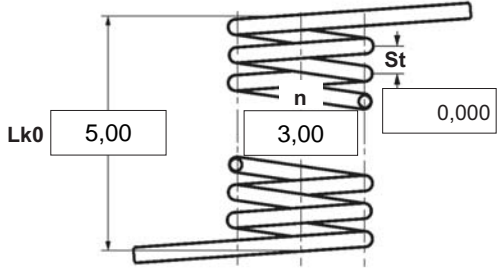



| | | |
|------------|--------|---------------------------------------|
| α | degree | Unstressed leg position |
| $\alpha 1$ | degree | Prestressed rotational angle |
| $\alpha 2$ | degree | Loaded rotational angle |
| αh | degree | Excursion |
| αn | degree | Maximum rotational angle |
| d | mm | Wire 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

| 1 Coiling direction <input checked="" type="checkbox"/> left <input type="checkbox"/> right | | 5 Excursion αh <input type="text"/> degr. | | 12 Tolerances to DIN 2194 <table border="1"> <thead> <tr> <th>Grade</th> <th>Di</th> <th>Lk0</th> <th>LSH,LSR</th> <th>$\alpha, \alpha 1, \alpha 2$</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><input 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> <td><input 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> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </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 type="checkbox"/> | 2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input 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 | $\alpha, \alpha 1, \alpha 2$ | 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 type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 Form of legs tangential, straight, no bends *  <p>*We can also supply torsion springs with any form of leg for an extra charge.</p> | | 6 Stress cyc. end. N <input type="text"/> | | 13 Production compensation through <table border="1"> <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 $\alpha 0$</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 $\alpha 0$ | 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 $\alpha 0$ | 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"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 Fixing Recumbent leg <input type="checkbox"/> Lever leg <input type="checkbox"/> | | 7 Stress cycle frequ. n <input type="text"/> / | | 8 Application temp. <input type="text"/> °C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 Load <input type="checkbox"/> in winding direction <input type="checkbox"/> against winding direction | | 9 Material EN 10270-3-1.4310 | | 10 Wire or rod surface <input checked="" type="checkbox"/> drawn <input type="checkbox"/> rolled <input type="checkbox"/> metal-cut | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Remarks País de origen: DE Número de arancel aduanero: 73202089 | | 11 Surface treatment <input type="text"/> | | Prices <table border="1"> <thead> <tr> <th>Cantidad progresiva</th> <th>Precio unidad [EUR]</th> </tr> </thead> <tbody> <tr><td>1</td><td>5,1600 €</td></tr> <tr><td>2</td><td>3,6400 €</td></tr> <tr><td>3</td><td>3,4700 €</td></tr> <tr><td>7</td><td>2,4200 €</td></tr> <tr><td>17</td><td>1,1500 €</td></tr> <tr><td>37</td><td>0,8500 €</td></tr> <tr><td>75</td><td>0,6800 €</td></tr> <tr><td>125</td><td>0,4859 €</td></tr> <tr><td>175</td><td>0,4196 €</td></tr> <tr><td>250</td><td>0,3695 €</td></tr> <tr><td>350</td><td>0,3536 €</td></tr> <tr><td>450</td><td>0,3284 €</td></tr> </tbody> </table> | | Cantidad progresiva | Precio unidad [EUR] | 1 | 5,1600 € | 2 | 3,6400 € | 3 | 3,4700 € | 7 | 2,4200 € | 17 | 1,1500 € | 37 | 0,8500 € | 75 | 0,6800 € | 125 | 0,4859 € | 175 | 0,4196 € | 250 | 0,3695 € | 350 | 0,3536 € | 450 | 0,3284 € | | |
| Cantidad progresiva | Precio unidad [EUR] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 5,1600 € | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 3,6400 € | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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