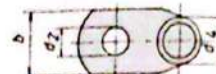
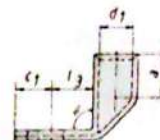


## Tubular cable-lugs

Standard type  
90° angle  
Material: E-copper  
Surface: tin plated

## Cosses tubulaires

Exécution standard  
angulaires 90°  
Matière: tube Cu él.  
Surface étamée par électrolyse



| conductor<br>section *<br>mm² | bolt<br>alésage<br>Ø | part<br>article<br>no. | dimensions mm |    |    |      |      |      |    | tools / outillg.<br>méch.<br>hydr.<br>page / page | 100 pcs<br>~ kg | pcs |
|-------------------------------|----------------------|------------------------|---------------|----|----|------|------|------|----|---------------------------------------------------|-----------------|-----|
|                               |                      |                        | d1            | a  | b  | d2   | d4   | c1   | l3 |                                                   |                 |     |
| <b>95</b>                     | M 8                  | 48 R/ 8                | 13,5          | 25 | 26 | 8,5  | 18   | 12   | 14 | 121,<br>122,<br>124<br>to / à<br>138              | 5,960           | 50  |
|                               | M 10                 | 48 R/10                |               |    | 26 | 10,5 |      | 12   | 17 |                                                   | 6,060           |     |
|                               | M 12                 | 48 R/12                |               |    | 26 | 13   |      | 13   | 18 |                                                   | 6,070           |     |
|                               | M 14                 | 48 R/14                |               |    | 26 | 15   |      | 14,5 | 20 |                                                   | 6,160           |     |
|                               | M 16                 | 48 R/16                |               |    | 28 | 17   |      | 16   | 22 |                                                   | 6,170           |     |
|                               | M 20                 | 48 R/20                |               |    | 36 | 21   |      | 22   | 24 |                                                   | 6,480           |     |
| <b>120</b>                    | M 8                  | 49 R/ 8                | 15            | 26 | 28 | 8,5  | 19,5 | 14   | 16 |                                                   | 7,500           | 50  |
|                               | M 10                 | 49 R/10                |               |    | 28 | 10,5 |      | 14   | 17 |                                                   | 7,450           |     |
|                               | M 12                 | 49 R/12                |               |    | 28 | 13   |      | 14   | 18 |                                                   | 7,300           |     |
|                               | M 14                 | 49 R/14                |               |    | 28 | 15   |      | 15   | 20 |                                                   | 7,300           |     |
|                               | M 16                 | 49 R/16                |               |    | 30 | 17   |      | 16   | 22 |                                                   | 7,350           |     |
|                               | M 20                 | 49 R/20                |               |    | 36 | 21   |      | 22   | 24 |                                                   | 7,600           |     |
| <b>150</b>                    | M 8                  | 50 R/ 8                | 16,5          | 30 | 31 | 8,5  | 21   | 14   | 16 |                                                   | 8,760           | 50  |
|                               | M 10                 | 50 R/10                |               |    | 31 | 10,5 |      | 14   | 17 |                                                   | 8,700           |     |
|                               | M 12                 | 50 R/12                |               |    | 31 | 13   |      | 15   | 18 |                                                   | 8,700           |     |
|                               | M 14                 | 50 R/14                |               |    | 31 | 15   |      | 15   | 20 |                                                   | 8,450           |     |
|                               | M 16                 | 50 R/16                |               |    | 31 | 17   |      | 16   | 22 |                                                   | 8,600           |     |
|                               | M 20                 | 50 R/20                |               |    | 36 | 21   |      | 22   | 24 |                                                   | 9,100           |     |
| <b>185</b>                    | M 10                 | 51 R/10                | 19            | 30 | 35 | 10,5 | 24   | 18   | 22 |                                                   | 12,450          | 25  |
|                               | M 12                 | 51 R/12                |               |    | 35 | 13   |      | 18   | 22 |                                                   | 12,300          |     |
|                               | M 14                 | 51 R/14                |               |    | 35 | 15   |      | 18   | 22 |                                                   | 12,000          |     |
|                               | M 16                 | 51 R/16                |               |    | 35 | 17   |      | 18   | 22 |                                                   | 11,800          |     |
|                               | M 20                 | 51 R/20                |               |    | 39 | 21   |      | 22   | 24 |                                                   | 12,000          |     |
|                               |                      |                        |               |    |    |      |      |      |    |                                                   |                 |     |
| <b>240</b>                    | M 10                 | 52 R/10                | 21            | 35 | 39 | 10,5 | 26   | 21,5 | 22 | 140<br>to / à<br>163                              | 15,750          | 25  |
|                               | M 12                 | 52 R/12                |               |    | 39 | 13   |      | 21,5 | 22 |                                                   | 15,600          |     |
|                               | M 14                 | 52 R/14                |               |    | 39 | 15   |      | 21,5 | 22 |                                                   | 15,400          |     |
|                               | M 16                 | 52 R/16                |               |    | 39 | 17   |      | 21,5 | 22 |                                                   | 15,200          |     |
|                               | M 20                 | 52 R/20                |               |    | 39 | 21   |      | 21,5 | 24 |                                                   | 15,200          |     |
|                               |                      |                        |               |    |    |      |      |      |    |                                                   |                 |     |
| <b>300</b>                    | M 12                 | 53 R/12                | 23,5          | 44 | 43 | 13   | 29,5 | 24   | 24 |                                                   | 23,600          | 20  |
|                               | M 14                 | 53 R/14                |               |    | 43 | 15   |      | 24   | 24 |                                                   | 23,400          |     |
|                               | M 16                 | 53 R/16                |               |    | 43 | 17   |      | 24   | 24 |                                                   | 23,000          |     |
|                               | M 20                 | 53 R/20                |               |    | 43 | 21   |      | 24   | 24 |                                                   | 22,700          |     |
|                               |                      |                        |               |    |    |      |      |      |    |                                                   |                 |     |
| <b>400</b>                    | M 12                 | 54 R/12                | 27            | 44 | 49 | 13   | 34   | 24   | 24 |                                                   | 34,000          | 10  |
|                               | M 14                 | 54 R/14                |               |    | 49 | 15   |      | 24   | 24 |                                                   | 33,400          |     |
|                               | M 16                 | 54 R/16                |               |    | 49 | 17   |      | 24   | 24 |                                                   | 32,600          |     |
|                               | M 20                 | 54 R/20                |               |    | 49 | 21   |      | 24   | 24 |                                                   | 31,800          |     |
|                               |                      |                        |               |    |    |      |      |      |    |                                                   |                 |     |

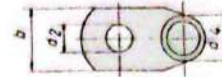
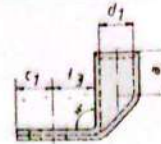


## Tubular cable-lugs

Standard type  
90° angle  
Material: E-copper  
Surface: tin plated

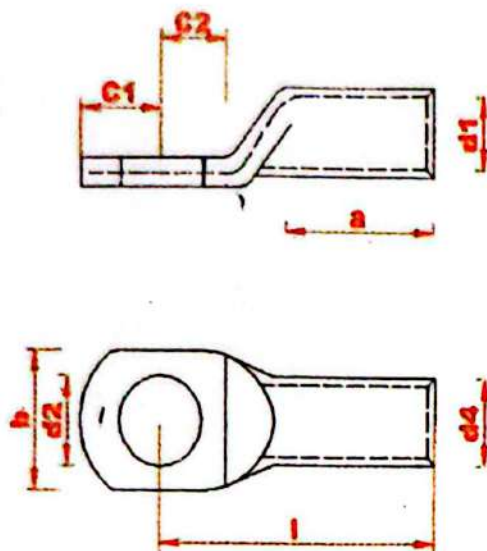
## Cosses tubulaires

Exécution standard  
angulaires 90°  
Matière: tube Cu él.  
Surface étamée par électrolyse



| conductor<br>section<br>mm² | bolt<br>alésage<br>Ø | part<br>article<br>no. | dimensions mm |    |    |      |      |      |    | tools / outillg.<br>mech. hydr.<br>méc. hydr.<br>page / page |                      | 100 pcs<br>~ kg | <br>pcs |
|-----------------------------|----------------------|------------------------|---------------|----|----|------|------|------|----|--------------------------------------------------------------|----------------------|-----------------|--------------------------------------------------------------------------------------------|
|                             |                      |                        | d1            | a  | b  | d2   | d4   | c1   | l3 |                                                              |                      |                 |                                                                                            |
| <b>6</b>                    | M 5                  | 41 R/ 5                | 3,5           | 9  | 10 | 5,5  | 6,5  | 7,5  | 9  | 120<br>to / à<br>138                                         | 140<br>to / à<br>163 | 0,600           | 100                                                                                        |
|                             | M 6                  | 41 R/ 6                |               |    | 12 | 6,5  |      | 7,5  | 10 |                                                              |                      | 0,620           |                                                                                            |
|                             | M 8                  | 41 R/ 8                |               |    | 14 | 8,5  |      | 10   | 13 |                                                              |                      | 0,640           |                                                                                            |
|                             | M 10                 | 41 R/10                |               |    | 17 | 10,5 |      | 12   | 15 |                                                              |                      | 0,700           |                                                                                            |
|                             | M 12                 | 41 R/12                |               |    | 19 | 13   |      | 13   | 17 |                                                              |                      | 0,700           |                                                                                            |
| <b>10</b>                   | M 5                  | 42 R/ 5                | 4,5           | 10 | 12 | 5,5  | 7    | 6,5  | 10 |                                                              |                      | 0,590           | 100                                                                                        |
|                             | M 6                  | 42 R/ 6                |               |    | 12 | 6,5  |      | 6,5  | 10 |                                                              |                      | 0,570           |                                                                                            |
|                             | M 8                  | 42 R/ 8                |               |    | 15 | 8,5  |      | 10   | 13 |                                                              |                      | 0,630           |                                                                                            |
|                             | M 10                 | 42 R/10                |               |    | 17 | 10,5 |      | 12   | 15 |                                                              |                      | 0,680           |                                                                                            |
|                             | M 12                 | 42 R/12                |               |    | 19 | 13   |      | 13   | 18 |                                                              |                      | 0,680           |                                                                                            |
| <b>16</b>                   | M 5                  | 43 R/ 5                | 5,5           | 13 | 12 | 5,5  | 8,5  | 7,5  | 10 |                                                              |                      | 1,050           | 100                                                                                        |
|                             | M 6                  | 43 R/ 6                |               |    | 12 | 6,5  |      | 7,5  | 11 |                                                              |                      | 1,030           |                                                                                            |
|                             | M 8                  | 43 R/ 8                |               |    | 15 | 8,5  |      | 10   | 13 |                                                              |                      | 1,150           |                                                                                            |
|                             | M 10                 | 43 R/10                |               |    | 17 | 10,5 |      | 12   | 15 |                                                              |                      | 1,150           |                                                                                            |
|                             | M 12                 | 43 R/12                |               |    | 19 | 13   |      | 13   | 18 |                                                              |                      | 1,200           |                                                                                            |
| <b>25</b>                   | M 5                  | 44 R/ 5                | 7             | 15 | 14 | 5,5  | 10   | 7,5  | 11 |                                                              |                      | 1,450           | 100                                                                                        |
|                             | M 6                  | 44 R/ 6                |               |    | 14 | 6,5  |      | 7,5  | 11 |                                                              |                      | 1,400           |                                                                                            |
|                             | M 8                  | 44 R/ 8                |               |    | 16 | 8,5  |      | 10   | 13 |                                                              |                      | 1,480           |                                                                                            |
|                             | M 10                 | 44 R/10                |               |    | 18 | 10,5 |      | 12   | 15 |                                                              |                      | 1,570           |                                                                                            |
|                             | M 12                 | 44 R/12                |               |    | 19 | 13   |      | 13   | 18 |                                                              |                      | 1,550           |                                                                                            |
|                             | M 14                 | 44 R/14                |               |    | 21 | 15   |      | 14,5 | 20 |                                                              |                      | 1,550           |                                                                                            |
| <b>35</b>                   | M 6                  | 45 R/ 6                | 8,5           | 17 | 17 | 6,5  | 12   | 7,5  | 11 |                                                              |                      | 2,050           | 100                                                                                        |
|                             | M 8                  | 45 R/ 8                |               |    | 17 | 8,5  |      | 10   | 13 |                                                              |                      | 2,250           |                                                                                            |
|                             | M 10                 | 45 R/10                |               |    | 19 | 10,5 |      | 12   | 15 |                                                              |                      | 2,290           |                                                                                            |
|                             | M 12                 | 45 R/12                |               |    | 21 | 13   |      | 13   | 18 |                                                              |                      | 2,370           |                                                                                            |
|                             | M 14                 | 45 R/14                |               |    | 21 | 15   |      | 14,5 | 20 |                                                              |                      | 2,410           |                                                                                            |
|                             | M 16                 | 45 R/16                |               |    | 26 | 17   |      | 16   | 22 |                                                              |                      | 2,400           |                                                                                            |
| <b>50</b>                   | M 6                  | 46 R/ 6                | 10            | 19 | 20 | 6,5  | 14   | 10   | 13 |                                                              |                      | 3,430           | 100                                                                                        |
|                             | M 8                  | 46 R/ 8                |               |    | 20 | 8,5  |      | 10   | 13 |                                                              |                      | 3,280           |                                                                                            |
|                             | M 10                 | 46 R/10                |               |    | 20 | 10,5 |      | 12   | 16 |                                                              |                      | 3,350           |                                                                                            |
|                             | M 12                 | 46 R/12                |               |    | 23 | 13   |      | 13   | 18 |                                                              |                      | 3,360           |                                                                                            |
|                             | M 14                 | 46 R/14                |               |    | 23 | 15   |      | 14,5 | 20 |                                                              |                      | 3,550           |                                                                                            |
|                             | M 16                 | 46 R/16                |               |    | 28 | 17   |      | 16   | 22 |                                                              |                      | 3,400           |                                                                                            |
|                             | M 20                 | 46 R/20                |               |    | 30 | 21   |      | 19   | 24 |                                                              |                      | 3,150           |                                                                                            |
| <b>70</b>                   | M 6                  | 47 R/ 6                | 12            | 21 | 23 | 6,5  | 16,5 | 10   | 13 |                                                              |                      | 5,180           | 100                                                                                        |
|                             | M 8                  | 47 R/ 8                |               |    | 23 | 8,5  |      | 10   | 14 |                                                              |                      | 5,080           |                                                                                            |
|                             | M 10                 | 47 R/10                |               |    | 23 | 10,5 |      | 12   | 16 |                                                              |                      | 5,090           |                                                                                            |
|                             | M 12                 | 47 R/12                |               |    | 23 | 13   |      | 13   | 18 |                                                              |                      | 5,150           |                                                                                            |
|                             | M 14                 | 47 R/14                |               |    | 23 | 15   |      | 14,5 | 20 |                                                              |                      | 5,380           |                                                                                            |
|                             | M 16                 | 47 R/16                |               |    | 28 | 17   |      | 16   | 22 |                                                              |                      | 5,350           |                                                                                            |
|                             | M 20                 | 47 R/20                |               |    | 30 | 21   |      | 19   | 24 |                                                              |                      | 5,300           |                                                                                            |





| Size | Bolt | No.C   | Dimensions Mm |    |    |      |      |      |     |    |
|------|------|--------|---------------|----|----|------|------|------|-----|----|
|      |      |        | d1            | a  | b  | d2   | d4   | c1   | c2  | l  |
| 6    | M6   | 1R/5   | 3.5           | 9  | 12 | 6.5  | 6.5  | 6.5  | 7.5 | 21 |
| 10   | M6   | 2R/6   | 4.5           | 10 | 12 | 6.5  | 7    | 6.5  | 7.5 | 22 |
| 16   | M8   | 3R/8   | 5.5           | 13 | 15 | 8.5  | 8.5  | 8.5  | 9.5 | 29 |
| 25   | M8   | 4R/8   | 7             | 15 | 16 | 8.5  | 10   | 10   | 10  | 32 |
| 35   | M8   | 5R/8   | 8.5           | 17 | 17 | 8.5  | 12   | 10   | 10  | 34 |
| 50   | M10  | 6R/10  | 10            | 19 | 20 | 10.5 | 14   | 12   | 12  | 39 |
| 70   | M10  | 7R/10  | 12            | 21 | 23 | 10.5 | 16.5 | 12   | 12  | 44 |
| 95   | M12  | 8R/12  | 13.5          | 25 | 26 | 13   | 18   | 13   | 13  | 49 |
| 120  | M12  | 9R/12  | 15            | 26 | 28 | 13   | 19.5 | 14   | 14  | 51 |
| 150  | M12  | 10R/12 | 16.5          | 30 | 31 | 13   | 21   | 15   | 15  | 57 |
| 185  | M16  | 11R/16 | 19            | 30 | 35 | 17   | 24   | 18   | 18  | 65 |
| 240  | M16  | 12R/16 | 21            | 35 | 39 | 17   | 26.9 | 21.5 | 19  | 72 |
| 300  | M20  | 13R/20 | 23.5          | 44 | 43 | 21   | 29.5 | 24   | 24  | 87 |
| 400  | M20  | 14R/20 | 27            | 44 | 49 | 21   | 34   | 24   | 24  | 90 |

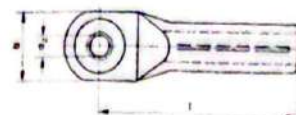


## Aluminium-copper cable-lugs

for aluminium conductors DIN 48201  
and pre-rounded sector shaped  
conductors  
Material: Al 99,5; E-copper  
Surface: bright

## Cosses Al-Cu à sertir

pour câbles alu selon DIN 48201  
et câbles secteurs arrondis  
Matière: Al 99,5; Cu él.  
Surface: nue



| conductor / section<br>mm <sup>2</sup><br>mm <sup>2</sup> /sm |     | bolt<br>alésage<br>Ø | part<br>article<br>no. | note<br>indice | dimensions mm  |                |    |     | compressions<br>sertissages<br>mech. hydr. |       | tools / outillg.<br>mech. hydr.<br>page / page |                      | 100 pcs<br>~ kg | pcs |
|---------------------------------------------------------------|-----|----------------------|------------------------|----------------|----------------|----------------|----|-----|--------------------------------------------|-------|------------------------------------------------|----------------------|-----------------|-----|
| mm <sup>2</sup>                                               | se  |                      |                        |                | d <sub>1</sub> | d <sub>2</sub> | b  | l   | mech.                                      | hydr. | mech.                                          | hydr.                |                 |     |
| 10                                                            |     | M 6                  | 302 R/ 6               | 10             | 5              | 6,5            | 18 | 52  | 4                                          | 2     | 128<br>to / à<br>138                           | 140<br>to / à<br>166 | 1,150           | 100 |
|                                                               |     | M 8                  | 302 R/ 8               |                |                | 8,5            | 22 |     |                                            |       |                                                |                      | 1,450           |     |
| 16                                                            | 25  | M 8                  | 303 R/ 8               | 12             | 5,5            | 8,5            | 22 | 52  | 4                                          | 2     |                                                |                      | 1,950           | 100 |
|                                                               |     | M 10                 | 303 R/10               |                |                | 10,5           | 25 |     |                                            |       |                                                |                      | 2,010           |     |
| 25                                                            | 35  | M 8                  | 304 R/ 8               | 12             | 6,8            | 8,5            | 22 | 60  | 4                                          | 2     |                                                |                      | 1,950           | 100 |
|                                                               |     | M 10                 | 304 R/10               |                |                | 10,5           | 25 |     |                                            |       |                                                |                      | 2,100           |     |
| 35                                                            | 50  | M 10                 | 305 R/10               | 14             | 8              | 10,5           | 26 | 67  | 5                                          | 2     |                                                |                      | 3,000           | 100 |
|                                                               |     | M 12                 | 305 R/12               |                |                | 13             | 30 |     |                                            |       |                                                |                      | 3,100           |     |
| 50                                                            | 70  | M 10                 | 306 R/10               | 16             | 9,8            | 10,5           | 27 | 72  | 5                                          | 2     |                                                |                      | 3,600           | 50  |
|                                                               |     | M 12                 | 306 R/12               |                |                | 13             | 30 |     |                                            |       |                                                |                      | 3,800           |     |
| 70                                                            | 95  | M 10                 | 307 R/10               | 18             | 11,2           | 10,5           | 29 | 86  | 6                                          | 3     |                                                |                      | 5,600           | 50  |
|                                                               |     | M 12                 | 307 R/12               |                |                | 13             | 32 |     |                                            |       |                                                |                      | 5,550           |     |
| 95                                                            | 120 | M 10                 | 308 R/10               | 22             | 13,2           | 10,5           | 32 | 90  | 6                                          | 3     |                                                |                      | 8,500           | 25  |
|                                                               |     | M 12                 | 308 R/12               |                |                | 13             | 35 |     |                                            |       |                                                |                      | 8,500           |     |
|                                                               |     | M 16                 | 308 R/16               |                |                | 17             | 38 |     |                                            |       |                                                |                      | 9,500           |     |
| 120                                                           | 150 | M 12                 | 309 R/12               | 22             | 14,7           | 13             | 35 | 91  | 6                                          | 3     |                                                |                      | 8,700           | 25  |
|                                                               |     | M 16                 | 309 R/16               |                |                | 17             | 38 |     |                                            |       |                                                |                      | 8,800           |     |
| 150                                                           | 185 | M 12                 | 310 R/12               | 25             | 16,3           | 13             | 35 | 103 | 6                                          | 3     |                                                |                      | 10,900          | 25  |
|                                                               |     | M 16                 | 310 R/16               |                |                | 17             | 41 |     |                                            |       |                                                |                      | 12,300          |     |
|                                                               |     | M 20                 | 310 R/20               |                |                | 21             | 44 |     |                                            |       |                                                |                      | 13,000          |     |
| 185                                                           | 240 | M 12                 | 311 R/12               | 28             | 18,3           | 13             | 40 | 106 | 6                                          | 3     |                                                |                      | 15,000          | 20  |
|                                                               |     | M 16                 | 311 R/16               |                |                | 17             | 42 |     |                                            |       |                                                |                      | 15,300          |     |
|                                                               |     | M 20                 | 311 R/20               |                |                | 21             | 46 |     |                                            |       |                                                |                      | 16,600          |     |
| 240                                                           | 300 | M 12                 | 312 R/12               | 32             | 21             | 13             | 45 | 116 | 8                                          | 3     |                                                |                      | 20,000          | 15  |
|                                                               |     | M 16                 | 312 R/16               |                |                | 17             | 45 |     |                                            |       |                                                |                      | 20,200          |     |
|                                                               |     | M 20                 | 312 R/20               |                |                | 21             | 49 |     |                                            |       |                                                |                      | 21,000          |     |
| 300                                                           |     | M 16                 | 313 R/16               | 34             | 23,3           | 17             | 51 | 124 | 8                                          | 3     |                                                |                      | 22,600          | 10  |
|                                                               |     | M 20                 | 313 R/20               |                |                | 21             | 51 |     |                                            |       |                                                |                      | 24,800          |     |
| 400                                                           |     | M 16                 | 314 R/16               | 38             | 26             | 17             | 58 | 165 | —                                          | 4     |                                                |                      | 37,400          | 5   |
|                                                               |     | M 20                 | 314 R/20               |                |                | 21             | 58 |     |                                            |       |                                                |                      | 37,900          |     |

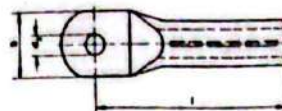


## Aluminium cable-lugs

for aluminium conductors DIN 48201  
and pre-rounded sector shaped  
conductors  
Material: Al 99,5  
Surface: bright

## Cosses à sertir Al

pour câbles alu selon DIN 48201  
et câbles secteurs arrondis  
Matière: Al 99,5  
Surface: nue



| conductor / section<br>mm <sup>2</sup><br>mm <sup>2</sup> /mm <sup>2</sup> | bolt<br>alésage<br>Ø | part<br>article<br>no. | note<br>indice                   | dimensions mm  |                |                  |                | compressions<br>sertissages<br>méch. hydr. |   | tools / outllg.<br>méch.<br>hydr.<br>page / page | 100 pcs<br>~ kg            | pcs |
|----------------------------------------------------------------------------|----------------------|------------------------|----------------------------------|----------------|----------------|------------------|----------------|--------------------------------------------|---|--------------------------------------------------|----------------------------|-----|
|                                                                            |                      |                        |                                  | d <sub>1</sub> | d <sub>2</sub> | b                | l              |                                            |   |                                                  |                            |     |
| 10                                                                         | M 6<br>M 8           | 202 R/ 6<br>202 R/ 8   | 10                               | 5              | 6,5<br>8,5     | 16<br>18         | 52             | 4                                          | 2 |                                                  | 0,930<br>0,930             | 100 |
| 16                                                                         | 25                   | M 8<br>M 10            | 203 R/ 8<br>203 R/10             | 12             | 5,5            | 8,5<br>10,5      | 18             | 52                                         | 4 | 2                                                | 1,370<br>1,390             | 100 |
| 25                                                                         | 35                   | M 8<br>M 10            | 204 R/ 8<br>204 R/10             | 12             | 6,8            | 8,5<br>10,5      | 18             | 60                                         | 4 | 2                                                | 1,380<br>1,390             | 100 |
| 35                                                                         | 50                   | M 10<br>M 12           | 205 R/10<br>205 R/12             | 14             | 8              | 10,5<br>13       | 21             | 67                                         | 5 | 2                                                | 2,080<br>2,050             | 100 |
| 50                                                                         | 70                   | M 10<br>M 12           | 206 R/10<br>206 R/12             | 16             | 9,8            | 10,5<br>13       | 25             | 72                                         | 5 | 2                                                | 2,800<br>2,700             | 50  |
| 70                                                                         | 95                   | M 10<br>M 12           | 207 R/10<br>207 R/12             | 18             | 11,2           | 10,5<br>13       | 28             | 86                                         | 6 | 3                                                | 4,460<br>4,370             | 50  |
| 95                                                                         | 120                  | M 10<br>M 12<br>M 16   | 208 R/10<br>208 R/12<br>208 R/16 | 22             | 13,2           | 10,5<br>13<br>17 | 32<br>32<br>34 | 90                                         | 6 | 3                                                | 6,760<br>6,580<br>6,470    | 25  |
| 120                                                                        | 150                  | M 12<br>M 16           | 209 R/12<br>209 R/16             | 22             | 14,7           | 13<br>17         | 32<br>34       | 91                                         | 6 | 3                                                | 6,960<br>6,740             | 25  |
| 150                                                                        | 185                  | M 12<br>M 16<br>M 20   | 210 R/12<br>210 R/16<br>210 R/20 | 25             | 16,3           | 13<br>17<br>21   | 35<br>35<br>41 | 103                                        | 6 | 3                                                | 9,000<br>8,800<br>8,900    | 25  |
| 185                                                                        | 240                  | M 12<br>M 16<br>M 20   | 211 R/12<br>211 R/16<br>211 R/20 | 28             | 18,3           | 13<br>17<br>21   | 40             | 106                                        | 6 | 3                                                | 12,900<br>12,740<br>12,070 | 20  |
| 240                                                                        | 300                  | M 12<br>M 16<br>M 20   | 212 R/12<br>212 R/16<br>212 R/20 | 32             | 21             | 13<br>17<br>21   | 45             | 116                                        | 8 | 3                                                | 17,300<br>17,000<br>16,950 | 15  |
| 300                                                                        |                      | M 16<br>M 20           | 213 R/16<br>213 R/20             | 34             | 23,3           | 17<br>21         | 49             | 124                                        | 8 | 3                                                | 20,000<br>19,800           | 10  |
| 400                                                                        |                      | M 16<br>M 20           | 214 R/16<br>214 R/20             | 38             | 26             | 17<br>21         | 58             | 165                                        | — | 4                                                | 33,300<br>41,400           | 5   |



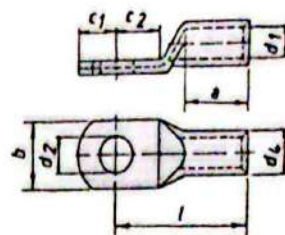


## Tubular cable-lugs

for fine stranded cable  
Material: E-copper  
Surface: tin plated  
with or without inspection hole

## Cosses tubulaires

pour conducteurs souples  
(câbles de soudage)  
Matière: tube Cu él.  
Surface étamée par électrolyse  
Livrables avec ou sans trou d'inspection



| conductor<br>section<br>mm <sup>2</sup> | bolt<br>alésage<br>Ø | part<br>article<br>no. * | dimensions mm |    |    |      |      |      |      |    | tools / outillg.<br>mech. hydr.<br>page / page | 100 pcs<br>~ kg | pcs |
|-----------------------------------------|----------------------|--------------------------|---------------|----|----|------|------|------|------|----|------------------------------------------------|-----------------|-----|
|                                         |                      |                          | d1            | a  | b  | d2   | d4   | c1   | c2   | l  |                                                |                 |     |
| <b>95</b>                               | M 8                  | 84 S/ 8                  | 15            | 25 | 27 | 8,5  | 18   | 12   | 12   | 48 | 121,<br>122,<br>131<br>to / à<br>138           | 4,050           | 50  |
|                                         | M 10                 | 84 S/10                  |               |    | 27 | 10,5 |      | 12   | 12   | 48 |                                                | 3,950           |     |
|                                         | M 12                 | 84 S/12                  |               |    | 27 | 13   |      | 13   | 13   | 49 |                                                | 4,100           |     |
|                                         | M 14                 | 84 S/14                  |               |    | 27 | 15   |      | 14,5 | 14,5 | 51 |                                                | 4,200           |     |
|                                         | M 16                 | 84 S/16                  |               |    | 28 | 17   |      | 16   | 16   | 54 |                                                | 4,250           |     |
| <b>120</b>                              | M 10                 | 85 S/10                  | 17,5          | 26 | 32 | 10,5 | 21,5 | 16   | 16   | 58 |                                                | 7,700           | 50  |
|                                         | M 12                 | 85 S/12                  |               |    | 32 | 13   |      | 16   | 16   | 58 |                                                | 7,550           |     |
|                                         | M 14                 | 85 S/14                  |               |    | 32 | 15   |      | 16   | 16   | 58 |                                                | 7,500           |     |
|                                         | M 16                 | 85 S/16                  |               |    | 32 | 17   |      | 16   | 16   | 58 |                                                | 7,100           |     |
|                                         | M 20                 | 85 S/20                  |               |    | 36 | 21   |      | 22   | 22   | 63 |                                                | 8,100           |     |
|                                         |                      |                          |               |    |    |      |      |      |      |    |                                                |                 |     |
| <b>150</b>                              | M 10                 | 86 S/10                  | 19,5          | 30 | 35 | 10,5 | 24   | 18   | 18   | 65 |                                                | 10,900          | 50  |
|                                         | M 12                 | 86 S/12                  |               |    | 35 | 13   |      | 18   | 18   | 65 |                                                | 10,700          |     |
|                                         | M 14                 | 86 S/14                  |               |    | 35 | 15   |      | 18   | 18   | 65 |                                                | 10,500          |     |
|                                         | M 16                 | 86 S/16                  |               |    | 35 | 17   |      | 18   | 18   | 65 |                                                | 10,200          |     |
|                                         | M 20                 | 86 S/20                  |               |    | 39 | 21   |      | 22   | 22   | 67 |                                                | 10,400          |     |
| <b>185</b>                              | M 12                 | 87 S/12                  | 21            | 35 | 39 | 13   | 26   | 21,5 | 19   | 72 | 147<br>to / à<br>164                           | 14,800          | 50  |
|                                         | M 14                 | 87 S/14                  |               |    | 39 | 15   |      | 21,5 | 19   | 72 |                                                | 14,600          |     |
|                                         | M 16                 | 87 S/16                  |               |    | 39 | 17   |      | 21,5 | 19   | 72 |                                                | 14,400          |     |
|                                         | M 20                 | 87 S/20                  |               |    | 39 | 21   |      | 21,5 | 19   | 72 |                                                | 14,000          |     |
| <b>240</b>                              | M 12                 | 88 S/12                  | 23,5          | 44 | 43 | 13   | 29,5 | 24   | 24   | 87 |                                                | 23,900          | 25  |
|                                         | M 14                 | 88 S/14                  |               |    | 43 | 15   |      | 24   | 24   | 87 |                                                | 23,500          |     |
|                                         | M 16                 | 88 S/16                  |               |    | 43 | 17   |      | 24   | 24   | 87 |                                                | 23,100          |     |
|                                         | M 20                 | 88 S/20                  |               |    | 43 | 21   |      | 24   | 24   | 87 |                                                | 22,800          |     |
| <b>300</b>                              | M 12                 | 89 S/12                  | 27            | 44 | 49 | 13   | 34   | 24   | 24   | 90 |                                                | 33,500          | 20  |
|                                         | M 14                 | 89 S/14                  |               |    | 49 | 15   |      | 24   | 24   | 90 |                                                | 33,000          |     |
|                                         | M 16                 | 89 S/16                  |               |    | 49 | 17   |      | 24   | 24   | 90 |                                                | 32,500          |     |
|                                         | M 20                 | 89 S/20                  |               |    | 49 | 21   |      | 24   | 24   | 90 |                                                | 31,500          |     |

\* Part number for inspection hole version with appendix "ms".

Nombre d'article pour exécution avec trou d'inspection avec supplément "ms".

Also available with 90° and 45° angle. / Egalement livrable angulaires 90° et 45°.



# Tubular cable-lugs

DIN 46235

Material: E-copper

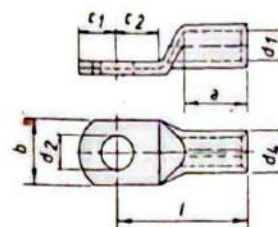
Surface: tin plated  
copper finish on request

# Cosses tubulaires

selon DIN 46235

Matière: tube Cu él.

Surface étamée par électrolyse  
ou au choix Cu nu



| conductor<br>section<br>mm² | bolt<br>alesage<br>Ø | part<br>article<br>no. * | note<br>indice | dimensions mm |     |    |      |      |      |      |     | tools / outillg.<br>mech. hydr.<br>méc. hydr.<br>page / page | 100 pcs<br>~ kg | pcs |
|-----------------------------|----------------------|--------------------------|----------------|---------------|-----|----|------|------|------|------|-----|--------------------------------------------------------------|-----------------|-----|
|                             |                      |                          |                | d1            | a   | b  | d2   | d4   | c1   | c2   | l   |                                                              |                 |     |
| <b>95</b>                   | M 8 **               | 108 R/ 8                 | 18             | 13,5          | 35  | 28 | 8,4  | 19   | 12   | 12   | 65  | 124<br>to / à<br>138                                         | 9,250           | 50  |
|                             | M 10                 | 108 R/10                 |                |               |     | 28 | 10,5 |      | 12   | 12   |     |                                                              | 9,150           |     |
|                             | M 12                 | 108 R/12                 |                |               |     | 28 | 13   |      | 13   | 13   |     |                                                              | 9,000           |     |
|                             | M 14 **              | 108 R/14                 |                |               |     | 28 | 15   |      | 14,5 | 14,5 |     |                                                              | 8,900           |     |
|                             | M 16                 | 108 R/16                 |                |               |     | 32 | 17   |      | 16   | 16   |     |                                                              | 9,000           |     |
| <b>120</b>                  | M 10                 | 109 R/10                 | 20             | 15,5          | 35  | 32 | 10,5 | 21   | 15   | 16   | 70  |                                                              | 11,400          | 50  |
|                             | M 12                 | 109 R/12                 |                |               |     | 32 | 13   |      | 16   | 17   |     |                                                              | 11,400          |     |
|                             | M 14 **              | 109 R/14                 |                |               |     | 32 | 15   |      | 18   | 19   |     |                                                              | 11,300          |     |
|                             | M 16                 | 109 R/16                 |                |               |     | 32 | 17   |      | 19   | 20   |     |                                                              | 11,300          |     |
|                             | M 20                 | 109 R/20                 |                |               |     | 38 | 21   |      | 21   | 22   |     |                                                              | 11,100          |     |
| <b>150</b>                  | M 10                 | 110 R/10                 | 22             | 17            | 35  | 34 | 10,5 | 23,5 | 15   | 16   | 78  |                                                              | 16,400          | 25  |
|                             | M 12                 | 110 R/12                 |                |               |     | 34 | 13   |      | 16   | 17   |     |                                                              | 16,300          |     |
|                             | M 14 **              | 110 R/14                 |                |               |     | 34 | 15   |      | 19   | 20   |     |                                                              | 16,500          |     |
|                             | M 16                 | 110 R/16                 |                |               |     | 34 | 17   |      | 19   | 20   |     |                                                              | 16,200          |     |
|                             | M 20                 | 110 R/20                 |                |               |     | 40 | 21   |      | 21   | 22   |     |                                                              | 15,900          |     |
| <b>185</b>                  | M 10                 | 111 R/10                 | 25             | 19            | 40  | 37 | 10,5 | 25,5 | 15   | 16   | 82  | 140<br>to / à<br>166                                         | 18,700          | 25  |
|                             | M 12                 | 111 R/12                 |                |               |     | 37 | 13   |      | 16   | 17   |     |                                                              | 18,900          |     |
|                             | M 14 **              | 111 R/14                 |                |               |     | 37 | 15   |      | 19   | 20   |     |                                                              | 19,300          |     |
|                             | M 16                 | 111 R/16                 |                |               |     | 37 | 17   |      | 19   | 20   |     |                                                              | 18,900          |     |
|                             | M 20                 | 111 R/20                 |                |               |     | 40 | 21   |      | 21   | 22   |     |                                                              | 18,000          |     |
| <b>240</b>                  | M 12                 | 112 R/12                 | 28             | 21,5          | 40  | 42 | 13   | 29   | 16   | 17   | 92  |                                                              | 27,300          | 25  |
|                             | M 14 **              | 112 R/14                 |                |               |     | 42 | 15   |      | 19   | 20   |     |                                                              | 27,600          |     |
|                             | M 16                 | 112 R/16                 |                |               |     | 42 | 17   |      | 19   | 20   |     |                                                              | 27,300          |     |
|                             | M 20                 | 112 R/20                 |                |               |     | 45 | 21   |      | 21   | 22   |     |                                                              | 27,000          |     |
| <b>300</b>                  | M 14 **              | 113 R/14                 | 32             | 24,5          | 50  | 48 | 15   | 32   | 19   | 22   | 100 |                                                              | 33,800          | 20  |
|                             | M 16                 | 113 R/16                 |                |               |     | 48 | 17   |      | 19   | 22   |     |                                                              | 33,500          |     |
|                             | M 20                 | 113 R/20                 |                |               |     | 48 | 21   |      | 22   | 22   |     |                                                              | 33,500          |     |
| <b>400</b>                  | M 14 **              | 114 R/14                 | 38             | 27,5          | 70  | 55 | 15   | 38,5 | 25   | 25   | 115 |                                                              | 67,100          | 10  |
|                             | M 16                 | 114 R/16                 |                |               |     | 55 | 17   |      | 25   | 25   |     |                                                              | 69,400          |     |
|                             | M 20                 | 114 R/20                 |                |               |     | 55 | 21   |      | 25   | 25   |     |                                                              | 65,400          |     |
| <b>500</b>                  | M 16 **              | 115 R/16                 | 42             | 31            | 70  | 60 | 17   | 42   | 25   | 25   | 125 |                                                              | 83,000          | 10  |
|                             | M 20                 | 115 R/20                 |                |               |     | 60 | 21   |      | 25   | 25   |     |                                                              | 82,000          |     |
| <b>625</b>                  | M 16 **              | 116 R/16                 | 44             | 34,5          | 80  | 60 | 17   | 44   | 25   | 25   | 135 |                                                              | 79,600          | 5   |
|                             | M 20                 | 116 R/20                 |                |               |     | 60 | 21   |      | 25   | 25   |     |                                                              | 78,700          |     |
| <b>800</b>                  | M 16 **              | 117 R/16                 | 52             | 40            | 100 | 75 | 17   | 52   | 30   | 30   | 165 |                                                              | 150,200         | 3   |
|                             | M 20                 | 117 R/20                 |                |               |     | 75 | 21   |      | 30   | 30   |     |                                                              | 148,400         |     |
| <b>1000</b>                 | M 16 **              | 118 R/16                 | 58             | 44            | 100 | 85 | 17   | 58   | 30   | 30   | 165 |                                                              | 199,000         | 10  |
|                             | M 20                 | 118 R/20                 |                |               |     | 85 | 21   |      | 30   | 30   |     |                                                              | 193,100         |     |



\* Part number for copper finish version with appendix "bk"  
 \* nombre d'article pour exécution cuivre nu avec supplément "bk"  
 \* non standardisé / non standardisé



## Tubular cable-lugs

DIN 46235

Material: E-copper

Surface: tin plated

copper finish on request

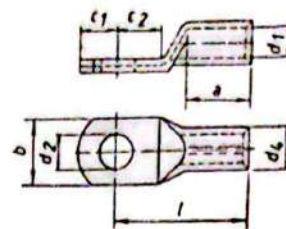
## Cosses tubulaires

selon DIN 46235

Matière: tube Cu él.

Surface étamée par électrolyse

ou au choix Cu nu



| conductor<br>section<br>mm² | bolt<br>alésage<br>Ø | part<br>article<br>no. * | note<br>indice | dimensions mm |    |     |      |      |      |      |    | tools / outillg.<br>méch. hydr.<br>page / page | to / à | to / à | 100 pcs<br>~ kg | pcs |
|-----------------------------|----------------------|--------------------------|----------------|---------------|----|-----|------|------|------|------|----|------------------------------------------------|--------|--------|-----------------|-----|
|                             |                      |                          |                | d1            | a  | b   | d2   | d4   | c1   | c2   | l  |                                                |        |        |                 |     |
| 6                           | M 5                  | 101 R/ 5                 | 5              | 3,8           | 10 | 8,5 | 5,3  | 5,5  | 6,5  | 7,5  | 24 |                                                |        |        | 0,310           | 100 |
|                             | M 6                  | 101 R/ 6                 |                |               |    | 8,5 | 6,4  |      | 7,5  | 8    |    |                                                |        |        | 0,300           |     |
|                             | M 8 **               | 101 R/ 8                 |                |               |    | 13  | 8,4  |      | 10   | 10   |    |                                                |        |        | 0,290           |     |
| 10                          | M 5                  | 102 R/ 5                 | 6              | 4,5           | 10 | 9   | 5,3  | 6    | 7    | 8,5  | 27 |                                                |        |        | 0,370           | 100 |
|                             | M 6                  | 102 R/ 6                 |                |               |    | 9   | 6,4  |      | 7,5  | 8,5  |    |                                                |        |        | 0,360           |     |
|                             | M 8 **               | 102 R/ 8                 |                |               |    | 13  | 8,4  |      | 10   | 10   |    |                                                |        |        | 0,390           |     |
| 16                          | M 6                  | 103 R/ 6                 | 8              | 5,5           | 20 | 13  | 6,4  | 8,5  | 7,5  | 8    | 36 |                                                |        |        | 1,180           | 100 |
|                             | M 8                  | 103 R/ 8                 |                |               |    | 13  | 8,4  |      | 10   | 10   |    |                                                |        |        | 1,180           |     |
|                             | M 10                 | 103 R/10                 |                |               |    | 17  | 10,5 |      | 12   | 12   |    |                                                |        |        | 1,200           |     |
|                             | M 12 **              | 103 R/12                 |                |               |    | 18  | 13   |      | 13   | 13   |    |                                                |        |        | 1,170           |     |
| 25                          | M 6                  | 104 R/ 6                 | 10             | 7             | 20 | 14  | 6,4  | 10   | 7,5  | 8    | 38 | 123                                            | 140    |        | 1,490           | 100 |
|                             | M 8                  | 104 R/ 8                 |                |               |    | 16  | 8,4  |      | 10   | 10   |    | to / à                                         | to / à |        | 1,570           |     |
|                             | M 10                 | 104 R/10                 |                |               |    | 17  | 10,5 |      | 12   | 12   |    | 138                                            | 163    |        | 1,580           |     |
|                             | M 12                 | 104 R/12                 |                |               |    | 19  | 13   |      | 13   | 13   |    |                                                |        |        | 1,540           |     |
| 35                          | M 6 **               | 105 R/ 6                 | 12             | 8,2           | 20 | 17  | 6,4  | 12,5 | 7,5  | 8    | 42 |                                                |        |        | 2,775           | 100 |
|                             | M 8                  | 105 R/ 8                 |                |               |    | 17  | 8,4  |      | 10   | 10   |    |                                                |        |        | 2,750           |     |
|                             | M 10                 | 105 R/10                 |                |               |    | 19  | 10,5 |      | 12   | 12   |    |                                                |        |        | 2,850           |     |
|                             | M 12                 | 105 R/12                 |                |               |    | 21  | 13   |      | 13   | 13   |    |                                                |        |        | 2,800           |     |
|                             | M 14 **              | 105 R/14                 |                |               |    | 21  | 15   |      | 14,5 | 14,5 |    |                                                |        |        | 2,600           |     |
| 50                          | M 8                  | 106 R/ 8                 | 14             | 10            | 28 | 20  | 8,4  | 14,5 | 10   | 10   | 52 |                                                |        |        | 4,500           | 100 |
|                             | M 10                 | 106 R/10                 |                |               |    | 22  | 10,5 |      | 12   | 12   |    |                                                |        |        | 4,500           |     |
|                             | M 12                 | 106 R/12                 |                |               |    | 24  | 13   |      | 13   | 13   |    |                                                |        |        | 4,450           |     |
|                             | M 14 **              | 106 R/14                 |                |               |    | 24  | 15   |      | 14,5 | 14,5 |    |                                                |        |        | 4,400           |     |
|                             | M 16                 | 106 R/16                 |                |               |    | 28  | 17   |      | 16   | 16   |    |                                                |        |        | 4,400           |     |
| 70                          | M 8                  | 107 R/ 8                 | 16             | 11,5          | 28 | 24  | 8,4  | 16,5 | 10   | 10   | 55 |                                                |        |        | 6,050           | 50  |
|                             | M 10                 | 107 R/10                 |                |               |    | 24  | 10,5 |      | 12   | 12   |    |                                                |        |        | 6,150           |     |
|                             | M 12                 | 107 R/12                 |                |               |    | 24  | 13   |      | 13   | 13   |    |                                                |        |        | 5,900           |     |
|                             | M 14 **              | 107 R/14                 |                |               |    | 24  | 15   |      | 14,5 | 14,5 |    |                                                |        |        | 5,750           |     |
|                             | M 16                 | 107 R/16                 |                |               |    | 30  | 17   |      | 16   | 16   |    |                                                |        |        | 5,900           |     |

\* Part number for copper finish version with appendix "bk"

Nombre d'article pour exécution cuivre nu avec supplément "bk"

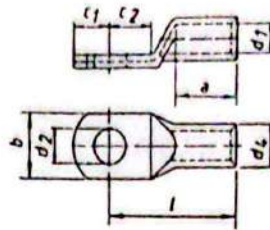


## Tubular cable-lugs

for fine stranded cable  
Material: E-copper  
Surface: tin plated  
with or without inspection hole

## Cosses tubulaires

pour conducteurs souples  
(câbles de soudage)  
Matière: tube Cu él.  
Surface étamée par électrolyse  
Livrables avec ou sans trou d'inspection



| conductor<br>section<br>mm² | bolt<br>alésage<br>Ø | part<br>article<br>no * | dimensions mm |    |    |      |      |      |      |    | tools / outillg.<br>mech.<br>hydr.<br>page / page | 100 pcs<br>~ kg | pcs |
|-----------------------------|----------------------|-------------------------|---------------|----|----|------|------|------|------|----|---------------------------------------------------|-----------------|-----|
|                             |                      |                         | d1            | a  | b  | d2   | d4   | c1   | c2   | l  |                                                   |                 |     |
| 10                          | M 5                  | 78 S/ 5                 | 5,4           | 10 | 12 | 5,5  | 7    | 6,5  | 7,5  | 23 |                                                   | 0,390           | 100 |
|                             | M 6                  | 78 S/ 6                 |               |    | 12 | 6,5  |      | 7,5  | 7,5  | 23 |                                                   | 0,370           |     |
|                             | M 8                  | 78 S/ 8                 |               |    | 15 | 8,5  |      | 10   | 10   | 26 |                                                   | 0,420           |     |
|                             | M 10                 | 78 S/10                 |               |    | 17 | 10,5 |      | 12   | 12   | 28 |                                                   | 0,440           |     |
|                             | M 12                 | 78 S/12                 |               |    | 19 | 13   |      | 13   | 13   | 30 |                                                   | 0,480           |     |
| 16                          | M 5                  | 79 S/ 5                 | 6,5           | 13 | 13 | 5,5  | 8,5  | 5,5  | 6,5  | 27 |                                                   | 0,650           | 100 |
|                             | M 6                  | 79 S/ 6                 |               |    | 13 | 6,5  |      | 6,25 | 7,5  | 27 |                                                   | 0,630           |     |
|                             | M 8                  | 79 S/ 8                 |               |    | 15 | 8,5  |      | 8,5  | 9,5  | 29 |                                                   | 0,690           |     |
|                             | M 10                 | 79 S/10                 |               |    | 17 | 10,5 |      | 10,5 | 11,5 | 31 |                                                   | 0,760           |     |
|                             | M 12                 | 79 S/12                 |               |    | 19 | 13   |      | 12   | 13   | 33 |                                                   | 0,740           |     |
| 25                          | M 5                  | 80 S/ 5                 | 8,2           | 15 | 15 | 5,5  | 10,5 | 7,5  | 7,5  | 30 |                                                   | 1,100           | 100 |
|                             | M 6                  | 80 S/ 6                 |               |    | 15 | 6,5  |      | 7,5  | 7,5  | 30 |                                                   | 1,060           |     |
|                             | M 8                  | 80 S/ 8                 |               |    | 16 | 8,5  |      | 10   | 10   | 32 | 121,                                              | 1,150           |     |
|                             | M 10                 | 80 S/10                 |               |    | 18 | 10,5 |      | 12   | 12   | 34 | 122,                                              | 1,230           |     |
|                             | M 12                 | 80 S/12                 |               |    | 19 | 13   |      | 13   | 13   | 36 | 128<br>to / à<br>138                              | 1,240           |     |
| 35                          | M 6                  | 81 S/ 6                 | 10            | 17 | 18 | 6,5  | 12,5 | 7,5  | 7,5  | 33 |                                                   | 1,500           | 100 |
|                             | M 8                  | 81 S/ 8                 |               |    | 18 | 8,5  |      | 10   | 10   | 35 |                                                   | 1,640           |     |
|                             | M 10                 | 81 S/10                 |               |    | 19 | 10,5 |      | 12   | 12   | 38 |                                                   | 1,800           |     |
|                             | M 12                 | 81 S/12                 |               |    | 21 | 13   |      | 13   | 13   | 39 |                                                   | 1,800           |     |
|                             | M 14                 | 81 S/14                 |               |    | 21 | 15   |      | 14,5 | 14,5 | 40 |                                                   | 1,850           |     |
| 50                          | M 6                  | 82 S/ 6                 | 11            | 19 | 21 | 6,5  | 14   | 10   | 10   | 38 |                                                   | 2,480           | 100 |
|                             | M 8                  | 82 S/ 8                 |               |    | 21 | 8,5  |      | 10   | 10   | 38 |                                                   | 2,420           |     |
|                             | M 10                 | 82 S/10                 |               |    | 21 | 10,5 |      | 12   | 12   | 40 |                                                   | 2,470           |     |
|                             | M 12                 | 82 S/12                 |               |    | 23 | 13   |      | 13   | 13   | 43 |                                                   | 2,600           |     |
|                             | M 14                 | 82 S/14                 |               |    | 23 | 15   |      | 14,5 | 14,5 | 45 |                                                   | 2,700           |     |
|                             | M 16                 | 82 S/16                 |               |    | 28 | 17   |      | 16   | 16   | 47 |                                                   | 2,770           |     |
| 70                          | M 8                  | 83 S/ 8                 | 13            | 21 | 24 | 8,5  | 16,5 | 10   | 10   | 43 |                                                   | 3,650           | 100 |
|                             | M 10                 | 83 S/10                 |               |    | 24 | 10,5 |      | 12   | 12   | 44 |                                                   | 3,800           |     |
|                             | M 12                 | 83 S/12                 |               |    | 24 | 13   |      | 13   | 13   | 46 |                                                   | 3,890           |     |
|                             | M 14                 | 83 S/14                 |               |    | 24 | 15   |      | 14,5 | 14,5 | 48 |                                                   | 4,000           |     |
|                             | M 16                 | 83 S/16                 |               |    | 28 | 17   |      | 16   | 16   | 50 |                                                   | 4,100           |     |



\* Part number for inspection hole version with appendix "ms"  
Nombre d'article pour exécution avec trou d'inspection avec supplément "ms"  
Also available with 90° and 45° angle. / Egalement livrable angulaire 90° et 45°.

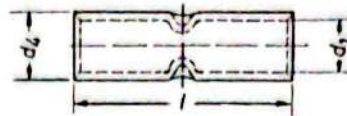


## Butt-connectors

Standard type  
Material: E-copper  
Surface: tin plated

## Manchons à butée

Exécution standard  
Matière: tube Cu él.  
Surface étamée par électrolyse



| conductor<br>section<br>mm² | part<br>article<br>no. | dimensions mm |      |     | tools / outillg.<br>méch.<br>méc.<br>page / page | hydr.<br>hydr.       | 100 pcs<br>~ kg | pcs |
|-----------------------------|------------------------|---------------|------|-----|--------------------------------------------------|----------------------|-----------------|-----|
|                             |                        | d1            | d4   | l   |                                                  |                      |                 |     |
| 0,75                        | 17 R                   | 1,3           | 2,8  | 20  | 116,<br>118<br>to / à<br>138                     | 140<br>to / à<br>163 | 0,085           | 100 |
| 1,5                         | 18 R                   | 1,8           | 3,3  | 25  |                                                  |                      | 0,135           | 100 |
| 2,5                         | 19 R                   | 2,3           | 4,2  | 25  |                                                  |                      | 0,215           | 100 |
| 4                           | 20 R                   | 3             | 5    | 25  |                                                  |                      | 0,275           | 100 |
| 6                           | 21 R                   | 3,5           | 6,5  | 25  |                                                  |                      | 0,520           | 100 |
| 10                          | 22 R                   | 4,5           | 7    | 30  |                                                  |                      | 0,600           | 100 |
| 16                          | 23 R                   | 5,5           | 8,5  | 35  |                                                  |                      | 1,020           | 100 |
| 25                          | 24 R                   | 7             | 10   | 40  |                                                  |                      | 1,430           | 100 |
| 35                          | 25 R                   | 8,5           | 12   | 45  |                                                  |                      | 2,250           | 100 |
| 50                          | 26 R                   | 10            | 14   | 50  |                                                  |                      | 3,380           | 100 |
| 70                          | 27 R                   | 12            | 16,5 | 55  |                                                  |                      | 4,900           | 100 |
| 95                          | 28 R                   | 13,5          | 18   | 60  |                                                  |                      | 6,000           | 50  |
| 120                         | 29 R                   | 15            | 19,5 | 65  |                                                  |                      | 7,000           | 50  |
| 150                         | 30 R                   | 16,5          | 21   | 70  |                                                  |                      | 8,300           | 50  |
| 185                         | 31 R                   | 19            | 24   | 75  |                                                  |                      | 11,200          | 25  |
| 240                         | 32 R                   | 21            | 26   | 85  |                                                  |                      | 13,900          | 25  |
| 300                         | 33 R                   | 23,5          | 29,5 | 100 |                                                  |                      | 22,000          | 25  |
| 400                         | 34 R                   | 27            | 34   | 100 |                                                  |                      | 29,900          | 10  |



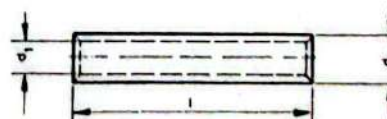
1

## Butt-connectors

Special type for solid conductors  
Material: E-copper  
Surface: tin plated  
without wirestop

## Manchons à butée

Exécution spéciale pour  
conducteurs massifs (re)  
Matière: tube Cu él.  
Surface étamée par électrolyse  
sans butée centrale



| conductor<br>section<br>mm² | part<br>article<br>no. | wire<br>fil<br>Ø | dimensions mm |     |    | tools/outillg.<br>méch.<br>méc. | 100 pcs<br>~ kg | pcs |
|-----------------------------|------------------------|------------------|---------------|-----|----|---------------------------------|-----------------|-----|
|                             |                        |                  | d1            | d4  | l  |                                 |                 |     |
| 1,5 - 2,5                   | SV 1,5/2,5             | 1,38/1,78        | 1,9           | 3,9 | 25 | K 02<br>catalogue<br>page 121   | 0,210           | 100 |
| 4                           | SV 4                   | 2,25             | 2,4           | 4,4 | 25 |                                 | 0,240           | 100 |
| 6                           | SV 6                   | 2,75             | 3             | 5   | 25 |                                 | 0,275           | 100 |
| 10                          | SV 10                  | 3,55             | 4             | 6   | 25 |                                 | 0,350           | 100 |
| 16                          | SV 16                  | 4,50             | 5             | 8   | 35 |                                 | 0,960           | 100 |
| 25                          | SV 25                  | 5,65             | 6,2           | 10  | 40 | K 05 *<br>catalogue<br>page 123 | 1,700           | 100 |
| 35                          | SV 35                  | 6,70             | 7             | 10  | 40 |                                 | 1,420           | 100 |
| 50                          | SV 50                  | 8,00             | 8,5           | 12  | 70 |                                 | 3,550           | 100 |

\* For sizes 25 and 35 mm² use die size 25 mm². For size 50 mm² use die size 35 mm².  
\* Pour dimensions 25 et 35 mm² il faut se servir de la matrice 25 mm².  
Pour dimension 50 mm² il faut se servir de la matrice 35 mm².



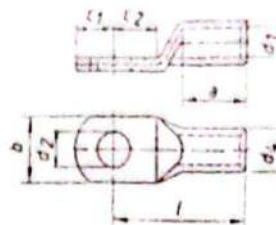


## Tubular cable-lugs

Standard type  
Material: E-copper  
Surface: tin plated  
with or without inspection hole

## Cosses tubulaires

Exécution standard  
Matière: tube en Cu él  
Surface étamée par électrolyse  
Livrables avec ou sans  
trou d'inspection



| conductor<br>section<br>mm² | bolt<br>désage<br>Ø | part<br>article<br>no. | dimensions mm |    |    |      |      |      |      |    | tools / outillg              |                               | 100 pcs<br>~ kg | pcs |
|-----------------------------|---------------------|------------------------|---------------|----|----|------|------|------|------|----|------------------------------|-------------------------------|-----------------|-----|
|                             |                     |                        | d1            | a  | b  | d2   | d4   | c1   | c2   | l  | mech.<br>méc.<br>page / page | hydr.<br>hydr.<br>page / page |                 |     |
| 70                          | M 6                 | 7 R/ 6                 | 12            | 21 | 20 | 6,5  | 16,5 | 10   | 10   | 43 |                              |                               | 4,600           | 100 |
|                             | M 8                 | 7 R/ 8                 |               |    | 23 | 8,5  |      | 10   | 10   | 43 |                              |                               | 4,500           |     |
|                             | M 10                | 7 R/10                 |               |    | 23 | 10,5 |      | 12   | 12   | 44 |                              |                               | 4,600           |     |
|                             | M 12                | 7 R/12                 |               |    | 23 | 13   |      | 13   | 13   | 46 |                              |                               | 4,660           |     |
|                             | M 14                | 7 R/14                 |               |    | 23 | 15   |      | 14,5 | 14,5 | 48 |                              |                               | 4,800           |     |
|                             | M 16                | 7 R/16                 |               |    | 28 | 17   |      | 16   | 16   | 50 |                              |                               | 5,100           |     |
|                             | M 20                | 7 R/20                 |               |    | 30 | 21   |      | 19   | 19   | 53 |                              |                               | 5,150           |     |
| 95                          | M 8                 | 8 R/ 8                 | 13,5          | 25 | 26 | 8,5  | 18   | 12   | 12   | 48 |                              |                               | 5,700           | 50  |
|                             | M 10                | 8 R/10                 |               |    | 26 | 10,5 |      | 12   | 12   | 48 |                              |                               | 5,550           |     |
|                             | M 12                | 8 R/12                 |               |    | 26 | 13   |      | 13   | 13   | 49 |                              |                               | 5,600           |     |
|                             | M 14                | 8 R/14                 |               |    | 26 | 15   |      | 14,5 | 14,5 | 51 |                              |                               | 5,800           |     |
|                             | M 16                | 8 R/16                 |               |    | 28 | 17   |      | 16   | 16   | 54 |                              |                               | 6,000           |     |
|                             | M 20                | 8 R/20                 |               |    | 36 | 21   |      | 22   | 22   | 60 |                              |                               | 6,900           |     |
| 120                         | M 8                 | 9 R/ 8                 | 15            | 26 | 28 | 8,5  | 19,5 | 14   | 14   | 51 |                              |                               | 6,800           | 50  |
|                             | M 10                | 9 R/10                 |               |    | 28 | 10,5 |      | 14   | 14   | 51 |                              |                               | 6,650           |     |
|                             | M 12                | 9 R/12                 |               |    | 28 | 13   |      | 14   | 14   | 51 |                              |                               | 6,450           |     |
|                             | M 14                | 9 R/14                 |               |    | 28 | 15   |      | 15   | 15   | 52 |                              |                               | 6,550           |     |
|                             | M 16                | 9 R/16                 |               |    | 30 | 17   |      | 16   | 16   | 54 |                              |                               | 6,600           |     |
|                             | M 20                | 9 R/20                 |               |    | 36 | 21   |      | 22   | 22   | 63 |                              |                               | 7,900           |     |
| 150                         | M 8                 | 10 R/ 8                | 16,5          | 30 | 31 | 8,5  | 21   | 14   | 14   | 56 | 121,                         |                               | 8,050           | 50  |
|                             | M 10                | 10 R/10                |               |    | 31 | 10,5 |      | 14   | 14   | 56 | 122,                         |                               | 7,900           |     |
|                             | M 12                | 10 R/12                |               |    | 31 | 13   |      | 15   | 15   | 57 |                              |                               | 7,850           |     |
|                             | M 14                | 10 R/14                |               |    | 31 | 15   |      | 15   | 15   | 57 | 124                          | 140                           | 7,750           |     |
|                             | M 16                | 10 R/16                |               |    | 31 | 17   |      | 16   | 16   | 58 | to / à                       | to / à                        | 7,700           |     |
|                             | M 20                | 10 R/20                |               |    | 36 | 21   |      | 22   | 22   | 66 | 138                          | 163                           | 9,000           |     |
| 185                         | M 10                | 11 R/10                | 19            | 30 | 35 | 10,5 | 24   | 18   | 18   | 65 |                              |                               | 12,000          | 50  |
|                             | M 12                | 11 R/12                |               |    | 35 | 13   |      | 18   | 18   | 65 |                              |                               | 11,800          |     |
|                             | M 14                | 11 R/14                |               |    | 35 | 15   |      | 18   | 18   | 65 |                              |                               | 11,600          |     |
|                             | M 16                | 11 R/16                |               |    | 35 | 17   |      | 18   | 18   | 65 |                              |                               | 11,400          |     |
|                             | M 20                | 11 R/20                |               |    | 39 | 21   |      | 22   | 22   | 69 |                              |                               | 12,000          |     |
| 240                         | M 10                | 12 R/10                | 21            | 35 | 39 | 10,5 | 26   | 21,5 | 19   | 72 |                              |                               | 15,000          | 50  |
|                             | M 12                | 12 R/12                |               |    | 39 | 13   |      | 21,5 | 19   | 72 |                              |                               | 14,800          |     |
|                             | M 14                | 12 R/14                |               |    | 39 | 15   |      | 21,5 | 19   | 72 |                              |                               | 14,600          |     |
|                             | M 16                | 12 R/16                |               |    | 39 | 17   |      | 21,5 | 19   | 72 |                              |                               | 14,400          |     |
|                             | M 20                | 12 R/20                |               |    | 39 | 21   |      | 21,5 | 19   | 72 |                              |                               | 14,000          |     |
| 300                         | M 12                | 13 R/12                | 23,5          | 44 | 43 | 13   | 29,5 | 24   | 24   | 87 |                              |                               | 23,900          | 25  |
|                             | M 14                | 13 R/14                |               |    | 43 | 15   |      | 24   | 24   | 87 |                              |                               | 23,500          |     |
|                             | M 16                | 13 R/16                |               |    | 43 | 17   |      | 24   | 24   | 87 |                              |                               | 23,100          |     |
|                             | M 20                | 13 R/20                |               |    | 43 | 21   |      | 24   | 24   | 87 |                              |                               | 22,800          |     |
| 400                         | M 12                | 14 R/12                | 27            | 44 | 49 | 13   | 34   | 24   | 24   | 90 |                              |                               | 33,500          | 20  |
|                             | M 14                | 14 R/14                |               |    | 49 | 15   |      | 24   | 24   | 90 |                              |                               | 33,000          |     |
|                             | M 16                | 14 R/16                |               |    | 49 | 17   |      | 24   | 24   | 90 |                              |                               | 32,500          |     |
|                             | M 20                | 14 R/20                |               |    | 49 | 21   |      | 24   | 24   | 90 |                              |                               | 31,500          |     |



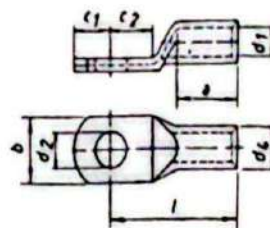


## Tubular cable-lugs

Standard type  
Material: E-copper  
Surface: tin plated  
with or without inspection hole

## Cosses tubulaires

Exécution standard  
Matière: tube en Cu él.  
Surface étamée par électrolyse  
Livrables avec ou sans  
trou d'inspection



| conductor<br>section<br>mm² | bolt<br>alésage<br>Ø | part<br>article<br>no. * | dimensions mm |    |    |      |     |      |      |    | tools / outillg.<br>méch.<br>page / page | 120<br>to / à<br>138 | 140<br>to / à<br>163 | 100 pcs<br>~ kg | pcs |
|-----------------------------|----------------------|--------------------------|---------------|----|----|------|-----|------|------|----|------------------------------------------|----------------------|----------------------|-----------------|-----|
|                             |                      |                          | d1            | a  | b  | d2   | d4  | c1   | c2   | l  |                                          |                      |                      |                 |     |
| 6                           | M 5                  | 1 R/ 5                   | 3,5           | 9  | 10 | 5,5  | 6,5 | 6,5  | 7,5  | 21 |                                          |                      |                      | 0,500           | 100 |
|                             | M 6                  | 1 R/ 6                   |               |    | 12 | 6,5  | 5,5 | 6,5  | 7,5  | 21 |                                          |                      |                      | 0,500           |     |
|                             | M 8                  | 1 R/ 8                   |               |    | 15 | 8,5  |     | 10   | 10   | 23 |                                          |                      |                      | 0,570           |     |
|                             | M 10                 | 1 R/10                   |               |    | 17 | 10,5 |     | 12   | 12   | 25 |                                          |                      |                      | 0,610           |     |
|                             | M 12                 | 1 R/12                   |               |    | 19 | 13   |     | 13   | 13   | 28 |                                          |                      |                      | 0,650           |     |
| 10                          | M 5                  | 2 R/ 5                   | 4,5           | 10 | 12 | 5,5  | 7   | 6,5  | 7,5  | 22 |                                          |                      |                      | 0,520           | 100 |
|                             | M 6                  | 2 R/ 6                   |               |    | 12 | 6,5  |     | 6,5  | 7,5  | 22 |                                          |                      |                      | 0,510           |     |
|                             | M 8                  | 2 R/ 8                   |               |    | 15 | 8,5  |     | 10   | 10   | 25 |                                          |                      |                      | 0,600           |     |
|                             | M 10                 | 2 R/10                   |               |    | 17 | 10,5 |     | 12   | 12   | 27 |                                          |                      |                      | 0,640           |     |
|                             | M 12                 | 2 R/12                   |               |    | 19 | 13   |     | 13   | 13   | 29 |                                          |                      |                      | 0,660           |     |
| 16                          | M 5                  | 3 R/ 5                   | 5,5           | 13 | 12 | 5,5  | 8,5 | 5,5  | 6,5  | 26 |                                          |                      |                      | 0,860           | 100 |
|                             | M 6                  | 3 R/ 6                   |               |    | 12 | 6,5  |     | 6,25 | 7,5  | 27 |                                          |                      |                      | 0,890           |     |
|                             | M 8                  | 3 R/ 8                   |               |    | 15 | 8,5  |     | 8,5  | 9,5  | 29 |                                          |                      |                      | 0,950           |     |
|                             | M 10                 | 3 R/10                   |               |    | 17 | 10,5 |     | 10,5 | 11,5 | 31 |                                          |                      |                      | 1,020           |     |
|                             | M 12                 | 3 R/12                   |               |    | 19 | 13   |     | 12   | 13   | 33 |                                          |                      |                      | 1,100           |     |
| 25                          | M 5                  | 4 R/ 5                   | 7             | 15 | 14 | 5,5  | 10  | 7,5  | 7,5  | 30 |                                          |                      |                      | 1,230           | 100 |
|                             | M 6                  | 4 R/ 6                   |               |    | 14 | 6,5  |     | 7,5  | 7,5  | 30 |                                          |                      |                      | 1,200           |     |
|                             | M 8                  | 4 R/ 8                   |               |    | 16 | 8,5  |     | 10   | 10   | 32 |                                          |                      |                      | 1,320           |     |
|                             | M 10                 | 4 R/10                   |               |    | 18 | 10,5 |     | 12   | 12   | 34 |                                          |                      |                      | 1,420           |     |
|                             | M 12                 | 4 R/12                   |               |    | 19 | 13   |     | 13   | 13   | 35 |                                          |                      |                      | 1,400           |     |
|                             | M 14                 | 4 R/14                   |               |    | 21 | 15   |     | 14,5 | 14,5 | 38 |                                          |                      |                      | 1,500           |     |
| 35                          | M 6                  | 5 R/ 6                   | 8,5           | 17 | 17 | 6,5  | 12  | 7,5  | 7,5  | 32 |                                          |                      |                      | 1,850           | 100 |
|                             | M 8                  | 5 R/ 8                   |               |    | 17 | 8,5  |     | 10   | 10   | 34 |                                          |                      |                      | 2,000           |     |
|                             | M 10                 | 5 R/10                   |               |    | 19 | 10,5 |     | 12   | 12   | 37 |                                          |                      |                      | 2,150           |     |
|                             | M 12                 | 5 R/12                   |               |    | 21 | 13   |     | 13   | 13   | 38 |                                          |                      |                      | 2,130           |     |
|                             | M 14                 | 5 R/14                   |               |    | 21 | 15   |     | 14,5 | 14,5 | 40 |                                          |                      |                      | 2,220           |     |
|                             | M 16                 | 5 R/16                   |               |    | 26 | 17   |     | 16   | 16   | 42 |                                          |                      |                      | 2,300           |     |
| 50                          | M 6                  | 6 R/ 6                   | 10            | 19 | 20 | 6,5  | 14  | 10   | 10   | 37 |                                          |                      |                      | 3,000           | 100 |
|                             | M 8                  | 6 R/ 8                   |               |    | 20 | 8,5  |     | 10   | 10   | 37 |                                          |                      |                      | 2,900           |     |
|                             | M 10                 | 6 R/10                   |               |    | 20 | 10,5 |     | 12   | 12   | 39 |                                          |                      |                      | 3,100           |     |
|                             | M 12                 | 6 R/12                   |               |    | 23 | 13   |     | 13   | 13   | 43 |                                          |                      |                      | 3,250           |     |
|                             | M 14                 | 6 R/14                   |               |    | 23 | 15   |     | 14,5 | 14,5 | 45 |                                          |                      |                      | 3,320           |     |
|                             | M 16                 | 6 R/16                   |               |    | 28 | 17   |     | 16   | 16   | 46 |                                          |                      |                      | 3,450           |     |
|                             | M 20                 | 6 R/20                   |               |    | 30 | 21   |     | 19   | 19   | 48 |                                          |                      |                      | 3,400           |     |

\* Part number for inspection hole version with appendix "ms"  
Nombre d'article pour exécution avec trou d'inspection avec supplément "ms"



## Tubular cable-lugs and connectors

according US-norm  
material: E-copper  
surface: tin plated, colour coded



approved; file no. E 111354,  
homologué (file no. E 111354)

## Cosses tubulaires et manchons

selon norme US  
matière: tube en Cu él.  
surface: étamée par électrolyse  
codage par couleur



approved; file no. LR 83424 \*  
homologué (file no. LR 83424) \*

| Type      | Art. No.                | Cable Size                                                                           |
|-----------|-------------------------|--------------------------------------------------------------------------------------|
| <b>SS</b> | SS 8 - 10 — SS 100 - B  | for / pour<br>Commercial Cable<br>8 STR — 1000 MCM.<br>Flex Cable<br>37/24 — 1925/24 |
| <b>SL</b> | SL 8 - 14 — SL 100 - B  |                                                                                      |
| <b>LS</b> | LS 8 - 14 — LS 100 - 58 |                                                                                      |
| <b>LL</b> | LL 8 - 14 — LL 100 - B  |                                                                                      |
| <b>SB</b> | SB 8 — SB 100           | * catalogue on request<br>* catalogue sur demande                                    |
| <b>LB</b> | LB 8 — LB 100           |                                                                                      |

## Battery lugs and splices

according US-norm  
material: E-copper  
surface: tin plated, colour coded

## Cosses et manchons de batterie

selon norme US  
matière: tube en Cu él.  
surface: étamée par électrolyse  
codage par couleur

| Type                                                                        | Art. No.                             | Battery Cable Size |
|-----------------------------------------------------------------------------|--------------------------------------|--------------------|
| Cable-lugs for starters<br><i>Cosses pour démarreurs</i>                    | B 2 R/6 — B 9 R/12                   | 8 — 4/0            |
| Cable-lugs for batteries<br><i>Cosses pour batteries</i>                    | B 4 R/10 AR — B 8 R/10 AR            | 4 — 4/0            |
| Butt connectors<br><i>Manchons à butée</i>                                  | B 23 R — B 29 R                      | 6 — 4/0            |
| Special connectors for batteries<br><i>Manchons spéciaux pour batteries</i> | B 6 R/10-ILS/AR —<br>B 9 R/10-ILS/AR | 1/0 — 4/0          |

Crimping tools on request / Outillages de sertissage sur demande



## Tubular cable-lugs

Standard type  
45° angle  
Material: E-copper  
Surface: tin plated

## Cosses tubulaires

Exécution standard  
angulaires 45°  
Matière: tube Cu él.  
Surface étamée par électrolyse



| conductor<br>section<br>mm² | bolt<br>alésage<br>Ø | part<br>article<br>no. | dimensions mm |    |    |      |      |      |    | tools / outillg.<br>mech.<br>hydr.   | 100 pcs<br>~ kg | pcs |
|-----------------------------|----------------------|------------------------|---------------|----|----|------|------|------|----|--------------------------------------|-----------------|-----|
|                             |                      |                        | d1            | a  | b  | d2   | d4   | c1   | l3 |                                      |                 |     |
| <b>95</b>                   | M 8                  | 48 R/ 8-45             | 13,5          | 25 | 26 | 8,5  | 18   | 12   | 14 | 121,<br>122,<br>124<br>to / à<br>138 | 6,280           | 50  |
|                             | M 10                 | 48 R/10-45             |               |    | 26 | 10,5 |      | 12   | 17 |                                      | 6,550           |     |
|                             | <b>M 12</b>          | <b>48 R/12-45</b>      |               |    | 26 | 13   |      | 13   | 18 |                                      | 6,570           |     |
|                             | M 14                 | 48 R/14-45             |               |    | 26 | 15   |      | 14,5 | 20 |                                      | 6,600           |     |
|                             | M 16                 | 48 R/16-45             |               |    | 28 | 17   |      | 16   | 22 |                                      | 6,780           |     |
|                             | M 20                 | 48 R/20-45             |               |    | 36 | 21   |      | 22   | 24 |                                      | 6,800           |     |
| <b>120</b>                  | M 8                  | 49 R/ 8-45             | 15            | 26 | 28 | 8,5  | 19,5 | 14   | 16 |                                      | 7,900           | 50  |
|                             | M 10                 | 49 R/10-45             |               |    | 28 | 10,5 |      | 14   | 17 |                                      | 7,910           |     |
|                             | <b>M 12</b>          | <b>49 R/12-45</b>      |               |    | 28 | 13   |      | 14   | 18 |                                      | 7,920           |     |
|                             | M 14                 | 49 R/14-45             |               |    | 28 | 15   |      | 15   | 20 |                                      | 7,940           |     |
|                             | M 16                 | 49 R/16-45             |               |    | 30 | 17   |      | 16   | 22 |                                      | 7,960           |     |
|                             | M 20                 | 49 R/20-45             |               |    | 36 | 21   |      | 22   | 24 |                                      | 8,200           |     |
| <b>150</b>                  | M 8                  | 50 R/ 8-45             | 16,5          | 30 | 31 | 8,5  | 21   | 14   | 16 |                                      | 9,000           | 50  |
|                             | M 10                 | 50 R/10-45             |               |    | 31 | 10,5 |      | 14   | 17 |                                      | 9,150           |     |
|                             | <b>M 12</b>          | <b>50 R/12-45</b>      |               |    | 31 | 13   |      | 15   | 18 |                                      | 9,180           |     |
|                             | M 14                 | 50 R/14-45             |               |    | 31 | 15   |      | 15   | 20 |                                      | 9,200           |     |
|                             | M 16                 | 50 R/16-45             |               |    | 31 | 17   |      | 16   | 22 |                                      | 9,220           |     |
|                             | M 20                 | 50 R/20-45             |               |    | 36 | 21   |      | 22   | 24 |                                      | 9,700           |     |
| <b>185</b>                  | M 10                 | 51 R/10-45             | 19            | 30 | 35 | 10,5 | 24   | 18   | 22 |                                      | 13,800          | 25  |
|                             | M 12                 | 51 R/12-45             |               |    | 35 | 13   |      | 18   | 22 |                                      | 13,400          |     |
|                             | M 14                 | 51 R/14-45             |               |    | 35 | 15   |      | 18   | 22 |                                      | 13,400          |     |
|                             | <b>M 16</b>          | <b>51 R/16-45</b>      |               |    | 35 | 17   |      | 18   | 22 |                                      | 13,100          |     |
|                             | M 20                 | 51 R/20-45             |               |    | 39 | 21   |      | 22   | 24 |                                      | 13,100          |     |
| <b>240</b>                  | M 10                 | 52 R/10-45             | 21            | 35 | 39 | 10,5 | 26   | 21,5 | 22 |                                      | 16,400          | 25  |
|                             | M 12                 | 52 R/12-45             |               |    | 39 | 13   |      | 21,5 | 22 |                                      | 16,500          |     |
|                             | M 14                 | 52 R/14-45             |               |    | 39 | 15   |      | 21,5 | 22 |                                      | 16,400          |     |
|                             | <b>M 16</b>          | <b>52 R/16-45</b>      |               |    | 39 | 17   |      | 21,5 | 22 |                                      | 16,100          |     |
|                             | M 20                 | 52 R/20-45             |               |    | 39 | 21   |      | 21,5 | 24 |                                      | 16,100          |     |
| <b>300</b>                  | M 12                 | 53 R/12-45             | 23,5          | 44 | 43 | 13   | 29,5 | 24   | 24 |                                      | 24,500          | 20  |
|                             | M 14                 | 53 R/14-45             |               |    | 43 | 15   |      | 24   | 24 |                                      | 24,200          |     |
|                             | M 16                 | 53 R/16-45             |               |    | 43 | 17   |      | 24   | 24 |                                      | 23,600          |     |
|                             | <b>M 20</b>          | <b>53 R/20-45</b>      |               |    | 43 | 21   |      | 24   | 24 |                                      | 23,500          |     |
| <b>400</b>                  | M 12                 | 54 R/12-45             | 27            | 44 | 49 | 13   | 34   | 24   | 24 |                                      | 34,000          | 10  |
|                             | M 14                 | 54 R/14-45             |               |    | 49 | 15   |      | 24   | 24 |                                      | 33,400          |     |
|                             | M 16                 | 54 R/16-45             |               |    | 49 | 17   |      | 24   | 24 |                                      | 32,600          |     |
|                             | <b>M 20</b>          | <b>54 R/20-45</b>      |               |    | 49 | 21   |      | 24   | 24 |                                      | 31,800          |     |

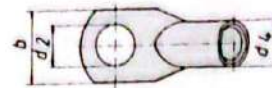
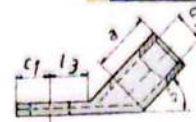


## Tubular cable-lugs

Standard type  
45° angle  
Material: E-copper  
Surface: tin plated

## Cosses tubulaires

Exécution standard  
angulaires 45°  
Matière: tube Cu él.  
Surface étamée par électrolyse



| conductor<br>section<br>mm² | bolt<br>alesage<br>Ø | part<br>article<br>no. | dimensions mm |    |    |      |      |      |    | tools / outillg.<br>mech. hydr.<br>méc. hydr.<br>page / page |                      | 100 pcs<br>~ kg | pcs |
|-----------------------------|----------------------|------------------------|---------------|----|----|------|------|------|----|--------------------------------------------------------------|----------------------|-----------------|-----|
|                             |                      |                        | d1            | a  | b  | d2   | d4   | c1   | l3 |                                                              |                      |                 |     |
| <b>6</b>                    | M 5                  | 41 R/ 5-45             | 3,5           | 9  | 10 | 5,5  | 6,5  | 7,5  | 9  | 120<br>to / à<br>138                                         | 140<br>to / à<br>163 | 0,600           | 100 |
|                             | M 6                  | 41 R/ 6-45             |               |    | 12 | 6,5  |      | 7,5  | 10 |                                                              |                      | 0,620           |     |
|                             | M 8                  | 41 R/ 8-45             |               |    | 14 | 8,5  |      | 10   | 13 |                                                              |                      | 0,640           |     |
|                             | M 10                 | 41 R/10-45             |               |    | 17 | 10,5 |      | 12   | 15 |                                                              |                      | 0,700           |     |
|                             | M 12                 | 41 R/12-45             |               |    | 19 | 13   |      | 13   | 17 |                                                              |                      | 0,700           |     |
| <b>10</b>                   | M 5                  | 42 R/ 5-45             | 4,5           | 10 | 12 | 5,5  | 7    | 6,5  | 10 |                                                              |                      | 0,590           | 100 |
|                             | M 6                  | 42 R/ 6-45             |               |    | 12 | 6,5  |      | 6,5  | 10 |                                                              |                      | 0,570           |     |
|                             | M 8                  | 42 R/ 8-45             |               |    | 15 | 8,5  |      | 10   | 13 |                                                              |                      | 0,630           |     |
|                             | M 10                 | 42 R/10-45             |               |    | 17 | 10,5 |      | 12   | 15 |                                                              |                      | 0,680           |     |
|                             | M 12                 | 42 R/12-45             |               |    | 19 | 13   |      | 13   | 18 |                                                              |                      | 0,680           |     |
| <b>16</b>                   | M 5                  | 43 R/ 5-45             | 5,5           | 13 | 12 | 5,5  | 8,5  | 7,5  | 10 |                                                              |                      | 1,050           | 100 |
|                             | M 6                  | 43 R/ 6-45             |               |    | 12 | 6,5  |      | 7,5  | 11 |                                                              |                      | 1,030           |     |
|                             | M 8                  | 43 R/ 8-45             |               |    | 15 | 8,5  |      | 10   | 13 |                                                              |                      | 1,150           |     |
|                             | M 10                 | 43 R/10-45             |               |    | 17 | 10,5 |      | 12   | 15 |                                                              |                      | 1,150           |     |
|                             | M 12                 | 43 R/12-45             |               |    | 19 | 13   |      | 13   | 18 |                                                              |                      | 1,200           |     |
| <b>25</b>                   | M 5                  | 44 R/ 5-45             | 7             | 15 | 14 | 5,5  | 10   | 7,5  | 11 |                                                              |                      | 1,430           | 100 |
|                             | M 6                  | 44 R/ 6-45             |               |    | 14 | 6,5  |      | 7,5  | 11 |                                                              |                      | 1,400           |     |
|                             | M 8                  | 44 R/ 8-45             |               |    | 16 | 8,5  |      | 10   | 13 |                                                              |                      | 1,480           |     |
|                             | M 10                 | 44 R/10-45             |               |    | 18 | 10,5 |      | 12   | 15 |                                                              |                      | 1,570           |     |
|                             | M 12                 | 44 R/12-45             |               |    | 19 | 13   |      | 13   | 18 |                                                              |                      | 1,550           |     |
|                             | M 14                 | 44 R/14-45             |               |    | 21 | 15   |      | 14,5 | 20 |                                                              |                      | 1,550           |     |
| <b>35</b>                   | M 6                  | 45 R/ 6-45             | 8,5           | 17 | 17 | 6,5  | 12   | 7,5  | 11 |                                                              |                      | 2,050           | 100 |
|                             | M 8                  | 45 R/ 8-45             |               |    | 17 | 8,5  |      | 10   | 13 |                                                              |                      | 2,250           |     |
|                             | M 10                 | 45 R/10-45             |               |    | 19 | 10,5 |      | 12   | 15 |                                                              |                      | 2,290           |     |
|                             | M 12                 | 45 R/12-45             |               |    | 21 | 13   |      | 13   | 18 |                                                              |                      | 2,370           |     |
|                             | M 14                 | 45 R/14-45             |               |    | 21 | 15   |      | 14,5 | 20 |                                                              |                      | 2,410           |     |
|                             | M 16                 | 45 R/16-45             |               |    | 26 | 17   |      | 16   | 22 |                                                              |                      | 2,400           |     |
| <b>50</b>                   | M 6                  | 46 R/ 6-45             | 10            | 19 | 20 | 6,5  | 14   | 10   | 13 |                                                              |                      | 3,430           | 100 |
|                             | M 8                  | 46 R/ 8-45             |               |    | 20 | 8,5  |      | 10   | 13 |                                                              |                      | 3,480           |     |
|                             | M 10                 | 46 R/10-45             |               |    | 20 | 10,5 |      | 12   | 16 |                                                              |                      | 3,500           |     |
|                             | M 12                 | 46 R/12-45             |               |    | 23 | 13   |      | 13   | 18 |                                                              |                      | 3,600           |     |
|                             | M 14                 | 46 R/14-45             |               |    | 23 | 15   |      | 14,5 | 20 |                                                              |                      | 3,650           |     |
|                             | M 16                 | 46 R/16-45             |               |    | 28 | 17   |      | 16   | 22 |                                                              |                      | 3,700           |     |
|                             | M 20                 | 46 R/20-45             |               |    | 30 | 21   |      | 19   | 24 |                                                              |                      | 3,300           |     |
| <b>70</b>                   | M 6                  | 47 R/ 6-45             | 12            | 21 | 23 | 6,5  | 16,5 | 10   | 13 |                                                              |                      | 5,180           | 100 |
|                             | M 8                  | 47 R/ 8-45             |               |    | 23 | 8,5  |      | 10   | 14 |                                                              |                      | 5,200           |     |
|                             | M 10                 | 47 R/10-45             |               |    | 23 | 10,5 |      | 12   | 16 |                                                              |                      | 5,400           |     |
|                             | M 12                 | 47 R/12-45             |               |    | 23 | 13   |      | 13   | 18 |                                                              |                      | 5,500           |     |
|                             | M 14                 | 47 R/14-45             |               |    | 23 | 15   |      | 14,5 | 20 |                                                              |                      | 5,600           |     |
|                             | M 16                 | 47 R/16-45             |               |    | 28 | 17   |      | 16   | 22 |                                                              |                      | 5,600           |     |
|                             | M 20                 | 47 R/20-45             |               |    | 30 | 21   |      | 19   | 24 |                                                              |                      | 5,600           |     |



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