Data sheet Compression spring : D-090U-20

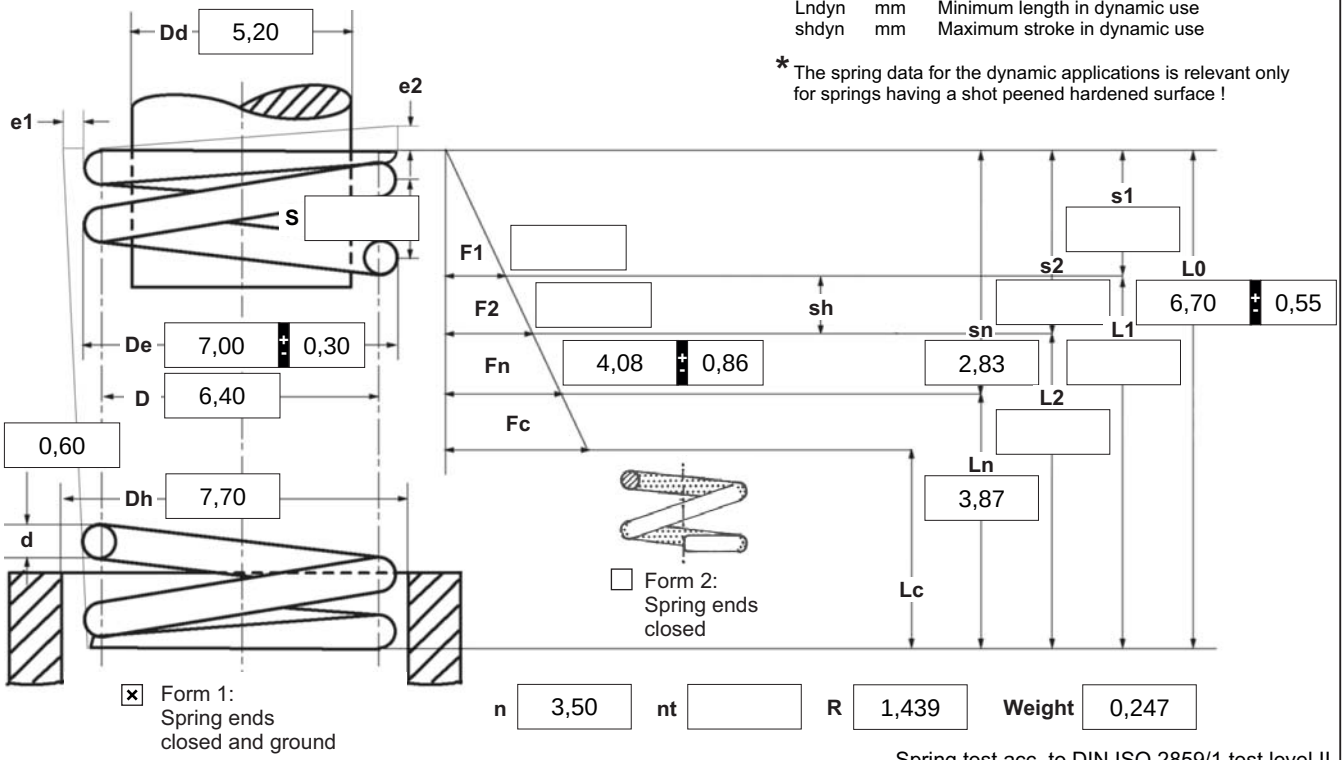
GUTEKUNST FEDERN

07.2024

d	mm	Wire diameter	Fn	N	Maximum force in static use	nt	pc.	Total coils
D	mm	Mean coil diameter	Fc	N	Theoretic maximum force at Lc	R	N/mm	Spring rate
Dd	mm	Diameter of mandrel	L0	mm	Length of unstressed spring	S	mm	Pitch (distance between coils)
De	mm	Outer coil diameter	L1	mm	Prestressed spring length	s1	mm	Prestressed spring deflection
Dh	mm	Diameter of bush	L2	mm	Loaded spring length	s2	mm	Loaded spring deflection
e1	mm	Perm.dev. perpendicular line	Lk	mm	Buckling length	sh	mm	Maximum stroke in static use
e2	mm	Perm.dev. parallel line	Ln	mm	Minimum length in static use	sn	mm	Maximum spring deflection in static use
F1	N	Prestressed spring force	Lc	mm	Block length	Weight	g	Weight of one spring in grammes
F2	N	Loaded spring force	n	pc.	Aktive coils			

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 !



n 3,50 | nt | R 1,439 | Weight 0,247

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

1 Coiling direction

☐ left ☒ right

2 Dynamic load *

Fndyn	3,66
Fndtol	0,85
Lndyn	4,16
shdyn	2,54

3 Excursion sh mm

4 Stress cyc. end. N

5 Stress cycle frequ. n /

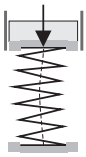
6 Application temp. °C

7 Guidance and seat to DIN EN 13906-1

☐ mandrel ☐ bush

Buckling length **Lk** 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	☐	☐	☐	☐	
2	☒	☒	☒	☒	
3	☐	☐	☐	☐	☒

13 Prouction compensation through

A spring resistance and associated length of tensed spring	L0	☐
A spring resistance, associated length of tensed spring and L0	n, d	☒
	n, De, Di	☐
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.

Remarks

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

Prices

Quantità progressive	Prezzo singolo [EUR]
1	4,8100 €
2	3,3900 €
3	3,2300 €
7	1,8100 €
17	0,7800 €
37	0,4700 €
75	0,2700 €
125	0,2226 €
175	0,1689 €
250	0,1503 €
350	0,1199 €
450	0,1011 €

Gutekunst + Co.KG Spring Factories · Carl-Zeiss-Straße 15 · D-72555 Metzingen

Sales +49 7123 960-192 · Customize springs +49 7123 960-193 · Main +49 7123 960-0

Fax +49 7123 960-195 · E-mail: order@gutekunst-co.com