

SMI SPRING DESIGNER VERSION 2.0 HARDCOPY PRINT

To place your company name and other customizing data here, run SDSETUP

021999-1

| Compression               | Cylind   | CEG              | Music Wire | Round            |         |
|---------------------------|----------|------------------|------------|------------------|---------|
| Wire Dia (in)             | 0.0630   | Mean Dia (in)    | 0.3530     | Active Coils     | 40.3267 |
|                           |          |                  |            | Total Coils      | 42.3267 |
|                           |          |                  |            | Inactive Coils   | 0.0000  |
| Rate (#/in)               | 12.7660  | Inside Dia (in)  | 0.2900     | Pitch (in)       | 0.1266  |
| Spring Index C            | 5.6032   | Outside Dia (in) | 0.4160     | 1/Pitch (per in) | 7.8984  |
| Nat Freq (Hz)             | 174.1564 |                  |            | Pitch Ang (deg)  | 6.5130  |
| Slenderness Lf/D          | 14.8206  | Max O.D. (in)    | 0.4177     |                  |         |
| Fatigue (cycles) > 10 Mil |          | Solid Hgt (in)   | 2.6666     | Devel Lngth (in) | 46.9395 |
| No Peen (cycles) > 10 Mil |          |                  |            | Weight (lbs)     | 0.0416  |

|                      | Free   | Point 1 | Point 2 | Solid   |
|----------------------|--------|---------|---------|---------|
| Load (lbs)           |        | 20.0000 | 23.0000 | 32.7458 |
| Length (in)          | 5.2317 | 3.6650  | 3.4300  | 2.6666  |
| Deflection (in)      |        | 1.5667  | 1.8017  | 2.5651  |
| Defl, % of Max Defl  |        | 61.1    | 70.2    |         |
| UNK Stress (psi)     |        | 71899   | 82684   | 117719  |
| UNK Stress % of MTS  |        | 24.5    | 28.2    | 40.1    |
| CORR Stress (psi)    |        | 91505   | 105231  | 149820  |
| CORR Stress % of MTS |        | 31.2    | 35.9    | 51.1    |

NORMAL MANUFACTURING TOLERANCES: (All other dimensions ref. only)

Coil Diameter: +/- 0.005 (in)

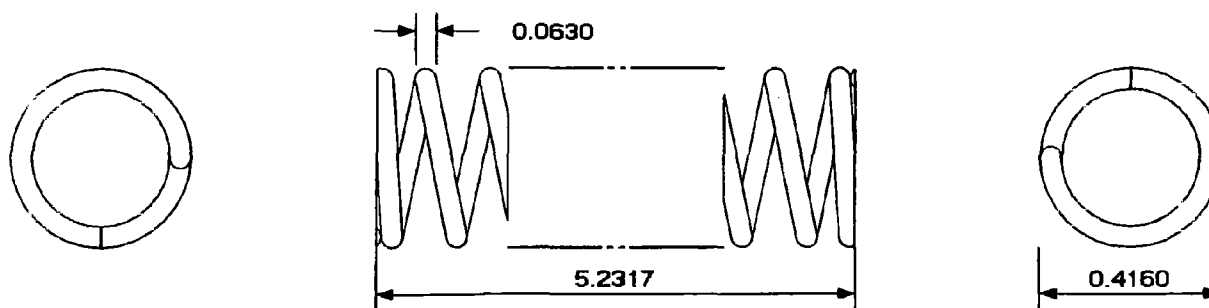
Load (smallest specified): +/- 9.1 (percent)

NOTES:

Minimum Allowable Working Height (before set) is 2.97 (in)

Spring may take a set at solid.

Spring may buckle under load.



Dimensions in inches

Illustration Only - Not for manufacture - Not to scale

Analysis performed with the SMI SPRING DESIGNER, Ver. 2.1 on 02/19/99

ET35715