Nanotec

NEW



HIGHLIGHTS

- 292 mm/s max. speed
- Peak force up to 3,000 N
- Built-in encoder
- Optional holding brake
- Long service life

LBA series

BLDC linear actuators for dynamic, precise motion

The LBA series combines a high-performance BLDC motor, a precision ball screw and an encoder in a compact unit with 60 mm or 80 mm flange.

With their short overall length, the actuators are ideal for applications where installation space is limited. A holding brake is available as an option. The optional linear guide provides additional stiffness for applications with high transverse forces.



LBGA60 LBA60 LBA80

Multiple encoder options

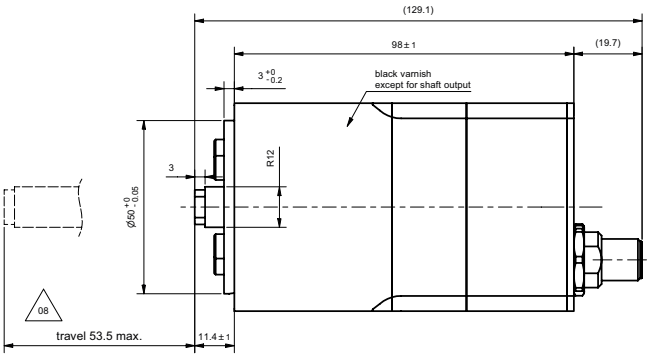
The actuators are available with either a 4,096 CPR incremental encoder with Hall sensors or a 17-bit absolute encoder with SSI interface. The version with a guide can also be equipped with an additional linear SSI encoder for direct position feedback.

High dynamic performance

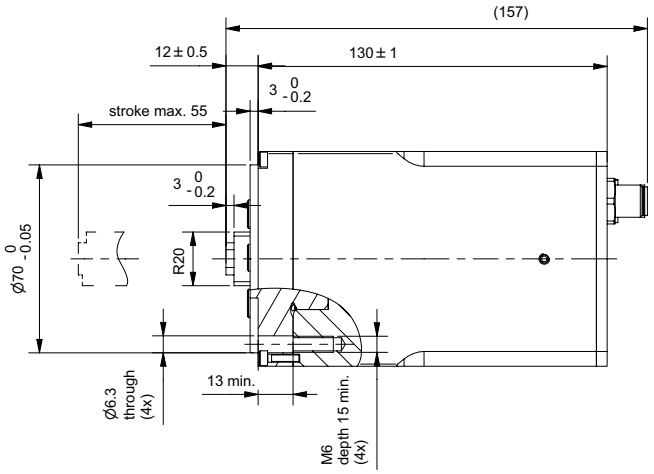
The ball screw and high-performance BLDC motor provide high speed and force for dynamic positioning tasks and short cycle times. Peak axial force reaches up to 1,500 N with the LBA60 and up to 3,000 N with the LBA80.

Easy integration

Industrial-grade M12 and M8 connectors, defined mounting interfaces and precise alignment tolerances simplify integration into machines and systems. The modular design provides flexibility for machine builders and OEMs.



LBA60



LBA80

	LBA60	LBA80
Flange size	60 mm	80 mm
Rated voltage	48 V	80 V
Rated current	6.2 A	7.8 A
Rated force	500 N	1,000 N
Peak force	1,500 N	3,000 N
Rated speed	100 rpm	208 rpm
Max. speed	292 mm/s	267 mm/s
Thread lead	5 mm	5 mm
Stroke length	53.5 mm	55 mm
Max. brake backlash	0.014 mm	0.014 mm
Operating voltage (encoder)	4.5 – 5.5 V	4.5 – 5.5 V

Nanotec Electronic GmbH
Kapellenstrasse 6 | 85622 Feldkirchen | Germany
+49 89 900 686-0 | info@nanotec.de
www.nanotec.com

© 2026 Nanotec Electronic GmbH. All rights reserved. 11.2026 (AA)