

M-20 FAQs

1. What are the differences between the LV, MV, HV and UHV models?

The different designators refer to the different armature windings available. The LV has the lowest resistance (about 1.5 ohms) and the highest Kv (rpm/volt). The UHV has a resistance of about 5.5 ohms and the lowest Kv.

2. How can you tell which version you have?

Using a DVM (digital volt meter) you can read the resistance across the terminals. You might need to move the shaft slightly to get a good reading.

LV ~1.5 ohms
MV ~2.5 ohms
HV ~3.5 ohms
UHV ~5.5 ohms

3. Which one should I use?

Here it starts to get a bit tricky. I like to use the LV if using one cell lipoly battery. But you could easily use the MV or HV too. The LV gives me the most power from one cell using the 4.2:1 Kenway gearing in our M-20a gearbox. For those planes that are scale or a floater type, the MV or HV might be a better choice as the power is less and the endurance is longer.

For 2 cell, or more lipoly operation, I recommend the MV or HV motors and the M-20a gearbox.

4. Which prop is right?

The prop you use should not pull over 1 amp static through the M-20 motor.

In my one cell setups I use the 10 or 12 cm blue prop or the GWS4540 with the M-20a gearbox. For direct drive using the LV or MV you could start with a GWS2508 or GWS2510 prop or U-80 and cut it down, if necessary, until the current is under 1 amp.

For my 2 cell 3D setups, I use the MV with the M-20a gearbox and the GWS 5030 prop. This is good for >40 grams of static thrust.