

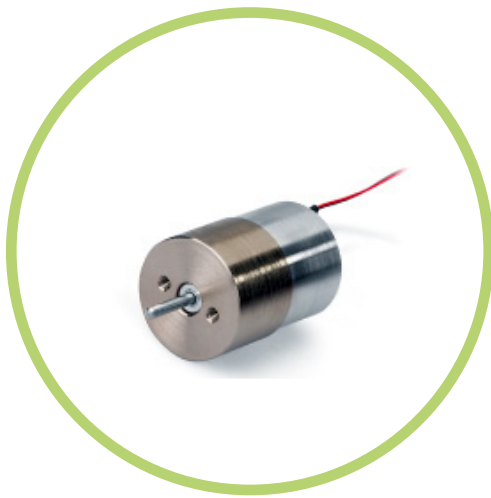


CYLINDRICAL HOUSED LINEAR VOICE COIL ACTUATORS (VCA)

Introduction

A fully housed voice coil actuator (VCA) further expands upon the idea of the semi-housed VCA, incorporating the self-aligning bushings and shaft, but fully captures the coil assembly to keep it concentric with the field assembly, adds an internal flex circuit to protect external moving wires and also limits the axial travel on both ends of the stroke.

As a single piece, the linear actuator can be mounted on one side and does not require a customer supplied alignment system, making it easy to integrate into applications. Housed voice coil actuators feature all of the inherent advantages of VCA technology, such as direct-drive, zero backlash and cog free operation for accurate motion, as well as high acceleration and use of single phase.



Features

- Designs available with magnet springs and/or latches
- Different shaft options available
- Housing offers additional mechanical and environmental protection
- Single unit that is more easily integrated into customer applications
- Life tested in excess of 500 million cycles



CYLINDRICAL HOUSED LINEAR VOICE COIL ACTUATOR (VCA) CONFIGURATIONS

| Part Number | Peak Force (N / lb) | Total Stroke (mm / in) | Continuous Stall Force (N / lb) | Actuator Constant (N $\sqrt{\text{watt}}$ / lb $\sqrt{\text{watt}}$) | Outside Diameter/Width (mm / in) | Length at Mid-stroke (mm / in) |
|-------------------|---------------------|------------------------|---------------------------------|---|----------------------------------|--------------------------------|
| LAH04-10-000A | 1.89 / 0.42 | 4.00 / 0.16 | 1.11 / 0.25 | 0.84 / 0.19 | 10.1 / 0.40 | 25.4 / 1.00 |
| LAH13-18-000A-3E | 15.5 / 3.50 | 6.36 / 0.25 | 5.07 / 1.14 | 2.36 / 0.53 | 31.6 / 1.24 | 45.7 / 1.80 |
| LAH13-18-000A-3S | 15.5 / 3.50 | 6.36 / 0.25 | 5.07 / 1.14 | 2.36 / 0.53 | 31.6 / 1.24 | 45.7 / 1.80 |
| LAH16-23-000A-4E | 89.0 / 20.0 | 6.08 / 0.24 | 17.0 / 3.82 | 5.83 / 1.31 | 40.0 / 1.57 | 58.4 / 2.30 |
| LAH16-23-000A-4S | 89.0 / 20.0 | 6.08 / 0.24 | 17.0 / 3.82 | 5.83 / 1.31 | 40.0 / 1.57 | 58.4 / 2.30 |
| LAH28-53-000A-12E | 266 / 60.0 | 25.0 / 0.98 | 60.1 / 13.5 | 13.0 / 2.94 | 70.0 / 2.76 | 132 / 5.22 |
| LAH28-53-000A-12I | 266 / 60.0 | 25.0 / 0.98 | 60.1 / 13.5 | 13.0 / 2.94 | 70.0 / 2.76 | 132 / 5.22 |
| LAH28-53-000A-12S | 266 / 60.0 | 25.0 / 0.98 | 60.1 / 13.5 | 13.0 / 2.94 | 70.0 / 2.76 | 132 / 5.22 |
| LAH43-86-001Z | 1512 / 340 | 31.7 / 1.25 | 386 / 86.9 | 38.3 / 8.61 | 218 / 8.60 | 108 / 4.25 |

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