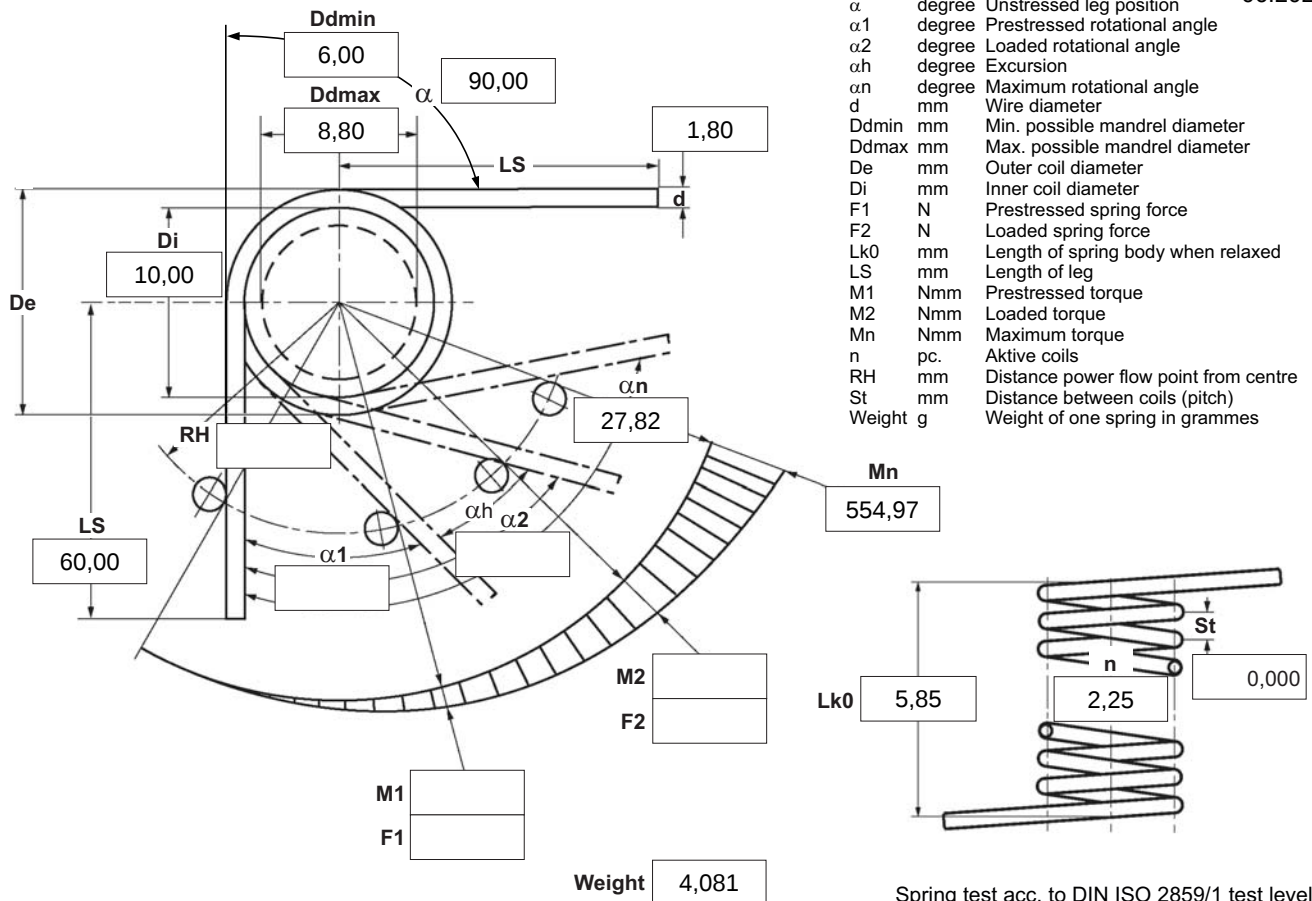


06.2025



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

| <b>1 Coiling direction</b><br><input checked="" type="checkbox"/> left <input type="checkbox"/> right                                                                                                                                                                                                            | <b>5 Excursion <math>a_h</math></b> <input style="width: 100px;" type="text"/> degr. | <b>12 Tolerances to DIN 2194</b><br><table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <th>Grade</th> <th>Di</th> <th>Lk0</th> <th>LSH,LSR</th> <th><math>\alpha, \alpha 1, \alpha 2</math></th> <th>M1,M2</th> <th>Wire diameter d to DIN 2076</th> </tr> <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 rowspan="3"><input checked="" type="checkbox"/></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> </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> </tr> </table> | Grade                                          | Di                                    | Lk0                                                   | LSH,LSR                             | $\alpha, \alpha 1, \alpha 2$        | M1,M2                                                 | Wire diameter d to DIN 2076      | 1                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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"/> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|---------------------------------------|-------------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------------------------|----------------------------------|-----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|---|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Grade                                                                                                                                                                                                                                                                                                            | Di                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Lk0                                            | LSH,LSR                               | $\alpha, \alpha 1, \alpha 2$                          | M1,M2                               | Wire diameter d to DIN 2076         |                                                       |                                  |                                   |                          |                          |                          |                          |                          |                                     |   |                                     |                                     |                                     |                                     |                                     |   |                          |                          |                          |                          |                          |
| 1                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/>                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/>                       | <input type="checkbox"/>              | <input type="checkbox"/>                              | <input type="checkbox"/>            | <input checked="" 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"/>                              |                                     |                                     |                                                       |                                  |                                   |                          |                          |                          |                          |                          |                                     |   |                                     |                                     |                                     |                                     |                                     |   |                          |                          |                          |                          |                          |
| <b>2 Form of legs</b><br><div style="border: 1px solid black; padding: 5px; min-height: 40px; margin-bottom: 5px;">           tangential, straight, no bends *         </div> <p style="font-size: small; margin-top: 5px;">*We can also supply torsion springs with any form of leg for an extra charge.</p>    | <b>6 Stress cyc. end. N</b> <input style="width: 100px;" type="text"/>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                       |                                                       |                                     |                                     |                                                       |                                  |                                   |                          |                          |                          |                          |                          |                                     |   |                                     |                                     |                                     |                                     |                                     |   |                          |                          |                          |                          |                          |
| <b>3 Fixing</b><br>Recumbent leg      Lever leg<br><div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> </div>                                                                                    | <b>7 Stress cycle frequ. n</b> <input style="width: 100px;" type="text"/> /          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                       |                                                       |                                     |                                     |                                                       |                                  |                                   |                          |                          |                          |                          |                          |                                     |   |                                     |                                     |                                     |                                     |                                     |   |                          |                          |                          |                          |                          |
| <b>4 Load</b><br><input type="checkbox"/> in winding direction<br><input type="checkbox"/> against winding direction                                                                                                                                                                                             | <b>8 Application temp.</b> <input style="width: 100px;" type="text"/> °C             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                       |                                                       |                                     |                                     |                                                       |                                  |                                   |                          |                          |                          |                          |                          |                                     |   |                                     |                                     |                                     |                                     |                                     |   |                          |                          |                          |                          |                          |
| <b>9 Material</b><br><input style="width: 100px;" type="text"/> 1.4310                                                                                                                                                                                                                                           |                                                                                      | <b>13 Production compensation through</b><br><table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">A spring torque and the associated swing angle</td> <td style="width: 20%;">α <input checked="" type="checkbox"/></td> </tr> <tr> <td rowspan="2">A spring torque and the associated swing angle and α0</td> <td>n, d <input type="checkbox"/></td> </tr> <tr> <td>n, Di <input type="checkbox"/></td> </tr> <tr> <td rowspan="2">Two spring resistances and the associated swing angle</td> <td>α, n, d <input type="checkbox"/></td> </tr> <tr> <td>α, n, Di <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>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 style="width: 100px;" type="text"/>                                                                                                                                                                                                                                        |                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                       |                                                       |                                     |                                     |                                                       |                                  |                                   |                          |                          |                          |                          |                          |                                     |   |                                     |                                     |                                     |                                     |                                     |   |                          |                          |                          |                          |                          |
| <b>Prices</b><br><table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 40%;">Quantity scale</th> <th style="width: 60%;">Single price [EUR]</th> </tr> <tr> <td>1</td> <td>5,2700 €</td> </tr> <tr> <td>2</td> <td>3,7200 €</td> </tr> <tr> <td>3</td> <td>3,5400 €</td> </tr> </table> |                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Quantity scale                                 | Single price [EUR]                    | 1                                                     | 5,2700 €                            | 2                                   | 3,7200 €                                              | 3                                | 3,5400 €                          |                          |                          |                          |                          |                          |                                     |   |                                     |                                     |                                     |                                     |                                     |   |                          |                          |                          |                          |                          |
| Quantity scale                                                                                                                                                                                                                                                                                                   | Single price [EUR]                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                       |                                                       |                                     |                                     |                                                       |                                  |                                   |                          |                          |                          |                          |                          |                                     |   |                                     |                                     |                                     |                                     |                                     |   |                          |                          |                          |                          |                          |
| 1                                                                                                                                                                                                                                                                                                                | 5,2700 €                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                       |                                                       |                                     |                                     |                                                       |                                  |                                   |                          |                          |                          |                          |                          |                                     |   |                                     |                                     |                                     |                                     |                                     |   |                          |                          |                          |                          |                          |
| 2                                                                                                                                                                                                                                                                                                                | 3,7200 €                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                       |                                                       |                                     |                                     |                                                       |                                  |                                   |                          |                          |                          |                          |                          |                                     |   |                                     |                                     |                                     |                                     |                                     |   |                          |                          |                          |                          |                          |
| 3                                                                                                                                                                                                                                                                                                                | 3,5400 €                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                |                                       |                                                       |                                     |                                     |                                                       |                                  |                                   |                          |                          |                          |                          |                          |                                     |   |                                     |                                     |                                     |                                     |                                     |   |                          |                          |                          |                          |                          |

### Remarks

Country of origin: DE | Customs tariff number: 73202089

**Gutekunst + Co.KG Spring Factories · Carl-Zeiss-Straße 15 · D-72555 Metzingen**

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