

# Actuator LA28

## Data Sheet



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## Introduction

LA28 is primarily a system actuator. The actuator is very quiet and powerful, designed for use in the CARELINE®, MEDLINE® and TECHLINE® areas of business.

## Features and options

- Thrust up to 3500 N in push (with S-motor)
- Protection class IP 51
- Storage temperature -40 °C to 70 °C
- Available with extra powerful motor(strong motor), increases speed and strength
- Brake - increases self-locking ability for LA28 actuators with 6 or 9 mm pitch with or without strong motor
- Protection class: IPX5 or IPX6
- Reed-switch (LA28 = 8 pulses/spindle rev. and LA28 with strong motor = 6 pulses/spindle rev.)
- Splines function (the actuator can only push)
- Mounting bracket for CB8-T/A control boxes (order number 914078 (grey) and 914054 (black))
- Safety nut for LA28 with 3, 6 or 9 mm pitch 0.2 m and 0.4 m coiled cable
- Built-in CS print ensures electronic overload protection, see chapter 10.3 (not to be used in connection with LINAK control boxes).

## Usage

- Duty cycle: Max. 10 % or 2 min. continuous use followed by 18 min. not in use.
- Ambient temperatures: +5° to +40°C
- Compatibility: 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

### LA28 with standard motor

Order number	Push max. (N)	Pull max. (N)	*Self-lock max. (N) Push	*Self-lock max. (N) Pull	Pitch (mm/spindle rev.)	Typical speed (mm/s)		Standard stroke lengths (mm) In steps of 50mm.	Typical amp.	
						Load			12V	24V
						no	full			
286xxx-xxxxx0xx	2500	2000	2000	2000	2	4.2	3.0	100-400	-	1.5
285xxx-xxxxx0xx	2000	2000	2000	2000	2.5	5.3	4.0	100-400	-	1.6
281xxx-xxxxx0xx	2000	2000	2000	2000	3	7.0	4.8	100-400	-	1.5
284xxx-xxxxx0xx	1500	1500	1500	1500	4	9.5	6.7	100-400	-	1.6
284xxx-4xxxx0xx	1500	1500	1500	1500	4	9.5	6.7	100-400	-	1.6
282xxx-xxxxx0xx	1000	1000	500	500	6	14.3	9.6	100-400	-	1.5
282xxx-4xxxx0xx	1000	1000	1000	1000	6	12.7	9.6	100-400	-	1.5
283xxx-xxxxx0xx	800	800	200	200	9	21.1	14.5	100-600	-	1.5
283xxx-4xxxx0xx	800	800	800	800	9	20.9	10.7	100-600	-	2.4
287xxx-xxxxx0xx	600	600	0	0	12	25.8	17.1	100-600	-	1.9
287xxx-4xxxx0xx	600	600	300	300	12	24.8	15.1	100-600	-	1.9

### LA28 with "S" motor

Order number	Push max. (N)	Pull max. (N)	*Self-lock max. (N) Push	*Self-lock max. (N) Pull	Pitch (mm/spindle rev.)	Typical speed (mm/s)		Standard stroke lengths (mm) In steps of 50mm.	Typical amp.	
						Load			12V	24V
						no	full			
286xxx-xxxxx1xx	3500	2000	3500	2000	2	6.7	4.7	100-400	-	3.9
285xxx-xxxxx1xx	3000	2000	3000	2000	2.5	8.6	6.1	100-400	-	3.6
281xxx-xxxxx1xx	2000	2000	2000	2000	3	10.8	8.4	100-400	-	2.9
284xxx-xxxxx1xx	2000	2000	1200	1200	4	14.6	10.3	100-400	-	3.6
284xxx-4xxxx1xx	2000	2000	2000	2000	4	14.3	10.3	100-400	-	3.4
282xxx-xxxxx1xx	2000	2000	500	500	6	22.0	13.8	100-400	-	4.1
282xxx-4xxxx1xx	2000	2000	2000	2000	6	22.0	12.7	100-400	-	4.6
283xxx-xxxxx1xx	1500	1500	500	500	9	34.2	16.5	100-600	-	4.9
283xxx-4xxxx1xx	1500	1500	1500	1500	9	33.0	10.9	100-600	-	5.5
287xxx-xxxxx1xx	800	800	0	0	12	46.0	33.5	100-600	-	3.1
287xxx-4xxxx1xx	800	800	800	800	12	45.9	33.5	100-600	-	3.1

## LA28 with 12V motor

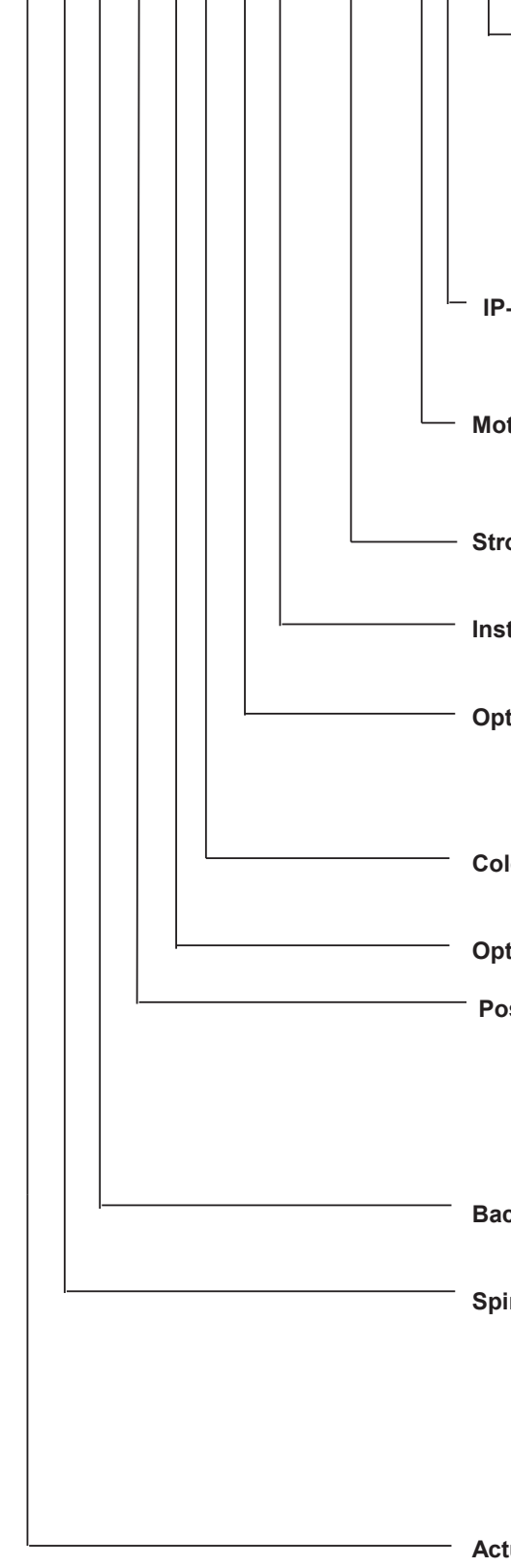
Order number	Push max. (N)	Pull max. (N)	*Self-lock max. (N) Push	*Self-lock max. (N) Pull	Pitch (mm/spindle rev.)	Typical speed (mm/s) Load		Standard stroke lengths (mm) In steps of 50mm.	Typical amp.	
						no	full		12V	24V
286xxx-xxxxx2xx	3000	2000	2000	2000	2	7.0	3.2	100-400	6.9	-
286xxx-4xxxx2xx	3000	2000	3000	2000	2	7.0	3.2	100-400	6.9	-
285xxx-xxxxx2xx	3000	2000	2000	2000	2.5	8.6	3.6	100-400	6.6	-
285xxx-4xxxx2xx	3000	2000	3000	2000	2.5	8.6	3.6	100-400	6.6	-
281xxx-xxxxx2xx	2000	2000	2000	2000	3	10.2	6.2	100-400	6.9	-
284xxx-xxxxx2xx	2000	2000	1500	1500	4	13.5	6.8	100-400	6.5	-
284xxx-4xxxx2xx	2000	2000	2000	2000	4	13.3	7.5	100-400	6.5	-
282xxx-xxxxx2xx	2000	2000	500	500	6	19.9	7.5	100-400	7.7	-
282xxx-4xxxx2xx	2000	2000	2000	2000	6	19.8	7.0	100-400	8.5	-
283xxx-xxxxx2xx	1500	1500	0	0	9	28.9	11.7	100-600	7.9	-
283xxx-4xxxx2xx	1500	1500	1500	1500	9	28.9	11.7	100-600	7.9	-
287xxx-xxxxx2xx	800	800	0	0	12	32.0	16.0	100-600	5.9	-
287xxx-4xxxx2xx	800	800	800	800	12	32.0	16.0	100-600	5.9	-

The measurements are made with the actuators connected to a stable power supply.

A reed-switch has no influence on above mentioned data.

# Ordering example

**28 1 1 0 0 + 1 0 2 5 0 0 0 0**



**Cables:**

**Jack cables**

- 0 = Straight 2.38m**                      4 = Cable without plug 1.5m
- 0 = Straight 2.4m with reed            5 = Cable without plug 1.0m
- 1 = Straight 1.13 m                      X = Other cable/ Length
- 1 = Straight 1.09m with reed
- 2 = Coiled 0.4
- 3 = Coiled 0.2

**General cable tolerance ± 0.080m**

**IP-Degree:**

- 0 = IPX1
- 1 = IPX5
- 2 = IPX6

**Motor type:**

- 0 = 24V**
- 1 = 24V S-motor
- 2 = 12V S-motor                      (Cable without plug L=1.5m)

**Stroke length**

XXX = mm    Max 500mm (for 600mm kontakt LINAK A/S)  
Min 100mm

**Inst. Dim.:**

- 0 = Standard**
- X = Other inst. dimension

**Option:**

- 1 = Safety nut RECOMMENDED**
- 0 = None                                      4 = Brake
- 2 = Steel Splines                          5 = Brake with safety nut
- 3 = Steel Splines with safety nut

**Colour:**

- + = grey**
- = black

**Option:**

- 0 = None**

**Pos./CS:**

- 0 = None**
- R = Reed switch
- Y = CS 28A mount. (without plug 1.0m)(not IP65/66)
- Z = CS 28B mount. (Without plug 1.0m  
Handset cable only in black)
- C = CS 28C mount. (Without plug 1.0m 5-core  
Cable only in black)

**Back fixture:**

- 1 = Standard**
- 2 = Turned 90 degrees

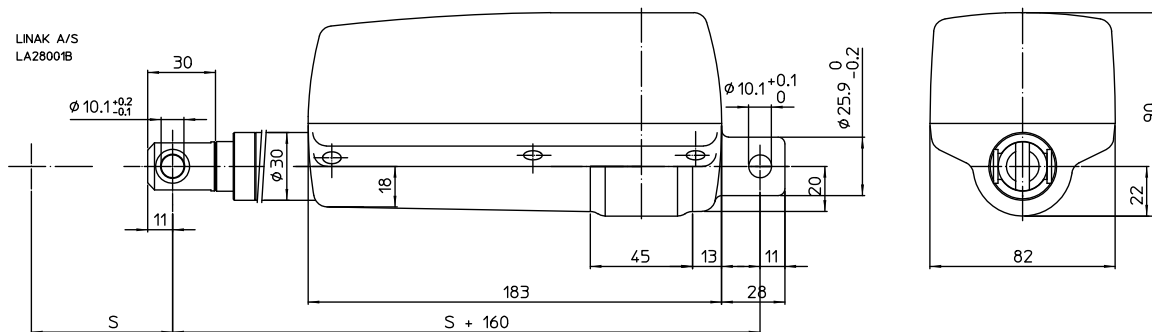
**Spindle type:**

- 1 = 3 mm                      ( 1 threaded )    ( 3mm pitch )**
- 2 = 6 mm                      ( 2 threaded )    ( 6mm pitch )**
- 3 = 9 mm                      ( 3 threaded )    ( 9mm pitch )**
- 4 = 4 mm                      ( 2 threaded )    ( 4mm pitch )**
- 5 = 2,5 mm                    ( 1 threaded )    ( 2.5mm pitch )**
- 6 = 2 mm                      ( 1 threaded )    ( 2mm pitch )**
- 7 = 12 mm                    ( 4 threaded )    ( 12mm pitch )**

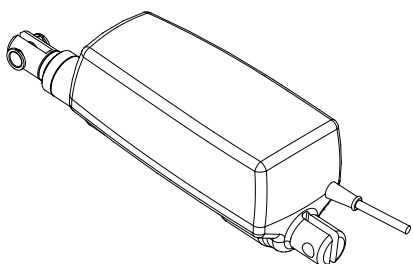
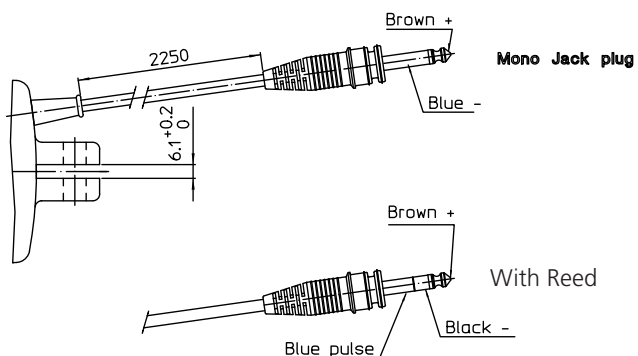
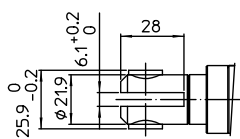
**Actuator type**

**28 = LA28**

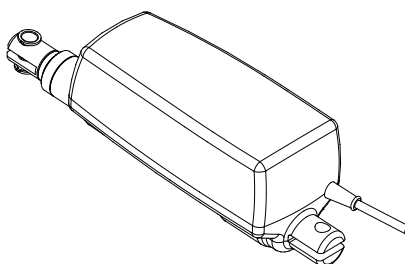
# Dimensions



S+160 LA28 (with or without safety nut)  
 S+171 splines  
 S+185 safety nut and splines  
 S+192 brake



Back fixture 01



Back fixture 02

Drawing no. 028745

# Contacts

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