Lehner Motoren Technik

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Operating instruction and specifications

Basic Basic-XL Basic-XXL

1. Because of the high packing density of the motors the depth for the mounting screws is max. 3 mm (2/17“).
2. External lead-through connectors are twisted winding wires that can break when bent several times.
3. Rpm values of the motors are proportional to the DC voltage at the controller.
   Approved rpm is max. 65000 rpm.
4. The maximal power throughput depends strongly on the rpm and on cooling.
   Make sure there is good cooling.

Basic	65000 rpm ca. 700 watts	37500 rpm ca. 350 watts
Basic-XL	65000 rpm ca. 1300 watts	37500 rpm ca. 650 watts
Basic-XXL	65000 rpm ca. 2000 watts	37500 rpm ca. 1000 watts

5. Basic motors are, like other products customary in the market, not capable of continuous partial power. This means: Because of the monolithic neodyme rotor the otherwise very high efficiency of approx. 90% can sink below 70% because of eddy current losses in partial power operation. Attention: This can destroy the motor by overheating. In applications with a high proportion of partial power operation (helicopter, RC car, etc.) observe temperature changes. For optimal results in these application areas we recommend partial power optimized motors from our 10xx 15xx 19xx 22xx series.
6. All efficiency figures (η) contain losses of motor and controller, e.g. an overall efficiency of 90% contains a controller loss of approx. 3%. This corresponds to a motor efficiency of approx. 93%.
7. We offer the Basic motor series with different types of load speed rpm per volt:
   Technical data are shown on the motor sticker.

Basic	2100	2400	2700	3100	3600	4200	5300	load speed rpm per volt			
Basic-XL	1200	1600	1800	2000	2400	2800	3100	3600	4200	5000	load speed rpm per volt
Basic-XXL	1100	1300	1500	1800	3000	4500	load speed rpm per volt				

8. Our rpm / power data have been determined by using 15° timing.