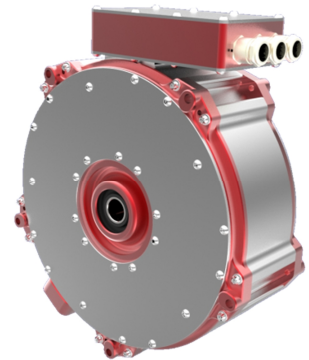


M24Px-x-19 MGU

Axial Flux Permanent Magnet

Features

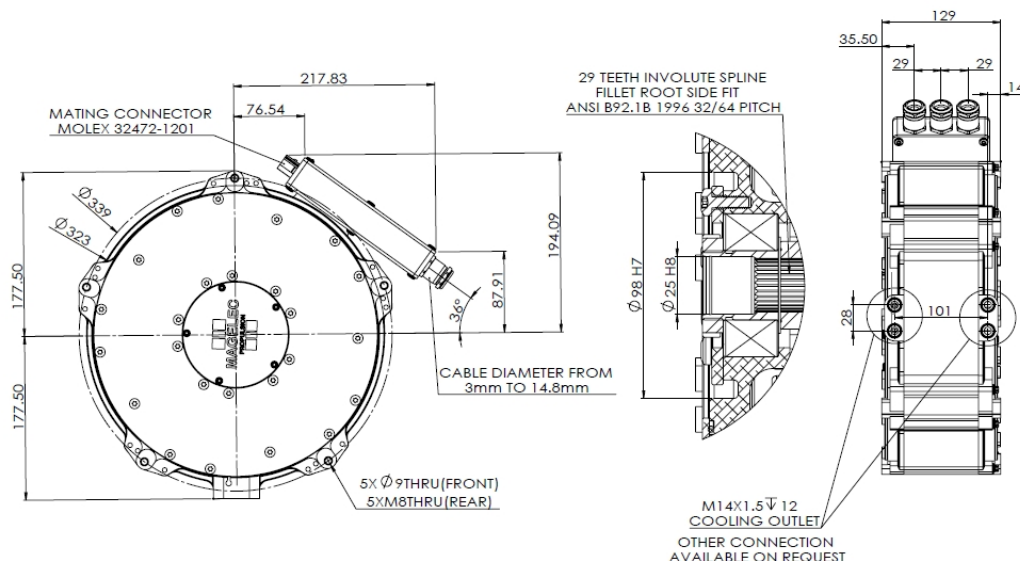
- High torque and power density
- High efficiency throughout the operating range (>95%)
- Low cogging torque, low rotor inertia
- Multiple winding configurations, wide selection of speed ratings
- Optimized speed range and torque capabilities
- Flexible design:
 - Four positions possible for HV box
 - Four directions for HV cables
 - Four positions for cooling ports
- HV box can be designed according to customer requirements
- Modular Design: can add motor stages to increase performance
- Extremely compact and robust structure
- IP67/IP6K9K enclosure class to maximize reliability
- Optimized mating with MAGELEC inverters
- Easy mating with MAGELEC gearboxes



The special technology of these machines makes them smaller, lighter and more efficient than conventional products on the market.

Typical Applications

- Traction/Propulsion/Regeneration for BEV
- Generator/Motor for HEV
- Optimal for Range Extender applications
- Special application on demand

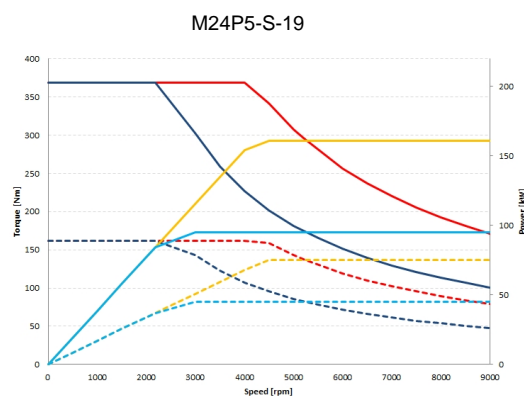
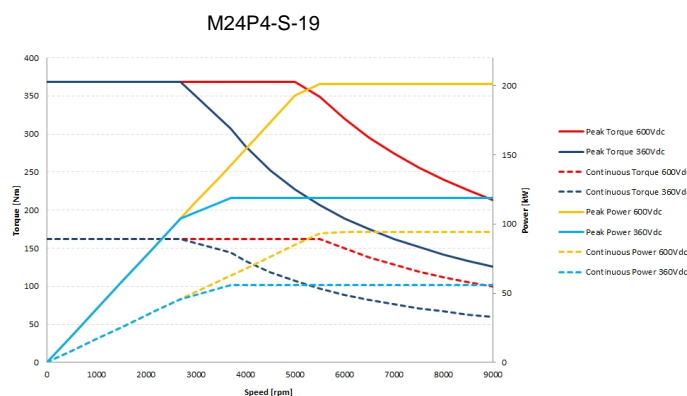


Specifications

MAGELEC Propulsion

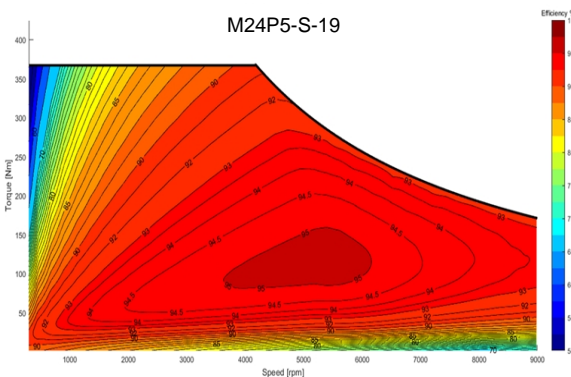
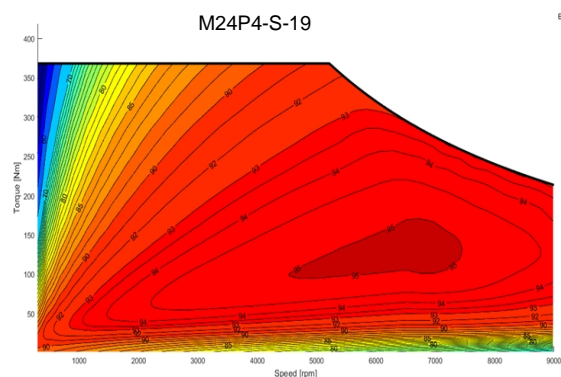
	M24Px-S-19		M24Px-D-19	
	4 turns	5 turns	4 turns	5 turns
Battery Voltage [Vdc]	200 ~ 800		200 ~ 800	
Continuous Torque [Nm]	162		324	
Peak Torque (20s) [Nm]	368		736	
Peak Current [Arms]	554	443	554x2	443x2
Continuous Power (360V) [kW]	56	45	112	90
Continuous Power (600V) [kW]	94	75	188	150
Peak Power (360V, 20s) [kW]	119	95	238	190
Peak Power (600V, 20s) [kW]	201	161	402	322
Weight [kg]	32.5		65.4	
Rotor Moment of Inertia [kgm ²]	0.02		0.04	
Coolant Flow Rate [L/min]	10		10x2	
Coolant Pressure Drop [bar]	0.4		0.4	
Coolant	50% Ethylene glycol, 50% Water			
Coolant Operating Pressure [bar]	1			
Cooling Liquid Temperature Range [°C]	-30 ~ +80			
Max Speed (600V) [rpm]	9,000			
Insulation class (IEC 60034-1)	H (180°C)			

Performance Curve



Efficiency Map

Test @ 55 °C coolant inlet temperature & 1bar coolant pressure



Test @ 600 Vdc & 55 °C coolant inlet temperature & 1bar coolant pressure