

# ACTUATOR LA30

## Features:

- 12/24V DC permanent magnet motor
- Max. thrust up to 6000 N (LA30LK)
- Stainless steel piston rod
- Elegant and compact construction with small installation dimensions
- Protection class: IP51 / IP66
- Colour: black
- Speed max. 65 mm/s (LA30 S-motor with 12 mm pitch)
- Low noise level
- Steel construction for all bearing parts
- Acme thread spindle for optimum efficiency

## Options:

- Extra powerful motor (S-motor)
- L-motor for system actuator
- IP66 (by ordering LA30 with plastic housing)
- Double-acting brake - increased self-locking ability (LA30 with 6 or 9 mm pitch + LA30 S-motor with 6 or 9 mm pitch and LA30L) which ensures that all these types are fully self-locking
- Potentiometer for positioning the actuator. 0-1 K ohm, 0-5 K ohm or 0-10 K ohm
- Optical encoder for positioning the actuator. 10 pulses pr. spindle revolution
- Reed switch (only LA30 L-motor versions): 8 pulses pr. spindle revolution
- Mechanical spline function. Safety feature by using the mechanical spline, the actuator can only push
- Safety nut (only in push)
- Terminal cover (only LA30 L-motor versions)
- Ball screw (K) (only LA30 L-motor versions)
- Ball screw and safety nut (KAS) (only LA30 L-motor versions)
- Ball screw, safety nut and splines (KSM) (only LA30 L-motor versions)

## Usage:

- Duty cycle: Max. 10% or 6 min/hour at continuous use
- Ambient temperature +5° to +40°C
- Storage temperature -40° to +70°C
- Compatible with control boxes CB8, CB12, CB14, CB18
- Should LA30 be used with a non LINAK control unit, please ask the nearest Linak representative for further details.



CARELINE<sup>®</sup>  
IMPROVING EFFICIENCY  
TECHLINE<sup>™</sup>  
IMPROVING FLEXIBILITY

LA30 is a powerful actuator yet small enough to fit to most applications.

The actuator can be supplied with options such as built-in potentiometer for servo operation or an extra powerful motor for increased speed and strength (S-motor).

In addition to industrial and agricultural applications, the actuator is also ideal for positioning satellite dishes.

The system actuator LA30L (option) can be combined with LINAK control boxes and it is perfect for a variety of furniture applications.

**Dimensions:**



**Installation dimension:**

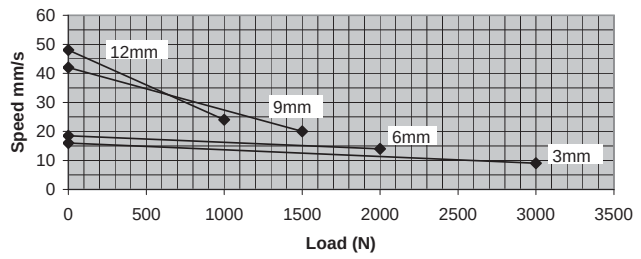
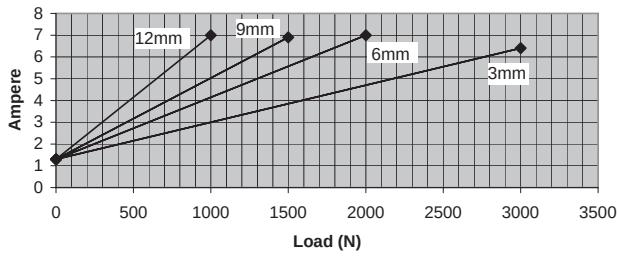
|                                                                    |            |
|--------------------------------------------------------------------|------------|
| LA30 L-motor + LA30 + LA30 S-motor with 3 or 6 mm pitch            | S + 156 mm |
| LA30 with spline + LA30 S-motor with 9 mm pitch                    | S + 167 mm |
| LA30 with brake + LA30 S-motor with 3 or 6 mm pitch with brake     | S + 189 mm |
| LA30 with ball screw and L-motor / LA30 ball screw and safety nut  | S + 194 mm |
| LA30 L-motor with brake + LA30 S-motor 9 or 12 mm pitch with brake | S + 199 mm |
| LA30 L-motor with ball screw, safety nut and spline                | S + 251 mm |

**Ordering example:**

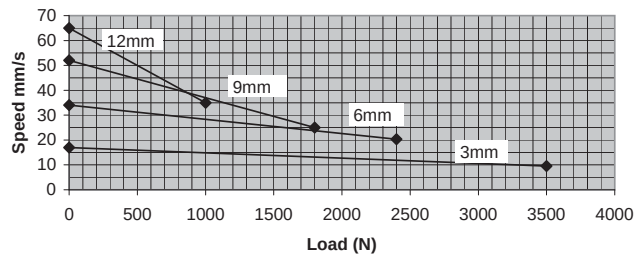
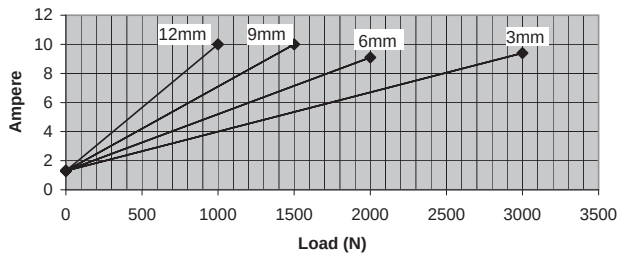
Old type no.

## Speed and current graphs:

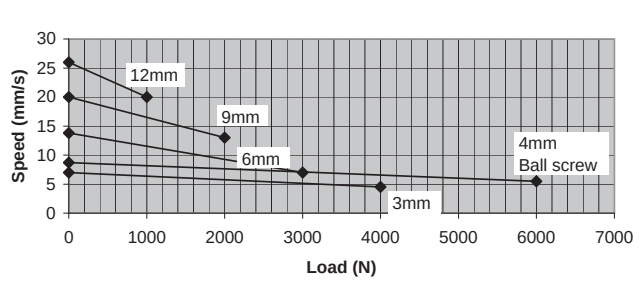
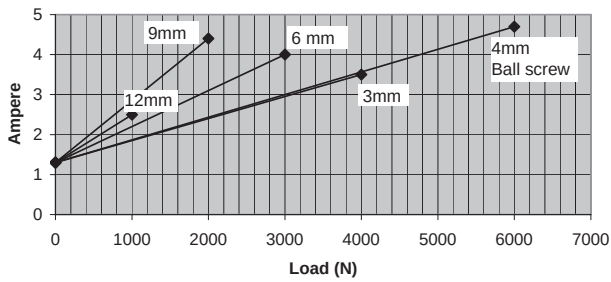
**LA30 24V motor**



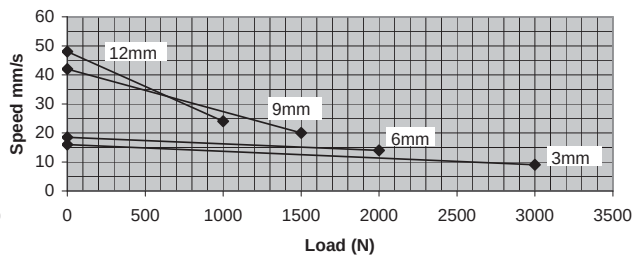
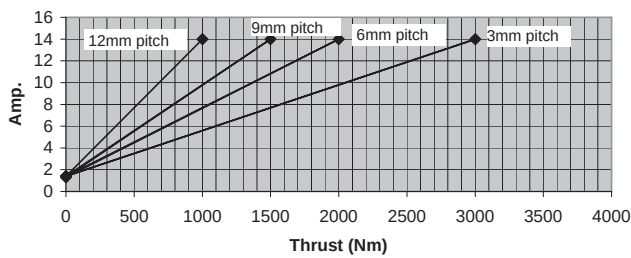
**LA30 24V S-motor**



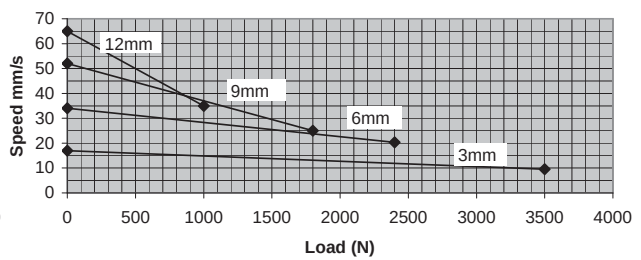
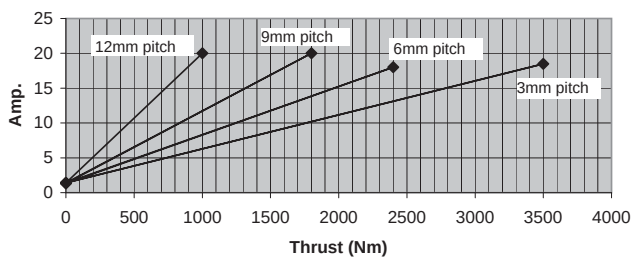
**LA30 24V L-motor**



**LA30 12V motor**



**LA30 12V S-motor**



# Technical specifications:

| New type          | Old type  | Spindle pitch<br>(mm) | Thrust max.<br>(N) | *Self-lock max. With/without brake<br>(N) | Typical speed 0/full load<br>(mm/s) | Stroke length<br>(mm) |     |     |     |     |     |     |     |    |     | Typical amp. at full load |     |
|-------------------|-----------|-----------------------|--------------------|-------------------------------------------|-------------------------------------|-----------------------|-----|-----|-----|-----|-----|-----|-----|----|-----|---------------------------|-----|
|                   |           |                       |                    |                                           |                                     |                       |     |     |     |     |     |     |     |    |     | 12V                       | 24V |
| 307xx0-4xxxx0/5xx | LA30.4B   | 12                    | 1000               | 1000/0                                    | 48/24                               | 50                    | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 14 | 7   |                           |     |
| 303xx0-4xxxx0/5xx | LA30.3B   | 9                     | 1500               | 1500/400                                  | 42/20                               | 50                    | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 14 | 6.9 |                           |     |
| 302xx0-4xxxx0/5xx | LA30.2B   | 6                     | 2000               | 2000/500                                  | 18.5/14                             | 50                    | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 14 | 7   |                           |     |
| 301xx0-xxxxx0/5xx | LA30.1    | 3                     | 3000               | 3000/3000                                 | 16/9                                | 50                    | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 14 | 6.4 |                           |     |
| 307xx0-4xxxx1/2xx | LA30.7SB  | 12                    | 1000               | 1000/0                                    | 65/35                               | 50                    | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 20 | 10  |                           |     |
| 303xx0-4xxxx1/2xx | LA30.3SB  | 9                     | 1800               | 1800/0                                    | 52/25                               | 50                    | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 20 | 10  |                           |     |
| 302xx0-4xxxx1/2xx | LA30.2SB  | 6                     | 2400               | 2400/500                                  | 34/20.3                             | 50                    | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 18 | 9.1 |                           |     |
| 301xx0-xxxxx1/2xx | LA30.1S   | 3                     | 3500               | 3500/3500                                 | 17/9.5                              | 50                    | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 18 | 9.3 |                           |     |
| 307xx0-4xxxx4xx   | LA30.4LB  | 12                    | 1000               | 1000/0                                    | 26/20                               | 50                    | 100 | 150 | 200 | 250 | 300 | 350 | 400 | -  | 2.5 |                           |     |
| 303xx0-4xxxx4xx   | LA30.3LB  | 9                     | 2000               | 2000/0                                    | 20/13                               | 50                    | 100 | 150 | 200 | 250 | 300 | 350 | 400 | -  | 4.4 |                           |     |
| 302xx0-4xxxx4xx   | LA30.2L   | 6                     | 3000               | 3000/2000                                 | 13.8/7                              | 50                    | 100 | 150 | 200 | 250 | 300 | 350 | 400 | -  | 4   |                           |     |
| 301xx0-xxxxx4xx   | LA30.1L   | 3                     | 4000               | 4000/4000                                 | 7/4.5                               | 50                    | 100 | 150 | 200 | 250 | 300 | 350 | 400 | -  | 3.5 |                           |     |
| 30Kxx0-0xxxx4xx   | LA30.LK   | 4                     | 6000               | 6000/n/a                                  | 8.7/5.5                             | -                     | -   | 150 | 200 | 250 | 300 | 350 | 400 | -  | 4.7 |                           |     |
| 30Kxx0-1xxxx4xx   | LA30.KAS  | 4                     | 6000               | 6000/n/a                                  | 8.7/5.5                             | -                     | -   | 150 | 200 | 250 | 300 | 350 | 400 | -  | 4.7 |                           |     |
| 30Kxx0-3xxxx4xx   | LA30.LKSM | 4                     | 6000               | 6000/n/a                                  | 8.7/5.5                             | -                     | 100 | 150 | 200 | 250 | 300 | 350 | 400 | -  | 4.7 |                           |     |

The above measurements are made with the actuators connected to a stable power supply, LA30 L-motor versions with a CB12.

S = Strong motor

L = Slow motor

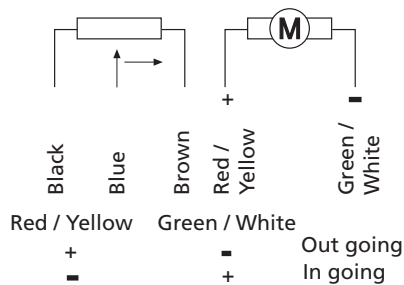
K = Ball screw

KAS = Ball screw, safety nut

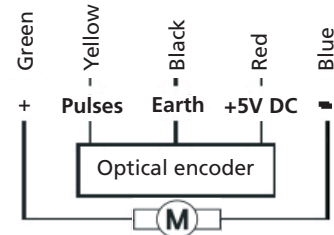
KSM = Ball screw, safety nut, spline

All stroke lengths marked with   background shading give full resolution with the standard potentiometer (1; 5 or 10 K ohm). A potentiometer may be used with other stroke lengths but will not give full resolution.

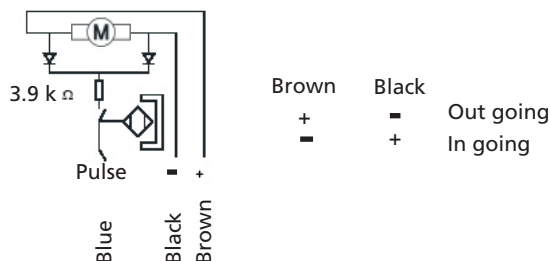
## LA30 Actuator with potentiometer



## LA30 Actuator with optical encoder

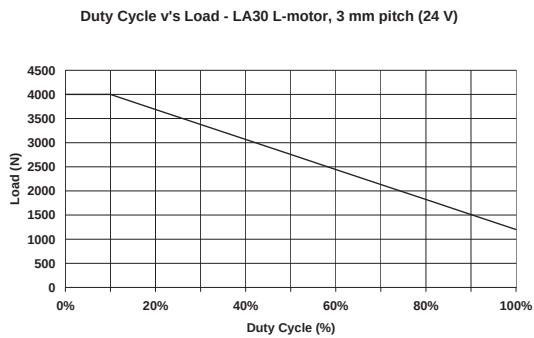


## LA30 Actuator with reed ( only possible with 24V L-motor )

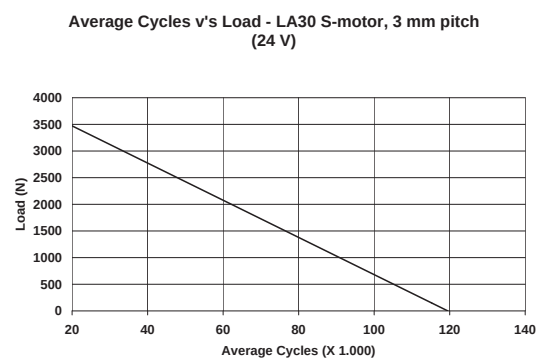
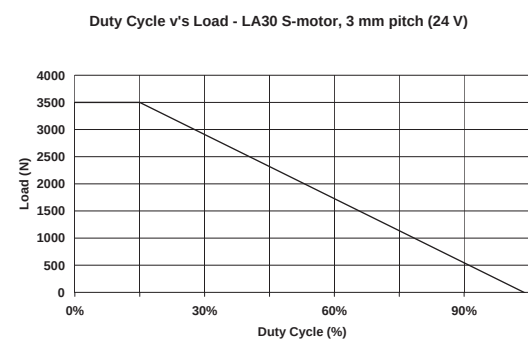
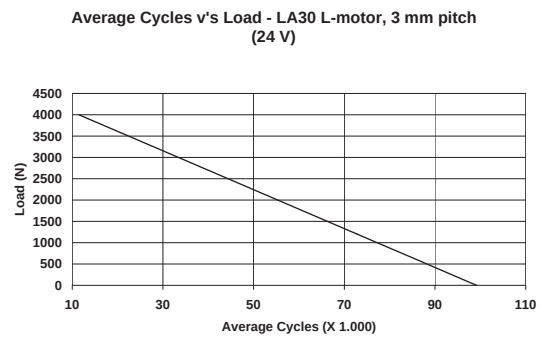


Please note that the voltage level og feedback signal depends on the actuator load.

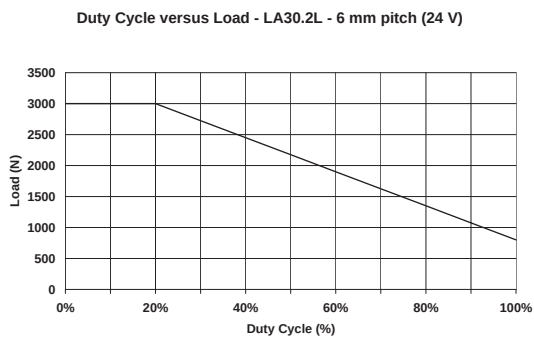
## Thrust v's Duty cycles for LA30 3 mm pitch



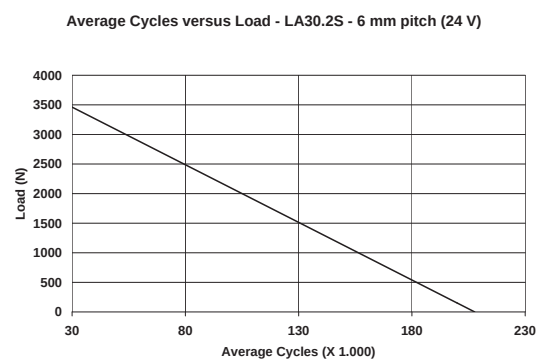
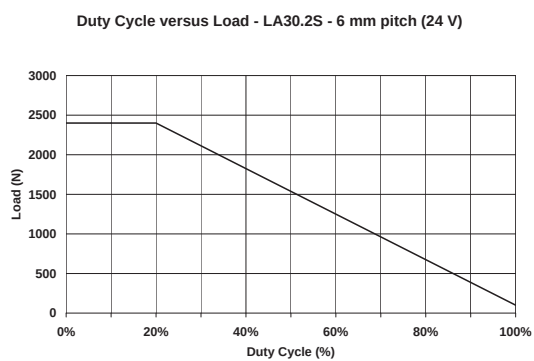
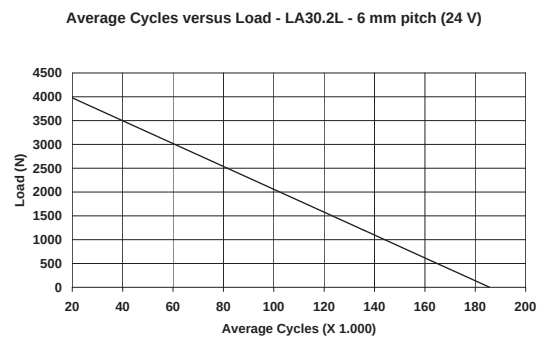
## Thrust v's Average cycles for LA30 3 mm pitch



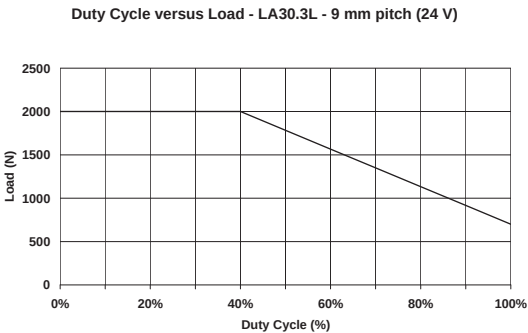
## Thrust v's Duty cycles for LA30 6 mm pitch



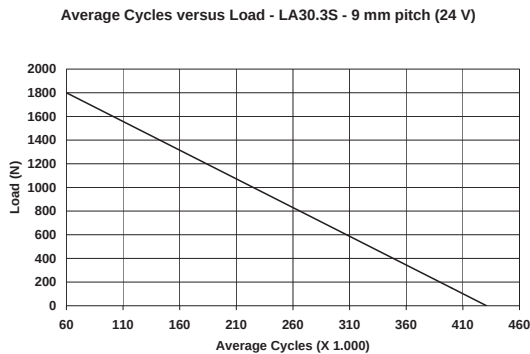
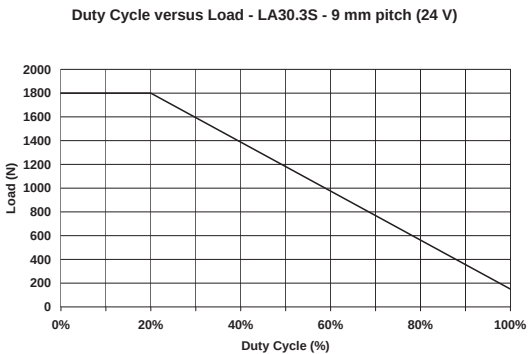
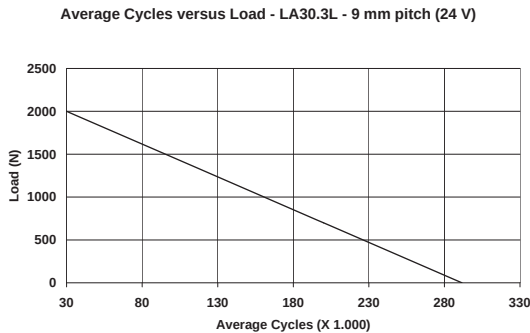
## Thrust v's Average cycles for LA30 6 mm pitch



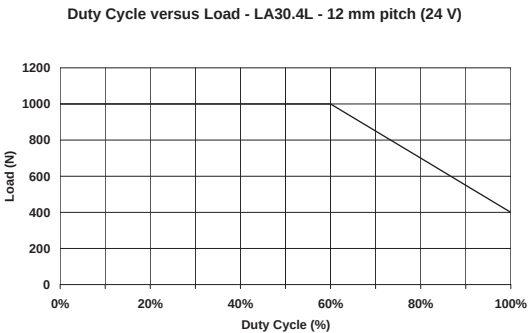
Thrust v's Duty cycles for LA30 9 mm pitch



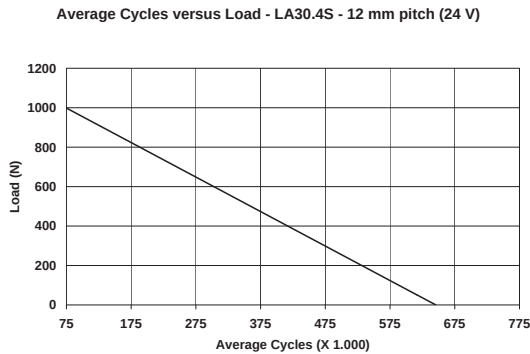
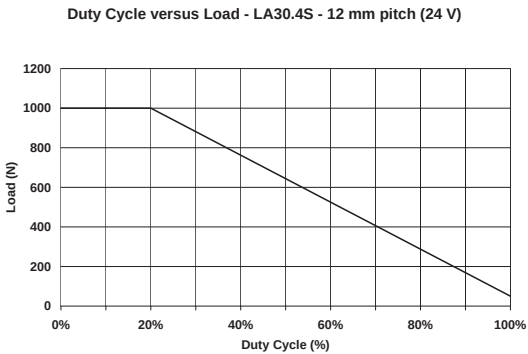
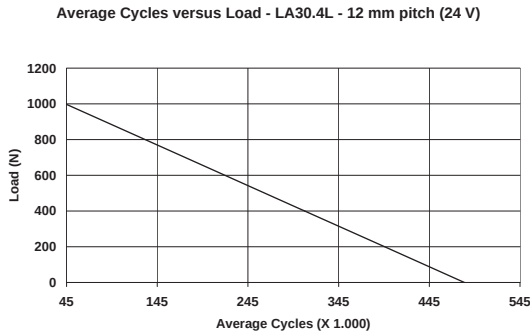
Thrust v's Average cycles for LA30 9 mm pitch



Thrust v's Duty cycles for LA30 12 mm pitch

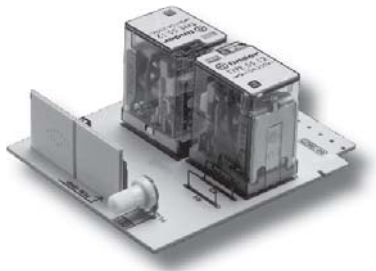


Thrust v's Average cycles for LA30 12 mm pitch



## Accessories for LA30:

### Control card



The CS16 electronic limit switch is connected between the LINAK® actuator and a non-LINAK power supply, where it cuts out the current to the actuator in end position or if an obstacle is encountered. The PCB contains a variable current limit setting and is available in different versions, depending on which actuator it is to be used with.

Above mentioned guarantees the maintenance of the long life of the LINAK actuator. The CS16 is an important component which ensures a long life for the actuator.

### Limit Switch



There are two types of LINAK® limit switches, for LA30, LS and LSD.

The LSD type controls the stroke length of the actuator between two fixed end positions by cutting off the current to the motor. The LS type gives signal in two fixed end positions, but requires a control unit to stop the actuator when the micro switches are activated.

### Bellows



- Give a better protection and therefore give a higher lifetime of the actuator
- Protects inner tube against dust and dirt
- Can be used for actuators: LA30
- Does not change the IP rating
- Available in black colour
- Ask for special folder

Please contact your nearest LINAK dealer for further details or read more on [www.linak.com](http://www.linak.com).

Specifications subject to change without prior notice.  
It is the responsibility of the product user to determine the suitability of LINAK A/S products for a specific application. LINAK will at point of delivery replace/repair defective products covered by the warranty if promptly returned to the factory. No liability is assumed beyond such replacement/repair.