

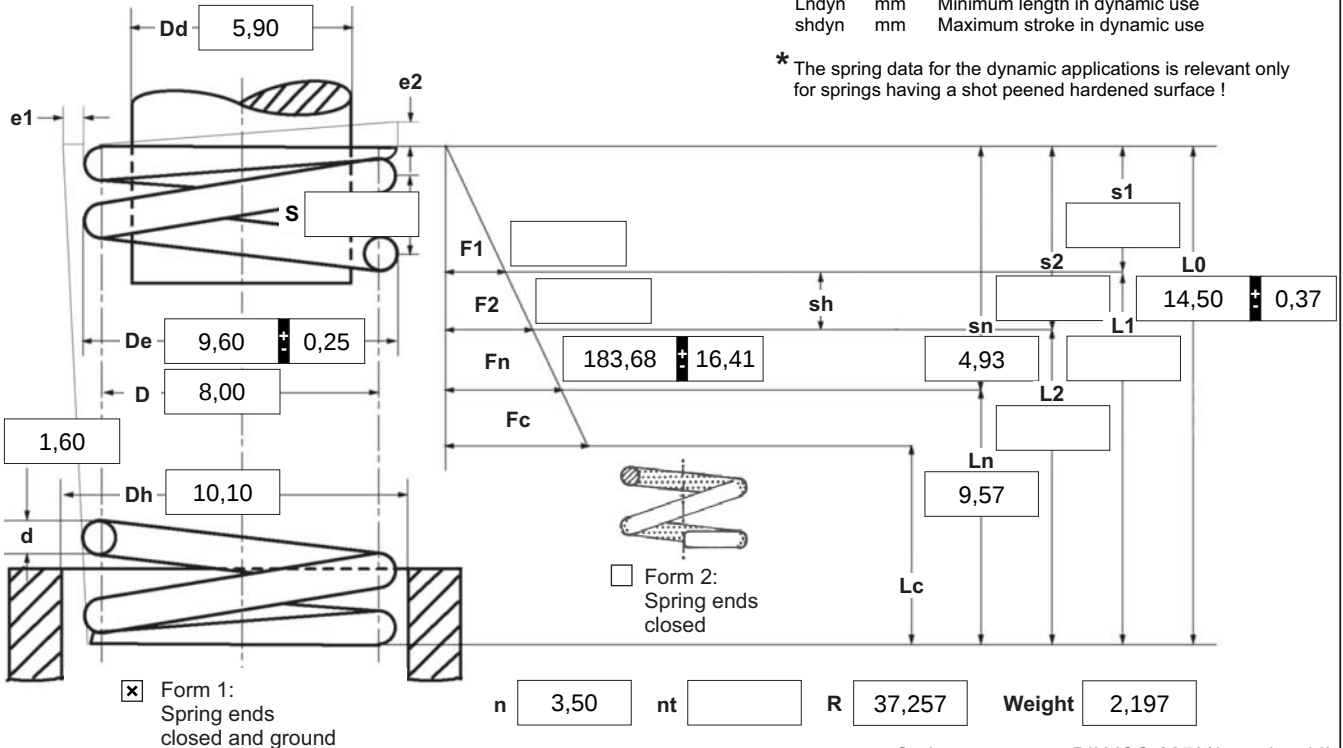
d mm Wire diameter  
 D mm Mean coil diameter  
 Dd mm Diameter of mandrel  
 De mm Outer coil diameter  
 Dh mm Diameter of bush  
 e1 mm Perm.dev. perpendicular line  
 e2 mm Perm.dev. parallel line  
 F1 N Prestressed spring force  
 F2 N Loaded spring force

F<sub>n</sub> N Maximum force in static use  
 F<sub>c</sub> N Theoretic maximum force at L<sub>c</sub>  
 L0 mm Length of unstressed spring  
 L1 mm Prestressed spring length  
 L2 mm Loaded spring length  
 L<sub>k</sub> mm Buckling length  
 L<sub>n</sub> mm Minimum length in static use  
 L<sub>c</sub> mm Block length  
 n pc. Active coils

nt pc. Total coils  
 R N/mm Spring rate  
 S mm Pitch (distance between coils)  
 s1 mm Prestressed spring deflection  
 s2 mm Loaded spring deflection  
 sh mm Maximum stroke in static use  
 sn mm Maximum spring deflection in static use  
 Weight g Weight of one spring in grammes

F<sub>ndyn</sub> N Maximum force in dynamic force  
 F<sub>ndtol</sub> N (+/-) tolerance of maximum dynamic force  
 L<sub>ndyn</sub> mm Minimum length in dynamic use  
 sh<sub>dyn</sub> mm Maximum stroke in dynamic use

\* The spring data for the dynamic applications is relevant only for springs having a shot peened hardened surface !

**1 Coiling direction**

☐ left ☒ right

**2 Dynamic load \***

F<sub>ndyn</sub> 156,48  
 F<sub>ndtol</sub> 16,19  
 L<sub>ndyn</sub> 10,30  
 sh<sub>dyn</sub> 1,54

**3 Excursion sh**

mm

**4 Stress cyc. end. N****5 Stress cycle frequ. n**

/

**6 Application temp.**

°C

**Remarks**

Kraj pochodzenia: DE | Numer taryfy celnej: 73202081

**7 Guidance and seat to DIN EN 13906-1**

☐ mandrel ☐ bush

Buckling length **L<sub>k</sub>** at

v=0,5 / Bild 5 0,00 mm

**8 Material**

EN 10270-1

**9 Wire or rod surface**

☒ drawn ☐ rolled ☐ metal-cut

**10 Springs deburred**

☐ inside ☐ outside

**11 Surface treatment**

☐ shot peened

**12 Tolerances to DIN EN 15800**

| Grade | De, Di, D                           | L0                                  | F1, F2                              | e1, e2                              | 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"/>            |

**13 Production compensation through**

|                                                                |               |                                     |
|----------------------------------------------------------------|---------------|-------------------------------------|
| A spring resistance and associated length of tensed spring     | L0            | <input type="checkbox"/>            |
| A spring resistance, associated length of tensed spring and L0 | n, d          | <input checked="" type="checkbox"/> |
|                                                                | n, De, Di     | <input type="checkbox"/>            |
| Two spring resistances and associated lengths of tensed spring | L0, n, d      | <input type="checkbox"/>            |
|                                                                | L0, n, De, Di | <input type="checkbox"/>            |

**14 Setting springs**

All springs which show setting tendency because of their size are pre-set within the production process.

**Prices**

| Grupa ilociowa | Cena jednostkowa [EUR] |
|----------------|------------------------|
| 1              |                        |
| 2              | 4,9400 €               |
| 3              | 3,4800 €               |
| 7              | 3,3200 €               |
| 17             | 1,9900 €               |
| 37             | 1,0000 €               |
| 75             | 0,6100 €               |
| 125            | 0,4600 €               |
| 175            | 0,3945 €               |
| 250            | 0,3631 €               |
| 350            | 0,3193 €               |
| 450            | 0,2780 €               |
|                | 0,2212 €               |