

07.2025

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	07.
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 !

Technical drawing of a helical spring showing two forms: Form 1 (Spring ends closed and ground) and Form 2 (Spring ends closed). The drawing includes dimensions for wire diameter (d), inner diameter (Di), outer diameter (De), mean diameter (D), and various lengths (Ld, Lc, Ln, L0, L1, L2). It also shows forces (F1, F2, Fn, Fc) and deflections (s1, s2, sn, sh). A table at the bottom provides calculated values for n, nt, R, and Weight.

Parameter	Value
n	5,50
nt	
R	2,788
Weight	2,686

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;"> <thead> <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> </thead> <tbody> <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> </tbody> </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;">Quantità progressiva</th> <th style="text-align: left;">Prezzo singolo [EUR]</th> </tr> </thead> <tbody> <tr><td>1</td><td>4,9000 €</td></tr> <tr><td>2</td><td>3,4600 €</td></tr> <tr><td>3</td><td>3,3000 €</td></tr> <tr><td>7</td><td>1,8900 €</td></tr> <tr><td>17</td><td>0,9300 €</td></tr> <tr><td>37</td><td>0,5700 €</td></tr> <tr><td>75</td><td>0,3900 €</td></tr> <tr><td>125</td><td>0,3566 €</td></tr> <tr><td>175</td><td>0,3067 €</td></tr> <tr><td>250</td><td>0,2817 €</td></tr> <tr><td>350</td><td>0,2526 €</td></tr> <tr><td>450</td><td>0,1895 €</td></tr> </tbody> </table>	Quantità progressiva	Prezzo singolo [EUR]	1	4,9000 €	2	3,4600 €	3	3,3000 €	7	1,8900 €	17	0,9300 €	37	0,5700 €	75	0,3900 €	125	0,3566 €	175	0,3067 €	250	0,2817 €	350	0,2526 €	450	0,1895 €
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5 Stress cycle frequ. n /	11 Surface treatment ☐ shot peened 																											
6 Application temp. °C	Remarks Paese d'origine: DE Numero della tariffa doganale: 73202081																											