

Eliminator SD™ Actuator

SUPERIOR THRUST CAPABILITY IN ELIMINATOR PLATFORM

The Eliminator SD super duty linear actuator provides superior thrust capacity for your higher thrust industrial applications. Achieve the perfect high precision/high load capacity solution when you combine your servomotor with this heavy-duty steel actuator.



Ideal for a Variety of Applications Including:

- Heavy Pressing / Punching / Staking
- Heavy Lifting
- Riveting / Fastening
- Cycle Testing
- Clamping / Stamping
- Hydraulic Replacement
- And More

Key Features:

- Rugged steel construction with durable anti-rotation feature
- Superior thrust capacity up to 100,000 lbf
- Velocity up to 12 in/sec, stroke up to 48 inches
- Combines with your servomotor to achieve the perfect high-precision/high-load capacity
- 0.002 in/ft standard lead accuracy
- Standard backlash is 0.003 in maximum

SPECIFICATION CHART FOR THE ELIMINATOR SD ACTUATOR

Model Number	Thrust Load Rated	Linear Velocity Max. ¹	Travel Length Max. ²	Frame Size	Lead	Ball Screw Diameter	Ball Screw Max. ¹	Torque @ Ball Screw Max.	Dynamic Capacity Per Million Revs	Dynamic Capacity Per Million Inches	Motor Gearhead Frame Supported Max. ²
	lbr	in/s	in	in	in	in	RPM	in-lb	lbr	lbr	in
SD948	48,000	12.0	48	9.00	1.000	4.00	720	8,490	76,390	76,390	12
SD966	66,000	12.0	48	9.00	1.000	4.00	720	11,670	84,900	84,900	12
SD999	100,000	12.0	42	9.00	1.000	4.00	720	17,684	84,900	84,900	12

Model Number	Inertia 1:1 Zero Stroke ³	Inertia 1:1 Per Inch of Stroke ³	Inertia 2:1 Zero Stroke ³	Inertia 2:1 Per Inch of Stroke ³	Inertia Inline Zero Stroke ³	Inertia Inline Per Inch of Stroke ³	Unit Weight "U" Motor Mount ⁴	Unit Weight "L" Motor Mount ⁴	Weight Per Inch of Stroke ⁴
	lb-in ²	lb-in ²	lb-in ²	lb-in ²	lb-in ²	lb-in ²	lb	lb	lb
SD948	1,099.84	4.7929	216.68	1.1982	211.02	4.7929	595	614	12.07
SD966	1,285.36	4.7929	279.53	1.1982	334.71	4.7929	609	628	12.07
SD999	1,564.22	4.9089	331.93	1.2272	116.89	4.9089	629	648	12.07

¹ Maximum velocity and maximum screw speed may not be achievable at maximum stroke.

² Larger Motor or Gearhead Frames and longer stroke lengths are available upon request.

³ All inertia values are at the input shaft and are representative of typical pulleys, bushings, couplers, etc. Actual values may vary due to motor selection.

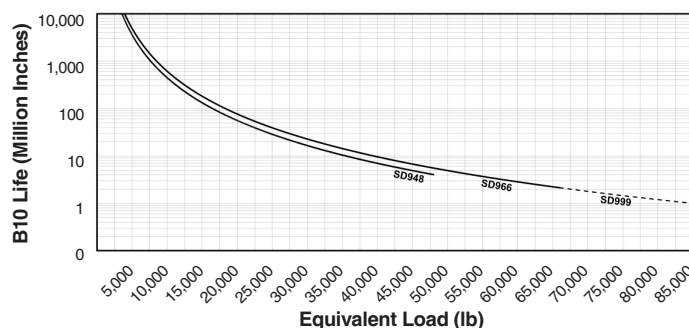
⁴ Weight values are for reference only and vary depending on configuration.

"U" Parallel offset configuration

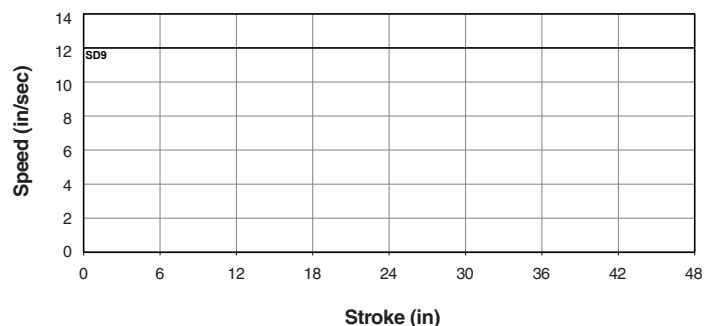
"L" Inline configuration

DATA CURVES FOR THE ELIMINATOR SD ACTUATOR

Dynamic Capacity: Life Vs. Load



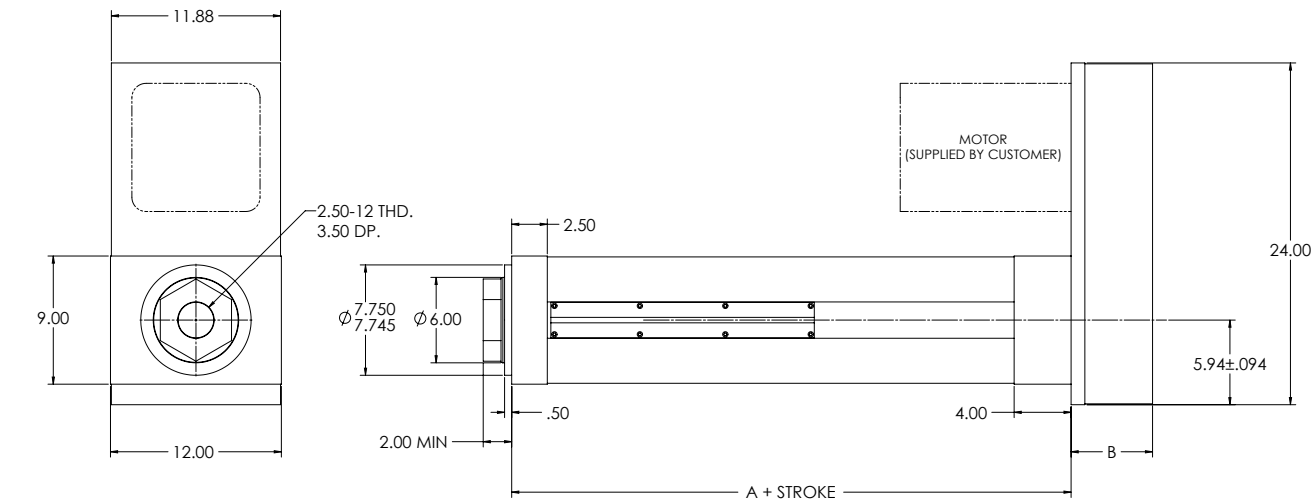
Speed Vs. Stroke



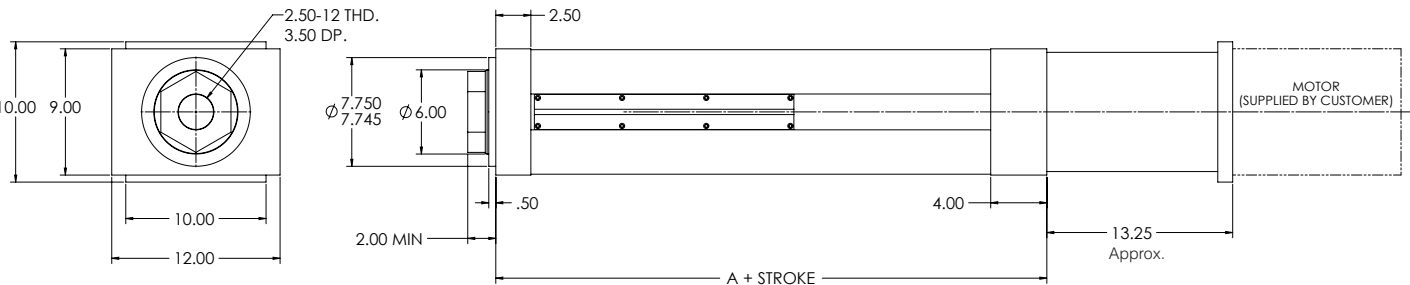
DIMENSIONED DRAWINGS FOR THE ELIMINATOR SD ACTUATOR

Dimensions are in inches and are subject to change without notice.

U-Parallel Offset Motor Configuration



L-Inline Motor Configuration

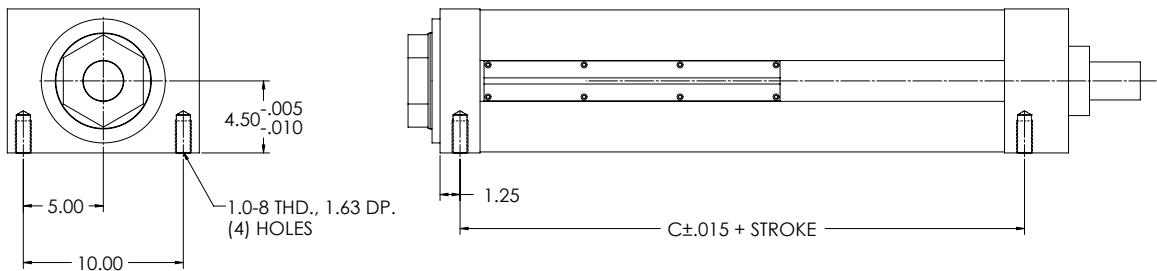


SD U-Parallel Offset and L-Inline Motor Configuration		
Model	A	B
SD948	27.28	5.72
SD966	27.28	5.72
SD999	29.88	6.22

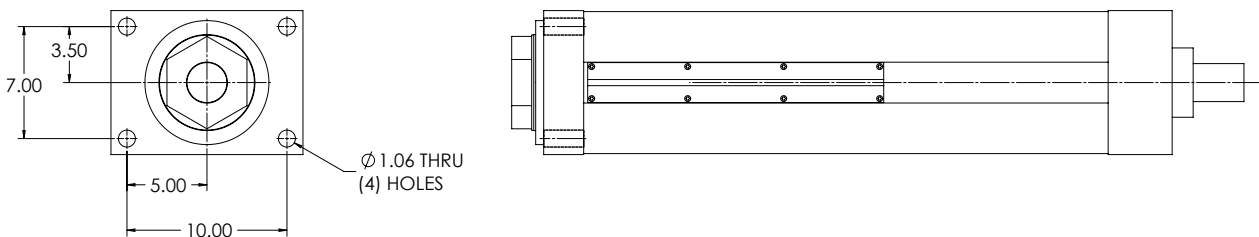
DIMENSIONED DRAWINGS FOR THE ELIMINATOR SD ACTUATOR

Dimensions are in inches and are subject to change without notice.

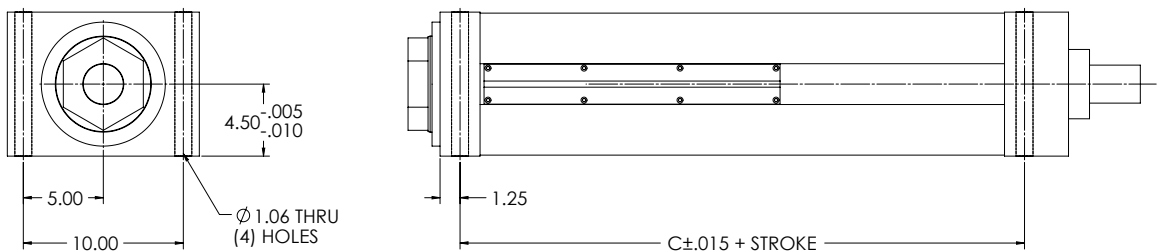
Bottom Mount Dimensions



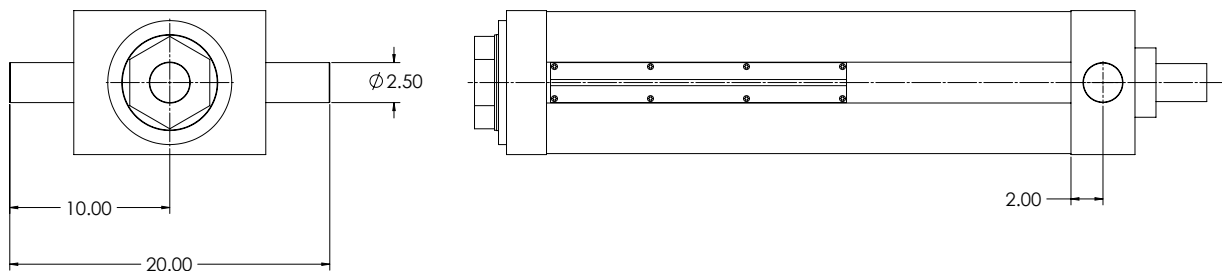
Front Flange Dimensions



Foot Mount Dimensions



Trunnion Mount Dimensions



SD Mounting Dimensions (Bottom Mount, Front Flange, Foot Mount, Trunnion Mount)

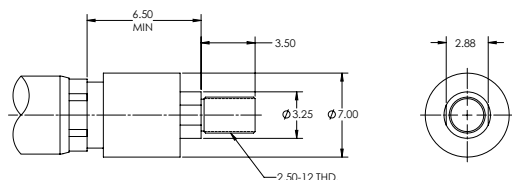
Model	C
SD948	23.28
SD966	23.28
SD999	25.88

DIMENSIONED DRAWINGS FOR THE ELIMINATOR SD ACTUATOR

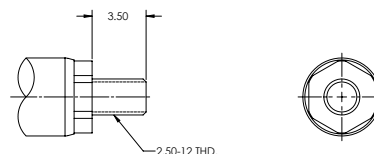
Dimensions are in inches and are subject to change without notice.

Rod End Options

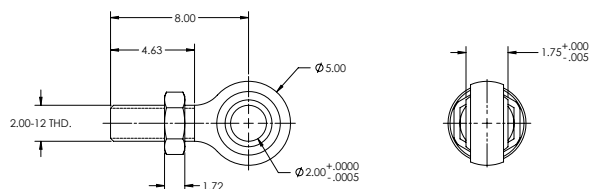
Self-Aligning Coupler



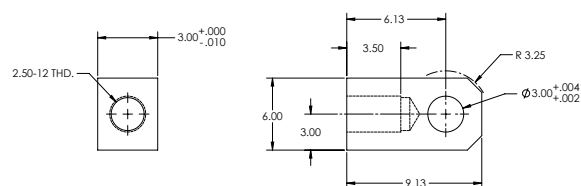
Male Thread



Spherical Rod Eye



Female Eye



ORDERING GUIDE FOR THE ELIMINATOR SD ACTUATOR

Ordering Information

S	D																		
Base No. (Capacity)					Unit Mounting Option					Motor Position					N.C Switch Qty				
SD948: (48,000 lbf)					MB: Bottom Mount					1, 2, 3, 4					0, 1, 2, 3, etc.				
SD966: (66,000 lbf)					FF: Front Flange					0 = In-Line									
SD999: (100,000 lbf)					MF: Foot Mount														
					TR: Rear Trunnion*														
Std. Stroke Length					Rod End Option					Gearbelt Reduction					N.O Switch Qty				
06: 6 in.					E: Female Eye					00: In-Line/Direct Coupled					0, 1, 2, 3, etc.				
12: 12 in.					F: Female Thread					10: 1:1									
18: 18 in.					A: Self-Aligning Coupler					20: 2:1									
24: 24 in.					M: Male Thread														
30: 30 in.					S: Spherical Rod Eye**														
36: 36 in.																			
42: 42 in.					Configuration														
48: 48 in.					L: In-Line														
					U: Parallel Offset														
										Switch Type									
										A: Hall Sourcing PNP									
										B: Hall Sinking NPN									
										C: Reed									
										D: Switch Tracks / No Switches									
										X: Solid Cover / No Switches									

For custom stroke lengths, contact Joyce/Dayton.

* Rear Trunnion not available for SD999

** Spherical Rod Eye not available for SD999