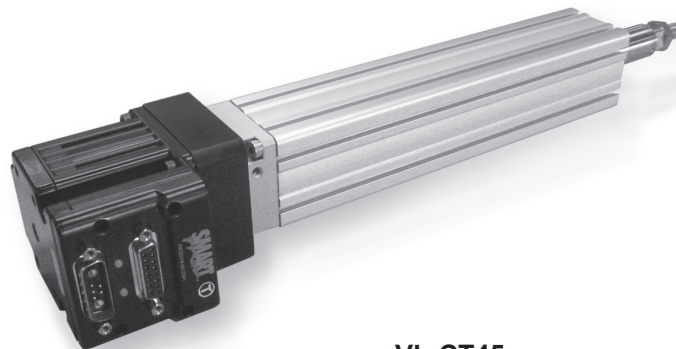
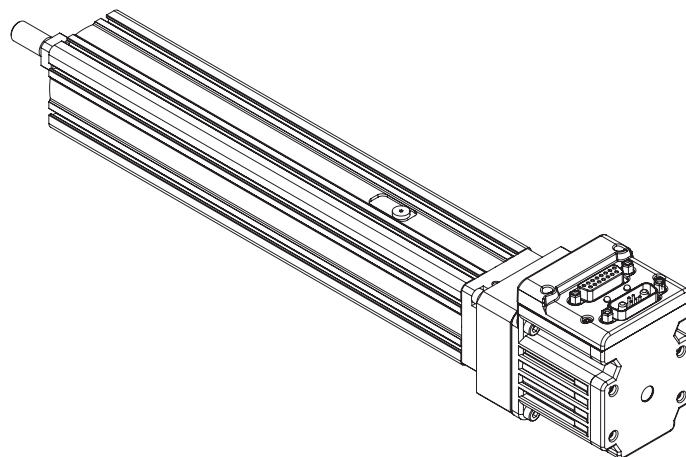


## VL-CT45 Series Specifications

| Parameter                                      | Value                         | Units        |   |
|------------------------------------------------|-------------------------------|--------------|---|
| <b>Configuration &amp; Physical Parameters</b> |                               |              |   |
| Motor                                          | Animatics SmartMotors NEMA 23 | -            |   |
| Coupling                                       | Beam                          | -            |   |
| Ball Screw Leads                               | 12                            | mm/rev       |   |
| Position Sensors                               | consult factory               | -            |   |
| Stroke Lengths                                 | 50, 100, 150 and 200          | mm           |   |
| Overall Length                                 | Stroke + 251.4                | mm           |   |
| Over-Travel                                    | 0                             | mm           |   |
| Unit Mass                                      | 1.45 + (stroke, mm)*0.0052    | kg           |   |
| <b>Performance</b>                             |                               |              |   |
| Unidirectional Repeatability                   | 20                            | µm           |   |
| Bi-directional Reapeatability                  | 40                            | µm           |   |
| Accuracy                                       | 0.021/300                     | mm/mm        |   |
| Max Velocity                                   | 470 -1000 (stroke dependant)  | mm/s         |   |
| Max Acceration                                 | 0.3                           | G            |   |
| Payload Mass                                   | 5.6                           | kg           |   |
| Rated Velocity                                 | 400                           | mm/s         |   |
| Lifetime*                                      | 15000                         | hr           |   |
| <b>Load Rating, Dynamic</b>                    |                               |              |   |
| Using SM23165DT motor                          | Direct Drive                  | 2:1 pulley** | - |
| Max Continuous Thrust                          | 245                           | 490          | N |
| Max Peak Thrust                                | 394                           | 565          | N |



VL-CT45

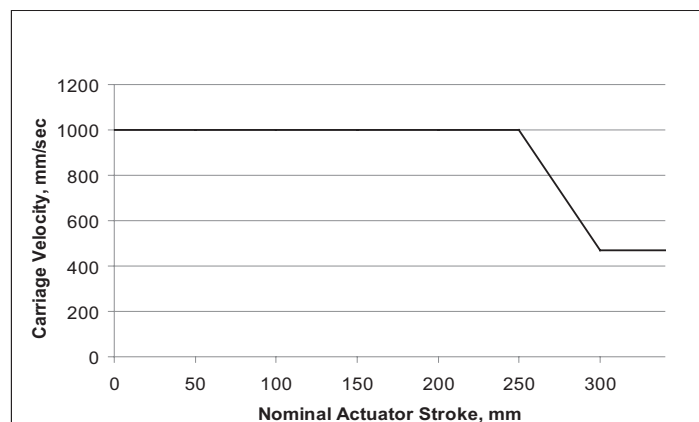


\* Based on operating at an average speed of the rated velocity at the given payload. The Lifetime will be significantly reduced operating above the Rated Velocity and/or given payload..

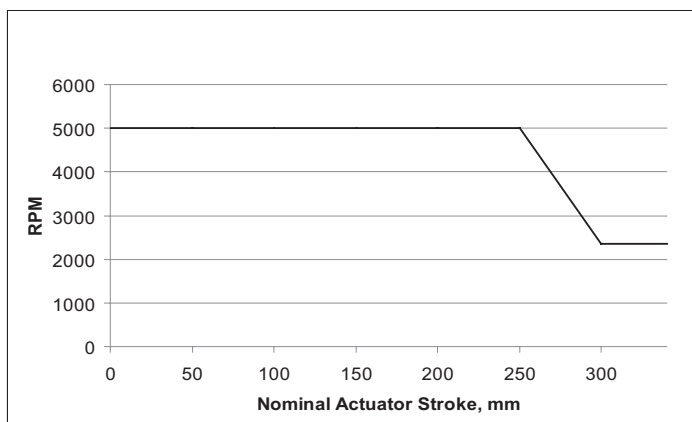
\*\*Please see pages 105 for pulley offset CAD drawings.

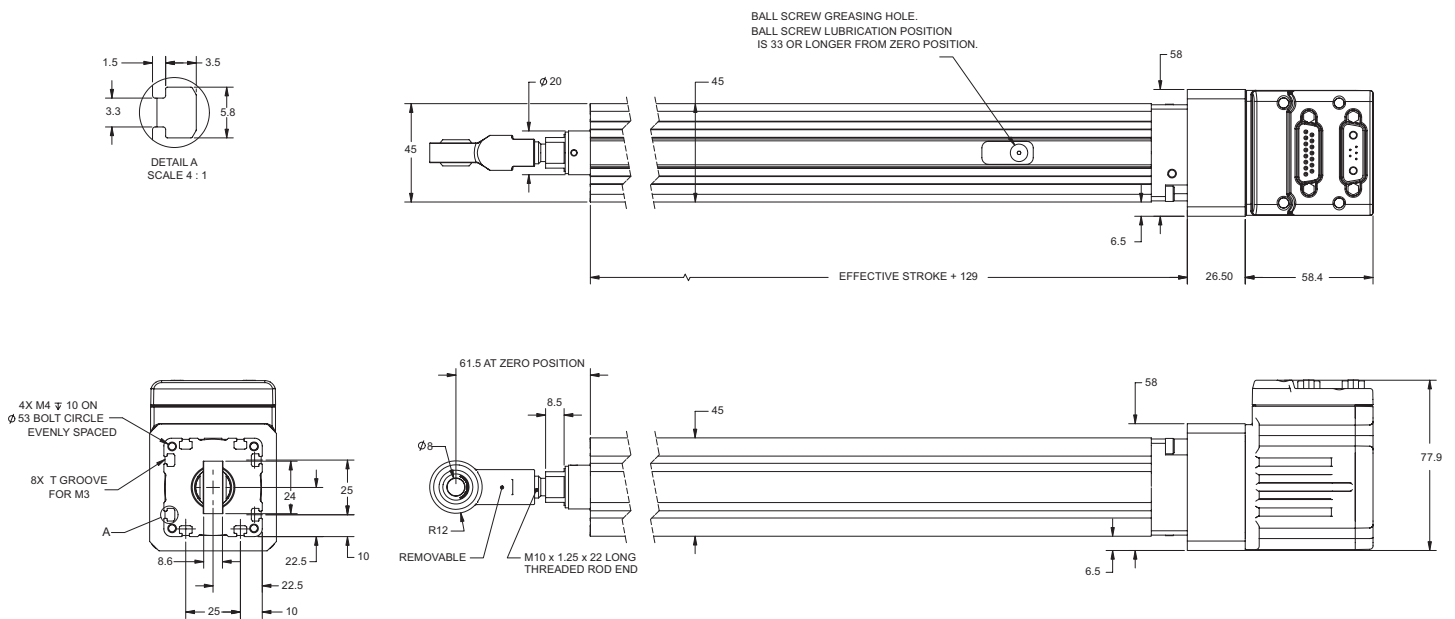
**WARNING: Do not exceed these limits**

VL-CT series - Maximum Permissible Carriage Velocity



VL-CT series - Maximum Permissible Screw Speed





Dimensions in millimeters

Note: For part numbers please refer to our Website at [www.oemdynamics.com](http://www.oemdynamics.com)

**Thrust Curve performance data in following section on page 109-126.**