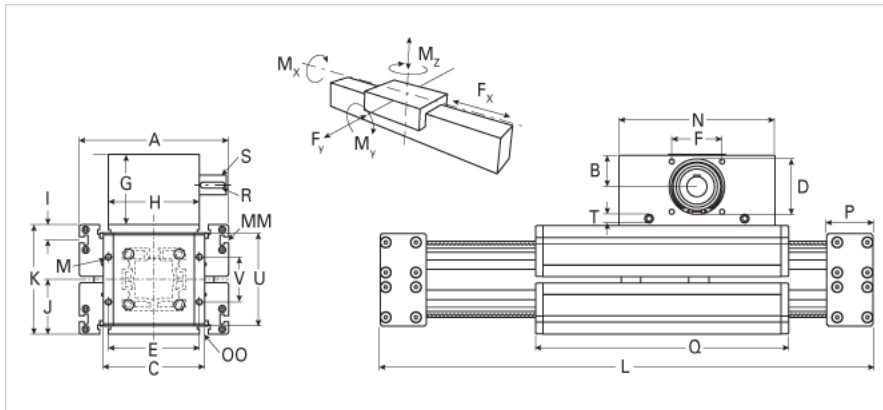
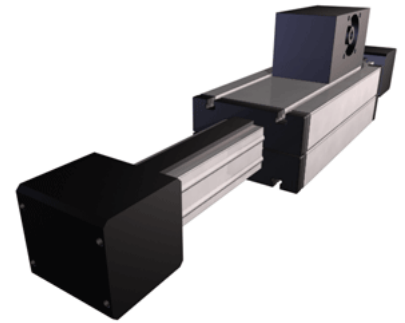


## ELFZ 80S Extended Carriage

Call 800-321-7800 or visit us online at [www.nookindustries.com](http://www.nookindustries.com) to configure and order your ELFZ 80S Extended Carriage today!



### Details

|                 |      |
|-----------------|------|
| Size            | 80S  |
| Belt            | 8M50 |
| mm/Rev          | 128  |
| Number of Teeth | 32   |

### Dimensions

|                                |         |
|--------------------------------|---------|
| Basic Length L [mm]            | 750     |
| A [mm]                         | 190     |
| B [mm]                         | 60      |
| C [mm]                         | 126     |
| D [mm]                         | 90      |
| E [mm]                         | 134     |
| F [mm]                         | 80      |
| G [mm]                         | 139     |
| H [mm]                         | 130     |
| I [mm]                         | 12.5    |
| J [mm]                         | 71      |
| K [mm]                         | 142     |
| M                              | M10     |
| MM                             | M6      |
| N [mm]                         | 270     |
| OO [mm]                        | M8      |
| P [mm]                         | 130     |
| Q [mm]                         | 489     |
| R [mm]                         | 8x7x40  |
| S [mm]                         | 30x45   |
| T                              | M10     |
| U [mm]                         | 130     |
| V [mm]                         | 70      |
| Shaft Diameter and Length [mm] | 30 x 45 |
| Key                            | 8x7x40  |

### Speed

|                     |   |
|---------------------|---|
| Speed Maximum [m/s] | 4 |
|---------------------|---|

### Forces and Torques

|                           |      |
|---------------------------|------|
| Drive Torque Maximum [Nm] | 120  |
| No-load torque [Nm]       | 1.5  |
| Mz dynamic [Nm]           | 440  |
| Mz static [Nm]            | 600  |
| Fx dynamic [N]            | 5400 |
| Fy dynamic [N]            | 7200 |
| Fz dynamic [N]            | 3600 |
| Mx dynamic [Nm]           | 280  |
| My dynamic [Nm]           | 460  |
| Fx static [N]             | 6200 |
| Fy static [N]             | 9200 |
| Fz static [N]             | 6000 |
| Mx static [Nm]            | 340  |
| My static [Nm]            | 540  |

### Geometrical moments of inertia of aluminum profile

|                                      |         |
|--------------------------------------|---------|
| Elastic modulus [N/mm <sup>2</sup> ] | 70000   |
| Ix [mm <sup>4</sup> ]                | 1890000 |
| Iy [mm <sup>4</sup> ]                | 1890000 |

### Weight

|                                        |         |
|----------------------------------------|---------|
| Additional Weight per 100 mm [kg]      | 1.20    |
| Basic Weight [kg]                      | 51.0    |
| <b>Values for Calculating Inertias</b> |         |
| Pulley Material - Drive Pulley (x5)    | Steel   |
| Pulley Material - Idler Pulleys (x2)   | Plastic |
| Pulley Diameter [mm]                   | 81.48   |
| Effective Pulley Width [mm]            | 130     |
| Belt Weight [kg/m]                     | 0.256   |
| Standard Carriage Weight [kg]          | 15.84   |
| No-load torque [Nm]                    | 1.5     |
| Friction Coefficient                   | 0.01    |