# Data sheet Extension spring : Z-130E-11X

GUTEKUNST FEDERN

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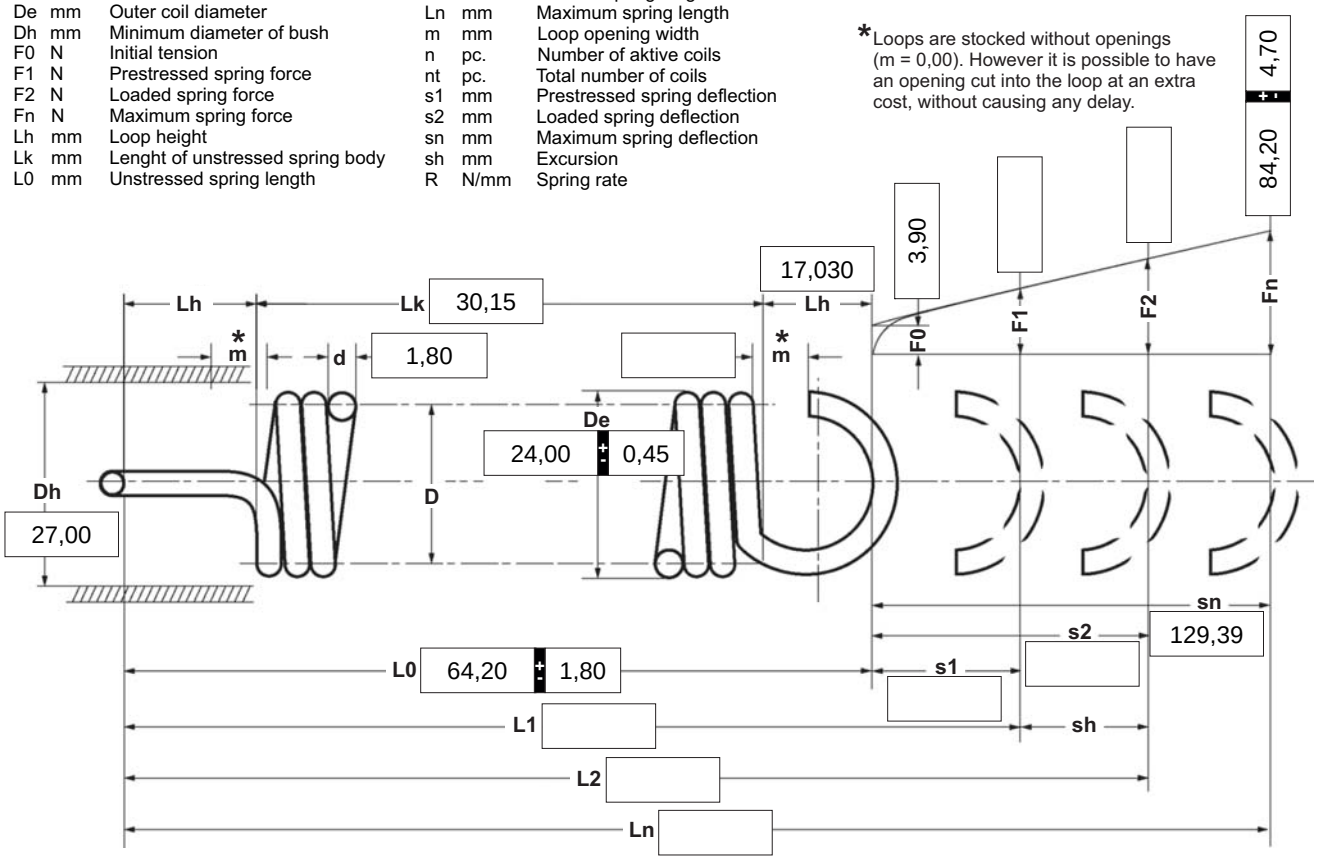
| | | |
|---|---|---|
| d | mm | Wire diameter |
| D | mm | Mean coil diameter |
| De | mm | Outer coil diameter |
| Dh | mm | Minimum diameter of bush |
| F0 | N | Initial tension |
| F1 | N | Prestressed spring force |
| F2 | N | Loaded spring force |
| Fn | N | Maximum spring force |
| Lh | mm | Loop height |
| Lk | mm | Lenght of unstressed spring body |
| L0 | mm | Unstressed spring length |
| L1 | mm | Prestressed spring length |
| L2 | mm | Loaded spring length |
| Ln | mm | Maximum spring length |
| m | mm | Loop opening width |
| n | pc. | Number of aktive coils |
| nt | pc. | Total number of coils |
| s1 | mm | Prestressed spring deflection |
| s2 | mm | Loaded spring deflection |
| sn | mm | Maximum spring deflection |
| sh | mm | Excursion |
| R | N/mm | Spring rate |
| Weight | g | Weight of one spring |

*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.




n | nt | R 0,621 | Weight 24,558

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

**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 ± 30,0 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 10270-1

**8 Wire or rod surface**

☒ drawn ☐ rolled ☐ metal-cut

**9 Surface treatment**

**10 Tolerances to DIN 2097**

| Grade | De,Di,D | L0 | F0-Fn | Loops | Wire diameter d to DIN 2076 |
|---|---|---|---|---|---|
| 1 | ☐ | ☐ | ☐ | ☐ | |
| **2** | ☒ | ☒ | ☒ | ☒ | |
| 3 | ☐ | ☐ | ☐ | ☐ | ☒ |

**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 | ☐ |
| | L0, D | ☐ |
| Two spring resistances and associated length of tensed spring | L0, n, d | ☐ |
| | F0,D | ☐ |

**Remarks**

Zem pvodu: DE | íslo celního sazebníku: 73202085

**Prices**

| Stupnice množství | Jedn. cena [EUR] |
|---|---|
| 1 | 6,0900 € |
| 2 | 3,8400 € |
| 3 | 2,2300 € |
| 7 | 1,8600 € |
| 17 | 0,9400 € |
| 37 | 0,5800 € |
| 75 | 0,4000 € |
| 125 | 0,3775 € |
| 175 | 0,3713 € |
| 250 | 0,3676 € |
| 350 | 0,3582 € |
| 450 | 0,3516 € |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