L-TAC LS™

Long Stroke Ball Screw Linear Actuators

- Force from 400 to 2,000 LBf
- Velocity to 40 in/sec
- Sealed from Contamination (IP54)
- Adjustable Limit Switch Positions
- Piston with Rugged Anti-Rotation

L-TAC LS™ Linear Actuator Capabilities:

Model Number	Thrust Load Rated (lb_f)	Linear Velocity Max. (in/sec)	Travel Length[1] Max. (in)	Frame Size (in)	Lead[2] (in)	Ball Screw Diameter (in)	Ball Screw Max. (RPM)	Torque @ Ball Screw Max. (in-lb)	Dynamic Capacity per million revs (lb_f)	Dynamic Capacity per million inches (lb_f)	Motor Gearhead Frame Supported Max. (in)	Unit Weight "U" Motor Mount (lb)	Unit Weight "L" Motor Mount (lb)
LS204-24	400	16	24	2.25	0.50	0.50	1,920	35	1,070	850	3.5	15.0	13.5
LS204-30	400	11	30	2.25	0.50	0.50	1,320	35	1,070	850	3.5	18.0	16.5
LS204-36	400	8	36	2.25	0.50	0.50	960	35	1,070	850	3.5	21.0	19.5
LS209-24	900	9	24	2.25	0.20	0.63	2,700	32	1,070	850	3.5	15.0	13.5
LS209-30	900	8	30	2.25	0.20	0.63	2,400	32	1,070	850	3.5	18.0	16.5
LS209-36	900	5	36	2.25	0.20	0.63	1,500	32	1,070	850	3.5	21.0	19.5
LS305-30	500	40	30	3.25	1.00	1.00	2,400	88	2,300	2,300	4.5	35.2	32.0
LS305-36	500	36	36	3.25	1.00	1.00	2,160	88	2,300	2,300	4.5	40.2	37.0
LS305-42	500	33	42	3.25	1.00	1.00	1,980	88	2,300	2,300	4.5	45.2	42.0
LS305-48	500	25	48	3.25	1.00	1.00	1,500	88	2,300	2,300	4.5	50.2	47.0
LS310-30	1,000	20	30	3.25	0.50	1.00	2,400	88	5,350	4,250	4.5	35.2	32.0
LS310-36	1,000	18	36	3.25	0.50	1.00	2,160	88	5,350	4,250	4.5	40.2	37.0
LS310-42	1,000	16.5	42	3.25	0.50	1.00	1,980	88	5,350	4,250	4.5	45.2	42.0
LS310-48	1,000	12.5	48	3.25	0.50	1.00	1,500	88	5,350	4,250	4.5	50.2	47.0
LS320-30	2,000	10	30	3.25	0.25	1.00	2,400	88	5,475	3,450	4.5	35.2	32.0
LS320-36	2,000	9	36	3.25	0.25	1.00	2,160	88	5,475	3,450	4.5	40.2	37.0
LS320-42	2,000	8.25	42	3.25	0.25	1.00	1,980	88	5,475	3,450	4.5	45.2	42.0
LS320-48	2,000	6.25	48	3.25	0.25	1.00	1,500	88	5,475	3,450	4.5	50.2	47.0

[1] Intermediate lengths are available. [2] Lead accuracy is 0.003 in/ft; Backlash is 0.004 in max.

EDRIVE® ACTUATORS

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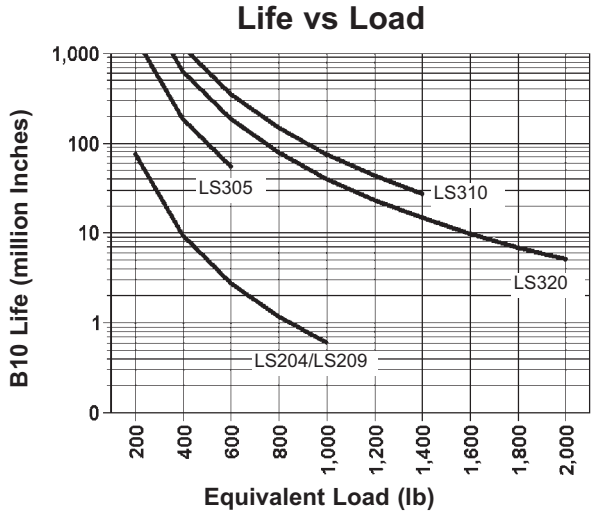
Graph: Life Vs. Load



EQUIVALENT LOAD is the average force over the working stroke, weighted proportionately to the distance traveled. For constant force loads, the equivalent load is the same as the typical or average load. Where forces vary due to gravity, angle of actuator, acceleration and deceleration, friction, and changing dynamic loads at different positions, it is best to determine the equivalent load in order to most accurately predict the B10 life of the actuator.

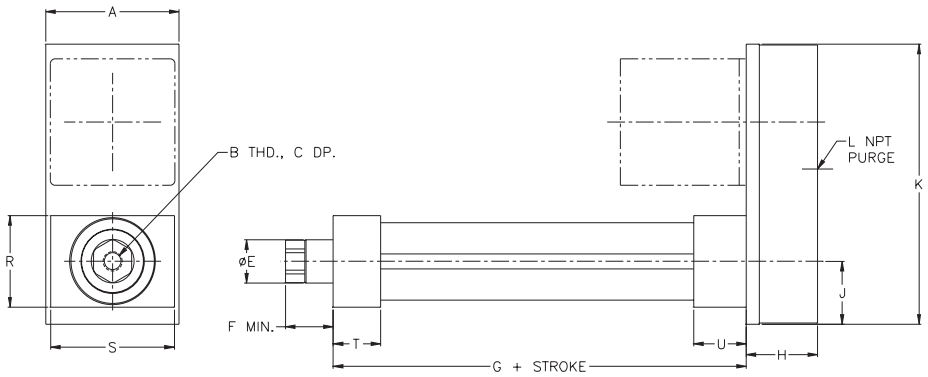
$$F = \sqrt[3]{\frac{L_1(F_1)^3 + L_2(F_2)^3 + L_3(F_3)^3 + L_4(F_4)^3 + \ldots\ldots L_n(F_n)^3}{L}}$$

Where: F_n is the calculated force for segment "n" with travel length of L_n and total travel L.

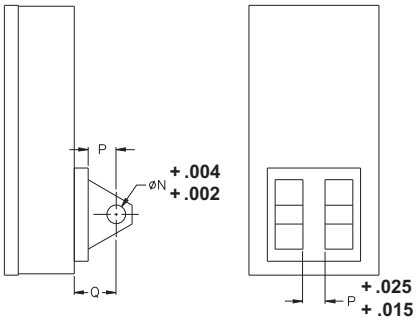
Find the intersection of this value and the appropriate curve. The value on the scale to the left reflects the B10 life of the actuator.

L-TAC LS™ General Dimensions

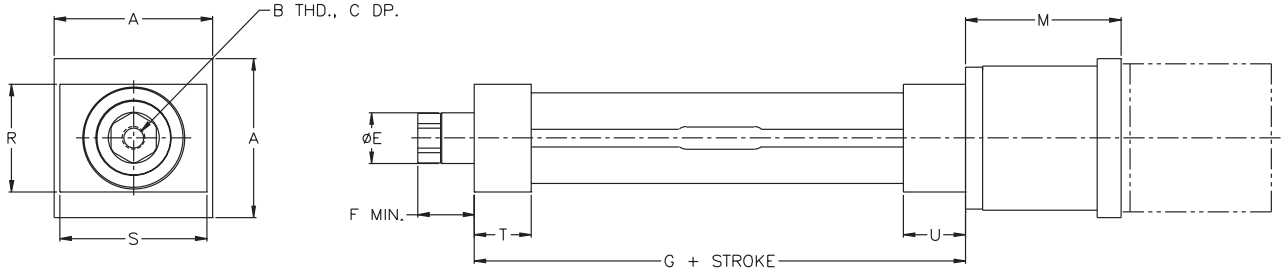
U-Parallel Offset Motor Configuration



Rear Clevis Dimensions



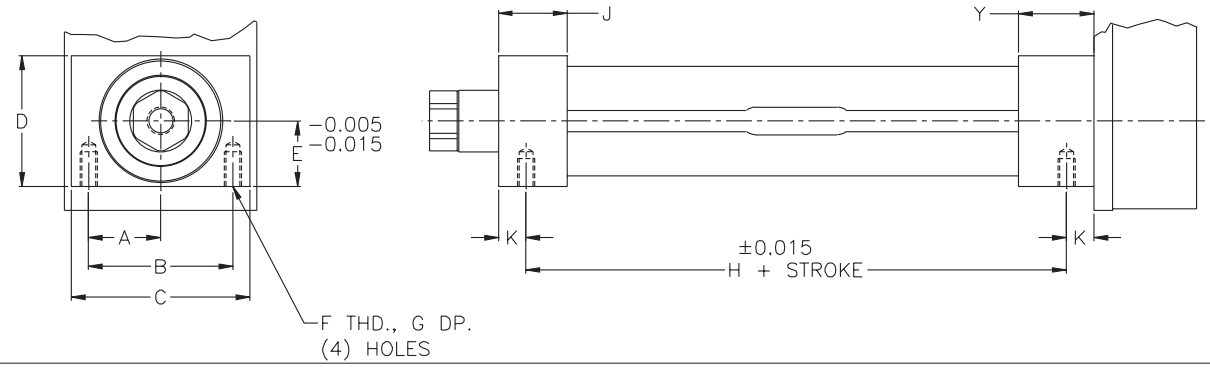
L-Inline Motor Configuration



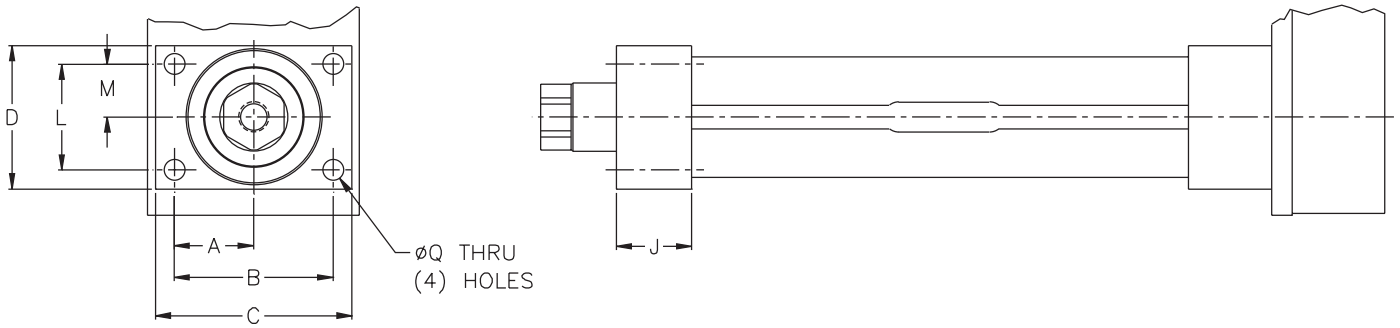
VecTac VT U-Parallel Offset, L-Inline and Rear Clevis Dimensions

Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
LS204	3.50	1/2-20	0.63	2.25	1.13	1.25	7.84	1.88	1.63	7.25	1/8	3.44	0.50	0.75	1.13	2.38	3.25	1.00	1.00
LS209	3.50	1/2-20	0.63	2.25	1.13	1.25	7.84	1.88	1.63	7.25	1/8	3.44	0.50	0.75	1.13	2.38	3.25	1.00	1.00
LS305	4.50	3/4-16	0.88	3.25	1.75	1.40	10.16	2.47	2.38	9.63	1/8	3.97	0.75	1.25	1.88	3.38	4.50	1.25	1.38
LS310	4.50	3/4-16	0.88	3.25	1.75	1.50	10.16	2.47	2.38	9.63	1/8	3.97	0.75	1.25	1.88	3.38	4.50	1.25	1.38
LS320	4.50	3/4-16	0.88	3.25	1.75	1.50	10.16	2.47	2.38	9.63	1/8	3.97	0.75	1.25	1.88	3.38	4.50	1.25	1.38

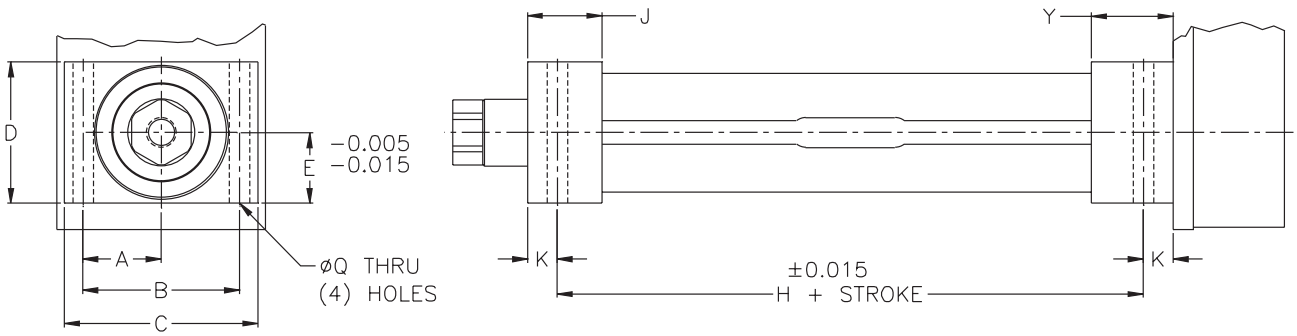
Bottom Mount Dimensions



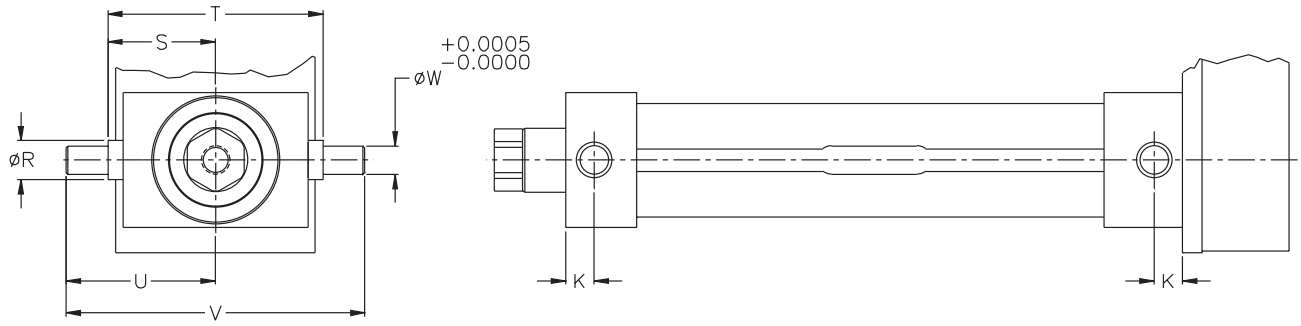
Front Flange Dimensions



Foot Mount Dimensions



Trunnion Mount Dimensions

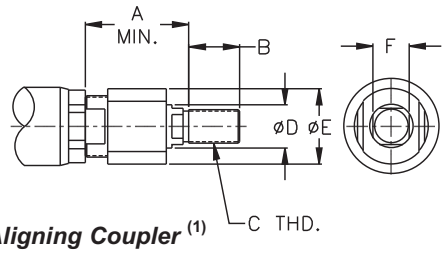


Unit Mounting Dimensions

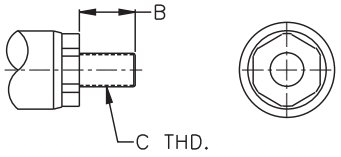
Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y
LS2	1.31	2.63	3.25	2.38	1.19	5/16-18	0.63	6.84	1.00	0.50	1.75	0.88	2.25	0.25	0.34	0.69	1.89	3.78	2.63	5.25	0.50	4.22	1.00
LS3	1.88	3.75	4.50	3.38	1.69	3/8-16	0.75	9.16	1.25	0.50	2.63	1.31	3.25	0.25	0.41	0.94	2.52	5.03	3.50	7.00	0.75	6.28	1.38

L-TAC LS™

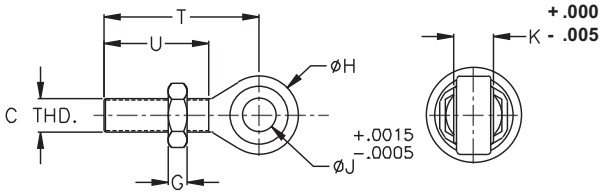
Rod End Options



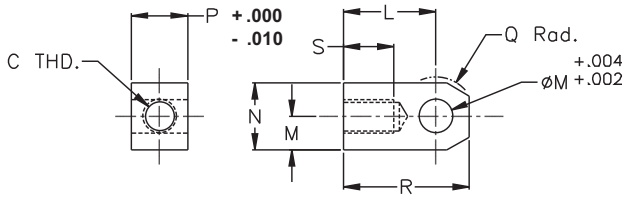
Self-Aligning Coupler (1)



Male Thread



Spherical Rod Eye



Female Eye

Rod End Options

Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U
LS2	2.00	0.75	1/2-20	0.63	1.25	0.56	0.31	1.31	0.50	0.63	1.50	0.50	1.00	0.75	0.63	2.00	0.75	2.44	1.50
LS3	2.31	1.13	3/4-16	0.97	1.75	0.88	0.42	1.75	0.75	0.88	2.06	0.75	1.50	1.25	0.88	2.81	1.13	2.88	1.75

(1) Zero backlash version also available

How To Order:

Base Number

L S

Frame Size (in):
2,3

Capacity (lb): x100

Standard Stroke Length (in):

Options

Unit Mounting Option:
MB Bottom Mount **MF** Foot Mount

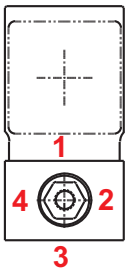
Vertical Mounting Only:
FF Front Flange **TF** Front Trunnion
TR Rear Trunnion **CR** Rear Clevis

End Effector/Rod End:
E Female Eye
F Female Thread
A Self-Aligning Coupler
M Male Thread
S Spherical Rod Eye

Configuration:
L- In-Line
U- Parallel Offset

Gearbelt Reduction:
00- Direct Coupled
10- 1:1
20- 2:1

Motor Position
1, 2, 3, 4
0 = Inline
(refer to figure)



Special

Custom Length (in):
00.00

N.C. Switch Qty:
0, 1, 2, 3, etc.

N.O. Switch Qty:
0, 1, 2, 3, etc.

Switch Type:
A - Hall Sourcing PNP
B - Hall Sinking NPN
C - Reed

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