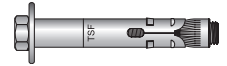
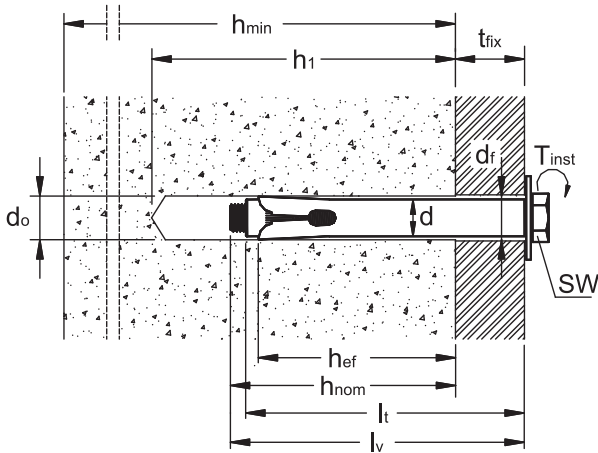


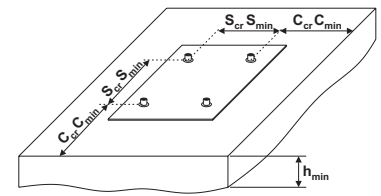
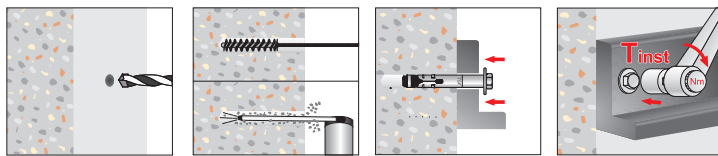
**LZ 01** Ancorante in lamiera avvolta con vite TE classe 8.8 e rondella serie larga, in acciaio zincato



**SCHEDA TECNICA**



|                      |   |
|----------------------|---|
| $d_{nom} \times l_t$ | diametro esterno ancorante x lunghezza ancorante  |
| <b>M</b>             | diametro vite   |
| $t_{fix}$            | spessore massimo fissabile  |
| $d_o$                | diametro del foro   |
| $h_1$                | profondità del foro   |
| $h_{min}$            | spessore del materiale di supporto  |
| $h_{nom}$            | profondità minima di inserimento  |
| $h_{ef}$             | profondità effettiva di ancoraggio  |
| $d_f$                | diametro del foro nell'elemento da fissare  |
| $T_{inst}$           | coppia di serraggio raccomandata  |
| <b>SW</b>            | misura chiave   |
| $c_{min}$            | minima distanza dal bordo consentita  |
| $s_{min}$            | minimo interasse consentito   |
| $c_{cr}$             | distanza dal bordo che assicura la trasmissione della resistenza caratteristica di un ancoraggio singolo                      |
| $s_{cr}$             | interasse tra ancoraggi in gruppo tale da assicurare la trasmissione della resistenza caratteristica di un ancoraggio singolo |



**DATI TECNICI E RISULTATI DI PROVA SU ANCORANTI LZ 01 IN CALCESTRUZZO NON FESSURATO C20/25**

| Codice Articolo | Misura                                 |                                    | $t_{fix}$<br>(mm) | $d_o$<br>(mm) | $h_1$<br>(mm) | $h_{min}$<br>(mm) | $h_{nom}$<br>(mm) | $h_{ef}$<br>(mm) | $d_f$<br>(mm) | $T_{inst}$<br>(Nm) | <b>SW</b><br>(mm) | $c_{min}$<br>(mm) | $s_{min}$<br>(mm) | $c_{cr}$<br>(mm) | $s_{cr}$<br>(mm) | CARICO CARATTERISTICO<br>(kN) |              |
|-----------------|--|------------------------------------|-------------------|---------------|---------------|-------------------|-------------------|------------------|---------------|--------------------|-------------------|-------------------|-------------------|------------------|------------------|-------------------------------|--------------|
|                 | Ancorante<br>$d_{nom} \times l_t$ (mm) | Misura Vite<br>$M \times l_v$ (mm) |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  | ESTRAZIONE                    | TAGLIO       |
| <b>Ø 8</b>      |  |                                    |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 08 045    | 8 x 45                                 | M6 x 45                            | 5                 | 8             | 55            | 100               | 40                | 35               | 9             | 15                 | 10                | 52,5              | 70                | 105              | 140              | <b>2,80</b>                   | <b>4,11</b>  |
| LZ 01 08 060    | 8 x 60                                 | M6 x 60                            | 5                 | 8             | 70            | 100               | 55                | 45               | 9             | 20                 | 10                | 67,5              | 90                | 135              | 180              | <b>3,00</b>                   | <b>8,01</b>  |
| LZ 01 08 070    | 8 x 70                                 | M6 x 70                            | 15                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 08 080    | 8 x 80                                 | M6 x 80                            | 25                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 08 100    | 8 x 100                                | M6 x 100                           | 45                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 08 120    | 8 x 120                                | M6 x 120                           | 65                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| <b>Ø 10</b>     |  |                                    |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 10 065    | 10 x 65                                | M8 x 60                            | 15                | 10            | 70            | 100               | 50                | 45               | 12            | 25                 | 13                | 67,5              | 90                | 135              | 180              | <b>8,07</b>                   | <b>11,52</b> |
| LZ 01 10 080    | 10 x 80                                | M8 x 65                            | 10                | 10            | 90            | 120               | 70                | 60               | 12            | 30                 | 13                | 90                | 120               | 180              | 240              | <b>11,40</b>                  | <b>13,87</b> |
| LZ 01 10 100    | 10 x 100                               | M8 x 80                            | 30                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 10 120    | 10 x 120                               | M8 x 100                           | 50                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 10 140    | 10 x 140                               | M8 x 120                           | 70                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| <b>Ø 12</b>     |  |                                    |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 12 065    | 12 x 65                                | M10 x 65                           | 15                | 12            | 70            | 100               | 50                | 45               | 14            | 45                 | 17                | 67,5              | 90                | 135              | 180              | <b>8,40</b>                   | <b>17,52</b> |
| LZ 01 12 075    | 12 x 75                                | M10 x 75                           | 15                | 12            | 80            | 110               | 60                | 55               | 14            | 45                 | 17                | 82,5              | 110               | 165              | 220              | <b>9,15</b>                   | <b>19,71</b> |
| LZ 01 12 100    | 12 x 100                               | M10 x 80                           | 30                | 12            | 90            | 120               | 70                | 60               | 14            | 50                 | 17                | 90                | 120               | 180              | 240              | <b>15,20</b>                  | <b>22,05</b> |
| LZ 01 12 120    | 12 x 120                               | M10 x 100                          | 50                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 12 150    | 12 x 150                               | M10 x 120                          | 80                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| <b>Ø 14</b>     |  |                                    |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 14 075    | 14 x 75                                | M10 x 75                           | 15                | 14            | 90            | 110               | 60                | 55               | 16            | 45                 | 17                | 82,5              | 110               | 165              | 220              | <b>9,45</b>                   | <b>19,71</b> |
| LZ 01 14 085    | 14 x 85                                | M10 x 85                           | 5                 | 14            | 110           | 140               | 80                | 70               | 16            | 60                 | 17                | 105               | 140               | 210              | 280              | <b>23,76</b>                  | <b>22,05</b> |
| LZ 01 14 100    | 14 x 100                               | M10 x 100                          | 20                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 14 120    | 14 x 120                               | M10 x 120                          | 40                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 14 150    | 14 x 150                               | M10 x 150                          | 70                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| <b>Ø 16</b>     |  |                                    |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 16 075    | 16 x 75                                | M12 x 75                           | 15                | 16            | 90            | 110               | 60                | 55               | 18            | 110                | 19                | 82,5              | 110               | 165              | 220              | <b>11,96</b>                  | <b>24,57</b> |
| LZ 01 16 110    | 16 x 110                               | M12 x 110                          | 10                | 16            | 130           | 180               | 100               | 90               | 18            | 100                | 19                | 135               | 180               | 270              | 360              | <b>28,52</b>                  | <b>32,01</b> |
| LZ 01 16 130    | 16 x 130                               | M12 x 130                          | 30                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 16 150    | 16 x 150                               | M12 x 150                          | 50                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| <b>Ø 20</b>     |  |                                    |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |
| LZ 01 20 120    | 20 x 120                               | M16 x 120                          | 10                | 20            | 150           | 190               | 110               | 95               | 22            | 150                | 24                | 143               | 190               | 285              | 380              | <b>33,28</b>                  | <b>52,50</b> |
| LZ 01 20 160    | 20 x 160                               | M16 x 160                          | 50                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                               |              |

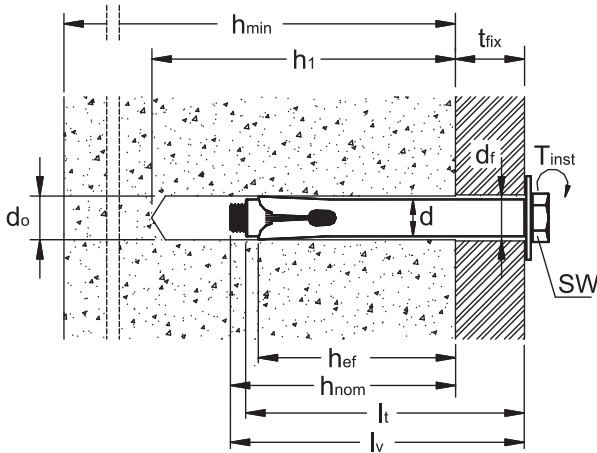
Per i dati non inseriti in tabella rivolgersi al Laboratorio Tecfi

In tabella sono indicati i CARICHI CARATTERISTICI per prove effettuate su calcestruzzo C20/25 non fessurato senza influenza del bordo e/o dell'interasse (valori di estrazione e taglio in kN: 1kN = 100Kg).

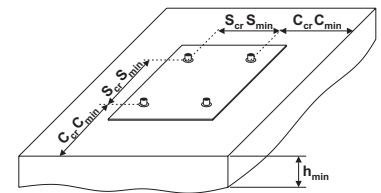
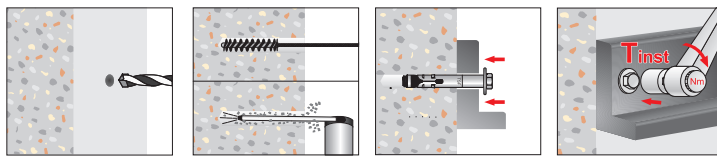
**LZ 01** Sleeve anchor with hex head screw 8.8 grade, zinc plated



**TECHNICAL DATA SHEET**



|                      |   |
|----------------------|---|
| $d_{nom} \times l_t$ | anchor diameter x anchor length   |
| <b>M</b>             | screw diameter  |
| $t_{fix}$            | maximum thickness of fixture  |
| $d_o$                | drill hole diameter   |
| $h_1$                | depth of drill hole   |
| $h_{min}$            | thickness of concrete member  |
| $h_{nom}$            | minimum overall anchor embedment depth  |
| $h_{ef}$             | effective anchorage depth   |
| $d_f$                | diameter of clearance hole in the fixture   |
| $T_{inst}$           | required torque moment  |
| <b>SW</b>            | wrench size   |
| $c_{min}$            | minimum allowable edge distance   |
| $s_{min}$            | minimum allowable spacing   |
| $c_{cr}$             | edge distance for ensuring the transmission of the characteristic resistance of a single anchor |
| $s_{cr}$             | spacing for ensuring the transmission of the characteristic resistance of a single anchor       |



**TECHNICAL DATA AND TEST REPORT ON LZ 01 ANCHORS ON NON-CRACKED CONCRETE C20/25**

| Item Code    | Anchor Size<br>$d_{nom} \times l_t$ (mm) | Screw Size<br>$M \times l_s$ (mm) | $t_{fix}$<br>(mm) | $d_o$<br>(mm) | $h_1$<br>(mm) | $h_{min}$<br>(mm) | $h_{nom}$<br>(mm) | $h_{ef}$<br>(mm) | $d_f$<br>(mm) | $T_{inst}$<br>(Nm) | <b>SW</b><br>(mm) | $c_{min}$<br>(mm) | $s_{min}$<br>(mm) | $c_{cr}$<br>(mm) | $s_{cr}$<br>(mm) | CHARACTERISTIC LOADS<br>(kN) |              |
|--------------|--|-----------------------------------|-------------------|---------------|---------------|-------------------|-------------------|------------------|---------------|--------------------|-------------------|-------------------|-------------------|------------------|------------------|------------------------------|--------------|
|              |  |                                   |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  | PULL OUT                     | SHEAR        |
| <b>Ø 8</b>   |  |                                   |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 08 045 | 8 x 45                                   | M6 x 45                           | 5                 | 8             | 55            | 100               | 40                | 35               | 9             | 15                 | 10                | 52,5              | 70                | 105              | 140              | <b>2,80</b>                  | <b>4,11</b>  |
| LZ 01 08 060 | 8 x 60                                   | M6 x 60                           | 5                 | 8             | 70            | 100               | 55                | 45               | 9             | 20                 | 10                | 67,5              | 90                | 135              | 180              | <b>3,00</b>                  | <b>8,01</b>  |
| LZ 01 08 070 | 8 x 70                                   | M6 x 70                           | 15                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 08 080 | 8 x 80                                   | M6 x 80                           | 25                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 08 100 | 8 x 100                                  | M6 x 100                          | 45                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 08 120 | 8 x 120                                  | M6 x 120                          | 65                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| <b>Ø 10</b>  |  |                                   |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 10 065 | 10 x 65                                  | M8 x 60                           | 15                | 10            | 70            | 100               | 50                | 45               | 12            | 25                 | 13                | 67,5              | 90                | 135              | 180              | <b>8,07</b>                  | <b>11,52</b> |
| LZ 01 10 080 | 10 x 80                                  | M8 x 65                           | 10                | 10            | 90            | 120               | 70                | 60               | 12            | 30                 | 13                | 90                | 120               | 180              | 240              | <b>11,40</b>                 | <b>13,87</b> |
| LZ 01 10 100 | 10 x 100                                 | M8 x 80                           | 30                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 10 120 | 10 x 120                                 | M8 x 100                          | 50                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 10 140 | 10 x 140                                 | M8 x 120                          | 70                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| <b>Ø 12</b>  |  |                                   |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 12 065 | 12 x 65                                  | M10 x 65                          | 15                | 12            | 70            | 100               | 50                | 45               | 14            | 45                 | 17                | 67,5              | 90                | 135              | 180              | <b>8,40</b>                  | <b>17,52</b> |
| LZ 01 12 075 | 12 x 75                                  | M10 x 75                          | 15                | 12            | 80            | 110               | 60                | 55               | 14            | 45                 | 17                | 82,5              | 110               | 165              | 220              | <b>9,15</b>                  | <b>19,71</b> |
| LZ 01 12 100 | 12 x 100                                 | M10 x 80                          | 30                | 12            | 90            | 120               | 70                | 60               | 14            | 50                 | 17                | 90                | 120               | 180              | 240              | <b>15,20</b>                 | <b>22,05</b> |
| LZ 01 12 120 | 12 x 120                                 | M10 x 100                         | 50                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 12 150 | 12 x 150                                 | M10 x 120                         | 80                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| <b>Ø 14</b>  |  |                                   |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 14 075 | 14 x 75                                  | M10 x 75                          | 15                | 14            | 90            | 110               | 60                | 55               | 16            | 45                 | 17                | 82,5              | 110               | 165              | 220              | <b>9,45</b>                  | <b>19,71</b> |
| LZ 01 14 085 | 14 x 85                                  | M10 x 85                          | 5                 | 14            | 110           | 140               | 80                | 70               | 16            | 60                 | 17                | 105               | 140               | 210              | 280              | <b>23,76</b>                 | <b>22,05</b> |
| LZ 01 14 100 | 14 x 100                                 | M10 x 100                         | 20                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 14 120 | 14 x 120                                 | M10 x 120                         | 40                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 14 150 | 14 x 150                                 | M10 x 150                         | 70                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| <b>Ø 16</b>  |  |                                   |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 16 075 | 16 x 75                                  | M12 x 75                          | 15                | 16            | 90            | 110               | 60                | 55               | 18            | 110                | 19                | 82,5              | 110               | 165              | 220              | <b>11,96</b>                 | <b>24,57</b> |
| LZ 01 16 110 | 16 x 110                                 | M12 x 110                         | 10                | 16            | 130           | 180               | 100               | 90               | 18            | 100                | 19                | 135               | 180               | 270              | 360              | <b>28,52</b>                 | <b>32,01</b> |
| LZ 01 16 130 | 16 x 130                                 | M12 x 130                         | 30                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 16 150 | 16 x 150                                 | M12 x 150                         | 50                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| <b>Ø 20</b>  |  |                                   |                   |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |
| LZ 01 20 120 | 20 x 120                                 | M16 x 120                         | 10                | 20            | 150           | 190               | 110               | 95               | 22            | 150                | 24                | 143               | 190               | 285              | 380              | <b>33,28</b>                 | <b>52,50</b> |
| LZ 01 20 160 | 20 x 160                                 | M16 x 160                         | 50                |               |               |                   |                   |                  |               |                    |                   |                   |                   |                  |                  |                              |              |

For all specification not included in the table, please contact Tecfi Lab

Pull-out and shear showed in the table are CHARACTERISTIC LOADS from tests run on non-cracked concrete C20/25 without edge and spacing effect (Pull-out and shear loads are in kN: 1kN = 100Kg).