# Oil-Proof Hand BHGJ Series

**Cross Roller Parallel Gripper with Rubber Cover**

## Key Features

- **Protective rubber cover for use in dusty and harsh environments**
  - Rubber cover prevents substances and particulates such as mists and dusts from penetrating into the interior of the unit.
- **High accuracy and smooth operation with cross roller guide**
  - Cross roller bearing retention structure used for sliding material provides high accuracy and smooth motion.
- **Compact body and high rigidity**
  - Telescopic slides and bearing retainers to provide high moments to size ratio.

*Oil-Proof Sensors can be mounted*

## How To Order

<table>
<thead>
<tr>
<th>Standard</th>
<th>Option</th>
<th>BHGJ-01AS</th>
<th>E40LS2</th>
<th>Z</th>
</tr>
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<tbody>
<tr>
<td>Size</td>
<td>Symbol</td>
<td>Name</td>
<td>Symbol</td>
<td>Name</td>
</tr>
<tr>
<td>01AS</td>
<td>E40</td>
<td>Contact</td>
<td>E45</td>
<td>Non-Contact</td>
</tr>
<tr>
<td>03AS</td>
<td>E40L</td>
<td>Contact</td>
<td>E45L</td>
<td>Non-Contact</td>
</tr>
<tr>
<td>04AS</td>
<td>E41</td>
<td>S1 Sensor</td>
<td>E41</td>
<td>S2 Sensors</td>
</tr>
<tr>
<td>05AS</td>
<td>E41L</td>
<td>Special Type</td>
<td>E41L</td>
<td>Special Type</td>
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BHGJ-01AS with 2 of E40L non-contact reed switches and special processing.

## Specification

<table>
<thead>
<tr>
<th>Model</th>
<th>BHGJ-01AS</th>
<th>BHGJ-03AS</th>
<th>BHGJ-04AS</th>
<th>BHGJ-05AS</th>
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</thead>
<tbody>
<tr>
<td>For Lead-Drawing</td>
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<td>For Lead-Drawing</td>
<td>For Lead-Drawing</td>
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<tr>
<td>Working Pressure</td>
<td>Pneumatic: 0.1 to 0.7 MPa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lubrication</td>
<td>Not Required or Turbine Oil Class 1 (ISO VG32)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature (℃)</td>
<td>5 to 60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Jaw Stroke (mm)</td>
<td>5</td>
<td>9</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Cylinder Diameter (mm)</td>
<td>dia.12</td>
<td>dia.16</td>
<td>dia.20</td>
<td>dia.25</td>
</tr>
<tr>
<td>Rod Diameter (mm)</td>
<td>dia.6</td>
<td>dia.8</td>
<td>dia.10</td>
<td>dia.12</td>
</tr>
<tr>
<td>Linear/Rotary Speed (rpm)</td>
<td>0.32</td>
<td>1.58</td>
<td>2.89</td>
<td>6.32</td>
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<tr>
<td>Repeatability (sec)</td>
<td>±0.01</td>
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<td></td>
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<tr>
<td>Weight (kg)</td>
<td>0.13</td>
<td>0.18</td>
<td>0.3</td>
<td>0.48</td>
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</tbody>
</table>

## Performance Data

- **Grip Force**
  - The graph shows grip force in opening and closing with effective external finger lengths L from gripper cover surface under different air pressure (MPa).
  - Open (○) --- --- --- ---
  - Closed (●) --- --- --- ---

### Graphs

**BHGJ-01AS**, **BHGJ-03AS**, **BHGJ-04AS**, **BHGJ-05AS**
Oil-Proof Hand BHGJ Series

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*Oil-Proof Sensors can be mounted*

How To Order

**Standard**
- BHGJ-01AS

**Option**
- BHGJ-01AS - E40LS2 - Z

BHGJ-01AS with 2 of E40L non-contact Reed switches and special processing

Performance Data

**Grip Force**

The graph shows grip force in opening and closing with effective external finger lengths \( l \) from gripper cover surface under different air pressure (MPa).

Open (○) ---
Closed (●) ---

### Specification

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<tr>
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<th>BHGJ-04AS</th>
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<tr>
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<tr>
<td>Rod Diameter (mm)</td>
<td>dia.6</td>
<td>dia.8</td>
<td>dia.10</td>
<td>dia.12</td>
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<td>Inner/Outer Retracted (cm³/time)</td>
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<td>1.58</td>
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</table>
Oil-Proof Hand BHGJ Series

Layout Drawing

BHGJ-01AS to 05AS (Optimal Grip Force 15N to 150N)

BHGJ-AS Standard

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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</table>

<table>
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<th>E</th>
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Oil-Proof Non Contact Sensor W=10.4 L=10

For CAD data, please go to [link]