



## Linear Drive System For Laser Cutting Industry



### Performance

|                                   | Ratio <sup>(1)</sup> | 5                            |      | 7    |      |
|-----------------------------------|----------------------|------------------------------|------|------|------|
|                                   |                      | Pinion Module No.            | 2    |      |      |
| Pinion Teeth No.                  |                      | 33                           | 37   | 33   | 37   |
| Nominal Output Torque $T_{2N}$    | Nm                   | 165                          |      | 130  |      |
| Max. Acceleration Torque $T_{2B}$ | Nm                   | 247.5                        |      | 195  |      |
| Emergency Stop Torque $T_{2NOT}$  | Nm                   | 495                          |      | 390  |      |
| Max. Drive Force $F_{2T}$         | N                    | 6913                         | 6172 | 5447 | 4863 |
| No Load Running Torque            | Nm                   | 0.7                          |      |      |      |
| Backlash <sup>(2)</sup>           | arcmin               | $\leq 3$                     |      |      |      |
| Torsional Rigidity                | Nm/arcmin            | 22                           |      |      |      |
| Nominal Input Speed $n_{1N}$      | rpm                  | 3,600                        |      |      |      |
| Max. Input Speed $n_{1B}$         | rpm                  | 6,000                        |      |      |      |
| Max. Drive Speed $V_{Max}$        | m/s                  | 4.4                          | 3.1  | 4.9  | 3.5  |
| Service Life <sup>(3)</sup>       | hr                   | 20,000                       |      |      |      |
| Operating Temp.                   | °C                   | -10° C ~ 90° C               |      |      |      |
| Lubrication                       |                      | Synthetic Lubrication Grease |      |      |      |
| Mounting Position                 |                      | All Directions               |      |      |      |
| Running Noise <sup>(4)</sup>      | dB(A)                | $\leq 59$                    |      |      |      |
| Efficiency $\eta$                 | %                    | $\geq 97\%$                  |      |      |      |
| Inertia                           | kg.cm <sup>2</sup>   | 4.52                         |      |      |      |

### Order Code

**L - 24 - 5 - 33**

Teeth No. 33T / 37T

Ratio R5 / R7

Motor Shaft<sup>(5)</sup> 22 / 24

(1) Ratio ( $i = N_{in} / N_{out}$ )

(2) Backlash is measured at 2% of Nominal Output Torque  $T_{2N}$

(3) Continuous operation is not recommended

(4) These values are measured by gearbox with ratio 7 at 3,000 rpm without loading

(5) Motor adapter specification please refer to the dimension of linear drive system



