



- $\alpha$  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**

| Quantità progressive | Prezzo singolo [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 €             |

**Remarks**

Paese d'origine: DE | Numero della tariffa doganale: 73202089