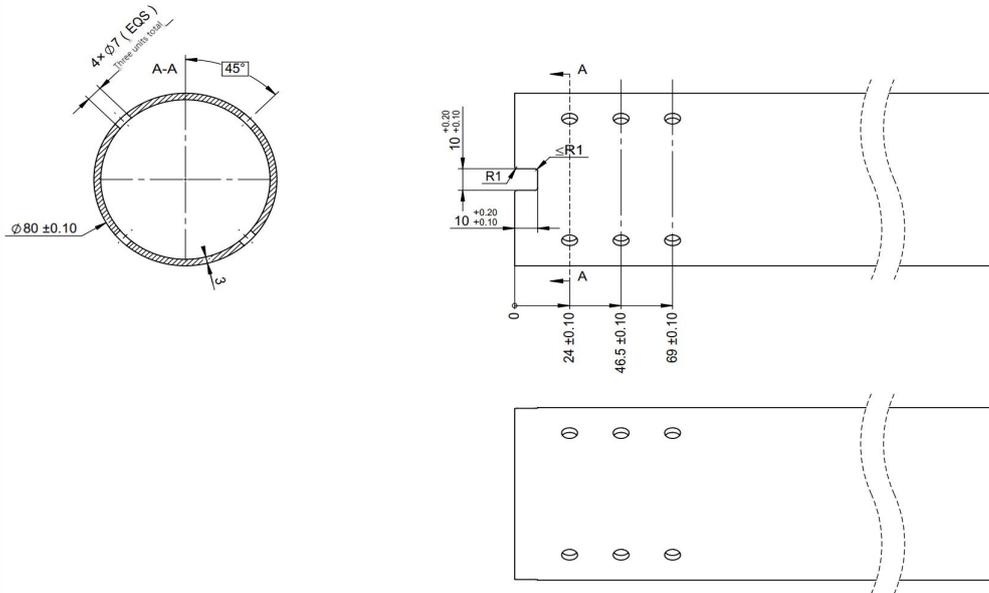


H15MD Integrated thrust system

Installation Drawing

Carbon Tube Processing Diagram



Propulsion System Assembly Diagram

<p>1. Align the notch and insert the carbon tube into the clamping device.</p> <p>The carbon tube notch are at the top and bottom.</p>	<p>2. Insert the 12 M6*22 allen screws into the holes and pre-tighten them. Use a torque wrench to tighten each screw diagonally in sequence to a torque of 8 N·m. After tightening, mark the screw heads and leave them still for 24h.</p>	<p>3. Unscrew the 4 M4*8 allen screws and remove the front cover.</p>
<p>4. Align the carbon tube with the clamping device to the propulsion system mounting holes. Pass the cable bundle through the carbon tube (Ensuring the tube is horizontal and the propulsion system is oriented correctly).</p> <p>The side with the L and R marks faces up.</p>	<p>5. Insert the 4 M8*30 allen screws into the holes and pre-tighten them. Use a torque wrench to tighten each screw diagonally in sequence to a torque of 10 N·m. After tightening, mark the screw heads and leave them still for 24h.</p>	<p>6. Insert the 4 M5*16 screws into the holes and pre-tighten them. Use a torque wrench to tighten each screw diagonally in sequence to a torque of 5 N·m. After tightening, mark the screw heads and leave them still for 24h.</p>
<p>7. Re-mount the front cover onto the propulsion system. Insert the 4 M4*8 allen screws removed in step 3 into the holes and pre-tighten them. Use a torque wrench to tighten each screw diagonally in sequence to a recommended torque of $2.5 \pm 10\%$ N·m.</p>	<p>8. Use a multimeter to measure the resistance between of the motor shaft position 1 and carbon tube position 2, ensuring they are conductive.</p>	

Note:

- Torque recommendation for propeller M6 lock screw: 8 N·m (thread locker required); Torque recommendation for quick-release thin nut (left-hand thread): 20 N·m, thick nut (right-hand thread): 30 N·m (thread locker not required). Mark a reference line after secure locking.
- The carbon tube needs to be processed with through holes, limit grooves, etc. The specific processing dimensions can be found in the carbon tube processing drawings;
- All screws require an appropriate amount of thread locker during assembly (to 1/2 screw length). Loctite 243 is recommended.
- The amount of thread locker and the tightening torque must be strictly followed according to the assembly diagram, with regular inspections to ensure the screws are secure.