

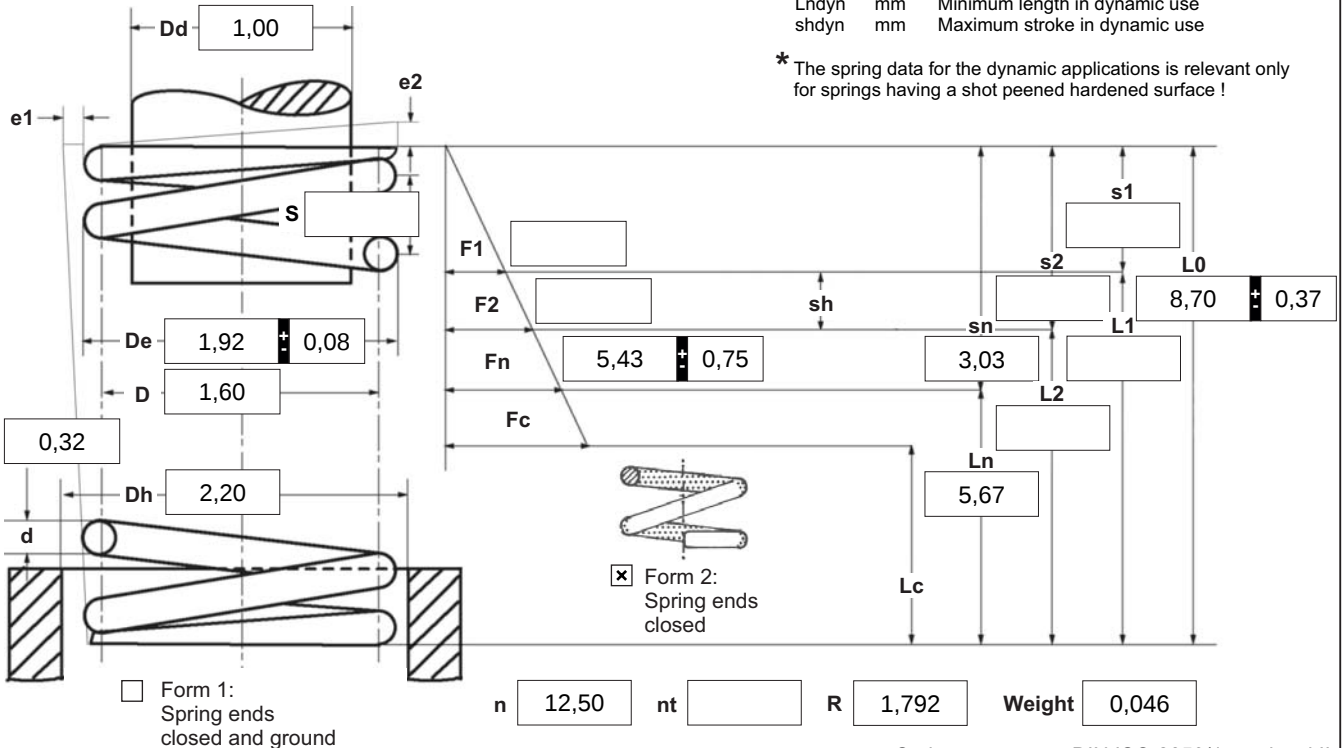
d mm Wire diameter
D mm Mean coil diameter
Dd mm Diameter of mandrel
De mm Outer coil diameter
Dh mm Diameter of bush
e1 mm Perm.dev. perpendicular line
e2 mm Perm.dev. parallel line
F1 N Prestressed spring force
F2 N Loaded spring force

F_n N Maximum force in static use
F_c N Theoretic maximum force at L_c
L0 mm Length of unstressed spring
L1 mm Prestressed spring length
L2 mm Loaded spring length
L_k mm Buckling length
L_n mm Minimum length in static use
L_c 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_{ndyn} N Maximum force in dynamic force
F_{ndtol} N (+/-) tolerance of maximum dynamic force
L_{ndyn} mm Minimum length in dynamic use
sh_{dyn} 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_{ndyn} 4,93

F_{ndtol} 0,75

L_{ndyn} 5,95

sh_{dyn} 1,13

3 Excursion sh

mm

4 Stress cyc. end. N

/

5 Stress cycle frequ. n

°C

6 Application temp.

°C

7 Guidance and seat to DIN EN 13906-1

☐ mandrel ☐ bush

Buckling length **L_k** at

v=0,5 / Bild 5 3,30 mm

8 Material

1.4310

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	☐	☐	☐	☐	☐
2	☒	☒	☒	☒	☒
3	☐	☐	☐	☐	☒

13 Production compensation through

A spring resistance and associated length of tensed spring L0 ☐

A spring resistance, associated length of tensed spring and L0 n, d ☒

Two spring resistances and associated lengths of tensed spring L0, n, d ☐

L0, n, De, Di ☐

14 Setting springs

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

Prices

Quantity scale	Single price [EUR]
1	4,8500 €
2	3,4200 €
3	3,2600 €
7	1,8400 €
17	0,8300 €
37	0,5200 €
75	0,3400 €
125	0,2817 €
175	0,2192 €
250	0,1878 €
350	0,1452 €
450	0,1264 €