

X-LRQ-DEC Series Datasheet



- 75, 150, 300, 450, 600 mm travel
- Up to 10 μm accuracy over 600 mm travel
- Up to 205 mm/s speed and up to 300 N thrust
- 100 kg load capacity
- Inline and parallel drive configurations
- Includes stainless steel dust cover
- Ball screw and lead screw configurations
- Integrated linear encoders with 50 nm resolution provide slip/stall detection and position correction
- Built-in controller; daisy-chains with other Zaber products
- Custom versions available

X-LRQ-DEC Series Overview

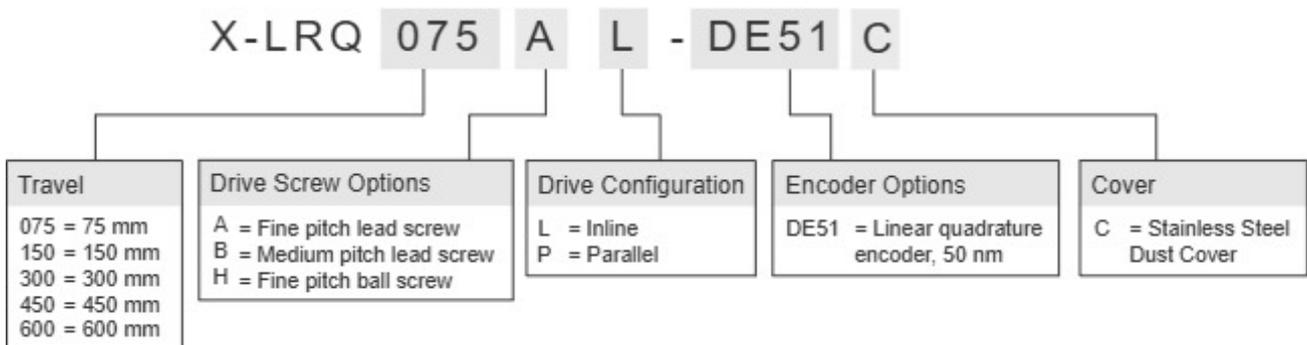
Zaber's X-LRQ-DEC Series devices are computer-controlled, motorized linear stages with high stiffness, load, and lifetime capabilities in a compact size. An integrated linear encoder combined with stage calibration provides high accuracy positioning over the full travel of the device. Each device is available in either an inline or parallel drive configuration. A flexible stainless steel dust cover prevents the ingress of small objects. They are stand-alone units requiring only a standard 24 V or 48 V power supply. An optional indexed knob provides convenient manual control for versatile operation even without a computer.

These stages connect to the RS-232 port or USB port of any computer, and they can be daisy-chained with any other Zaber products. The daisy-chain also shares power, making it possible for multiple X-Series products to share a single power supply. Convenient locking, 4-pin, M8 connectors on the unit allow for secure connection between units.

At only 48 mm high, these stages are excellent for applications where a low profile is required. The X-LRQ-DEC's innovative design allows speeds up to 205 mm/s and loads up to 100 kg. Like all of Zaber's products, the X-LRQ-DEC Series is designed to be 'plug and play' and very easy to set up and operate. These stages can bolt together into XY and XYZ systems. Some multi axis configurations may require additional accessories, please contact Zaber Technical Support to ensure the correct ones are selected.

For more information visit: <https://www.zaber.com/products/linear-stages/X-LRQ-DEC>

X-LRQ-DEC Series Part Numbering & Options



X-LRQ-DEC Series Drawings

- [X-LRQxL-DEC.png \(Dimension Drawing for the X-LRQxL-DEC\)](#)
- [X-LRQxP-DEC.png \(Dimension Drawing for the X-LRQxP-DEC\)](#)

X-LRQ-DEC Series Specifications

Built-in Controller	
Repeatability	< 2 μm (< 0.000079")
Encoder Type	Linear quadrature encoder
Encoder Resolution	50 nm
Communication Interface	RS-232
Communication Protocol	Zaber ASCII (Default), Zaber Binary
Data Cable Connection	Locking 4-pin M8
Maximum Centered Load	1000 N (224.3 lb)
Maximum Moment (Pitch)	30 N-m (22.1 ft-lb)
Maximum Moment (Roll)	30 N-m (22.1 ft-lb)
Maximum Moment (Yaw)	30 N-m (22.1 ft-lb)
Stiffness in Pitch	250 N-m/ $^{\circ}$ (70 $\mu\text{rad/N-m}$)
Stiffness in Roll	600 N-m/ $^{\circ}$ (29 $\mu\text{rad/N-m}$)
Stiffness in Yaw	430 N-m/ $^{\circ}$ (41 $\mu\text{rad/N-m}$)
Power Supply	24-48 VDC
Power Plug	2-pin screw terminal
Maximum Current Draw	1900 mA
Motor Steps Per Rev	200
Motor Type	Stepper (2 phase)
Motor Rated Current	2300 mA/phase
Inductance	2.8 mH/phase
Default Resolution	1/64 of a step
Guide Type	Recirculating Ball Linear Guide
Limit or Home Sensing	Magnetic home sensor
Manual Control	Indexed knob with push switch
Axes of Motion	1
LED Indicators	Yes
Mounting Interface	M6 and M3 threaded holes
Operating Temperature Range	0 to 50 $^{\circ}\text{C}$
CE Compliant	Yes
Vacuum Compatible	No

Part Number	Microstep Size (Default Resolution)	Travel Range	Accuracy (unidirectional)	Backlash
X-LRQ075AL-DE51C	0.09921875 µm	75 mm (2.953")	10 µm (0.000394")	< 5 µm (< 0.000197")
X-LRQ075BL-DE51C	0.49609375 µm	75 mm (2.953")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ075HL-DE51C	0.1953125 µm	75 mm (2.953")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ150AL-DE51C	0.09921875 µm	150 mm (5.905")	10 µm (0.000394")	< 5 µm (< 0.000197")
X-LRQ150BL-DE51C	0.49609375 µm	150 mm (5.905")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ150HL-DE51C	0.1953125 µm	150 mm (5.905")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ300AL-DE51C	0.09921875 µm	300 mm (11.811")	10 µm (0.000394")	< 5 µm (< 0.000197")
X-LRQ300BL-DE51C	0.49609375 µm	300 mm (11.811")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ300HL-DE51C	0.1953125 µm	300 mm (11.811")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ450AL-DE51C	0.09921875 µm	450 mm (17.716")	10 µm (0.000394")	< 5 µm (< 0.000197")
X-LRQ450BL-DE51C	0.49609375 µm	450 mm (17.716")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ450HL-DE51C	0.1953125 µm	450 mm (17.716")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ600AL-DE51C	0.09921875 µm	600 mm (23.622")	10 µm (0.000394")	< 5 µm (< 0.000197")
X-LRQ600BL-DE51C	0.49609375 µm	600 mm (23.622")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ600HL-DE51C	0.1953125 µm	600 mm (23.622")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ075AP-DE51C	0.09921875 µm	75 mm (2.953")	10 µm (0.000394")	< 5 µm (< 0.000197")
X-LRQ075BP-DE51C	0.49609375 µm	75 mm (2.953")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ075HP-DE51C	0.1953125 µm	75 mm (2.953")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ150AP-DE51C	0.09921875 µm	150 mm (5.905")	10 µm (0.000394")	< 5 µm (< 0.000197")
X-LRQ150BP-DE51C	0.49609375 µm	150 mm (5.905")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ150HP-DE51C	0.1953125 µm	150 mm (5.905")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
		300 mm	10 µm	< 5 µm

Part Number	Microstep Size (Default Resolution)	Travel Range	Accuracy (unidirectional)	Backlash
X-LRQ300AP-DE51C	0.09921875 µm	(11.811")	(0.000394")	(< 0.000197")
X-LRQ300BP-DE51C	0.49609375 µm	300 mm (11.811")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ300HP-DE51C	0.1953125 µm	300 mm (11.811")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ450AP-DE51C	0.09921875 µm	450 mm (17.716")	10 µm (0.000394")	< 5 µm (< 0.000197")
X-LRQ450BP-DE51C	0.49609375 µm	450 mm (17.716")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ450HP-DE51C	0.1953125 µm	450 mm (17.716")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ600AP-DE51C	0.09921875 µm	600 mm (23.622")	10 µm (0.000394")	< 5 µm (< 0.000197")
X-LRQ600BP-DE51C	0.49609375 µm	600 mm (23.622")	13 µm (0.000512")	< 6.5 µm (< 0.000256")
X-LRQ600HP-DE51C	0.1953125 µm	600 mm (23.622")	13 µm (0.000512")	< 6.5 µm (< 0.000256")

Part Number	Maximum Speed	Minimum Speed	Speed Resolution	Peak Thrust
X-LRQ075AL-DE51C	54 mm/s (2.126"/s)	0.000061 mm/s (0.000002"/s)	0.000061 mm/s (0.000002"/s)	230 N (51.6 lb)
X-LRQ075BL-DE51C	270 mm/s (10.630"/s)	0.000303 mm/s (0.000012"/s)	0.000303 mm/s (0.000012"/s)	150 N (33.6 lb)
X-LRQ075HL-DE51C	110 mm/s (4.331"/s)	0.000119 mm/s (0.000005"/s)	0.000119 mm/s (0.000005"/s)	500 N (112.1 lb)
X-LRQ150AL-DE51C	54 mm/s (2.126"/s)	0.000061 mm/s (0.000002"/s)	0.000061 mm/s (0.000002"/s)	230 N (51.6 lb)
X-LRQ150BL-DE51C	270 mm/s (10.630"/s)	0.000303 mm/s (0.000012"/s)	0.000303 mm/s (0.000012"/s)	150 N (33.6 lb)
X-LRQ150HL-DE51C	110 mm/s (4.331"/s)	0.000119 mm/s (0.000005"/s)	0.000119 mm/s (0.000005"/s)	500 N (112.1 lb)
X-LRQ300AL-DE51C	54 mm/s (2.126"/s)	0.000061 mm/s (0.000002"/s)	0.000061 mm/s (0.000002"/s)	230 N (51.6 lb)
X-LRQ300BL-DE51C	270 mm/s (10.630"/s)	0.000303 mm/s (0.000012"/s)	0.000303 mm/s (0.000012"/s)	150 N (33.6 lb)
X-LRQ300HL-DE51C	110 mm/s (4.331"/s)	0.000119 mm/s (0.000005"/s)	0.000119 mm/s (0.000005"/s)	500 N (112.1 lb)
X-LRQ450AL-DE51C	54 mm/s (2.126"/s)	0.000061 mm/s (0.000002"/s)	0.000061 mm/s (0.000002"/s)	230 N (51.6 lb)

Part Number	Maximum Speed	Minimum Speed	Speed Resolution	Peak Thrust
X-LRQ450BL-DE51C	270 mm/s (10.630"/s)	0.000303 mm/s (0.000012"/s)	0.000303 mm/s (0.000012"/s)	150 N (33.6 lb)
X-LRQ450HL-DE51C	110 mm/s (4.331"/s)	0.000119 mm/s (0.000005"/s)	0.000119 mm/s (0.000005"/s)	500 N (112.1 lb)
X-LRQ600AL-DE51C	54 mm/s (2.126"/s)	0.000061 mm/s (0.000002"/s)	0.000061 mm/s (0.000002"/s)	230 N (51.6 lb)
X-LRQ600BL-DE51C	270 mm/s (10.630"/s)	0.000303 mm/s (0.000012"/s)	0.000303 mm/s (0.000012"/s)	150 N (33.6 lb)
X-LRQ600HL-DE51C	110 mm/s (4.331"/s)	0.000119 mm/s (0.000005"/s)	0.000119 mm/s (0.000005"/s)	500 N (112.1 lb)
X-LRQ075AP-DE51C	54 mm/s (2.126"/s)	0.000061 mm/s (0.000002"/s)	0.000061 mm/s (0.000002"/s)	230 N (51.6 lb)
X-LRQ075BP-DE51C	270 mm/s (10.630"/s)	0.000303 mm/s (0.000012"/s)	0.000303 mm/s (0.000012"/s)	150 N (33.6 lb)
X-LRQ075HP-DE51C	110 mm/s (4.331"/s)	0.000119 mm/s (0.000005"/s)	0.000119 mm/s (0.000005"/s)	500 N (112.1 lb)
X-LRQ150AP-DE51C	54 mm/s (2.126"/s)	0.000061 mm/s (0.000002"/s)	0.000061 mm/s (0.000002"/s)	230 N (51.6 lb)
X-LRQ150BP-DE51C	270 mm/s (10.630"/s)	0.000303 mm/s (0.000012"/s)	0.000303 mm/s (0.000012"/s)	150 N (33.6 lb)
X-LRQ150HP-DE51C	110 mm/s (4.331"/s)	0.000119 mm/s (0.000005"/s)	0.000119 mm/s (0.000005"/s)	500 N (112.1 lb)
X-LRQ300AP-DE51C	54 mm/s (2.126"/s)	0.000061 mm/s (0.000002"/s)	0.000061 mm/s (0.000002"/s)	230 N (51.6 lb)
X-LRQ300BP-DE51C	270 mm/s (10.630"/s)	0.000303 mm/s (0.000012"/s)	0.000303 mm/s (0.000012"/s)	150 N (33.6 lb)
X-LRQ300HP-DE51C	110 mm/s (4.331"/s)	0.000119 mm/s (0.000005"/s)	0.000119 mm/s (0.000005"/s)	500 N (112.1 lb)
X-LRQ450AP-DE51C	54 mm/s (2.126"/s)	0.000061 mm/s (0.000002"/s)	0.000061 mm/s (0.000002"/s)	230 N (51.6 lb)
X-LRQ450BP-DE51C	270 mm/s (10.630"/s)	0.000303 mm/s (0.000012"/s)	0.000303 mm/s (0.000012"/s)	150 N (33.6 lb)
X-LRQ450HP-DE51C	110 mm/s (4.331"/s)	0.000119 mm/s (0.000005"/s)	0.000119 mm/s (0.000005"/s)	500 N (112.1 lb)
X-LRQ600AP-DE51C	54 mm/s (2.126"/s)	0.000061 mm/s (0.000002"/s)	0.000061 mm/s (0.000002"/s)	230 N (51.6 lb)
X-LRQ600BP-DE51C	270 mm/s (10.630"/s)	0.000303 mm/s (0.000012"/s)	0.000303 mm/s (0.000012"/s)	150 N (33.6 lb)
X-LRQ600HP-DE51C	110 mm/s (4.331"/s)	0.000119 mm/s (0.000005"/s)	0.000119 mm/s (0.000005"/s)	500 N (112.1 lb)

Part Number	Back-driving Force*	Maximum Continuous Thrust	Vertical Runout	Horizontal Runout
X-LRQ075AL-DE51C	Non-back-driving	100 N (22.4 lb)	< 20 µm (< 0.000787")	< 20 µm (< 0.000787")
X-LRQ075BL-DE51C	(± 30%) 106 N (23.8 lb)	100 N (22.4 lb)	< 20 µm (< 0.000787")	< 20 µm (< 0.000787")
X-LRQ075HL-DE51C	(± 30%) 106 N (23.8 lb)	200 N (44.9 lb)	< 20 µm (< 0.000787")	< 20 µm (< 0.000787")
X-LRQ150AL-DE51C	Non-back-driving	100 N (22.4 lb)	< 25 µm (< 0.000984")	< 20 µm (< 0.000787")
X-LRQ150BL-DE51C	(± 30%) 106 N (23.8 lb)	100 N (22.4 lb)	< 25 µm (< 0.000984")	< 20 µm (< 0.000787")
X-LRQ150HL-DE51C	(± 30%) 106 N (23.8 lb)	200 N (44.9 lb)	< 25 µm (< 0.000984")	< 20 µm (< 0.000787")
X-LRQ300AL-DE51C	Non-back-driving	100 N (22.4 lb)	< 35 µm (< 0.001378")	< 30 µm (< 0.001181")
X-LRQ300BL-DE51C	(± 30%) 106 N (23.8 lb)	100 N (22.4 lb)	< 35 µm (< 0.001378")	< 30 µm (< 0.001181")
X-LRQ300HL-DE51C	(± 30%) 106 N (23.8 lb)	200 N (44.9 lb)	< 35 µm (< 0.001378")	< 30 µm (< 0.001181")
X-LRQ450AL-DE51C	Non-back-driving	100 N (22.4 lb)	< 45 µm (< 0.001772")	< 40 µm (< 0.001575")
X-LRQ450BL-DE51C	(± 30%) 106 N (23.8 lb)	100 N (22.4 lb)	< 45 µm (< 0.001772")	< 40 µm (< 0.001575")
X-LRQ450HL-DE51C	(± 30%) 106 N (23.8 lb)	200 N (44.9 lb)	< 45 µm (< 0.001772")	< 40 µm (< 0.001575")
X-LRQ600AL-DE51C	Non-back-driving	100 N (22.4 lb)	< 75 µm (< 0.002953")	< 60 µm (< 0.002362")
X-LRQ600BL-DE51C	(± 30%) 106 N (23.8 lb)	100 N (22.4 lb)	< 75 µm (< 0.002953")	< 60 µm (< 0.002362")
X-LRQ600HL-DE51C	(± 30%) 106 N (23.8 lb)	200 N (44.9 lb)	< 75 µm (< 0.002953")	< 60 µm (< 0.002362")
X-LRQ075AP-DE51C	Non-back-driving	100 N (22.4 lb)	< 20 µm (< 0.000787")	< 20 µm (< 0.000787")
X-LRQ075BP-DE51C	(± 30%) 136 N (30.5 lb)	100 N (22.4 lb)	< 20 µm (< 0.000787")	< 20 µm (< 0.000787")
X-LRQ075HP-DE51C	(± 30%) 136 N (30.5 lb)	200 N (44.9 lb)	< 20 µm (< 0.000787")	< 20 µm (< 0.000787")
X-LRQ150AP-DE51C	Non-back-driving	100 N (22.4 lb)	< 25 µm (< 0.000984")	< 20 µm (< 0.000787")
X-LRQ150BP-DE51C	(± 30%) 136 N (30.5 lb)	100 N (22.4 lb)	< 25 µm (< 0.000984")	< 20 µm (< 0.000787")
X-LRQ150HP-DE51C	(± 30%) 136 N (30.5 lb)	200 N (44.9 lb)	< 25 µm (< 0.000984")	< 20 µm (< 0.000787")
			< 35 µm	< 30 µm

Part Number	Back-driving Force*	Maximum Continuous Thrust	Vertical Runout	Horizontal Runout
X-LRQ300AP-DE51C	Non-back-driving	100 N (22.4 lb)	(< 0.001378")	(< 0.001181")
X-LRQ300BP-DE51C	(± 30%) 136 N (30.5 lb)	100 N (22.4 lb)	< 35 µm (< 0.001378")	< 30 µm (< 0.001181")
X-LRQ300HP-DE51C	(± 30%) 136 N (30.5 lb)	200 N (44.9 lb)	< 35 µm (< 0.001378")	< 30 µm (< 0.001181")
X-LRQ450AP-DE51C	Non-back-driving	100 N (22.4 lb)	< 45 µm (< 0.001772")	< 40 µm (< 0.001575")
X-LRQ450BP-DE51C	(± 30%) 136 N (30.5 lb)	100 N (22.4 lb)	< 45 µm (< 0.001772")	< 40 µm (< 0.001575")
X-LRQ450HP-DE51C	(± 30%) 136 N (30.5 lb)	200 N (44.9 lb)	< 45 µm (< 0.001772")	< 40 µm (< 0.001575")
X-LRQ600AP-DE51C	Non-back-driving	100 N (22.4 lb)	< 75 µm (< 0.002953")	< 60 µm (< 0.002362")
X-LRQ600BP-DE51C	(± 30%) 136 N (30.5 lb)	100 N (22.4 lb)	< 75 µm (< 0.002953")	< 60 µm (< 0.002362")
X-LRQ600HP-DE51C	(± 30%) 136 N (30.5 lb)	200 N (44.9 lb)	< 75 µm (< 0.002953")	< 60 µm (< 0.002362")

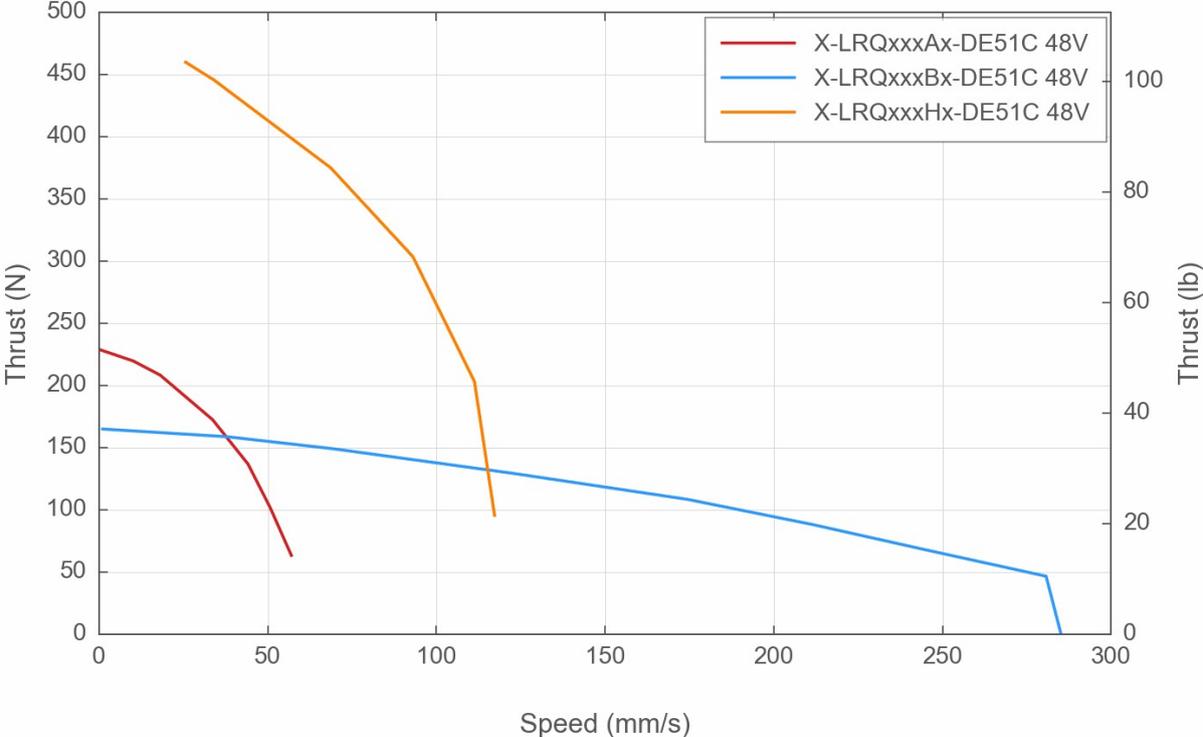
Part Number	Pitch	Roll	Yaw	Linear Motion Per Motor Rev
X-LRQ075AL-DE51C	0.025° (0.436 mrad)	0.01° (0.174 mrad)	0.02° (0.349 mrad)	1.27 mm (0.050")
X-LRQ075BL-DE51C	0.025° (0.436 mrad)	0.01° (0.174 mrad)	0.02° (0.349 mrad)	6.35 mm (0.250")
X-LRQ075HL-DE51C	0.025° (0.436 mrad)	0.01° (0.174 mrad)	0.02° (0.349 mrad)	2.5 mm (0.098")
X-LRQ150AL-DE51C	0.03° (0.523 mrad)	0.015° (0.262 mrad)	0.02° (0.349 mrad)	1.27 mm (0.050")
X-LRQ150BL-DE51C	0.03° (0.523 mrad)	0.015° (0.262 mrad)	0.02° (0.349 mrad)	6.35 mm (0.250")
X-LRQ150HL-DE51C	0.03° (0.523 mrad)	0.015° (0.262 mrad)	0.02° (0.349 mrad)	2.5 mm (0.098")
X-LRQ300AL-DE51C	0.034° (0.593 mrad)	0.015° (0.262 mrad)	0.03° (0.523 mrad)	1.27 mm (0.050")
X-LRQ300BL-DE51C	0.034° (0.593 mrad)	0.015° (0.262 mrad)	0.03° (0.523 mrad)	6.35 mm (0.250")
X-LRQ300HL-DE51C	0.034° (0.593 mrad)	0.015° (0.262 mrad)	0.03° (0.523 mrad)	2.5 mm (0.098")
X-LRQ450AL-DE51C	0.04° (0.698 mrad)	0.025° (0.436 mrad)	0.04° (0.698 mrad)	1.27 mm (0.050")

Part Number	Pitch	Roll	Yaw	Linear Motion Per Motor Rev
X-LRQ450BL-DE51C	0.04° (0.698 mrad)	0.025° (0.436 mrad)	0.04° (0.698 mrad)	6.35 mm (0.250")
X-LRQ450HL-DE51C	0.04° (0.698 mrad)	0.025° (0.436 mrad)	0.04° (0.698 mrad)	2.5 mm (0.098")
X-LRQ600AL-DE51C	0.045° (0.785 mrad)	0.035° (0.611 mrad)	0.04° (0.698 mrad)	1.27 mm (0.050")
X-LRQ600BL-DE51C	0.045° (0.785 mrad)	0.035° (0.611 mrad)	0.04° (0.698 mrad)	6.35 mm (0.250")
X-LRQ600HL-DE51C	0.045° (0.785 mrad)	0.035° (0.611 mrad)	0.04° (0.698 mrad)	2.5 mm (0.098")
X-LRQ075AP-DE51C	0.025° (0.436 mrad)	0.01° (0.174 mrad)	0.02° (0.349 mrad)	1.27 mm (0.050")
X-LRQ075BP-DE51C	0.025° (0.436 mrad)	0.01° (0.174 mrad)	0.02° (0.349 mrad)	6.35 mm (0.250")
X-LRQ075HP-DE51C	0.025° (0.436 mrad)	0.01° (0.174 mrad)	0.02° (0.349 mrad)	2.5 mm (0.098")
X-LRQ150AP-DE51C	0.03° (0.523 mrad)	0.015° (0.262 mrad)	0.02° (0.349 mrad)	1.27 mm (0.050")
X-LRQ150BP-DE51C	0.03° (0.523 mrad)	0.015° (0.262 mrad)	0.02° (0.349 mrad)	6.35 mm (0.250")
X-LRQ150HP-DE51C	0.03° (0.523 mrad)	0.015° (0.262 mrad)	0.02° (0.349 mrad)	2.5 mm (0.098")
X-LRQ300AP-DE51C	0.034° (0.593 mrad)	0.015° (0.262 mrad)	0.03° (0.523 mrad)	1.27 mm (0.050")
X-LRQ300BP-DE51C	0.034° (0.593 mrad)	0.015° (0.262 mrad)	0.03° (0.523 mrad)	6.35 mm (0.250")
X-LRQ300HP-DE51C	0.034° (0.593 mrad)	0.015° (0.262 mrad)	0.03° (0.523 mrad)	2.5 mm (0.098")
X-LRQ450AP-DE51C	0.04° (0.698 mrad)	0.025° (0.436 mrad)	0.04° (0.698 mrad)	1.27 mm (0.050")
X-LRQ450BP-DE51C	0.04° (0.698 mrad)	0.025° (0.436 mrad)	0.04° (0.698 mrad)	6.35 mm (0.250")
X-LRQ450HP-DE51C	0.04° (0.698 mrad)	0.025° (0.436 mrad)	0.04° (0.698 mrad)	2.5 mm (0.098")
X-LRQ600AP-DE51C	0.045° (0.785 mrad)	0.035° (0.611 mrad)	0.04° (0.698 mrad)	1.27 mm (0.050")
X-LRQ600BP-DE51C	0.045° (0.785 mrad)	0.035° (0.611 mrad)	0.04° (0.698 mrad)	6.35 mm (0.250")
X-LRQ600HP-DE51C	0.045° (0.785 mrad)	0.035° (0.611 mrad)	0.04° (0.698 mrad)	2.5 mm (0.098")

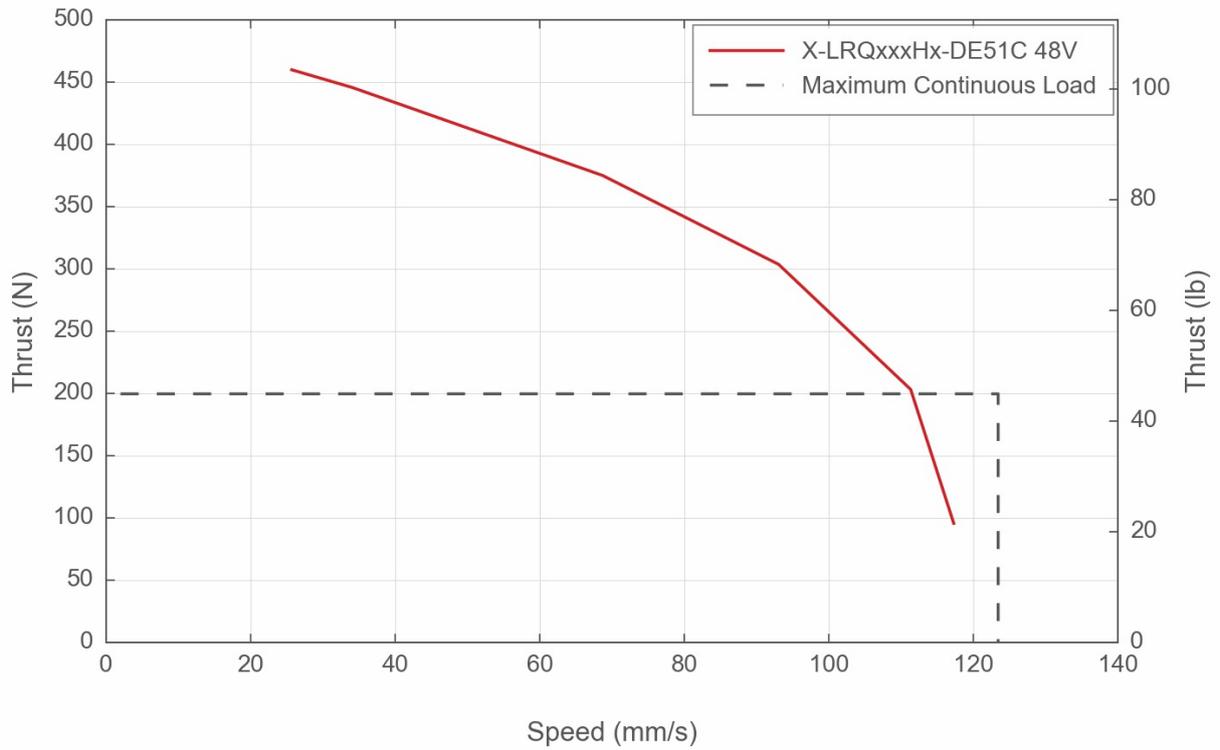
Part Number	Mechanical Drive System	Weight
X-LRQ075AL-DE51C	Precision lead screw	2.51 kg (5.534 lb)
X-LRQ075BL-DE51C	Precision lead screw	2.51 kg (5.534 lb)
X-LRQ075HL-DE51C	Precision ball screw	2.51 kg (5.534 lb)
X-LRQ150AL-DE51C	Precision lead screw	2.93 kg (6.460 lb)
X-LRQ150BL-DE51C	Precision lead screw	2.93 kg (6.460 lb)
X-LRQ150HL-DE51C	Precision ball screw	2.93 kg (6.460 lb)
X-LRQ300AL-DE51C	Precision lead screw	3.77 kg (8.311 lb)
X-LRQ300BL-DE51C	Precision lead screw	3.77 kg (8.311 lb)
X-LRQ300HL-DE51C	Precision ball screw	3.77 kg (8.311 lb)
X-LRQ450AL-DE51C	Precision lead screw	4.61 kg (10.163 lb)
X-LRQ450BL-DE51C	Precision lead screw	4.61 kg (10.163 lb)
X-LRQ450HL-DE51C	Precision ball screw	4.61 kg (10.163 lb)
X-LRQ600AL-DE51C	Precision lead screw	5.41 kg (11.927 lb)
X-LRQ600BL-DE51C	Precision lead screw	5.41 kg (11.927 lb)
X-LRQ600HL-DE51C	Precision ball screw	5.41 kg (11.927 lb)
X-LRQ075AP-DE51C	Precision lead screw	2.68 kg (5.908 lb)
X-LRQ075BP-DE51C	Precision lead screw	2.68 kg (5.908 lb)
X-LRQ075HP-DE51C	Precision ball screw	2.68 kg (5.908 lb)
X-LRQ150AP-DE51C	Precision lead screw	3.10 kg (6.834 lb)
X-LRQ150BP-DE51C	Precision lead screw	3.10 kg (6.834 lb)
X-LRQ150HP-DE51C	Precision ball screw	3.1 kg (6.834 lb)
X-LRQ300AP-DE51C	Precision lead screw	3.95 kg (8.708 lb)
X-LRQ300BP-DE51C	Precision lead screw	3.95 kg (8.708 lb)
X-LRQ300HP-DE51C	Precision ball screw	3.95 kg (8.708 lb)
X-LRQ450AP-DE51C	Precision lead screw	4.78 kg (10.538 lb)
X-LRQ450BP-DE51C	Precision lead screw	4.78 kg (10.538 lb)
X-LRQ450HP-DE51C	Precision ball screw	4.78 kg (10.538 lb)
X-LRQ600AP-DE51C	Precision lead screw	5.58 kg (12.302 lb)
X-LRQ600BP-DE51C	Precision lead screw	5.58 kg (12.302 lb)
X-LRQ600HP-DE51C	Precision ball screw	5.58 kg (12.302 lb)

X-LRQ-DEC Series Charts

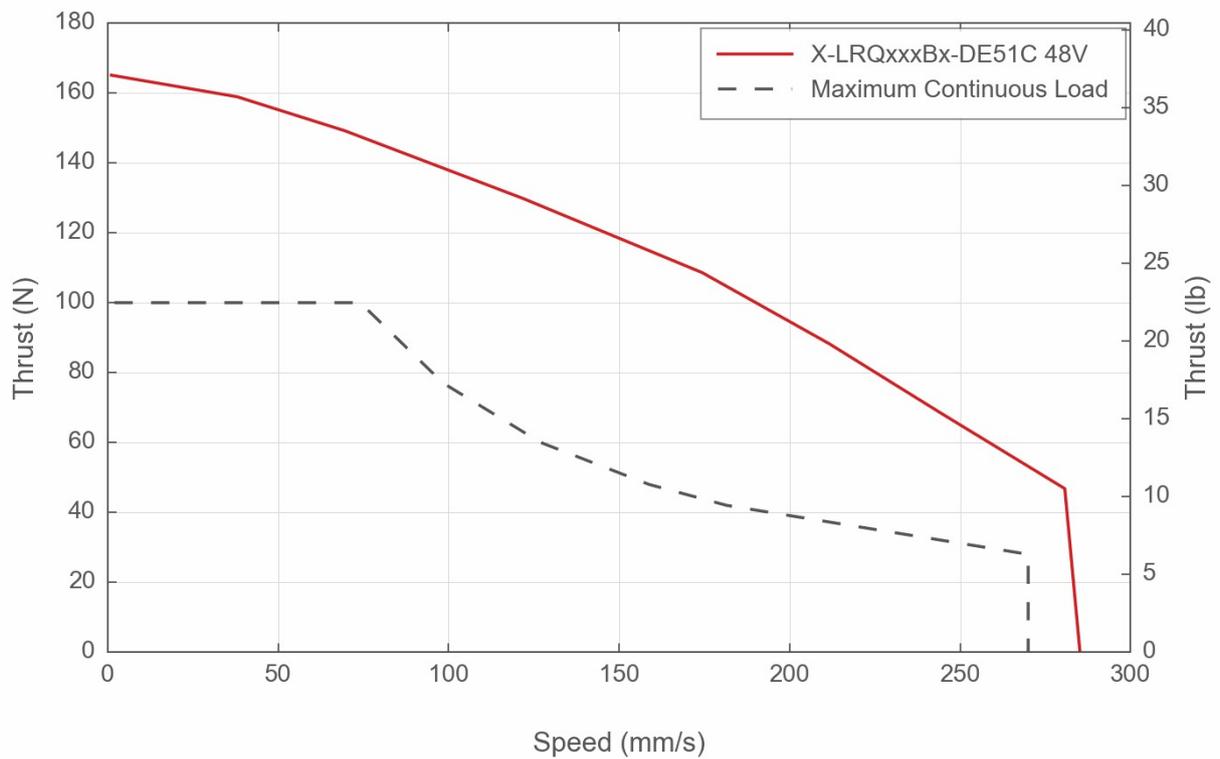
Thrust Speed Performance



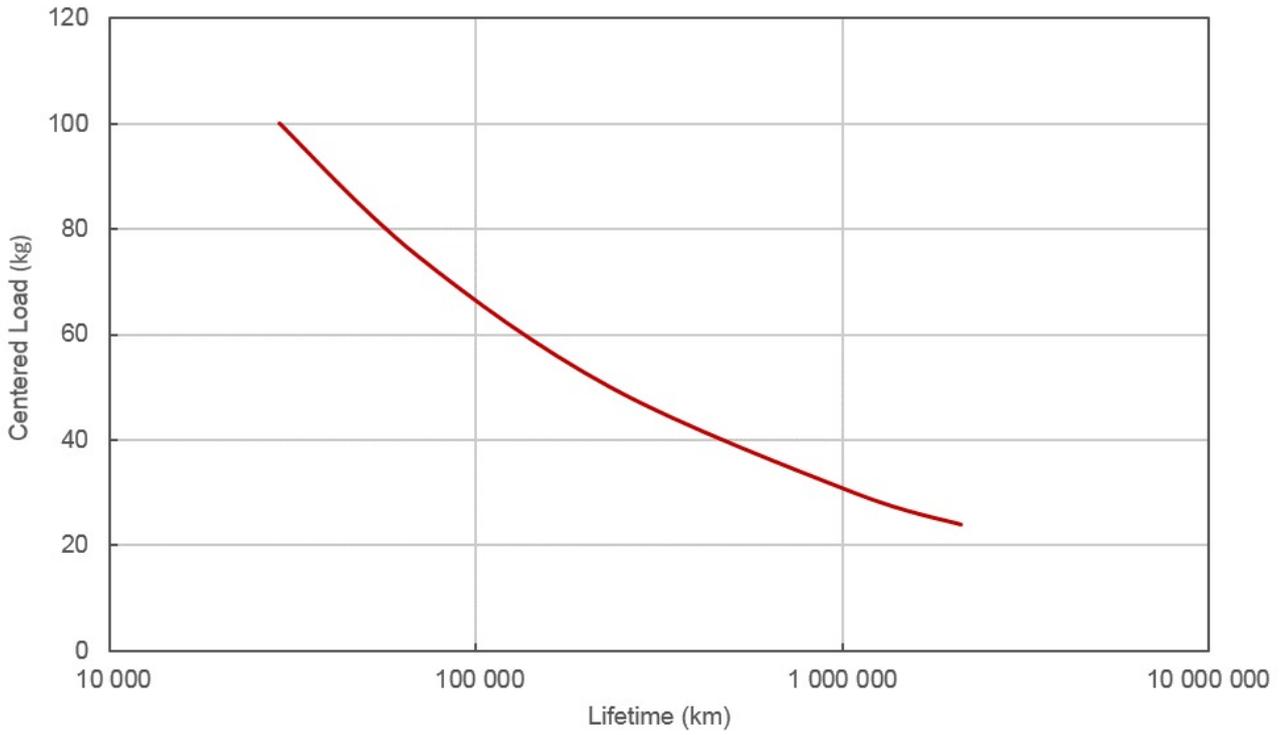
Thrust Speed Performance



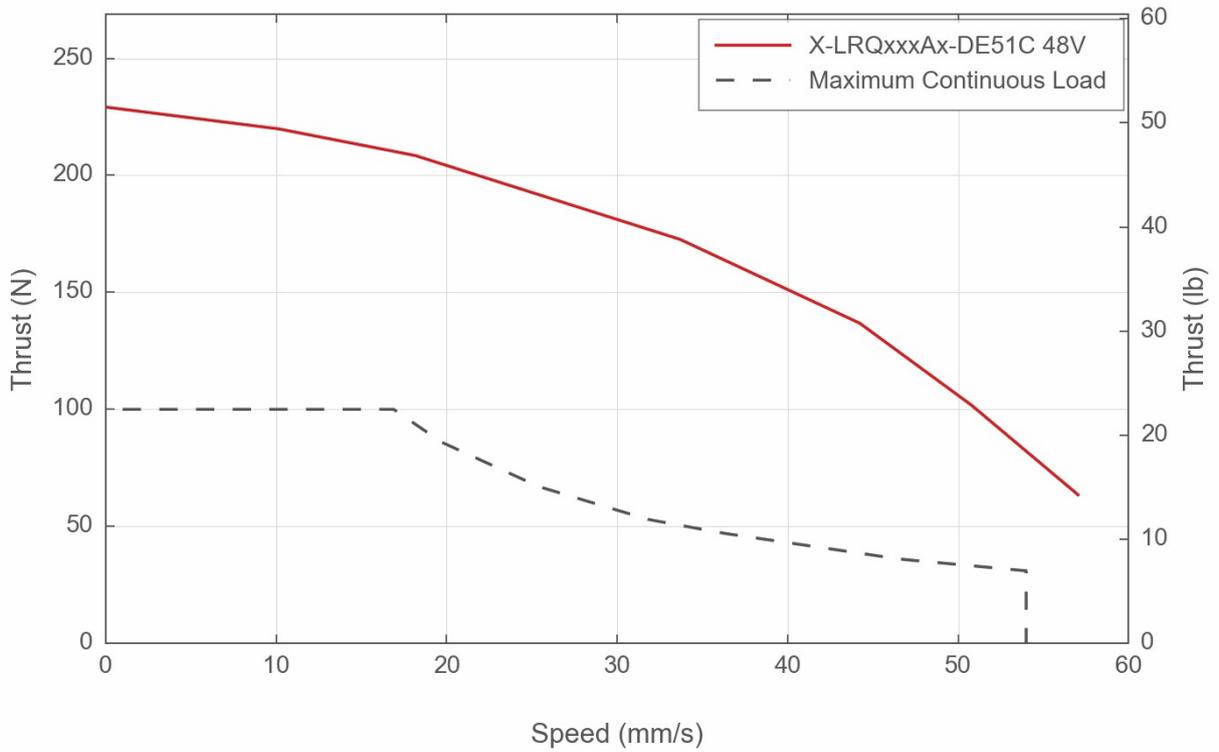
Thrust Speed Performance



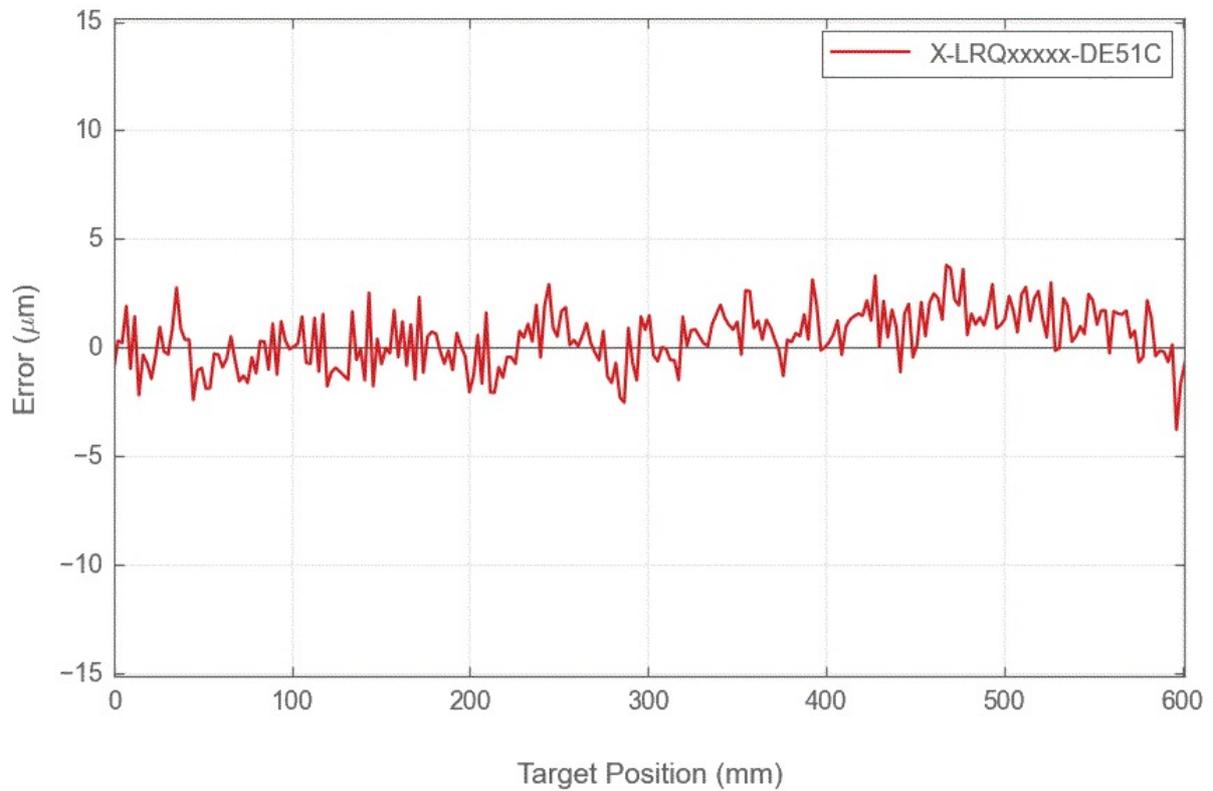
LRQ Linear Bearing Lifetime



Thrust Speed Performance



Typical Accuracy



Contact

Email: contact@zaber.com

Phone (toll free Canada/USA): 1-888-276-8033

Phone (direct): 1-604-569-3780

Fax: 1-604-648-8033

Zaber Technologies Inc.

#2 - 605 West Kent Ave. N.

Vancouver, British Columbia

Canada, V6P 6T7

<https://www.zaber.com>