

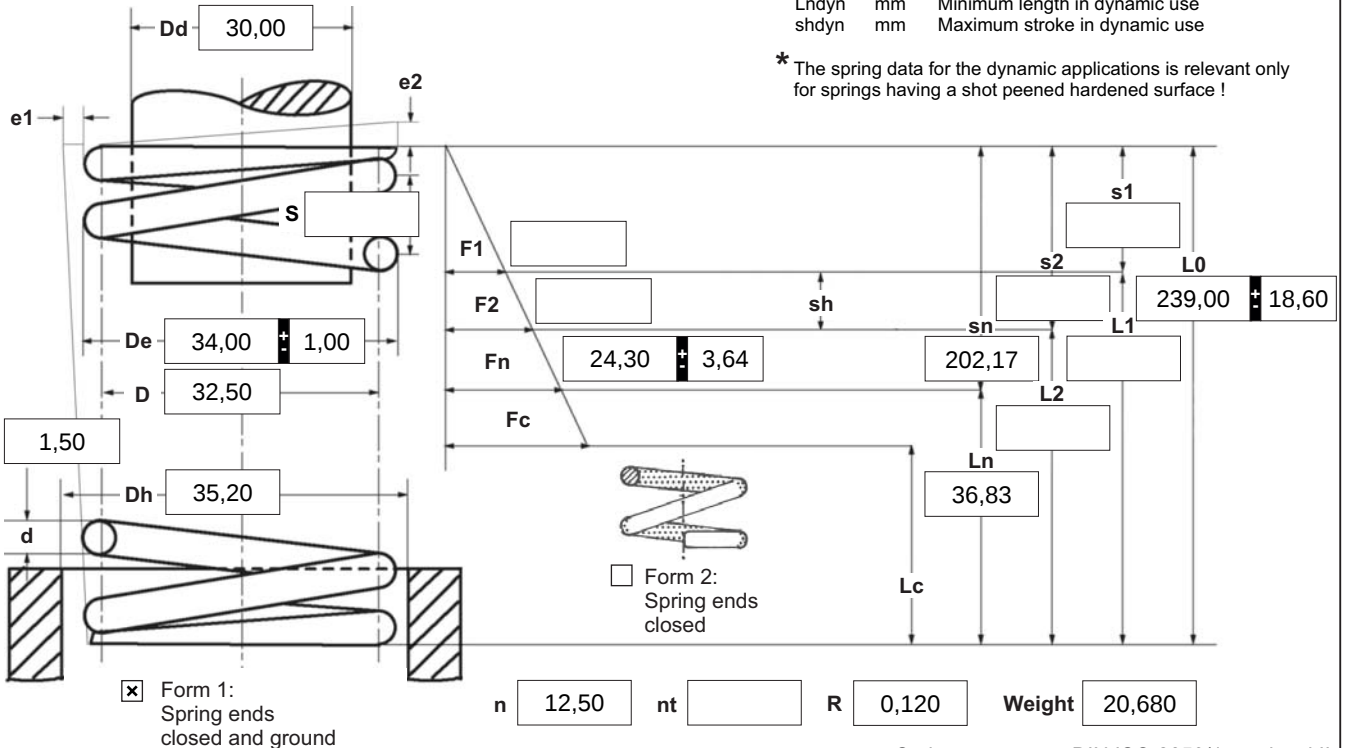
d mm Wire diameter  
D mm Mean coil diameter  
Dd mm Diameter of mandrel  
De mm Outer coil diameter  
Dh mm Diameter of bush  
e1 mm Perm.dev. perpendicular line  
e2 mm Perm.dev. parallel line  
F1 N Prestressed spring force  
F2 N Loaded spring force

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 !



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

# 1 Coiling direction

☐ left ☒ right

# 2 Dynamic load \*

F<sub>ndyn</sub> 23,39  
F<sub>ndtol</sub> 3,50  
L<sub>ndyn</sub> 44,37  
sh<sub>dyn</sub> 172,04

3 Excursion sh mm

4 Stress cyc. end. N

5 Stress cycle frequ. n /

6 Application temp. °C

# Remarks

Paese d'origine: DE | Numero della tariffa doganale: 73202081

# 7 Guidance and seat to DIN EN 13906-1

☐ mandrel ☐ bush

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

v=0,5 / Bild 5 182,12 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 checked="" type="checkbox"/> |

# 13 Prouction 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

| Quantità progressive | Prezzo singolo [EUR] |
|----------------------|----------------------|
| 1                    | 5,1100 €             |
| 2                    | 3,6000 €             |
| 3                    | 3,4300 €             |
| 7                    | 2,2200 €             |
| 17                   | 1,1200 €             |
| 37                   | 0,7400 €             |
| 75                   | 0,5500 €             |
| 125                  | 0,4570 €             |
| 175                  | 0,4069 €             |
| 250                  | 0,3567 €             |
| 350                  | 0,3095 €             |
| 450                  | 0,2652 €             |