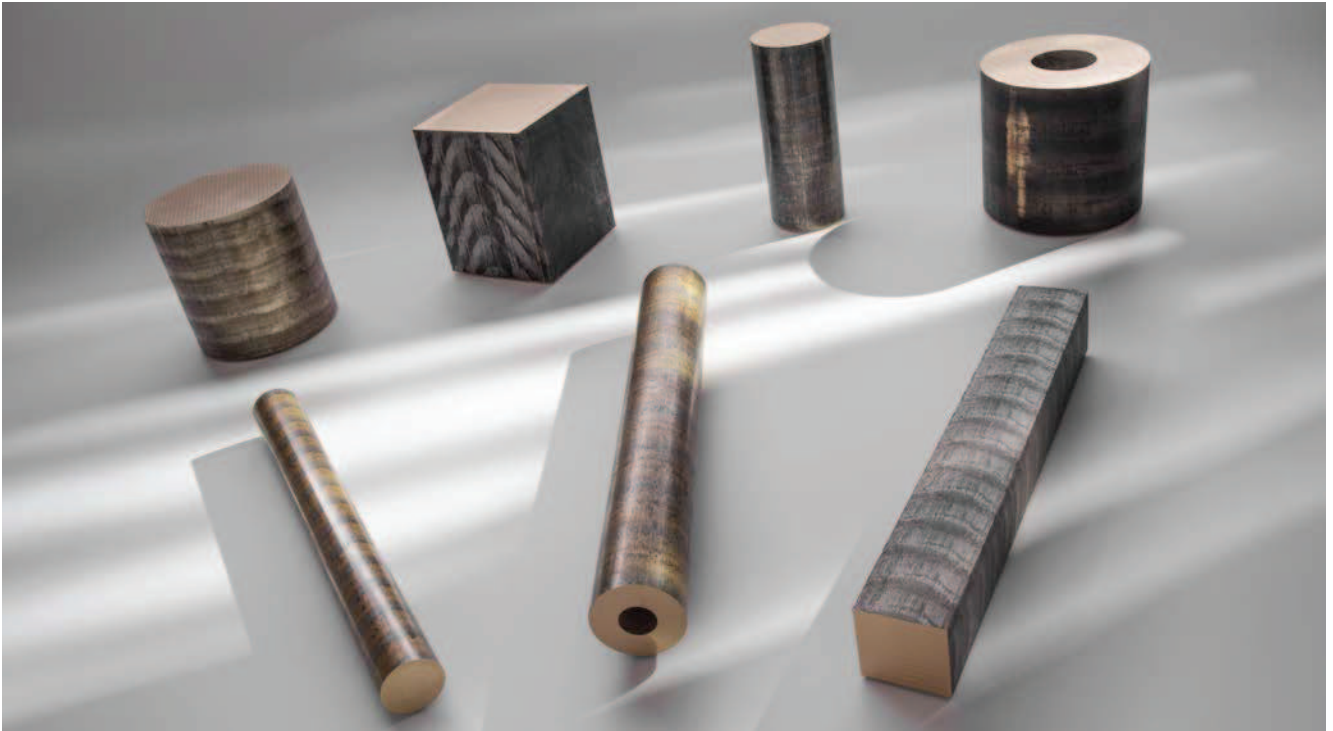


# **CARO-PROMETA**

## LAGERPROGRAMM STOCK LIST



# GUSSBRONZEN | CAST BRONZES



## Lieferübersicht | Delivery Programm

| Bezeichnung<br>Material    | Werkstoff-<br>Nr.<br>Material No. | Rohre<br>Tubes | Rund<br>Round | Flach<br>Flat | 4-Kant<br>Square | 6-Kant<br>Hexagon | Draht<br>Wire | Profile<br>Sections | Bleche<br>Sheets |
|----------------------------|-----------------------------------|----------------|---------------|---------------|------------------|-------------------|---------------|---------------------|------------------|
| CARO®CAST CuSn7Zn4Pb7      | CC493K                            | ●              | ●             | ●             | ●                | ○                 |               | ○                   |                  |
| CARO®CAST CuSn12           | CC483K                            | ●              | ●             | ●             | ●                | ○                 |               | ○                   |                  |
| CARO®CAST CuSn7Pb15        | CC496K                            | ○              | ○             | ○             | ○                | ○                 |               | ○                   |                  |
| CARO®CAST CuSn11Pb2        | CC482K                            | ○              | ○             | ○             | ○                | ○                 |               | ○                   |                  |
| CARO®CAST CuSn12Ni2        | CC484K                            | ○              | ○             | ○             | ○                | ○                 |               | ○                   |                  |
| CARO®CAST CuSn10Pb10       | CC495K                            | ○              | ○             | ○             | ○                | ○                 |               | ○                   |                  |
| CARO®CAST CuSn5Pb20        | CC497K                            | ○              | ○             | ○             | ○                | ○                 |               | ○                   |                  |
| CARO®CAST CuSn5Zn5Pb5      | CC491K                            | ○              | ○             | ○             | ○                | ○                 |               | ○                   |                  |
| CARO®CAST CuSn10           | CC480K                            | ○              | ○             | ○             | ○                | ○                 |               | ○                   |                  |
| WIELAND GD1<br>CuSn5Zn5Pb2 | CC499K                            | ○              | ○             | ○             | ○                | ○                 |               | ○                   |                  |

Weitere Werkstoffe auf Anfrage | Further material on demand

● = ab Lager | from stock

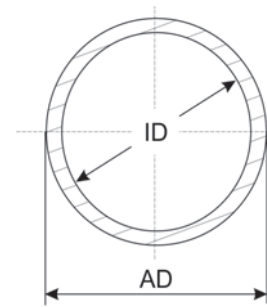
○ = auf Anfrage | on demand

# ROHRE | TUBES

Material: **CARO®CAST** CuSn7Zn4Pb7-C CC493K  
**CARO®CAST** CuSn12-C CC483K

Standards: DIN EN 1982

Status: Präzisions-Strangguss / GC | continuous cast / GC



|    | Fertigmaß<br>Final dimension<br>mm | Liefemaß<br>Delivery dimension<br>mm | CuSn7Zn4Pb7-C<br>CC493K | CuSn12-C<br>CC483K | kg/m<br>ca.<br>approx. |
|----|------------------------------------|--------------------------------------|-------------------------|--------------------|------------------------|
| 10 | 10 / 25                            | 09 / 26                              | •                       |                    | 4,4                    |
| 15 | 15 / 25                            | 14 / 26                              | •                       | •                  | 3,4                    |
|    | 15 / 30                            | 14 / 31                              | •                       | •                  | 5,5                    |
|    | 15 / 35                            | 14 / 36                              | •                       | •                  | 7,9                    |
|    | 15 / 40                            | 14 / 41                              | •                       | •                  | 10,6                   |
|    | 15 / 45                            | 14 / 46                              | •                       | •                  | 13,7                   |
| 18 | 18 / 36                            | 17 / 37                              | •                       |                    | 7,8                    |
| 20 | 20 / 28                            | 19 / 29                              | •                       |                    | 3,6                    |
|    | 20 / 30                            | 19 / 31                              | •                       | •                  | 4,4                    |
|    | 20 / 32                            | 19 / 33                              | •                       | •                  | 5,3                    |
|    | 20 / 35                            | 19 / 36                              | •                       | •                  | 6,7                    |
|    | 20 / 40                            | 19 / 41                              | •                       | •                  | 9,5                    |
|    | 20 / 45                            | 19 / 46                              | •                       | •                  | 12,5                   |
|    | 20 / 50                            | 19 / 51                              | •                       | •                  | 15,9                   |
|    | 20 / 55                            | 19 / 56                              | •                       | •                  | 20,1                   |
|    | 20 / 60                            | 19 / 61                              | •                       | •                  | 23,9                   |
|    | 20 / 70                            | 18 / 71                              | •                       | •                  | 33,5                   |
| 25 | 25 / 32                            | 24 / 33                              | •                       | •                  | 3,9                    |
|    | 25 / 35                            | 24 / 36                              | •                       | •                  | 5,6                    |
|    | 25 / 40                            | 24 / 41                              | •                       | •                  | 8,1                    |
|    | 25 / 45                            | 24 / 46                              | •                       | •                  | 11,2                   |
|    | 25 / 50                            | 24 / 51                              | •                       | •                  | 14,5                   |
|    | 25 / 55                            | 24 / 56                              | •                       | •                  | 18,5                   |
|    | 25 / 60                            | 24 / 61                              | •                       | •                  | 23,0                   |
|    | 25 / 65                            | 24 / 66                              | •                       | •                  | 26,9                   |
|    | 25 / 70                            | 24 / 71                              | •                       | •                  | 31,2                   |
|    | 25 / 75                            | 24 / 76                              | •                       | •                  | 37,6                   |
|    | 25 / 80                            | 23 / 82                              | •                       |                    | 43,5                   |
| 30 | 30 / 36                            | 29 / 37                              | •                       |                    | 3,9                    |
|    | 30 / 38                            | 29 / 39                              | •                       |                    | 5,0                    |
|    | 30 / 40                            | 29 / 41                              | •                       | •                  | 6,3                    |
|    | 30 / 45                            | 29 / 46                              | •                       | •                  | 9,3                    |

## ROHRE | TUBES

|    | Fertigmaß<br>Final dimension<br>mm | Liefermaß<br>Delivery dimension<br>mm | CuSn7Zn4Pb7-C<br>CC493K | CuSn12-C<br>CC483K | kg/m<br>ca.<br>approx. |
|----|------------------------------------|---------------------------------------|-------------------------|--------------------|------------------------|
|    | 30 / 50                            | 29 / 51                               | ●                       | ●                  | 12,7                   |
|    | 30 / 55                            | 29 / 56                               | ●                       | ●                  | 17,0                   |
|    | 30 / 60                            | 29 / 61                               | ●                       | ●                  | 20,5                   |
|    | 30 / 65                            | 29 / 66                               | ●                       | ●                  | 25,0                   |
|    | 30 / 70                            | 29 / 71                               | ●                       | ●                  | 30,0                   |
|    | 30 / 75                            | 29 / 76                               | ●                       | ●                  | 34,5                   |
|    | 30 / 80                            | 29 / 81                               | ●                       | ●                  | 41,5                   |
|    | 30 / 85                            | 28 / 87                               | ●                       | ●                  | 47,5                   |
|    | 30 / 90                            | 28 / 92                               | ●                       | ●                  | 54,4                   |
|    | 30 / 95                            | 28 / 97                               | ●                       |                    | 60,7                   |
|    | 30 / 100                           | 28 / 102                              | ●                       | ●                  | 68,3                   |
| 35 | 35 / 42                            | 34 / 43                               | ●                       | ●                  | 5,0                    |
|    | 35 / 45                            | 34 / 46                               | ●                       | ●                  | 7,2                    |
|    | 35 / 50                            | 34 / 51                               | ●                       | ●                  | 10,6                   |
|    | 35 / 55                            | 34 / 56                               | ●                       | ●                  | 14,5                   |
|    | 35 / 60                            | 34 / 61                               | ●                       | ●                  | 18,3                   |
|    | 35 / 65                            | 34 / 66                               | ●                       | ●                  | 22,8                   |
|    | 35 / 70                            | 34 / 71                               | ●                       | ●                  | 28,6                   |
|    | 35 / 75                            | 34 / 76                               | ●                       |                    | 33,2                   |
|    | 35 / 80                            | 34 / 81                               | ●                       |                    | 39,4                   |
|    | 35 / 90                            | 34 / 91                               | ●                       |                    | 50,4                   |
| 40 | 40 / 50                            | 39 / 51                               | ●                       | ●                  | 8,1                    |
|    | 40 / 55                            | 39 / 56                               | ●                       | ●                  | 12,0                   |
|    | 40 / 60                            | 39 / 61                               | ●                       | ●                  | 16,0                   |
|    | 40 / 65                            | 39 / 66                               | ●                       | ●                  | 20,4                   |
|    | 40 / 70                            | 39 / 71                               | ●                       | ●                  | 25,0                   |
|    | 40 / 75                            | 39 / 76                               | ●                       | ●                  | 31,3                   |
|    | 40 / 80                            | 39 / 81                               | ●                       | ●                  | 37,0                   |
|    | 40 / 85                            | 38 / 87                               | ●                       | ●                  | 42,0                   |
|    | 40 / 90                            | 39 / 91                               | ●                       | ●                  | 48,1                   |
|    | 40 / 100                           | 38 / 102                              | ●                       | ●                  | 63,5                   |
|    | 40 / 110                           | 38 / 112                              | ●                       | ●                  | 78,4                   |
|    | 40 / 120                           | 38 / 122                              | ●                       | ●                  | 95,5                   |
| 45 | 45 / 55                            | 44 / 57                               | ●                       | ●                  | 9,4                    |
|    | 45 / 60                            | 44 / 61                               | ●                       | ●                  | 13,0                   |
|    | 45 / 65                            | 44 / 66                               | ●                       | ●                  | 16,9                   |
|    | 45 / 70                            | 44 / 71                               | ●                       |                    | 22,2                   |
|    | 45 / 75                            | 44 / 76                               | ●                       | ●                  | 28,0                   |

## ROHRE | TUBES

|    | Fertigmaß<br>Final dimension<br>mm | Liefermaß<br>Delivery dimension<br>mm | CuSn7Zn4Pb7-C<br>CC493K | CuSn12-C<br>CC483K | kg/m<br>ca.<br>approx. |
|----|------------------------------------|---------------------------------------|-------------------------|--------------------|------------------------|
|    | 45 / 80                            | 44 / 81                               | •                       | •                  | 32,9                   |
| 50 | 50 / 60                            | 49 / 61                               | •                       | •                  | 10,0                   |
|    | 50 / 65                            | 49 / 66                               | •                       | •                  | 14,3                   |
|    | 50 / 70                            | 49 / 71                               | •                       | •                  | 19,0                   |
|    | 50 / 75                            | 49 / 76                               | •                       | •                  | 25,0                   |
|    | 50 / 80                            | 49 / 81                               | •                       | •                  | 31,0                   |
|    | 50 / 85                            | 48 / 87                               | •                       | •                  | 37,1                   |
|    | 50 / 90                            | 49 / 91                               | •                       | •                  | 43,0                   |
|    | 50 / 95                            | 48 / 97                               | •                       | •                  | 50,1                   |
|    | 50 / 100                           | 48 / 102                              | •                       | •                  | 56,6                   |
|    | 50 / 105                           | 48 / 107                              |                         | •                  | 64,9                   |
|    | 50 / 110                           | 48 / 112                              | •                       | •                  | 71,5                   |
|    | 50 / 120                           | 48 / 122                              | •                       | •                  | 87,9                   |
|    | 50 / 130                           | 48 / 132                              | •                       | •                  | 105,6                  |
| 55 | 55 / 65                            | 54 / 66                               | •                       | •                  | 11,0                   |
|    | 55 / 70                            | 54 / 71                               | •                       | •                  | 16,0                   |
|    | 55 / 75                            | 54 / 76                               | •                       | •                  | 20,8                   |
|    | 55 / 80                            | 54 / 81                               | •                       |                    | 26,4                   |
| 60 | 60 / 70                            | 58 / 72                               | •                       | •                  | 12,7                   |
|    | 60 / 75                            | 59 / 76                               | •                       | •                  | 16,9                   |
|    | 60 / 80                            | 58 / 82                               | •                       | •                  | 23,5                   |
|    | 60 / 85                            | 58 / 87                               | •                       | •                  | 29,0                   |
|    | 60 / 90                            | 58 / 92                               | •                       | •                  | 35,5                   |
|    | 60 / 95                            | 58 / 97                               | •                       | •                  | 43,6                   |
|    | 60 / 100                           | 58 / 102                              | •                       | •                  | 49,7                   |
|    | 60 / 105                           | 58 / 107                              | •                       | •                  | 56,5                   |
|    | 60 / 110                           | 58 / 112                              | •                       | •                  | 64,1                   |
|    | 60 / 115                           | 58 / 117                              | •                       | •                  | 71,2                   |
|    | 60 / 120                           | 58 / 122                              | •                       | •                  | 80,5                   |
|    | 60 / 130                           | 58 / 132                              | •                       | •                  | 98,3                   |
|    | 60 / 140                           | 58 / 142                              | •                       | •                  | 117,4                  |
|    | 60 / 150                           | 58 / 152                              | •                       | •                  | 138,1                  |
| 65 | 65 / 75                            | 63 / 77                               | •                       |                    | 14,0                   |
|    | 65 / 80                            | 63 / 82                               | •                       | •                  | 19,8                   |
|    | 65 / 85                            | 64 / 86                               | •                       | •                  | 23,9                   |
|    | 65 / 90                            | 63 / 92                               | •                       | •                  | 30,1                   |
|    | 65 / 105                           | 63 / 107                              | •                       |                    | 53,0                   |
| 70 | 70 / 82                            | 68 / 82                               | •                       | •                  | 14,8                   |

## ROHRE | TUBES

|    | Fertigmaß<br>Final dimension<br>mm | Liefermaß<br>Delivery dimension<br>mm | CuSn7Zn4Pb7-C<br>CC493K | CuSn12-C<br>CC483K | kg/m<br>ca.<br>approx. |
|----|------------------------------------|---------------------------------------|-------------------------|--------------------|------------------------|
|    | 70 / 85                            | 68 / 87                               | ●                       | ●                  | 19,4                   |
|    | 70 / 90                            | 68 / 92                               | ●                       | ●                  | 26,8                   |
|    | 70 / 95                            | 68 / 97                               | ●                       | ●                  | 32,0                   |
|    | 70 / 100                           | 68 / 102                              | ●                       | ●                  | 40,4                   |
|    | 70 / 105                           | 68 / 107                              | ●                       | ●                  | 47,5                   |
|    | 70 / 110                           | 68 / 112                              | ●                       | ●                  | 55,3                   |
|    | 70 / 120                           | 68 / 122                              | ●                       | ●                  | 71,7                   |
|    | 70 / 130                           | 68 / 132                              | ●                       | ●                  | 89,5                   |
|    | 70 / 140                           | 68 / 142                              | ●                       | ●                  | 108,6                  |
|    | 70 / 150                           | 68 / 152                              | ●                       | ●                  | 130,8                  |
|    | 70 / 160                           | 68 / 162                              | ●                       | ●                  | 151,2                  |
| 75 | 75 / 90                            | 74 / 91                               | ●                       | ●                  | 20,9                   |
|    | 75 / 95                            | 74 / 96                               | ●                       | ●                  | 27,3                   |
|    | 75 / 100                           | 73 / 102                              | ●                       | ●                  | 36,0                   |
|    | 75 / 105                           | 73 / 107                              | ●                       | ●                  | 43,5                   |
|    | 75 / 115                           | 73 / 117                              | ●                       | ●                  | 59,1                   |
| 80 | 80 / 90                            | 78 / 92                               | ●                       | ●                  | 17,0                   |
|    | 80 / 95                            | 79 / 96                               | ●                       | ●                  | 21,9                   |
|    | 80 / 100                           | 78 / 102                              | ●                       | ●                  | 30,2                   |
|    | 80 / 105                           | 78 / 107                              | ●                       | ●                  | 38,6                   |
|    | 80 / 110                           | 78 / 112                              | ●                       | ●                  | 45,2                   |
|    | 80 / 115                           | 78 / 117                              | ●                       | ●                  | 55,3                   |
|    | 80 / 120                           | 78 / 122                              | ●                       | ●                  | 61,5                   |
|    | 80 / 125                           | 78 / 127                              | ●                       | ●                  | 71,3                   |
|    | 80 / 130                           | 78 / 132                              | ●                       | ●                  | 79,3                   |
|    | 80 / 140                           | 78 / 142                              | ●                       | ●                  | 98,4                   |
|    | 80 / 150                           | 78 / 152                              | ●                       | ●                  | 118,4                  |
|    | 80 / 160                           | 78 / 162                              | ●                       | ●                  | 142,8                  |
|    | 80 / 190                           | 78 / 192                              | ●                       | ●                  | 215,2                  |
| 85 | 85 / 95                            | 83 / 97                               | ●                       | ●                  | 17,8                   |
|    | 85 / 100                           | 83 / 102                              | ●                       | ●                  | 26,0                   |
|    | 85 / 105                           | 84 / 106                              | ●                       | ●                  | 32,9                   |
|    | 85 / 115                           | 83 / 117                              | ●                       | ●                  | 48,3                   |
|    | 85 / 125                           | 83 / 127                              | ●                       | ●                  | 65,5                   |
| 90 | 90 / 100                           | 88 / 102                              | ●                       | ●                  | 19,8                   |
|    | 90 / 110                           | 88 / 112                              | ●                       | ●                  | 33,6                   |
|    | 90 / 120                           | 88 / 122                              | ●                       | ●                  | 49,9                   |
|    | 90 / 130                           | 88 / 132                              | ●                       | ●                  | 67,7                   |

## ROHRE | TUBES

|     | Fertigmaß<br>Final dimension<br>mm | Liefermaß<br>Delivery dimension<br>mm | CuSn7Zn4Pb7-C<br>CC493K | CuSn12-C<br>CC483K | kg/m<br>ca.<br>approx. |
|-----|------------------------------------|---------------------------------------|-------------------------|--------------------|------------------------|
|     | 90 / 140                           | 88 / 142                              | •                       | •                  | 86,8                   |
|     | 90 / 150                           | 88 / 152                              | •                       | •                  | 108,8                  |
|     | 90 / 160                           | 88 / 162                              | •                       | •                  | 132,0                  |
|     | 90 / 170                           | 88 / 172                              | •                       |                    | 154,5                  |
| 95  | 95 / 115                           | 93 / 117                              | •                       |                    | 35,8                   |
|     | 95 / 125                           | 93 / 127                              | •                       |                    | 53,0                   |
| 100 | 100 / 110                          | 98 / 112                              | •                       | •                  | 20,9                   |
|     | 100 / 115                          | 98 / 117                              | •                       |                    | 29,0                   |
|     | 100 / 120                          | 98 / 122                              | •                       | •                  | 36,9                   |
|     | 100 / 125                          | 98 / 127                              | •                       | •                  | 45,4                   |
|     | 100 / 130                          | 98 / 132                              | •                       | •                  | 54,6                   |
|     | 100 / 140                          | 98 / 142                              | •                       | •                  | 73,8                   |
|     | 100 / 150                          | 98 / 152                              | •                       | •                  | 95,6                   |
|     | 100 / 160                          | 98 / 162                              | •                       | •                  | 117,8                  |
|     | 100 / 170                          | 98 / 172                              |                         | •                  | 141,5                  |
|     | 100 / 190                          | 98 / 192                              | •                       |                    | 192,8                  |
|     | 100 / 200                          | 98 / 202                              | •                       | •                  | 220,8                  |
|     | 100 / 220                          | 98 / 222                              | •                       | •                  | 282,0                  |
| 110 | 110 / 125                          | 108 / 127                             | •                       |                    | 31,6                   |
|     | 110 / 130                          | 108 / 132                             | •                       | •                  | 40,9                   |
|     | 110 / 140                          | 108 / 142                             | •                       | •                  | 60,3                   |
|     | 110 / 150                          | 108 / 152                             | •                       | •                  | 81,0                   |
|     | 110 / 160                          | 108 / 162                             | •                       | •                  | 104,0                  |
|     | 110 / 170                          | 108 / 172                             | •                       | •                  | 126,9                  |
|     | 110 / 190                          | 108 / 192                             | •                       |                    | 178,4                  |
| 120 | 120 / 140                          | 118 / 142                             | •                       | •                  | 44,3                   |
|     | 120 / 150                          | 118 / 152                             | •                       | •                  | 65,0                   |
|     | 120 / 160                          | 118 / 162                             | •                       | •                  | 87,3                   |
|     | 120 / 170                          | 118 / 172                             | •                       | •                  | 110,9                  |
|     | 120 / 180                          | 118 / 182                             | •                       | •                  | 135,9                  |
|     | 120 / 200                          | 118 / 202                             | •                       | •                  | 190,3                  |
|     | 120 / 230                          | 118 / 232                             |                         | •                  | 282,4                  |
|     | 120 / 240                          | 118 / 242                             | •                       |                    | 316,0                  |
| 130 | 130 / 150                          | 128 / 152                             | •                       | •                  | 47,7                   |
|     | 130 / 160                          | 128 / 162                             | •                       | •                  | 69,9                   |
|     | 130 / 170                          | 128 / 172                             | •                       | •                  | 93,5                   |
|     | 130 / 180                          | 128 / 182                             | •                       | •                  | 118,5                  |
|     | 130 / 190                          | 128 / 192                             | •                       |                    | 144,9                  |

## ROHRE | TUBES

| Fertigmaß<br>Final dimension<br>mm |           | Liefermaß<br>Delivery dimension<br>mm | CuSn7Zn4Pb7-C<br>CC493K | CuSn12-C<br>CC483K | kg/m<br>ca.<br>approx. |
|------------------------------------|-----------|---------------------------------------|-------------------------|--------------------|------------------------|
| 140                                | 140 / 160 | 138 / 162                             | ●                       | ●                  | 51,0                   |
|                                    | 140 / 170 | 138 / 172                             | ●                       | ●                  | 74,8                   |
|                                    | 140 / 180 | 138 / 182                             | ●                       |                    | 99,8                   |
|                                    | 140 / 200 | 138 / 202                             | ●                       | ●                  | 154,0                  |
| 150                                | 150 / 170 | 148 / 172                             | ●                       |                    | 54,4                   |
|                                    | 150 / 180 | 148 / 182                             | ●                       | ●                  | 79,5                   |
|                                    | 150 / 190 | 148 / 192                             | ●                       |                    | 105,9                  |
|                                    | 150 / 200 | 148 / 202                             | ●                       | ●                  | 133,8                  |
|                                    | 150 / 210 | 148 / 212                             | ●                       |                    | 162,9                  |
|                                    | 150 / 220 | 148 / 222                             | ●                       | ●                  | 199,5                  |
|                                    | 150 / 300 | 146 / 304                             | ●                       | ●                  | 504,0                  |
| 160                                | 160 / 180 | 158 / 182                             | ●                       |                    | 57,9                   |
|                                    | 160 / 190 | 158 / 192                             | ●                       | ●                  | 84,3                   |
|                                    | 160 / 200 | 158 / 202                             | ●                       | ●                  | 112,2                  |
|                                    | 160 / 210 | 158 / 212                             |                         | ●                  | 141,5                  |
|                                    | 160 / 220 | 158 / 222                             | ●                       | ●                  | 172,1                  |
| 170                                | 170 / 200 | 168 / 202                             | ●                       | ●                  | 89,1                   |
|                                    | 170 / 210 | 168 / 212                             | ●                       |                    | 119,3                  |
|                                    | 170 / 230 | 168 / 232                             | ●                       | ●                  | 181,1                  |
|                                    | 170 / 270 | 168 / 272                             |                         | ●                  | 319,9                  |
| 180                                | 180 / 200 | 178 / 202                             | ●                       |                    | 64,6                   |
|                                    | 180 / 210 | 178 / 212                             | ●                       |                    | 95,0                   |
|                                    | 180 / 230 | 178 / 232                             | ●                       |                    | 157,0                  |
|                                    | 180 / 250 | 178 / 252                             | ●                       | ●                  | 225,0                  |
| 190                                | 190 / 220 | 188 / 222                             | ●                       |                    | 100,0                  |
|                                    | 190 / 240 | 188 / 242                             | ●                       | ●                  | 164,3                  |
|                                    | 190 / 260 | 188 / 262                             | ●                       |                    | 235,9                  |
| 200                                | 200 / 225 | 198 / 227                             | ●                       |                    | 92,0                   |
|                                    | 200 / 240 | 198 / 242                             | ●                       |                    | 138,0                  |
|                                    | 200 / 250 | 198 / 252                             | ●                       |                    | 173,0                  |
|                                    | 200 / 270 | 198 / 272                             | ●                       |                    | 246,0                  |
|                                    | 200 / 300 | 196 / 304                             | ●                       | ●                  | 385,1                  |
|                                    | 200 / 310 | 198 / 312                             | ●                       |                    | 411,0                  |
|                                    | 200 / 350 | 196 / 354                             | ●                       | ●                  | 616,0                  |
| 210                                | 210 / 250 | 208 / 252                             | ●                       |                    | 144,0                  |
|                                    | 210 / 260 | 208 / 262                             | ●                       |                    | 180,0                  |
|                                    | 210 / 280 | 208 / 282                             | ●                       |                    | 257,0                  |
| 220                                | 220 / 260 | 218 / 262                             | ●                       |                    | 151,0                  |



## ROHRE | TUBES

| Fertigmaß<br>Final dimension<br>mm |           | Liefermaß<br>Delivery dimension<br>mm | CuSn7Zn4Pb7-C<br>CC493K | CuSn12-C<br>CC483K | kg/m<br>ca.<br>approx. |
|------------------------------------|-----------|---------------------------------------|-------------------------|--------------------|------------------------|
|                                    | 220 / 270 | 218 / 272                             | ●                       | ●                  | 189,0                  |
|                                    | 220 / 280 | 218 / 282                             | ●                       |                    | 226,2                  |
|                                    | 220 / 290 | 218 / 292                             | ●                       |                    | 266,9                  |
| 250                                | 250 / 300 | 246 / 304                             | ●                       | ●                  | 231,0                  |
|                                    | 250 / 350 | 246 / 354                             | ●                       | ●                  | 462,0                  |
|                                    | 250 / 400 | 246 / 404                             | ●                       |                    | 727,0                  |
| 300                                | 300 / 350 | 296 / 354                             | ●                       | ●                  | 273,0                  |
|                                    | 300 / 400 | 296 / 404                             | ●                       |                    | 539,0                  |
| 350                                | 350 / 400 | 346 / 404                             | ●                       |                    | 315,0                  |

### Zugaben Toleranzen Rohre / Add on tolerances tubes:

| Fertigmaß AD<br>Final dimension OD<br>mm | Zugabe AD<br>Add on OD<br>mm | Innendurchmesser<br>Inner diameter | Gießtoleranz<br>Cast tolerance | Innendurchmesser<br>Inner diameter |
|--|------------------------------|------------------------------------|--------------------------------|------------------------------------|
| 17 - 100                                 | + 1,0                        | - 1,0                              | + 0,6                          | -1,0                               |
| 101 - 140                                | + 1,5                        | - 1,0                              | + 0,6                          | - 1,0                              |
| 141 - 252                                | + 2,0                        | - 2,0                              | + 1,5                          | - 1,5                              |
| 253 - 404                                | + 4,0                        | - 4,0                              | + 2,0                          | - 2,0                              |

#### Information:

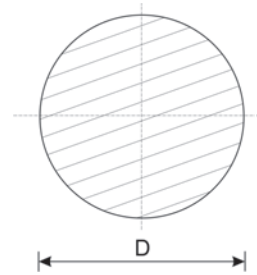
Standardlängen ca. 3.000 mm | Standard length approx. 3.000 mm

## RUND | ROUND

Material: **CARO®CAST** CuSn7Zn4Pb7-C CC493K  
**CARO®CAST** CuSn12-C CC483K

Standards: DIN EN 1982

Status: Präzisions-Strangguss / GC | continuous cast / GC



| Fertigmaß<br>Final dimension<br>mm | Liefermaß<br>Delivery dimension<br>mm | CuSn7Zn4Pb7-C<br>CC493K | CuSn12-C<br>CC483K | ca.<br>approx.<br>kg/m |
|------------------------------------|---------------------------------------|-------------------------|--------------------|------------------------|
| 12                                 | 13                                    | •                       | •                  | 1,2                    |
| 14                                 | 15                                    | •                       | •                  | 1,6                    |
| 15                                 | 16                                    | •                       | •                  | 1,8                    |
| 16                                 | 17                                    | •                       | •                  | 2,1                    |
| 18                                 | 19                                    | •                       | •                  | 2,5                    |
| 20                                 | 21                                    | •                       | •                  | 3,0                    |
| 22                                 | 23                                    | •                       | •                  | 3,8                    |
| 25                                 | 26                                    | •                       | •                  | 4,8                    |
| 28                                 | 29                                    | •                       | •                  | 6,0                    |
| 30                                 | 31                                    | •                       | •                  | 6,8                    |
| 32                                 | 33                                    | •                       | •                  | 7,7                    |
| 34                                 | 35                                    | •                       | •                  | 8,7                    |
| 35                                 | 36                                    | •                       |                    | 9,2                    |
| 36                                 | 37                                    | •                       | •                  | 9,6                    |
| 38                                 | 39                                    | •                       |                    | 10,8                   |
| 40                                 | 41                                    | •                       | •                  | 11,9                   |
| 42                                 | 43                                    | •                       |                    | 13,1                   |
| 45                                 | 46                                    | •                       | •                  | 15,0                   |
| 50                                 | 51                                    | •                       | •                  | 18,4                   |
| 55                                 | 56                                    | •                       | •                  | 22,2                   |
| 60                                 | 61                                    | •                       | •                  | 26,3                   |
| 65                                 | 66                                    | •                       | •                  | 30,8                   |
| 70                                 | 71                                    | •                       | •                  | 35,7                   |
| 75                                 | 76                                    | •                       | •                  | 40,9                   |
| 80                                 | 81                                    | •                       | •                  | 46,5                   |
| 85                                 | 86                                    | •                       | •                  | 52,3                   |
| 90                                 | 91                                    | •                       | •                  | 58,6                   |
| 95                                 | 96                                    | •                       | •                  | 65,2                   |
| 100                                | 102                                   | •                       | •                  | 72,7                   |
| 105                                | 106                                   | •                       | •                  | 79,5                   |
| 110                                | 112                                   | •                       | •                  | 87,6                   |
| 120                                | 122                                   | •                       | •                  | 104,0                  |
| 125                                | 127                                   | •                       |                    | 114,0                  |
| 130                                | 132                                   | •                       | •                  | 121,8                  |
| 140                                | 142                                   | •                       | •                  | 140,9                  |

## RUND | ROUND

| Fertigmaß<br>Final dimension<br>mm | Liefermaß<br>Delivery dimension<br>mm | CuSn7Zn4Pb7-C<br>CC493K | CuSn12-C<br>CC483K | ca.<br>approx.<br>kg/m |
|------------------------------------|---------------------------------------|-------------------------|--------------------|------------------------|
| 150                                | 152                                   | •                       | •                  | 163,5                  |
| 160                                | 162                                   | •                       | •                  | 185,7                  |
| 170                                | 172                                   | •                       | •                  | 209,2                  |
| 180                                | 182                                   | •                       | •                  | 234,3                  |
| 190                                | 192                                   | •                       | •                  | 261,0                  |
| 200                                | 202                                   | •                       | •                  | 288,8                  |
| 210                                | 212                                   | •                       | •                  | 317,8                  |
| 220                                | 222                                   | •                       | •                  | 348,5                  |
| 230                                | 232                                   | •                       | •                  | 380,8                  |
| 240                                | 242                                   | •                       | •                  | 414,4                  |
| 250                                | 252                                   | •                       | •                  | 450,0                  |
| 280                                | 282                                   | •                       | •                  | 562,5                  |
| 300                                | 304                                   | •                       | •                  | 653,5                  |
| 350                                | 354                                   | •                       | •                  | 886,0                  |
| 400                                | 404                                   | •                       | •                  | 1140,0                 |

### Zugaben Toleranzen Stangen / Add on tolerances bars:

| Fertigmaß<br>Final dimension<br>mm | Zugabe<br>Add on<br>mm | Gießtoleranz<br>Cast tolerance |
|------------------------------------|------------------------|--------------------------------|
| 13 - 100                           | 1                      | 0,6                            |
| 101 - 140                          | 2                      | 1,2                            |
| 141 - 252                          | 2                      | 1,5                            |
| 253 - 404                          | 4                      | 2                              |

#### Information:

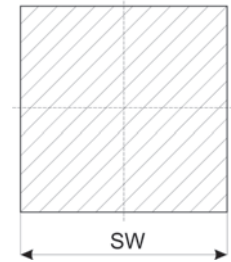
Standardlängen ca. 3.000 mm | Standard length approx. 3.000 mm

## VIERKANT | SQUARE

Material: **CARO®CAST** CuSn7Zn4Pb7-C CC493K  
**CARO®CAST** CuSn12-C CC483K

Standards: DIN EN 1982

Status: Präzisions-Strangguss / GC | continuous cast / GC



| Fertigmaß<br>Final dimension<br>mm | Liefermaß<br>Delivery dimension<br>mm | CuSn7Zn4Pb7-C<br>CC493K | CuSn12-C<br>CC483K | ca.<br>approx.<br>kg/m |
|------------------------------------|---------------------------------------|-------------------------|--------------------|------------------------|
| 20 / 20                            | 22 / 22                               | •                       | •                  | 4,6                    |
| 30 / 30                            | 32 / 32                               | •                       | •                  | 9,3                    |
| 40 / 40                            | 42 / 42                               | •                       | •                  | 16,0                   |
| 50 / 50                            | 52 / 52                               | •                       | •                  | 24,5                   |
| 60 / 60                            | 62 / 62                               | •                       | •                  | 34,7                   |
| 70 / 70                            | 72 / 72                               | •                       | •                  | 47,8                   |
| 80 / 80                            | 82 / 82                               | •                       | •                  | 60,7                   |
| 90 / 90                            | 93 / 93                               | •                       | •                  | 77,8                   |
| 100 / 100                          | 102 / 102                             | •                       | •                  | 93,6                   |
| 110 / 110                          | 113 / 113                             | •                       | •                  | 114,9                  |

### Information:

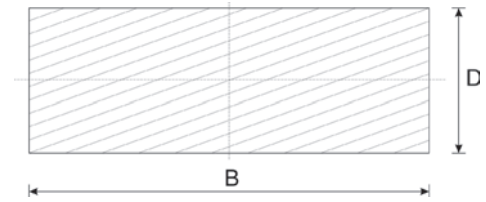
Standardlängen ca. 3.000 mm | Standard length approx. 3.000 mm

# FLACH | FLAT

Material: **CARO®CAST** CuSn7Zn4Pb7-C CC493K  
**CARO®CAST** CuSn12-C CC483K

Standards: DIN EN 1982

Status: Präzisions-Strangguss / GC | continuous cast / GC



| Fertigmaß<br>Final dimension<br>mm | Liefermaß<br>Delivery dimension<br>mm | CuSn7Zn4Pb7-C<br>CC493K | CuSn12-C<br>CC483K | ca.<br>approx.<br>kg/m |
|------------------------------------|---------------------------------------|-------------------------|--------------------|------------------------|
| 30 / 10                            | 32 / 12                               | •                       | •                  | 3,8                    |
| 30 / 20                            | 32 / 22                               | •                       | •                  | 6,4                    |
| 40 / 10                            | 42 / 12                               | •                       | •                  | 4,9                    |
| 40 / 15                            | 42 / 17                               | •                       | •                  | 6,8                    |
| 40 / 20                            | 42 / 22                               | •                       | •                  | 8,7                    |
| 40 / 30                            | 42 / 32                               | •                       | •                  | 12,5                   |
| 50 / 10                            | 52 / 12                               | •                       | •                  | 5,7                    |
| 50 / 15                            | 52 / 17                               | •                       | •                  | 8,0                    |
| 50 / 20                            | 52 / 22                               | •                       | •                  | 10,2                   |
| 50 / 25                            | 52 / 27                               | •                       | •                  | 12,6                   |
| 50 / 40                            | 52 / 42                               | •                       | •                  | 19,7                   |
| 60 / 10                            | 62 / 12                               | •                       | •                  | 7,2                    |
| 60 / 15                            | 62 / 18                               | •                       | •                  | 10,5                   |
| 60 / 20                            | 62 / 22                               | •                       | •                  | 12,2                   |
| 60 / 30                            | 62 / 32                               | •                       | •                  | 17,7                   |
| 60 / 40                            | 62 / 42                               | •                       | •                  | 23,5                   |
| 65 / 10                            | 67 / 12                               | •                       | •                  | 7,2                    |
| 65 / 16                            | 67 / 18                               | •                       | •                  | 10,8                   |
| 65 / 20                            | 67 / 22                               | •                       | •                  | 13,3                   |
| 65 / 30                            | 67 / 32                               | •                       | •                  | 19,1                   |
| 70 / 10                            | 73 / 13                               | •                       | •                  | 8,5                    |
| 70 / 20                            | 73 / 23                               | •                       | •                  | 15,0                   |
| 80 / 10                            | 83 / 13                               | •                       | •                  | 9,8                    |
| 80 / 16                            | 83 / 19                               | •                       | •                  | 14,0                   |
| 80 / 20                            | 83 / 23                               | •                       | •                  | 17,0                   |
| 80 / 50                            | 82 / 52                               | •                       | •                  | 38,5                   |
| 100 / 10                           | 103 / 13                              | •                       | •                  | 12,1                   |
| 100 / 12                           | 103 / 15                              | •                       | •                  | 14,1                   |
| 100 / 16                           | 103 / 19                              | •                       | •                  | 17,7                   |
| 100 / 20                           | 103 / 23                              | •                       | •                  | 21,4                   |
| 100 / 50                           | 103 / 53                              | •                       | •                  | 49,1                   |
| 120 / 16                           | 123 / 19                              | •                       | •                  | 21,2                   |
| 120 / 20                           | 123 / 23                              | •                       | •                  | 25,5                   |

## WERKSTOFFE | MATERIALS

### CARO®CAST CuSn7Zn4Pb7 CC493K

| Zusammensetzung<br>Composition<br>%                     | Zugfestigkeit<br>Tensile Strength<br>$R_m$<br>N/mm <sup>2</sup> | Dehngrenze<br>Yield Strength<br>$R_{p0,2}$<br>N/mm <sup>2</sup> | Bruchdehnung<br>Elongation<br>A<br>% | Härte<br>Hardness<br>HB | Dichte<br>Density |
|---|---|---|--------------------------------------|-------------------------|-------------------|
| Cu Rest   | 260   | 120   | 12                                   | 70                      | 8,9               |
| Sn 7,0  |   |   |                                      |                         |                   |
| Pb 7,0  |   |   |                                      |                         |                   |
| Zn 4,0  |   |   |                                      |                         |                   |
| Gleichwertige Spezifikationen   Related specifications: |   | CuSn7ZnPb / 2.1090 DIN<br>C93200 UNS                            |                                      |                         |                   |

#### Eigenschaften:

Bewährte Standard-Legierung für alle im Maschinenbau vorkommenden Gleitlager mit mittlerer Beanspruchung.

#### Properties:

Proven standard alloy for all bearings with medium stress used in mechanical engineering.

#### Anwendung:

Lagerbuchsen und Gleitelemente für den allgemeinen Maschinen- und Apparatebau.

#### Application:

Bearing bushes and sliding components for general mechanical engineering and apparatus construction.

### CARO®CAST CuSn12 CC483K

| Zusammensetzung<br>Composition<br>%                     | Zugfestigkeit<br>Tensile Strength<br>$R_m$<br>N/mm <sup>2</sup> | Dehngrenze<br>Yield Strength<br>$R_{p0,2}$<br>N/mm <sup>2</sup> | Bruchdehnung<br>Elongation<br>A<br>% | Härte<br>Hardness<br>HB | Dichte<br>Density |
|---|---|---|--------------------------------------|-------------------------|-------------------|
| Cu Rest   | 300   | 150   | 6                                    | 90                      | 8,9               |
| Sn 12,0   |   |   |                                      |                         |                   |
| Pb 0,5  |   |   |                                      |                         |                   |
| Gleichwertige Spezifikationen   Related specifications: |   | CuSn12 / 2.1052 DIN<br>C92500 UNS                               |                                      |                         |                   |

#### Eigenschaften:

Zur Gruppe der Kupfer-Zinn-Gußlegierungen gehörend hat dieser Werkstoff neben guten Gleiteigenschaften die höchste Verschleißfestigkeit der Stranggusswerkstoffe.

#### Properties:

Belonging to the copper-tin-casting alloy group, besides good sliding characteristics, this material has the highest wear-resistance of the continuous casting materials.

#### Anwendung:

Lagerbuchsen und Gleitelemente für hochbeanspruchte Lagerstellen.

#### Application:

Bearing bushes and sliding components for highly stressed bearing positions.

#### Auf Anfrage / On request:

| Werkstoff<br>Alloy | Werkstoffnummer<br>Material no. |        |
|--------------------|---------------------------------|--------|
| CuSn5Pb20          | CC497K                          | 2.1188 |
| CuSn7Pb15          | CC496K                          | 2.1182 |
| CuSn11Pb2          | CC482K                          | 2.1061 |
| CuSn12Ni2          | CC484K                          | 2.1060 |
| CuSn10Pb10         | CC495K                          | 2.1176 |