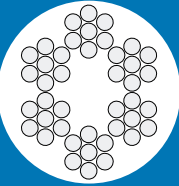


# EN 12385-4 - CLASS 6x7

| CONSTRUCTION CROSS SECTION EXAMPLE<br> | CONSTRUCTION OF ROPE |                    | CONSTRUCTION OF STRAND          |          |  |
|---|----------------------|--------------------|---------------------------------|----------|--|
|   | ITEM                 | QUANTITY           | ITEM                            | QUANTITY |  |
|   | Strands              | 6                  | Wires                           | 5 to 9   |  |
|   | outer strands        | 6                  | Outer wires                     | 4 to 8   |  |
| layers of strands   | 1                    | Layers of wires    | 1                               |          |  |
| Wires in rope (excluding metallic core)   | 30 to 54             |                    |                                 |          |  |
| TYPICAL EXAMPLE   |                      | No. OF OUTER WIRES | OUTER WIRE FACTOR <sup>1)</sup> |          |  |
| ROPE  | STRAND               | TOTAL              | PER STRAND                      |          |  |
| 6X7-FC  | 1-6                  | 36                 | 6                               | 0,106    |  |
| Min. breaking force factor:   |                      | K1=0,332           | K2=0,359                        | K3=0,388 |  |
| Nominal length mass factor <sup>1)</sup>  |                      | W1=0,345           | W2=0,348                        |          |  |
| Nominal metallic cross-sectional area factor <sup>1)</sup>  |                      | C1=0,369           | C2=0,432                        |          |  |

| Nominal rope diameter mm | Approximate nominal length mass <sup>1)</sup> kg/100m |            | Minimum breaking force kN |                 |            |                 |
|--------------------------|---|------------|---------------------------|-----------------|------------|-----------------|
|                          |   |            | Rope Grade                |                 |            |                 |
|                          | Fibre core  | Steel core | 1770                      |                 | 1960       |                 |
|                          |   |            | Fibre core                | Steel core      | Fibre core | Steel core      |
| 1                        | 2   | 3          | 4                         | 5 <sup>2)</sup> | 6          | 7 <sup>2)</sup> |
| 2                        | 1,38  | 1,54       | 2,35                      | 2,54            | 2,60       | 2,81            |
| 3                        | 3,11  | 3,46       | 5,29                      | 5,72            | 5,86       | 6,33            |
| 4                        | 5,52  | 6,14       | 9,40                      | 10,2            | 10,40      | 11,3            |
| 5                        | 8,63  | 9,60       | 14,7                      | 15,9            | 16,3       | 17,6            |
| 6                        | 12,4  | 13,8       | 21,2                      | 22,9            | 23,4       | 25,3            |
| 7                        | 16,9  | 18,8       | 28,8                      | 31,1            | 31,9       | 34,5            |
| 8                        | 22,1  | 24,6       | 37,6                      | 40,7            | 41,6       | 45,0            |
| 9                        | 27,9  | 31,1       | 47,6                      | 51,5            | 52,7       | 57,0            |
| 10                       | 34,5  | 38,4       | 58,8                      | 63,5            | 65,1       | 70,4            |
| 11                       | 41,7  | 46,5       | 71,1                      | 76,9            | 78,7       | 85,1            |
| 12                       | 49,7  | 55,3       | 84,6                      | 91,5            | 93,7       | 101             |
| 13                       | 58,3  | 64,9       | 99,3                      | 107             | 110        | 119             |
| 14                       | 67,6  | 75,3       | 115                       | 125             | 128        | 138             |
| 16                       | 88,3  | 98,3       | 150                       | 163             | 167        | 180             |
| 18                       | 112   | 124        | 190                       | 206             | 211        | 228             |
| 20                       | 138   | 154        | 235                       | 254             | 260        | 281             |
| 22                       | 167   | 186        | 284                       | 308             | 315        | 341             |
| 24                       | 199   | 221        | 338                       | 366             | 375        | 405             |
| 26                       | 233   | 260        | 397                       | 430             | 440        | 476             |
| 28                       | 270   | 301        | 461                       | 498             | 510        | 552             |
| 32                       | 353   | 393        | 602                       | 651             | 666        | 721             |
| 36                       | 447   | 498        | 762                       | 824             | 843        | 912             |
| 40                       | 552   | 614        | 940                       | 1 040           | 1 040      | 1 130           |

1) Informative only

2) For small diameter ropes (2mm to 7mm) with wire strand core (WSC), k3 may be used for the calculation of breaking forces. The values given in columns 5 and 7 are based on ropes with independent wire rope cores (IWRC).