



Table 1-1. Leading Particulars of the Ling Model 420 Shaker

| Item | Particular | Comment |
|------|--|---|
| 1 | Force Rating Forced-air Cooled Self Cooled See Figure 1-4 Below 0.1 Hz | 100 lb (445 N) vector 30 lb (133 N) vector (continuous duty) 70% of above force ratings |
| 2 | Frequency Range | dc to 7500 Hz (bare table) |
| 3 | First Major Resonance | 5800 Hz (nominal) |
| 4 | Armature Displacement | ±0.375 in (9.5 mm) from neutral position |
| 5 | Maximum Acceleration | 118 g vector |
| 6 | Upper Armature Guidance and Suspension | 3 internally damped lateral flexures |
| 7 | Lower Armature Guidance and Suspension | Linear bearing assembly |
| 8 | Axial Suspension Stiffness | 65 lb/in (114 N/cm) (nominal) |
| 9 | Armature Effective Weight | 0.85 lb (3.78 N) |
| 10 | Armature Drive Requirements (Ref. Fig. 1-5 & 1-6) | 100 lb force vector : 800 VA 50 lb force vector : 250 VA |
| 11 | Rated Armature Current Forced-air Cooled Self Cooled | 28A rms 8.4A rms (30 lb force vector) |
| 12 | DC Armature Resistance at 68°F (20°C) | 0.24 ohms (nominal) |
| 13 | Shaker Weight | 65 lb (289 N) |