

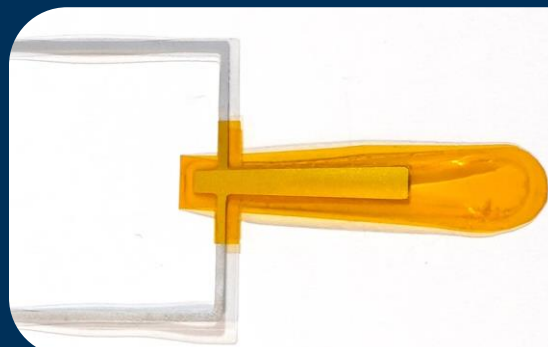


# E-Series Expanding HASEL Actuator

E-5507-01-01-A-CBBA-35-015

## Key Metrics

<b>Actuation Type</b>	Expanding
<b>Series</b>	E-Series
<b>Model Number</b>	E-5507
<b>Part Number</b>	E-5507-01-01-A-CBBA-35-015
<b>Actuator Stack Quantity</b>	1
<b>Pouches Per Actuator</b>	1
<b>Mounting</b>	None – Screw Ends
<b>Weight</b>	0.32g
<b>Voltage Range</b>	2kV – 6kV
<b>Blocking Force</b>	5N (@6kV, <1% Strain)
<b>Free Stroke</b>	0.5mm (@6kV)
<b>Typical Lifetime</b>	$10^4 - 10^6$ cycles



## Features

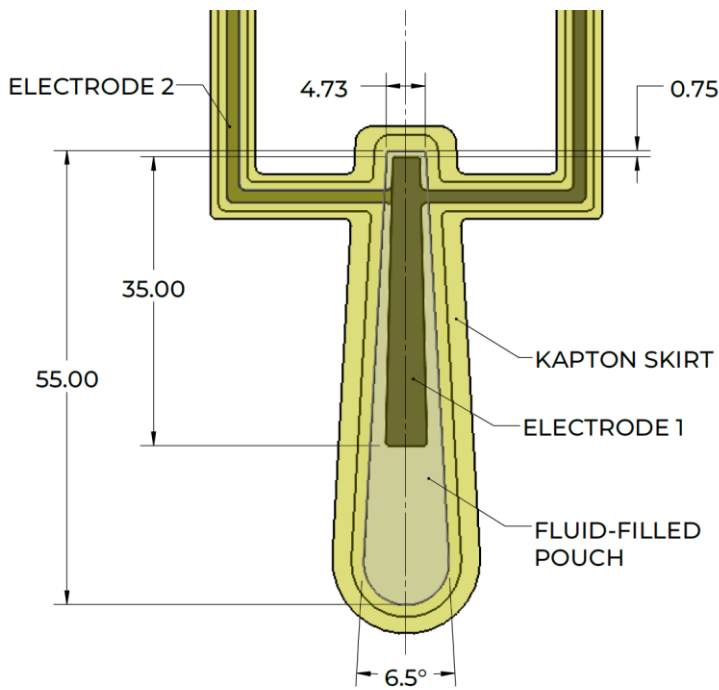
- Electrically controlled
- Direct linear analog motion
- Soft, compliant structure
- Wide bandwidth
- Intelligent self-sensing
- Silent operation
- Fast actuation speeds
- Lightweight and portable
- Modular
- Easily customizable

## Available Accessories

- High voltage power supply
- Standalone control software

**Customizable Characteristics:** Actuator stack quantity (stroke), pouch dimensions, actuator dimensions (force), mounting, encapsulation

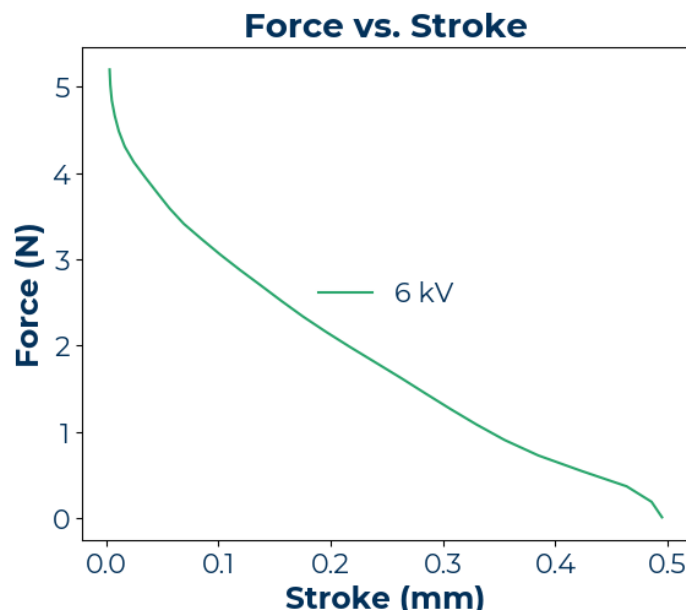
HASEL actuators are the first linear contracting actuators to operate using electrohydraulic principles. Designed and manufactured in Boulder, Colorado, HASEL actuators are used in multiple industries including **automotive, industrial automation, medical devices, aerospace, and defense.**



A single HASEL pouch that linearly expands at the tip of the actuator (see [video](#)).

Rest thickness is 0.72 mm. Download the layout print at [artimusrobotics.com](http://artimusrobotics.com) for more dimensions.

## Typical Performance



Actuator **force** and **stroke** are controllable through input **voltage**.

Artimus Robotics specializes in engineering actuators and systems for challenging applications. Not sure if it's a fit for you? Fill out our [Application Assistant](#) so our engineers can evaluate and recommend a custom solution.

The information presented in this document is based on test results using custom electronics. It is believed to be accurate and reliable, but application conditions may adversely affect performance and lifetime. It is the responsibility of the user to determine suitability of the product for intended use.

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**video**