

# Linear Actuator LA30

## Data Sheet



## Contents

|                                       |          |
|---------------------------------------|----------|
| <b>Introduction</b> .....             | <b>3</b> |
| <b>Features and options</b> .....     | <b>3</b> |
| <b>Usage</b> .....                    | <b>4</b> |
| <b>Technical specifications</b> ..... | <b>4</b> |
| <b>Ordering example</b> .....         | <b>5</b> |
| <b>Dimensions</b> .....               | <b>6</b> |
| Installation dimension .....          | 6        |
| <b>Plastic housing for LA30</b> ..... | <b>7</b> |
| <b>LA30 Standard</b> .....            | <b>8</b> |
| <b>Piston Rod eyes</b> .....          | <b>8</b> |

## Introduction



LA30 is a powerful actuator yet small enough to fit 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.

## Features and options

- 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: IPX0/66
- Colour: Black
- Speed max. 65mm/s (LA30 S-motor with 12mm pitch)
- Low noise level
- Steel construction for all bearing parts
- Acme thread spindle for optimum efficiency
- 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: 0-10 K ohm
- Reed switch (only LA30 L-motor versions): 8 pulses pr. spindle revolution
- 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)

## Usage

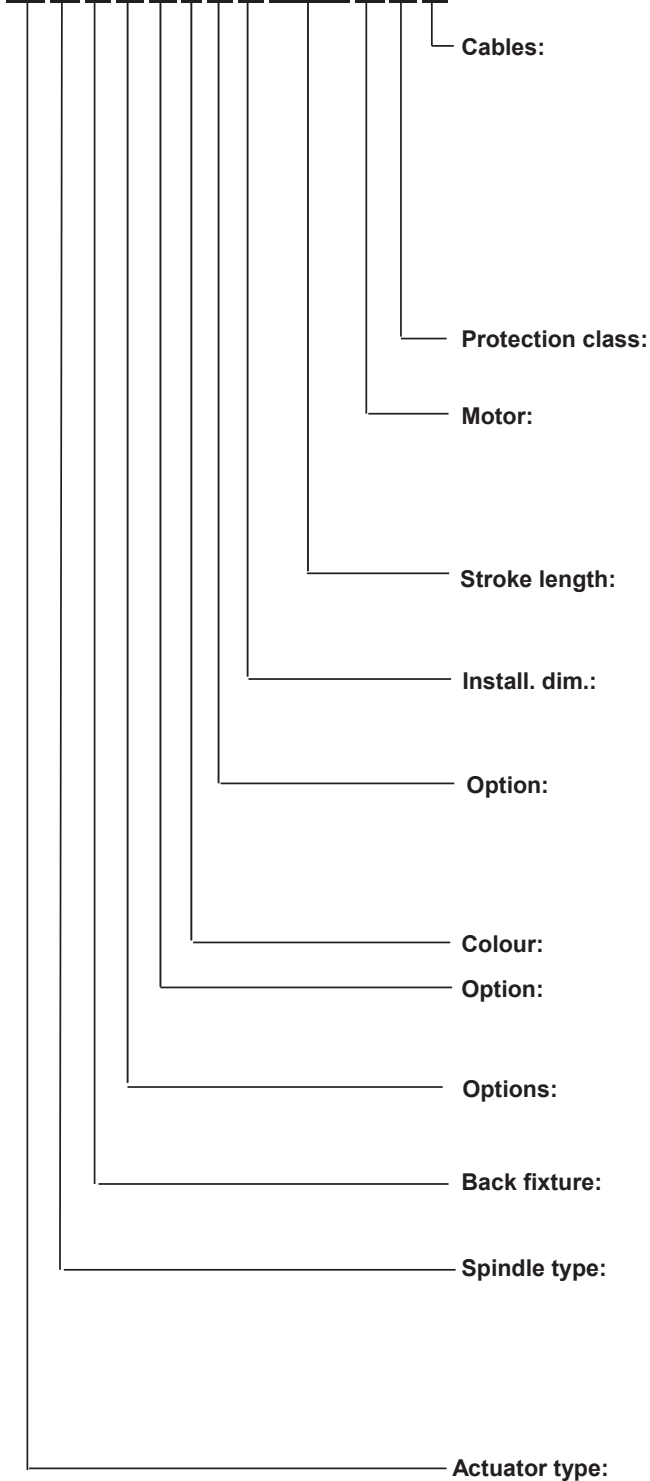
- Duty cycle: 10%, 2 minutes continuous use followed by 18 minutes not in use
- Ambient temperature: +5o to +40o C
- Storage temperature -40o to +70o C
- Compatible with LINAK control boxes. Please contact LINAK.
- Approvals: IEC 60601-1, ANSI/AAMI ES60601-1 and CAN/CSA-22.2 No 60601-1

## Technical specifications

| New type          | Spindle pitch(mm) | Thrustmax.(N)<br>Push | Thrust max.(N)<br>Pull | *Self-lock max.<br>with/without<br>brake (N) | Typical speed<br>0/ full load<br>(mm/s) | Stroke length<br>(mm) |      |      |      |     |      |     |      |    | Typical amp.at ull<br>load 12V 24V |  |
|-------------------|-------------------|-----------------------|------------------------|--|---|-----------------------|------|------|------|-----|------|-----|------|----|------------------------------------|--|
|                   |                   |                       |                        |  |   | 50                    | 100  | 150  | 200P | 250 | 300  | 350 | 400P | 14 | 7                                  |  |
| 307xx0-4xxxx0/5xx | 12                | 1000                  | 1000                   | 1000/0                                       | 48/24                                   | 50                    | 100  | 150  | 200P | 250 | 300  | 350 | 400P | 14 | 7                                  |  |
| 303xx0-4xxxx0/5xx | 9                 | 1500                  | 1500                   | 1500/400                                     | 42/20                                   | 50                    | 100  | 150P | 200  | 250 | 300P | 350 | 400  | 14 | 7                                  |  |
| 302xx0-4xxxx0/5xx | 6                 | 2000                  | 2000                   | 2000/500                                     | 18.5/14                                 | 50                    | 100P | 150  | 200P | 250 | 300  | 350 | 400P | 14 | 7                                  |  |
| 301xx0-xxxxx0/5xx | 3                 | 3000                  | 3000                   | 3000/3000                                    | 16/9                                    | 50P                   | 100P | 150  | 200P | 250 | 300  | 350 | 400  | 14 | 6.4                                |  |
| 307xx0-4xxxx1/2xx | 12                | 1000                  | 1000                   | 1000/0                                       | 65/35                                   | 50                    | 100  | 150  | 200P | 250 | 300  | 350 | 400P | 20 | 10                                 |  |
| 303xx0-4xxxx1/2xx | 9                 | 1800                  | 1800                   | 1800/0                                       | 52/25                                   | 50                    | 100  | 150P | 200  | 250 | 300P | 350 | 400  | 20 | 10                                 |  |
| 302xx0-4xxxx2xx   | 6                 | 2000                  | 2000                   | 2000/500                                     | 34/20.3                                 | 50                    | 100P | 150  | 200P | 250 | 300  | 350 | 400P | 18 | -                                  |  |
| 302xx0-4xxxx1xx   | 6                 | 2400                  | 2400                   | 2400/500                                     | 34/20.3                                 | 50                    | 100P | 150  | 200P | 250 | 300  | 350 | 400P |    | 9                                  |  |
| 301xx0-xxxxx1/2xx | 3                 | 3500                  | 3000                   | 3500/3500                                    | 17/9.5                                  | 50P                   | 100P | 150  | 200P | 250 | 300  | 350 | 400  | 18 | 9                                  |  |
| 307xx0-4xxxx4xx   | 12                | 1000                  | 1000                   | 1000/0                                       | 26/20                                   | 50                    | 100  | 150  | 200P | 250 | 300  | 350 | 400P | -  | 2.5                                |  |
| 303xx0-4xxxx4xx   | 9                 | 2000                  | 2000                   | 2000/0                                       | 20/13                                   | 50                    | 100  | 150P | 200  | 250 | 300P | 350 | 400  | -  | 4.4                                |  |
| 302xx0-4xxxx4xx   | 6                 | 3000                  | 3000                   | 3000/2000                                    | 13.8/7                                  | 50                    | 100P | 150  | 200P | 250 | 300  | 350 | 400P | -  | 4                                  |  |
| 301xx0-xxxxx4xx   | 3                 | 4000                  | 3000                   | 4000/4000                                    | 7/4.5                                   | 50P                   | 100P | 150  | 200P | 250 | 300  | 350 | 400  | -  | 5.5                                |  |
| 30Kxx0-0xxxx4xx   | 4                 | 6000                  | 3000                   | 6000/n/a                                     | 8.7/5.5                                 | -                     | -    | 150  | 200  | 250 | 300  | 350 | 400  | -  | 4.7                                |  |
| 30Kxx0-1xxxx4xx   | 4                 | 6000                  | 3000                   | 6000/n/a                                     | 8.7/5.5                                 | -                     | -    | 150  | 200  | 250 | 300  | 350 | 400  | -  | 4.7                                |  |
| 30Kxx0-3xxxx4xx   | 4                 | 6000                  | 3000                   | 6000/n/a                                     | 8.7/5.5                                 | -                     | 100  | 150  | 200  | 250 | 300  | 350 | 400  | -  | 4.7                                |  |

## Ordering example

**30 1 1 0 0 - 1 0 2 5 0 0 0 0**



General tolerance +/- 70mm

**Cables:**  
**N = No cable when IPX0 (except reed)** (no cable relief will be mounted)  
 0 = Straight with jack plug, 2.3m with IP- housing and 2.45m without IP-housing  
 1 = Straight with jack plug, 1.05m with IP- housing and 1.2m without IP-housing  
 2 = Coiled with jack plug 400 mm  
 3 = Coiled with jack plug 200 mm  
 4 = Straight without plug 500 mm (Potentiometer)  
 5 = Straight without plug 1200 mm (with IP66 housing)  
 X = Other cable / length

**Protection class:**  
**0 = IPX0**  
 2 = IP66 with plastic house

**Motor:**  
**0 = 24V**  
 1 = 24V S-motor  
 2 = 12V S-motor  
 4 = 24V L-motor for LINAK control boxes  
 5 = 12V motor

**Stroke length:**  
 XXX = mm Max. with 3 & 6mm pitch 400 mm  
 Max. with 9 & 12mm pitch 500 mm  
 Min. 50 mm

**Install. dim.:**  
**0 = Standard**  
 X = Other installation dimension

**Option:**  
 0 = None  
**1 = Safety nut RECOMMENDED**  
 4 = Brake (not optional with K spindle)  
 5 = Brake with safety nut (not optional with K spindle)

**Colour:**  
**- = Black**

**Option:**  
**0 = None**  
 1 = LSD (Factory installed, not IPX6 max. IPX4)  
 2 = LS (Separately, for customer assembly, not IPX6 max. IPX4)

**Options:**  
**0 = None**  
 T = Potentiometer 10 Kohm } only with motor 0, 1, 2, 4, 5  
 R = Reed switch } only with motor 4

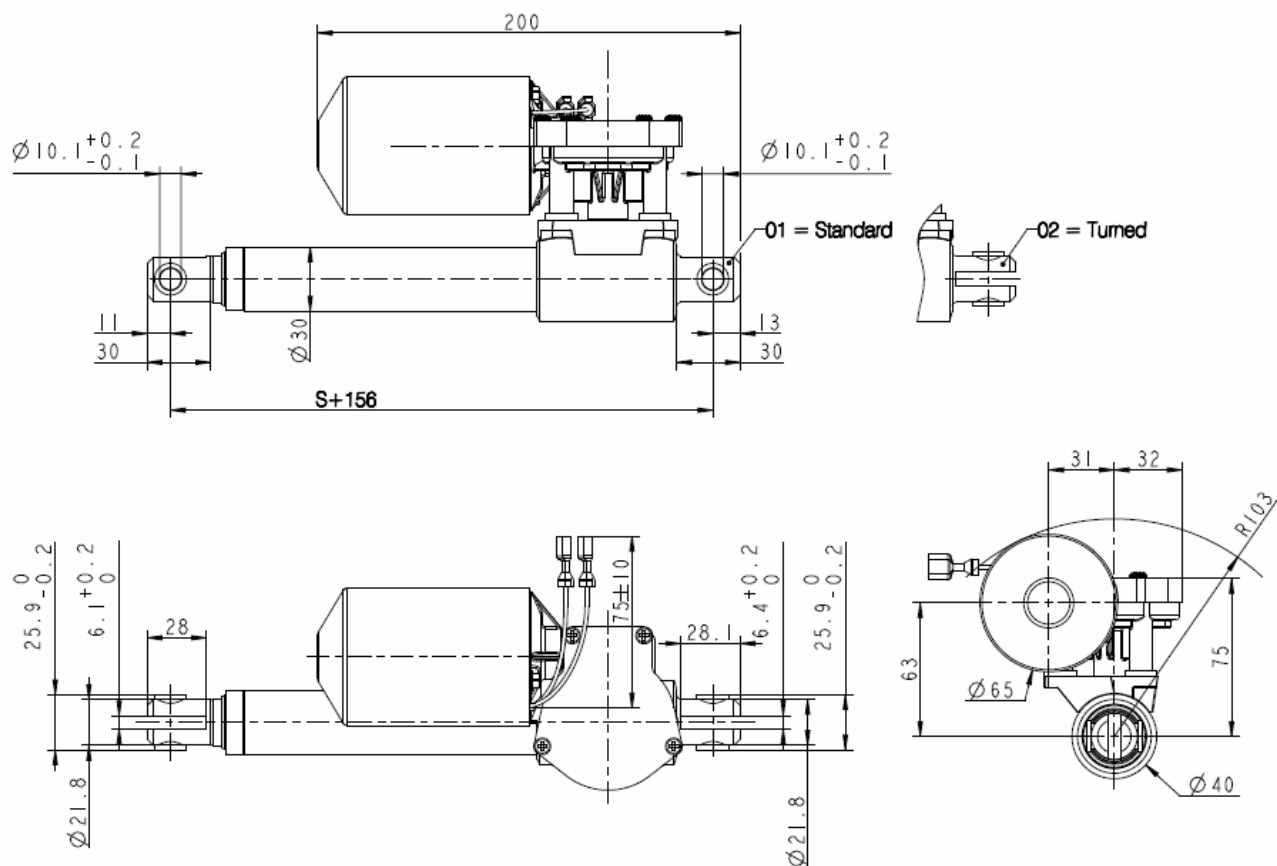
**Back fixture:**  
**1 = Standard (01)**  
 2 = Turned 90° (02)

**Spindle type:**  
**1 = 3 mm** (1-thread) Old type no. LA30.1  
**2 = 6 mm** (2 thread) LA30.2  
**3 = 9 mm** (3-thread) LA30.3  
**7 = 12 mm** (4-thread) LA30.4  
**K = Ball spindle** LA30K  
**(K spindle is always with brake)**

**Actuator type:** **LA30**

- Please note when standard stroke lengths are ordered together with LS/ LSD the actuator stroke will typically be 6mm shorter and the install dimension 3mm longer.
- Also note that the switches in the LS/LSD will only cut the current to the actuator. The piston will continue its travel depending on the actuator's actual self-locking.

## Dimensions



## Installation dimension

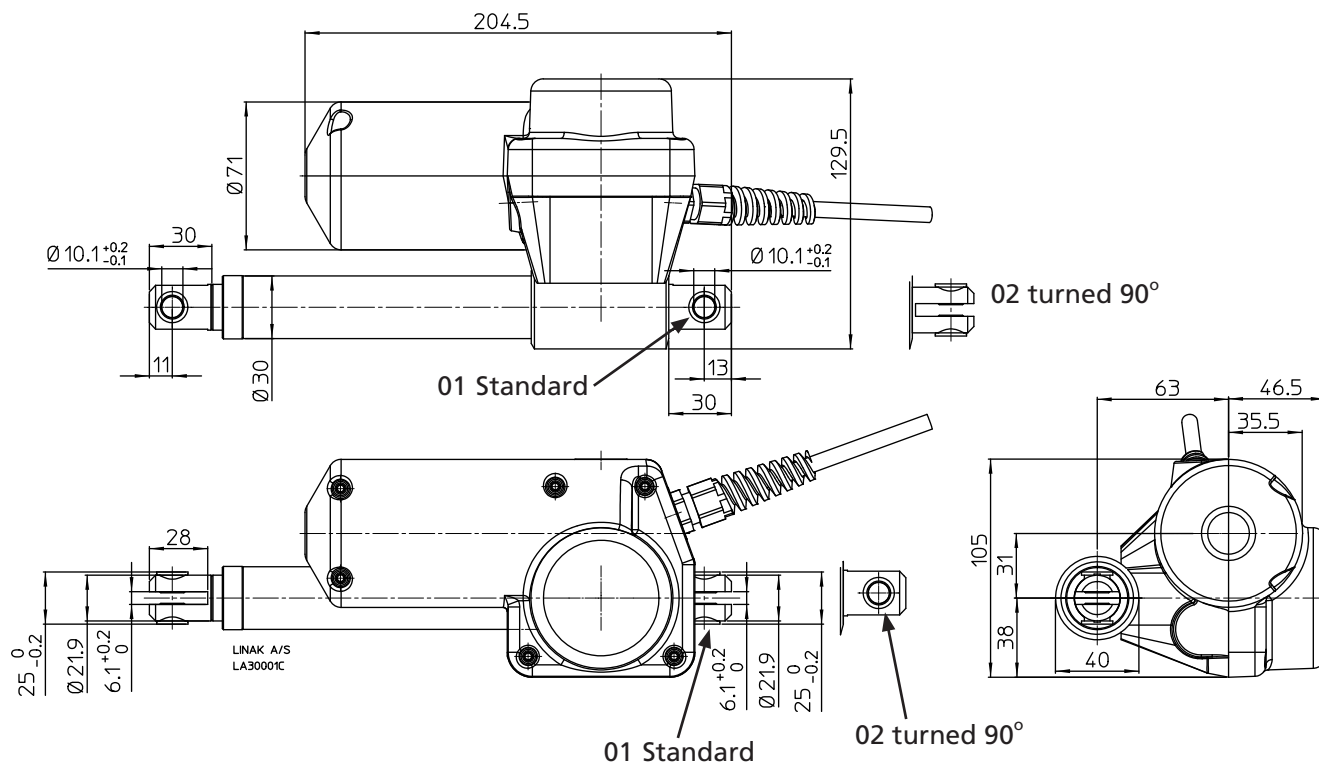
|   |            |
|---|------------|
| LA30 L-motor + LA30 + LA30 S-motor with 3 or 6mm. pitch           | S + 156 mm |
| LA30 with spline + LA30 S-motor with 9 mm. pitch                  | S + 167 mm |
| LA30 with brake + LA30 S-motor with 3 or 6 mm. pitch with brake   | S + 189 mm |
| LA30 with ball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

## Plastic housing for LA30

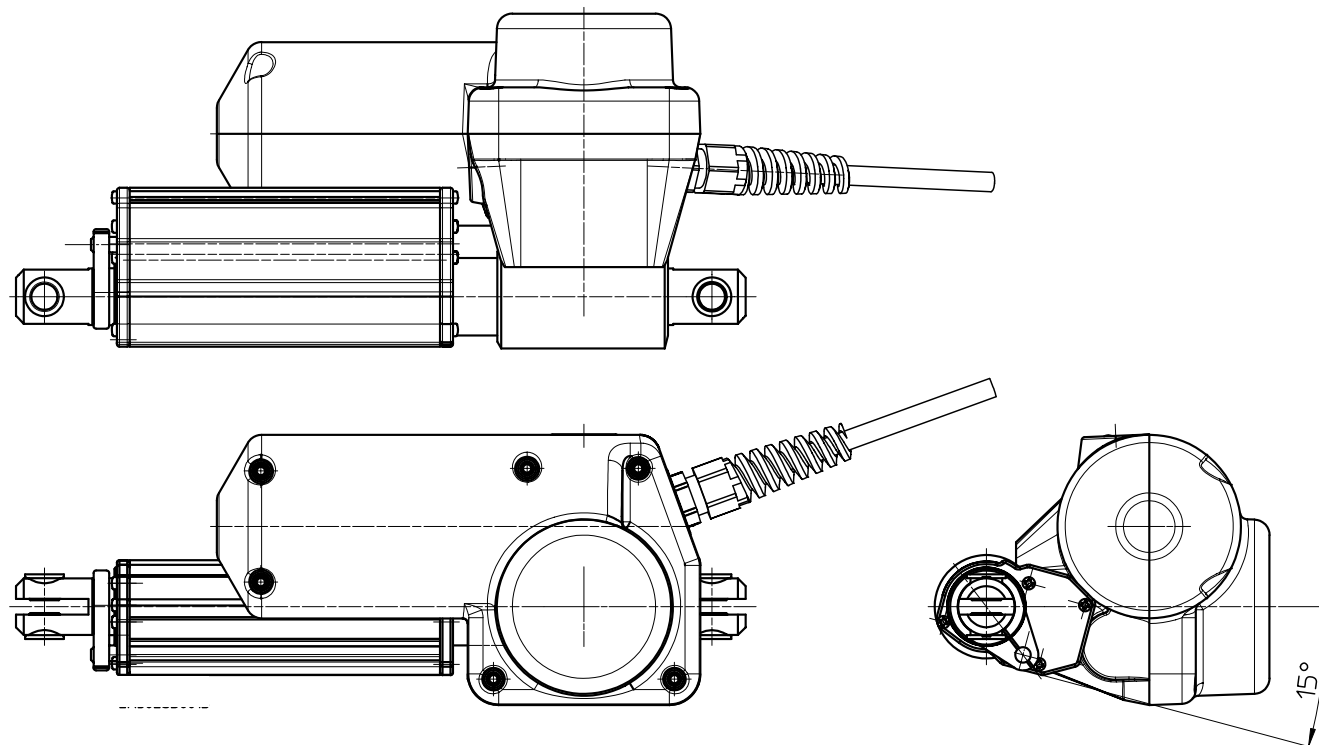
It is possible to order a LA30 with the protection class IP66. This option requires a plastic housing. See drawings below.

The LA30 actuator is mounted with a 1.2m / 0.5m cable without plug.

### Dimensions

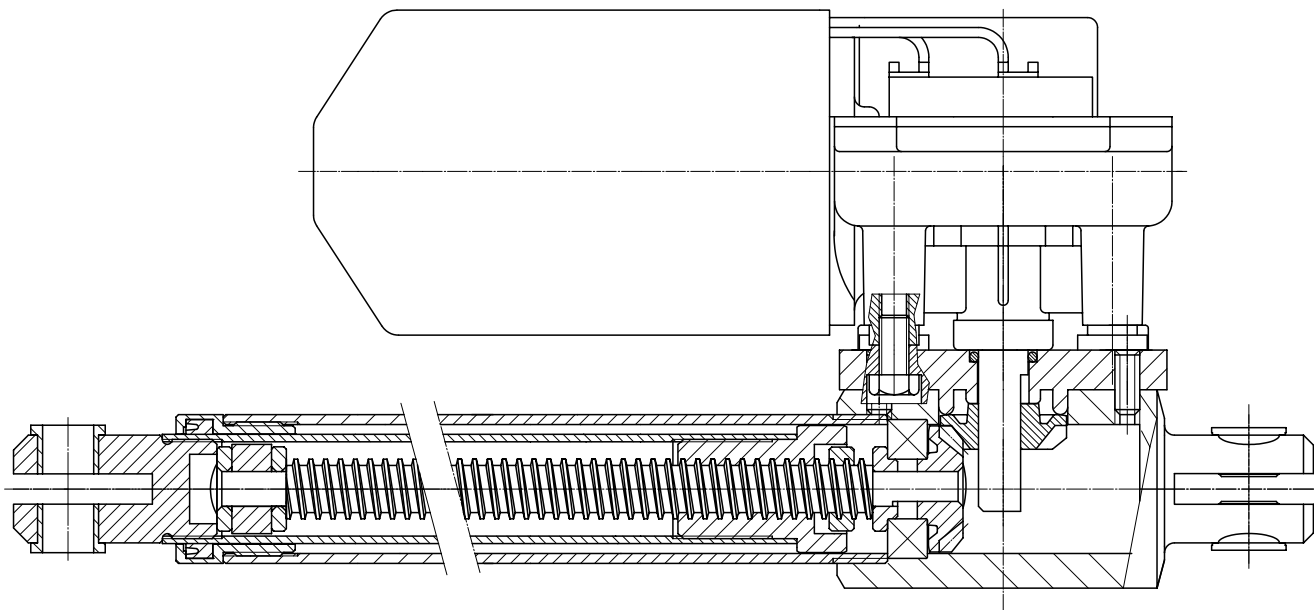


### LA30 with housing mounted with LSD (protection class IPX4)



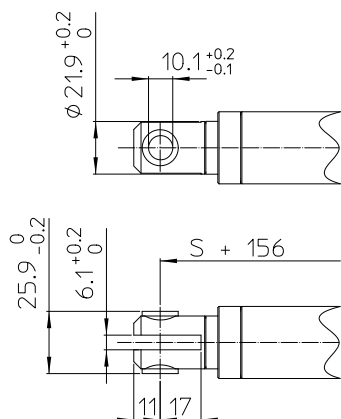
Drawing no.: LA30LSD001B

# LA30 Standard



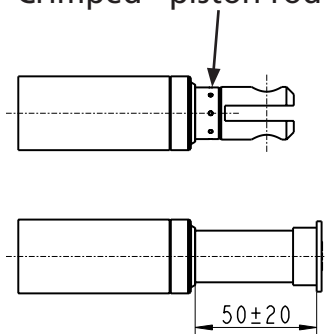
Drawing no.: LA30SNIT001B

## Piston Rod eyes



Standard

## "Crimped" piston rod eye



Piston rod without eye  
(Piston rods without eyes are not tested)

Drawing no.: LA30003A



# Contacts

## FACTORIES

Denmark - Headquarters  
 LINAK A/S  
 Phone: +45 73 15 15 15  
 Fax: +45 74 45 80 48  
 Fax (Sales): +45 73 15 16 13  
 Web: www.linak.com

China  
 LINAK (Shenzhen) Actuator Systems, Ltd.  
 Phone: +86 755 8610 6656  
 Phone: +86 755 8610 6990  
 Web: www.linak.cn

Slovakia  
 LINAK Slovakia s.r.o.  
 Phone: +421 51 7563 444  
 Web: www.linak.sk

Thailand  
 LINAK APAC Ltd.  
 Phone: +66 33 265 400  
 Web: www.linak.com

USA  
 LINAK U.S. Inc.  
 Americas Headquarters  
 Phone: +1 502 253 5595  
 Fax: +1 502 253 5596  
 Web: www.linak-us.com  
 www.linak-latinamerica.com

## SUBSIDIARIES

Australia  
 LINAK Australia Pty. Ltd  
 Phone: +61 3 8796 9777  
 Fax: +61 3 8796 9778  
 E-mail: sales@linak.com.au  
 Web: www.linak.com.au

Austria  
 LINAK Zweigniederlassung - Österreich (Wien)  
 Phone: +43 (1) 890 7446  
 Fax: +43 (1) 890 744615  
 E-mail: info@linak.de  
 Web: www.linak.at - www.linak.hu

Belgium  
 LINAK Actuator-Systems NV/SA  
 (Belgium & Luxembourg)  
 Phone: +32 (0)9 230 01 09  
 E-mail: beinfo@linak.be  
 Web: www.linak.be - www.fr.linak.be

Brazil  
 LINAK Do Brasil Comércio De Atuadores Ltda.  
 Phone: +55 (11) 2832 7070  
 Fax: +55 (11) 2832 7060  
 E-mail: info@linak.com.br  
 Web: www.linak.com.br

Canada  
 LINAK Canada Inc.  
 Phone: +1 502 253 5595  
 Fax: +1 416 255 7720  
 E-mail: info@linak.ca  
 Web: www.linak-us.com

Czech Republic  
 LINAK C&S s.r.o.  
 Phone: +42 058 174 1814  
 Fax: +42 058 170 2452  
 E-mail: info@linak.cz  
 Web: www.linak.cz - www.linak.sk

Denmark - International  
 LINAK International  
 Phone: +45 73 15 15 15  
 E-mail: info@linak.com  
 Web: www.linak.com

Denmark - Sales  
 LINAK Danmark A/S  
 Phone: +45 86 80 36 11  
 Fax: +45 86 82 90 51  
 E-mail: linak@linak-silkeborg.dk  
 Web: www.linak.dk

Finland  
 LINAK OY  
 Phone: +358 10 841 8700  
 E-mail: linak@linak.fi  
 Web: www.linak.fi

France  
 LINAK France E.U.R.L.  
 Phone: +33 (0) 2 41 36 34 34  
 Fax: +33 (0) 2 41 36 35 00  
 E-mail: linak@linak.fr  
 Web: www.linak.fr

Germany  
 LINAK GmbH  
 Phone: +49 6043 9655 0  
 Fax: +49 6043 9655 60  
 E-mail: info@linak.de  
 Web: www.linak.de

India  
 LINAK A/S India Liaison Office  
 Phone: +91 120 4531797  
 Fax: +91 120 4786428  
 E-mail: info@linak.in  
 Web: www.linak.in

Ireland  
 LINAK UK Limited (Ireland)  
 Phone: +44 (0)121 544 2211  
 Fax: +44 (0)121 544 2552  
 +44 (0)796 855 1606 (UK Mobile)  
 +35 387 634 6554 (Rep.of Ireland Mobile)  
 E-mail: sales@linak.co.uk  
 Web: www.linak.co.uk

Italy  
 LINAK ITALIA S.r.l.  
 Phone: +39 02 48 46 33 66  
 Fax: +39 02 48 46 82 52  
 E-mail: info@linak.it  
 Web: www.linak.it

Japan  
 LINAK K.K.  
 Phone: 81-45-533-0802  
 Fax: 81-45-533-0803  
 E-mail: linak@linak.jp  
 Web: www.linak.jp

Malaysia  
 LINAK Actuators Sdn. Bhd.  
 Phone: +60 4 210 6500  
 Fax: +60 4 226 8901  
 E-mail: info@linak-asia.com  
 Web: www.linak.my

Netherlands  
 LINAK Actuator-Systems B.V.  
 Phone: +31 76 5 42 44 40 /  
 +31 76 200 11 10  
 E-mail: info@linak.nl  
 Web: www.linak.nl

New Zealand  
 LINAK New Zealand Ltd  
 Phone: +64 9580 2071  
 Fax: +64 9580 2072  
 E-mail: nzsales@linak.com.au  
 Web: www.linak.com.au

Norway  
 LINAK Norge AS  
 Phone: +47 32 82 90 90  
 E-mail: info@linak.no  
 Web: www.linak.no

Poland  
 LINAK Polska  
 LINAK Danmark A/S (Spółka Akcyjna)  
 Phone: +48 22 295 09 70 /  
 +48 22 295 09 71  
 E-mail: info@linak.pl  
 Web: www.linak.pl

Republic of Korea  
 LINAK Korea Ltd.  
 Phone: +82 2 6231 1515  
 Fax: +82 2 6231 1516  
 E-mail: info@linak.kr  
 Web: www.linak.kr

Slovakia  
 LINAK Slovakia S.R.O.  
 Phone: +421 51 7563 444  
 Web: www.linak.sk

Spain  
 LINAK Actuadores, S.L.U  
 Phone: +34 93 588 27 77  
 Fax: +34 93 588 27 85  
 E-mail: esma@linak.es  
 Web: www.linak.es

Sweden  
 LINAK Scandinavia AB  
 Phone: +46 8 732 20 00  
 Fax: +46 8 732 20 50  
 E-mail: info@linak.se  
 Web: www.linak.se

Switzerland  
 LINAK AG  
 Phone: +41 43 388 31 88  
 Fax: +41 43 388 31 87  
 E-mail: info@linak.ch  
 Web: www.linak.ch - www.fr.linak.ch  
 www.it.linak.ch

Taiwan  
 LINAK (Shenzhen) Actuator systems Ltd.  
 Taiwan Representative office  
 Phone: +886 2 272 90068  
 Fax: +886 2 272 90096  
 E-mail: sales@linak.com.tw  
 Web: www.linak.com.tw

Turkey  
 LINAK İth. İhr. San. ve Tic. A.Ş.  
 Phone: +90 312 4726338  
 Fax: +90 312 4726635  
 E-mail: info@linak.com.tr  
 Web: www.linak.com.tr

United Kingdom  
 LINAK UK Limited  
 Phone: +44 (0)121 544 2211  
 Fax: +44 (0)121 544 2552  
 E-mail: sales@linak.co.uk  
 Web: www.linak.co.uk

## DISTRIBUTORS

Argentina  
 Novotec Argentina SRL  
 Phone: 011-4303-8989 / 8900  
 Fax: 011-4032-0184  
 E-mail: info@novotecargentina.com  
 Web: www.novotecargentina.com

Colombia  
 MEM Ltda  
 Phone: +[57] (1) 334-7666  
 Fax: +[57] (1) 282-1684  
 E-mail: servicioalcliente@memltda.com.co  
 Web: www.mem.net.co

India  
 Mechatronics Control Equipments India Pvt Ltd  
 Phone: +91-44-28558484, 85  
 E-mail: bala@mechatronicscontrol.com  
 Web: www.mechatronicscontrol.com

Indonesia  
 PT. Himalaya Everest Jaya  
 Phone: +6 221 544 8956 /+6 221 544 8965  
 Fax: +6 221 619 1925  
 Fax (Sales): +6 221 619 4658  
 E-mail: hejplastic-div@centrin.net.id  
 Web: www.hej.co.id

Israel  
 NetivTech LTD  
 Phone: +972 55-2266-535  
 Fax: +972 2-9900-560  
 Email: info@NetivTech.com  
 Web: www.netivtech.com

Singapore  
 Servo Dynamics Pte Ltd  
 Phone: +65 6844 0288  
 Fax: +65 6844 0070  
 E-mail: servodynamics@servo.com.sg

South Africa  
 Industrial Specialised Applications CC  
 Phone: +27 011 466 0346  
 E-mail: gartht@isagroup.co.za  
 Web: www.isaza.co.za

United Arab Emirates  
 Mechatronics  
 Phone: +971 4 267 4311  
 Fax: +971 4 267 4312  
 E-mail: mechtron@emirates.net.ae

## Terms of use

LINAK® takes great care in providing accurate and up-to-date information on its products. However, the user is responsible for determining the suitability of LINAK products for a specific application. Due to continual development, LINAK products are subject to frequent modifications and changes. LINAK reserves the rights to conduct modifications, updates, and changes without any prior notice. For the same reason, LINAK cannot guarantee the correctness and actual status of imprinted information on its products.

LINAK uses its best efforts to fulfil orders. However, for the reasons mentioned above, LINAK cannot guarantee availability of any particular product at any given time. LINAK reserves the right to discontinue the sale of any product displayed on its website or listed in its catalogues or in other written material created and produced by LINAK, LINAK subsidiaries, or LINAK affiliates. All sales are subject to the 'Standard Terms of Sale and Delivery for LINAK A/S' available on LINAK websites. LINAK and the LINAK logotype are registered trademarks of LINAK A/S. All rights reserved.