


α	degree	Unstressed leg position
$\alpha 1$	degree	Prestressed rotational angle
$\alpha 2$	degree	Loaded rotational angle
αh	degree	Excursion
αn	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	g	Weight of one spring in grammes

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

1 Coiling direction <input type="checkbox"/> left <input checked="" type="checkbox"/> right		5 Excursion αh <input type="text"/> degr.		12 Tolerances to DIN 2194 <table border="1"> <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><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td></td> </tr> <tr> <td>2</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td></td> </tr> <tr> <td>3</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table>		Grade	Di	Lk0	LSH,LSR	$\alpha, \alpha 1, \alpha 2$	M1, M2	Wire diameter d to DIN 2076	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Grade	Di	Lk0	LSH,LSR	$\alpha, \alpha 1, \alpha 2$	M1, M2	Wire diameter d to DIN 2076																											
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																												
2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																												
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
2 Form of legs tangential, straight, no bends *  <p>*We can also supply torsion springs with any form of leg for an extra charge.</p>		6 Stress cyc. end. N <input type="text"/>		13 Production compensation through <table border="1"> <tr> <td>A spring torque and the associated swing angle</td> <td>α</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>A spring torque and the associated swing angle and $\alpha 0$</td> <td>n, d</td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td>n, Di</td> <td><input type="checkbox"/></td> </tr> <tr> <td>Two spring resistances and the associated swing angle</td> <td>α, n, d</td> <td><input type="checkbox"/></td> </tr> <tr> <td></td> <td>α, n, Di</td> <td><input type="checkbox"/></td> </tr> </table>		A spring torque and the associated swing angle	α	<input checked="" type="checkbox"/>	A spring torque and the associated swing angle and $\alpha 0$	n, d	<input type="checkbox"/>		n, Di	<input type="checkbox"/>	Two spring resistances and the associated swing angle	α, n, d	<input type="checkbox"/>		α, n, Di	<input type="checkbox"/>													
A spring torque and the associated swing angle	α	<input checked="" type="checkbox"/>																															
A spring torque and the associated swing angle and $\alpha 0$	n, d	<input type="checkbox"/>																															
	n, Di	<input type="checkbox"/>																															
Two spring resistances and the associated swing angle	α, n, d	<input type="checkbox"/>																															
	α, n, Di	<input type="checkbox"/>																															
3 Fixing Recumbent leg <input type="checkbox"/> Lever leg <input type="checkbox"/>		7 Stress cycle frequ. n <input type="text"/> / <input type="text"/>		8 Application temp. <input type="text"/> °C																													
4 Load <input type="checkbox"/> in winding direction <input type="checkbox"/> against winding direction		9 Material EN 10270-3-1.4310		10 Wire or rod surface <input checked="" type="checkbox"/> drawn <input type="checkbox"/> rolled <input type="checkbox"/> metal-cut																													
Remarks Country of origin: DE Customs tariff number: 73202089		11 Surface treatment <input type="text"/>		Prices <table border="1"> <thead> <tr> <th>Quantity scale</th> <th>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>3,4300 €</td></tr> <tr><td>7</td><td>2,2200 €</td></tr> <tr><td>17</td><td>1,1200 €</td></tr> <tr><td>37</td><td>0,7400 €</td></tr> <tr><td>75</td><td>0,5500 €</td></tr> <tr><td>125</td><td>0,4570 €</td></tr> <tr><td>175</td><td>0,4069 €</td></tr> <tr><td>250</td><td>0,3567 €</td></tr> <tr><td>350</td><td>0,3095 €</td></tr> <tr><td>450</td><td>0,2652 €</td></tr> </tbody> </table>		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 €		
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 €																																