



## NEWSLETTER ELLIPTEC 04/2009

Dear Sir or Madam,

Welcome to the new issue of Elliptec's Newsletter, presenting updates on our piezoelectric drives and technologies.

For questions and comments, please feel free to contact us at [info@elliptec.com](mailto:info@elliptec.com)

Visit Elliptec's website at [www.elliptec.com](http://www.elliptec.com) for further information, including application examples, or [contact us by phone](#).

Elliptec AG, Dortmund

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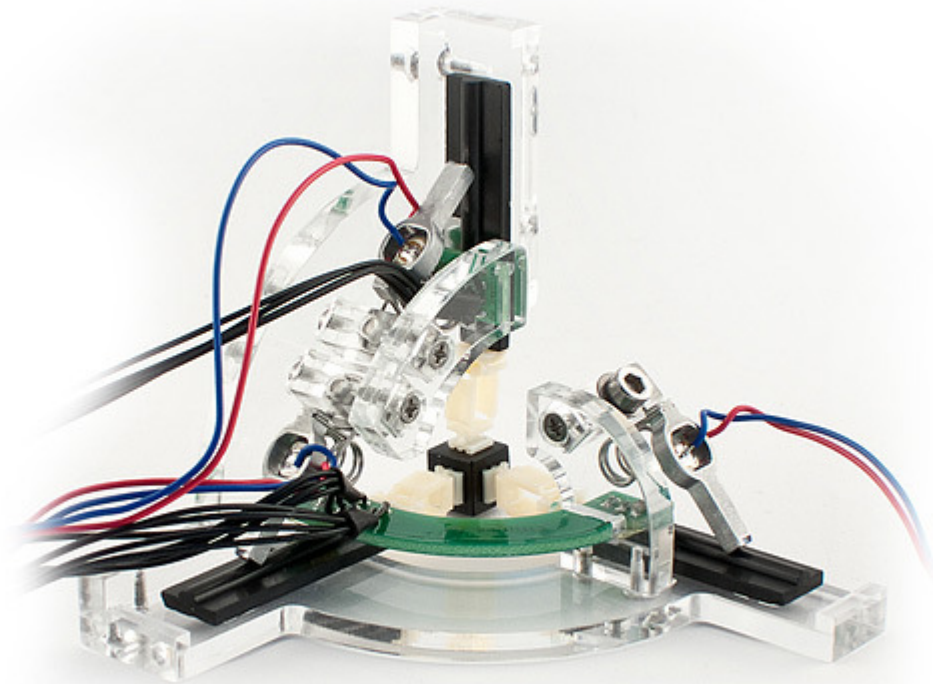
- [1. Delta-kinematics with three Elliptec X15G motors](#)
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### 1. Delta-kinematics with three Elliptec motors X15G

Elliptec's delta-kinematics manipulator with three degrees of freedom uses three Elliptec motors X15G for precise and fast positioning of an object, e.g., a tool, in space. The motors are configured as linear drives that are coupled to the positioning platform by way of flexible joints. The device was designed with a special emphasis on system cost so that this manipulator is significantly more affordable than might be expected from its performance and specifications.

- Dimensions: 68x68x73mm
- 15µm step size. Platform accelerates to 200mm/s maximal speed in less than 10ms
- Simple, flexible joints for backlash-free positioning

The design can be adapted to customer specific requests. Elliptec provides full technical support and offers a full range of engineering services from design and prototyping to series production of drives and sub-systems.



Visit the free download area on our website to view 3D-animations and demonstration videos of Elliptec's delta-kinematics in the **Media** section of <http://www.elliptec.com/index.php?id=74&L=2>

## 2. Hexapod-kinematics with six Elliptec X15G motors

Elliptec's six degrees of freedom Hexapod manipulator uses six Elliptec motors X15G for precise and fast positioning of an object, e.g., a tool, in space. In addition to moving in X-, Y-, Z-axes, the Hexapod tilts and rotates the mounting platform. The Elliptec motors drive wheel segments that are connected by way of elastic joints and beams to the platform. The various degrees of freedom enable complex positioning tasks in space such as are needed for cell analysis or for CNC machining.

- 15 $\mu$ m step size, accelerates to 200mm/s max. speed in less than 10ms
- Simple, elastic joints for backlash-free positioning

The design can also be adapted to customer specific requests, for which Elliptec provides full technical support and offers a full range of engineering services from design and prototyping to series production of drives and sub-systems.



To view 3D-animations and demonstration videos of this hexapod manipulator, visit the [Media] section of our free download area in <http://www.elliptec.com/index.php?id=74&L=2>

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