

# ACTUATOR LA28

## Features:

- Thrust up to 3500 N (with strong motor)
- Protection class IP51
- 2.3 m straight cable with 6.3 mm jack-plug, (for actuators with reed-switch 2.3 m straight or 0.4 m coiled cable only). For 12 V versions 1.5 m straight cable without plug
- Storage temperature -40°C to 70°C

## Options:

- 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 CB08-T/A control boxes (order number 914078 (grey) and 914054 (black))
- Safety nut for LA28 with 3, 6 or 9 mm pitch/spindle rev. (push direction)
- 0.2 m and 0.4 m coiled cable
- Built-in CS print ensures electronic overload protection (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
- LA28 is approved according to EN 60601-1/ UL 60601-1 in connection with CB8, CB12, CB14, CB18 and CBJ
- Should LA28 be used with a non LINAK control unit, please ask the nearest LINAK representative for further details



HOMELINE<sup>®</sup>  
IMPROVING COMFORT

MEDLINE<sup>®</sup>  
IMPROVING EFFICIENCY

CARELINE<sup>®</sup>  
IMPROVING EFFICIENCY

TECHLINE<sup>™</sup>  
IMPROVING FLEXIBILITY

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

The actuator is also ideal for use in agricultural machinery and for a wide range of industrial applications.

## LA28 with standard motor

Technical specifications:

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 50 mm	Typical amp. (A) 24 V
						Load			
						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	800	800	0	0	12	25,8	17,1	100 – 600	1,9
287XXX-4XXXX0XX	800	800	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 50 mm	Typical amp. (A) 24 V
						Load			
						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)		Standard stroke lengths (mm) In steps of 50 mm	Typical amp. (A)
						Load			
						No	Full		12 V
286XXX-XXXXX2XX	3500	2000	2000	2000	2	7,0	3,2	100 – 400	6,9
285XXX-XXXXX2XX	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	4,9
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

Above data: the measurements are made with the actuators connected to a stable power supply.

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



### Precautions:

- The maximum load in pull is 2000N.
- LINAK control boxes are designed so that they will short-circuit the motor terminals of the actuator(s), when the actuator(s) are not running. This solution gives the actuator(s) a higher self-locking ability. If the actuator(s) are not connected to a LINAK control box, the terminals of the motor must be short-circuited to enable self-locking of the actuator.
- Min. stroke length for LA28 with splines is 80 mm
- The current supply to LINAK actuators must be cut off in case of overload and when the actuators reach end position.
- Ambient operating temperature is 22°C.

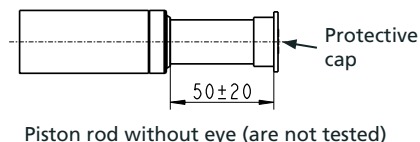
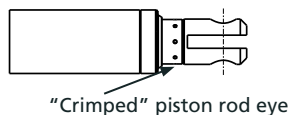
### Further information:

#### Noise level:

- LA28: dB(A) 45; measuring method DS/EN ISO 3746, actuator not loaded
- LA28S: dB(A) 54; measuring method DS/EN ISO 3746, actuator not loaded

### Material:

- The piston rod eyes are "crimped" in place and cannot be screwed loose.



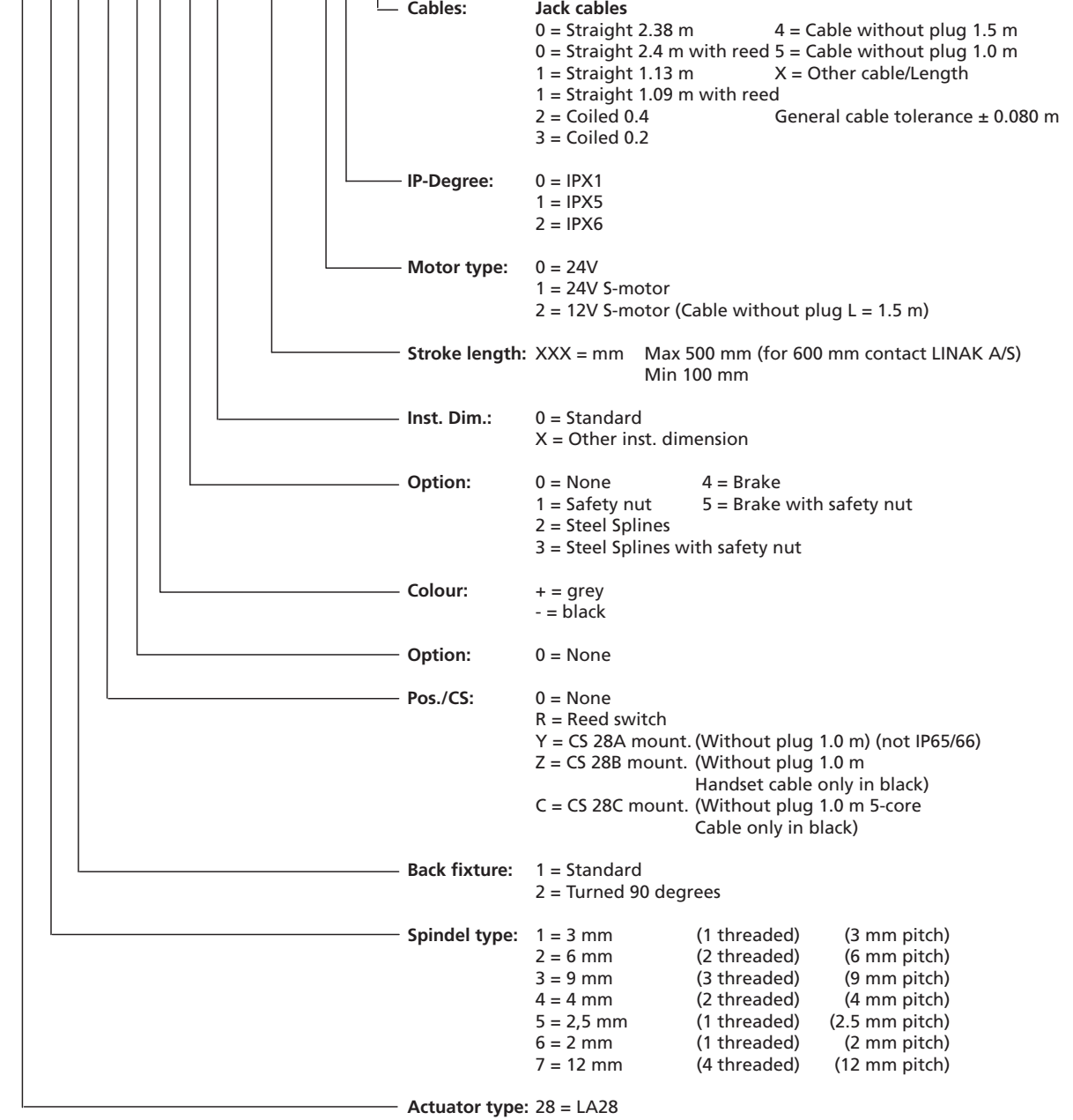
### Accessories:

- CS16 electronic limit switch
- CS28 electronic limit switch (built-in)
- SLS safety limit switch

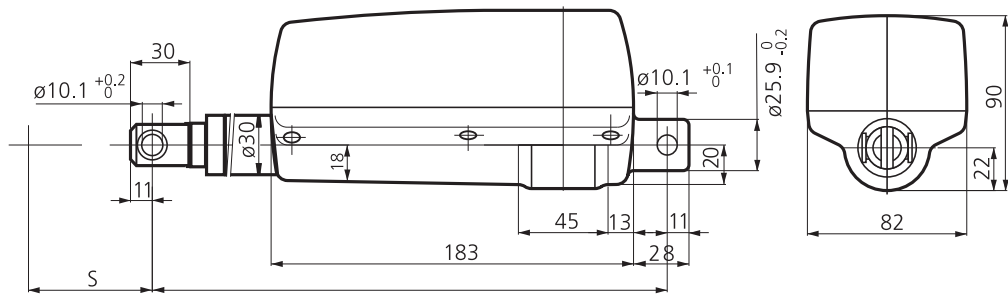
# LA28

Ordering example:

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

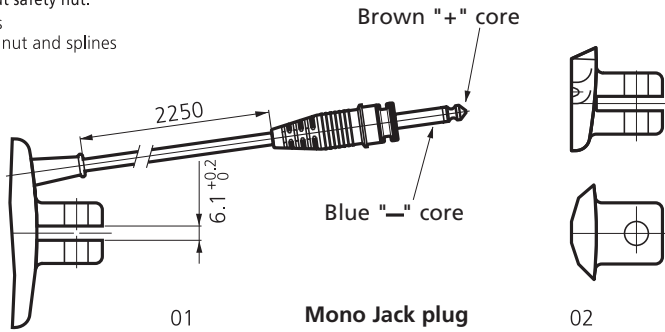
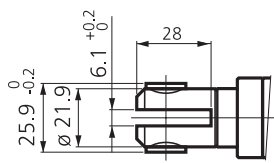


**Dimensions:**



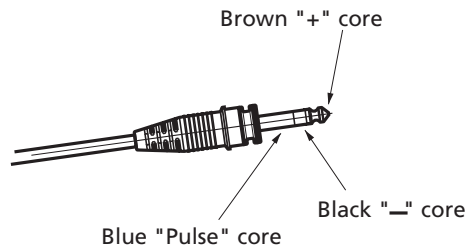
S + 160 LA28 (3 or 6 mm pitch) and LA28 strong motor  
(with or without safety nut.

S + 171 splines  
S + 185 safety nut and splines  
S + 192 brake



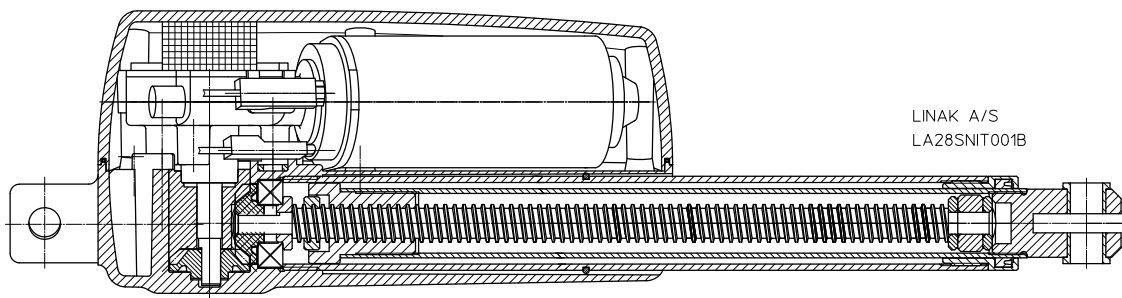
**Mono Jack plug**

LINAK A/S  
LA28001A



**Stereo Jack plug**

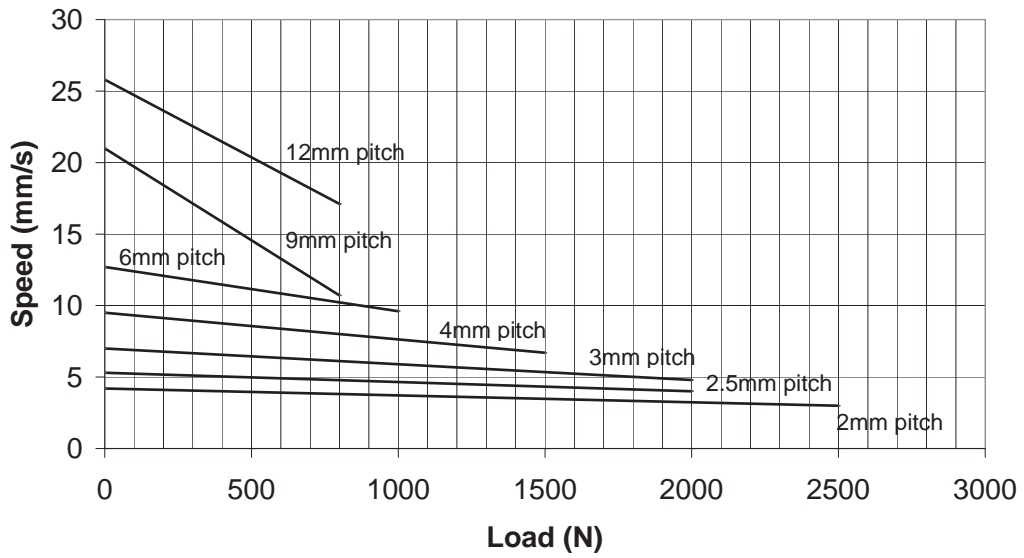
**Section drawing:**



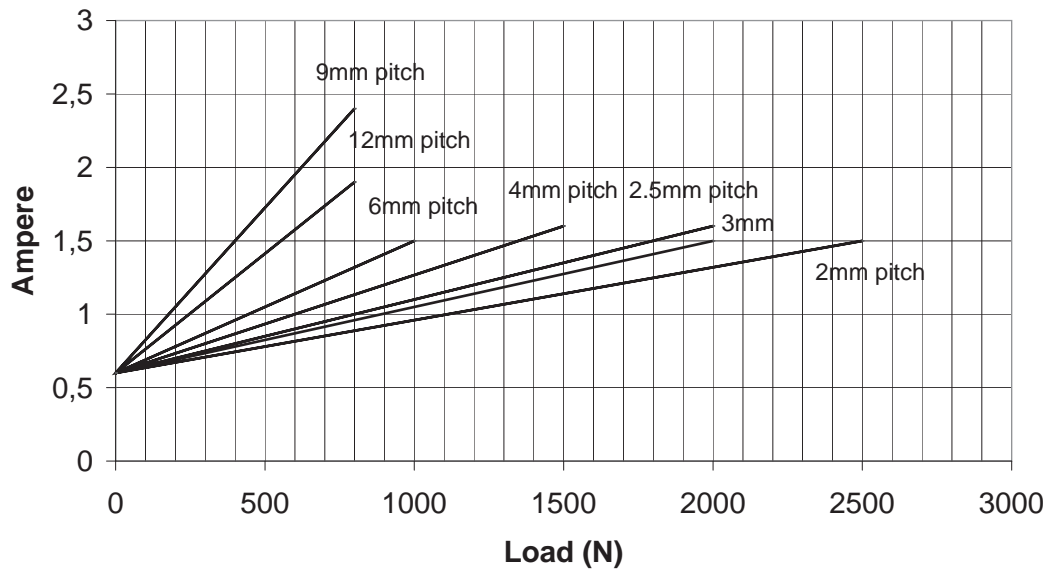
LINAK A/S  
LA28SNIT001B

Curves:

**LA28 std motor speed v' s load**

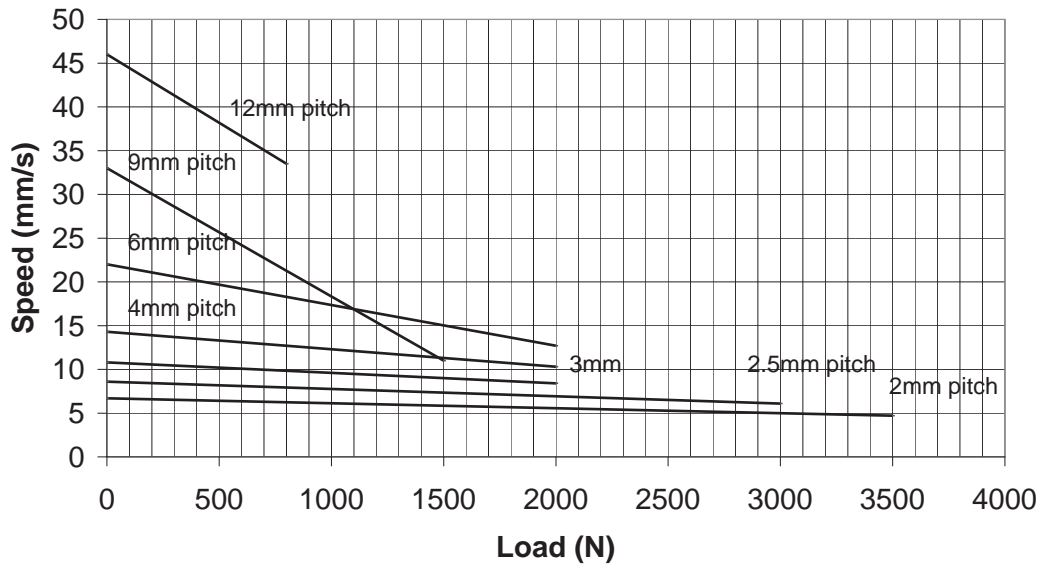


**LA28 standard motor current v' s load**

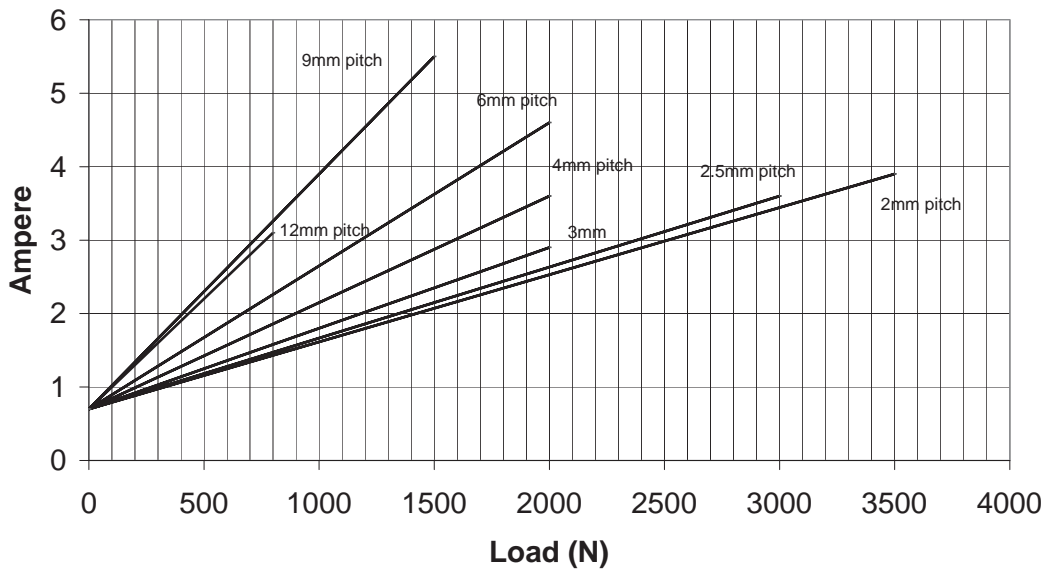


Curves:

### LA28 "S" motor speed v's load

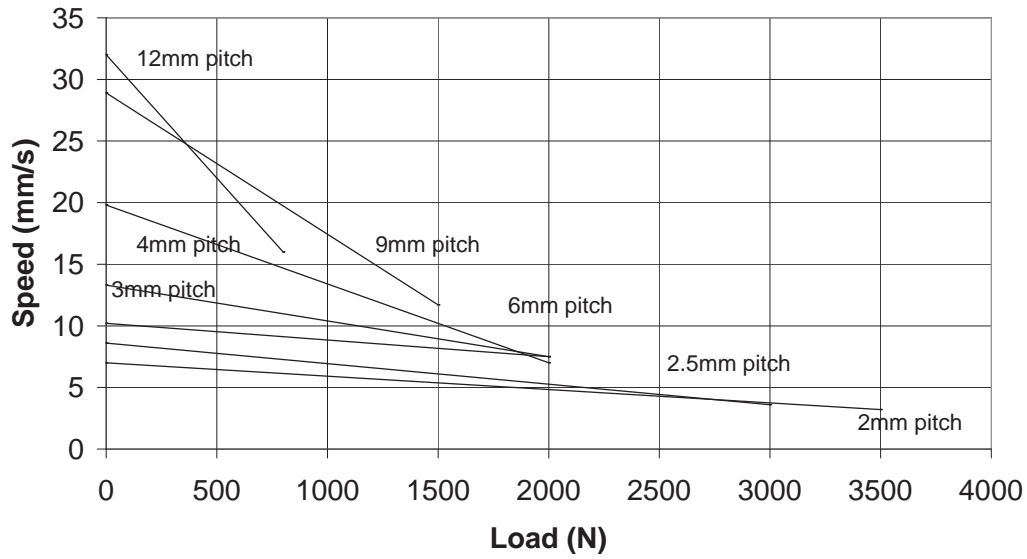


### LA28 "S" motor current v's load

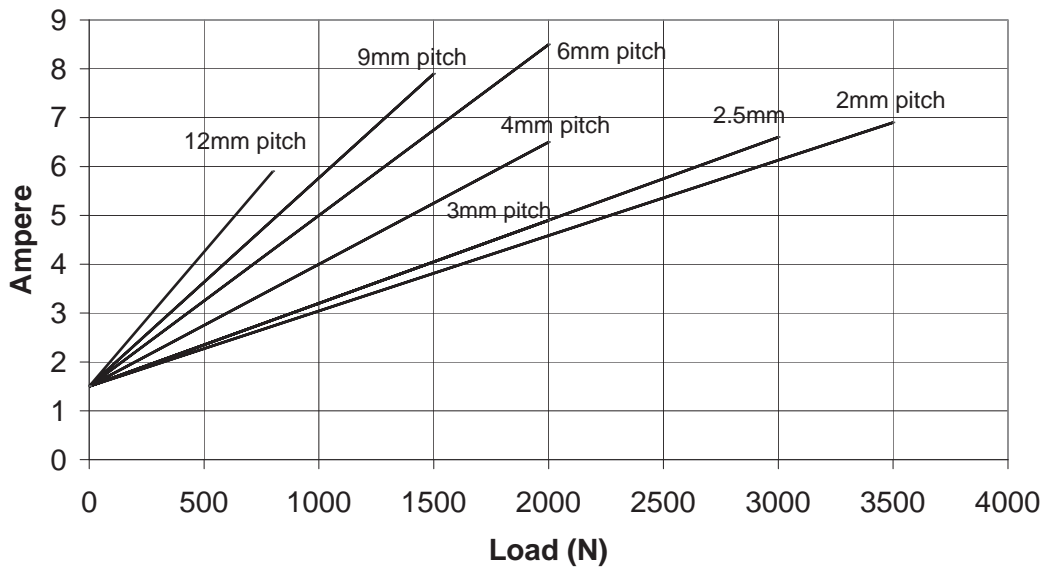


Curves:

### LA28 12V motor speed v's load



### LA28 12V motor current v's load



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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.