PRODUCT DATA SHEET

LIFTING COLUMN LC2

Features

- *LC2 is a specially designed telescopic aluminum lifting column incorporating a LINAK 24 V or 12V DC linear actuator (LC28 or LC30) equipped with safety nut as standard*
- *LC2 lifting columns are available in 2 versions; the LC22 (small footprint 120 mm X 120 mm) and the LC25 (large footprint 146 mm X 146 mm)*
- *LC2 has thrust capacity up to 5000 N (push applications only)*
- *LC2 standard install tolerance is ± 4 mm, install plus stroke tolerance is ± 8 mm*
- *LC2 telescoping profiles are made of anodized aluminum*
- *LC2 uses internal end stop switches for stroke and install limits*
- *LC2 comes with a standard mini-fit cable connector for exchangeable cables*
- *LC2 is available with standard protection class IP 30*

Options:

- *LC2 is available with either 3 mm or 10 mm end plates allowing a variety of application mounting configurations*
- *LC28 and LC30 actuator reed-switch (for parallel and memory functions)*
- *LC2 standard available stroke 100 mm to 500 mm on 100 mm increments**

Usage

- *Duty cycle: 2/18 (2 minutes continuous use followed by 18 minutes not in use)*
- *Ambient temperature: +5° to +40°C*

** Contact LINAK-US for technical support on non standard stroke availability*

*** Contact LINAK A/S for technical support on parallel applications*

The LC2 column is an update of the LP2 program. It has an improved "twisting" stability, and end stop switches as standard.

The column is designed to be used in a vertical position and only for lifting purposes. It is not possible to use the column in any kind of "pull" application.

Depending on the application, the LC2 can be operated either as a single column or multiple columns in a parallel system by choosing a control box with micro-processor.

It is designed to provide stable vertical lift (push only) where simultaneous bending and torsion moments exist.

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Technical specifications:

Actuator Type	Max. Push Force (N)	Stroke (mm)	Install. dim. with 3 mm endplate (mm)	*Speed no load / full load (mm/sec)	*Max.current (A)	Voltage (VDC)
LC22A (LC282X0-XXXXX1X)	3000	100 to 500	288 to 688	6.6/3.4	6.3	24
LC22B (LC286X1-XXXXX1X)	1500	100 to 500	288 to 688	18.0/10.7	6.1	24
LC22C (LC286X1-XXXXX2X)	1500	100 to 500	288 to 688	16.9/8.7	13.5	12
LC25C (LC303X0-XXXXX3X)	5000	100 to 500	288 to 688	5.3/3.5	5.8	24
LC25D (LC303X0-XXXXX0X)	2500	100 to 500	288 to 688	12.7/5.6	8.8	24
LC25E (LC306X0-XXXXX3X)	2500	100 to 500	288 to 688	10.4/7.8	4.7	24
LC25F (LC309X0-XXXXX3X)	1500	100 to 500	288 to 688	15.4/12.5	4.1	24

* Speed and current are measured using a stable power supply. Actual values will vary with temperature and age.
Special articles are available contact LINAK A/S

Precautions

- The install height is determined by stroke + 182 mm + 2 x endplate thickness.
- Maximum bending loads are obtained from the bending load curves for the specific actuator type selected.
- The speeds and currents listed above are with axial load applied to the column (i.e. without offset load applied to the column).
- If the 3 mm endplate option is chosen and an offset load is applied, do not unscrew the self tapping screw out of the profiles. This will reduce the strength of the assembly when the screw is screwed in again.
- When an offset load is applied to the column, extra consideration must be taken regarding the mounting of LC2.
  The top and the base must be fastened securely to avoid vibration and the offset load must be parallel to the limit switch side.
- LINAK control boxes are designed to short-circuit the motor terminals (poles) of the actuator(s), when the actuator(s) are not running. This solution gives higher lead screw actuator(s) a higher resistance to back-drive. If the actuator(s) are not connected to a LINAK control box, the terminals of the motor must be short circuited when power is cut to activate the back-drive resistance from the motor.
- Storage temperature -40°C to +70°C
- Cleaning can be done with any glass cleaner that does not contain Ammonia-D. It is further recommended that citrus cleaners that are biodegradable and distillate/silicate free be used. CAUTION: Citrusol and Simple Green can be harmful when used as a cleaner in this application. Follow the cleaning agent manufacturer's directions/ recommendations, and follow up the application with a "wet rag wipe" to remove any remaining cleaning agent.

LC2

Ordering example:

LC2 XX X X X XXX XXX X

Cable Type & Exit

A	Grey Cable/ Exit Outer Profile
B	Grey Cable/Exit Inner Profile
C	Black Cable/Exit Outer Profile
D	Black Cable/Exit Inner Profile

Column Install

Column Install = Stroke + 182 + 2X End Plate Thickness

Column Stroke

100	100 mm	3.9 in
200	200 mm	7.9 in
300	300 mm	11.8 in
400	400 mm	15.7 in
500	500 mm	19.7 in

Option

0	Reserved

End Plate Type

0	10 mm endplate
1	3 mm endplate

Feedback Type

0	None (DIN)
1	None (Jack)
2	4W Reed (4P DIN)
3	3W Reed (Stereo Jack)

Profile/Actuator Type

2A	LC282X0-XXXXX1X
2B	LC286X1-XXXXX1X
2C	LC286X1-XXXXX2X
5C	LC303X0-XXXXX3X
5D	LC303X0-XXXXX0X
5E	LC306X0-XXXXX3X
5F	LC309X0-XXXXX3X

Lifting Column

LC2

LC25D is not available with feedback.

Mounting brackets have to be ordered separately
Order number: 0578006 (includes 2 mounting screws)

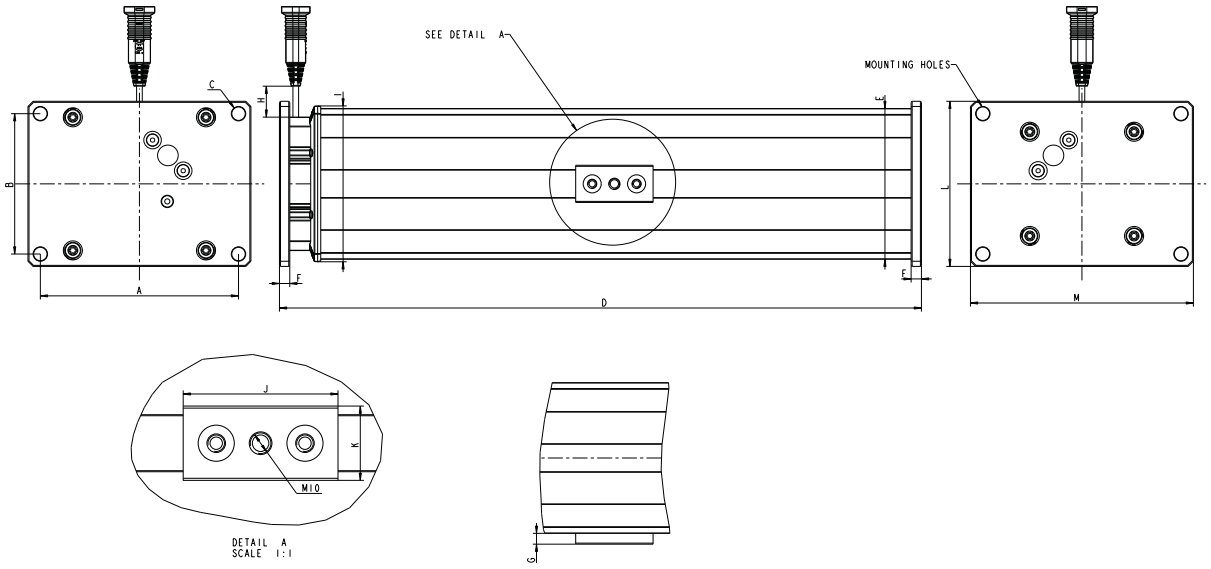
Additional 8mm self-tapping screws can be ordered separately with part no.: 0002085. Order through LINAK US. If another type of screw is used the screw must be a DG type screw for aluminum, the screw depth must be min. 60 mm.

External cable to be ordered separately (See table below).

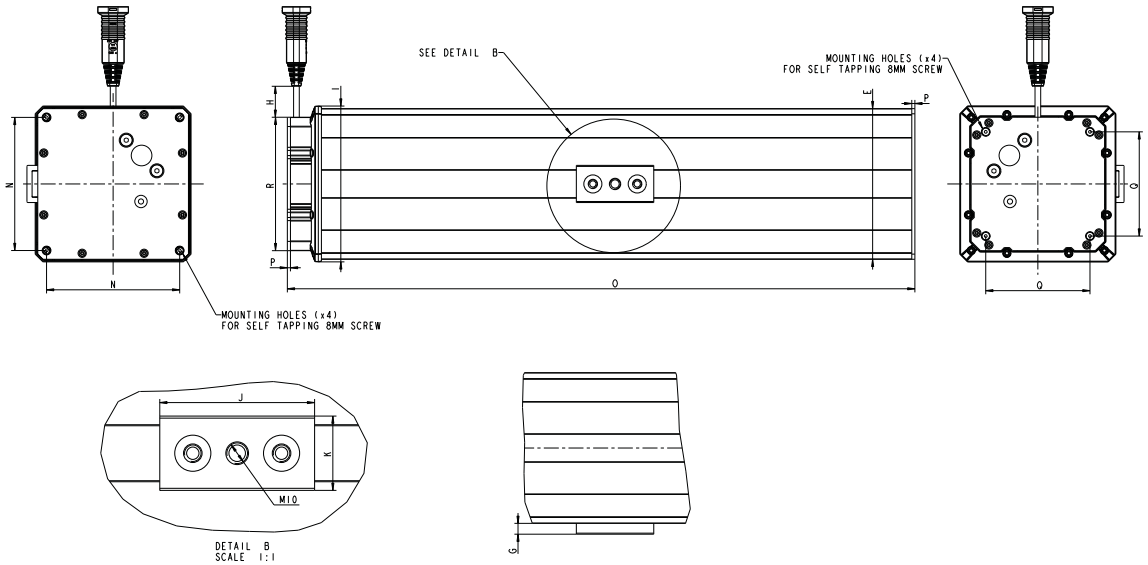
Non Reed	Reed
Part No.	Part No.
00914569 - 2100 mm Black Jack	00914588 - 2100 mm Grey Jack
00914573 - 2100 mm Grey Jack	00914589 - 2100 mm Black Jack
00914571 - 2100 mm Black 4P DIN	00914665 - 2100 mm Black 4P DIN
00914572 - 2100 mm Grey 4P DIN	00914666 - 2100 mm Grey 4P DIN

LC25 Dimensions:

With 10 mm endplates



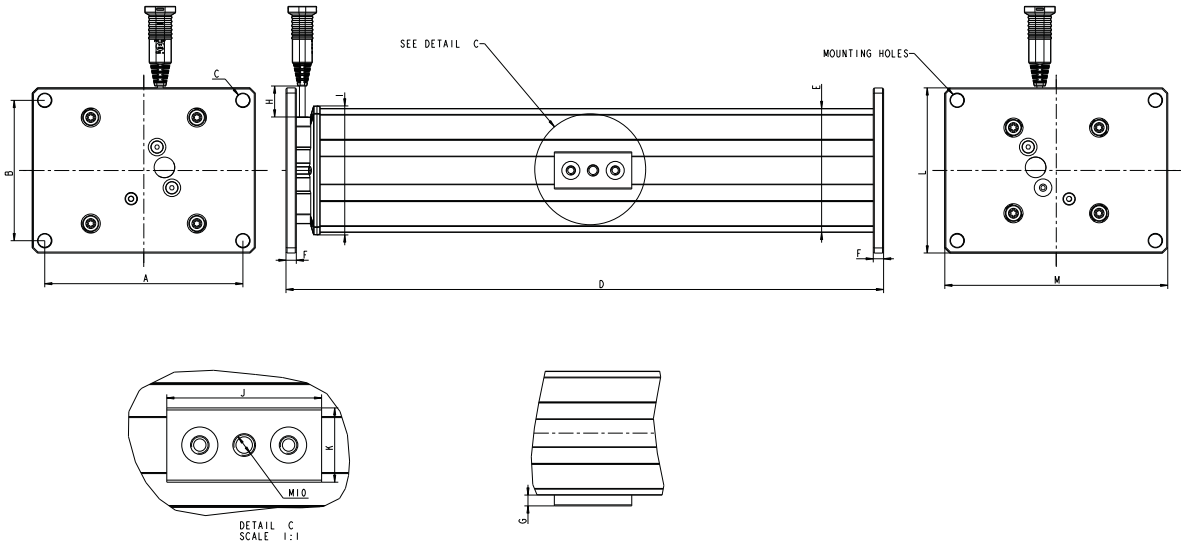
With 3 mm endplates



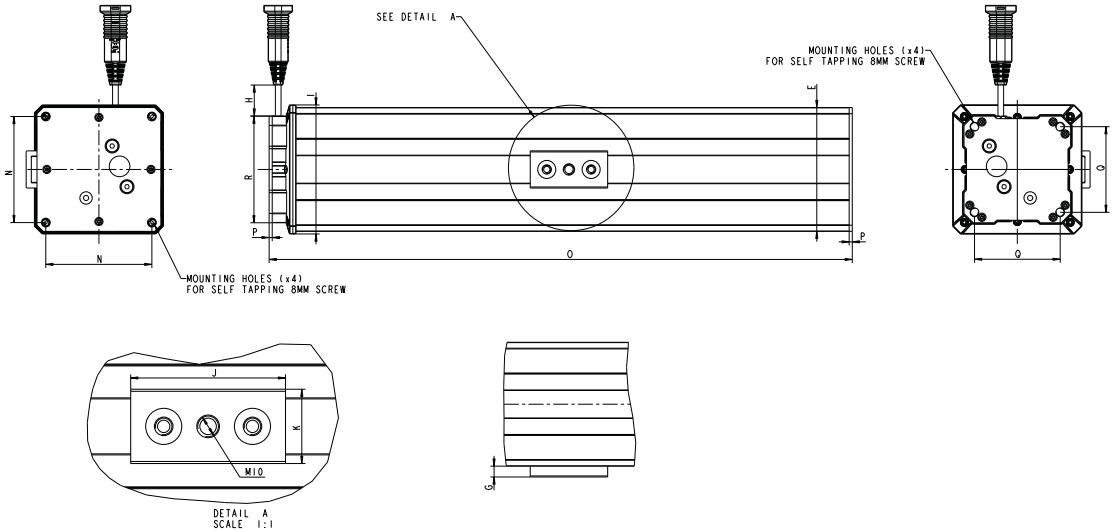
	in	mm		in	mm
A	7.56 ± 0.02	192 ± 0.5	L	6.30 ± 0.20	160 ± 0.5
B	5.35 ± 0.02	136 ± 0.5	M	8.50 ± 0.20	216 ± 0.5
C	ø0.51	ø13	N	5.08 ± 0.01	129 ± 0.3
D	Stroke + 7.95 ± 0.2	Stroke + 202 ± 4	O	Stroke + 7.40 ± 0.2	Stroke + 188 ± 4
E	5.748 SQ.	146 SQ.	P	0.12	3
F	0.39	10	Q	3.98 ± 0.01	101 ± 0.3
G	0.41	10.5	R	4.92 SQ.	125 SQ.
H	88.58 ± 0.20	2250 ± 50	S	4.72 SQ.	120 SQ.
I	5.94 SQ.	151 SQ.	T	4.07 SQ.	103.3 SQ.
J	3.95	75	U	3.26 ± 0.01	82.92 ± 0.3
K	1.42	36	V	4.04 ± 0.01	102.62 ± 0.3

LC25 Dimensions:

With 10 mm endplates



With 3 mm endplates



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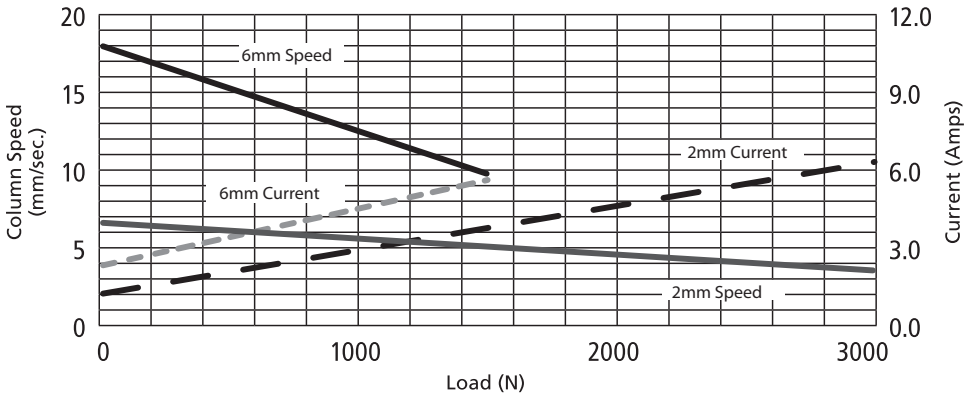
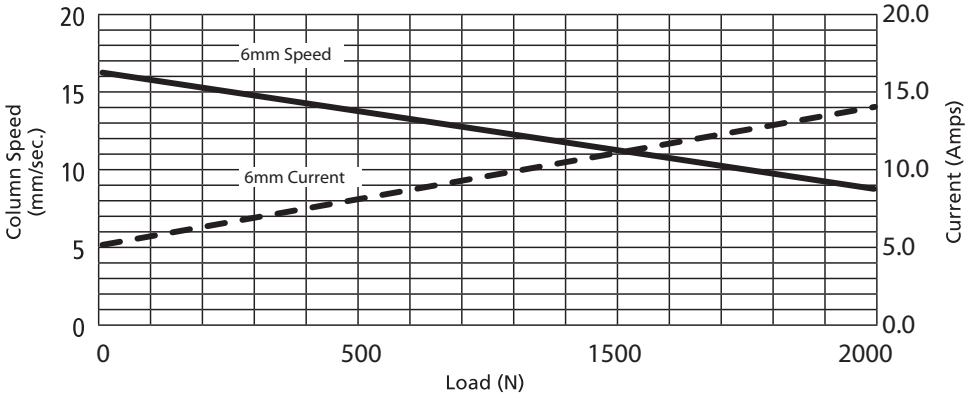
Characteristic Curves for the Standard LC2 Motors:

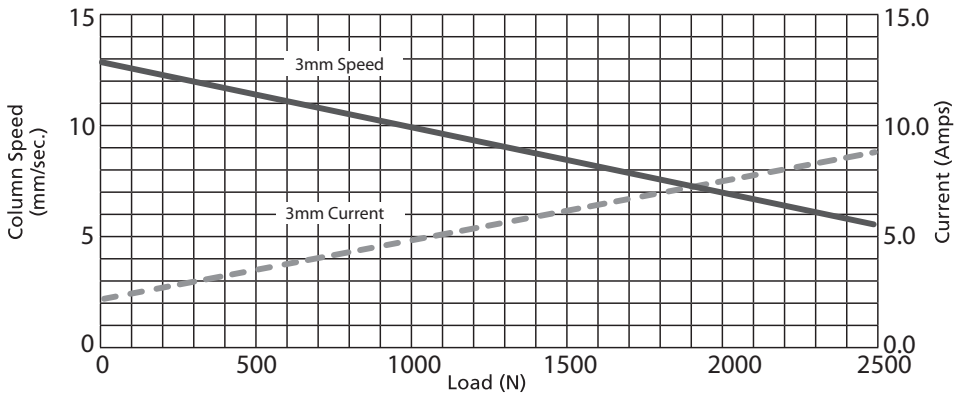
24VS Motor (LC22A,B)



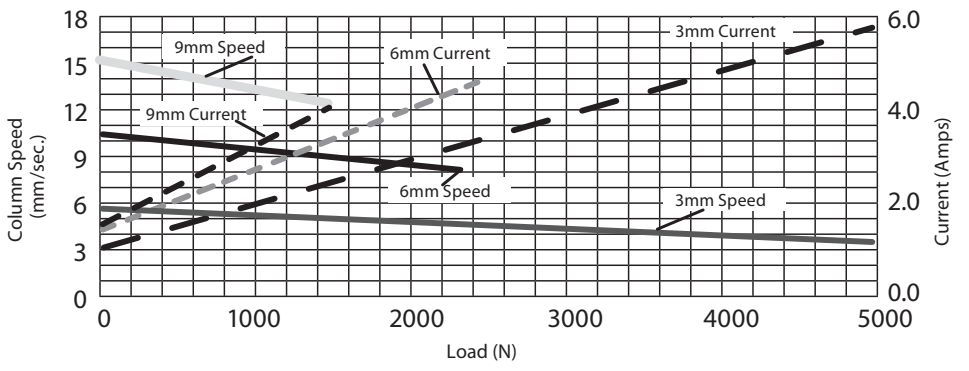
12VS Motor (LC22C)



24V Motor (LC25D)

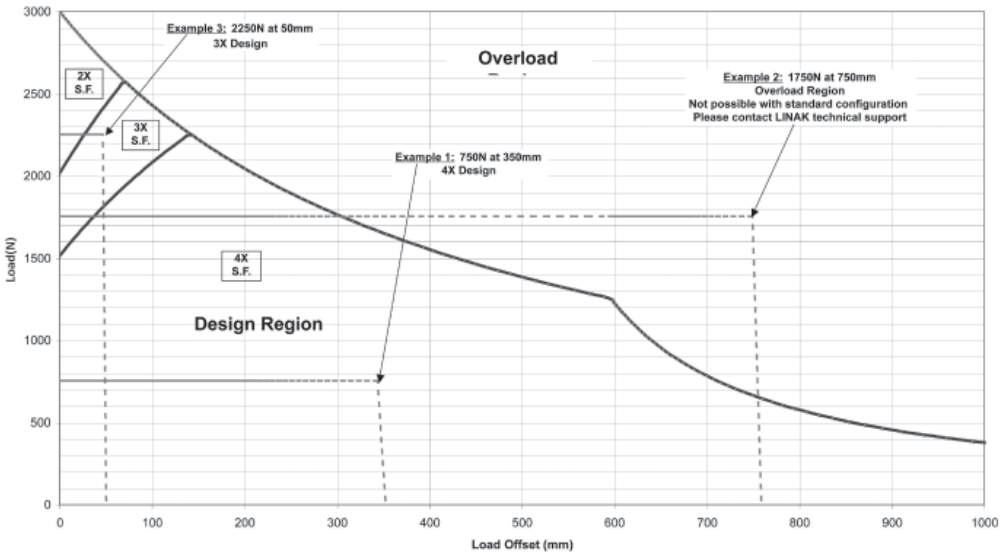


24VL Motor (LC25C,E,F)

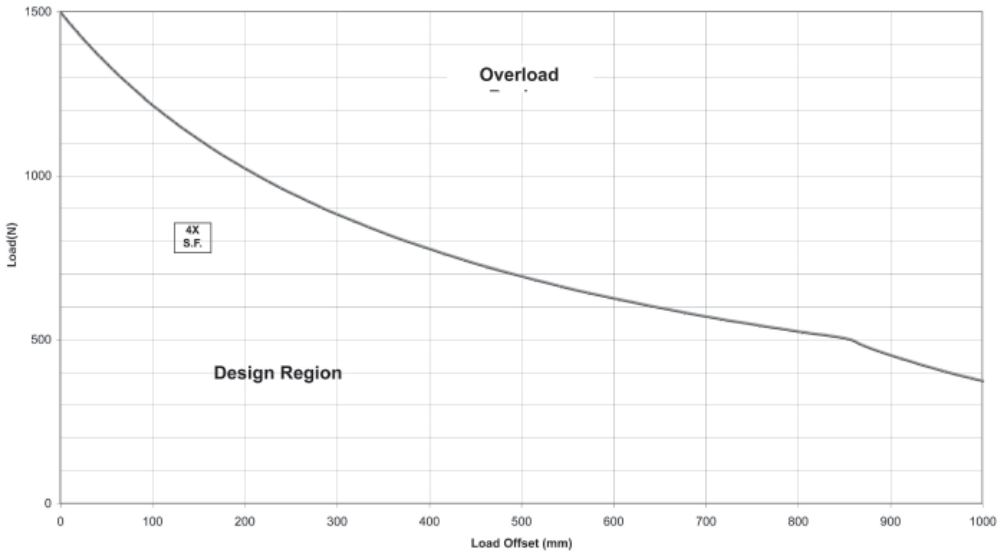


Bending Load:

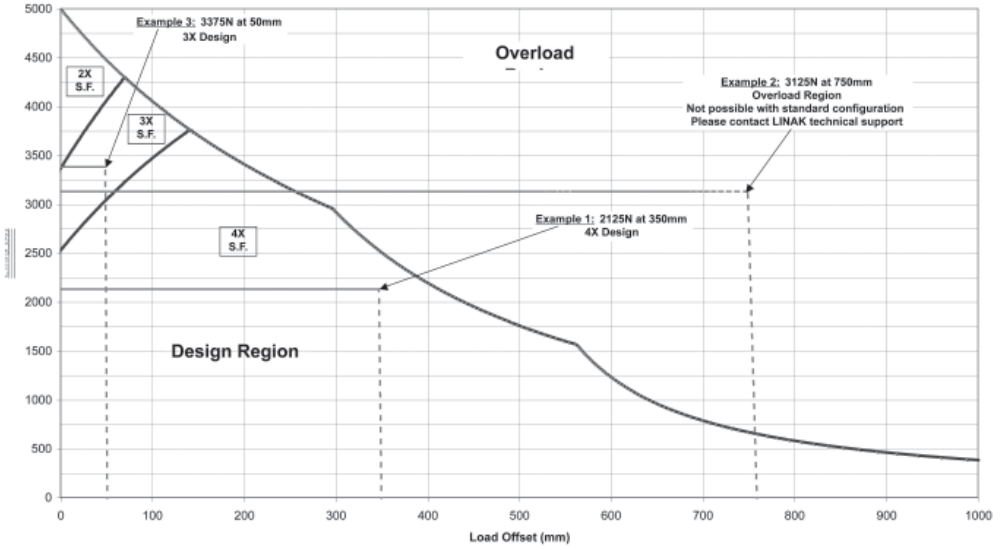
Moment Arm Vs. Load For Actuator LC282X0-XXXXX1X (LC22A)



Moment Arm Vs. Load For Actuator LC286X1-XXXXX1X (LC22B) & LC286X1-XXXXX2X (LC22C)

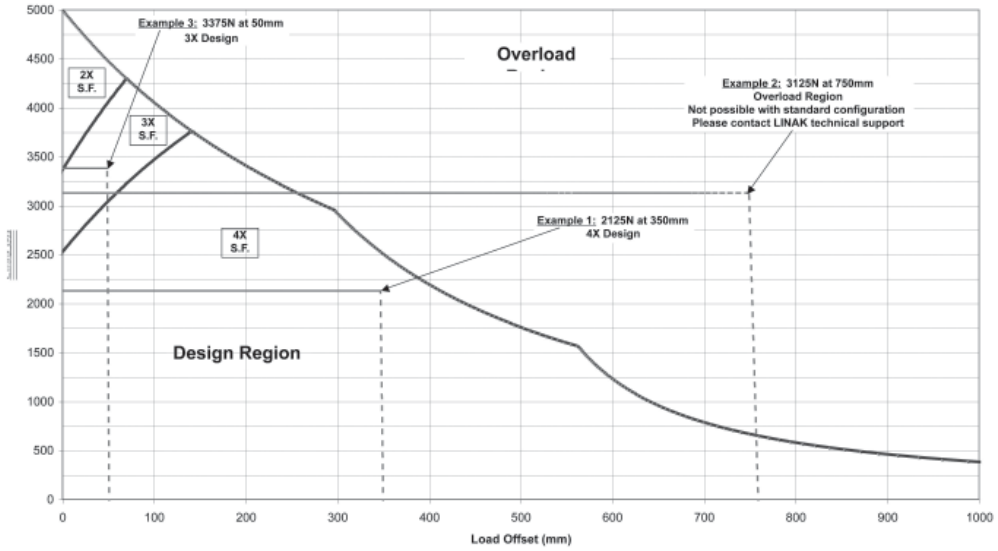


Moment Arm Vs. Load For Actuator LC303X0-XXXXX3X (LC25C)



Bending Load:

Moment Arm Vs. Load For Actuator LC303X0-XXXXX3X (LC25C)



Moment Arm Vs. Load For Actuator LC309X1-XXXXX3X (LC25F)