



- $\alpha$  degree Unstressed leg position
- $\alpha 1$  degree Prestressed rotational angle
- $\alpha 2$  degree Loaded rotational angle
- $\alpha h$  degree Excursion
- $\alpha n$  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 g Weight of one spring in grammes

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

**1 Coiling direction**

 left   right

**2 Form of legs**

tangential, straight, no bends \*



\*We can also supply torsion springs with any form of leg for an extra charge.

**3 Fixing**

Recumbent leg  Lever leg

**4 Load**

in winding direction  
 against winding direction

**5 Excursion  $\alpha h$**

degr.

**6 Stress cyc. end. N**

**7 Stress cycle frequ. n**

/

**8 Application temp.**

°C

**9 Material**

EN 10270-3-1.4310

**10 Wire or rod surface**

drawn  rolled  metal-cut

**11 Surface treatment**

**12 Tolerances to DIN 2194**

| 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"/> |

**13 Production compensation through**

|   |                 |                                     |
|---|-----------------|-------------------------------------|
| A spring torque and the associated swing angle                | $\alpha$        | <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         | $\alpha, n, d$  | <input type="checkbox"/>            |
|   | $\alpha, n, Di$ | <input type="checkbox"/>            |

**Prices**

| Grupa ilociowa | Cena jednostkowa [EUR] |
|----------------|------------------------|
| 1              |                        |
| 2              | 5,1100 €               |
| 3              | 3,6000 €               |
| 7              | 3,4300 €               |
| 17             | 2,2200 €               |
| 37             | 1,1200 €               |
| 75             | 0,7400 €               |
| 125            | 0,5500 €               |
| 175            | 0,4570 €               |
| 250            | 0,4069 €               |
| 350            | 0,3567 €               |
| 450            | 0,3095 €               |
|                | 0,2652 €               |

**Remarks**

Kraj pochodzenia: DE | Numer taryfy celnej: 73202089