

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
Fh	N	Maximum spring force	47,55
Lh	mm	Loop height	8,310
Lk	mm	Length of unstressed spring body	104,38
L0	mm	Unstressed spring length	121,00
s2	mm	Loaded spring deflection	254,13
sn	mm	Maximum spring deflection	254,13
sh	mm	Excursion	2,40
R	N/mm	Spring rate	3,71

The technical drawing shows a spring with a hook and a coiled body. Key dimensions include:

- Lh**: Loop height (8,310 mm)
- Lk**: Length of unstressed spring body (104,38 mm)
- L0**: Unstressed spring length (121,00 mm)
- s2**: Loaded spring deflection (254,13 mm)
- sn**: Maximum spring deflection (254,13 mm)
- sh**: Excursion (2,40 mm)
- R**: Spring rate (3,71 N/mm)

 The force-displacement diagram on the right shows the relationship between force (F) and displacement (s). The force increases linearly from F0 to Fn as displacement increases from 0 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;"> <thead> <tr> <th>Grade</th> <th>De, Di, D</th> <th>L0</th> <th>F0-Fn</th> <th>Loops</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	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 /	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 ☐																
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Loops offset to one another by 180,0 56,0 degrees (in the dir. of the right helix)	6 Application temp. °C																							
3 Excursion sh mm	7 Material 1.4310	Prices Stupnice množství Jedn. cena [EUR]																						
	8 Wire or rod surface ☒ drawn ☐ rolled ☐ metal-cut																							
	9 Surface treatment 																							

Remarks

Zem pvodu: DE | íslo celního sazebníku: 73202085

Grade	De,Di,D	L0	F0-Fn	Loops	Wire diameter d to DIN 2076
1	☐	☐	☐	☐	
2	☒	☒	☒	☒	☒
3	☐	☐	☐	☐	

11 Production compensation		through
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	☐

Prices	
Stupnice množství	Jedn. cena [EUR]
1	7,0400 €
2	4,4400 €
3	3,4600 €
7	2,9500 €
17	1,5300 €
37	1,2300 €
75	1,0500 €
125	0,9748 €
175	0,9607 €
250	0,9427 €
350	0,8977 €
450	0,8721 €