

VL-CT55 Series Specifications

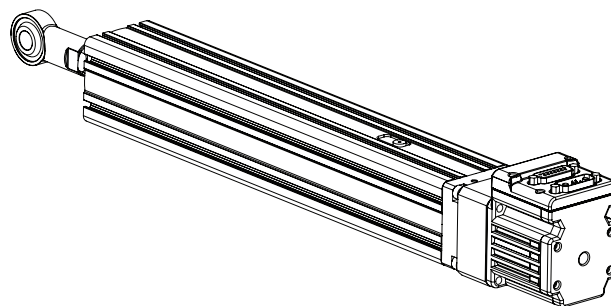
Parameter	Value	Units					
Configuration & Physical Parameters							
Motor	23 frame D-series SmartMotors ONLY	-					
Coupling	Beam	-					
Displacement/rev	6,12	mm/rev					
Position Sensors	consult factory	-					
Stroke Lengths	50 – 300mm in 50mm steps	mm					
Overall Length	Stroke + 274.9 + motor	mm					
Overtravel	None	mm					
Unit Mass	1.94 + 0.0075 x (stroke, mm) + (motor mass, kg)	kg					
Performance							
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					
Load Rating, Dynamic							
Using SM23165DT motor	Direct Drive	2:1 pulley**	3:1 pulley**	-			
Displacement/rev	6	12	6	12	6	12	mm/rev
Max Continuous Thrust	461	231	922	461	1383	692	N
Max Peak Thrust	745	372	1490	745	2235	1117	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 page 156 for pulley offset CAD drawings.

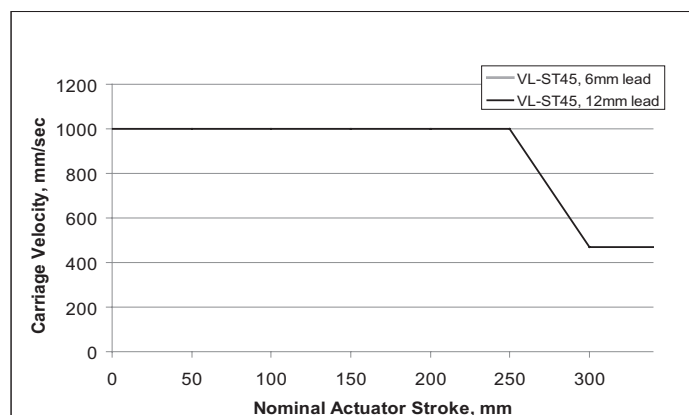


VL-CT55 series - Direct Drive

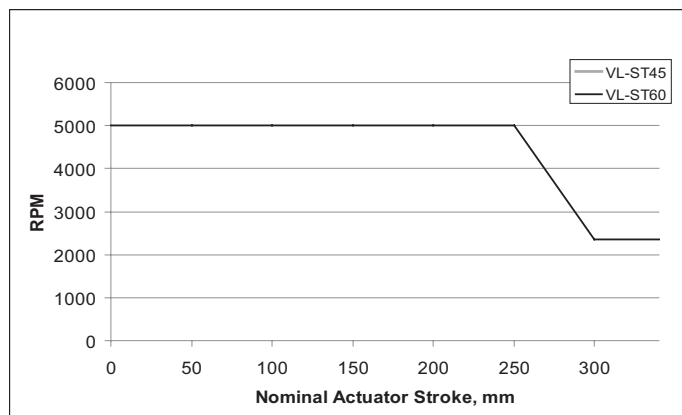


WARNING: Do not exceed these limits

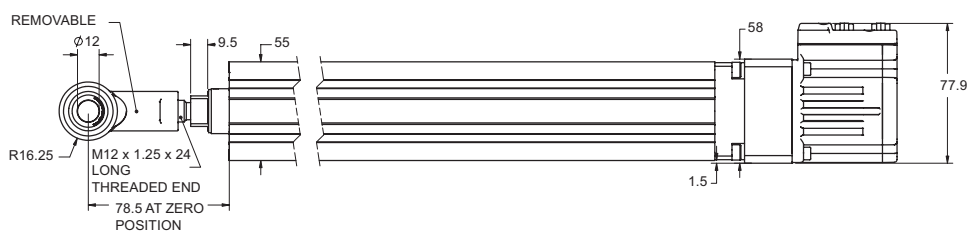
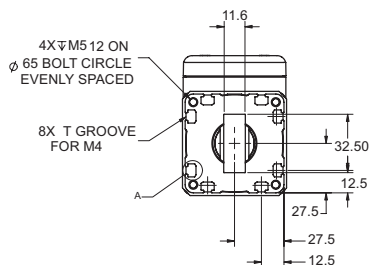
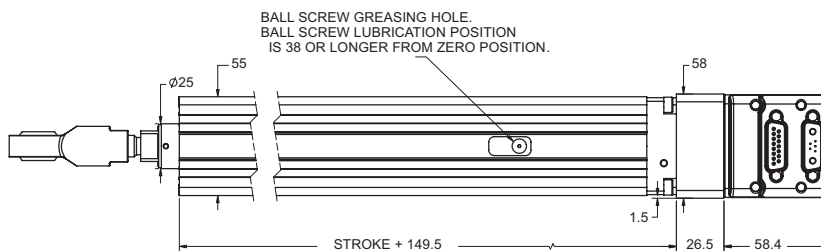
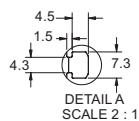
VL-CT series - Maximum Permissible Carriage Velocity



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.



Dimensions in millimeters

NOTE: For part numbers please refer to our website at www.animatics.com

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