



Lifting Column LC2 Data sheet

LC2

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 several columns in a parallel system by choosing a control box with micro-processor.

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



Features

- LC2 is a specially designed telescopic aluminum lifting column incorporating a LINAK 24 V or 12V DC linear actuator (LC28C or LC30) equipped with a 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)
- Thrust up to 5000 N (push only)
- LC2 standard install tolerance is ± 4 mm, install plus stroke tolerance is ± 8 mm
- Available with either 3 or 10 mm end plates
- LC2 profiles are made of anodised aluminum
- Internal end stop switches for stroke and install limits
- Elegant and compact design
- LC2 comes with a standard mini-fit cable connector for exchangeable cables
- Standard protection class IPX0

Options:

- LC2 is available with either 3 mm or 10 mm end plates
- LA28 and LA30 actuator reed-switch (for parallel and memory functions)
- LC2 standard available stroke 100 mm to 500 mm in 100 mm increments*

Usage

- Duty cycle: 2/18 (2 minutes continuous use followed by 18 minutes not in use)
- LC2 is compatible with CB8, CB9, CB12, CB14**, CB20**
- Ambient temperature: $+5^{\circ}$ to $+40^{\circ}\text{C}$

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

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

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

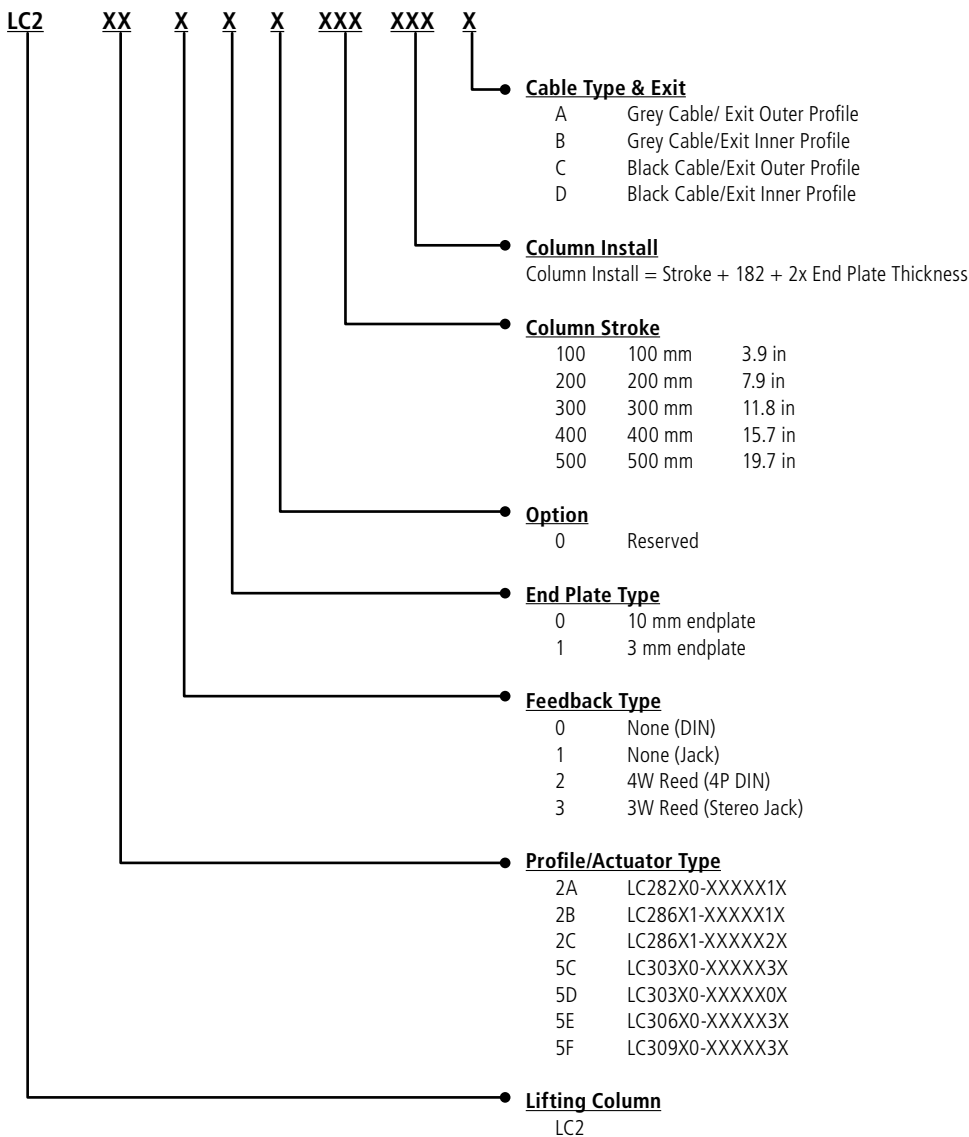
* Speed and current are measured using a stable power supply. Actual values will vary with temperature and age.
Special articles are available contact LINAK A/S

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:



Additional 8 mm 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 aluminium, the screw depth must be min. 60 mm.



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



There are 4 holes provided in the 10 mm end plate for mounting the column into its application.

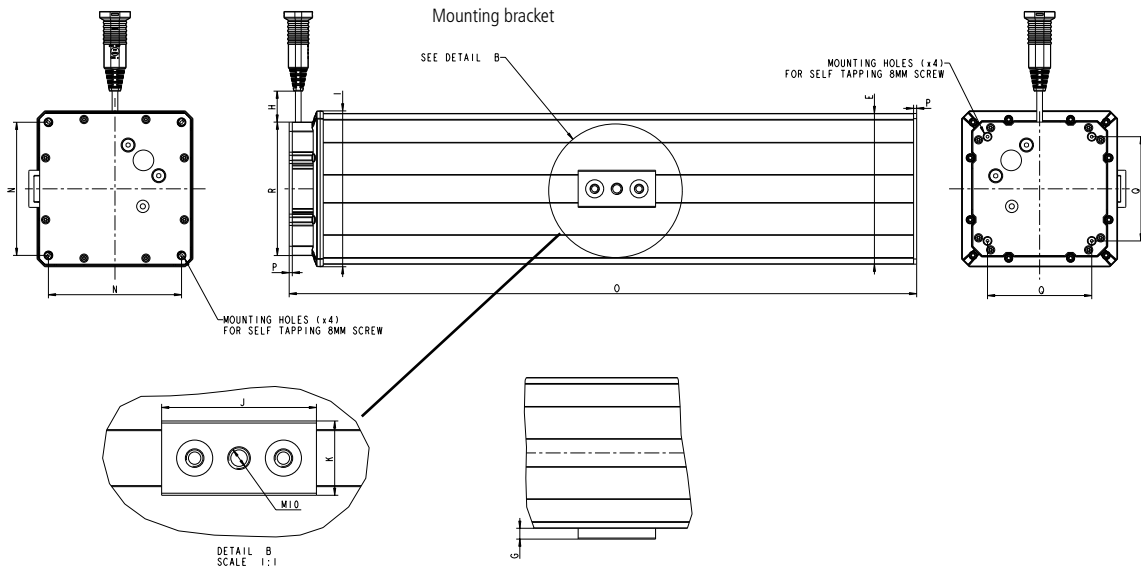


When ordering, please bear in mind, the LC2's are packed 12 to a pallet.

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:

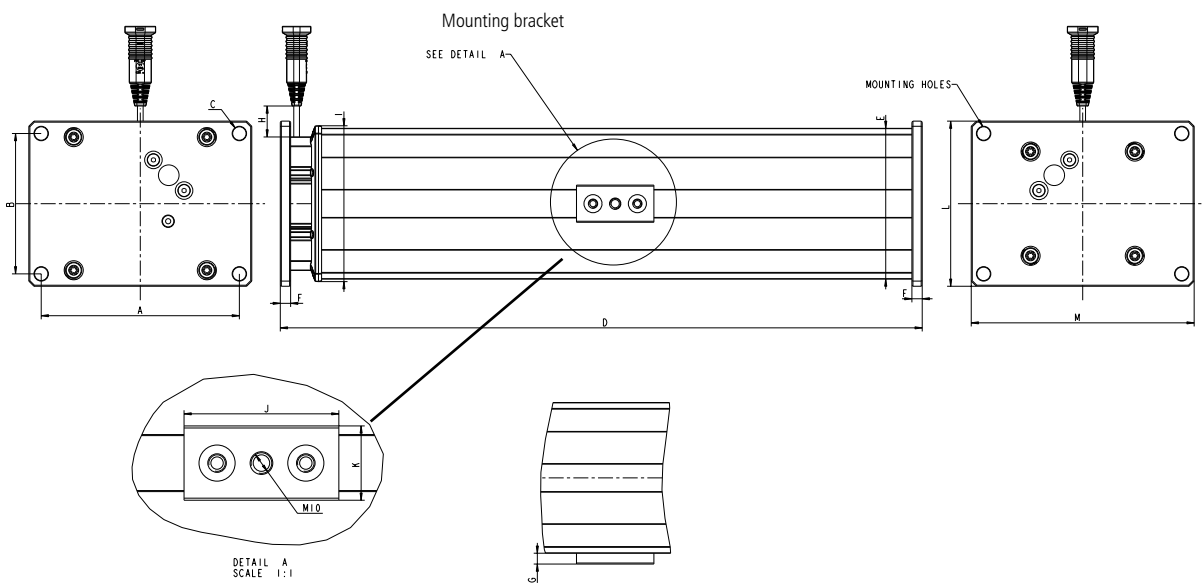
With 3 mm endplates (P)



Mounting bracket

Dimension table					
Dim	in	mm	Dim	in	mm
E	5.75 SQ	146 SQ	N	5.08	129
G	0.41	10.5	O	Stroke + 8.15	Stroke + 207
H	3.54	90	P	0.12	3
I	5.94 SQ	151 SQ	Q	3.98	101
J	3.95	75	R	5.1	129.3
K	1.42	36	S	Stroke	Stroke

With 10 mm endplates (F)

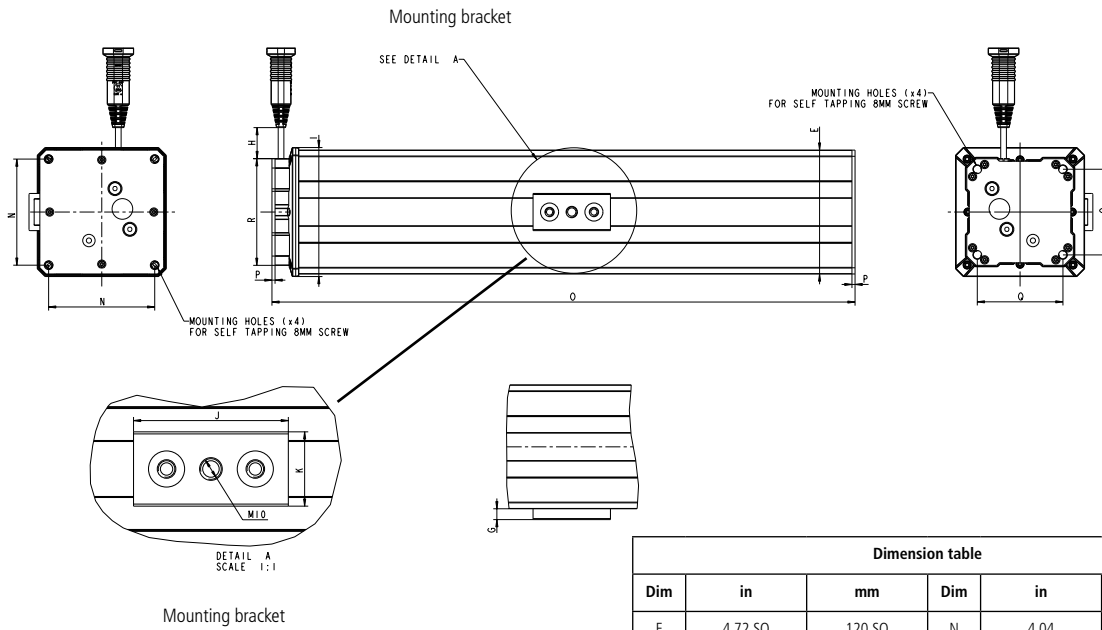


Mounting bracket

Dimension table					
Dim	in	mm	Dim	in	mm
A	7.56 SQ	192 SQ	H	3.54	90
B	5.35	136	I	4.92 SQ	125 SQ
C	ø0.51	ø13	J	3.95	75
D	Stroke + 8.70	Stroke + 221	K	1.42	36
E	5.748 SQ	146 SQ	L	6.30	160
F	0.39	10	M	8.50	216
G	0.41	10	S	Stroke	Stroke

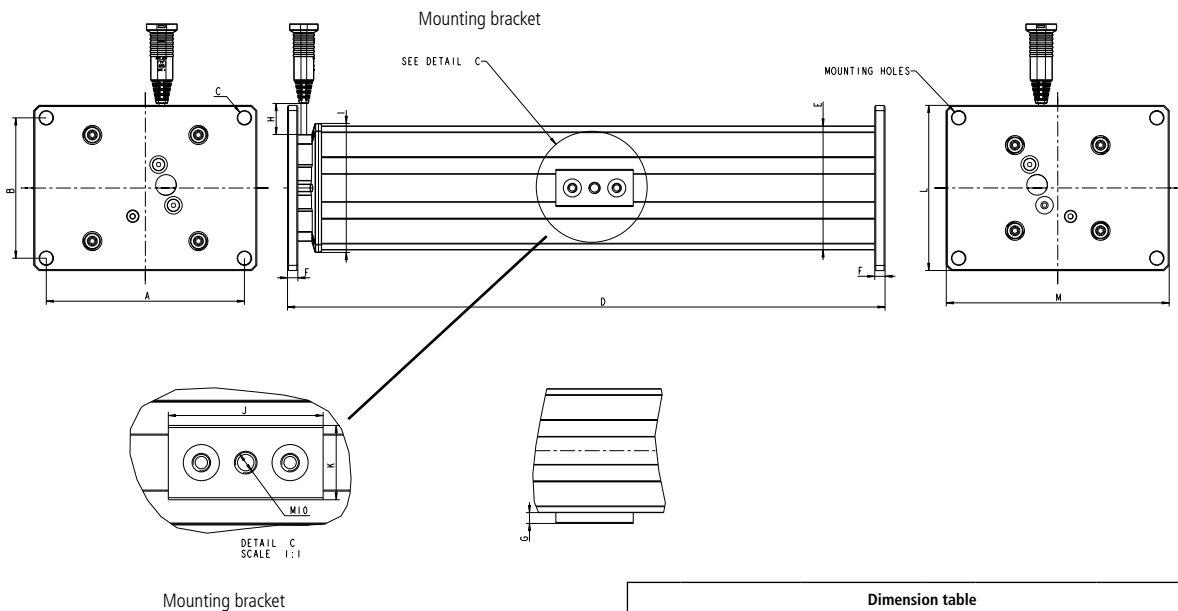
LC22 Dimensions:

With 3 mm endplates



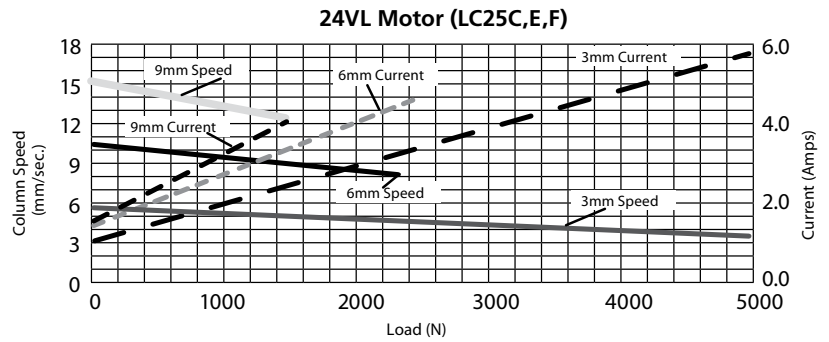
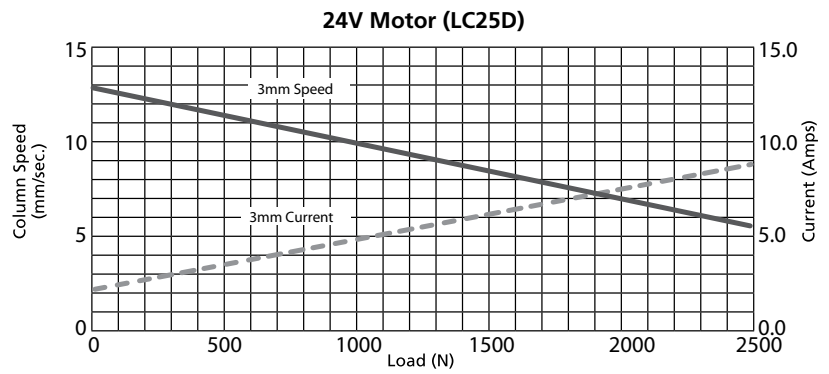
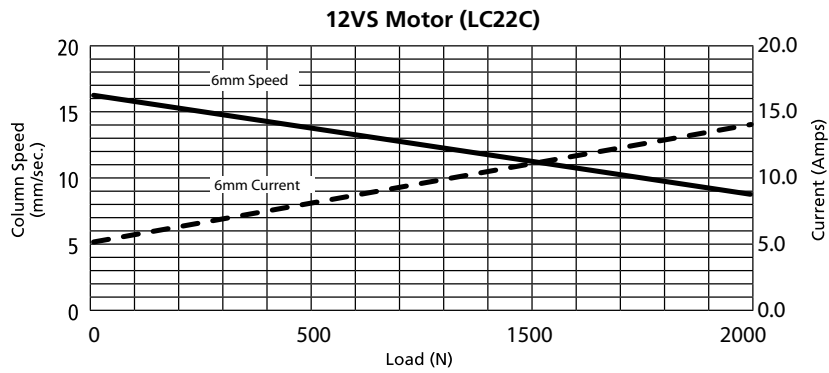
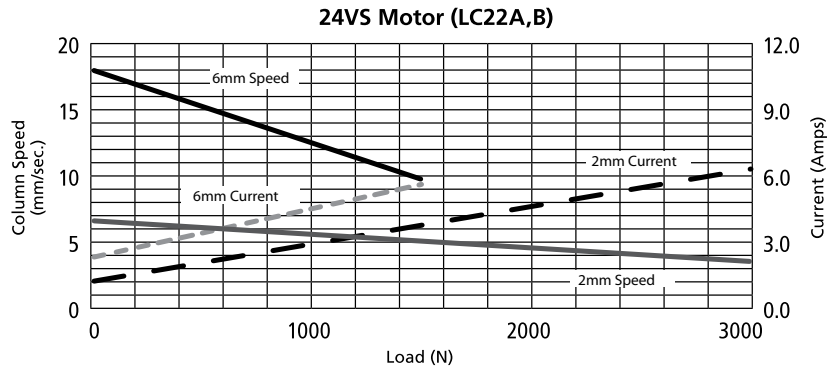
Dimension table					
Dim	in	mm	Dim	in	mm
E	4.72 SQ	120 SQ	N	4.04	102.62
G	0.41	10	O	Stroke + 8.15	Stroke + 207
H	3.54	90	P	0.12	3
I	4.92 SQ	125 SQ	Q	3.26	82.92
J	3.95	75	R	5.1	103.3
K	1.42	36	S	Stroke	Stroke

With 10 mm endplates



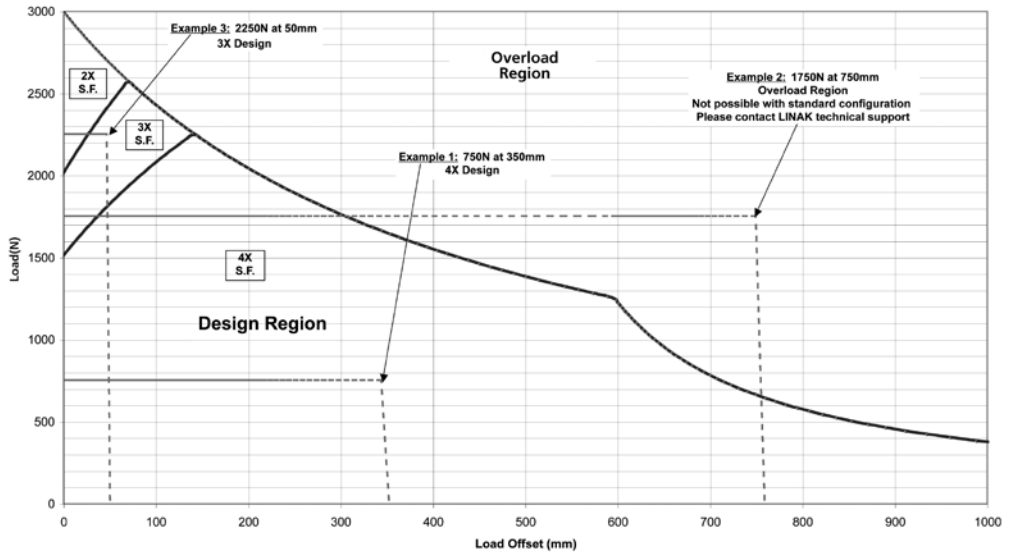
Dimension table					
Dim	in	mm	Dim	in	mm
A	7.56 SQ	192 SQ	H	3.54	90
B	5.35	136	I	4.92 SQ	125 SQ
C	ø0.51	ø13	J	3.95	75
D	Stroke + 8.70	Stroke + 221	K	1.42	36
E	4.72 SQ	120 SQ	L	6.30	160
F	0.39	10	M	8.50	216
G	0.41	10	S	Stroke	Stroke

Characteristic Curves for the Standard LC2 Motors:

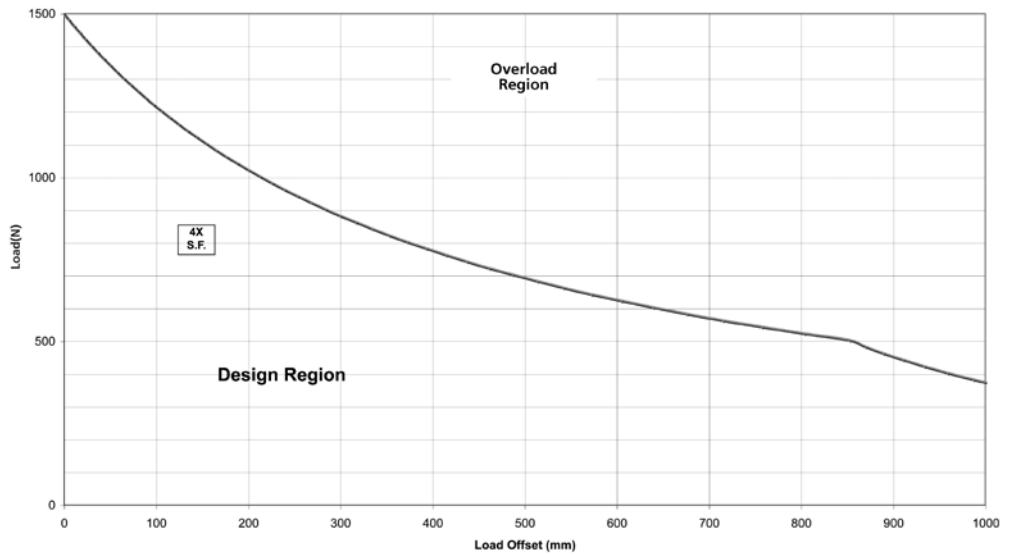


Bending Load:

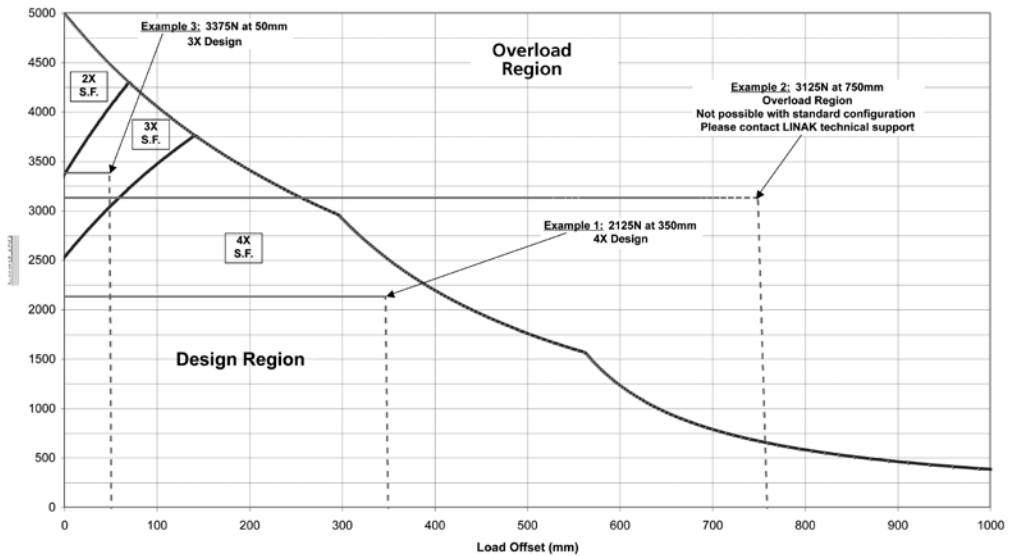
Moment Arm Vs. Load For Actuator LC282X0-XXXXX1X (LC22A)



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

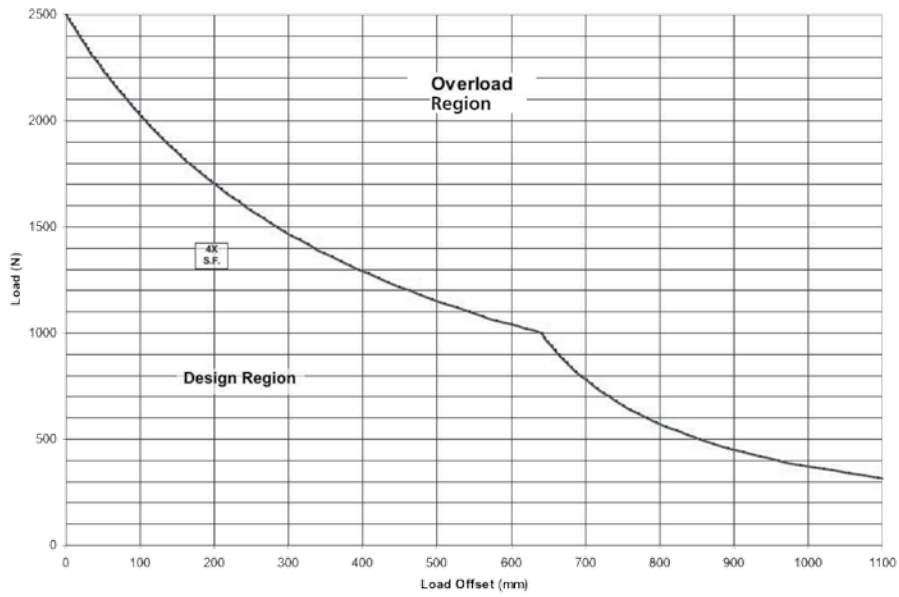


Moment Arm Vs. Load For Actuator LC303X0-XXXXX3X (LC25C)

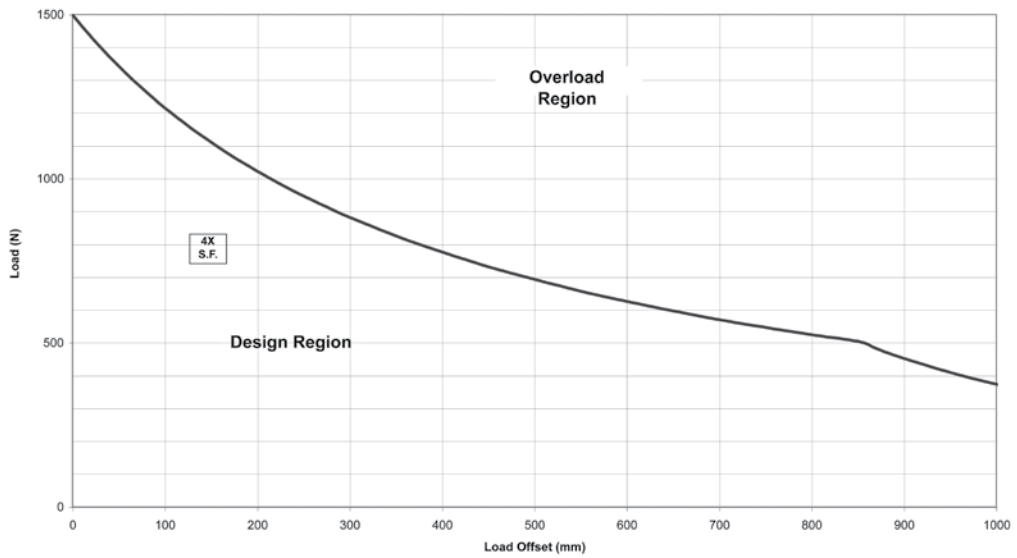


Bending Load:

Moment Arm Vs. Load For Actuator LC303X0-XXXXX0X (LC25D) & LC306X1-XXXXX3X (LC25E)



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



Terms of use

The user is responsible for determining the suitability of LINAK products for specific application. LINAK takes great care in providing accurate and up-to-date information on its products. However, due to continuous development in order to improve its products, LINAK products are subject to frequent modifications and changes without prior notice. Therefore, LINAK cannot guarantee the correct and actual status of said information on its products. While LINAK uses its best efforts to fulfil orders, LINAK cannot, for the same reasons as mentioned above, guarantee the availability of any particular product. Therefore, LINAK reserves the right to discontinue the sale of any product displayed on its website or listed in its catalogues or other written material drawn up by LINAK. All sales are subject to the Standard Terms of Sale and Delivery for LINAK. For a copy hereof, please contact LINAK.