Data sheet Extension spring : RZ-003AX

<table>
<thead>
<tr>
<th>d mm</th>
<th>Wire diameter</th>
<th>L1 mm</th>
<th>Prestressed spring length</th>
</tr>
</thead>
<tbody>
<tr>
<td>D mm</td>
<td>Mean coil diameter</td>
<td>L2 mm</td>
<td>Loaded spring length</td>
</tr>
<tr>
<td>De mm</td>
<td>Outer coil diameter</td>
<td>Ln mm</td>
<td>Maximum spring length</td>
</tr>
<tr>
<td>Dh mm</td>
<td>Minimum diameter of bush</td>
<td>m mm</td>
<td>Loop opening width</td>
</tr>
<tr>
<td>F0 N</td>
<td>Initial tension</td>
<td>n pc.</td>
<td>Number of active coils</td>
</tr>
<tr>
<td>F1 N</td>
<td>Prestressed spring force</td>
<td>nt pc.</td>
<td>Total number of coils</td>
</tr>
<tr>
<td>F2 N</td>
<td>Loaded spring force</td>
<td>s1 mm</td>
<td>Prestressed spring deflection</td>
</tr>
<tr>
<td>Fn N</td>
<td>Maximum spring force</td>
<td>s2 mm</td>
<td>Loaded spring deflection</td>
</tr>
<tr>
<td>Lh mm</td>
<td>Loop height</td>
<td>sn mm</td>
<td>Maximum spring deflection</td>
</tr>
<tr>
<td>sh mm</td>
<td>Excursion</td>
<td>R N/mm</td>
<td>Spring rate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lk mm</th>
<th>Length of unstressed spring body</th>
</tr>
</thead>
<tbody>
<tr>
<td>L0 mm</td>
<td>Unstressed spring length</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L0</th>
<th>24.50</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>0.70</td>
</tr>
<tr>
<td>L2</td>
<td></td>
</tr>
<tr>
<td>Ln</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D</th>
<th>1.87</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td>0.20</td>
</tr>
<tr>
<td>m</td>
<td>0.15</td>
</tr>
<tr>
<td>mh</td>
<td></td>
</tr>
<tr>
<td>Lh</td>
<td>20.75</td>
</tr>
</tbody>
</table>

| 2,8800 € | 1,9900 € | 1,0300 € | 0,7000 € | 0,5200 € | 0,4854 € | 0,4757 € | 0,4637 € | 0,4431 € | 0,4257 € |

<table>
<thead>
<tr>
<th>Grade</th>
<th>De,Di,D</th>
<th>L0</th>
<th>F0-Fn</th>
<th>Loops</th>
<th>Wire diameter d to DIN 2076</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>0,06</th>
<th>0,09</th>
</tr>
</thead>
</table>

**Remarks**

**1 Coiling direction**
- Left 🔺
- Right 🔺

**2 Loop shape and loop position**
- Loop shape: 1/1 German loop
- Loops offset to one another by 270,0 \( \pm \) 76,0 degrees (in the dir. of the right helix)

**3 Excursion sh mm**

**4 Stress cyc. end. N**

**5 Stress cycle frequ. n /**

**6 Application temp. C**

**7 Material**
- EN 10270-3-1.4310

**8 Wire or rod surface**
- X drawn
- Rolled
- Metal-cut

**9 Surface treatment**

**10 Tolerances to DIN 2097**

<table>
<thead>
<tr>
<th>Grade</th>
<th>De,Di,D</th>
<th>L0</th>
<th>F0-Fn</th>
<th>Loops</th>
<th>Wire diameter d to DIN 2076</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**11 Production compensation through**
- A spring resistance, associated length of tensed spring and L0 (F0, D)
- A spring resistance, associated length of tensed spring and F0 (L0, n, d)
- Two spring resistances and associated length of tensed spring (F0, D)

**Prices**

<table>
<thead>
<tr>
<th>Quantity scale</th>
<th>Single price [EUR]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.8800 €</td>
</tr>
<tr>
<td>7</td>
<td>1.9900 €</td>
</tr>
<tr>
<td>17</td>
<td>1.0300 €</td>
</tr>
<tr>
<td>37</td>
<td>0.7900 €</td>
</tr>
<tr>
<td>75</td>
<td>0.5200 €</td>
</tr>
<tr>
<td>125</td>
<td>0.4854 €</td>
</tr>
<tr>
<td>175</td>
<td>0.4757 €</td>
</tr>
<tr>
<td>250</td>
<td>0.4637 €</td>
</tr>
<tr>
<td>350</td>
<td>0.4431 €</td>
</tr>
<tr>
<td>450</td>
<td>0.4257 €</td>
</tr>
</tbody>
</table>

*Loops are stocked without openings \((m = 0.00)\). However it is possible to have an opening cut into the loop at an extra cost, without causing any delay.*