

PMG Series

Disc Motors with Brushes

The PMG 132 is a multi-pole, permanently excited DC disc motor.

The excitation field is created using high-performance permanent magnets from rare earth.

The disc-shaped rotor has been made with copper profiled lamella at whose inner end a disc commutator is moulded by means of suitable profiling. Power is transmitted via metalliferous carbon brushes which are optimally adapted to the shape of the commutator and conducted via a special brush holder alignment.

The magnetic flow passes axially through the lamination stacks. This alignment reduces the air gap to the minimum required mechanically and reduces magnetic losses. What results is far greater efficiency (approx. 90 %) across a broad range of operating conditions.



- ➔ Compact
- ➔ Cost-efficient
- ➔ High efficiency

Benefits PMG Motors

- ➔ *Less installation space thanks to compact design*
- ➔ *Lower power-to-weight ratio*
- ➔ *Strong torque*
- ➔ *Greater efficiency over broad range of operating conditions*
- ➔ *Simple control*
- ➔ *Energy recovery possible through regenerative operation*
- ➔ *Cost advantage through integration of commutator into winding ends*

Range of application

- ➔ *Generally all kind of battery driven and electric vehicles*
- ➔ *Cleaning machines*
- ➔ *Boat drives*
- ➔ *Fans*
- ➔ *Wind powered generators*





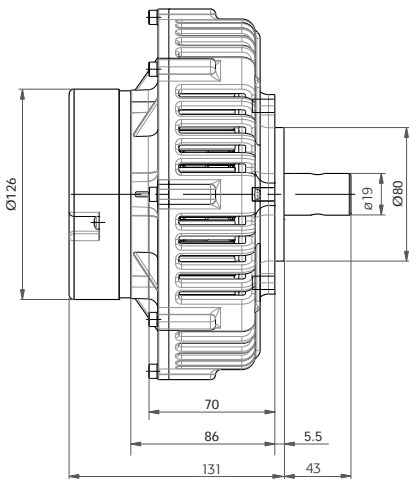
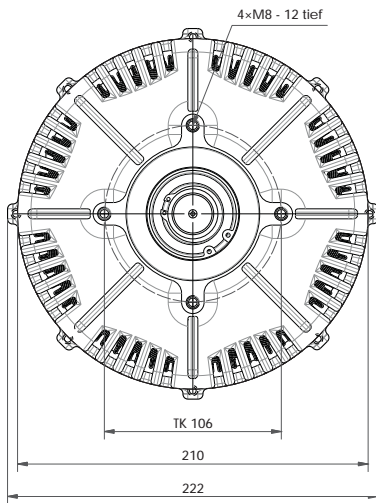
Technical Data PMG 132

Motor data				
Operation voltage	24 V	36 V	48 V	60 V
Power	1.8 kW	3.1 kW	4.7 kW	5.1 kW
Speed	1100 rpm	1800 rpm	2400 rpm	3000 rpm
Current	90 A	97 A	110 A	97 A
Torque	15 Nm	16 Nm	19 Nm	16 Nm
Table valid for operation in duty type S1.				
DC current in short-time duty S2 10 min	210 A			
Peak torque	38 Nm			
Mass inertia	0.025 kgm ²			
Inductance	0.019 mH			
Resistance	16 mΩ			
Protection class	IP20			
Weight	approx. 12.5 kg			



Dimensions

Selection diagram



Type: PMG132
 Magnet system: 3.9/1.2
 Edition: 08/2014

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