The 7 Benefits of ROBO CYLINDER

www.IntelligentActuator.com
Multiple Positioning
With the ROBO Cylinder, you can achieve positioning of up to 20,000 stored points and a repeatability of ±0.01mm. (±0.005mm for high-precision type)

**Benefit** – Use one assembly line to produce a variety of products and achieve higher quality production with a repeatability of ±0.01mm or less.

Push and Hold
The push force (pressing force) can be easily adjusted by changing the position data values. The push force can also be set to constant. This function is perfectly suited for press fit applications and parts holding.

**Benefit** – Push and hold hard/soft materials equally well without damaging your product. Great for press fitting and clamping applications.

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### Position Data Table
(Set on a teaching pendant or using PC software)

<table>
<thead>
<tr>
<th>No.</th>
<th>Position (mm)</th>
<th>Speed (mm/s)</th>
<th>Acceleration (G)</th>
<th>Deceleration (G)</th>
<th>Push (%)</th>
<th>Positioning Band (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td>100</td>
<td>0.3</td>
<td>0.3</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>200</td>
<td>200</td>
<td>0.3</td>
<td>0.3</td>
<td>0</td>
<td>20</td>
</tr>
</tbody>
</table>

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**Caution**
Push force precision when not in motion is not guaranteed. This is merely an estimate. Warning: If the push force is even slightly exceeded, pressing errors may occur due to sliding resistance, etc.
Acceleration/Deceleration Settings
Set the acceleration and deceleration independently on the ROBO Cylinder.
**Benefit** – Improve cycle time and drastically reduce part defects. Produce more in less time.

Zone Output
Output a signal when the ROBO Cylinder reaches a preset range, without a need for any external sensors. The zone output function allows the ROBO Cylinder to shorten its cycle time, output a danger zone signal, and can be used for a variety of other applications.
**Benefit** – Save time, money and effort of adding cumbersome external sensors.

Pause Input
Unlike pneumatic systems, ROBO Cylinders are capable of stopping at any point of the stroke during operation. **Benefit** – This allows for collision prevention and greater safety for operators and equipment.

Incremental/Decremental Moves
When performing a continuous movement with uniform pitch, repetitive movement is possible with data of a single position. **Benefit** – This function can speed up programming and reduce I/O count.

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<tbody>
<tr>
<td>1</td>
<td>300</td>
<td>100</td>
<td>0.3</td>
<td>0.01</td>
<td>0</td>
<td>0.1</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0.3</td>
<td>0.01</td>
<td>0</td>
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<td>0</td>
<td>0.1</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>300</td>
<td>0.3</td>
<td>0.3</td>
<td>0</td>
<td>0.1</td>
</tr>
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Speed Change While in Motion

Speed can easily be changed while in motion. Easily set a position band and change your speed while in motion.

**Benefit** – Improve cycle time and minimize product defects, resulting in higher quality production and ROI.

## More Benefits...

### Energy Efficient

ROBO Cylinders are highly energy efficient and will cut running costs, giving you substantial ROI. Functions such as Full Servo Control Mode and Automatic Servo Off Mode, further improve energy efficiency, making ROBO Cylinder the optimal choice for discerning automation engineers worldwide.

### Quiet Operation

Are you tired of the ear-splitting noise generated by pneumatic systems? ROBO Cylinder electric actuators offer quiet operation without the need for mufflers.

### Longer Life = Greater ROI

In addition to less product defects, operator safety, shorter cycle times, energy efficiency, and higher quality production, ROBO Cylinder electric actuators last 10 times longer than similar air cylinders.

### Free Technical Support

IAI America has offices in each of the 3 US time zones, to accommodate your schedule. Call us at your convenience to speak with one of our highly experienced technical support engineers.

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Established in 1976, IAI has 7 overseas sales offices and 25 regional offices in Japan. IAI is proud to announce a newly constructed headquarters, with an adjacent state of the art manufacturing facility to produce the highest quality automation robots. When looking for innovative and high quality robots, excellent service and support for your unique needs, look no further than IAI!