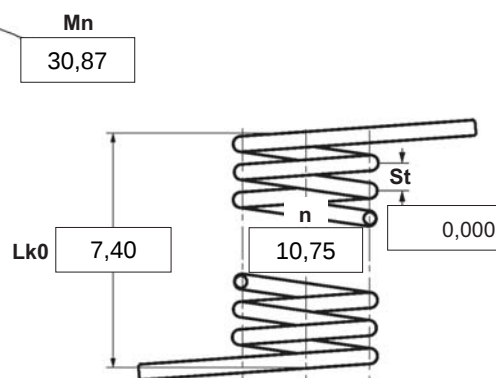


α	degree	Unstressed leg position
α_1	degree	Prestressed rotational angle
α_2	degree	Loaded rotational angle
α_h	degree	Excursion
α_n	degree	Maximum rotational angle
d	mm	Wire diameter
Ddmin	mm	Min. possible mandrel diameter
Ddmax	mm	Max. possible mandrel diameter
De	mm	Outer coil diameter
Di	mm	Inner coil diameter
F1	N	Prestressed spring force
F2	N	Loaded spring force
Lk0	mm	Length of spring body when relaxed
LS	mm	Length of leg
M1	Nmm	Prestressed torque
M2	Nmm	Loaded torque
Mn	Nmm	Maximum torque
n	pc.	Active coils
RH	mm	Distance power flow point from centre
St	mm	Distance between coils (pitch)
Weight	a	Weight of one spring in grammes



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

1 Coiling direction ☒ left ☐ right	5 Excursion $\underline{a_h}$ degr.	12 Tolerances to DIN 2194 <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Grade</th> <th>Di</th> <th>Lk0</th> <th>LSH,LSR</th> <th>$\alpha, \alpha 1, \alpha 2$</th> <th>M1,M2</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>☐</td> <td></td> </tr> <tr> <td>2</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td>☒</td> <td></td> </tr> <tr> <td>3</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☒</td> </tr> </tbody> </table>	Grade	Di	Lk0	LSH,LSR	$\alpha, \alpha 1, \alpha 2$	M1,M2	Wire diameter d to DIN 2076	1	☐	☐	☐	☐	☐		2	☒	☒	☒	☒	☒		3	☐	☐	☐	☐	☐	☒
Grade	Di	Lk0	LSH,LSR	$\alpha, \alpha 1, \alpha 2$	M1,M2	Wire diameter d to DIN 2076																								
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2	☒	☒	☒	☒	☒																									
3	☐	☐	☐	☐	☐	☒																								
2 Form of legs tangential, straight, no bends * *We can also supply torsion springs with any form of leg for an extra charge.	6 Stress cyc. end. N	13 Production compensation through <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>A spring torque and the associated swing angle</td> <td>α</td> <td>☒</td> </tr> <tr> <td>A spring torque and the associated swing angle and $\alpha 0$</td> <td>n, d</td> <td>☐</td> </tr> <tr> <td></td> <td>n, Di</td> <td>☐</td> </tr> <tr> <td>Two spring resistances and the associated swing angle</td> <td>α, n, d</td> <td>☐</td> </tr> <tr> <td></td> <td>α, n, Di</td> <td>☐</td> </tr> </tbody> </table>	A spring torque and the associated swing angle	α	☒	A spring torque and the associated swing angle and $\alpha 0$	n, d	☐		n, Di	☐	Two spring resistances and the associated swing angle	α , n, d	☐		α , n, Di	☐													
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3 Fixing Recumbent leg Lever leg 	7 Stress cycle frequ. n /																													
4 Load ☐ in winding direction ☐ against winding direction	8 Application temp. °C	Prices <table style="width: 100%;"> <thead> <tr> <th style="text-align: left;">Quantity scale</th> <th style="text-align: left;">Single price [EUR]</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>5,1100 €</td> </tr> <tr> <td>2</td> <td>3,6000 €</td> </tr> <tr> <td>3</td> <td>3,4200 €</td> </tr> </tbody> </table>	Quantity scale	Single price [EUR]	1	5,1100 €	2	3,6000 €	3	3,4200 €																				
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	9 Material 1.4310																													
	10 Wire or rod surface ☒ drawn ☐ rolled ☐ metal-cut																													
	11 Surface treatment 																													

Remarks

Country of origin: DE | Customs tariff number: 73202089

12 Tolerances to DIN 2194						
Grade	Di	Lk0	LSH,LSR	$\alpha, \alpha 1, \alpha 2$	M1,M2	Wire diameter d to DIN 2076
1	☐	☐	☐	☐	☐	
2	☒	☒	☒	☒	☒	
3	☐	☐	☐	☐	☐	

13 Production compensation	through	
A spring torque and the associated swing angle	α	☒
A spring torque and the associated swing angle and α_0	n, d	☐
	n, Di	☐
Two spring resistances and the associated swing angle	α , n, d	☐
	α , n, Di	☐

Prices

Quantity scale	Single price [EUR]
1	5,1100 €
2	3,6000 €
3	3,4300 €
7	2,2200 €
17	1,1200 €
37	0,7400 €
75	0,5500 €
125	0,4570 €
175	0,4069 €
250	0,3567 €
350	0,3095 €
450	0,2652 €