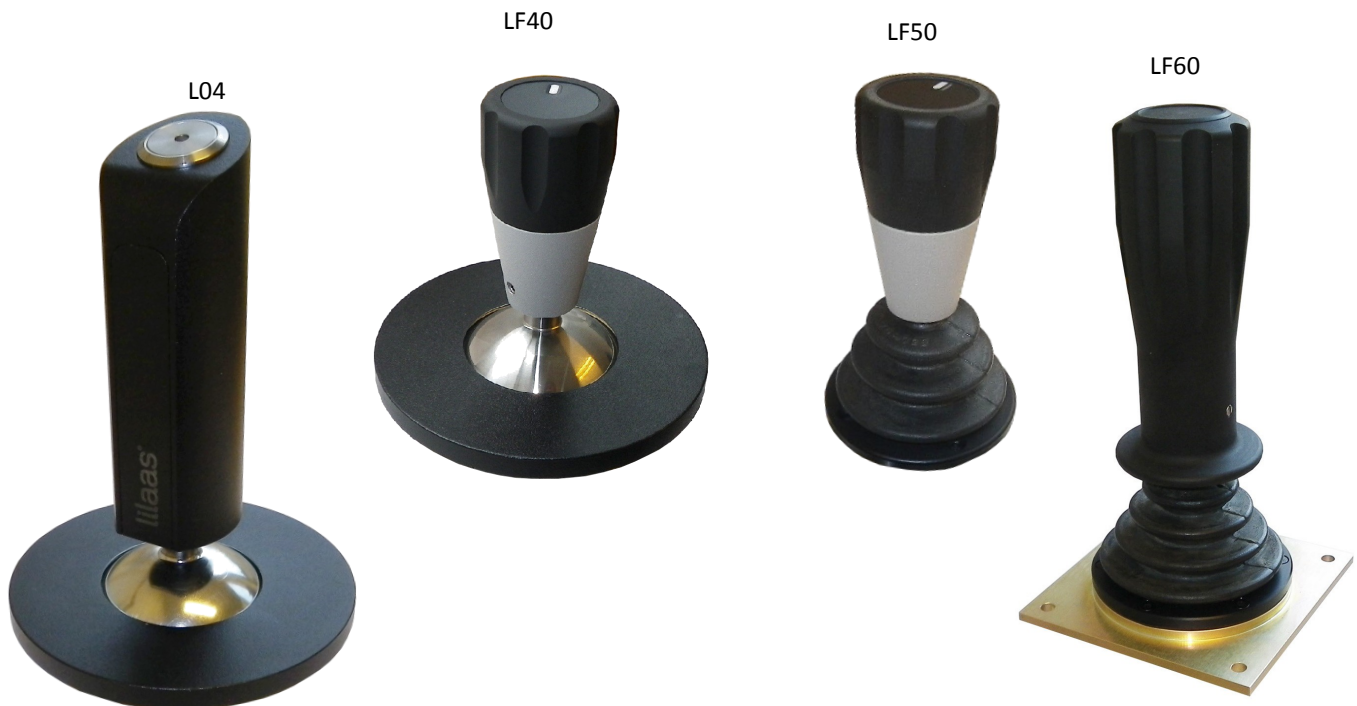


Lilaas joysticks

Lilaas offers a wide range of high quality type approved multipurpose joysticks. Below you will find a simple technical description of various basic models. To meet various needs and requirements, the joysticks may be customized. See next page for more information.



Specification details standard version

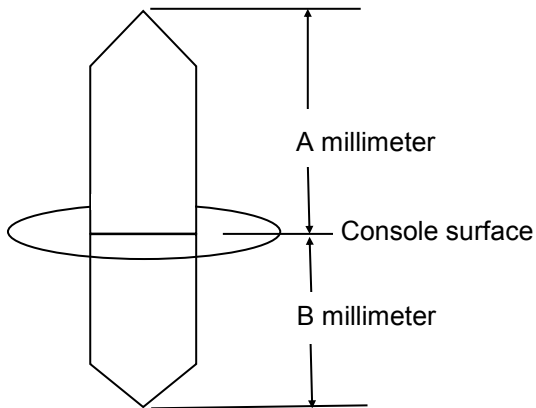
| | L04 | LF40 | LF50 | LF60 |
|---------------------|---|---|---|---|
| Weight | 0,8 kg | 0,9 kg | 0,5 kg | 0,9 kg |
| Handle movement | X: $\pm 24^\circ$ Y: $\pm 24^\circ$ Z: $\pm 60^\circ$ | X: $\pm 24^\circ$ Y: $\pm 24^\circ$ Z: $\pm 45^\circ$ | X: $\pm 26^\circ$ Y: $\pm 26^\circ$ Z: $\pm 75^\circ$ | X: $\pm 28^\circ$ Y: $\pm 28^\circ$ Z: $\pm 90^\circ$ |
| Electrical movement | X: 48° Y: 48° Z: 120° | X: 48° Y: 48° Z: 90° | X: 52° Y: 52° Z: 150° | X: 244° Y: 244° Z: 244° |
| Magnetic sensors | Yes | NA | NA | NA |
| Potmeters | NA | Single 5 k Ω , linear | Single 5 k Ω , linear | Single 5 k Ω , linear |
| IP grade | IP66 | IP66 | IP56 | IP66 |
| Termination | 16 pins contact with plug | | | |
| Materials / Finish | Steel A2, Al, POM / alodine, powder coating, rubber bellows | | | |

Lilaas AS, Kongeveien 75, P.O. Box705, N-3196 Horten, Norway. Tel: +47 33 03 18 50, fax: +47 33 03 18 60
Bank no: 2450.05.05628, NO917 748 446 MVA, E-mail : sales@lilaas.no

Certified according to NS-EN ISO 9001:2008

For more info, see our website <http://www.lilaas.no/>

The potentiometer is of a plastic conductive type measuring 5 kΩ between the end points. The potentiometer must be used as a voltage divider and not as a rheostat. Wiper current must not exceed 1 mA.



External dimensions:

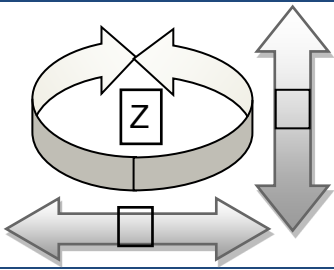
| Standard | L04 | LF40 | LF50 | LF60 |
|----------|-----|------|------|------|
| A | 113 | 97 | 100 | 167 |
| B | 74 | 50 | 66 | 100 |

Lilaas joysticks, basic models

| | | |
|--|---|---|
| <p>L04EAA-AB-00002</p>  | <p>L04EBA-AB-00002</p>  | <p>LF60-3-02</p>  |
| <p>LF40-x-xx</p> <p>On request</p>  | <p>LF50-3-03</p>  | |

Do you need an extended version? To simplify the customization process, please fill in your request to Lilaas in the *Spec your request* form below and forward it to: sales@lilaas.no

We will revert with price and availability.

| Spec your request | | Lilaas joystick model: L04 <input type="checkbox"/> LF40 <input type="checkbox"/> LF50 <input type="checkbox"/> LF60 <input type="checkbox"/> | | | |
|-----------------------------------|-----|---|--|--|--|
| Options, other than standard | Yes | Description | | | |
| Less than 3 active axes | | | | | |
| Push button with light (only L04) | | | | | |
| Switches | | | | | |
| Spring return | | | | | |
| Handle movement Z-axis | | | | | |
| Potentiometer | | | | | |
| Logo | | | | | |
| Axes definition | |  | | | |
| | | | | | |
| Other | | | | | |

| | |
|---------------------|-----------------|
| Specification from: | Contact person: |
| Company: | E-mail: |
| | Telephone: |



Lilaas AS is a world leading manufacturer of various types of control levers and joysticks for marine and offshore use.

As a result of unique design, top-grade materials and thorough test procedures, we produce products of high quality that requires a minimum of service and maintenance.

The control units from Lilaas include levers, controlling mechanism and accompanying electronics.

The products range from simple, one-axis control levers in different sizes, hand wheels and rudder controls to azimuth control units and multi-axis joysticks.

All units may be delivered motorised on all axes and with several optional features. The products comply with stringent certification requirements.

All kinds of vessels, from small fishing boats and ferries, via supply vessels to large tankers and cruise ships may be manoeuvred by control levers from Lilaas.

The products are certified by DNV and the company is certified under NS-EN ISO 9001-2008.

Lilaas AS

Kongeveien 75, P.O. Box705, N-3196 Horten, Norway.

Tel: +47 33 03 18 50, fax: +47 33 03 18 60

E-mail : sales@lilaas.no

Certified service partner:

Z-POWER Automation Pte Ltd
No. 8 Penjura Lane
Singapore 609189
SINGAPORE

Tel: +6564651925
Fax: +6564651926
E-mail: info@z-power.com.sg
www.z-power.com.sg

Certified distributor:

Shanghai EJH Group Co. Ltd
Room 501, No.1165, Jiang Ning Road,
Shanghai, CHINA 200060

Tel: +61072296/62300624/61398478
Hotline: 18017019329
Fax: +862161303138
E-mail: sales@ejhul.com
www.ejhul.com

Certified distributor:

Imtra Corporation
30 Samuel Barnet Boulevard
New Bedford, MA 02745 USA

Tel: +1 508 995-7000
Fax: +1 508 998-5359
E-mail: alex@imtra.com
www.imtra.com

