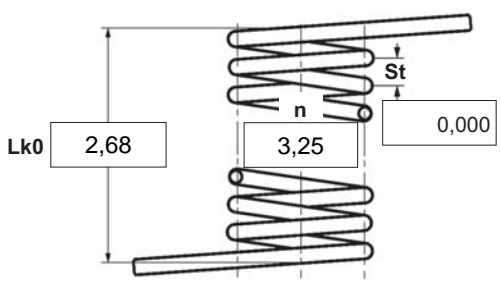


- α degree Unstressed leg position
- α1 degree Prestressed rotational angle
- α2 degree Loaded rotational angle
- αh degree Excursion
- αn degree Maximum rotational angle
- d mm Wire diameter
- Ddmin mm Min. possible mandrel diameter
- Ddmax mm Max. possible mandrel diameter
- De mm Outer coil diameter
- Di mm Inner coil diameter
- F1 N Prestressed spring force
- F2 N Loaded spring force
- Lk0 mm Length of spring body when relaxed
- LS mm Length of leg
- M1 Nmm Prestressed torque
- M2 Nmm Loaded torque
- Mn Nmm Maximum torque
- n pc. Active coils
- RH mm Distance power flow point from centre
- St mm Distance between coils (pitch)
- Weight g Weight of one spring in grammes



Spring test acc. to DIN ISO 2859/1 test level II

| <b>1 Coiling direction</b><br><input type="checkbox"/> left <input checked="" type="checkbox"/> right  | <b>5 Excursion αh</b> <input type="text"/> degr.   | <b>12 Tolerances to DIN 2194</b> <table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Grade</th> <th>Di</th> <th>Lk0</th> <th>LSH,LSR</th> <th>α,α1,α2</th> <th>M1,M2</th> <th>Wire diameter d to DIN 2076</th> </tr> </thead> <tbody> <tr> <td>1</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td></td> </tr> <tr> <td>2</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td></td> </tr> <tr> <td>3</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table> | Grade  | Di                                  | Lk0                                 | LSH,LSR   | α,α1,α2 | M1,M2                    | Wire diameter d to DIN 2076 | 1        | <input type="checkbox"/> | <input type="checkbox"/>                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |          | 2                        | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |     | 3        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--|---|--|-------------------------------------|-------------------------------------|---|---------|--------------------------|-----------------------------|----------|--------------------------|---|--------------------------|--------------------------|--------------------------|----------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-----|----------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| Grade  | Di   | Lk0   | LSH,LSR  | α,α1,α2                             | M1,M2                               | Wire diameter d to DIN 2076                           |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 1  | <input type="checkbox"/>                           | <input type="checkbox"/>  | <input type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/>            |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 2  | <input checked="" type="checkbox"/>                | <input checked="" type="checkbox"/>   | <input checked="" type="checkbox"/>            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 3  | <input type="checkbox"/>                           | <input type="checkbox"/>  | <input type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/>                   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| <b>2 Form of legs</b><br>tangential, straight, no bends *<br><br>*We can also supply torsion springs with any form of leg for an extra charge. | <b>6 Stress cyc. end. N</b> <input type="text"/>   | <b>7 Stress cycle frequ. n</b> <input type="text"/> / <input type="text"/>  |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| <b>3 Fixing</b><br>Recumbent leg <input type="checkbox"/> Lever leg <input type="checkbox"/>   | <b>8 Application temp.</b> <input type="text"/> °C | <b>13 Production compensation through</b> <table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <tr> <td>A spring torque and the associated swing angle</td> <td>α</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>A spring torque and the associated swing angle and α0</td> <td>n, d</td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td>n, Di</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Two spring resistances and the associated swing angle</td> <td>α, n, d</td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td>α, n, Di</td> <td><input type="checkbox"/></td> </tr> </table>  | A spring torque and the associated swing angle | α                                   | <input checked="" type="checkbox"/> | A spring torque and the associated swing angle and α0 | n, d    | <input type="checkbox"/> |                             | n, Di    | <input type="checkbox"/> | Two spring resistances and the associated swing angle | α, n, d                  | <input type="checkbox"/> |                          | α, n, Di | <input type="checkbox"/> |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| A spring torque and the associated swing angle   | α  | <input checked="" type="checkbox"/>   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| A spring torque and the associated swing angle and α0  | n, d   | <input type="checkbox"/>  |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
|  | n, Di  | <input type="checkbox"/>  |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| Two spring resistances and the associated swing angle  | α, n, d  | <input type="checkbox"/>  |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
|  | α, n, Di   | <input type="checkbox"/>  |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| <b>4 Load</b><br><input type="checkbox"/> in winding direction<br><input type="checkbox"/> against winding direction                           | <b>9 Material</b><br>EN 10270-3-1.4310             | <b>10 Wire or rod surface</b><br><input checked="" type="checkbox"/> drawn <input type="checkbox"/> rolled <input type="checkbox"/> metal-cut   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| <b>11 Surface treatment</b><br><input type="text"/>  |  | <b>Prices</b> <table style="width: 100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th>Quantità progressive</th> <th>Prezzo singolo [EUR]</th> </tr> </thead> <tbody> <tr><td>1</td><td>5,1100 €</td></tr> <tr><td>2</td><td>3,6000 €</td></tr> <tr><td>3</td><td>3,4300 €</td></tr> <tr><td>7</td><td>2,2200 €</td></tr> <tr><td>17</td><td>1,1200 €</td></tr> <tr><td>37</td><td>0,7400 €</td></tr> <tr><td>75</td><td>0,5500 €</td></tr> <tr><td>125</td><td>0,4570 €</td></tr> <tr><td>175</td><td>0,4069 €</td></tr> <tr><td>250</td><td>0,3567 €</td></tr> <tr><td>350</td><td>0,3095 €</td></tr> <tr><td>450</td><td>0,2652 €</td></tr> </tbody> </table>  | Quantità progressive                           | Prezzo singolo [EUR]                | 1                                   | 5,1100 €  | 2       | 3,6000 €                 | 3                           | 3,4300 € | 7                        | 2,2200 €  | 17                       | 1,1200 €                 | 37                       | 0,7400 € | 75                       | 0,5500 €                            | 125                                 | 0,4570 €                            | 175                                 | 0,4069 €                            | 250 | 0,3567 € | 350                      | 0,3095 €                 | 450                      | 0,2652 €                 |                          |                                     |
| Quantità progressive   | Prezzo singolo [EUR]                               |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 1  | 5,1100 €   |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 2  | 3,6000 €   |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 3  | 3,4300 €   |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 7  | 2,2200 €   |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 17   | 1,1200 €   |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 37   | 0,7400 €   |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 75   | 0,5500 €   |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 125  | 0,4570 €   |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 175  | 0,4069 €   |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 250  | 0,3567 €   |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 350  | 0,3095 €   |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |
| 450  | 0,2652 €   |   |  |                                     |                                     |   |         |                          |                             |          |                          |   |                          |                          |                          |          |                          |                                     |                                     |                                     |                                     |                                     |     |          |                          |                          |                          |                          |                          |                                     |

**Remarks**  
 Paese d'origine: DE | Numero della tariffa doganale: 73202089