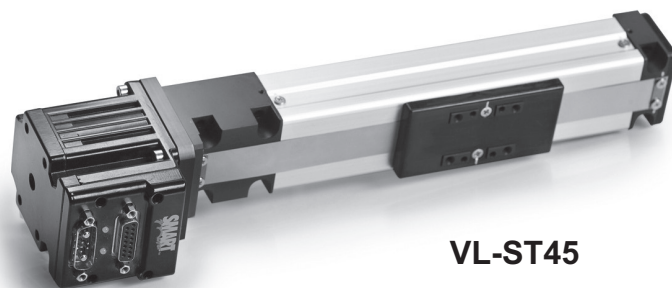


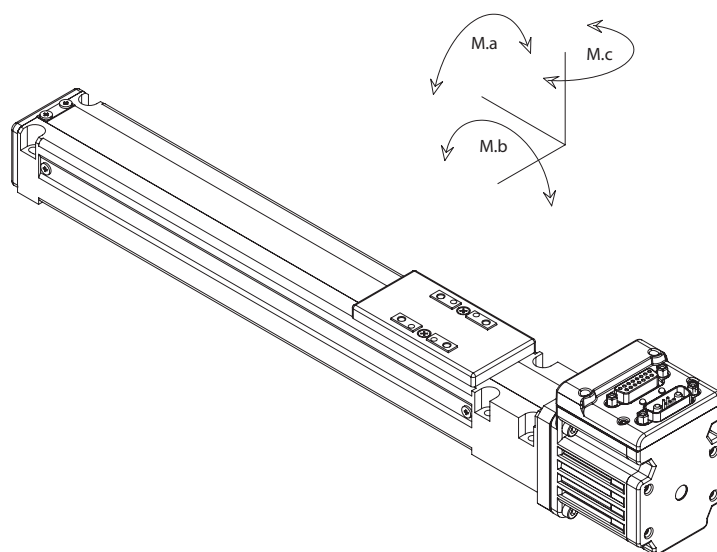
VL-ST45 Product Specifications

Parameter	Value	Units	
Configuration & Physical Parameters			
Motor	Animatics SmartMotors Size 23	-	
Coupling	Beam	-	
Ball Screw Leads	6, 12	mm/rev	
Position Sensors	consult factory	-	
Stroke Lengths	50-500mm in 50mm steps	mm	
Overall Length	Stroke + 222	mm	
Over-Travel	Approx 10	mm	
Unit Mass	$1.38 + (\text{stroke, mm}) \cdot 0.0021$	kg	
Performance			
Unidirectional Repeatability	20	μm	
Bi-directional Repeatability	40	μm	
Accuracy	0.021/300	mm/mm	
Max Velocity	up to 1000 (stroke dependant)	mm/s	
Max Acceration	0.3	G	
Leads	6	12	mm/rev
Payload Mass	8	6.5	kg
Rated Velocity	200	400	mm/s
Lifetime*	15000	hr	
Load Rating, Dynamic* (Static)			
Max Continuous Thrust	488	245	N
Max Peak Thrust	660	330	N
M.a, Carriage Moment	4.47 (31)	3.44 (31)	N*m
M.b, Carriage Moment	1.64 (12)	1.33 (12)	N*m
M.b, Carriage Moment	1.64 (12)	1.33 (12)	N*m

* 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.

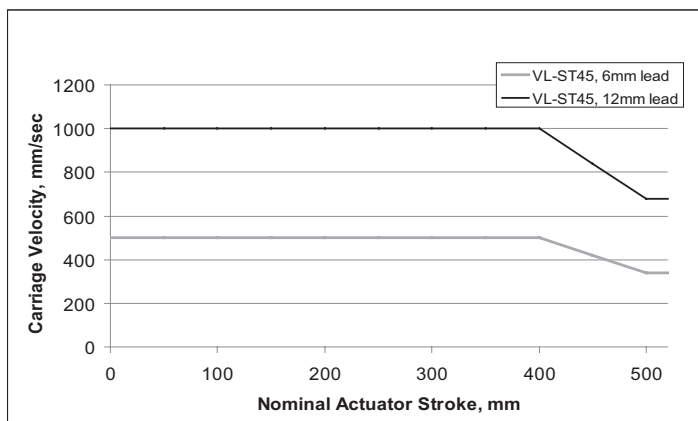


VL-ST45

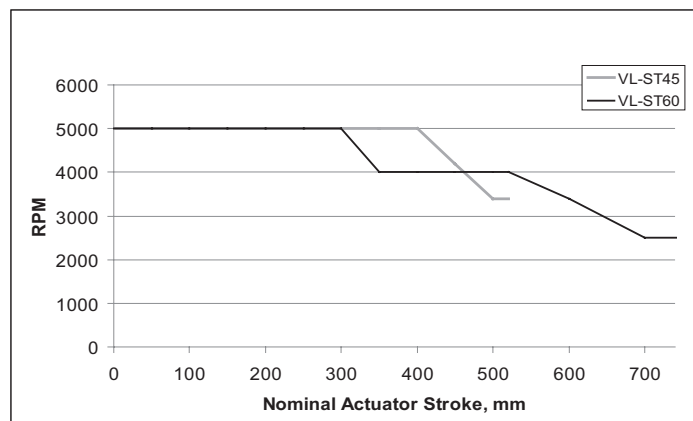


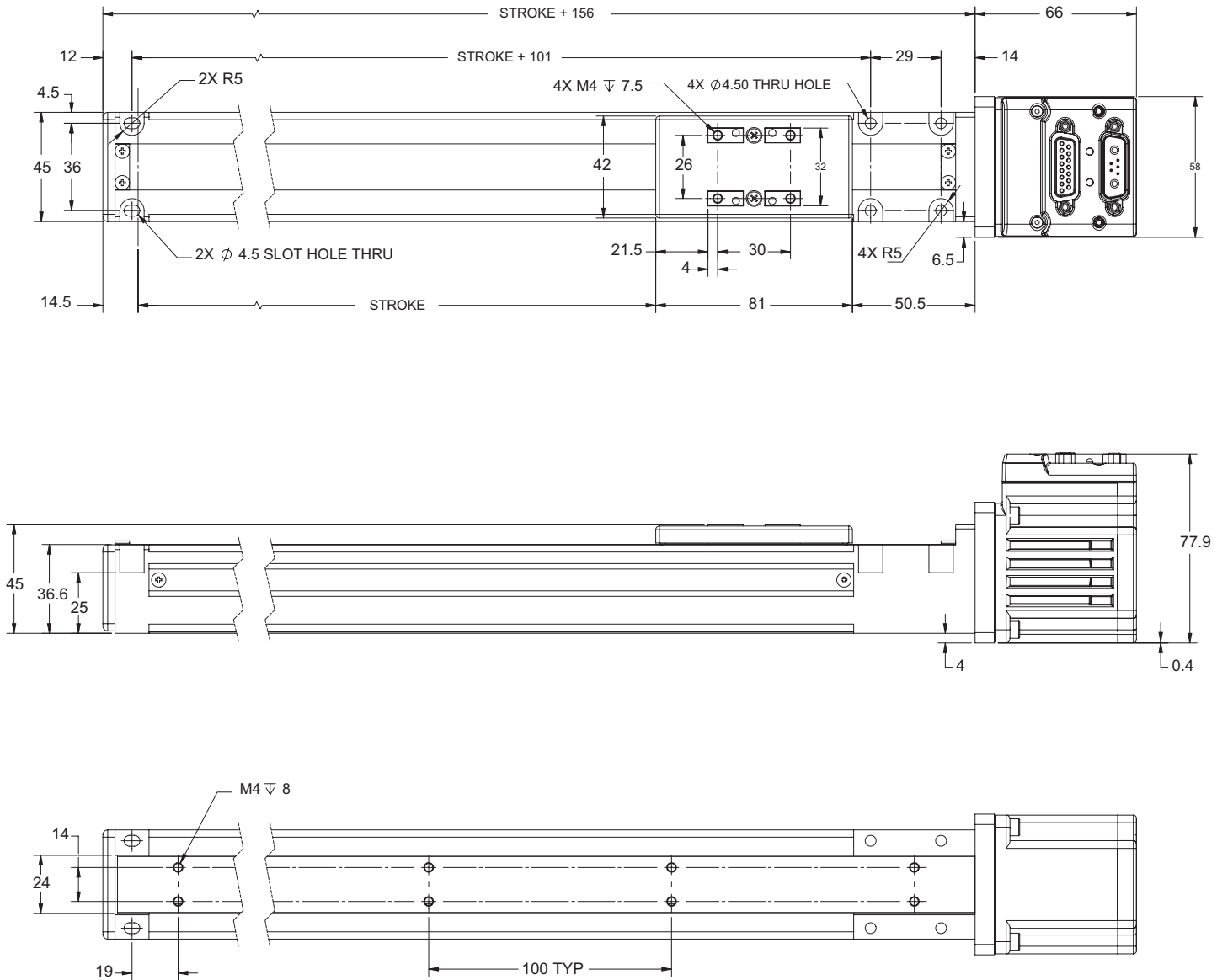
WARNING: Do not exceed these limits

VL-ST45 - Maximum Permissible Carriage Velocity



VL-ST series - Maximum Permissible Screw Speed





Dimensions in millimeters

Note: For part numbers please refer to our Website at www.oemdynamics.com

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