

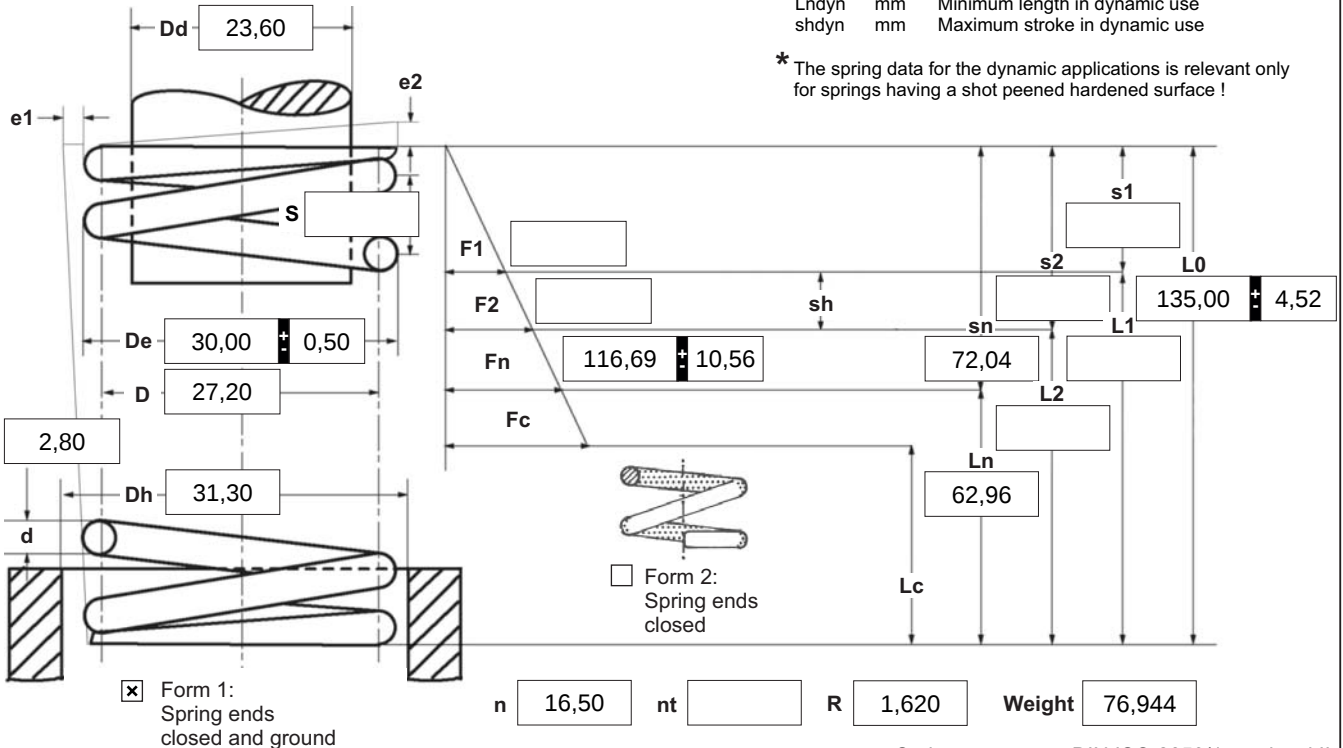
08.2025

d	mm	Wire diameter
D	mm	Mean coil diameter
De	mm	Diameter of mandrel
Dd	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
L ₀	mm	Length of unstressed spring
L ₁	mm	Prestressed spring length
L ₂	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	08.
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	7 Guidance and seat to DIN EN 13906-1 ☐ mandrel ☐ bush Buckling length L_k at v=0,5 / Bild 5 0,00 mm	12 Tolerances to DIN EN 15800 <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <th>Grade</th> <th>De,Di,D</th> <th>L0</th> <th>F1,F2</th> <th>e1,e2</th> <th>Wire diameter d to DIN 2076</th> </tr> <tr> <td>1</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> <td rowspan="3">☒</td> </tr> <tr> <td>2</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> </tr> <tr> <td>3</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </table>	Grade	De,Di,D	L0	F1,F2	e1,e2	Wire diameter d to DIN 2076	1	☐	☐	☐	☐	☒	2	☒	☒	☒	☒	3	☐	☐	☐	☐
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2 Dynamic load * <table style="width: 100%;"> <tr> <td style="width: 20%;">Fndyn</td> <td> 107,65 </td> </tr> <tr> <td>Fndtol</td> <td> 10,40 </td> </tr> <tr> <td>Lndyn</td> <td> 68,54 </td> </tr> <tr> <td>shdyn</td> <td> 60,44 </td> </tr> </table>	Fndyn	107,65	Fndtol	10,40	Lndyn	68,54	shdyn	60,44	8 Material 1.4310	13 Prouction compensation through <table style="width: 100%;"> <tr> <td style="width: 80%;">A spring resistance and associated length of tensed spring</td> <td>L0 ☐</td> </tr> <tr> <td>A spring resistance, associated length of tensed spring and L0</td> <td>n, d ☒ n, De, Di ☐</td> </tr> <tr> <td>Two spring resistances and associated lengths of tensed spring</td> <td>L0, n, d ☐ L0,n,De,Di ☐</td> </tr> </table>	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 ☐								
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3 Excursion sh mm	9 Wire or rod surface ☒ drawn ☐ rolled ☐ metal-cut	14 Setting springs All springs which show setting tendency because of their size are pre-set within the production process.																						
4 Stress cyc. end. N	10 Springs deburred ☐ inside ☐ outside	Prices <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Desconto por quantidade</th> <th style="text-align: left;">Preço individual</th> </tr> <tr> <td>1</td> <td>[EUR]</td> </tr> <tr> <td>2</td> <td>6,4400 €</td> </tr> <tr> <td>3</td> <td>4,5400 €</td> </tr> <tr> <td>7</td> <td>4,3300 €</td> </tr> <tr> <td>17</td> <td>3,5700 €</td> </tr> <tr> <td>37</td> <td>2,3000 €</td> </tr> <tr> <td>75</td> <td>1,8300 €</td> </tr> <tr> <td></td> <td>1,7400 €</td> </tr> </table>	Desconto por quantidade	Preço individual	1	[EUR]	2	6,4400 €	3	4,5400 €	7	4,3300 €	17	3,5700 €	37	2,3000 €	75	1,8300 €		1,7400 €				
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