## Electrical Data

<table>
<thead>
<tr>
<th>XX</th>
<th>Linear travel per step</th>
<th>42DBLXX-XXXX-K</th>
<th>Unit</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td>C1B Bipolar</td>
<td>C2B Bipolar</td>
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<tr>
<td>10</td>
<td>@ .001&quot; (0.0254mm)</td>
<td>102.9 (370)</td>
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<td>20</td>
<td>@ .002&quot; (0.0508mm)</td>
<td>83.4 (300)</td>
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<td>@ .004&quot; (0.1016mm)</td>
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### General Data

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### Notes:
1. All motor data values at 20° C unless otherwise specified – 2. # Voltage in case of voltage driver (indicator R•I)

### Dimensions in mm. [inches]

- **42DBL-K**
  - Ø 42 mm • RoHS Compliant • 102.9 N
  - Specifications subject to change without notice.

### Specifications
- **Can Stack Linear Actuators**
- **Electrical Data**
  - Operating Voltage #
  - Resistance per Phase, ± 10%
  - Inductance per Phase, typ
  - Rated Current per Phase, 1 Phase ON
  - Input Power
- **General Data**
  - Min. Holding Force @ rated current
  - Min. Holding Force (Unenergized)
  - Stroke Length, Typ
  - Linear Travel Accuracy
  - Steps per Revolution
  - Ambient Temperature Range (operating)
  - Maximum Coil Temperature
  - Bearing Type
  - Insulation Resistance at 500 VDC
  - Dielectric Withstanding Voltage
  - Weight
  - Leadwire

### Notes:
- Brown, Green, Black, Yellow, Red, Orange
- UNIPOLAR COIL
- BIPOLAR COIL

### Mechanical Data

- **42DBLXXCU-K/L**
  - Typical Pull-in Linear Force vs Linear Rate at 20° C
  - Full Step, Unipolar, L/R Drive

- **42DBLXXCB-K/L**
  - Typical Pull-in Linear Force vs Linear Rate at 20° C
  - Full Step, Bipolar, L/R Drive

### Diagrams

- Dimensions in mm. [inches]

### Technical Details

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<tr>
<th>Item</th>
<th>Value</th>
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<tr>
<td>Ø28.09±0.25 [Ø1.106±0.010]</td>
<td>45.11 [1.776] MAX</td>
</tr>
<tr>
<td>Ø42.01 [Ø1.654] MAX</td>
<td>27.76 [1.093] MAX</td>
</tr>
<tr>
<td>Ø9.53±0.13 [Ø0.375±0.005]</td>
<td>21.74 [0.856] MAX</td>
</tr>
<tr>
<td>Ø20.45±0.13 [Ø0.805±0.005] BOTH ENDS</td>
<td></td>
</tr>
<tr>
<td>Ø5.54 [Ø0.218] REF</td>
<td></td>
</tr>
<tr>
<td>45.97±0.64 [1.810±0.025] EXTENDED</td>
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</tr>
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### Additional Information

- Pull-In Force
- Viewing Diagrams
- Viewing Notes
- Viewing Electrical Data
- Viewing General Data
- Viewing Mechanical Data
- Viewing Dimensions

### Knowledge Integration

- Understanding the specifications of linear actuators is crucial for selecting the right device for a project.
- Electrical parameters like operating voltage, resistance, and current are critical for ensuring the device operates within safe limits.
- General specifications such as holding force, travel length, and accuracy are essential for accurate and reliable operation.
- Mechanical dimensions and tolerances are necessary for proper installation and compatibility with other components.

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**1. NOT RECOMMENDED TO USE AT THE FULLY RETRACTED AND EXTENDED POSITIONS.**

2. SHAFT AXIAL BACKLASH: 0.15 [0.006] MAX.

3. 2X Ø3.66±0.13 [Ø0.144±0.005]

4. 65.28±0.25 (2.570±0.010)

5. 55.55±0.10 [2.167±0.004]

6. 2X Ø3.66±0.13 [Ø0.144±0.005]

7. 45.97±0.64 [1.810±0.025] EXTENDED

8. 21.64±0.84 [0.852±0.032] RETRACTED

9. Ø20.45±0.13 [Ø0.805±0.005] BOTH ENDS

10. Ø5.54 [Ø0.218] REF

11. Ø28.09±0.25 [Ø1.106±0.010] BOTH ENDS

12. Ø9.53±0.13 [Ø0.375±0.005] BOTH ENDS

13. 304.8±0.8 [12±4] LONG

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**Unipolar Coil**:

- Yellow, Orange, Brown, Black, Red, Green

**Bipolar Coil**:

- Red, Gray, Yellow, Black

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**Notes**: 1. All motor data values at 20° C unless otherwise specified – 2. # Voltage in case of voltage driver (indicator R•I)

**Unipolar Coils**:

- UNIPOLAR COIL

**Bipolar Coils**:

- BIPOLAR COIL

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**Dimensions in mm. [inches]**

- **Brown, Green, Black, Yellow, Red, Orange**

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**42DBL10CXU-K/L**

**42DBL20CXU-K/L**

**42DBL40CXU-K/L**

**42DBL10CXB-K/L**

**42DBL20CXB-K/L**

**42DBL40CXB-K/L**

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**42DBLXXCU-K/L**

**42DBLXXCB-K/L**