Fast 6- Axis Hexapod

FOR LOADS TO 60 KG

H-900KSCO

- Low- wear, brushless DC motors
- Travel ranges to 200 mm in X and Y and up to 170 mm in Z
- Tilt and rotation angle to 66°
- High velocities

Reference- class 6- axis positioning system
Parallel- kinematic design for six degrees of freedom making it significantly more compact and stiff than serial- kinematic systems, higher dynamic range, no moved cables: Higher reliability, reduced friction.

Powerful digital controller, open software architecture
Optional: Software for avoiding collisions in restricted workspace

Fields of application
Motion simulation: Motion profile compatible according to ISO 20672, ISO 8728, and ISO 16328
Industrial production, tool machines, automotive industry, shipping
Specifications

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<th>Preliminary Data</th>
<th>H-900KSCO</th>
<th>Unit</th>
<th>Tolerance</th>
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</thead>
<tbody>
<tr>
<td>Active axes</td>
<td>X, Y, Z, (\theta_x), (\theta_y), (\theta_z)</td>
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</table>

**Motion and Positioning**

- Single-actuator design resolution: 0.58 \(\mu\)m
- Travel range X, Y: 200 mm
- Travel range Z: 170 mm
- Travel range \(\theta_x\), \(\theta_y\): 66°
- Travel range \(\theta_z\): 66°
- Min. incremental motion X, Y: 5 \(\mu\)m typ.
- Min. incremental motion Z: 5 \(\mu\)m typ.
- Backlash X, Y: 20 \(\mu\)m typ.
- Backlash Z: 5 \(\mu\)m typ.
- Backlash \(\theta_x\), \(\theta_y\): 50 \(\mu\)rad typ.
- Backlash \(\theta_z\): 90 \(\mu\)rad typ.
- Repeatability X, Y: ±2 \(\mu\)m typ.
- Repeatability Z: ±0.5 \(\mu\)m typ.
- Repeatability \(\theta_x\), \(\theta_y\): ±5 \(\mu\)rad typ.
- Repeatability \(\theta_z\): ±9 \(\mu\)rad typ.
- Max. velocity X, Y, Z: 80 mm/s
- Max. velocity \(\theta_x\), \(\theta_y\), \(\theta_z\): 520 mrad/s
- Typ. velocity X, Y, Z: 20 mm/s
- Typ. velocity \(\theta_x\), \(\theta_y\), \(\theta_z\): 130 mrad/s

**Mechanical Properties**

- Load (base plate horizontal): 635 N max.
- Holding force, de-energized (base plate horizontal): 635 N max.
- Motor Type: DC gear motor

**Miscellaneous**

- Operating temperature range: -10 to 50 °C
- Material: Aluminum
- Mass: 65.5 kg

Technical data specified at 20 ±3 °C.

* The travel ranges of the individual coordinates (X, Y, Z, \(\theta_x\), \(\theta_y\), \(\theta_z\)) are interdependent. The data for each axis in this table shows its maximum travel, where all other axes are at their zero positions. If the other linear or rotational coordinates are not zero, the available travel may be less.

**Order Information**

**H-900KSCO**

Motion Hexapod for 60 kg Load, to 200 mm Travel Range, to 80 mm/s Velocity

Ask about custom designs!

**Controllers / Drivers / Amplifiers**

**C-887.5x Controller for Hexapod Positioning Systems**

**Related Products**

**H-850 6- Axis Hexapod**
**H-840 6- Axis Hexapod**
**H-845 High-Load Hexapod**
**H-860KMAG High- Dynamics Hexapod**