

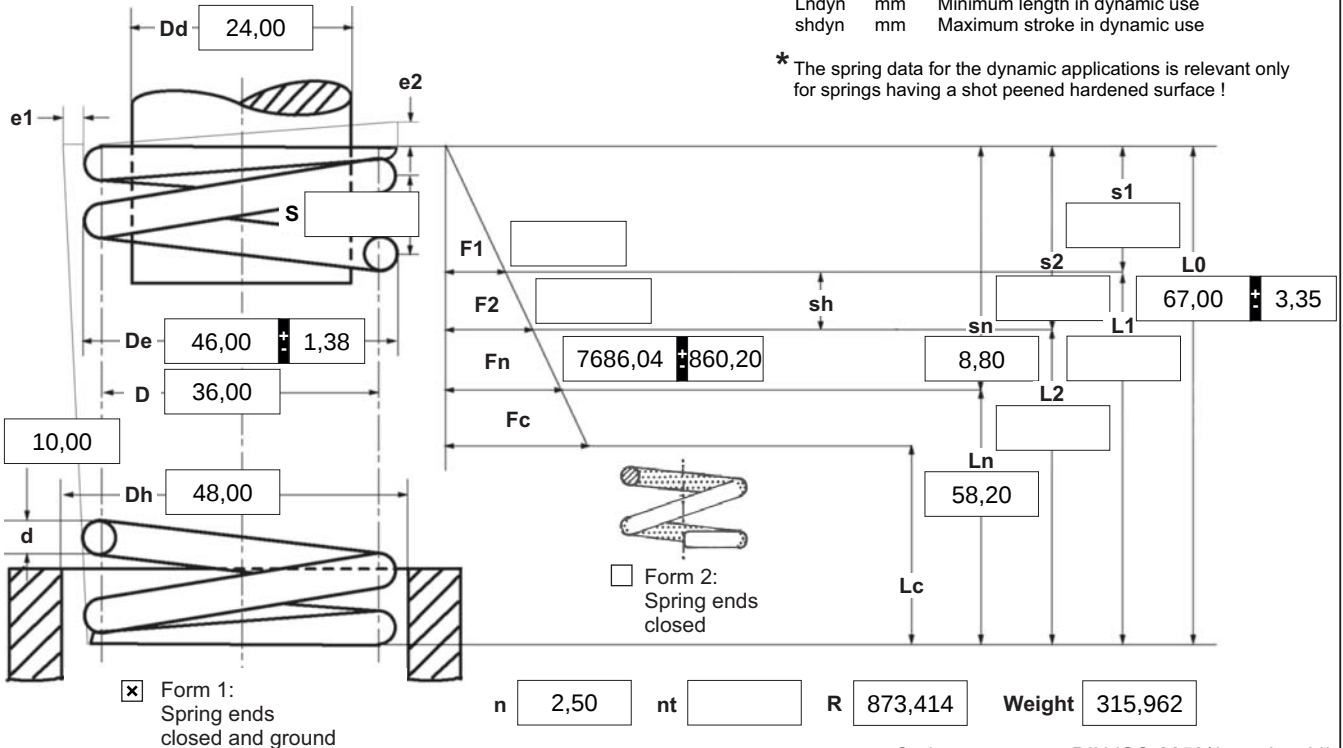
08.2025

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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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%;"> <thead> <tr> <th style="text-align: left;">Cantidad progresiva</th> <th style="text-align: left;">Precio unidad [EUR]</th> </tr> </thead> <tbody> <tr><td>1</td><td>14,5700 €</td></tr> <tr><td>2</td><td>11,6100 €</td></tr> <tr><td>3</td><td>7,2800 €</td></tr> <tr><td>7</td><td>5,4200 €</td></tr> <tr><td>17</td><td>3,8200 €</td></tr> <tr><td>37</td><td>3,3100 €</td></tr> <tr><td>75</td><td>3,2400 €</td></tr> <tr><td>125</td><td>3,2451 €</td></tr> <tr><td>175</td><td>3,2080 €</td></tr> <tr><td>250</td><td>3,1837 €</td></tr> <tr><td>350</td><td>3,1130 €</td></tr> </tbody> </table>	Cantidad progresiva	Precio unidad [EUR]	1	14,5700 €	2	11,6100 €	3	7,2800 €	7	5,4200 €	17	3,8200 €	37	3,3100 €	75	3,2400 €	125	3,2451 €	175	3,2080 €	250	3,1837 €	350	3,1130 €
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