



JVL
intelligent motors

HBAC - Electric Cylinder Actuator

Assembly instructions



1 Important User Information



Warning

The MIS series of products are used to control electrical and mechanical components of motion control systems. You should test your motion system for safety under all potential conditions. Failure to do so can result in damage to equipment and/or serious injury to personnel.

Please contact your nearest JVL representative in case of technical assistance. Your nearest contact can be found on our web site www.jvl.dk

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2 Revisions

Ver.	Changes	Date	Init
1.0	First version	2024-09-24	JLN



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4 Attaching the brake/motor to the actuator

The following part of the instructions include pictures of a configuration using a brake. If **no brake is to be used**, perform the steps in this section and skip the section “Attaching the motor to the brake”.

This guide uses the following parts:



Figure 1. Linear actuator
HBAC76-HD05D8TXR450A parallel reverse



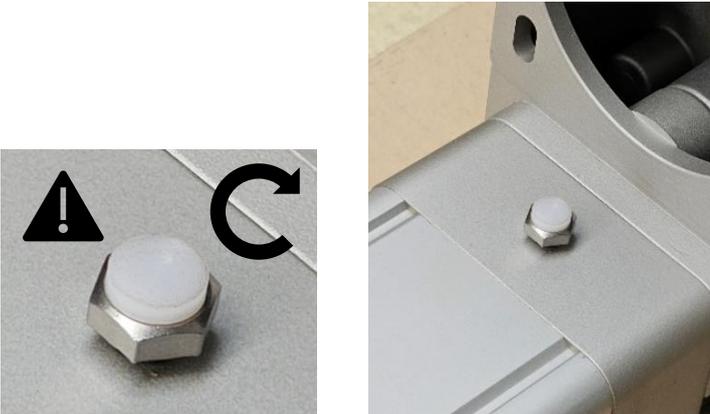
Figure 2. Belt (left) and cog (right)



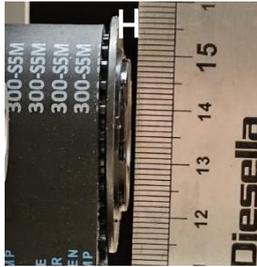
Figure 1. Brake
MAB34M-4.0N05F05



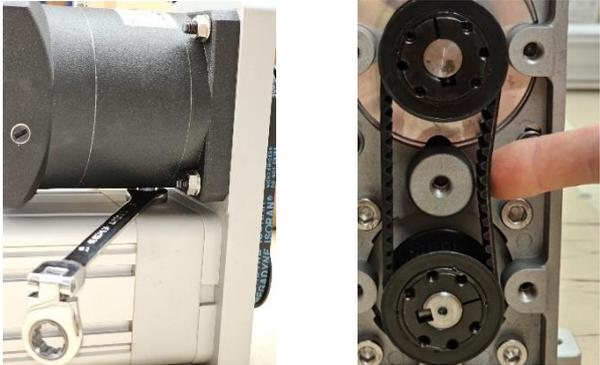
Figure 4. MIS Stepper motor
MIS341C14P6H485

Step	Text	Image
1	Attach the cog (from figure 2) onto the shaft of the motor/brake. It should go on easily most of the way.	 <p>Figure 5. Make sure to apply as little force as possible and that the screws are facing outwards.</p>
2	Tighten the support screw on the actuator	 <p>Figure 6. CAUTION: Remember to tighten the support screw!</p>

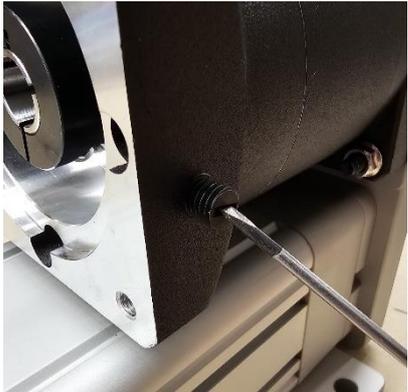
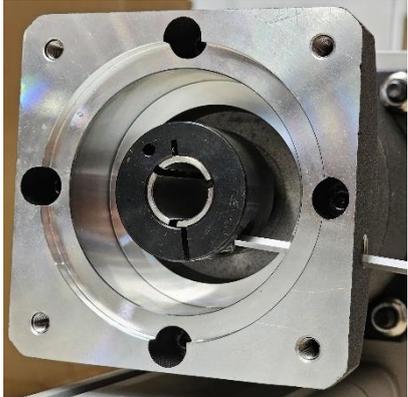


<p>3</p>	<p>Wrap the belt around the lower cog and tilt the motor/brake while pushing it through the actuator housing.</p>	 <p><i>Figure 7. When installing the belt, feed the motor/brake through like shown.</i></p>
<p>4</p>	<p>Ensure that the upper cog is 1-2 mm closer to the motor compared to the lower cog.</p>	<p>1-2 mm</p>  <p><i>Figure 8. Upper cog should be 1-2 mm further in compared to lower cog.</i></p>
<p>5</p>	<p>Tighten the screws on the cog, which pushes the cog out slightly.</p> <p>Subsequently, make sure that the two cogs align.</p>	 <p><i>Figure 9. Tighten the screws in a star pattern.</i></p>



<p>6</p>	<p>Loosen the support screw to adjust belt tension. The belt will gradually become tauter. Continue <i>only</i> until the belt becomes difficult to push towards the middle.</p> <p>Overtightening will lead to high levels of motor wear or breakage!</p>	 <p><i>Figure 10. Left: Loosen the support screw to adjust belt tension. Right: Tighten until the belt becomes difficult to push towards the middle, but no more.</i></p>
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5 Attaching the motor to the brake

Step	Text	Image
<p>1</p>	<p>The brake comes with its own shaft coupling. This is accessed by unscrewing the plastic screw on the side.</p>	 <p><i>Figure 11. The screw for accessing the shaft coupling</i></p>
<p>2</p>	<p>When attaching the motor to the brake-actuator assembly, tighten the flange first, then the shaft coupling.</p>	 <p><i>Figure 11. Tip: By leaving in the allen key, the shaft coupling is kept in place while attaching the flange.</i></p>



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When finished, it will look like this (with a brake).

