

D	mm	Wire diameter	L1	mm	Prestressed spring length
D	mm	Mean coil diameter	L2	mm	Loaded spring length
De	mm	Outer coil diameter	Ln	mm	Maximum spring length
Dh	mm	Minimum diameter of bush	m	mm	Loop opening width
F0	N	Initial tension	n	pc.	Number of active coils
F1	N	Prestressed spring force	nt	pc.	Total number of coils
F2	N	Loaded spring force	s1	mm	Prestressed spring deflection
Fn	N	Maximum spring force	s2	mm	Loaded spring deflection
Lh	mm	Loop height	sn	mm	Maximum spring deflection
Lk	mm	Length of unstressed spring body	sh	mm	Excursion
L0	mm	Unstressed spring length	R	N/mm	Spring rate

Symbol	Unit	Description	Value
Lh	mm	Loop height	6,500
Lk	mm	Length of unstressed spring body	113,00
L0	mm	Unstressed spring length	126,00 ± 2,00
sn	mm	Maximum spring deflection	65,73
sh	mm	Excursion	
R	N/mm	Spring rate	

The technical drawing shows a spring with a hook and a series of loops. Key dimensions include:

- Lh**: Loop height, 6,500 mm.
- Lk**: Length of unstressed spring body, 113,00 mm.
- L0**: Unstressed spring length, 126,00 mm with a tolerance of ± 2,00 mm.
- sn**: Maximum spring deflection, 65,73 mm.
- sh**: Excursion, indicated by a dimension line.
- R**: Spring rate, indicated by a dimension line.

 The force-displacement diagram on the right shows the relationship between force (F) and displacement (s). The force starts at F0 and increases linearly to Fn. The displacement starts at s0 and increases linearly to sn. The spring rate R is the slope of this line.

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

1 Coiling direction ☐ left ☒ right	4 Stress cyc. end. N	10 Tolerances to DIN 2097 <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>F0-Fn</th> <th>Loops</th> <th rowspan="4">Wire diameter d to DIN 2076</th> </tr> <tr> <td>1</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</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> <tr> <td colspan="5"></td> <td>☒</td> </tr> </table>	Grade	De, Di, D	L0	F0-Fn	Loops	Wire diameter d to DIN 2076	1	☐	☐	☐	☐	2	☒	☒	☒	☒	3	☐	☐	☐	☐						☒
Grade	De, Di, D		L0	F0-Fn	Loops	Wire diameter d to DIN 2076																							
1	☐		☐	☐	☐																								
2	☒	☒	☒	☒																									
3	☐	☐	☐	☐																									
					☒																								
2 Loop shape and loop position Loop shape 1/1 German loop	5 Stress cycle frequ. n /																												
Loops offset to one another by 180,0 ☒ 40,0 degrees	6 Application temp. °C																												
3 Excursion sh mm	7 Material 1.4310	11 Production compensation through <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">A spring resistance, associated length of tensed spring and L0</td> <td style="width: 20%;">F0, D ☒</td> </tr> <tr> <td>A spring resistance, associated length of tensed spring and F0</td> <td>L0, n, d ☐ L0, D ☐</td> </tr> <tr> <td>Two spring resistances and associated length of tensed spring</td> <td>L0, n, d ☐ F0, D ☐</td> </tr> </table>	A spring resistance, associated length of tensed spring and L0	F0, D ☒	A spring resistance, associated length of tensed spring and F0	L0, n, d ☐ L0, D ☐	Two spring resistances and associated length of tensed spring	L0, n, d ☐ F0, D ☐																					
	A spring resistance, associated length of tensed spring and L0		F0, D ☒																										
	A spring resistance, associated length of tensed spring and F0		L0, n, d ☐ L0, D ☐																										
Two spring resistances and associated length of tensed spring	L0, n, d ☐ F0, D ☐																												
8 Wire or rod surface ☒ drawn ☐ rolled ☐ metal-cut	9 Surface treatment 																												
Remarks Paese d'origine: DE Numero della tariffa doganale: 73202085		Prices <table style="width: 100%;"> <tr> <th style="text-align: left;">Quantità progressiva</th> <th style="text-align: left;">Prezzo singolo [EUR]</th> </tr> <tr><td>1</td><td>6,7100 €</td></tr> <tr><td>2</td><td>4,2300 €</td></tr> <tr><td>3</td><td>3,0800 €</td></tr> <tr><td>7</td><td>2,6300 €</td></tr> <tr><td>17</td><td>1,3800 €</td></tr> <tr><td>37</td><td>1,0500 €</td></tr> <tr><td>75</td><td>0,8600 €</td></tr> <tr><td>125</td><td>0,8600 €</td></tr> <tr><td>175</td><td>0,8600 €</td></tr> <tr><td>250</td><td>0,8600 €</td></tr> <tr><td>350</td><td>0,8600 €</td></tr> <tr><td>450</td><td>0,8600 €</td></tr> </table>	Quantità progressiva	Prezzo singolo [EUR]	1	6,7100 €	2	4,2300 €	3	3,0800 €	7	2,6300 €	17	1,3800 €	37	1,0500 €	75	0,8600 €	125	0,8600 €	175	0,8600 €	250	0,8600 €	350	0,8600 €	450	0,8600 €	
Quantità progressiva	Prezzo singolo [EUR]																												
1	6,7100 €																												
2	4,2300 €																												
3	3,0800 €																												
7	2,6300 €																												
17	1,3800 €																												
37	1,0500 €																												
75	0,8600 €																												
125	0,8600 €																												
175	0,8600 €																												
250	0,8600 €																												
350	0,8600 €																												
450	0,8600 €																												