

## VL-CT45 Series Specifications

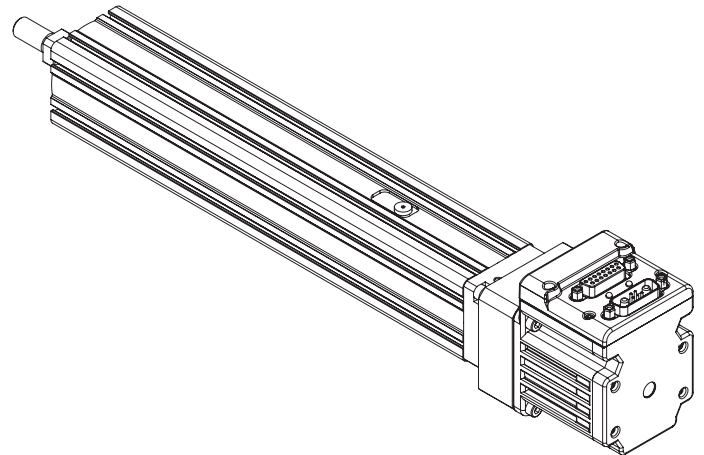
Parameter	Value	Units	
<b>Configuration &amp; Physical Parameters</b>			
Motor	Animatics SmartMotors NEMA 23	-	
Coupling	Beam	-	
Ball Screw Leads	12	mm/rev	
Position Sensors	consult factory	-	
Stroke Lengths	50, 100, 150 and 200	mm	
Overall Length	Stroke + 251.4	mm	
Over-Travel	0	mm	
Unit Mass	$1.45 + (\text{stroke, mm}) \cdot 0.0052$	kg	
<b>Performance</b>			
Unidirectional Repeatability	20	$\mu\text{m}$	
Bi-directional Reapeatability	40	$\mu\text{m}$	
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

\* 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.

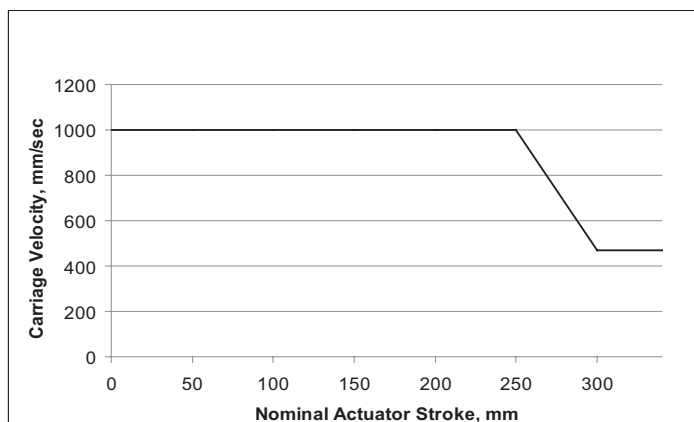


VL-CT45

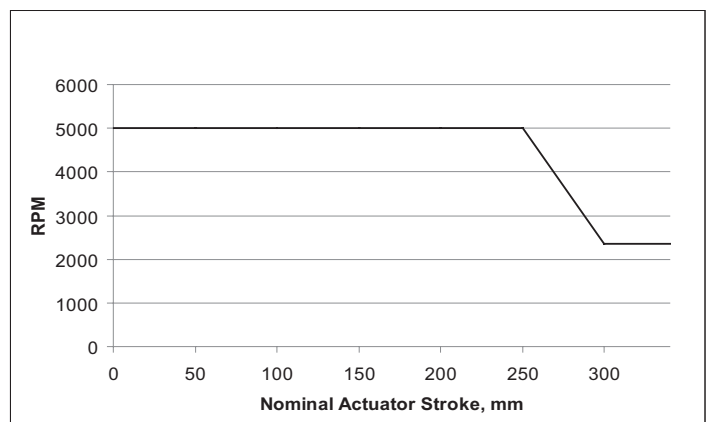


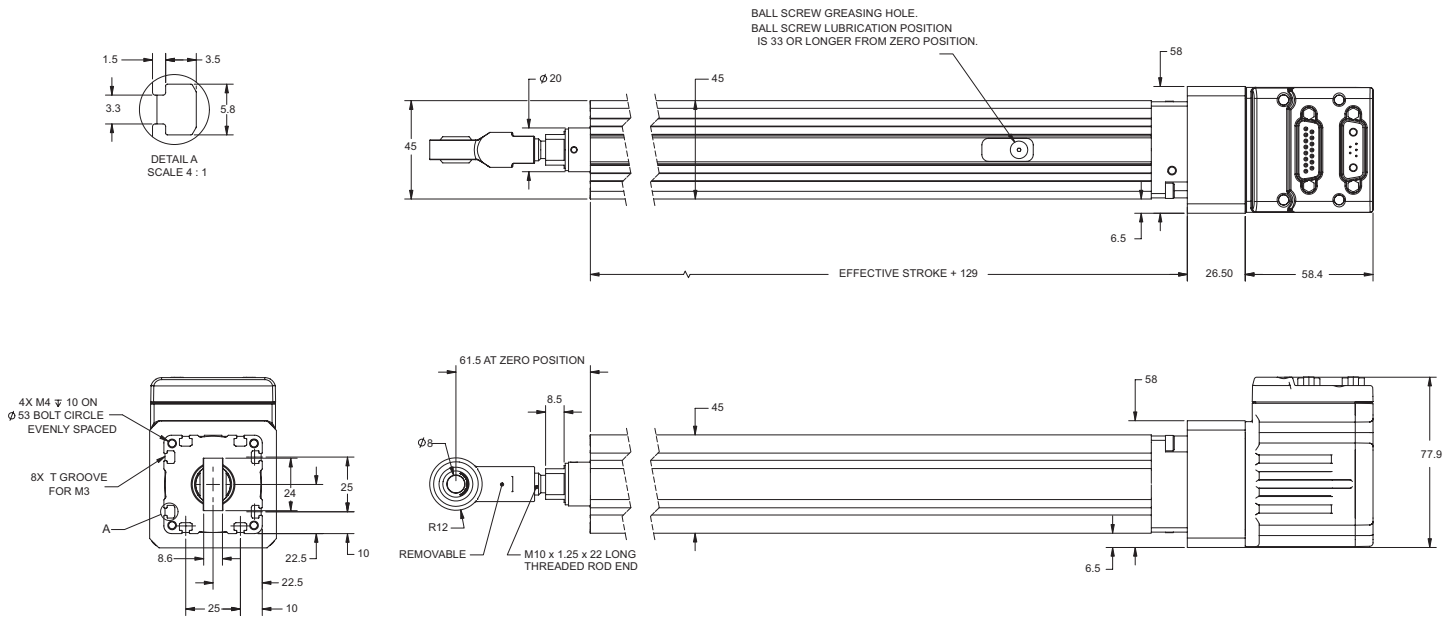
**WARNING: Do not exceed these limits**

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.**