

# POLYAMIDE PA6.6 INSULATED COPPER TUBE LUGS ANE-M FINE STRANDED

*for extra flexible copper conductors*

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 Cu-OF CW008A conform to UNI EN 13600.

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 items tabulated all feature black insulated sleeves, however other colours are available, please consult us.

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.



## CONDUCTOR TABLES IEC 60228:2004-11

### CLASS 5

Nominal cross-sectional mm <sup>2</sup>	Maximum diameter of wires in conductor mm	Maximum resistance of conductor at 20 °C	
		Plain wires [Ω/km]	Metal-coated wires [Ω/km]
0,5	0,21	39	40,1
0,75	0,21	26	26,7
1	0,21	19,5	20
1,5	0,26	13,3	13,7
2,5	0,26	7,98	8,21
4	0,31	4,95	5,09
6	0,31	3,3	3,39

10	0,41	1,91	1,95
16	0,41	1,21	1,24
25	0,41	0,78	0,795
35	0,41	0,554	0,565
50	0,41	0,386	0,393
70	0,51	0,272	0,277
95	0,51	0,206	0,21
120	0,51	0,161	0,164
150	0,51	0,129	0,132
185	0,51	0,106	0,108
240	0,51	0,08	0,081
300	0,51	0,064	0,065
400	0,51	0,048	0,049
500	0,61	0,038	0,039
630	0,61	0,028	0,029

## CLASS 6

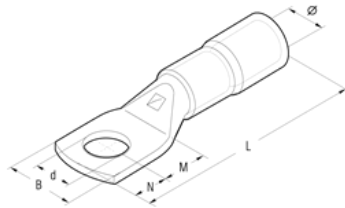
Sezione nominale mm <sup>2</sup>	Diametro massimo dei fili mm	Resistenza massima del conduttore a 20 °C	
		Fili nudi [Ohm/km]	Fili rivestiti [Ohm/km]
0,5	0,16	39	40,1
0,75	0,16	26	26,7
1	0,16	19,5	20
1,5	0,16	13,3	13,7

2,5	0,16	7,98	8,21
4	0,16	4,95	5,09
6	0,21	3,3	3,39
10	0,21	1,91	1,95
16	0,21	1,21	1,24
25	0,21	0,78	0,795
35	0,21	0,554	0,565
50	0,31	0,386	0,393
70	0,31	0,272	0,277
95	0,31	0,206	0,21
120	0,31	0,161	0,164
150	0,31	0,129	0,132
185	0,41	0,106	0,108
240	0,41	0,08	0,081
300	0,41	0,064	0,065

# POLYAMIDE PA6.6 INSULATED COPPER TUBE LUGS ANE-M FINE STRANDED

## *Technical characteristics*

Min operating temperature range	-20 °C
Max operating temperature range	115 °C
Max operating temperature range (surge)	130 °C
Material (Body)	Electrolytic copper
Material (fully insulated)	Polyamide PA6.6



# POLYAMIDE PA6.6 INSULATED COPPER TUBE LUGS ANE-M FINE STRANDED

## List of products

**ANE9-M** Cable type: extra-flexible copper, Maximum section: 35 mm<sup>2</sup>



Type	Ø Stud mm	Ø	B	N	M	L	d	Pack qty	Min. pack qty	Maximum diameter of the stripped cable
ANE9-M6/15	6 mm	13.6 mm	15 mm	7 mm	8 mm	54 mm	6.4 mm	200	50	
ANE9-M8	8 mm	13.6 mm	17 mm	8 mm	9 mm	56 mm	8.4 mm	200	50	
ANE9-M10	10 mm	13.6 mm	18.5 mm	10 mm	11 mm	60 mm	10.5 mm	150	50	
ANE9-M12	12 mm	13.6 mm	21 mm	12 mm	14 mm	65 mm	13.2 mm	150	50	

## Products used together

### Tools

**PNB - PNB-1**

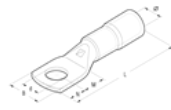
**ANE12-M** Cable type: extra-flexible copper, Maximum section: 50 mm<sup>2</sup>


Type	B	L	Ø	d	Pack qty	Min. pack qty	M	N	Ø Stud mm	Internal diameter
ANE12-M6/15	15 mm	59.5 mm	15.7 mm	6.4 mm	100	25	8 mm	7 mm	6 mm	
ANE12-M8	19.8 mm	61.5 mm	15.7 mm	8.4 mm	100	25	9 mm	8 mm	8 mm	
ANE12-M10	19.8 mm	65.5 mm	15.7 mm	10.5 mm	100	25	11 mm	10 mm	10 mm	
ANE12-M10/19	19 mm	65.5 mm	15.7 mm	10.5 mm	100	25	11 mm	10 mm	10 mm	
ANE12-M12	22 mm	70.5 mm	15.7 mm	13.2 mm	100	25	14 mm	12 mm	12 mm	

**ANE17-M** Cable type: extra-flexible copper, Maximum section: 70 mm<sup>2</sup>


Type	Ø Stud mm	Ø	B	N	M	L	d	Pack qty	Min. pack qty	Internal diameter
ANE17-M6	6 mm	17.9 mm	23 mm	7 mm	8 mm	63.8 mm	6.4 mm	100	25	
ANE17-M8	8 mm	17.9 mm	23 mm	8 mm	9 mm	65.8 mm	8.4 mm	100	25	
ANE17-M10	10 mm	17.9 mm	23 mm	10 mm	11 mm	69.8 mm	10.5 mm	50	25	
ANE17-M10/19	10 mm	17.9 mm	19 mm	10 mm	11 mm	69.8 mm	10.5 mm	100	25	
ANE17-M12	12 mm	17.9 mm	23 mm	12 mm	14 mm	74.8 mm	13.2 mm	50	25	
ANE17-M14	14 mm	17.9 mm	25 mm	12 mm	15.5 mm	76.3 mm	15 mm	50	25	
ANE17-M16	16 mm	17.9 mm	27 mm	13.5 mm	16.5 mm	78.8 mm	17 mm	50	25	

### ANE20-M *Cable type: extra-flexible copper, Maximum section: 95 mm<sup>2</sup>*



Type	Ø Stud mm	Ø	B	N	M	L	d	Pack qty	Min. pack qty
ANE20-M8	8 mm	20 mm	27 mm	8 mm	9 mm	70.6 mm	8.4 mm	50	25
ANE20-M10	10 mm	20 mm	27 mm	10 mm	11 mm	74.6 mm	10.5 mm	50	25
ANE20-M12	12 mm	20 mm	27 mm	12 mm	14 mm	79.6 mm	13.2 mm	50	25
ANE20-M14	14 mm	20 mm	27 mm	12 mm	15.5 mm	81.1 mm	15 mm	50	25
ANE20-M16	16 mm	20 mm	27 mm	13.5 mm	16.5 mm	83.6 mm	17 mm	50	25

### ANE29-M *Cable type: extra-flexible copper, Maximum section: 120 mm<sup>2</sup>*



Type	Ø Stud mm	Ø	B	N	M	L	d	Pack qty	Min. pack qty
ANE29-M10	10 mm	22.4 mm	30 mm	10 mm	11 mm	81.5 mm	10.5 mm	50	25
ANE29-M12	12 mm	22.4 mm	30 mm	12 mm	14 mm	86.5 mm	13.2 mm	50	25
ANE29-M14	14 mm	22.4 mm	30 mm	12 mm	15.5 mm	88.5 mm	15 mm	50	25
ANE29-M16	16 mm	22.4 mm	30 mm	13.5 mm	16.5 mm	90.5 mm	17 mm	50	25
ANE29-M20	20 mm	22.4 mm	30 mm	20 mm	22 mm	102.5 mm	21 mm	40	20

### ANE35-M *Cable type: extra-flexible copper, Maximum section: 150 mm<sup>2</sup>*



Type	Ø Stud mm	Ø	B	N	M	L	d	Pack qty	Min. pack qty
ANE35-M12	12 mm	25 mm	34.2 mm	14 mm	14 mm	95 mm	13.2 mm	30	15
ANE35-M14	14 mm	25 mm	34.2 mm	16 mm	15.5 mm	99 mm	15 mm	30	15
ANE35-M16	16 mm	25 mm	34.2 mm	17 mm	16.5 mm	101 mm	17 mm	30	15
ANE35-M20	20 mm	25 mm	34.2 mm	20 mm	22 mm	107 mm	21 mm	30	15