Battery BAL50

Data Sheet



LINAK® WE IMPROVE YOUR LIFE

Contents

Introduction **3**
Features and options **3**
Usage **4**
Ordering example **5**
Approvals and certifications **6**
Dimensions **7**
Contacts **8**

Introduction



The BAL50 Li-Ion battery pack is a part of the LIFT50 product series specially developed for healthcare applications.

LIFT50 is a complete system consisting of the control box COL50, a battery BAL50 and an external charger CHL50 in a flexible solution.

Combined with one or more actuators and a hand control, you have a complete system for modern patient lifts and sit-to-stand lifts.

The BAL50 is a next generation Li-Ion battery technology for high performance and improved return on investment (ROI) due to long lifetime. Packaged in a light, small and ergonomic package for fast and single-handed battery exchange.

The environmental footprint of lithium-ion batteries is low due to less waste as only one battery is to be scrapped instead of previously 4 batteries. This also means that less transportation is necessary because of the lower battery weight which is only half the weight of lead-acid batteries.

Feature highlights

- LINAK Li-Ion battery
- Small and light-weight in an ergonomic package for fast and single-handed battery exchange.
- Lithium-ion batteries will give you much faster return on investment (ROI)
- IPX6 Washable
- 5-year warranty
- Choice of colour (white, light grey)

Features and options

Lithium-ion technology:	Nickel Manganese Cobalt Oxide (NMC)
Nominal voltage:	25.2 - 25.7 V DC
Battery capacity (rated):	2.85 Ah
Weight:	Approx. 0.8 kg
Housing colour:	Signal white RAL 9003 or light grey RAL 7035
Protection class:	IPX6 Washable*
Packaging:	Every battery is packed individually and is fitted with lithium caution (transportation requirement)

*In combination with COL50, IPX6 Washable can only be guaranteed if a minimum interval of 24 hours between each wash is observed.

Usage

Compatibility:	COL50 and CHL50
Duty cycle:	Max. 10% (or 2 min. continuous use followed by 18 min. without use) at max. discharge current (10 A)
Charging:	Via external wall charger CHL50 or via COL50 with integrated charger
Charging current:	3 A, limited to 350 mA with COL50 and 600 mA with CHL50
Charging time (approx.):	4 hours with CHL50
Charging temperature:	+5 °C to +40 °C Charging at elevated temperatures can impact the charging time.
Charging state:	Maximum 30% when shipped from LINAK (The battery is shipped from LINAK in deep sleep mode and will be woken by charging)
Recharging during storage:	No need for charging during storage when the battery is in deep sleep mode. If the battery is woken up, it is recommended to fully charge the battery and recharge at least every 24 months.
Operating temperature:	+5 °C to +40 °C
Storage temperature:	-10 °C to +40 °C (+10 °C to +25 °C recommended) The batteries must be stored in an applicable storage room without direct sunlight.
Transportation temperature:	-20 C to +40 °C
Relative humidity:	20% - 80% – non-condensing
Atmospheric pressure	700 to 1060 hPa
Height above sea level:	Max. 3000 meters
Cycles per charge (lifts/lowerings):	Approx. 40 cycles*
Warranty:	5 years
Approvals:	IEC 60601-1 ANSI/AAMI ES60601-1CSA CAN/CSA-C22.2 NO. 60601-1 IEC 60601-2 IEC62133-2
Operating conditions:	The battery must be operated within the specified operating conditions and used together with a genuine LINAK charging and system solution. Modifications, repairs or other unauthorised interventions may affect battery performance, safety and service life. Battery condition is determined from battery data readouts, including battery throughput (Ah) and State of Health (SOH).

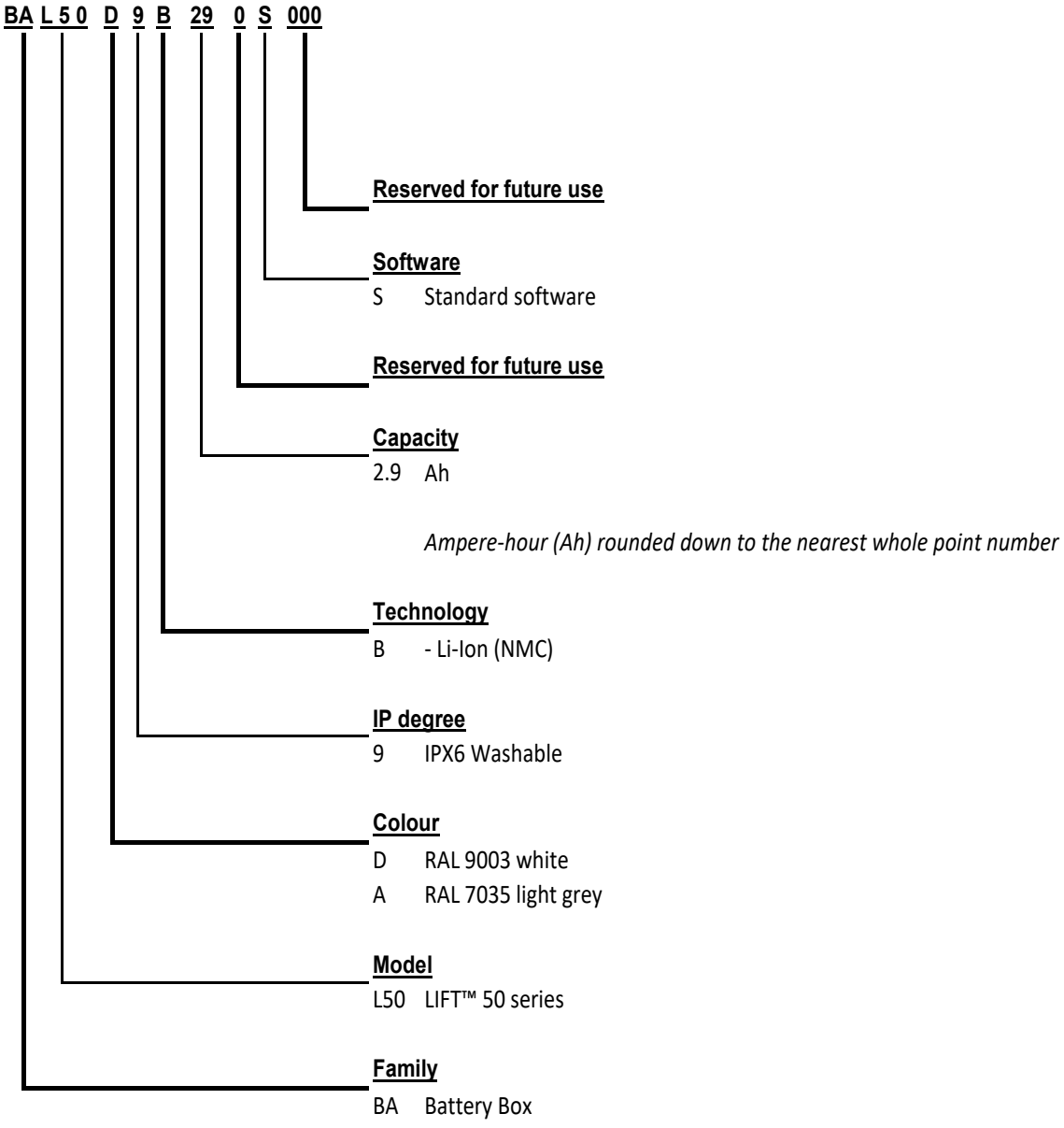
* Number of lifts and lowerings with a fully charged battery under the following conditions: Normal speed (COL50 and LA44), thrust up to 6,000 N

  Stroke: S = 200 mm. The actuator does not reach the end position at any time.

All BAL50 batteries produced in Denmark as of 1 January 2025 will have an extended warranty of 60 months (counting from manufacturing date).

All BAL50 batteries produced prior to this date will follow the standard 12 months warranty period for batteries.

Ordering example



A half pallet contains 140 pcs of BAL50.

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: BAL50

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: BAL50*SS**S****

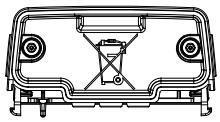
" * " is not safety critical and we recommend including a non-specific signifier such as an asterisk.

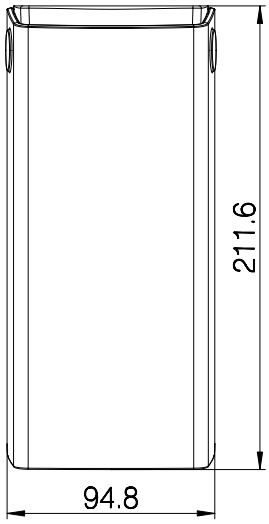
" S " is safety critical and represents a listed critical component in the product and cannot be left out.

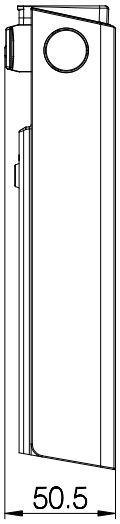
For more information, please refer to "Approvals and certifications" in LINAK Application Design Recommendations found under User Manual for any given product on LINAK.com

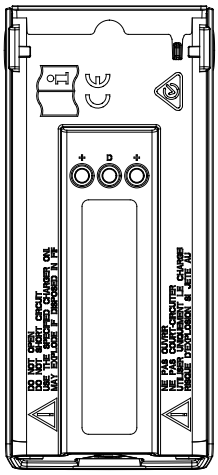
Dimensions

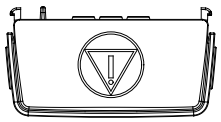
All dimensions are in mm.











Drawing no.: 1039w4000

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 (Spólka 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
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 to provide accurate and up-to-date information about its products. However, it is the responsibility of the user to determine the suitability of LINAK products for any specific application. Due to ongoing product development, LINAK products are subject to continuous modifications and changes. LINAK reserves the right to make such modifications, updates, and changes without prior notice. For this reason, LINAK cannot guarantee the accuracy or current status of printed information about 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 applicable terms and conditions of sale and delivery available on LINAK websites. LINAK and the LINAK logotype are registered trademarks of LINAK A/S. All rights reserved.

Copyright© LINAK • 2026-10• LIT-62-02-005 J

WE IMPROVE YOUR LIFE