

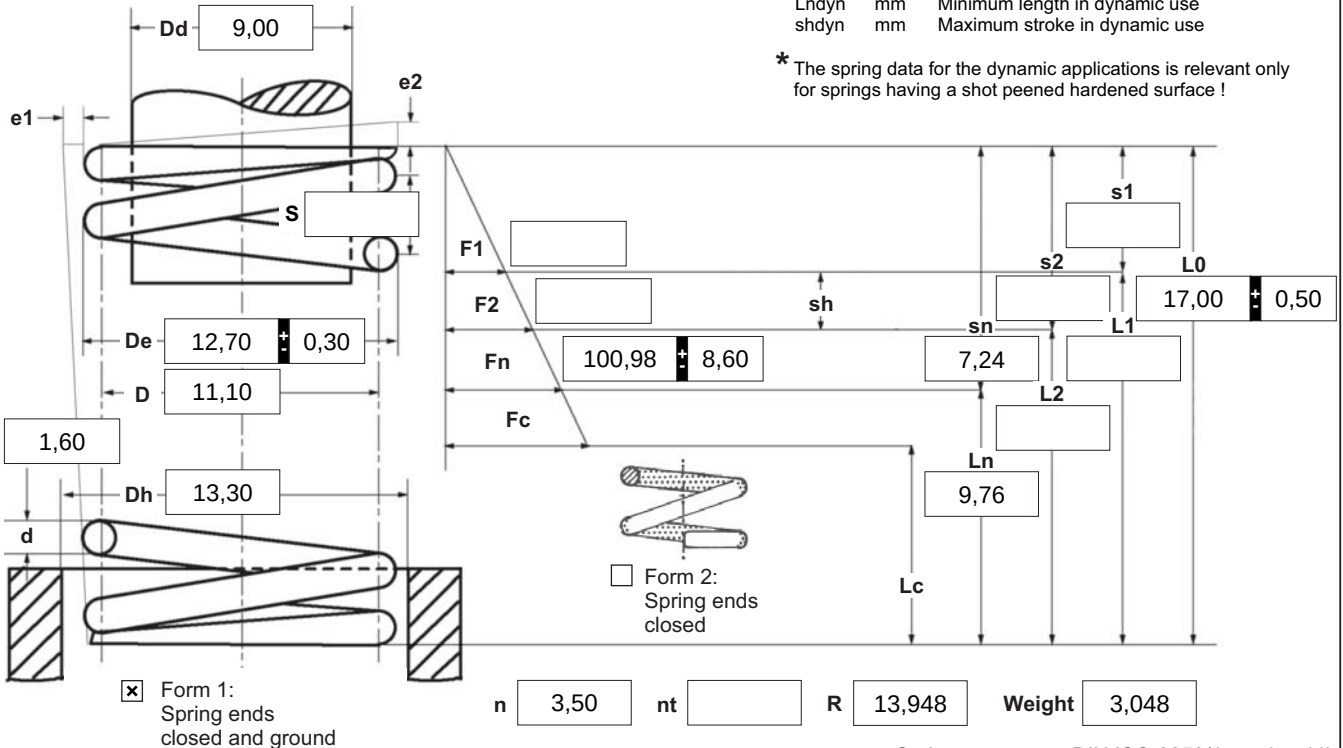
d mm Wire diameter  
D mm Mean coil diameter  
Dd mm Diameter of mandrel  
De mm Outer coil diameter  
Dh mm Diameter of bush  
e1 mm Perm.dev. perpendicular line  
e2 mm Perm.dev. parallel line  
F1 N Prestressed spring force  
F2 N Loaded spring force

Fn N Maximum force in static use  
Fc N Theoretic maximum force at Lc  
L0 mm Length of unstressed spring  
L1 mm Prestressed spring length  
L2 mm Loaded spring length  
Lk mm Buckling length  
Ln mm Minimum length in static use  
Lc 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

Fndyn N Maximum force in dynamic force  
Fndtol N (+/-) tolerance of maximum dynamic force  
Lndyn mm Minimum length in dynamic use  
shdyn mm Maximum stroke in dynamic use

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



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

# 1 Coiling direction

☐ left ☒ right

# 2 Dynamic load \*

Fndyn 93,45  
Fndtol 8,48  
Lndyn 10,30  
shdyn 4,00

# 3 Excursion sh

mm

# 4 Stress cyc. end. N

# 5 Stress cycle frequ. n

/

# 6 Application temp.

°C

# Remarks

País de origen: DE | Número de arancel aduanero: 73202081

# 7 Guidance and seat to DIN EN 13906-1

☐ mandrel ☐ bush

Buckling length  $L_k$  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

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