

Linear Actuator LA44

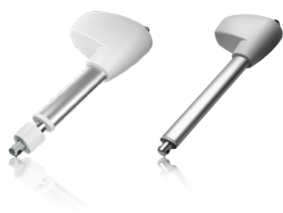
Data Sheet



Contents

Introduction.....	3
Features and options	4
Usage	4
Ordering example	5
Approvals and certifications	6
Installation dimension	7
Dimensions - LA44 standard	8
Dimensions - LA44 with manual lowering.....	9

Introduction



The LA44 is available in powerful 10,000 N and 12,000 N versions for use in various healthcare applications to ensure safe patient handling.

With the LA44 actuator, LINAK offers a product, which with its wide range of safety options, low noise level, and outstanding performance is the right choice for medical applications such as patient lifts, beds, dental chairs etc.

- Heavy duty actuator
- Safety options such as:
 - Manual lowering: makes it possible to turn the inner tube down by hand, in case of emergency, or if electrical power is not available.
 - Spline: potential work injuries are prevented by the spline, as the actuator can only push and not pull, in case something touches e.g. the lifting boom on a patient lift.
- High side load capacity for high safety: Side load of up to 1000 N is possible without breaking or damaging the actuator.
- Safety nut: to ensure safe patient handling even when the actuator is no longer new.
- Unique and improved brake to ensure no unintended movement.

Features and options

Load in push:	10000 N, 12000 N
Housing colour:	Light grey RAL7035
Protection class:	IPX4, IPX6
Motor:	24 V DC (standard), 24 V DC (fast)
Stroke length:	100 - 400 mm (in steps of 5mm)
Built-in dimensions:	See installation dimensions
Positioning options:	Dual Hall or potentiometer
Noise level:	50dB (A) according to DS/EN ISO3743-1
Safety nut option:	Yes, in push
Nut:	Guided (not guided nut with manual lowering)
Spline options:	Mechanical or electrical
Built-in electrical	Endstop
limit switch:	
Built-in end stop	Mechanical
switches:	
Exchangeable cable:	Yes, minifit to minifit
Safety factor:	>2
Manual lowering:	Optional in red or grey

Usage

Operation temperature:	+5 °C to +40 °C
Storage temperature:	-10 °C to +50 °C
Duty cycle:	10%, 2 minutes continuous use followed by 18 minutes not in use
Compatibility:	Compatible with LINAK control boxes. Please contact LINAK.
Relative humidity:	20% to 80% – non-condensing
Atmospheric pressure:	700 to 1060 hPa
Meters above sea level:	Max. 3000 meters
Approvals:	IEC60601-1 ANSI/AAMI ES60601-1 CAN/CSA-22.2 No 60601-1

Ordering example

Actuator type:	LA					Std.	PL
	44						
Spindle pitch:	080	080	= 8 mm	12000 N		X	X
		120	= 12 mm	10000 N		X	X
Stroke length:	200	XXX	= XXX mm	From 100-400 mm in steps of 5 mm		X	X
Safety:	A	A	= Safety nut			X	X
		D	= Mechanical spline and safety nut	Not available with ML option		X	
		L	= Electrical spline and safety nut			X	X
Feedback:	0	0	= None			X	X
		P	= Potentiometer	Not available with ML option	Max. stroke: 150 mm with 8 mm pitch Max. stroke: 250 mm with 12 mm pitch	X	
		H	= Dual Hall, digital	Not available with ML option		X	
Not used	00	00	= Not specified				
Motor type:	B	B	= 24 VDC normal			X	X
		E	= 24 VDC fast			X	X
IP degree:	4	4	= IPX4			X	X
		6	= IPX6			X	X
	-						
Colour:	2	2	= Grey RAL7035			X	X
Back fixture:	1	1	= 0 degrees			X	X
		2	= 90 degrees			X	X
Piston Rod Eye:	1	1	= With slot	Installation + 3.3 mm		X	
		2	= Solid			X	X
Option Lowering:	0	0	= None			X	
		J	= Manual Lowering	Available in grey RAL7035 and Red RAL3020			X
Brake:	1	1	= Brake PUSH			X	X
Install. Dim:	0200	xxxx	= xxxx mm	Standard load ≤ 10 kN	BID = SL + 210 (SL ≤ 300)	X	
				Standard load ≤ 12 kN	BID = SL + 230 (SL ≤ 300)	X	
				Long installation with ML	BID = SL + 270+78 (SL ≤ 300)		X
				Long installation with ML	BID = SL + 290+78 (SL > 300)		X
				Long installation	BID = SL + 270 (SL ≤ 300)	X	
				Long installation	BID = SL + 290 (SL > 300)	X	
Fire Category:	0	0	= None/HB			X	X
		1	= V0			X	X
Connector	D	D	= Mini-fit			X	X
Cable:	0	0	= None			X	X
Safety factor	0	0	= 2.0	Bed applications	Check safety factor graphs	X	
		1	= 2.0 PL	Patient lifts	Check safety factor graphs		X
		2	= 2.5	Medical applications	Check safety factor graphs	X	
Not Used	0	0	= Not specified				
Not Used	0	0	= Not specified				

Chosen item number: 44080200A000B4-2110102000D0000

Approvals and certifications

For approval documentation, LINAK recommends specifying the product type instead of individual item numbers to ensure broader approval coverage and simplify future product changes.

Listed LINAK item for application approval: LA44

If this is not possible, we advise being as non-specific as possible when specifying LINAK products in your approval application:

Listed LINAK item for application approval: LA44*****S***SS*****S***SS

“ * ” is not safety critical and we recommend including a non-specific signifier such as an asterisk.

“ S ” is safety critical and represents a listed critical component in the product and cannot be left out.

For more information, please refer to “Approvals and certifications” in LINAK Application Design Recommendations found under User Manual for any given product on LINAK.com

Installation dimension

Installation dimension option "0" in ordering example

	Installation dimensions 12 mm pitch (10,000 N)	
	Standard piston rod	Piston rod with slot (+3.3 mm)
Stroke length 100-300mm:	S+210 mm	S + 213.3 mm
Safety nut in push is standard: no addition to installation dimension		
Piston rod eye with slot: Installation + 3.3 mm		
Manual lowering not allowed		

Installation dimension option "1" in ordering example

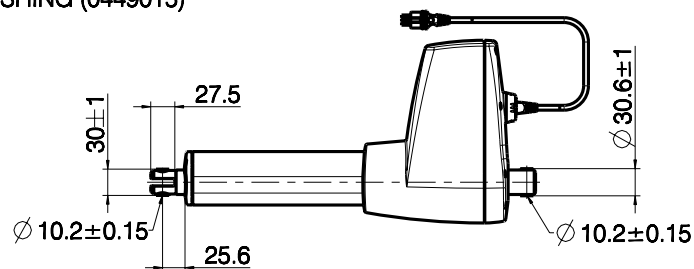
	Installation dimensions 8 mm pitch (12,000 N) or 12 mm pitch (10,000 N)	
	Standard piston rod	Piston rod with slot (+3.3 mm) (not for 12,000 N)
Stroke length 100-300 mm:	S+230 mm	S + 233.3 mm
Safety nut in push is standard: no addition to installation dimension		
Piston rod eye with slot: installation + 3.3 mm (Not for 12,000 N)		
Manual lowering not allowed		

Installation dimension option "L" in ordering example

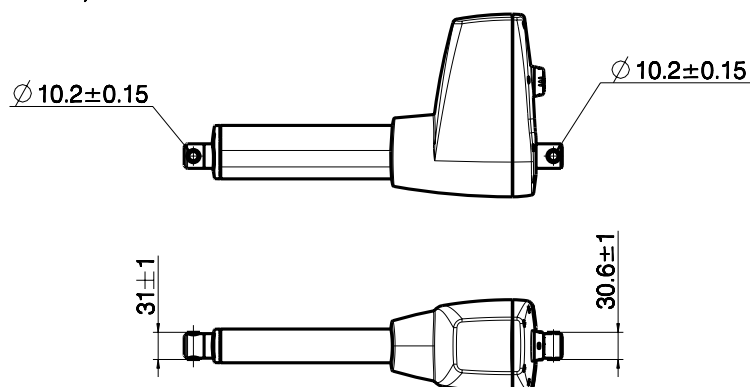
	Installation dimensions 8 mm pitch (12,000 N) or 12 mm pitch (10,000 N)		
	Standard piston rod	Piston rod with slot (+3.3 mm)	With manual lowering
Stroke length 100-300 mm:	S+270 mm	S + 273.3 mm	S + 348 mm
Stroke length 301-400 mm:	S+290 mm	S + 293.3 mm	S + 368 mm
Safety nut in push is standard: no addition to installation dimension			
Piston rod eye with slot: installation + 3.3 mm (Not for 12,000 N)			
Manual lowering: Installation + 78 mm (slot is not possible with manual lowering)			

Dimensions - LA44 standard

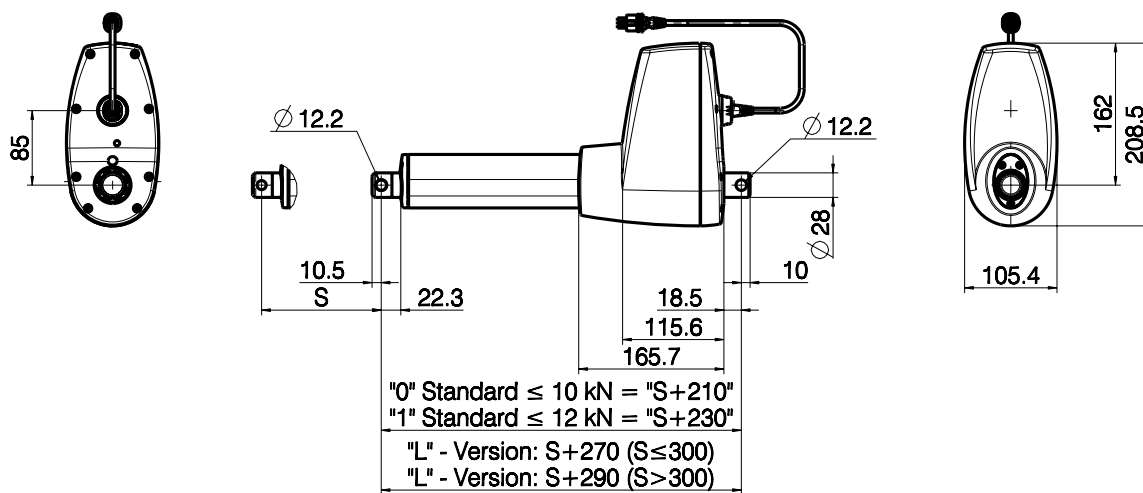
WITH SLOT AND BUSHING (0449015)



WITH BUSHING (0449014)



WITHOUT BUSHING (0449014)



INSTALLATION DIMENSION

Drawing no.: 0449014

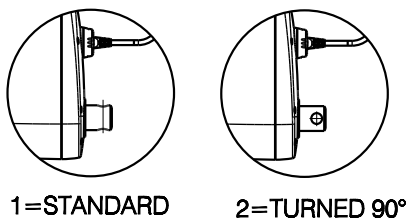


Information

± 2 mm - Installation dimension

± 2 mm - Stroke length

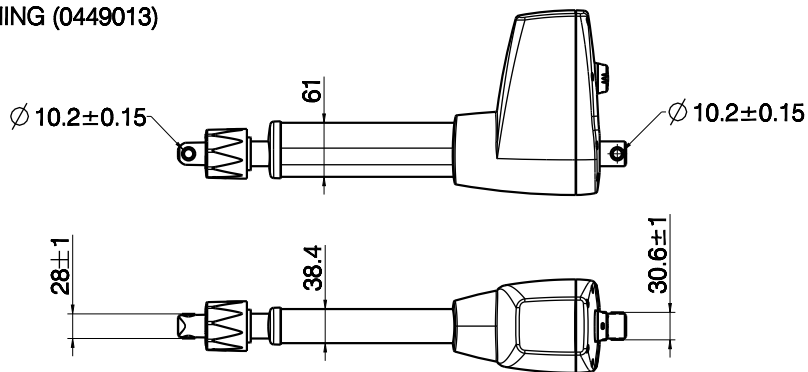
Dimensions - LA44 with manual lowering



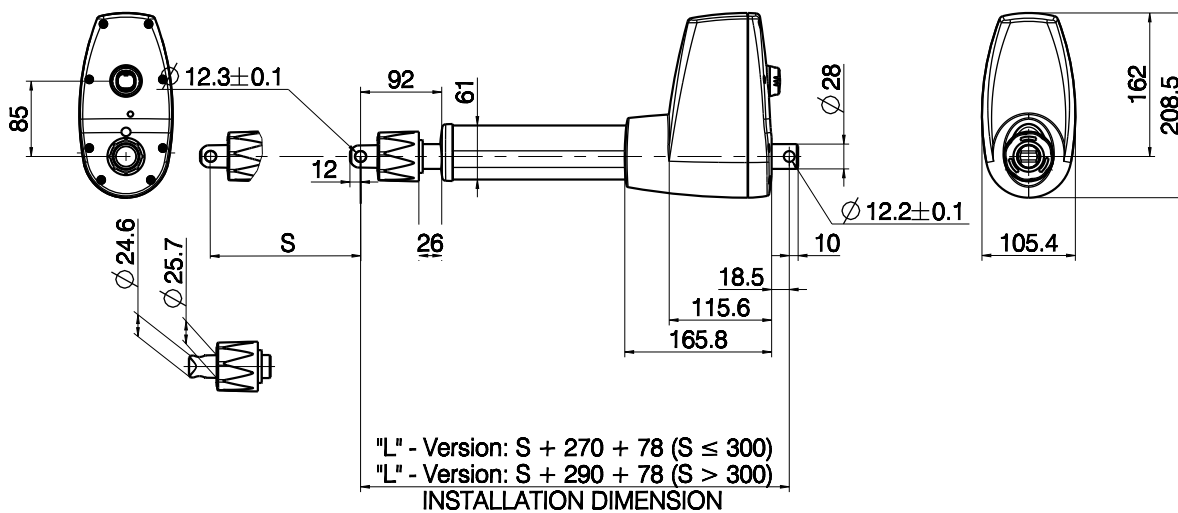
1=STANDARD

2=TURNED 90°

WITH BUSHING (0449013)



WITHOUT BUSHING (0449013)



Drawing no.: 0449013



Information

± 2 mm - Installation dimension

± 2 mm - Stroke length

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