Kollmorgen Linear Positioners EC1
Electric Cylinder Servo Systems

**Benefits**

- Plug-and-play system with integrated AKM servo or CT stepper motor and mating Kollmorgen drive will satisfy nearly any application in this thrust/stroke range
- EC1 series electric cylinders offer a limited degree of flexibility optimizing solutions, reducing cost and minimizing cylinder size - 33% smaller than comparable N2; 44% smaller than comparable EC-2
- EC1 fills the price/performance gap between EC2 and our Thomson linear actuators
- Compact and cost-effective design for higher conversion rate from pneumatics

### Metric Dimensions ISO 6431 Std

<table>
<thead>
<tr>
<th></th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>C (mm)</th>
<th>D (mm)</th>
<th>E (mm)</th>
<th>F (mm)</th>
<th>G (mm)</th>
<th>H (mm)</th>
<th>J (mm)</th>
<th>K (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC1</td>
<td>78.0 (3.07)</td>
<td>62.0 (2.44)</td>
<td>43.7 (1.72)</td>
<td>8.0 (0.31)</td>
<td>48.0 (1.89)</td>
<td>82.6 (3.25)</td>
<td>41.8 (1.65)</td>
<td>31.3 (1.23)</td>
<td>20.0 (0.79)</td>
<td>20.0 (0.79)</td>
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<thead>
<tr>
<th></th>
<th>L (mm)</th>
<th>M (mm)</th>
<th>N Cyl Length (mm)</th>
<th>O Retract Length (mm)</th>
<th>R (mm)</th>
<th>S (mm)</th>
<th>T (mm)</th>
<th>U (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC1</td>
<td>20.5 (0.81)</td>
<td>27.1 (1.06)</td>
<td>96.5 + S (3.80 + S)</td>
<td>117.0 + S (4.60 + S)</td>
<td>58.6 + S (2.30 + S)</td>
<td>6.6 (0.26)</td>
<td>10.0 (0.39)</td>
<td>22.2 (0.88)</td>
</tr>
</tbody>
</table>

* Other mounting options include: MF1 (Front Flange), MF1 (Front Flange - Inline Version), MP2/MP3 (Clevis Mount), MS6 (Side Tapped Holes). See Linear Positioners Catalog online for more details.
Typical Construction
(EC1 Cutaway Shown)

- Brushless servomotor or stepper motor (not shown) with a variety of feedback options.
- Guide Flange provides antirotation of the ballnut.
- Recirculating ball bearing ball screws provide smooth, high-thrust drive.
- Deep groove ball bearing ensures long life with minimal backlash.
- Wiper seal on polished stainless steel output tube keeps contaminants out and lubricants in.
- Front sleeve bearing supports side loads and minimizes runout.
- Ground stainless steel thrust tube for long wear and corrosion resistance.

Force Speed Curves

Legend

- EC1-03B Ballscrew Life Curve
- EC1-CTP12-40-03B
- EC1-AKM11B-40-03B
- EC1-AKM11B-20-03B
- EC1-AKM13C-20-03B
- EC1-AKM13C-10-03B
- EC1-AKM13C-11B-20-03B
- EC1-CTP12-10-03B

For information regarding other EC1-CT step motor systems see the full line Kollmorgen Linear Positioners / Electric Cylinders Datalog online.

*230 Vac

- System limits are equivalent to 115 Vac system.

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