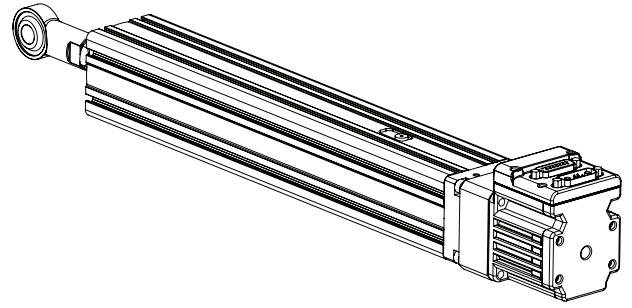


## VL-CT55 Series Specifications

Parameter	Value	Units					
<b>Configuration &amp; Physical Parameters</b>							
Motor	23 frame D-series SmartMotors ONLY	-					
Coupling	Beam	-					
Displacement/rev	6,12	mm/rev					
Position Sensors	consult factory	-					
Stroke Lengths	50 – 300mm in 50mm steps	mm					
Overall Length	Stroke + 274.9 + motor	mm					
Overtravel	None	mm					
Unit Mass	1.94 + (stroke, mm)*0.0075	kg					
<b>Performance</b>							
Unidirectional Repeatability	20	µm					
Bidirectional Repeatability	40	µm					
Linear Accuracy	0.21/300	mm/mm					
Max Velocity	470 – 1000 (stroke dependent)	mm/s					
Max Acceleration	0.3	G					
Payload Mass	22	kg					
Rated Velocity	400	mm/s					
Lifetime*	15000	hr					
<b>Load Rating, Dynamic</b>							
Using SM23165DT motor	<b>Direct Drive</b>	<b>2:1 pulley**</b>	<b>3:1 pulley**</b>	-			
Displacement/rev	<b>6</b>	<b>12</b>	<b>6</b>	<b>12</b>	<b>6</b>	<b>12</b>	mm/rev
Max Continuous Thrust	461	231	922	461	1383	692	N
Max Peak Thrust	745	372	1490	745	2235	1117	N



**VL-CT55 series - Direct Drive**

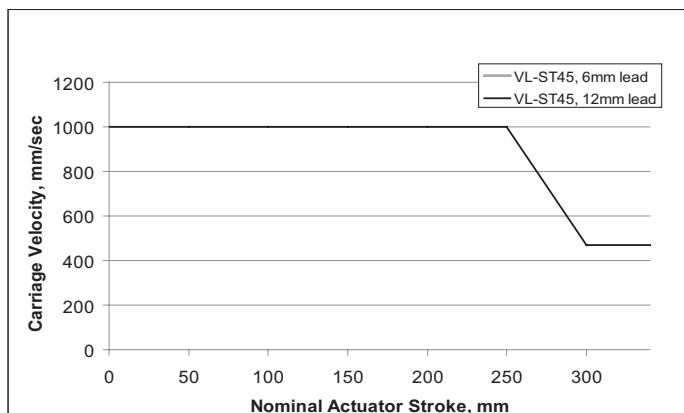


\*Based on operating at an average speed of the rated velocity at the given payload. The Lifetime will be significantly reduced operating above the rated velocity and/or given payload.

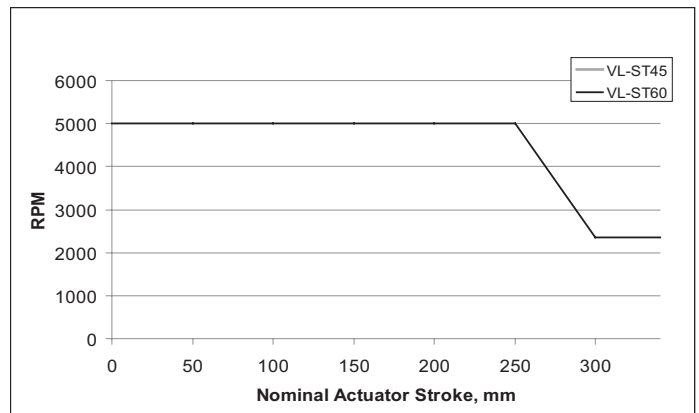
\*\*Please see page 156 for pulley offset CAD drawings.

### WARNING: Do not exceed these limits

**VL-CT series - Maximum Permissible Carriage Velocity**



**VL-CT series - Maximum Permissible Screw Speed**



**WARNING: Exceeding thrust, speed, or moment loading specifications could result in immediate damage to the actuators. Doing so will void the warranty.**

OVERVIEW

SOFTWARE

D-STYLE MOTORS

D-STYLE CONNECTIVITY

PERIPHERALS

M-STYLE MOTORS

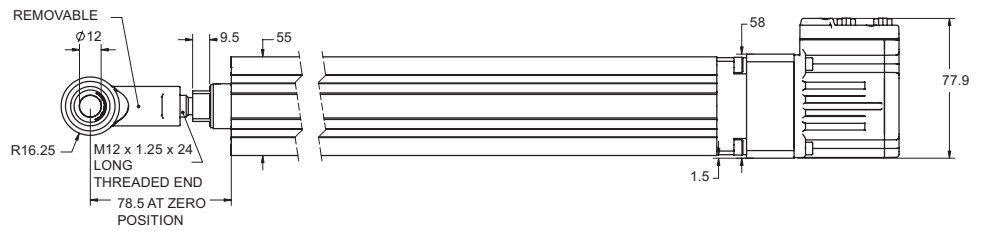
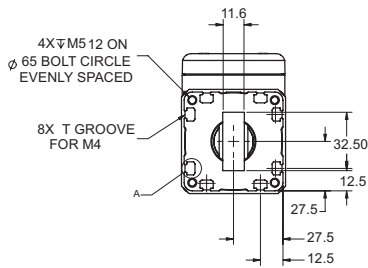
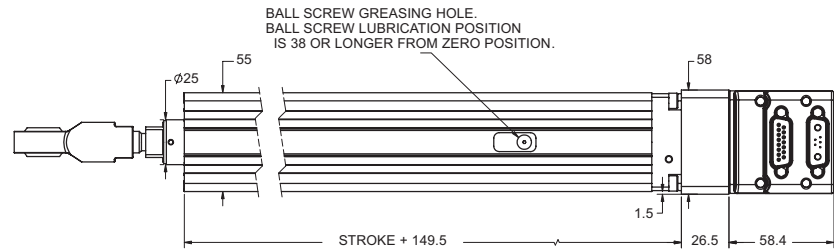
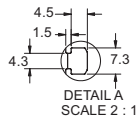
M-STYLE CONNECTIVITY

LINEAR SYSTEMS

POWER SUPPLIES &amp; SHUNTS

GEAR HEADS

APPENDIX



Dimensions in millimeters

**NOTE:** For part numbers please refer to our website at [www.animatics.com](http://www.animatics.com)

**For Thrust Curve performance data, see pages 158–173.**