically tin plated to avoid oxidation; min 3µm
- Marking: CEMBRE logo; Type, die type (MK.); Press positions

Details of the appropriate crimping tools and dies are shown on page 316.

Conductor Size sqmm	Type	Dimensions mm								Quantity	Mechanical Tools	Hydraulic Tools								
		Øi	B	M	N	E	L	C	d											
70	DR70-2M12-51AS	11,5	24,0	25,5	21,5	51,0	140,0	24,0	13,0	10	TNE-D50	TNE-D120	HT45-E	B450ND-BV	B500ND	B600CND	B600CND	HT120 and tools and heads with 130 kN crimping force	ECW-H3D	RHU520
95	DR95-2M12-51AS	13,5	28,0	25,5	21,5	51,0	150,0	24,0	13,0	10	TNE-D120		HT45-E	B450ND-BV	B500ND	B600CND	B600CND		ECW-H3D	RHU520
120	DR120-2M12-51AS	15,5	32,0	25,5	21,5	51,0	151,0	24,0	13,0	10	TNE-D120		HT45-E	B450ND-BV	B500ND	B600CND	B600CND		ECW-H3D	RHU520

## MECHANICAL FIXING LUGS

21..



### 2 bolt fixing lugs

Conductor Size sqmm	Type	Clamping Bolt		Ø A Bolt	Dimensions mm				Quantity
		Ø	Torque Ratio Nm		B	C	D	L	
16	2155	M5	3	M8	18,0	4,5	12,5	39	100
16	2171	M5	3	M10	18,0	4,5	12,5	39	100
25	2156	M5	3	M8	19,5	6,0	13,0	43	100
25	2172	M5	3	M10	19,5	6,0	13,0	43	100
35	2157	M5	3	M12	23,0	7,0	15,0	49	50
35	2173	M5	3	M14	23,0	7,0	15,0	49	50
50	2174	M6	5	M14	25,0	8,0	17,0	56	50



Material:  
Brass CB754S EN 1982 Nickel plated.  
Zinc plated Steel bolts.

### 4 bolt fixing lugs

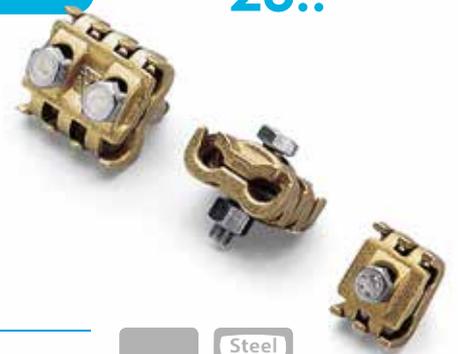
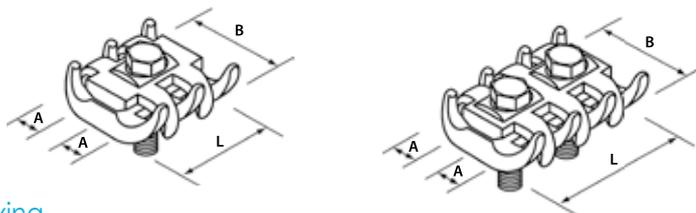
Conductor Size sqmm	Type	Clamping Bolt		Ø A Bolt	Dimensions mm				Quantity
		Ø	Torque Ratio Nm		B	C	D	L	
50	2158	M6	5	M12	23,5	8	16,0	57	50
75	2160	M6	5	M12	28,0	10	20,0	65	25
75	2176	M6	5	M16	28,0	10	20,0	65	25
100	2161*	M6	5	M12	31,0	13	17,0	66	25
125	2162*	M7	10	M15	33,0	14	18,0	71	25
150	2163*	M7	10	M14	34,0	16	19,5	75	25
175	2164*	M7	10	M15	36,0	16	21,0	78	25



\* Versions with U-bolts in bent steel

## CABLE CLAMPS

23..



### Single bolt fixing

Conductor Size sqmm	Type	Clamping Bolt		A for Cable mm	Dimensions mm		Quantity
		Ø	Torque Ratio Nm		B	L	
6÷16	2323	M6	8	3÷ 5	24	20,0	50
16÷50	2326	M8	15	5÷ 8	32	28,4	50
35÷70	2329	M8	15	7÷12	40	30,0	25

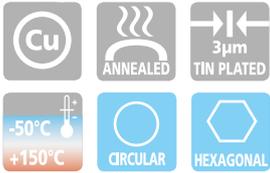
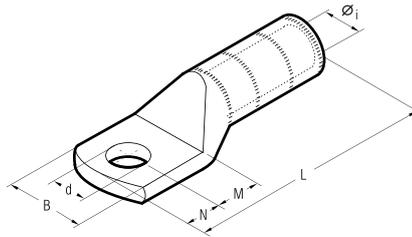


### 2 bolt fixing

Conductor Size sqmm	Type	Clamping Bolt		A for Cable mm	Dimensions mm		Quantity
		Ø	Torque Ratio Nm		B	L	
6÷16	2333	M6	8	3÷ 5	24,5	30	50
16÷50	2336	M8	15	5÷ 8	32,0	40	50
35÷70	2339	M8	15	7÷12	40,0	44	25
50÷95	2342	M10	35	8÷14	48,0	48	10
95÷150	2344	M10	35	12÷16	51,0	53	10
150÷300	2346*	M12	60	16÷22	66,0	66	5

Material:  
Brass CB754S EN 1982  
White zinc plated Steel bolts.  
White zinc plated Steel nuts.

\* Stainless Steel bolts



Series CA-M and 2A-M terminals are designed for medium voltage applications up to 35 kV. They are manufactured from Copper tube with a purity greater than 99.9%, annealed and Tin plated. The extended barrel enhances both electrical and mechanical performance. The absence of an inspection hole prevents moisture entry into the crimped joint and makes these terminals suitable for outdoor applications. Details of the appropriate crimping tools and dies are shown on page 317.

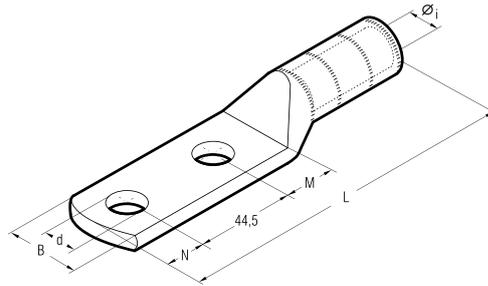
Conductor Size (sqmm) & Format	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Hydraulic Tools	
			Øi	B	M	N	L	d			
25 R/BR/BS*	8	CA25-M8	6,8	14,0	9,0	8,0	65,0	8,4	300/50	HT45-E	B450ND-BV
	10	CA25-M10	6,8	18,0	13,0	11,0	72,0	10,5	200/50		
	12	CA25-M12	6,8	21,0	16,0	14,0	78,0	13,2	150/50		
30 RC/S ÷ 40 S	12	CA40S-M12	8,2	21,0	16,0	14,0	79,0	13,2	100/50	HT45-E	B450ND-BV
	16	CA40S-M16	8,2	26,0	19,0	17,0	85,0	17,0	100/50		
35 BR/BS*	10	CA35-M10	8,3	21,0	13,0	11,0	73,0	10,5	150/50	HT45-E	B450ND-BV
	12	CA35-M12	8,3	21,0	16,0	14,0	79,0	13,2	150/50		
	16	CA35-M16	8,3	26,0	19,0	17,0	85,0	17,0	150/50		
50 RC	12	CA50R-M12	8,7	20,5	16,0	14,0	79,0	13,2	100/50	HT45-E	B450ND-BV
50 S	12	CA50S-M12	9,5	21,0	16,0	14,0	79,0	13,2	100/50		
	16	CA50S-M16	9,5	26,0	19,0	17,0	85,0	17,0	100/50		
50 BR/BS*	10	CA50-M10	9,5	21,0	13,0	11,0	73,0	10,5	150/50	HT45-E	B450ND-BV
	12	CA50-M12	9,5	21,0	16,0	14,0	79,0	13,2	150/50		
	14	CA50-M14	9,5	25,0	18,0	16,0	83,0	15,0	100/50		
	16	CA50-M16	9,5	26,0	19,0	17,0	85,0	17,0	100/50		
63 S ÷ 70 S	12	CA70S-M12	11,0	28,0	16,0	14,0	81,2	13,2	30/15	HT51	RH50
	16	CA70S-M16	11,0	30,0	19,0	17,0	87,2	17,0	50/25		
70 BR/BS*	10	CA70S-M10	11,0	26,0	13,0	11,0	75,2	10,5	50/25	HT51	RH50
	12	CA70S-M12	11,0	28,0	16,0	14,0	81,2	13,2	30/15		
	14	CA70S-M14	11,0	28,0	18,0	16,0	85,2	15,0	50/25		
	16	CA70S-M16	11,0	30,0	19,0	17,0	87,2	17,0	50/25		
80 S ÷ 95 RC	12	CA95R-M12	12,0	28,0	16,0	14,0	91,0	13,2	30/15	HT51	RH50
	14	CA95R-M14	12,0	29,0	18,0	16,0	95,0	15,0	50/25		
95 S ÷ 100 S	12	CA95S-M12	13,5	28,0	16,0	14,0	91,0	13,2	30/15	HT51	RH50
	14	CA95S-M14	13,5	29,0	18,0	16,0	94,5	15,0	50/25		
	16	CA95S-M16	13,5	30,0	20,0	17,0	97,0	17,0	50/25		
95 BR/BS*	10	CA95-M10	13,5	28,0	13,0	11,0	85,0	10,5	50/25	HT51	RH50
	12	CA95-M12	13,5	28,0	16,0	14,0	91,0	13,2	50/25		
16	CA95-M16	13,5	30,0	20,0	17,0	97,0	17,0	50/25			
120 RC/S ÷ 150 RC	12	CA150R-M12	15,0	31,0	16,0	14,0	97,0	13,2	30/15	HT51	RH50
	14	CA150R-M14	15,0	31,0	18,0	16,0	101,0	15,0	30/15		
120 BR/BS*	12	CA120-M12	15,0	31,0	16,0	14,0	97,0	13,2	30/15	HT51	RH50
	16	CA120-M16	15,0	31,0	19,0	17,0	103,0	17,0	30/15		
150 S ÷ 160 RC	12	CA150S-M12	16,5	32,0	16,0	14,0	97,0	13,2	30/15	HT51	RH50
	14	CA150S-M14	16,5	32,0	18,0	16,0	101,0	15,0	30/15		
150 BR/BS*	12	CA150-M12	16,5	32,0	16,0	14,0	97,0	13,2	30/15	HT51	RH50
	16	CA150-M16	16,5	32,0	19,0	17,0	103,0	17,0	30/15		
160 S ÷ 200 RC	14	CA200R-M14	17,0	32,5	18,0	16,0	101,0	15,0	30/15	HT51	RH50
185 BR/BS*	12	CA185-M12	18,0	33,5	16,0	14,0	97,0	13,2	30/15		
	16	CA185-M16	18,0	33,5	19,0	17,0	103,0	17,0	30/15		
200 S ÷ 240 RC	14	CA240R-M14	19,2	43,0	18,0	16,0	107,0	15,0	15/5	HT51	RH50
240 S ÷ 315 RC	14	CA315R-M14	21,5	43,0	18,0	16,0	105,0	15,0	15/5		
	12	CA240-M12	20,5	42,0	16,0	14,0	103,0	13,2	15/5		
240 BR/BS*	16	CA240-M16	20,5	42,0	19,0	17,0	109,0	17,0	15/5	HT51	RH50
	20	CA240-M20	20,5	42,0	22,0	20,0	115,0	21,0	15/5		
300 BR/BS*	12	CA300-M12	23,0	43,5	16,0	14,0	109,5	13,2	15/5	HT51	RH50
	16	CA300-M16	23,0	43,5	19,0	17,0	115,5	17,0	15/5		
	20	CA300-M20	23,0	43,5	22,0	20,0	121,5	21,0	15/5		
315 S	14	CA315S-M14	23,7	44,0	18,0	16,0	105,0	15,0	15/5	HT51	RH50

Conductor Format: R = Round, RC = Round Compact, S = Sector, BR = BS EN 60228 Round, BS\* = BS EN 60228 size - Sector shaped  
 \* = Pre-rounding required, consult CEMBRE for appropriate die set

# MEDIUM VOLTAGE COPPER TERMINALS

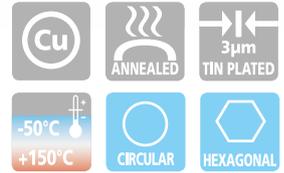
# CA-2M

two hole fixing



Conductor Size (sqmm) & Format	Ø Stud mm	Type	Dimensions mm					Quantity Box/Bag	Hydraulic Tools	
			Øi	B	M	N	L			d
25 R	8	CA25-2M8	6,8	14,0	10,0	11,0	113,5	8,4	200/50	HT45-E B450ND-BV HT51 RH50 B500ND B550 HT81-U RHU81 HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
	12	CA25-2M12	6,8	21,0	16,0	14,0	122,5	13,2	100/50	
25 BR/BS*	8	CA25-2M8	6,8	14,0	10,0	11,0	113,5	8,4	200/50	
	10	CA25-2M10	6,8	18,0	13,0	11,0	116,5	10,5	150/50	
30 RC/S ÷ 40 S	12	CA40S-2M12	6,8	21,0	16,0	14,0	122,5	13,2	150/50	
	12	CA40S-2M12	8,2	21,5	16,0	14,0	123,5	13,2	100/50	
35 BR/BS*	12	CA35-2M12	8,3	21,5	16,0	14,0	123,5	13,2	100	
50 RC	12	CA50R-2M12	8,7	20,5	16,0	14,0	123,5	13,2	100/50	
50 S	12	CA50S-2M12	9,5	21,0	16,0	14,0	123,5	13,2	100/50	
50 BR/BS*	12	CA50-2M12	9,5	21,0	16,0	14,0	123,5	13,2	90/3	
63 S ÷ 70 S	12	CA70S-2M12	11,0	27,0	16,0	14,0	125,5	13,2	50/25	
70 BR/BS*	12	CA70S-2M12	11,0	27,0	16,0	14,0	125,5	13,2	50/25	
80 S ÷ 95 RC	14	CA95R-2M14	12,0	28,0	18,0	16,0	139,5	15,0	30/15	
95 S ÷ 100 S	14	CA95S-2M14	13,5	29,0	18,0	16,0	139,5	15,0	30/15	
95 BR/BS*	12	CA95-2M12	13,5	28,0	16,0	14,0	135,5	13,2	30/15	
120 RC/S ÷ 150 RC	14	CA150R-2M14	15,0	31,0	18,0	16,0	145,5	15,0	30/15	
120 BR/BS*	12	CA120-2M12	15,0	31,0	16,0	14,0	141,5	13,2	30/15	
150 S ÷ 160 RC	14	CA150S-2M14	16,5	32,0	18,0	16,0	145,5	15,0	30/15	
150 BR/BS*	12	CA150-2M12	16,5	32,0	16,0	14,0	141,5	13,2	30/15	
160 S ÷ 200 RC	14	CA200R-2M14	17,0	32,5	18,0	16,0	145,0	15,0	30/15	
185 BR/BS*	12	CA185-2M12	18,0	32,5	16,0	14,0	141,5	13,2	30/15	
200 S ÷ 240 RC	14	CA240R-2M14	19,2	43,0	18,0	16,0	151,5	15,0	15/5	
240 S ÷ 315 RC	14	CA315R-2M14	21,5	43,0	18,0	16,0	149,5	15,0	20/5	
240 BR/BS*	12	CA240-2M12	20,5	43,0	16,0	14,0	147,5	13,2	15/5	
300 BR/BS*	12	CA300-2M12	23,0	43,0	16,0	14,0	145,5	13,2	15/5	
315 S	14	CA315S-2M14	23,7	44,0	18,0	16,0	149,5	15,0	20/5	

Conductor Format: R = Round, RC = Round Compact, S = Sector, BR = BS EN 60228 Round, BS\* = BS EN 60228 size - Sector shaped  
 \* = Pre-rounding required, consult CEMBRE for appropriate die set



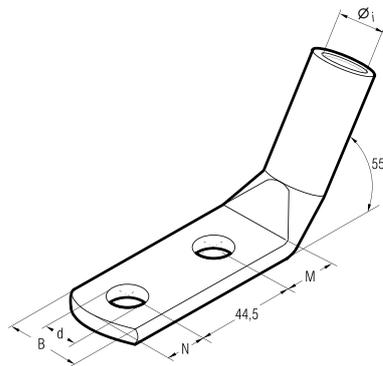
CA-2M and 2A-2M Copper Tube Terminal Lugs are designed for medium voltage applications up to 35 kV. Manufactured from Copper tube with a purity greater than 99.9%, annealed and Tin plated. The extended barrel enhances electrical and mechanical performance.

The absence of an inspection hole prevents moisture entry into the crimped joint. Featuring an extended palm with two fixing holes at 44.5 mm centres.

Details of the appropriate crimping tools and dies are shown on page 317.

# MEDIUM VOLTAGE COPPER TERMINALS

palm bent at 55° - two hole fixing



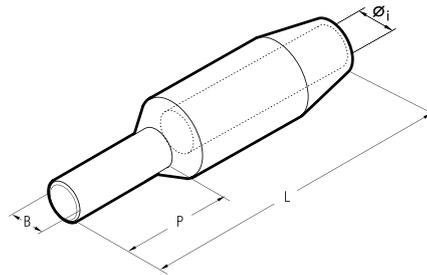
Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm					Quantity Box/Bag	Hydraulic Tools
			Øi	B	M	N	d		
400 R	14	2A80-2M14/55	27,0	51,0	22	16	15	10/5	HT120 and tools and heads with 130 kN crimping force ECW-H3D RHU520
600 R ÷ 630 R	14	2A120-2M14/55	33,4	61,5	22	16	15	15/3	

R = Round conductors



The 2A-2M/55° Copper Tube Terminal Lugs have the same characteristics as the CA-2M and 2A-2M ranges, with the additional feature of the palm bent at 55°.

Details of the appropriate crimping tools and dies are shown on page 317.



MT-C series connectors are designed for medium voltage applications up to 35 kV.

They are manufactured from Copper with a purity greater than 99.9%, annealed and Tin plated.

The extended barrel enhances both electrical and mechanical performance.

The stalk or pin makes these connectors ideal for terminating conductors into contact blocks.

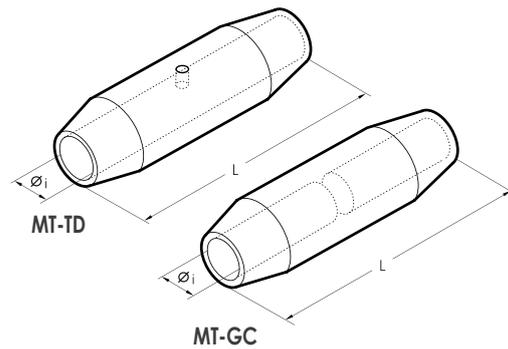
Details of the appropriate crimping tools and dies are shown on page 317.

Conductor Size (sqmm) & Format	Type	Dimensions mm				Quantity Box/Bag	Hydraulic Tools																								
		Øi	B	P	L																										
25 R	MT25-C8	6,8	8,0	35,0	80,0	90/3	HT45-E	B450ND-BV																							
	MT40S-C8	8,2	8,0	35,0	80,0	90/3																									
30 RC/S ÷ 40 S	MT40S-C10	8,2	10,0	35,0	80,0	90/3						HT51	RH50	B500	ND	B550															
	MT40S-C14-80	8,2	14,0	80,0	123,0	30/3																									
35 BR/BS*	MT35-C8	8,2	8,0	35,0	80,0	90/3											HT81-U	RHU81													
	MT35-C10	8,2	10,0	35,0	80,0	90/3																									
50 RC	MT35-C14-80	8,2	14,0	80,0	123,0	30/3																HT120	and tools and heads with 130 kN crimping force								
	MT50R-C8	8,8	8,0	35,0	80,0	90/3																									
50 RC	MT50R-C10	8,8	10,0	35,0	80,0	90/3																					ECW-H3D				RHU520
	MT50S-C8	9,5	8,0	35,0	80,0	90/3																									
50 S	MT50S-C10	9,5	10,0	35,0	80,0	90/3																									
	MT50S-C14-80	9,5	14,0	80,0	123,0	30/3																									
50 BR/BS*	MT50-C8	9,5	8,0	35,0	80,0	90/3																									
	MT50-C10	9,2	10,0	35,0	80,0	90/3																									
63 S ÷ 70 S	MT50-C14-80	9,5	14,0	80,0	123,0	90/3																									
	MT70S-C10	11,2	10,0	35,0	90,0	30/3																									
70 BR/BS*	MT70-C10	11,2	10,0	35,0	90,0	30/3																									
	MT95R-C10	12,0	10,0	45,0	110,0	60/3																									
80 S ÷ 95 RC	MT95R-C12	12,0	12,0	45,0	110,0	60/3																									
	MT95S-C10	13,5	10,0	45,0	110,0	60/3																									
95 S ÷ 100 S	MT95S-C12	13,5	12,0	45,0	110,0	60/3																									
	MT95S-C14-80	13,5	14,0	80,0	145,0	60/3																									
95 BR/BS*	MT95-C10	13,5	10,0	45,0	110,0	60/3																									
	MT95-C12	13,5	12,0	45,0	110,0	60/3																									
120 RC/S ÷ 150 RC	MT95-C14-80	13,5	14,0	80,0	145,0	60/3																									
	MT150R-C12	15,0	12,0	45,0	110,0	60/3																									
120 BR/BS*	MT150R-C16	15,0	16,0	45,0	110,0	30/3																									
	MT120-C12	15,0	12,0	45,0	110,0	60/3																									
150 S ÷ 160 RC	MT120-C16	15,0	16,0	45,0	110,0	60/3																									
	MT150S-C12	16,5	12,0	45,0	110,0	60/3																									
150 BR/BS*	MT150S-C14-80	16,5	14,0	80,0	145,0	45/3																									
	MT150S-C16	16,5	16,0	45,0	110,0	30/3																									
150 BR/BS*	MT150-C10	16,5	10,0	45,0	110,0	60/3																									
	MT150-C12	16,5	12,0	45,0	110,0	60/3																									
160 S ÷ 200 RC	MT150-C14-80	16,5	14,0	80,0	145,0	45/3																									
	MT150-C16	16,5	16,0	45,0	110,0	60/3																									
185 BR/BS*	MT200R-C10	17,0	10,0	45,0	110,0	30/3																									
	MT200R-C16	17,0	16,0	45,0	110,0	30/3																									
200 S ÷ 240 RC	MT185-C10	18,0	10,0	45,0	110,0	30/3																									
	MT185-C16	18,0	16,0	45,0	110,0	30/3																									
240 S ÷ 315 RC	MT240R-C12	19,5	12,0	50,0	115,0	30/3																									
	MT240R-C16	19,5	16,0	50,0	115,0	30/3																									
240 BR/BS*	MT315R-C16	21,5	16,0	50,0	115,0	30/3																									
	MT240-C12	20,5	12,0	45,0	110,0	30/3																									
300 BR/BS*	MT240-C16	20,5	16,0	50,0	115,0	30/3																									
	MT300-C16	23,0	16,0	50,0	115,0	30/3																									
315 S	MT315S-C16	24,0	16,0	60,0	130,0	30/3																									

Conductor Format: R = Round, RC = Round Compact, S = Sector, BR = BS EN 60228 Round, BS\* = BS EN 60228 size - Sector shaped  
 \* = Pre-rounding required, consult CEMBRE for appropriate die set

# MEDIUM VOLTAGE COPPER THROUGH CONNECTORS

## MT-TD MT-GC



Conductor Size (sqmm) & Format	Type	Type	Dimensions mm		Quantity Box/Bag	Hydraulic Tools			
			ø1	L		HT45-E B450ND-BV	HT51 RH50 B500E B500ND B550	HT81-U RHU81	ECW-H3D RHU520
25 R/BR/BS*	MT25-TD	MT25-GC	6,8	60,0	90/3	HT120 and tools and heads with 130 kN crimping force			
30 RC/S ÷ 40 S	MT40S-TD	MT40S-GC	8,2	60,0	90/3				
30 BR/BS*	MT35-TD	MT35-GC	8,2	60,0	90/3				
50 RC	MT50R-TD	MT50R-GC	8,7	60,0	90/3				
50 S	MT50S-TD	MT50S-GC	9,5	60,0	90/3				
50 BR/BS*	MT50-TD	MT50-GC	9,5	60,0	90/3				
63 S ÷ 70 S	MT70S-TD	MT70S-GC	11,0	70,0	30/3				
70 BR/BS*	MT70-TD	MT70-GC	11,0	70,0	30/3				
80 S ÷ 95 RC	MT95R-TD	MT95R-GC	12,0	80,0	30/3				
95 S ÷ 100 S	MT95S-TD	MT95S-GC	13,5	80,0	30/3				
95 BR/BS*	MT95-TD	MT95-GC	13,5	80,0	30/3				
120 RC/S ÷ 150 RC	MT150R-TD	MT150R-GC	15,0	80,0	30/3				
120 BR/BS*	MT120-TD	MT120-GC	15,0	80,0	30/3				
150 S ÷ 160 RC	MT150S-TD	MT150S-GC	16,5	80,0	30/3				
150 BR/BS*	MT150-TD	MT150-GC	16,5	80,0	30/3				
160 S ÷ 200 RC	MT200R-TD	MT200R-GC	17,0	100,0	30/3				
185 BR/BS*	MT185-TD	MT185-GC	18,0	100,0	30/3				
200 S ÷ 240 RC	MT240R-TD	MT240R-GC	19,2	100,0	21/3				
240 S ÷ 315 RC	MT315R-TD	MT315R-GC	21,5	100,0	21/3				
240 BR/BS*	MT240-TD	MT240-GC	20,5	100,0	30/3				
300 BR/BS*	MT300-TD	MT300-GC	23,0	100,0	30/3				
315 S	MT315S-TD	MT315S-GC	23,7	100,0	21/3				
400 BR/BS*	MT400-TD	MT400-GC	27,0	120,0	15/3				
500 R	MT500-TD		30,3	118,0	12/3				
600 R ÷ 630 R	MT630-TD		33,4	130,0	9/3				

Conductor Format: R = Round, RC = Round Compact, S = Sector, BR = BS EN 60228 Round, BS\* = BS EN 60228 size - Sector shaped  
\* = Pre-rounding required, consult CEMBRE for appropriate die set



MT-TD and MT-GC series connectors are designed to join conductors in medium voltage applications up to 35 kV.

They are manufactured from Copper with a purity greater than 99.9%, annealed and Tin plated.

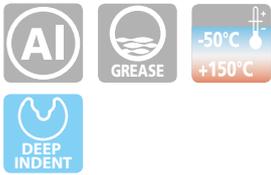
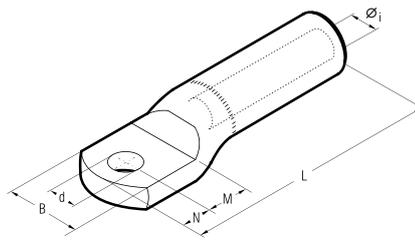
MT-GC series feature a solid stop which forms a barrier between the two conductors being joined, this prevents the migration of oils or greases, which may be present, in one cable contaminating the other cable.

MT-TD connectors are unblocked and are suitable for joining cables of the same type.

Details of the appropriate crimping tools and dies are shown on page 317.

# AA-M

# ALUMINIUM TERMINALS



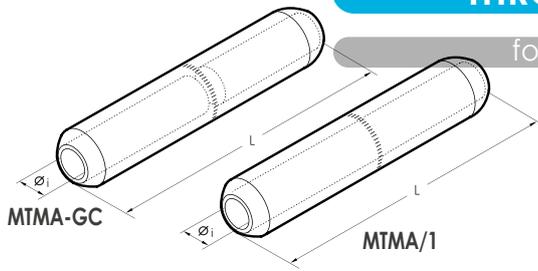
AA-M series terminals are made from Aluminium of a purity equal to or greater than 99,5%. They are designed to accept a variety of conductor forms especially low stranded compacted conductors. Non circular conductors may require pre-rounding prior to introduction to the terminal. Barrels are capped and filled with grease so as to avoid oxidation of the Aluminium. Details of the appropriate crimping tools and dies are shown on page 317, 319.

Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm						Quantity Box/Bag	Hydraulic Tools		
			Øi	B	M	N	L	d				
16	8	AA16-M8	5,5	21	13	11	77,0	8,4	60/3	HT131-UC	RHU131-C	B1300-UC
25	8	AA25-M8	6,5	21	13	11	77,0	8,4	60/3			
35	8	AA35-M8	8,0	23	13	11	77,5	8,4	60/3			
	10	AA35-M10	8,0	23	13	11	77,5	10,5	60/3			
50	12	AA50-M12	9,0	26	16	14	91,0	13,2	60/3			
	14	AA50-M14	9,0	26	18	16	95,0	15,0	60/3			
70	12	AA70-M12	11,0	27	16	14	91,0	13,2	45/3			
	14	AA70-M14	11,0	27	18	16	95,0	15,0	45/3			
95	12	AA95-M12	12,5	27	16	14	91,0	13,2	45/3			
	14	AA95-M14	12,5	27	18	16	95,0	15,0	45/3			
120	12	AA120-M12	13,7	35	16	14	115,0	13,2	30/3			
	14	AA120-M14	13,7	35	18	16	119,0	15,0	30/3			
150	12	AA150-M12	15,5	34	16	14	115,0	13,2	30/3			
	14	AA150-M14	15,5	34	18	16	119,0	15,0	30/3			
185	12	AA185-M12	17,0	42	20	14	122,0	13,2	18/3			
	14	AA185-M14	17,0	42	22	16	126,0	15,0	18/3			
240	12	AA240-M12	19,5	44	20	14	122,0	13,2	15/3			
	14	AA240-M14	19,5	44	22	16	126,0	15,0	15/3			
300	12	AA300-34M12	22,5	47	22	14	130,0	13,2	15/3	HT120	HT131-C	RHC131
	14	AA300-34M14	22,5	47	22	16	132,0	15,0	15/3			
	16	AA300-34M16	22,5	47	22	17	133,0	17,0	15/3			
	16	AA300-M16	23,3	54	22	19	177,0	17,0	12/3			
400	16	AA400-M16	26,0	56	19	17	172,0	17,0	15/3	ECW-H3D	RHU 230-630	
500	16	AA500-40M16	29,1	57	22	19	177,0	17,0	12/3			
630	16	AA630-M16	32,5	70	22	19	177,0	17,0	9/3			



## THROUGH CONNECTORS

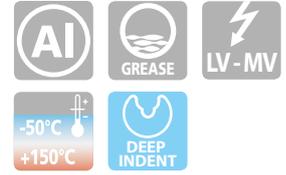
for Aluminium conductors



## MTMA-GC MTMA/1



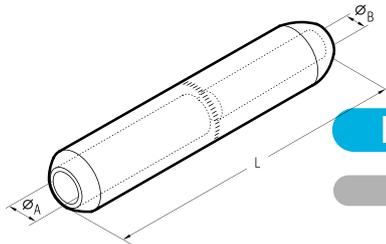
Conductor Size sqmm	Type	Type	Dimensions mm		Quantity Box/Bag	Hydraulic Tools	
			øi	L			
10	MTMA10-GC		4,3	90,5	60/3	B1300-UC	
16	MTMA16-GC	MTMA16/1	5,5	90,5	60/3		
25	MTMA25-GC	MTMA25/1	6,5	90,5	60/3		
35	MTMA35-GC	MTMA35/1	8,0	90,5	60/3		
	MTMA35-20-GC		8,0	106,5	30/3		
50	MTMA50-GC	MTMA50/1	9,0	106,5	30/3		
70	MTMA70-GC	MTMA70/1	11,0	106,5	30/3		
	MTMA95-GC		12,5	110,0	30/3		
95		MTMA95/1	12,5	106,5	30/3		
	120	MTMA120-GC	13,7	133,0	30/3		
150	MTMA150-GC		15,5	135,0	30/3		
		MTMA150/1	15,5	133,5	30/3		
185	MTMA185-GC	MTMA185/1	17,0	143,5	15/3		
240	MTMA240-GC	MTMA240/1	19,5	143,5	15/3		
	MTMAD300-GC		22,5	144,5	15/3		
300		MTMAD300/1	22,5	135,0	15/3		
	MTMA300-GC		23,3	218,0	15/3		
400		MTMA400/1	26,0	218,0	15/3		
500	MTMA500-GC		29,1	218,5	12/3		
630		MTMA500-40/1	29,1	218,0	15/3		
		MTMA630/1	32,5	218,5	12/3		



MTMA-GC series through connectors are made from Aluminium of a purity equal to or greater than 99,5%.

They feature a solid stop which creates a barrier between the two sides of conductors to be joined. Barrels are capped and filled with grease so as to avoid oxidation of the connector. MTMA/1 series through connectors are unblocked and are suitable for joining cables of the same type.

Details of the appropriate crimping tools and dies are shown on pages 318-319.



## REDUCER THROUGH CONNECTORS

for Aluminium or Copper conductors

## MTMA-GC



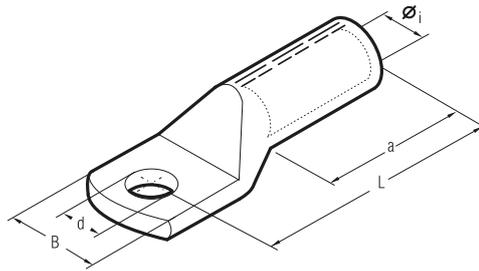
Conductor Size sqmm	Side A Al	Side B Al/Cu	Type	Dimensions mm			Quantity Box/Bag	Hydraulic Tools	
				øA	øB	L			
16	10		MTMA 16-10-GC	5,5	4,3	90,5	60/3	B1300-UC	
			MTMA 25-10-GC	6,5	4,3	90,5	60/3		
25	16		MTMA 25-16-GC	6,5	5,5	90,5	60/3		
			MTMA 50-25-GC	9,0	6,5	106,5	30/3		
50	35		MTMA 50-35-GC	9,0	8,0	106,5	30/3		
			MTMA 70-35-GC	11,0	8,0	106,5	30/3		
70	50		MTMA 70-50-GC	11,0	9,0	106,5	30/3		
			MTMA 95-50-GC	12,5	9,0	109,4	30/3		
95	70		MTMA 95-70-GC	12,5	11,0	106,5	30/3		
			MTMA 120-70-GC	13,7	11,0	133,0	30/3		
120	95		MTMA 120-95-GC	13,7	12,5	133,0	30/3		
			MTMA 150-70-GC	15,5	11,0	133,0	30/3		
150	95		MTMA 150-95-GC	15,5	12,5	134,4	30/3		
			MTMA 150-120-GC	15,5	13,7	133,0	30/3		
185	120		MTMA 185-120-GC	17,0	13,7	143,5	15/3		
			MTMA 185-150-GC	17,0	15,5	143,5	15/3		
240	150		MTMA 240-150-GC	19,5	15,5	143,5	15/3		
			MTMA 240-185-GC	19,5	17,0	143,5	15/3		
300	95		MTMAD 300-95-GC	22,5	12,5	144,5	15/3		
			MTMAD 300-150-GC	22,5	15,5	144,5	15/3		
300	185		MTMAD 300-185-GC	22,5	17,0	144,5	15/3		
			MTMAD 300-240-GC	22,5	19,5	144,5	15/3		
400	240		MTMA 400-240-GC	26,0	19,5	218,0	15/3		
			MTMA 400-300-GC	26,0	23,3	218,0	15/3		
500	300		MTMA 500-300-GC	29,1	23,3	218,5	12/3		
			MTMA 500-400-GC	29,1	26,0	218,5	12/3		



MTMA-GC series reducer through connectors are manufactured to the same specification as MTMA-GC series through connectors. Details of the appropriate crimping tools and dies are shown on pages 318-319.

for non-tension connections on Aluminium conductors according to DIN EN 50182

Tube dimensions according to DIN 46329



Terminals type AAD.-M.. are made from Aluminium tube of a purity equal or greater than 99,5%. They are suitable for Aluminium conductors according to DIN EN 50182, up to 10 kV.

All terminals are filled with a special grease that avoids Aluminium oxidation after crimping thereby assuring an optimal compression.

Barrel is closed with a cap for storage and transport.

Bright surface finish

The following data is stamped on the terminal:

- CEMBRE logo
- Terminal description
- Section
- Fixing bolt size
- Number and position of crimps
- CEMBRE Die reference according to DIN 48083

Details of the appropriate crimping tools and dies are shown on page 323.

Conductor Size	Ø Stud	Ref.	Code	Dimensions mm					Quantity Bag	Hydraulic Tools
				Øi	B	L	d	a		
16 25	8	AAD16-M8	12	5,8	18	52	8,5	32	50	HT45-E B450ND-BV HT51 RH50 B500 B500ND RH60C HT60C B600CND RH60C HT60C B600CND HT 81-U RHU 81 HT 120 and tools and heads with 130 kN crimping force ECW-H3D RHU 450 RHU 520
	10	AAD16-M10	12	5,8	18	52	10,5	32	50	
25 35	8	AAD25-M8	12	6,8	19	60	8,5	37	50	
	10	AAD25-M10	12	6,8	19	60	10,5	37	50	
35 50	8	AAD35-M8	14	8,0	21	67	8,5	42	35	
	10	AAD35-M10	14	8,0	21	67	10,5	42	35	
	12	AAD35-M12	14	8,0	21	67	13,0	42	35	
50 70	8	AAD50-M8	16	9,8	25	72	8,5	42	30	
	10	AAD50-M10	16	9,8	25	72	10,5	42	30	
	12	AAD50-M12	16	9,8	25	72	13,0	42	30	
70 95	10	AAD70-M10	18	11,2	28	83	10,5	52	15	
	12	AAD70-M12	18	11,2	28	83	13,0	52	15	
	16	AAD70-M16	18	11,2	28	83	17,0	52	15	
95 120	10	AAD95-M10	22	13,2	32	90	10,5	55	10	
	12	AAD95-M12	22	13,2	32	90	13,0	55	10	
	16	AAD95-M16	22	13,2	34	90	17,0	55	10	
120 150	10	AAD120-M10	22	14,7	32	91	10,5	55	10	
	12	AAD120-M12	22	14,7	32	91	13,0	55	10	
	16	AAD120-M16	22	14,7	34	91	17,0	55	10	
150 185	10	AAD150-M10	25	16,5	35	104	10,5	60	8	
	12	AAD150-M12	25	16,5	35	104	13,0	60	8	
	16	AAD150-M16	25	16,5	35	104	17,0	60	8	
	20	AAD150-M20	25	16,5	41	104	21,0	60	8	
	12	AAD185-M12	28	18,3	40	105	13,0	60	15	
185 240	16	AAD185-M16	28	18,3	40	105	17,0	60	15	
	20	AAD185-M20	28	18,3	40	105	21,0	60	15	
	12	AAD240-M12	32	21,0	45	119	13,0	70	12	
240 300	16	AAD240-M16	32	21,0	45	119	17,0	70	12	
	20	AAD240-M20	32	21,0	45	119	21,0	70	12	
	12	AAD300-M12	34	23,3	49	125	13,0	70	9	
300	16	AAD300-M16	34	23,3	49	125	17,0	70	9	
	20	AAD300-M20	34	23,3	49	125	21,0	70	9	
	12	AAD400-M12	38	26,0	58	140	13,0	100	3	
400	16	AAD400-M16	38	26,0	58	140	17,0	100	3	
	20	AAD400-M20	38	26,0	58	140	21,0	100	3	
	12	AAD500-M12	44	29,0	63	160	13,0	100	3	
500	16	AAD500-M16	44	29,0	63	160	17,0	100	3	
	20	AAD500-M20	44	29,0	63	160	21,0	100	3	

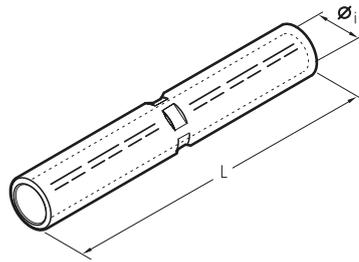
rm = round stranded  
sm = sector stranded  
re = round solid  
se = sector solid

# ALUMINIUM THROUGH CONNECTORS

# DSVA

for non-tension connections on Aluminium conductors according to DIN EN 50182

Manufactured according to DIN 46267 Part 2



Conductor Size		Code	Ref.	Dimensions mm		Quantity Bag	Hydraulic Tools													
rm sm	re se			øi	L		HT45-E	B450ND-BV	HT51	RH50	B500	B500ND	RH60C	HT60C	B600C	B600CND	HT 81-U	RHU 81	ECW-H3D	RHU 450
16	25	12	DSVA16	5.8	55	30														
25	35	12	DSVA25	6.8	70	25														
35	50	14	DSVA35	8.0	85	25														
50	70	16	DSVA50	9.8	85	20														
70	95	18	DSVA70	11.2	105	20														
95	120	22	DSVA95	13.2	105	15														
120	150	22	DSVA120	14.7	105	15														
150	185	25	DSVA150	16.5	125	10														
185	240	28	DSVA185	18.3	125	10														
240	300	32	DSVA240	21.0	145	5														
300		34	DSVA300	23.3	145	10														
400		38	DSVA400	26.0	210	3														
		42	DSVA401	28.0	210	3														
500		44	DSVA500	29.0	210	3														
		46	DSVA501	31.0	210	3														
600		52	DSVA625	35.0	330	4														
800		58	DSVA800	40.0	350	3														
1000		60	DSVA1000	44.0	350	3														

rm = round stranded  
sm = sector stranded  
re = round solid  
se = sector solid



Crimping through connectors type DSV.. are manufactured according to DIN 46267 part 2.

The aluminum tube has a purity equal to or greater than 99.5%.

The crimping through connectors are suitable for aluminum conductors according to DIN EN 50182, up to 10 kV.

All connectors are filled with a special grease that avoids aluminum oxidation after crimp and thus guarantees an optimal compression.

Barrels are capped for storage and transport.

On the connector following information is shown:

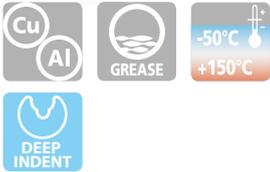
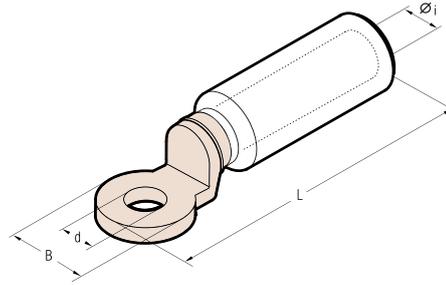
- CEMBRE logo
- Connector description
- Section
- Number and position of crimps
- Compression code according to DIN 48083

Details of the appropriate crimping tools and dies are shown on page 323.

# CAA-M

## BIMETALLIC CONNECTORS

Copper palm fixing - Aluminium barrels



The barrels of series CAA-M connectors are made from Aluminium of a purity equal to or greater than 99.5%.

The barrel is friction welded to the palm thus achieving the best possible transition between the Copper palm and Aluminium barrel. Barrels are capped and filled with grease so as to avoid oxidation of the Aluminium.

Details of the appropriate crimping tools and dies are shown on pages 317, 319.

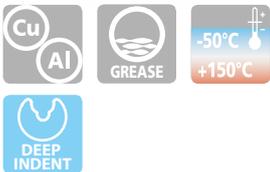
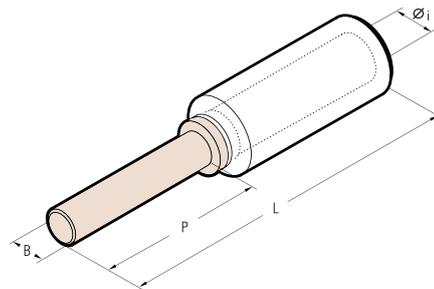
Conductor Size sqmm	Ø Stud mm	Type	Dimensions mm				Quantity Box/Bag	Hydraulic Tools	
			Øi	B	L	d			
10	12	CAA10-M12	4,3	24,0	87,0	13,0	90/3	HT131-UC RHU131-C B1300-UC	
16	12	CAA16-M12	5,5	24,0	87,0	13,0	90/3		
25	12	CAA25-M12	6,5	24,0	87,0	13,0	90/3		
35	12	CAA35-M12	8,0	24,0	87,0	13,0	90/3		
	12	CAA35-20-M12	8,0	24,0	87,0	13,0	60/3		
50	12	CAA50-M12	9,0	24,0	87,0	13,0	60/3		
70	12	CAA70-M12	11,0	24,0	87,0	13,0	60/3		
95	10	CAA95-M10	12,5	24,0	87,0	10,5	30/3		
	12	CAA95-M12	12,5	24,0	87,0	13,0	30/3		
120	12	CAA120-M12	13,7	31,0	111,0	13,0	24/3		
150	12	CAA150-M12	15,5	31,0	111,0	13,0	24/3		
185	12	CAA185-M12	17,0	35,0	116,0	13,0	18/3		
	12	CAA240-M12	19,5	35,0	116,0	13,0	18/3		
300	12	CAA300-34-M12	22,5	35,0	120,0	13,0	15/3	HT120 HT131-C RH131	ECW-H3D RHU230-630
	14	CAA300-34-M14 <b>NEW</b>	22,5	35,0	120,0	15,0	15/3		
	16	CAA300-34-M16	22,5	35,0	120,0	17,0	15/3		
	16	CAA300-M16	23,3	35,0	152,5	16,5	9/3		
400	12	CAA400-M12	26,0	35,0	152,5	13,0	9/3		
	16	CAA400-M16	26,0	35,0	152,5	16,5	9/3		
500	16	CAA500-M16-TNBD	29,1	35,0	152,5	16,5	9/3		
630	8	CAA630-4M8	32,5	60,0	200,0	4 x 9,0*	9/3		

\* 4 holes with 30 mm between axes

# MTA-C

## BIMETALLIC CONNECTORS

Copper pin - Aluminium barrels



The barrels of series MTA-C connectors are made from Aluminium of a purity equal to or greater than 99.5%.

The barrel is friction welded to the pin thus achieving the best possible transition between the Copper pin and Aluminium barrel.

Barrels are capped and filled with grease so as to avoid oxidation of the Aluminium.

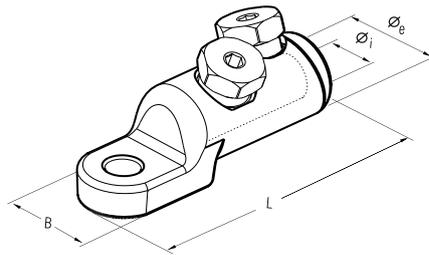
Details of the appropriate crimping tools and dies are shown on pages 317, 319.

Conductor Size sqmm	Type	Dimensions mm				Quantity Box/Bag	Hydraulic Tools
		Øi	B	P	L		
16	MTA16-C	5,5	8	30	82	90/3	HT131-UC RHU131-C B1300-UC
25	MTA25-C	6,5	8	30	82	90/3	
35	MTA35-C	8,0	8	30	82	90/3	
50	MTA50-C	9,0	12	45	97	60/3	
70	MTA70-C	11,0	12	45	97	60/3	
95	MTA95-C	12,5	12	45	97	60/3	
120	MTA120-C	13,7	14	55	125	30/3	
150	MTA150-C	15,5	14	55	125	30/3	
185	MTA185-C	17,0	14	55	125	24/3	
240	MTA240-C	19,5	14	55	125	24/3	

# MECHANICAL LUGS

For Low and Medium voltage Al/Cu conductors

# MLA-NC



Conductor Size sqmm	Type	Ø Stud mm	Dimensions mm				N° of Bolts	Number of centring devices	Quantity Box/Bag
			Øe	Øi	B	L			
50-240	MLA50-240-12NC	12	33	20,5	33	106,5*	2	3 ● ● ●	1/10

\* without centring devices



CEMBRE range-taking mechanical connectors are intended for use with Copper and Aluminium conductors, for low and medium voltage (up to 52kV) installations, in indoor, outdoor and underground applications.

Mechanical connector bodies (pic.1) are made from Aluminium EN-AW 2011 T6 with cross sectional

area and barrel length designed to optimise electrical connectivity. Internal surfaces are protected against oxidation by grease with a very high dropping point, while the Tin plating on external surfaces has a minimum thickness of 12 µm for improved surface protection.

Shear bolts (pic.2) are made from the same material and designed

to ensure a reliable electrical connection simply by tightening the bolts with a standard socket until shearing occurs inside the threaded hole without external protrusion.

To minimise voltage stresses, connectors are provided with centring devices (pic.3) to improve the alignment of the different conductor

sizes.

### Key features:

- Wide range of conductor cross sections
- Suitable for Copper and Aluminium conductors
- Tested according to IEC 61238
- Torque controlled to guarantee a good electrical contact
- Reduces inventory levels
- Easy installation - only requires a standard socket
- Reduced installation time

Pic. 1



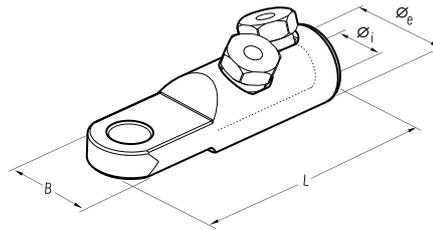
Conductor Size sqmm	Centring device	
	Color	Type
50 - 70 - 95	Red	
120 - 150	Blue	
185	Yellow	
240	Not required	

Pic. 3

# ML-C

## MECHANICAL LUGS WITH SYMMETRICAL PALM

For Medium voltage Al/Cu conductors



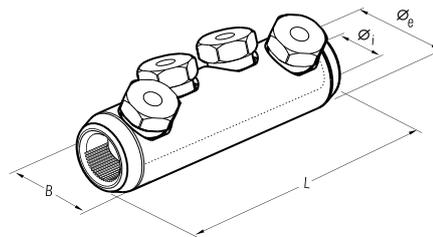
Conductor Size sqmm	Type	Ø Stud mm	Dimensions mm				N° of Bolts	Number of centring devices	Quantity Box/Bag
			Øe	Øi	B	L			
95-240	ML95-240-16C	16	35	20,5	35	124*	2	3 ● ● ●	1/10
150-240	ML150-240-16C	16	35	20,5	35	124*	2	2 ● ●	1/10

\* without centring devices

# MBS-NC

## MECHANICAL SPLICES

For Low and Medium voltage Al/Cu conductors



Conductor Size sqmm	Type	Dimensions mm				N° of Bolts	Number of centring devices	Quantity Box/Bag
		Øe	Øi	B	L			
50-240	MBS50-240NC	35	20,5	35	124*	4	3 ● ● ●	1/20

\* without centring devices

# TERMINAL BLOCKS, FLEXIBLE BUSBAR, BRAIDS AND DISTRIBUTION BLOCKS



## symbol description

### terminal blocks



Polycarbonate body



Zinc plated Steel screws



Polyamide PA6.6 body



Chrome plated Steel screws



Polypropylene body



Brass clamp



Steatite body



Operating temperature range



Polyvinylchloride insulating sheath



Italian Institute of the Quality Mark type approval



Electrolytically Tin plated Copper interconnections



Lloyd's Register Marine type approval



Electrolytically Tin plated to avoid oxidation



Italian Naval Register type approval



Nominal voltage V



USR-CNR type approval valid for USA and CANADA



Degree of Protection IP20



CE marking



Self-extinguishing class V0 UL94



UKCA marking

## example applications

### terminal blocks

type  
**ZETA**più®

Z35T-11 uninterrupted,  
main earth loop, terminal block.  
Used for equipotential bonding



UNINTERRUPTED  
MAIN EARTH  
LOOP



Z6-10D terminal blocks  
used in a control panel.

SUITABLE  
FOR DIN RAIL  
MOUNTING



Z16-8D and Z6-6D  
mounted on DIN rails.  
Used in control panels

type  
**ZETA**mini®

ZETAmini terminal blocks  
used for domestic/commercial  
applications.



type  
**ZETA**block®

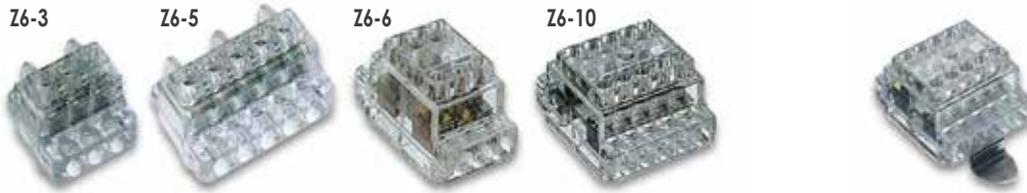
A typical application of the  
Z50-DP12-160 and Z35-DP14B-125  
installed in a distribution panel



# Z6

## SINGLE POLE TERMINAL BLOCKS

indirect clamping - nominal section 6 sqmm



type  
**ZETApiù®**

The "Z...D" version has been designed for mounting on DIN rails



3, 5, 6 and 10 way, single pole terminal blocks for conductor section 1 to 6 sqmm.

Self contained and robust, they are quick and easy to install for both industrial and domestic use. The indirect clamping of the "ZETApiù" terminal blocks guarantees a low and stable contact resistance.

Indirect clamping eliminates damage to the conductor strands. The easy-entry receptacles also grant a fast and reliable insertion of the cable.

Connecting Capacity sqmm	Type	No. of Ways	Nominal Voltage V	Maximum Operating Temperature °C	Insulation Specification	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
(3 way) 1÷6	Z6-3	3	450	85	IP20	V-0 (UL 94)	23x23xh27,5	15,0	30
	Z6-3D						23x40xh36,5	18,5	10
(5 way) 1÷6	Z6-5	5	450	85	IP20	V-0 (UL 94)	35x23xh27,5	23,0	20
	Z6-5D						35x40xh36,5	26,5	10
(6 way) 1÷6	Z6-6	6	450	85	IP20	V-0 (UL 94)	23x43xh28,5	26,0	15
	Z6-6D						23x53xh33	31,0	10
(10 way) 1÷6	Z6-10	10	450	85	IP20	V-0 (UL 94)	35x43xh28,5	41,0	10
	Z6-10D						35x53xh33	46,0	15

D= Version with clamp for DIN rail

### Technical features:

- Self-extinguishing Polycarbonate body
- Tempered Steel clamps
- Electrolytically Tin plated Copper interconnections

# Z16

## SINGLE POLE TERMINAL BLOCKS

indirect clamping - nominal section 16 sqmm



type  
**ZETApiù®**



3, 4, 5, 8 and 12 way, single pole terminal blocks.

Ideal for use as an equipotential bonding connector for both industrial and domestic use.

Connecting Capacity sqmm	Type	No. of Ways	Nominal Voltage V	Maximum Operating Temperature °C	Insulation Specification	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
16	Z16-3	3	450	85	IP20	V-0 (UL 94)	38x31,3xh38	52,0	20
	Z16-3D						38x50xh44	55,5	15
16	Z16-4	4	450	85	IP20	V-0 (UL 94)	27x54xh37	50,0	15
	Z16-4D						27x58xh43	54,0	10
16	Z16-5N	5	450	85	IP20	V-0 (UL 94)	61x31,5xh38	64,5	10
	Z16-5ND						61x50xh44	68,0	4
(2 way) 16 + (6 way) 6	Z16-8	8 (2÷6)	450	85	IP20	V-0 (UL 94)	35,5x50xh36,5	50,0	15
	Z16-8D						35,5x57xh42	56,0	10
(2 way) 16 + (10 way) 6	Z16-12	12 (2÷10)	450	85	IP20	V-0 (UL 94)	104,5x32,5xh36,5	115,0	8
	Z16-12D						104,5x50xh42	125,0	5

D= Version with clamp for DIN rail

## SINGLE POLE TERMINAL BLOCKS

indirect clamping - nominal section 35 sqmm

type  
**ZETApiù®**

Z35-3



Z35-4



Z35-6



Connecting Capacity sqmm	Type	No. of Ways	Nominal Voltage V	Maximum Operating Temperature °C	Insulation Specification	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
35	Z35-3	3	450	85	IP20	V-0 (UL 94)	53x48,5xh42	110	10
	Z35-3D						53x50xh48	114	5
35	Z35-4	4	450	85	IP20	V-0 (UL 94)	37x85xh42	129	5
	Z35-4D						37x85xh48	133	5
(2 way) 35 + (4 way) 16	Z35-6	6 (2÷4)	450	85	IP20	V-0 (UL 94)	83x41xh43	130	8
	Z35-6D						83x49xh52	140	5

D= Version with clamp for DIN rail



3, 4 and 6 way, single pole terminal blocks. Ideal for use as an equipotential bonding connector for both industrial and domestic use.

## SINGLE POLE TERMINAL BLOCKS

indirect clamping - for earthing applications ⚡

type  
**ZETApiù®**

Z50-10D



Z35T-11  
Z35T-11D



Z35-26D



Connecting Capacity sqmm	Type	No. of Ways	Maximum Operating Temperature °C	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
(1 way) 35 + (10 way) 6	Z35T-11	11	85	V-0 (UL 94)	58x43xh42	70	10
	Z35T-11D	(1+10)			58x53xh47	75	10
(2 way) 35 + (24 way) 10	Z35-26D	26 (2+24)	85	V-0 (UL 94)	151x52xh48	379	4
(2 way) 50 + (8 way) 25	Z50-10D	10 (2+8)	85	V-0 (UL 94)	77,5x55xh49	320	6

D= Version with clamp for DIN rail



10, 11 and 26 way, single pole terminal blocks. Ideal for use as an equipotential bonding connector for both industrial and domestic use.

# CONNECTING CAPACITY OF TERMINAL BLOCKS

indirect clamping

type  
**ZETApiù®**

Type	Nominal Section	No. of Ways x Nominal Section	Connecting Capacity of Each Way* No. of Conductors x Section	Markings
Z6-3 Z6-3D	6□	3 x 6□		   6 mm <sup>2</sup> 450 V T 85°C  
Z6-5 Z6-5D	6□	5 x 6□	1 x 6□ R/F 1 x 4□ R/F	
Z6-6 Z6-6D	6□	6 x 6□	1÷2 x 2,5□ R/F 1÷2 x 1,5□ R/F 1÷4 x 1□ R/F	   6 mm <sup>2</sup> 450 V T 85°C 
Z6-10 Z6-10D	6□	10 x 6□		
Z16-3 Z16-3D	16□	3 x 16□	1 x 16□ R/F 1 x 10□ R/F 1÷2 x 6□ R/F 1÷3 x 4□ R/F 1÷4 x 2,5□ R/F 1÷8 x 1,5□ R/F	   16 mm <sup>2</sup> 450 V T 85°C  
Z16-4 Z16-4D	16□	4 x 16□	1 x 16□ F 1 x 10□ F 1÷2 x 6□ F 1÷3 x 4□ F 1÷4 x 2,5□ F 1÷8 x 1,5□ F	
Z16-5N Z16-5ND	16□	5 x 16□	1 x 16□ R/F 1 x 10□ R/F 1÷2 x 6□ R/F 1÷3 x 4□ R/F 1÷4 x 2,5□ R/F 1÷8 x 1,5□ R/F	   16 mm <sup>2</sup> 450 V T 85°C 
Z16-8 Z16-8D	16□ / 6□	2 x 16□	1 x 16□ R/F 1 x 10□ R/F 1÷2 x 6□ R/F 1÷3 x 4□ R/F 1÷4 x 2,5□ R/F 1÷8 x 1,5□ R/F	
		6 x 6□	1 x 6□ R/F 1 x 4□ R/F 1÷2 x 2,5□ R/F 1÷2 x 1,5□ R/F 1÷4 x 1□ R/F	   16~6 mm <sup>2</sup> 450 V T 85°C 
Z16-12	16□ / 6□	2 x 16□	1 x 16□ F 1 x 10□ F 1÷2 x 6□ F 1÷3 x 4□ F 1÷4 x 2,5□ F	
Z16-12D	16□ / 6□	10 x 6□	1 x 6□ F 1 x 4□ F 1÷2 x 2,5□ F 1÷2 x 1,5□ F 1÷4 x 1□ F	   16~6 mm <sup>2</sup> 450 V T 85°C 

\* A mixture of conductor sizes may be connected to the terminal block provided that the sum of their sections is less than the nominal section.  
R = Rigid conductor    F = Flexible conductor

# CONNECTING CAPACITY OF TERMINAL BLOCKS

indirect clamping

type  
**ZETApiù®**

Type	Nominal Section	No. of Ways x Nominal Section	Connecting Capacity of Each Way* No. of Conductors x Section	Markings
Z35-3 Z35-3D	35□	3 x 35□	1 x 35□ R/F 1 x 25□ R/F 1÷2 x 16□ R/F 1÷3 x 10□ R/F 1÷5 x 6□ R/F	CE UK CA  35 mm² 450 V T 85°C
Z35-4 Z35-4D	35□	4 x 35□	1 x 35□ F 1 x 25□ F 1÷2 x 16□ F 1÷3 x 10□ F 1÷6 x 6□ F	CE UK CA  35 mm² 450 V T 85°C
Z35-6 Z35-6D	35□ / 16□	2 x 35□	1 x 35□ R/F 1 x 25□ R/F 1÷2 x 16□ R/F 1÷3 x 10□ R/F 1÷6 x 6□ F	CE UK CA  35~16 mm² 450 V T 85°C
		4 x 16□	1 x 16□ R/F 1 x 10□ R/F 1÷2 x 6□ R/F 1÷3 x 4□ R/F 1÷5 x 2,5□ F	
Z35T-11 Z35T-11D	35□ / 6□	1 x 35□	1 x 35□ R/F 1 x 25□ R/F 1 x 16□ R/F 1 x 10□ R/F	CE UK CA  35~6 mm² T 85°C
		10 x 6□	1 x 6□ R/F 1 x 4□ R/F 1÷2 x 2,5□ R/F 1÷2 x 1,5□ R/F 1÷4 x 1□ R/F	
Z35-26D	35□ / 10□	2 x 35□	1 x 35□ R/F 1 x 25□ R/F 1÷2 x 16□ R/F 1÷3 x 10□ R/F 1÷6 x 6□ R/F	CE UK CA  35~10 mm² T 85°C
		24 x 10□	1 x 10□ R/F 1 x 6□ R/F 1÷2 x 4□ R/F 1÷4 x 2,5□ R/F	
Z50-10D	50□ / 25□	2 x 50□	1 x 50□ R/F 1 x 35□ R/F 1÷2 x 25□ R/F 1÷4 x 16□ R/F	CE UK CA  ** 50~25 mm² T 85°C
		8 x 25□	1 x 25□ R/F 1÷2 x 16□ R/F 1÷3 x 10□ R/F 1÷6 x 6□ R/F 1÷9 x 4□ R/F	

\* A mixture of conductor sizes may be connected to the terminal block provided that the sum of their sections is less than the nominal section.  
R = Rigid conductor F = Flexible conductor

## MARKINGS



Italian Institute of the Quality Mark  
type approval



Lloyd's Register Marine  
type approval



Italian Naval Register  
type approval



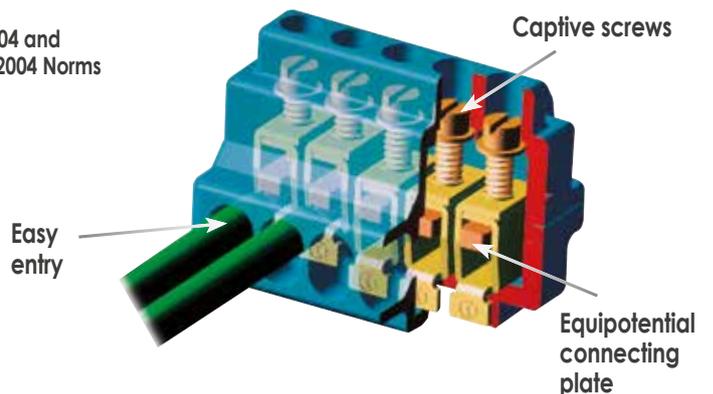
\*\*  
EN60947-1: 2007+A1: 2011: 2014  
and EN 60947-7-1: 2002 Norms



## Conforms to:

Directive 2014/35/UE

EN 60998-1: 2004 and  
EN 60998-2-1: 2004 Norms



indirect clamping

type  
**ZETA**block®

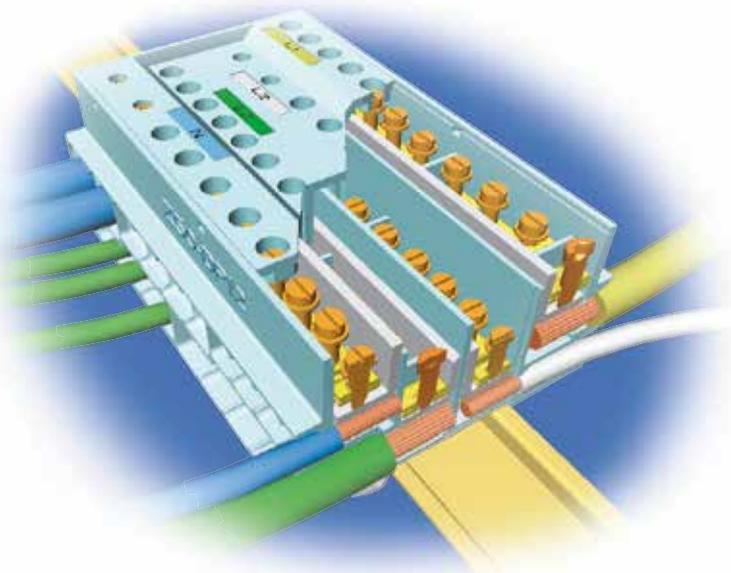


Type	No. of poles	No. of Ways per pole	Nominal CSA for each pole sqmm	Maximum operating voltage (Ui)	Impulse voltage (Uimp)	Maximum operating current (In)	Allowable short duration fault current (Icw)	Maximum allowed peak fault current (Ipk)	Self Extinguishing Specification	Dimensions mm	Weight g	Qty
Z25-DP7-100	4	7 (2+5)	(2 way) 25 + (5 way) 6	800 V	8 kV	100 A	3 kA	18 kA	V-0 (UL 94)	70x84xh45	290	2
Z35-DP14-125	4	14 (2+2+10)	(2 way) 35 + (2 way) 16 + (10 way) 6	800 V	8 kV	125 A	4,2 kA	18 kA	V-0 (UL 94)	137x83xh46	700	1
Z35-DP14B-125	2	14 (2+2+10)	(2 way) 35 + (2 way) 16 + (10 way) 6	800 V	8 kV	125 A	4,2 kA	18 kA	V-0 (UL 94)	137x44xh46	360	2
Z50-DP12-160	4	12 (2+4+6)	(2 way) 50 + (4 way) 25 + (6 way) 16	800 V	8 kV	160 A	6 kA	18 kA	V-0 (UL 94)	150x84xh48	780	1

100, 125 and 160A, 2-4 pole distribution blocks with 7, 14 and 12 ways per pole respectively. Accepting a wide cable CSA range (1 - 50 sqmm) and of compact size, Zetablocks are ideal for control cabinets and distribution panels. The lateral arrangement of terminals on upper and lower faces (Z35-DP14B one face only), simplifies connection and promotes tidy, homogeneous cable routing to assist subsequent wiring operations. Easy entry apertures provide quick, effective cable insertion while the indirect clamping feature eliminates damage to cable strands and assures a low, stable contact resistance.

**Technical features:**

- Self extinguishing antishock Polycarbonate body
- Tempered Steel captive clamping screws and plates
- Electrolytically Tin plated Copper interconnectors

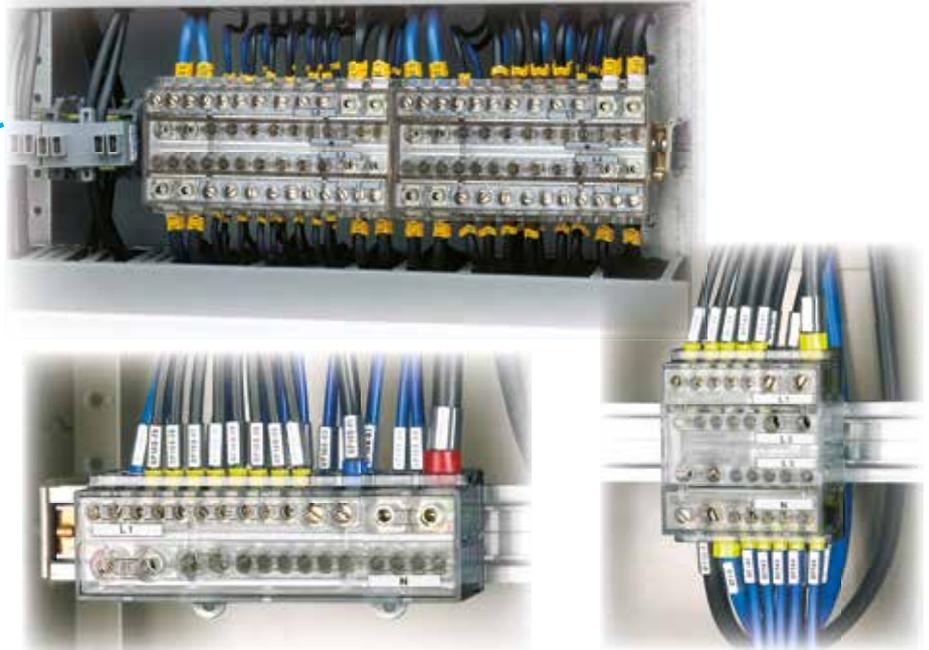


# POWER DISTRIBUTION BLOCK

Z-DP

indirect clamping

type  
**ZETA**block®



## CONNECTING CAPACITY OF POWER DISTRIBUTION BLOCK

indirect clamping

Type	Nominal Section	No. of Ways x Nominal Section	Connecting Capacity of Each Way No. of Conductors x Section	Markings
Z25-DP7-100	25□/6□	2 x 25□	1 x 25□ F 1 x 16□ F 1÷2 x 10□ F	   25÷6 sqmm
		5 x 6□	1 x 6□ F 1 x 4□ F 1÷2 x 2,5□ F 1÷2 x 1,5□ F 1÷4 x 1□ F	
Z35-DP14-125	35□/16□/6□	2 x 35□	1 x 35□ F 1 x 25□ F 1÷2 x 16□ F 1÷3 x 10□ F	   35÷16÷6 sqmm
		2 x 16□	1 x 16□ F 1 x 10□ F 1÷2 x 6□ F 1÷3 x 4□ F 1÷4 x 2,5□ F	
Z35-DP14B-125		10 x 6□	1 x 6□ F 1 x 4□ F 1÷2 x 2,5□ F 1÷2 x 1,5□ F 1÷4 x 1□ F	
Z50-DP12-160	50□/25□/16□	2 x 50□	1 x 50□ F 1 x 35□ F 1÷2 x 25□ F	   50÷25÷16 sqmm
		4 x 25□	1 x 25□ F 1 x 16□ F 1÷2 x 10□ F	
		6 x 16□	1 x 16□ F 1 x 10□ F 1÷2 x 6□ F	

F = Flexible conductor

### MARKINGS



Italian Institute of the Quality Mark  
type approval

Conforms to:  
Directive 2014/35/UE

EN 60947-7-1: 2009 Norms

indirect clamping

type  
**ZETAmini®**



Connecting Capacity sqmm	Type	Nominal Voltage V	Maximum Operating Temperature °C	Insulation Specification	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
2,5	Z2.5-1	450	85	IP20	V-0 (UL 94)	7,6x20xh23,5	3	500/25
6	Z6-1	450	85	IP20	V-0 (UL 94)	11,5x28xh29	6	250/25
10	Z10-1	450	85	IP20	V-0 (UL 94)	15,6x32xh32,5	11	80/10
16	Z16-1	450	85	IP20	V-0 (UL 94)	18x34xh38	15	60/10
25	Z25-1	450	85	IP20	V-0 (UL 94)	20,8x42,5xh43,5	29	50/10
35	Z35-1	450	85	IP20	V-0 (UL 94)	25x45xh51,5	37	40/10

One way, single pole terminal blocks for conductors sections from 0.5 to 35 sqmm.

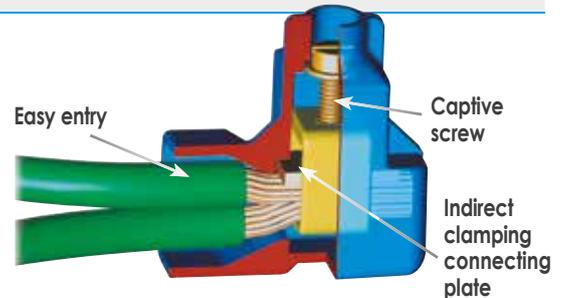
Self contained and robust, they are ideal for the fast and safe installation for industrial and domestic applications.

The indirect clamping of the "ZETAmini" terminal blocks guarantees a low and stable contact resistance.

The easy-entry receptacle also grants a fast and reliable insertion of the cable.

Technical features:

- Self-extinguishing Polycarbonate body
- Electrolytically Zinc plated, tempered Steel clamp and screw
- Electrolytically Tin plated Steel connection plate



Type	Nominal Section	Connecting Capacity of Each Way* No. of Conductors x Section	Markings
Z2.5-1	2,5□	2 x 2,5□ R/F 2÷3 x 1,5□ R/F 2÷5 x 1,0□ R/F 2÷6 x 0,75□ R/F 2÷10 x 0,5□ R/F 2÷18 x Ø 0,4÷0,6 mm communication type wire	CE UK CA IP20 2,5 sqmm 450V T 85°C IP 20 APPROVED R
Z6-1	6□	2 x 6□ R/F 2÷3 x 4□ R/F 2÷4 x 2,5□ R/F 2÷6 x 1,5□ R/F 2÷6 x 1□ R/F 2÷10 x 0,75□ R/F 2÷12 x 0,5□ R/F (1 x 6□ F) + (4 x 1,5□ F) (1 x 6□ F) + (2 x 2,5□ F)	CE UK CA IP20 6 sqmm 450V T 85°C IP 20 APPROVED R
Z10-1	10□	2 x 10□ R/F 2÷3 x 6□ R/F 2÷5 x 4□ R/F 2÷8 x 2,5□ R/F 2÷12 x 1,5□ R/F 2÷20 x 1□ R/F 2÷25 x 0,75□ R/F (1 x 6□ F) + (1 x 4□ F) + (2 x 2,5□ F) + (3 x 1,5□ F)	CE UK CA IP20 10 sqmm 450V T 85°C IP 20 APPROVED R
Z16-1	16□	2 x 16□ R/F 2÷3 x 10□ R/F 2÷5 x 6□ R/F 2÷8 x 4□ R/F 2÷12 x 2,5□ R/F 2÷18 x 1,5□ R/F	CE UK CA IP20 16 sqmm 450V T 85°C IP 20 APPROVED R
Z25-1	25□	2 x 25□ R/F 2÷3 x 16□ R/F 2÷4 x 10□ R/F 2÷8 x 6□ R/F 2÷11 x 4□ R/F 4÷16 x 2,5□ R/F	CE UK CA IP20 25 sqmm 450V T 85°C IP 20 APPROVED R
Z35-1	35□	2 x 35□ R/F 2÷3 x 25□ R/F 2÷4 x 16□ R/F 2÷7 x 10□ R/F 2÷11 x 6□ R/F 4÷17 x 4□ R/F 5÷28 x 2,5□ R/F	CE UK CA IP20 35 sqmm 450V T 85°C IP 20 APPROVED R

\*A mixture of conductor sizes may be connected to the terminal block provided that the sum of their sections is less than twice the nominal section.

R = Rigid conductor F = Flexible conductor

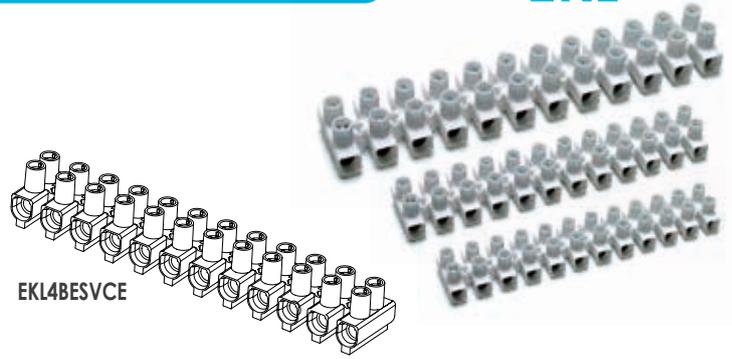
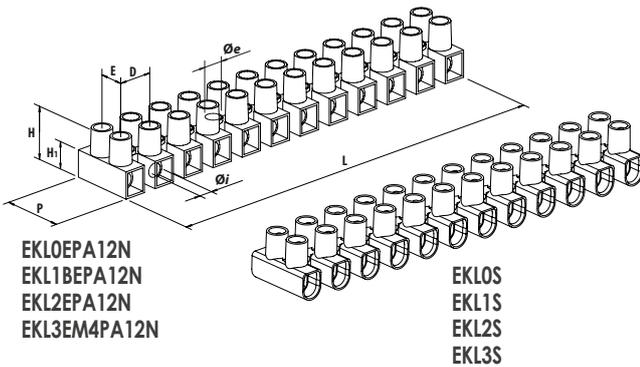
Conforms to:

Directive 2014/35/UE

EN 60998-1: 2004 and  
EN 60998-2-1: 2004 Norms

## TERMINAL BLOCK TYPE EKL

# EKL



### Type 12 Poles of Polyamide (PA6.6)

Type	Nominal section sqmm	Dimensions mm								Screw	Quantity
		Øi	Øe	L 12 poles	H	H1	P	E	D		
□ EKLOEPA12N	2,5	3,0	2,6	94,0	14,5	9,2	16,4	6,0	8,0	M3	50
□ EKL1BEPA12N	4	3,4	3,2	116,2	15,7	8,3	20,2	10,0	10,0	M3	30
□ EKL2EPA12N	10	4,3	3,2	139,8	20,0	10,8	23,1	10,0	12,0	M3,5	20
□ EKL3EM4PA12N	16	5,8	4,1	171,8	24,8	14,7	32,1	13,0	14,5	M4**	25

□ Nominal voltage: 450 V  
Ambient temperature: max 110°C

\* Pending approval \*\* Combination head screws



#### Material:

- Block made of chromium plated Brass
- Screw made of chromium plated Steel

Variants upon request for version en Polyamide PA6.6

N° of poles from 1 to 11:

- replace reference 12 with n° of required poles
- Versions with protection plate: add reference "DSN"

### Type 12 Poles of Polypropylene (PP)

Type	Nominal section sqmm	Dimensions mm								Screw	Quantity
		Øi	Øe	L 12 poles	H	H1	P	E	D		
● EKLOS	4	3,2	2,65	94,9	13,0	-	16,6	6,4	8,1	M2,6	50
● EKL1S	6	3,5	3,4	116,5	14,9	-	18,9	7,3	10,0	M3	30
● EKL2S	10	4,3	3,7	133,8	17,3	-	23,4	10,0	11,5	M3,5	15
● EKL3S	16	5,5	4,9	174,5	25,0	-	20,7	11,0	15,0	M4	25
◇ EKL4BESVCE	25	7,0	4,0	187,3	28,0	-	30,0	11,0	16,0	M5	25

● Nominal voltage: 450 V  
Ambient temperature: max 80°C

◇ Nominal voltage: 750 V  
Ambient temperature: max 80°C



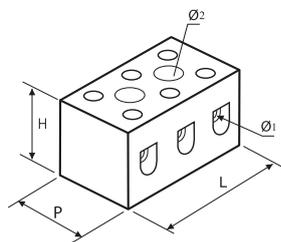
EKL OE PA XX XX

N° poles DSN version with protective blade

**DSN**

## TERMINAL BLOCK TYPE ZS

# ZS



Type	Nominal section sqmm		No. of poles	Dimensions mm					Quantity
	Low Str.	Flex		Ø1	Ø2	L	H	P	
ZS-U6	4/6	4	1	2,8	-	9	18	19	200
ZS-B6	4/6	4	2	2,8	4,0	22	18	19	80
ZS-T6	4/6	4	3	2,8	4,0	36	18	19	60
ZS-U10	10	6	1	4,3	-	13	20	21	200
ZS-B10	10	6	2	4,3	4,8	24	20	21	80
ZS-T10	10	6	3	4,3	4,8	36	20	21	70
ZS-U16	16	10	1	6,1	-	15	22	27	100
ZS-B16	16	10	2	6,1	5,0	31	22	27	50
ZS-T16	16	10	3	6,1	5,0	48	22	27	30



#### Material:

- insulating body in STEATITE
- screw in GALVANIZED STEEL
- BRASS clamp

Nominal voltage: 450 V  
Operating temperature: 350°C

# DB/1N



## UNIPOLAR DISTRIBUTION BLOCKS

direct clamping

### DBLOCK UNIPOLAR SERIES

- 80, 125, 160, 250, 400, 500 A distribution blocks
- Versions available with 6, 7 or 11 outputs (see table)
- Wire entry facilitated by chamfered entry holes and clamping screws
- Terminals maintain excellent stability of the connection over time
- Connection can be expanded through dedicated unipolar jumpers (can be used for types DB125-7/1N and DB160-7/1N)



Type	N° inputs	Connecting Capacity in mm²	N° outputs	Connecting Capacity out mm²	IEC* 60947-7-1		UL* 1059		Allowable short duration fault current (Icw)	Maximum allowed peak fault current (Ipk)	Self Extinguishing Specification	Dimensions mm	Weight g	Qty
					Nominal voltage	Nominal Current	Nominal voltage	Nominal Current						
DB80-6/1N	1	6÷16	6 (4+2)	(4) 2,5÷6 (2) 2,5÷16	1000 V	80 A	600 V	85 A	3 kA	22 kA	V-0 (UL 94)	66x27xh46	70	5
DB125-7/1N	1	10÷35	7 (6+1)	(6) 2,5÷16 (1) 6÷16	1000 V	125 A	600 V	150 A	4.2 kA	30 kA	V-0 (UL 94)	77x29xh46	142	5
DB160-7/1N	1	10÷70	7 (6+1)	(6) 2,5÷16 (1) 6÷16	1000 V	160 A	600 V	200 A	11.8 kA	30 kA	V-0 (UL 94)	77x29xh46	136	5
DB250-11/1N	1	35÷120	11 (2+5+4)	(2) 6÷35 (5) 2,5÷16 (4) 2,5÷10	1000 V	250 A	600 V	255 A	24.5 kA	51 kA	V-0 (UL 94)	96x46xh50	423	3
DB400-11/1N	1	95÷185	11 (2+5+4)	(2) 6÷35 (5) 2,5÷16 (4) 2,5÷10	1000 V	400 A	600 V	335 A	24.5 kA	51 kA	V-0 (UL 94)	96x46xh50	402	3
DB500-11/1N	1	8x24 Flex. Busbar	11 (2+5+4)	(2) 6÷35 (5) 2,5÷16 (4) 2,5÷10	1000 V	500 A	600 V	335 A	24.5 kA	51 kA	V-0 (UL 94)	96x46xh50	388	3

# DB/2

## BIPOLAR DISTRIBUTION BLOCKS

direct clamping



### DBLOCK BIPOLAR SERIES

- 40, 100, 125 A bipolar distribution blocks
- Versions available with 6, 13, 14 or 15 outputs (see table)
- Wire entry facilitated by chamfered entry holes
- Terminals maintain excellent stability of the connection over time



Type	N° inputs	Connecting Capacity in mm²	N° outputs	Connecting Capacity out mm²	Nominal voltage	Nominal Current	Allowable short duration fault current (Icw)	Maximum allowed peak fault current (Ipk)	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
DB100-6/2	1	10÷25	6 (3+3)	(3) 1,5÷4 / 0,75÷4 (3) 2,5÷6 / 1,5÷6	500 V	100 A	4.5 kA	20 kA	V-0 (UL 94)	50x64xh50	110	1
DB100-13/2	2	10÷25	13 (6+7)	(6) 1,5÷4 / 0,75÷4 (7) 2,5÷6 / 1,5÷6	500 V	100 A	4.5 kA	20 kA	V-0 (UL 94)	50x130xh50	208	1
DB125-6/2	1	10÷35	6 (5+1)	(5) 2,5÷6 / 1,5÷6 (1) 10÷25 / 6÷16	690 V	125 A	4.5 kA	18 kA	V-0 (UL 94)	50x94xh50	160	1
DB125-14/2	1	10÷35	14 (11+3)	(11) 2,5÷6 / 1,5÷6 (3) 10÷25 / 6÷16	690 V	125 A	4.5 kA	18 kA	V-0 (UL 94)	50x162xh50	266	1
DB125-14/2C	2	10÷35 10÷16	13 (11+2)	(11) 2,5÷6 / 1,5÷6 (2) 10÷25 / 6÷16	500 V	125 A	4.5 kA	20 kA	V-0 (UL 94)	50x130xh50	204	1

## TETRAPOLAR DISTRIBUTION BLOCKS

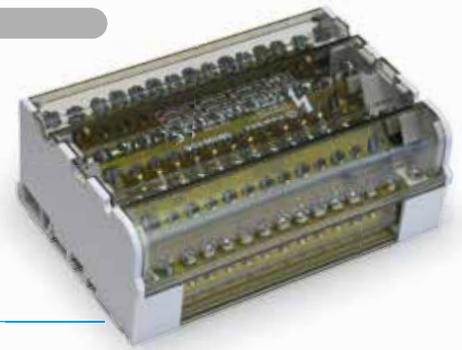
# DB/4

direct clamping



### DBLOCK TETRAPOLAR

- 40, 100, 125, 160 A distribution blocks
- Versions available with 6, 13, 14 or 15 outputs (see table)
- Wire entry facilitated by chamfered entry holes
- Terminals maintain excellent stability of the connection over time



Type	N° inputs	Connecting Capacity in mm²	N° outputs	Connecting Capacity out mm²	Nominal voltage	Nominal Current	Allowable short duration fault current (Icw)	Maximum allowed peak fault current (Ipk)	Self Extinguishing Specification	Dimensions mm	Weight g	Quantity
DB40-11/4	2	6÷16 4÷10	11	1,5÷4 / 0,75÷4	500 V	40 A	4.5 kA	22 kA	V-0 (UL 94)	90x100xh50	351	1
DB100-6/4	1	10÷25	6 (3+3)	(3) 1,5÷4 / 0,75÷4 (3) 2,5÷6 / 1,5÷6	500 V	100 A	4.5 kA	20 kA	V-0 (UL 94)	90x64xh50	230	1
DB100-13/4	2	10÷25	13 (6+7)	(6) 1,5÷4 / 0,75÷4 (7) 2,5÷6 / 1,5÷6	500 V	100 A	4.5 kA	20 kA	V-0 (UL 94)	90x130xh50	444	1
DB125-6/4	1	10÷35	6 (5+1)	(5) 2,5÷6 / 1,5÷6 (1) 10÷25 / 6÷16	690 V	125 A	4.5 kA	20 kA	V-0 (UL 94)	90x109xh50	326	1
DB125-10/4	1	10÷35	10 (7+3)	(7) 2,5÷6 / 1,5÷6 (3) 10÷25 / 6÷16	690 V	125 A	4.5 kA	20 kA	V-0 (UL 94)	90x147xh50	440	1
DB125-10/4C	2	10÷35 10÷16	9 (7+2)	(7) 2,5÷6 / 1,5÷6 (2) 10÷25 / 6÷16	500 V	125 A	4.5 kA	20 kA	V-0 (UL 94)	90x100xh50	306	1
DB125-14/4	1	10÷35	14 (11+1+2)	(11) 2,5÷6 / 1,5÷6 (1) 10÷25 / 6÷16 (2) 10÷35 / 10÷25	690 V	125 A	4.2 kA	14.5 kA	V-0 (UL 94)	90x182xh50	586	1
DB125-14/4C	2	10÷35 10÷16	13 (11+2)	(11) 2,5÷6 / 1,5÷6 (2) 10÷25 / 6÷16	500 V	125 A	4.5 kA	20 kA	V-0 (UL 94)	90x130xh50	398	1
DB160-11/4	1	10÷50	11 (3+7+1)	(3) 10÷35 / 10÷25 (7) 2,5÷6 / 1,5÷6 (1) 2,5÷6 / 1,5÷6	690 V	160 A	8.2 kA	35 kA	V-0 (UL 94)	96x175xh50	738	1



## ACCESSORIES

neutral bars



Type	N° inputs	Connecting Capacity in mm²	N° outputs	Connecting Capacity out mm²	Nominal voltage	Nominal Current	Allowable short duration fault current (Icw)	Maximum allowed peak fault current (Ipk)	Type Application	Length mm	Weight g	Quantity
DNB125-9	4	10÷25 / 6÷16	9	2,5÷6 / 1,5÷6	-	125 A	4.5 kA	30 kA	DB125-10/4 DB125-14/4	142	172	1
DNB160-10	4	10÷35 / 10÷25	10	2,5÷16 / 1,5÷16	-	160 A	6.2 kA	35 kA	DB160-11/4	168	192	1



unipolar jumper



Type	Nominal Current	Type Application	Length mm	Weight g	Quantity
DJ160	125 A - 160 A	DB125-7/1N - DB160-7/1N	37	29	5



# DJ160



### Designation

<b>SFI</b>	<b>8</b>	<b>x 24</b>	<b>x 1</b>
Insulated flexible busbar	Number of strips	Strip width mm	Strip thickness mm

### Advantages

Insulated flexible busbar is a self-contained system combining convenient layout and connection with assured insulation and self-supporting construction, resulting in reduced cost installations with extreme ease of use.

### Compared to plain busbar:

- Higher current capacity size for size
- Space saving as individual insulated busbars may be positioned in closer proximity
- Layout easier and quicker due to flexibility
- Insulated support not required.

### Compared to cables:

- Simple and rapid installation
- Space saving due to tighter bend radius
- Insulated support not required.

### Principle of selection

The following charts allow selection of the appropriate configuration based on:

- ambient temperature of 35°C
- required current carrying capacity in Amps
- maximum permitted temperature increase

### Example of selection

Required current carrying capacity per phase is 630A. Maximum permitted temperature in the equipment enclosure is 85°C:

- ambient temperature is 35°C
- maximum permitted temperature rise is 85°C - 35°C = 50°C

The possible selections are where the red vertical line (630A) intersects the green temperature band (50°C):

**SFI8X24X1**  
**SFI6X32X1**  
**SFI4X40X1**

The final selection will depend on limitations relating to connection palm width.

### Technical features

#### PVC Insulation (for width 9 - 50mm):

- Colour: Black
- Density: 1,36 g/cm<sup>3</sup>
- Hardness: 86 Shore A
- Breaking resistance: ≈ 18 MPa
- Breaking elongation: ≈ 300 %
- Self-extinguishing class: Vo (UL94)

#### Strip:

- Copper designation: Cu-ETP
- Copper purity min: 99,9%
- Max electrical resistivity at 20°C: 1,7241 μΩ/cm (100% IACS)
- Breaking resistance min: 200MPa
- Breaking elongation min: 30%
- Hardness: <55 HV
- Surface protection: Sm 99
- Thickness of tin plating: 2 ÷ 4 μm

#### Insulated flexible busbar:

- max working voltage: 1000 V AC /1500 V DC
- Working temperature: -40°C ÷ +105°C
- Average thickness of extruded PVC: 2mm
- Average dielectric strength between conductor and earth: 15 kV/mm (50Hz)
- between conductors: 30 kV/mm (50Hz)

Total conductor c.s.a. sqmm	Type
21,6	SFI3X9X0.8
43,2	SFI6X9X0.8
13,0	SFI2X13X0.5
19,5	SFI3X13X0.5
26	SFI4X13X0.5
39	SFI6X13X0.5
24,8	SFI2X15.5X0.8
37,2	SFI3X15.5X0.8
49,6	SFI4X15.5X0.8
74,4	SFI6X15.5X0.8
124	SFI10X15.5X0.8
40	SFI2X20X1
60	SFI3X20X1
80	SFI4X20X1
100	SFI5X20X1
120	SFI6X20X1
48	SFI2X24X1
72	SFI3X24X1
96	SFI4X24X1
120	SFI5X24X1
144	SFI6X24X1
192	SFI8X24X1
240	SFI10X24X1
64	SFI2X32X1
96	SFI3X32X1
128	SFI4X32X1
160	SFI5X32X1
192	SFI6X32X1
256	SFI8X32X1
320	SFI10X32X1
160	SFI4X40X1
200	SFI5X40X1
240	SFI6X40X1
320	SFI8X40X1
400	SFI10X40X1
200	SFI4X50X1
250	SFI5X50X1
300	SFI6X50X1
400	SFI8X50X1
500	SFI10X50X1
315	SFI5X63X1
378	SFI6X63X1
504	SFI8X63X1
630	SFI10X63X1
320	SFI4X80X1
400	SFI5X80X1
480	SFI6X80X1
640	SFI8X80X1
800	SFI10X80X1
1000	SFI10X100X1



### Concept and design

CEMBRE SFI series insulated flexible busbar comprises a set of Cu strips within an insulated sleeve - for widths 9-50mm this is extruded PVC, for widths 63-100mm it is heat shrunk material.

The dielectric strength of the insulation is guaranteed independent of the eventual formation of the busbar and its working conditions (humidity, temperature and environmental aggressors).

### Dimensions

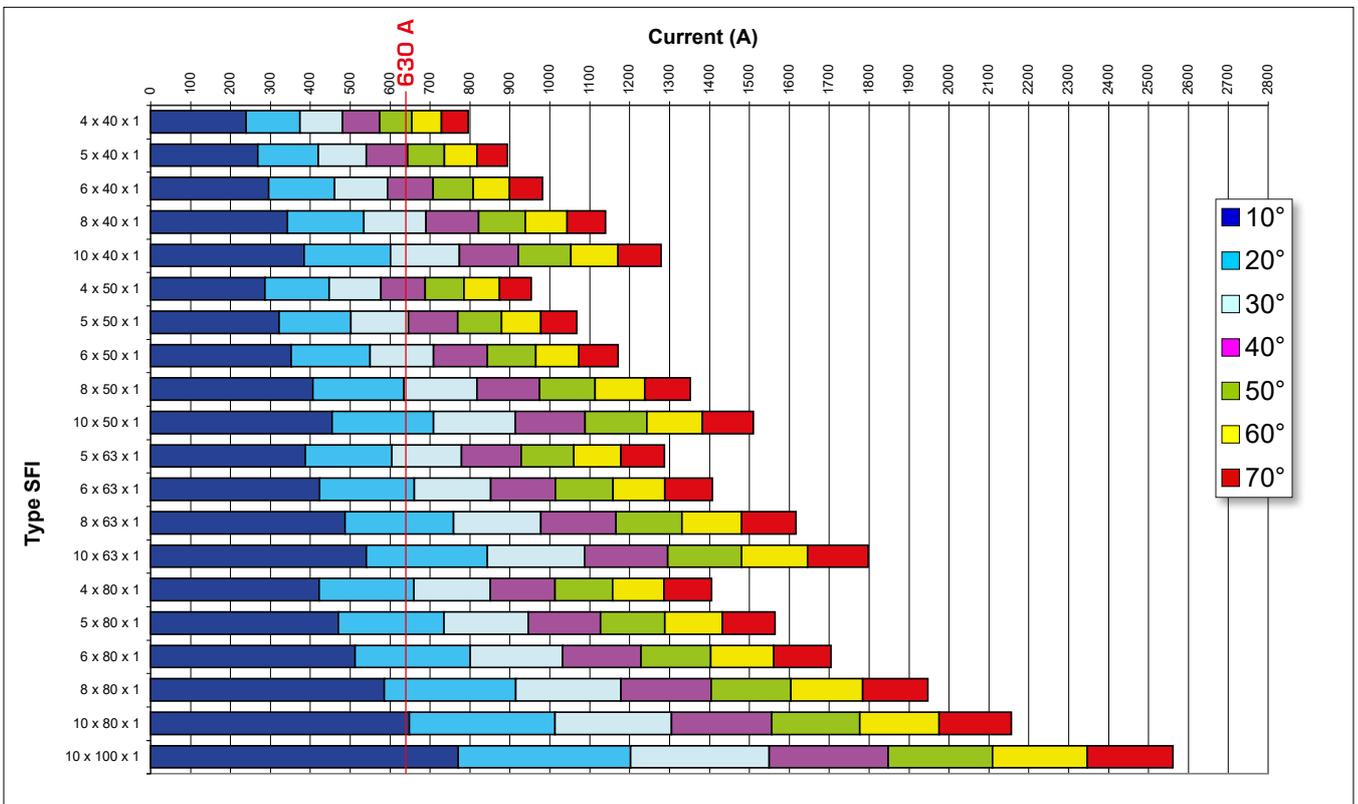
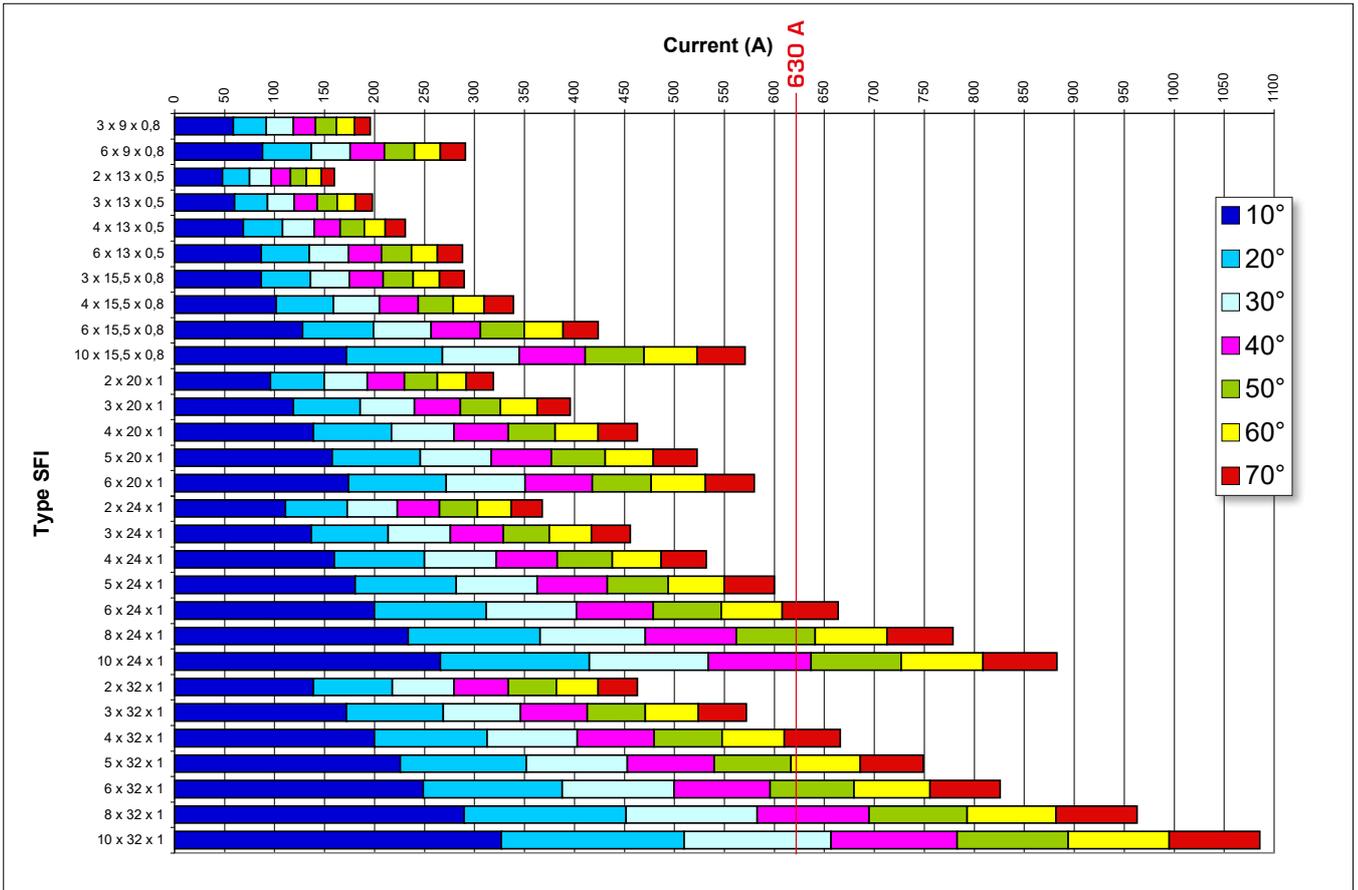
**Standard length:** 2000 mm (consult us for other lengths)  
**Strip thickness:** 0,5 - 1 mm  
**Number of strips:** 2 - 12.

### Applications

- Power distribution, substituting cable with extruded insulation and rigid busbar
- Electrical equipment ( racks, circuit breakers, rectifiers)
- Transformers

Current carrying capacity (A)

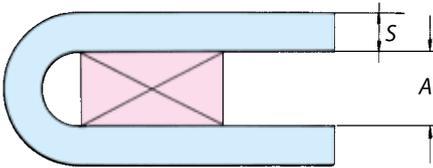
Temperature increase for each configuration based on an ambient temperature of 35°C



### Mechanical bending and torsion testing

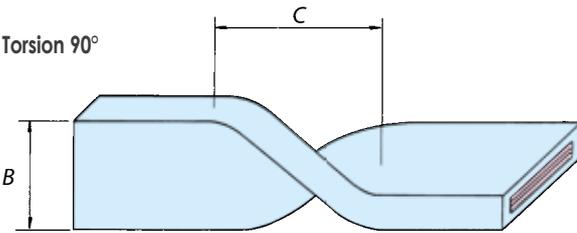
Test temperatures:  $-10^{\circ}\text{C}$  and  $+80^{\circ}\text{C}$ .

#### Bending 180°



$S$  = Bar thickness (conductor + insulation)  
 $A = 2 \times S$

#### Torsion 90°



$B$  = Bar width (conductor + insulation)  
 $C = 1,5 \times B$

In both cases the tests do not show damage to the insulation



### Insulated flexible busbar installation

#### Bending:

Small section configurations may be bent manually. When tooling is used, protect the insulated sleeve of the busbar from damage. As the Cu strips move relative to each other during bending, this operation should be completed before drilling.

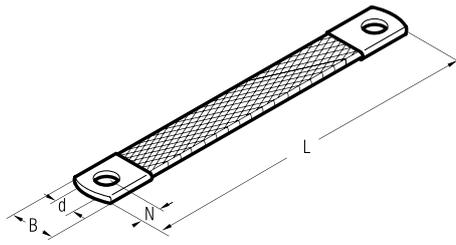
#### Drilling:

Drilling templates type **MFB 13-40** and type **MFB 50-63** (available as optional extras) are designed to facilitate accurate location of fixing holes in the busbar of  $\varnothing 8, 10, 12$  mm.

It is recommended that the insulation of the busbar is not removed before drilling is completed, as it assists the operation.

Template type	includes drilling inserts	for bar width mm
MFB 13-40	SFB13-16	for bar width 13÷15,5 mm
	SFB20-24	for bar width 20÷24 mm
	SFB32-40	for bar width 32÷40 mm
MFB 50-63	SFB50-63	for bar width 50÷63 mm





Size sqmm	Ø Stud mm	Type	Dimensions mm				Quantity
			B	N	L	d	
10	8	FL10-150	17	10	150	8,5	50
	8	FL10-200	17	10	200	8,5	50
	8	FL10-250	17	10	250	8,5	50
16	8	FL16-150	17	10	150	8,5	50
	8	FL16-200	17	10	200	8,5	50
	8	FL16-250	17	10	250	8,5	50
	8	FL16-320	17	10	320	8,5	50
	8	FL16-350	17	10	350	8,5	50
	8	FL16-420	17	10	420	8,5	25
	8	FL16-570	17	10	570	8,5	25
	8	FL16-660	17	10	660	8,5	25
25	8	FL25-150	21	10	150	8,5	50
	8	FL25-200	21	10	200	8,5	50
	8	FL25-250	21	10	250	8,5	50
	8	FL25-300	21	10	300	8,5	50



Flexible braids are manufactured from electrolytic Copper wire. Braids of different conductor sizes or lengths are available on request. Standard finish - bright Copper. Flexible braids can be supplied Tin plated, in this case add the suffix "ST" to reference.

E.g.:  
 - FL10-150 (Bright Copper)  
 - FL10-150-ST (Tin plated)



# CABLE TIES

G series, PA6.6 Polyamide

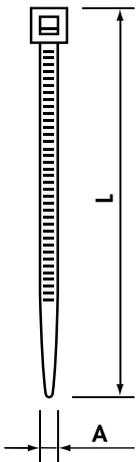
PA 6.6



HF  
HALOGEN  
FREE



Material: PA6.6 Polyamide  
Self-extinguishing V2 (UL 94)  
Humidity absorption:  
2,5% (at 50% relative humidity)  
Operating temperature:  
From -40°C to +85°C (continuous)  
From -40°C to +120°C (short periods)  
Resistant to:  
oils, greases, oil products, chlorinated solvents.  
Colour: Natural or Black (Ral 2005)



Black ties have higher UV resistance due to increased carbon black loading



Natural ties offer rapid installation due to the low friction coefficient of the material



## Cable Ties in PA6.6

Type	L (mm)	A (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity			
G80X2.4	80	2,4	15	8	100			
G80X2.4N					1000			
G80X2.4/M			16		100			
G80X2.4N/M					1000			
G90X2.4	90	2,4	16		100			
G90X2.4N					1000			
G100X2.5			100		2,5	22	100	
G100X2.5N							1000	
G100X2.5/M	30	100						
G100X2.5N/M		1000						
G120X2.5	120	2,5	30	100				
G120X2.5N				1000				
G140X2.5			140	2,5	33	1000		
G140X2.5N						1000		
G140X2.5/M	40	100						
G140X2.5N/M		1000						
G160X2.5	160	2,5	40	100				
G160X2.5N				1000				
G160X2.5/M			53	1000				
G160X2.5N/M				100				
G200X2.5	200	2,5	53	100				
G200X2.5N				1000				
G200X2.5/M			65	1000				
G200X2.5N/M				100				
G250X2.8	250	2,8	65	14	100			
G250X2.8N					1000			
G300X2.8			76		100			
G300X2.8N					1000			
G120X3.6	120	3,6	30		18	100		
G120X3.6N						1000		
G140X3.6			140			3,6	33	1000
G140X3.6N								1000
G140X3.6/M	35	100						
G140X3.6N/M		1000						
G150X3.6	150	3,6	35	100				
G150X3.6N				1000				
G180X3.6			180	3,6	44	100		
G180X3.6N						1000		
G200X3.6	200	3,6			53	1000		
G200X3.6N						1000		
G200X3.6/M			65	100				
G200X3.6N/M				1000				
G250X3.6	250	3,6	65	100				
G250X3.6N				1000				
G300X3.6			300	3,6	76	1000		
G300X3.6N						1000		
G300X3.6/M	102	1000						
G300X3.6N/M		1000						
G370X3.6	370	3,6	102	100				
G370X3.6N				1000				
G120X4.8	120	4,8	24	22	100			
G120X4.8N					1000			
G160X4.8			160		4,8	38	1000	
G160X4.8N							1000	
G190X4.8	190	4,8				46	100	
G190X4.8N							1000	
G190X4.8/M			50		1000			
G190X4.8N/M					1000			
G200X4.8	200	4,8	50	1000				
G200X4.8N				1000				
G200X4.8/M			60	1000				
G200X4.8N/M				1000				
G250X4.8/M	250	4,8	60	100				
G250X4.8N/M				1000				
G250X4.8			250	4,8	60	100		
G250X4.8N						1000		
G280X4.8	280	4,8			70	100		
G280X4.8N						1000		
G300X4.8			300	4,8	76	100		
G300X4.8N						1000		
G370X4.8	370	4,8			102	100		
G370X4.8N						1000		
G390X4.8			390	4,8	105	100		
G390X4.8N						1000		
G430X4.8	430	4,8	110	100				
G430X4.8N				1000				

Minimum order: 1.000 pcs

Minimum order: 100 pcs

Note: In Type, N = Black

Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice

# CABLE TIES



G series, PA6.6 Polyamide

## Cable Ties in PA6.6

Type	L (mm)	A (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity	
G450X4.8	450	4,8	116	22	100	
G450X4.8N						
G530X4.8	530	4,8	140	22		
G530X4.8N						
G150X7.6	150	7,6	33	55		
G150X7.6N						
G200X7.6	200		50			55
G200X7.6N						
G250X7.6	250		65			55
G250X7.6N						
G300X7.6	300		76			55
G300X7.6N						
G370X7.6	370		102			55
G370X7.6N						
G430X7.6	430		125			55
G430X7.6N						
G530X7.6	530	140	55			
G530X7.6N						
G430X9.0	430	9,0	110	80		
G430X9.0N						
G530X9.0	530		140			80
G530X9.0N						
G710X9.0	710		190			80
G710X9.0N						
G780X9.0	780		228		80	
G780X9.0N						
G830X9.0	830		239		80	
G830X9.0N						
G920X9.0	920		263		80	
G920X9.0N						
G1020X9.0	1020	295	80			
G1020X9.0N						
G1220X9.0	1220	365	80			
G1220X9.0N						
G230X12.6	230	12,6	50	115		
G230X12.6N						
G380X12.6	380		106		115	
G480X12.6						480
G480X12.6N	580		152			
G580X12.6					730	204
G580X12.6N	730		204			
G730X12.6					880	248
G730X12.6N	880		248			
G880X12.6					1030	295
G880X12.6N	1030		295			
G1030X12.6					1030	295
G1030X12.6N						

Minimum order: 100 pcs

Note: In Type, N = Black

Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice



Angled tongue to facilitate easy introduction into the buckle



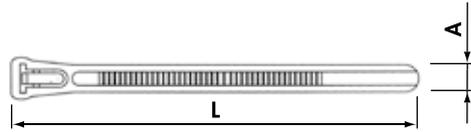
Rounded corners for increased safety



# GR



Same features as G series.  
Easy installation without tools.  
Released by pressure on the tongue.  
Suitable for temporary locking.



### Releasable cable ties in PA6.6

Type	L (mm)	A (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity
GR100X7.6N	100	7,6	20	22,2	100
GR120X7.6N	120		30		
GR150X7.6N	150		35		
GR200X7.6N	200		50		
GR250X7.6N	250		66		
GR300X7.6N	300		80		
GR370X7.6N	370		102		

Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice

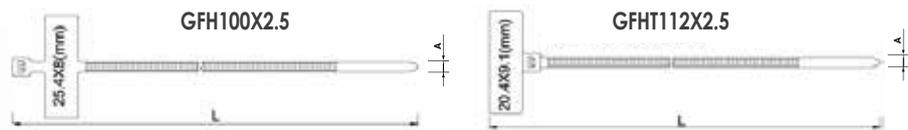
# GFH



Same features as G series.  
Quick and easy identification of bundled conductors.  
Write on panel with Felt tip pen.

### CABLE TIES

GFH series, PA6.6 Polyamide



### Markable cable ties in PA6.6

Type	L (mm)	A (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity
GFH100X2.5	100	2,5	18	8,1	100
GFHT112X2.5	112				

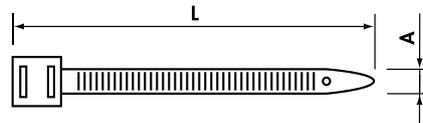
Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice

# 1600



Resistant to: UV, salt atmosphere, oils, greases, oil products  
Colour: Black



### Cable Ties in PA12 Polyamide

Type	Head Type	L (mm)	A (mm)	Min. Bundle Ø (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity
1618.90	single	180	9	15	40	40	100
1626.90	double	260	9	30	60	55	100
1636.90	double	360	9	30	93	55	100
1651.90	double	510	9	70	140	55	100
1676.90	double	760	9	70	220	55	100

Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice

Material: Elastomerized Polymer on Polyamide base  
Self-extinguishing HB (UL94)  
Halogen free  
Operating temperature:  
From -45°C to +85°C (continuous)  
From -45°C to +120°C (short periods)

## CABLE TIES

GX

GX series, in Stainless Steel AISI 304

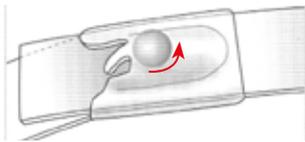


### Cable Ties in Stainless Steel

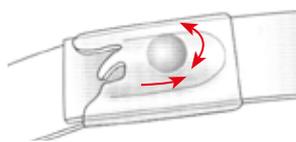
Type	L (mm)	A (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity
GX200X4.5	200	4,5	50	46	100
GX300X4.5	300		76		
GX370X4.5	370		102		
GX520X4.5	520		156		
GX370X7.9	370	7,9	102	114	
GX680X7.9	680		207		
GX1020X7.9	1020		312		

Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice



Insert the tongue into the buckle. The internal locking ball rolls freely as the tie is tightened.



Once the correct tension is reached, use the specific tool to trim the tongue. The ball then wedges into the buckle locking it tightly against both the top and bottom of the tie.

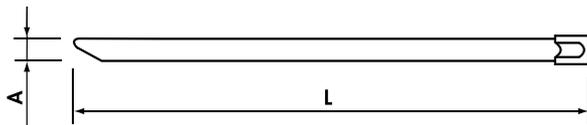


Material: Stainless Steel AISI 304  
 Unique ball locking mechanism that allows simple and rapid installation and secure locking.  
 Operating temperature: From -80°C to +500°C  
 High tensile strength.  
 Non-flammability.  
 High resistance to acetic acid, alkalies, sulphuric acid, corrosion, etc.  
 In general very resistant to most hostile environments.

## CABLE TIES

GXAC

GXAC series, 316 Stainless Steel coated with Polyester

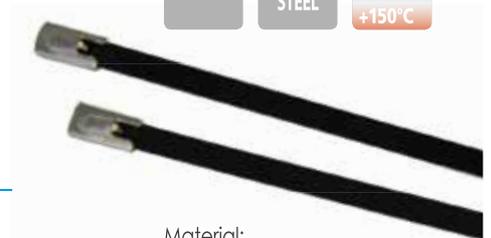


### Coated Stainless Steel cable ties

Type	L (mm)	A (mm)	Max. Bundle Ø (mm)	Min. Loop Tensile Strength (kg)	Quantity
GXAC125X4.6	125	4,6	38,0	46	100
GXAC150X4.6	150		46,0		
GXAC200X4.6	200		61,9		
GXAC260X4.6	260		81,0		
GXAC290X4.6	290		90,6		
GXAC360X4.6	360		112,8		
GXAC520X4.6	520		163,8		
GXAC680X4.6	680		214,8		
GXAC840X4.6	840		265,7		
GXAC200X7.9	200		7,9		
GXAC290X7.9	290	90,6			
GXAC360X7.9	360	112,8			
GXAC520X7.9	520	163,8			
GXAC680X7.9	680	214,8			
GXAC840X7.9	840	265,7			

Recommended tools are shown on page 167

The dimensions shown in the table must be considered as nominal. CEMBRE reserves the right to make changes without prior notice



Material: 316 stainless steel for the most corrosive environments coated with Polyester for insulation purpose, and a better outdoor application  
 Colour: Black  
 Smooth surface and rounded edges assures cable protection and user safety. Equipped with unique ball locking mechanism that allows simple and rapid installation and secure locking.  
 Operating temperature: da -40°C a +150°C  
 High tensile strength  
 Very resistant to ultraviolet radiation and chemical corrosion  
 Non flammable

PA6.6 Polyamide

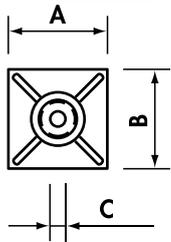
PA 6.6



Material: PA6.6 Polyamide  
 Self-extinguishing V2 (UL 94)  
 Humidity absorption:  
 2,5% (at 50% relative humidity)  
 Operating temperature:  
 From -40°C to +85°C (continuous)  
 From -40°C to +120°C (short periods)

Resistant to:  
 oils, bases, greases, oil products,  
 chlorinated solvents.  
 Colour: Natural

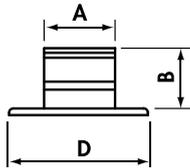
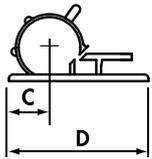
**Attention:**  
**acrylic adhesive; to obtain the best result, wait at least 6 - 8 hours before applying the load.**



### Self adhesive cable tie bases in PA6.6

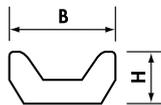
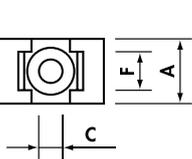
Type	Max Tie (mm)	A (mm)	B (mm)	C (mm)	H (mm)	Fixing screw hole Ø (mm)	Quantity
AB13*	2,8	13,0	13,0	3,2	3,2	-	100
AB19*	3,6	19,0	19,0	4,0	4,4	3,1	100
AB28*	4,8	28,0	28,0	5,3	5,7	5,5	100

\*Add to Ref: N for Black



### Self adhesive cable clips in PA6.6

Type	Cable Ø (mm)	A (mm)	B (mm)	C (mm)	D (mm)	Quantity
CC8.9	8-9	9,0	12,0	8,0	21,5	100
CC9.12	9-12	12,0	15,0	8,2	21,5	100



### Cable tie saddle clamps in PA6.6

Type	Max Tie (mm)	A (mm)	B (mm)	C (mm)	F (mm)	H (mm)	Quantity
SS4.8-3.7	4,8	9,5	15	3,7	5,0	7,2	100
SS4.8-4.5	4,8	9,5	15	4,5	5,0	7,2	100
SS9-4.5	9	16,0	22	4,5	9,2	9,7	100
SS9-5	9	16,0	22	5,0	9,2	9,7	100
SS9-6.4	9	16,0	22	6,4	9,2	9,7	100

## GH8

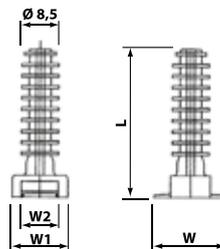
## ACCESSORIES

PA6.6 Polyamide

PA 6.6



Same features as G series.  
 Push into Ø 8 mm hole.  
 Cable tie inserted through slot in head.



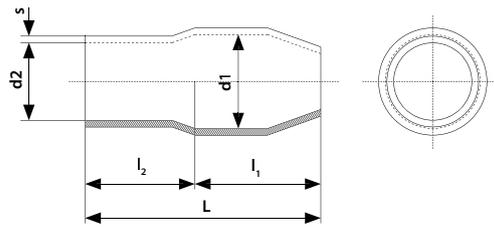
### Stud fixing for cable ties in PA6.6

Type	W (mm)	W1 (mm)	W2 (mm)	L (mm)	Fixing hole Ø (mm)	Quantity
GH8	20	15	10	40,5	8	100

# INSULATED COVERS

ES

For uninsulated connectors



Insulated covers in PVC for general use with CEMBRE A-M copper tube lugs characterised by environmental tolerance, flexibility, not inflammability & stable performance. Widely used for the insulation and protection of connections and electrical terminations.

### General features:

- Material: PVC
- Self extinguishing (UL94): V0
- Working temperature: 85 °C
- Colours: red, yellow, blue, black, grey, brown.

Type	Connectors A-M*	d1 Ø	d2 Ø	l1 ±1	l2 ±1	L ±2	s ±0.2	Quantity	Minimum Order Qty
ES03-..	A03	3.3	3.1	7.0	8.0	15.0	0.6	100	3.000
ES06-..	A06	4.5	3.7	8.0	8.0	16.0	0.7	100	
ES1-..	A1	5.7	4.1	9.0	9.0	18.0	0.8	100	
ES2-..	A2	7.2	6.2	11.0	10.0	21.0	1.0	100	1.000
ES3-..	A3	10.0	8.0	15.0	13.0	28.0	1.1	100	
ES5-..	A5	12.0	9.5	15.0	14.0	29.0	1.2	100	
ES10-..	A7, A9, A10	14.0	11.8	17.0	17.0	34.0	1.4	100	500
ES14-..	A12, A14	17.0	13.9	22.0	20.0	42.0	1.5	100	
ES19-..	A17, A19	19.0	16.0	25.0	21.0	46.0	1.5	50	
ES24-..	A20, A24	22.0	18.0	31.0	24.0	55.0	1.7	50	200
ES30-..	A29, A30	24.0	20.0	32.0	28.0	60.0	1.8	50	
ES37-..	A35, A37	26.0	22.0	34.0	31.0	65.0	1.8	50	
ES40-..	A40	32.2	24.0	38.0	31.0	69.0	2.0	50	100
ES48-..	A48	36.5	27.2	42.0	33.0	75.0	2.0	50	
ES80-..	A60, A80	36.7	30.0	42.0	33.0	75.0	2.0	25	

Add the suffix corresponding to the selected colour to the reference:

-BU blue, -GY grey, -BR brown, -BK black, -RE red, -YE yellow,

\* See A-M type copper tube lugs on pages 28-29, 31

\*\* Depending on the diameter of the insulated cable



Heat-shrinkable Polyolefin tubing coil for general use; is environmentally neutral, flexible, not inflammable and offers fast heat shrinkage and stable performance.

Main uses include insulation and protection of electrical conductors, connectors and terminations; protection of metal tubes from corrosion; protection of antennae and various identification applications.

**For general characteristics and technical specifications see page 102.**

- Colours: Black, Red, White, Blue, Transparent, Yellow, Green, Grey, Brown, Yellow/Green.
- Packaging: Coil on Reel

Type	Coil Length	before shrinking	after shrinking		Colour	
		Internal Ø mm	Internal Ø mm	Thickness mm		
TCS12X200BK	200 m	Ø 1,1 mm	Ø 0,50 mm	0,33 mm	BLACK	●
TCS16X200BK	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	BLACK	●
TCS24X200BK	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	BLACK	●
TCS32X200BK	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	BLACK	●
TCS48X100BK	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	BLACK	●
TCS64X100BK	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	BLACK	●
TCS95X100BK	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	BLACK	●
TCS127X100BK	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	BLACK	●
TCS160X100BK	100 m	Ø 16,5 mm	Ø 8,00 mm	0,70 mm	BLACK	●
TCS190X100BK	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	BLACK	●
TCS254X50BK	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	BLACK	●
TCS320X50BK	50 m	Ø 31,5 mm	Ø 15,0 mm	1,00 mm	BLACK	●
TCS381X50BK	50 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	BLACK	●
TCS508X25BK	25 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	BLACK	●
TCS762X25BK	25 m	Ø 70,0 mm	Ø 36,0 mm	1,30 mm	BLACK	●
TCS1016X25BK	25 m	Ø 100,0 mm	Ø 51,0 mm	1,30 mm	BLACK	●
TCS1260X25BK	25 m	Ø 120,0 mm	Ø 61,0 mm	1,30 mm	BLACK	●
TCS1500X25BK	25 m	Ø 150,0 mm	Ø 76,0 mm	1,30 mm	BLACK	●
TCS16X200RE	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	RED	●
TCS24X200RE	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	RED	●
TCS32X200RE	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	RED	●
TCS48X100RE	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	RED	●
TCS64X100RE	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	RED	●
TCS95X100RE	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	RED	●
TCS127X100RE	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	RED	●
TCS190X100RE	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	RED	●
TCS254X50RE	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	RED	●
TCS16X200WH	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	WHITE	○
TCS20X200WH	200 m	Ø 2,0 mm	Ø 0,85 mm	0,36 mm	WHITE	○
TCS24X200WH	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	WHITE	○
TCS32X200WH	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	WHITE	○
TCS48X100WH	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	WHITE	○
TCS64X100WH	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	WHITE	○
TCS95X100WH	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	WHITE	○
TCS127X100WH	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	WHITE	○
TCS190X100WH	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	WHITE	○
TCS254X50WH	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	WHITE	○
TCS16X200BU	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	BLUE	●
TCS24X200BU	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	BLUE	●
TCS32X200BU	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	BLUE	●
TCS48X100BU	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	BLUE	●
TCS64X100BU	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	BLUE	●
TCS95X100BU	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	BLUE	●
TCS127X100BU	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	BLUE	●
TCS190X100BU	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	BLUE	●
TCS254X50BU	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	BLUE	●
TCS381X50BU	50 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	BLUE	●
TCS508X25BU	25 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	BLUE	●

# TERMOCOIL HEAT-SHRINKABLE TUBING

TCS

flame-retardant Polyolefin - shrinkage ratio 2÷1



Type	Coil Length	before shrinking		after shrinking		Colour
		Internal Ø mm	Internal Ø mm	Thickness mm		
TCS12X200TR	200 m	Ø 1,1 mm	Ø 0,50 mm	0,33 mm	TRANSPARENT	○
TCS16X200TR	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	TRANSPARENT	○
TCS24X200TR	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	TRANSPARENT	○
TCS32X200TR	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	TRANSPARENT	○
TCS48X100TR	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	TRANSPARENT	○
TCS64X100TR	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	TRANSPARENT	○
TCS95X100TR	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	TRANSPARENT	○
TCS127X100TR	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	TRANSPARENT	○
TCS160X100TR	100 m	Ø 16,5 mm	Ø 8,00 mm	0,70 mm	TRANSPARENT	○
TCS190X100TR	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	TRANSPARENT	○
TCS254X50TR	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	TRANSPARENT	○
TCS320X50BK	50 m	Ø 31,5 mm	Ø 15,0 mm	1,00 mm	TRANSPARENT	○
TCS381X50TR	50 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	TRANSPARENT	○
TCS508X25TR	25 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	TRANSPARENT	○
TCS762X25TR	25 m	Ø 70,0 mm	Ø 36,0 mm	1,30 mm	TRANSPARENT	○
TCS1016X25TR	25 m	Ø 100,0 mm	Ø 51,0 mm	1,30 mm	TRANSPARENT	○
TCS1260X25TR	25 m	Ø 120,0 mm	Ø 61,0 mm	1,30 mm	TRANSPARENT	○
TCS1500X25TR	25 m	Ø 150,0 mm	Ø 76,0 mm	1,30 mm	TRANSPARENT	○
TCS16X200YE	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	YELLOW	●
TCS24X200YE	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	YELLOW	●
TCS32X200YE	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	YELLOW	●
TCS48X100YE	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	YELLOW	●
TCS64X100YE	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	YELLOW	●
TCS95X100YE	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	YELLOW	●
TCS127X100YE	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	YELLOW	●
TCS190X100YE	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	YELLOW	●
TCS254X50YE	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	YELLOW	●
TCS16X200GN	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	GREEN	●
TCS24X200GN	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	GREEN	●
TCS32X200GN	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	GREEN	●
TCS48X100GN	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	GREEN	●
TCS64X100GN	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	GREEN	●
TCS95X100GN	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	GREEN	●
TCS127X100GN	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	GREEN	●
TCS190X100GN	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	GREEN	●
TCS254X50GN	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	GREEN	●
TCS16X200GY	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	GREY	●
TCS24X200GY	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	GREY	●
TCS32X200GY	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	GREY	●
TCS48X100GY	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	GREY	●
TCS64X100GY	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	GREY	●
TCS95X100GY	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	GREY	●
TCS127X100GY	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	GREY	●
TCS190X100GY	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	GREY	●
TCS254X50GY	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	GREY	●
TCS381X50GY	50 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	GREY	●
TCS508X25GY	25 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	GREY	●
TCS16X200BR	200 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	BROWN	●
TCS24X200BR	200 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	BROWN	●
TCS32X200BR	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	BROWN	●
TCS48X100BR	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	BROWN	●
TCS64X100BR	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	BROWN	●
TCS95X100BR	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	BROWN	●
TCS127X100BR	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	BROWN	●
TCS190X100BR	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	BROWN	●
TCS254X50BR	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	BROWN	●
TCS381X50BR	50 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	BROWN	●
TCS508X25BR	25 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	BROWN	●
TCS32X200Y/G	200 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	YELLOW/GREEN	●
TCS48X100Y/G	100 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	YELLOW/GREEN	●
TCS64X100Y/G	100 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	YELLOW/GREEN	●
TCS95X100Y/G	100 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	YELLOW/GREEN	●
TCS127X100Y/G	100 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	YELLOW/GREEN	●
TCS190X100Y/G	100 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	YELLOW/GREEN	●
TCS254X50Y/G	50 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	YELLOW/GREEN	●
TCS381X50Y/G	50 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	YELLOW/GREEN	●
TCS508X25Y/G	25 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	YELLOW/GREEN	●



Heat-shrinkable Polyolefin tubing strip for general use; is environmentally neutral, flexible, not inflammable and offers fast heat shrinkage and stable performance.

Main uses include insulation and protection of electrical conductors, connectors and terminations; protection of metal tubes from corrosion; protection of antennae and various identification applications.

For general characteristics and technical specifications see page 102.

- Colours: Black, Red, White, Blue, Transparent, Yellow, Green, Grey, Brown, Yellow/Green.
- Packaging: Strips in Box

Type	Strip Length	before shrinking		after shrinking		Colour	Quantity Strips per box
		Internal Ø mm	Internal Ø mm	Thickness mm	Thickness mm		
TSS12BK	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	BLACK ●	30
TSS16BK	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	BLACK ●	30
TSS24BK	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	BLACK ●	30
TSS32BK	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	BLACK ●	30
TSS48BK	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	BLACK ●	30
TSS64BK	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	BLACK ●	30
TSS95BK	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	BLACK ●	20
TSS127BK	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	BLACK ●	15
TSS190BK	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	BLACK ●	10
TSS254BK	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	BLACK ●	6
TSS380BK	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	BLACK ●	4
TSS510BK	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	BLACK ●	2
TSS12RE	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	RED ●	30
TSS16RE	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	RED ●	30
TSS24RE	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	RED ●	30
TSS32RE	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	RED ●	30
TSS48RE	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	RED ●	30
TSS64RE	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	RED ●	30
TSS95RE	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	RED ●	20
TSS127RE	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	RED ●	15
TSS190RE	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	RED ●	10
TSS254RE	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	RED ●	6
TSS380RE	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	RED ●	4
TSS510RE	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	RED ●	2
TSS12WH	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	WHITE ○	30
TSS16WH	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	WHITE ○	30
TSS24WH	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	WHITE ○	30
TSS32WH	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	WHITE ○	30
TSS48WH	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	WHITE ○	30
TSS64WH	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	WHITE ○	30
TSS95WH	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	WHITE ○	20
TSS127WH	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	WHITE ○	15
TSS190WH	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	WHITE ○	10
TSS254WH	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	WHITE ○	6
TSS380WH	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	WHITE ○	4
TSS510WH	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	WHITE ○	2
TSS12BU	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	BLUE ●	30
TSS16BU	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	BLUE ●	30
TSS24BU	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	BLUE ●	30
TSS32BU	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	BLUE ●	30
TSS48BU	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	BLUE ●	30
TSS64BU	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	BLUE ●	30
TSS95BU	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	BLUE ●	20
TSS127BU	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	BLUE ●	15
TSS190BU	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	BLUE ●	10
TSS254BU	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	BLUE ●	6
TSS380BU	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	BLUE ●	4
TSS510BU	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	BLUE ●	2
TSS12TR	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	TRANSPARENT ○	30
TSS16TR	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	TRANSPARENT ○	30
TSS24TR	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	TRANSPARENT ○	30
TSS32TR	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	TRANSPARENT ○	30
TSS48TR	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	TRANSPARENT ○	30
TSS64TR	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	TRANSPARENT ○	30
TSS95TR	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	TRANSPARENT ○	20
TSS127TR	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	TRANSPARENT ○	15
TSS190TR	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	TRANSPARENT ○	10
TSS254TR	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	TRANSPARENT ○	6
TSS380TR	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	TRANSPARENT ○	4
TSS510TR	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	TRANSPARENT ○	2

# TERMOSTRIP HEAT-SHRINKABLE TUBING

TSS

flame-retardant Polyolefin - shrinkage ratio 2÷1

Type	Strip Length	before shrinking		after shrinking		Colour	Quantity Strips per box
		Internal Ø mm	Internal Ø mm	Thickness mm	Thickness mm		
TSS12YE	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	YELLOW	30
TSS16YE	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	YELLOW	30
TSS24YE	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	YELLOW	30
TSS32YE	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	YELLOW	30
TSS48YE	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	YELLOW	30
TSS64YE	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	YELLOW	30
TSS95YE	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	YELLOW	20
TSS127YE	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	YELLOW	15
TSS190YE	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	YELLOW	10
TSS254YE	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	YELLOW	6
TSS380YE	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	YELLOW	4
TSS510YE	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	YELLOW	2
TSS12GN	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	GREEN	30
TSS16GN	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	GREEN	30
TSS24GN	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	GREEN	30
TSS32GN	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	GREEN	30
TSS48GN	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	GREEN	30
TSS64GN	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	GREEN	30
TSS95GN	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	GREEN	20
TSS127GN	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	GREEN	15
TSS190GN	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	GREEN	10
TSS254GN	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	GREEN	6
TSS380GN	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	GREEN	4
TSS510GN	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	GREEN	2
TSS12GY	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	GREY	30
TSS16GY	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	GREY	30
TSS24GY	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	GREY	30
TSS32GY	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	GREY	30
TSS48GY	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	GREY	30
TSS64GY	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	GREY	30
TSS95GY	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	GREY	20
TSS127GY	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	GREY	15
TSS190GY	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	GREY	10
TSS254GY	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	GREY	6
TSS380GY	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	GREY	4
TSS510GY	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	GREY	2
TSS12BR	1,22 m	Ø 1,1 mm	Ø 0,5 mm	0,33 mm	0,33 mm	BROWN	30
TSS16BR	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	BROWN	30
TSS24BR	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	BROWN	30
TSS32BR	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	BROWN	30
TSS48BR	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	BROWN	30
TSS64BR	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	BROWN	30
TSS95BR	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	BROWN	20
TSS127BR	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	BROWN	15
TSS190BR	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	BROWN	10
TSS254BR	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	BROWN	6
TSS380BR	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	BROWN	4
TSS510BR	1,22 m	Ø 50,0 mm	Ø 25,0 mm	1,10 mm	1,10 mm	BROWN	2
TSS16Y/G	1,22 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	YELLOW/GREEN	30
TSS24Y/G	1,22 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	YELLOW/GREEN	30
TSS32Y/G	1,22 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	YELLOW/GREEN	30
TSS48Y/G	1,22 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	YELLOW/GREEN	30
TSS64Y/G	1,22 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	YELLOW/GREEN	30
TSS95Y/G	1,22 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	YELLOW/GREEN	20
TSS127Y/G	1,22 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	YELLOW/GREEN	15
TSS190Y/G	1,22 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	YELLOW/GREEN	10
TSS254Y/G	1,22 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	YELLOW/GREEN	6
TSS380Y/G	1,22 m	Ø 36,5 mm	Ø 17,5 mm	1,00 mm	1,00 mm	YELLOW/GREEN	4



flame-retardant Polyolefin - shrinkage ratio 2÷1



Heat-shrinkable Polyolefin tubing for general use; is environmentally neutral, flexible, not inflammable and offers fast heat shrinkage and stable performance.

Main uses include insulation and protection of electrical conductors, connectors and terminations; protection of metal tubes from corrosion; protection of antennae and various identification applications.

### General characteristics:

- Operating temperature: -55°C + 125°C
- Minimum shrinkage temperature: 70°C
- Temperature for complete shrinkage: 110°C
- RoHS compliant
- Colours: Black, Red, White, Blue, Grey, Brown, Yellow/Green.
- Packaging: Roll in Dispenser Box

### Technical Specifications:

Property	Test Method	Performance
Traction resistance (MPa):	ASTM D2671	≥10.4
Elongation at failure (%):	ASTM D2671	≥200
Traction resistance after heat aging (MPa):	UL 224 158°Cx168hr	≥7.3
Elongation at failure after heat aging (%):	UL 224 158°Cx168hr	≥100
Heat resistance:	UL 224 250°Cx4hr	No failure
Low temperature flexibility:	UL 224 -30°Cx4hr	No failure
Dielectric strength (kv/mm):	IEC 243	≥15
Insulation resistance:	600V UL 224	No perforation at 2500V
Volume resistance (Ω.cm):	IEC 93	≥1x10 <sup>14</sup>
Corrosive action:	UL 224 158°Cx168hr	Not corrosive
Copper compatibility:	UL 224 158°Cx168hr	Not corrosive
Flammability:	UL 224	VW-1

Type	Reel Length	before shrinking		after shrinking		Colour
		Internal Ø mm	Internal Ø mm	Thickness mm	Thickness mm	
TBS16X20BK	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	BLACK ●
TBS24X20BK	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	BLACK ●
TBS32X10BK	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	BLACK ●
TBS48X10BK	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	BLACK ●
TBS64X10BK	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	BLACK ●
TBS95X10BK	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	BLACK ●
TBS127X10BK	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	BLACK ●
TBS190X5BK	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	BLACK ●
TBS254X5BK	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	BLACK ●
TBS16X20RE	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	RED ●
TBS24X20RE	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	RED ●
TBS32X10RE	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	RED ●
TBS48X10RE	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	RED ●
TBS64X10RE	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	RED ●
TBS95X10RE	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	RED ●
TBS127X10RE	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	RED ●
TBS190X5RE	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	RED ●
TBS254X5RE	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	RED ●
TBS16X20WH	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	WHITE ○
TBS24X20WH	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	WHITE ○
TBS32X10WH	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	WHITE ○
TBS48X10WH	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	WHITE ○
TBS64X10WH	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	WHITE ○
TBS95X10WH	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	WHITE ○
TBS127X10WH	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	WHITE ○
TBS190X5WH	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	WHITE ○
TBS254X5WH	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	WHITE ○
TBS16X20BU	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	BLUE ●
TBS24X20BU	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	BLUE ●
TBS32X10BU	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	BLUE ●
TBS48X10BU	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	BLUE ●
TBS64X10BU	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	BLUE ●
TBS95X10BU	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	BLUE ●
TBS127X10BU	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	BLUE ●
TBS190X5BU	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	BLUE ●
TBS254X5BU	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	BLUE ●

Type	Reel Length	before shrinking		after shrinking		Colour
		Internal Ø mm	Internal Ø mm	Thickness mm	Thickness mm	
TBS16X20GY	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	GREY ●
TBS24X20GY	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	GREY ●
TBS32X10GY	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	GREY ●
TBS48X10GY	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	GREY ●
TBS64X10GY	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	GREY ●
TBS95X10GY	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	GREY ●
TBS127X10GY	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	GREY ●
TBS190X5GY	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	GREY ●
TBS254X5GY	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	GREY ●
TBS16X20BR	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	BROWN ●
TBS24X20BR	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	BROWN ●
TBS32X10BR	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	BROWN ●
TBS48X10BR	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	BROWN ●
TBS64X10BR	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	BROWN ●
TBS95X10BR	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	BROWN ●
TBS127X10BR	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	BROWN ●
TBS190X5BR	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	BROWN ●
TBS254X5BR	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	BROWN ●
TBS16X20Y/G	20 m	Ø 1,5 mm	Ø 0,65 mm	0,36 mm	0,36 mm	YELLOW/GREEN ●
TBS24X20Y/G	20 m	Ø 2,5 mm	Ø 1,00 mm	0,45 mm	0,45 mm	YELLOW/GREEN ●
TBS32X10Y/G	10 m	Ø 3,0 mm	Ø 1,30 mm	0,45 mm	0,45 mm	YELLOW/GREEN ●
TBS48X10Y/G	10 m	Ø 4,7 mm	Ø 2,00 mm	0,45 mm	0,45 mm	YELLOW/GREEN ●
TBS64X10Y/G	10 m	Ø 6,5 mm	Ø 3,00 mm	0,56 mm	0,56 mm	YELLOW/GREEN ●
TBS95X10Y/G	10 m	Ø 9,5 mm	Ø 4,50 mm	0,56 mm	0,56 mm	YELLOW/GREEN ●
TBS127X10Y/G	10 m	Ø 12,5 mm	Ø 6,00 mm	0,56 mm	0,56 mm	YELLOW/GREEN ●
TBS190X5Y/G	5 m	Ø 19,0 mm	Ø 9,00 mm	0,70 mm	0,70 mm	YELLOW/GREEN ●
TBS254X5Y/G	5 m	Ø 26,0 mm	Ø 12,5 mm	0,90 mm	0,90 mm	YELLOW/GREEN ●

# CAST RESIN JOINTS

N

cast resin, low voltage through joints



## Shells

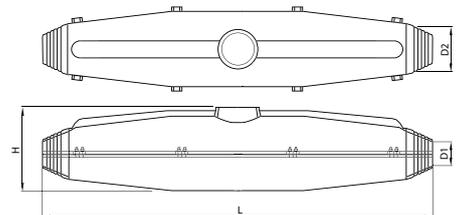
Manufactured from transparent synthetic material which allows a visual check of the connections before and after casting. The halves of the shell are joined by snap closures which avoid further fixing or sealing.

Shells are left on after casting to provide additional protection against mechanical abrasion, chemical agents and severe weather conditions.



## STRAIGHT JOINTS

Type	Dimensions mm				Dimensions Cable	
	L	H	D1(1)	D2(1)	Cable Diameter mm	Indicative Cable Section (2) mm <sup>2</sup>
N11	200	50	8	26	8 - 25	4C x 1,5 ÷ 10
N12	260	67	16	32	16 - 31	4C x 10 ÷ 25
N13	360	75	21	38	21 - 36	4C x 35 ÷ 50
N14	400	100	26	41	26 - 39	4C x 50 ÷ 70
N15	530	130	35	56	35 - 54	4C x 95 ÷ 150
N16	700	150	47	74	45 - 72	4C x 185 ÷ 300

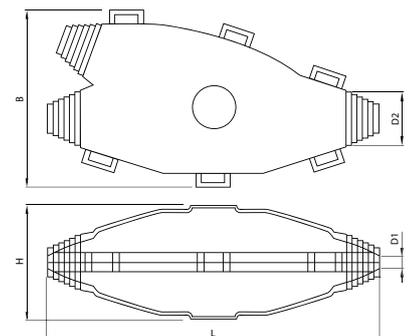


(1) Internal dimension of the shell  
 (2) Indicative cable sections are approximate and concern only harmonised, PVC or Rubber insulated cables at a working voltage of 0,6/1 kV



## BRANCH JOINTS

Type	Dimensions mm					Dimensions Cable		
	L	H	B	D1(1)	D2(1)	Cable Diameter mm	Indicative Cable Section (2) mm <sup>2</sup>	
							Passante	Derivato
NY00	150	47	70	11	20	11 - 20	4C x 1,5 ÷ 2,5	4C x 1,5
NY0	175	60	94	6	22	6 - 21	4C x 4 ÷ 10	4C x 4
NY1	225	75	110	9	26	9 - 24	4C x 6 ÷ 25	4C x 16



(1) Internal dimension of the shell  
 (2) Indicative cable sections are approximate and concern only harmonised, PVC or Rubber insulated cables at a working voltage of 0,6/1 kV

**Cast resin technology**

PUR-cast resin technology was introduced to seal and protect power, signal and telephone cable joints.

This new generation of two component cast resin has been developed for the most demanding environments and circumstances.

CEMBRE cast resin joints meet the requirements of EN50393 and DIN VDE 57291-2 (VDE0291).

Quick setting properties in humid or even cold conditions make it a fast and reliable solution.

No external measuring or mixing is required as this takes place within an Aluminium foil pouch, avoiding spillage and errors during installation.

Unmixed resin components have a 48 month shelf-life even in the most difficult storage conditions.

Shells are made of durable PET resulting in good hydrophobic properties and excellent impact resistance, while good adhesion to PVC and metals assures a watertight seal.

Technical characteristic	Test result	Requirement of DIN VDE 0291
Pot life @ 5°C 23°C 35°C	35 min 20 min 15 min	product conforms ± 30%
Reactant open cup flash point	> 200 °C	> 55
Tensile strength	≥ 8.0 Mpa	≥ 5.0
Hot aging	-5 Shore A	-7
Adhesive	> 1500 CP.S	-
Elongation at break	≥ 100%	≥ 50%
Gel time for 300 ml @ Pouch >1000 ml Pouch <1000 ml	23 °C 26 min 17 min	product conforms ± 10% product conforms ± 10%
Max. reaction temp. Total vol. variability when hardening	60 °C / 333 K 6 %	product conforms ± 10% max. 6.5 %
Cast resin component open cup flash point	> 200 °C	> 100
Density	1.07 g / cm <sup>3</sup>	-
Impact strength	> 10 kJ / m <sup>2</sup>	> 10 kJ / m <sup>2</sup>
Hardness	75 Shore A	min. 20 Shore D
Expansion coefficient in temp. range 20-50°C	5.9 x 10 <sup>-4</sup> K <sup>-1</sup>	product conforms ± 15%
Thermal conductivity	0.2W x m <sup>-1</sup> x K <sup>-1</sup>	product conforms ± 20%
Flammability	Class II c	acc. to DIN VDE 0304, part 3
Water absorption 42 days@50°C	360 mg	max. 400 mg
Electrolytic corrosion	A1	-
Voltage test @ 23°C 80°C	> 20 kV > 10 kV	no breakdown @ test voltage > 20 kV > 20 kV
Dielectric dissipation factor @ 23°C and 50 Hz 23°C and 1k Hz	0.08 0.05	max. 0.1 -
Relative permittivity @ 23°C and 50 Hz @ 23°C and 1k Hz	5 5.1	< 6 -
Tracking resistance	KA 3c	min KA 3c
After 28 days of immersion in 90°C water		
Tensile strength	8.2N/mm <sup>2</sup>	≥ 65% of initial value
Elongation at break	60%	≥ 65% of initial value
Hardness	47 Shore	≥ 80% of initial value