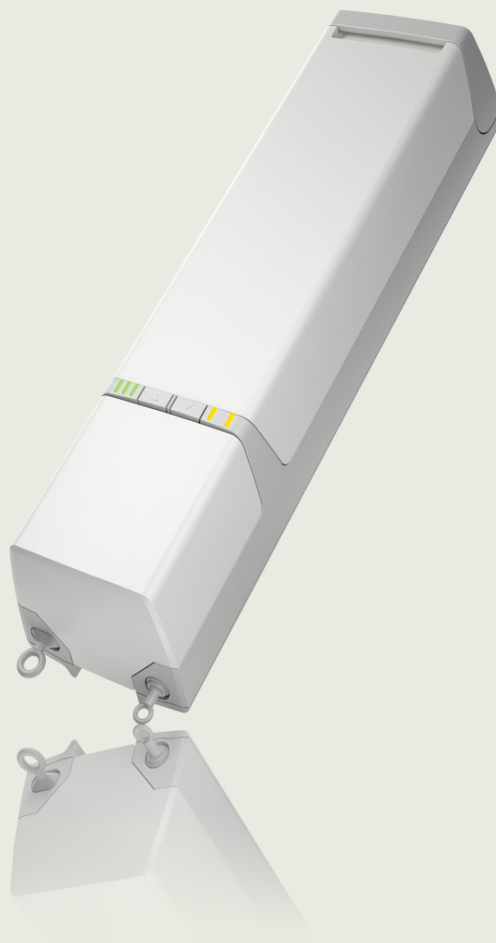


# Control Box CAL40

## Data Sheet



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## Introduction



The control box CAL40 is part of the LIFT40 product series specially developed for patient lifts.

LIFT40 is a complete system consisting of the control box CAL40 or CAL40+, a battery BAL40 and an external charger CHL40 in a flexible solution. Combined with one or more actuators and a hand control you have a complete system for modern patient lifts.

The LIFT40 control box range is available in two product levels. Full feature level CAL40+ and entry level CAL40.

The CAL40+ control box is equipped with a series of features like Bluetooth, 3 channels and customisable software (SoftCon2). The entry-level control box comes with maximum 2 channels. Both level control boxes meet the patient's need for a safe and comfortable lift. Combine this with an easy-to-replace battery. All housed in a modern and intuitive ergonomic package for fast and easy battery exchange.

The updated design with a clean white surface reduces visual noise. This makes it easy to integrate the LIFT40 design into the OEM patient lift design.

### Feature highlights

- Ingress protection IPX6
- Cable management
- Redundant control buttons on channel 1
- Emergency stop located on top for easy access and to avoid unintended activation
- BLE - Bluetooth® Low Energy (only CAL40+)
- Service and overload indicator (only CAL40+)
- SoftCon2-ready for on-location software customisation (only CAL40+)

## Features and options

Features	CAL40+	CAL40
Channels	Up to 3 channels	Up to 2 channels
Soft start/stop	Yes	Yes
Emergency stop function	Located on top to avoid unintended activation	Located on top to avoid unintended activation
Output current*	12 A on all channels (duty cycle 2/18 min.)	10 A both channels (duty cycle 2/18 min.)
DC outlet	Yes, max. 2 A	No
Acoustic battery alarm	Yes	Yes
LED Indicators	Battery status (3 green LEDs, first LED on left side switches to orange at lowest status) and system status/service (2 x orange)	Battery status (1 pc.) and system status (1 pc.)
Wireless operation	BLE, Bluetooth® Low Energy	No
Redundant control buttons on channel 1	Up and down channel 1	Up and down channel 1
Cable management	Yes, cable locking and cable routing	Yes, cable locking and cable routing
Ingress Protection	IPX6	IPX6
Safe Working Load (SWL) adjustment	Yes	Yes
Battery charging	Internal and external	Internal and external
Software customisation/SC2	SoftCon2	One std. software/LIX configurable
Colour base	Light grey RAL7035	Light grey RAL7035
Cable cover colour	Signal White RAL9003	Signal White RAL9003
Feedback actuators	No	No
Service status	Orange LED indication + buzzer	Orange LED indication + buzzer
Low battery information	Orange LED indication + buzzer	LED indication + buzzer

### Output current\*

If the output current is higher than 10 Amp, the output voltage is lowered from 24 V to approx. 20 V.

## Usage

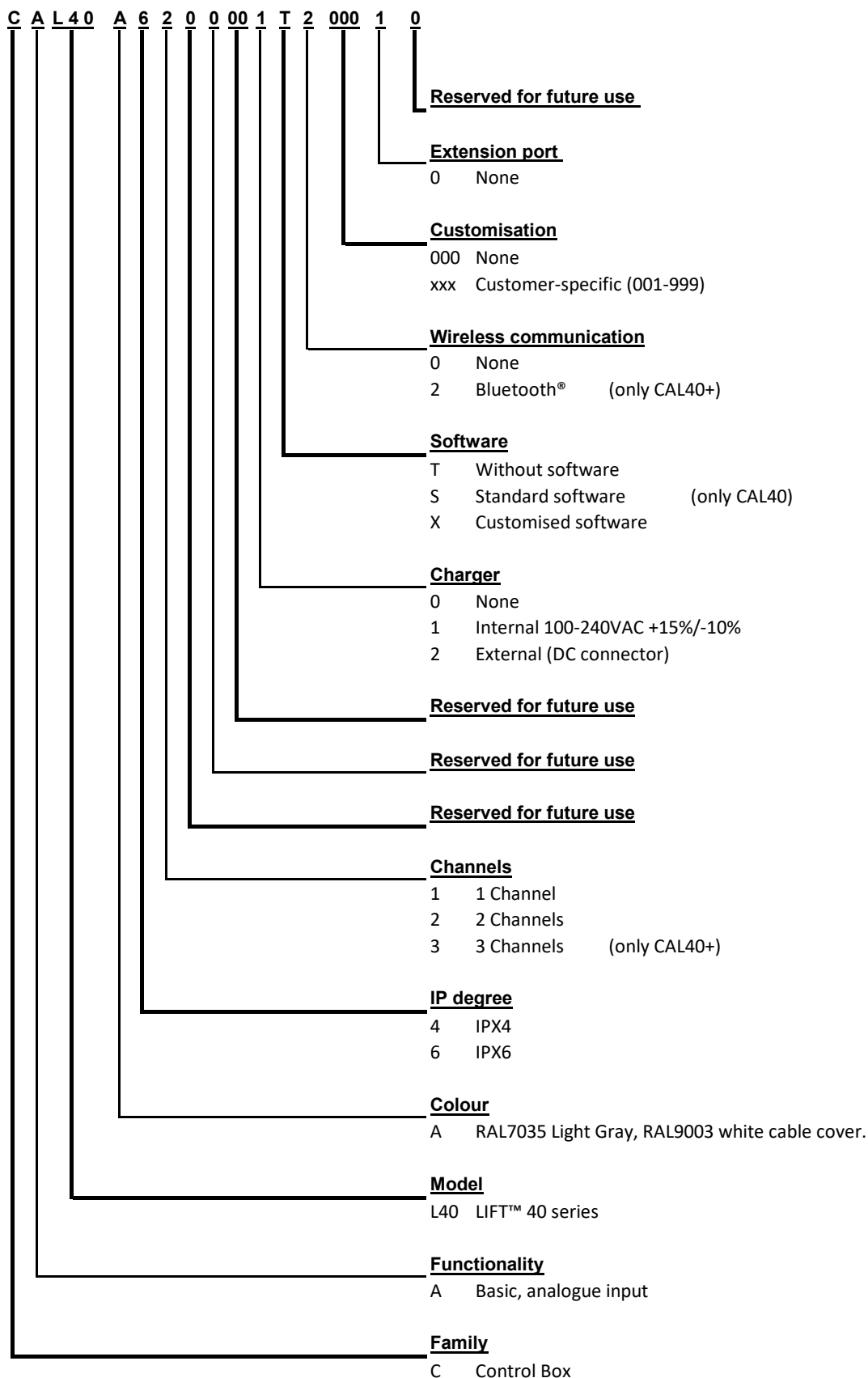
With internal charger	Nominal current draw max. 350 mA (depending on input voltage) Standby power of 230 VAC = 0.7 W (depending on input voltage) Improved BLE might give lower power consumption Input voltage range: 120-240 VAC (50/60 Hz) Power consumption (charging): max. 30 W (depending on input voltage)
Duty cycle	Max. 10%, 2 minutes continuous use followed by 18 minutes without use
Operating temperature	+5 °C to +40 °C
Storage temperature	-10 °C to +50 °C
Relative humidity	20% to 80% - non-condensing
Atmospheric pressure	700 to 1060 hPa
Meters above sea level	Max. 3000 meters
Mains supply grid should be limited to the highest prospective short circuit current of 100 A	
Approvals	<b><u>CAL40</u></b>

- EN IEC 60601-1
- ANSI/AAMI ES60601-1
- CAN/CSA-C22.2 NO. 60601-1
- EN IEC 60601-1-2

### **CAL40+**

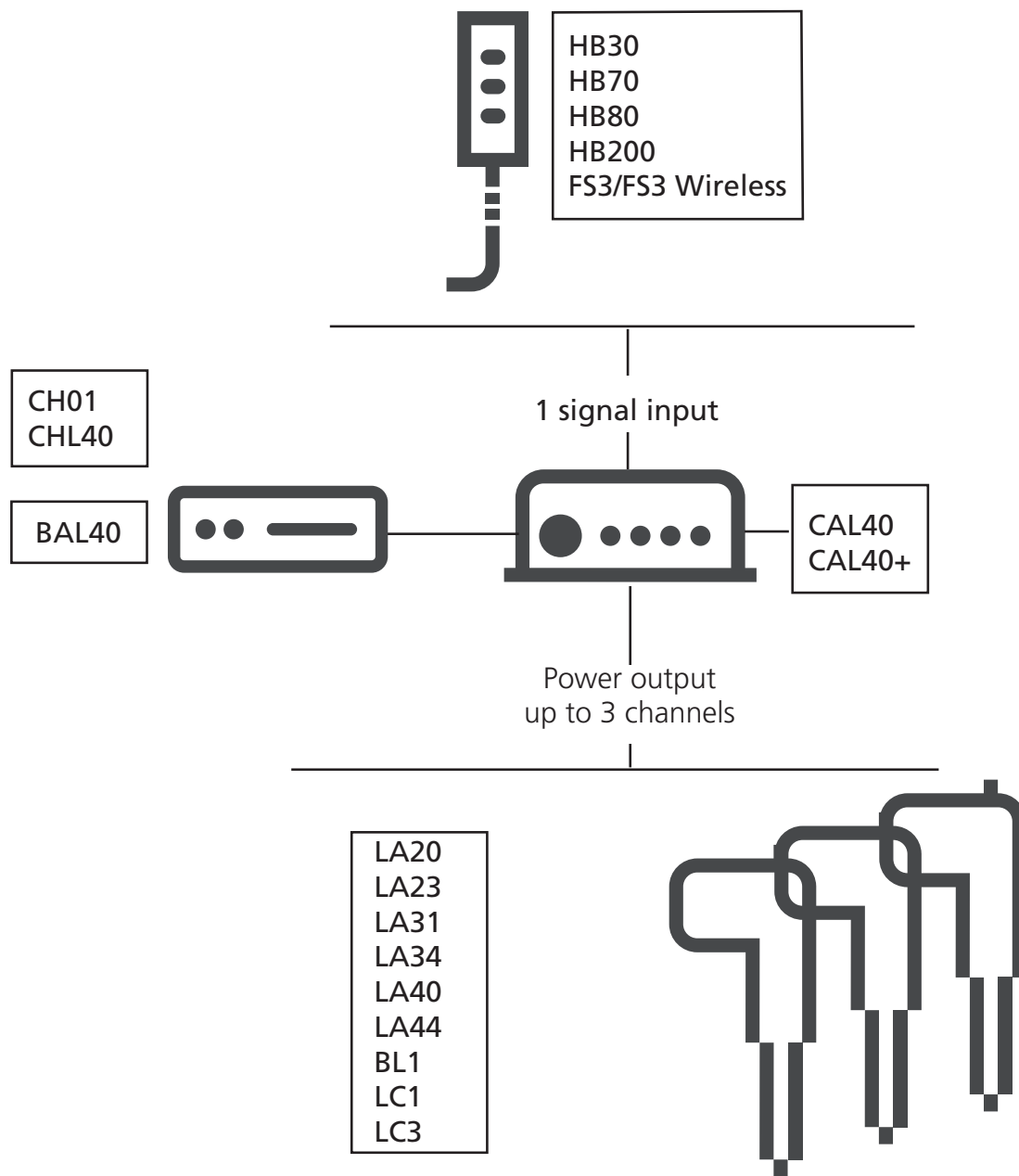
- EN IEC 60601-1
- ANSI/AAMI ES60601-1
- CAN/CSA-C22.2 NO. 60601-1
- EN IEC 60601-1-2
- RED (EU)
- FCC ID (US)
- IC ID (Canada)
- Telec (Japan)

## Ordering example



Hand control cable lock is included when ordering CAL40.

# System overview



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## Internal battery charger

LIFT40 is available with and without internal charger.

The internal SMPS charger makes charging of the batteries very efficient.

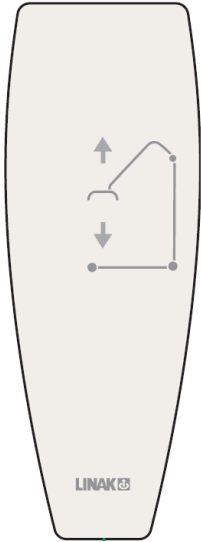
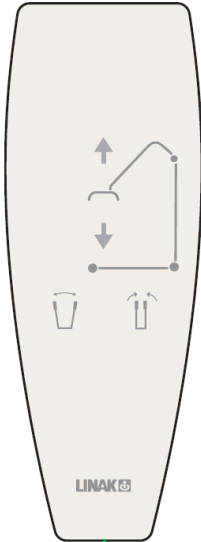
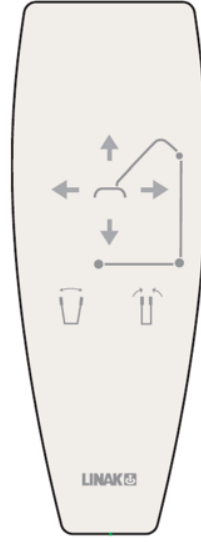

The charging time depends on the battery capacity and condition. Typically, the BAL40 charging time is 4-5 hours from fully discharged state.

Mains voltage from 120-240 VAC (50/60 Hz).

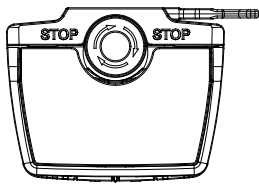
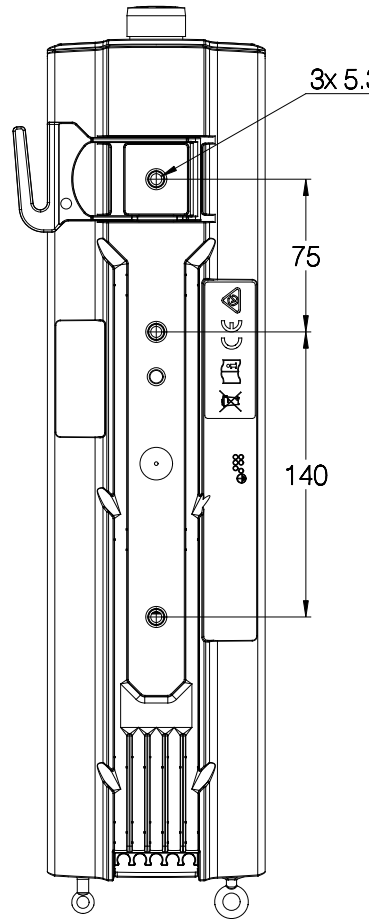
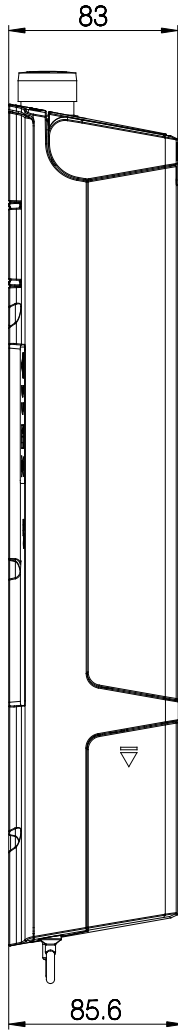
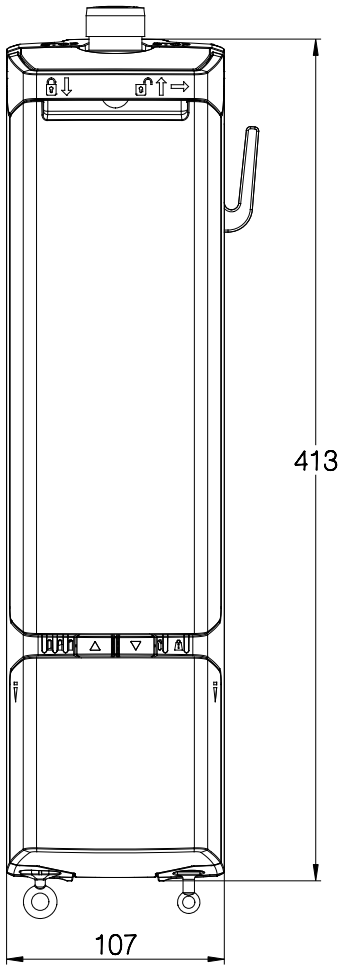
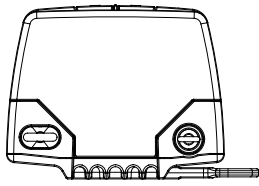
The charger indicates whether it is connected to mains or whether the battery is being charged.

See LED functionality graphics.

## LIFT40-compatible hand controls

1 Channel	2 Channel	3 Channel
<p><b>J05628</b> (HB310000B006-2102D1E000). Hook w/rubber, IPX6, PU cable</p> <p><b>J05616</b> (HB310000B004-2M02D1E000). Magnet, IPX4, PU cable</p>	<p><b>J06531</b> (HB320000B004-2M02D1E000). Magnet, IPX4, PU cable</p> <p><b>J05306</b> (HB320000B004-2002D1E000). Hook, IPX4, PU cable</p>	<p><b>HB30132-00</b> (Hook) <b>HB30133-00</b> (Magnet)</p>
		
<p>Hand control for the SWL function Special hand control prepared for use with the SWL function.</p> <p>Item number: HB7x161-00</p>		

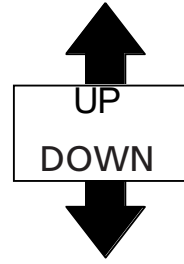
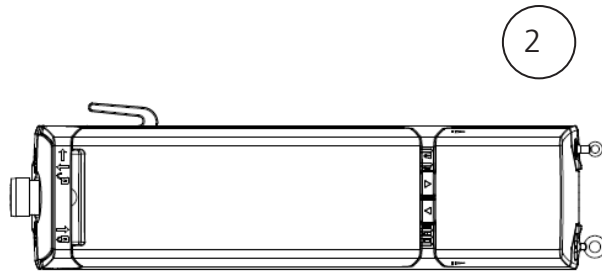
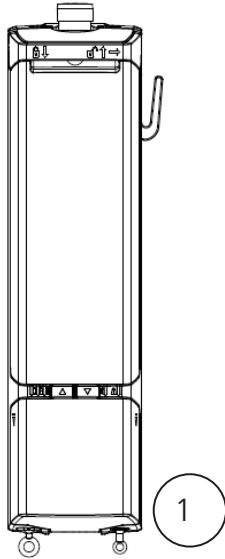
# Dimensions



Drawing no. 1048W4000

<b>Accessories list and item numbers</b>	
Cable cover (cable lock)	Item no.: SA1048W1003
Cable hanger	Item no.: SA1039W1041
Programming adaptor (to be used with Programming Box PB31001-00) Access point for programming box below product label.	Item no.: PB31PP-00
Be aware that cables and blind plugs must be ordered separately.	

# LIFT40 mounting



# 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

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 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  
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 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  
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 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  
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