Material Handling Motors









Parameter	Specification
Material	Polyurethane
Load Capacity	1000 kg
Motor Rated Power	1.5 kW
Battery Voltage	24 V
Wheel Size	250 × 80 mm
Speed Ratio	1:32
Brake Torque	8 N·m
Maximum Turning Radius	176 mm
Motor Current	40 A

Parameter	Specification
Type	Hub Motor with Gearbox
Rated Power	1.5 – 3 kW (customizable)
Rated Voltage	24 V / 48 V DC
Rated Speed	2000 – 3000 RPM
Rated Torque	50 – 150 N·m
Peak Torque	150 – 400 N·m
Peak Current	40 – 90 A
Number of Poles	8 – 16
Motor Phases	3
Gear Reduction	1:32
Weight	0.5 – 2 kg
Tread Material	PU Polyurethane (if wheel integrated)

Parameter	Value
Rated power (continuous)	3.0 kW
Rated speed	2,500 RPM
Rated torque (user)	12.0 N·m
Angular speed (ω)	261.7993878 rad/s
Mechanical power at 12 N·m	3,141.5927 W (≈3.142 kW)
Continuous torque for 3.0 kW	11.4592 N·m
Tipping load (mass)	5,000 kg
Tipping load (force)	49,033.25 N
Assumed motor efficiency	90%
Electrical input power	3,333.33 W

Parameter	Value
Rated power (continuous)	1.2 kW
Rated speed	2,500 RPM
Rated torque (user range)	4 – 6 N·m
Angular speed (ω)	261.7993878 rad/s
Mechanical power @ 4 N·m	1,047.20 W (≈1.047 kW)
Mechanical power @ 6 N·m	1,570.80 W (≈1.571 kW)
Continuous torque for 1.2 kW	4.5837 N·m
Tipping load (mass)	2,000 kg
Tipping load (force)	19,613.30 N

The motor can be designed &manufactured with customized request.

Special Purpose Motors



Parameter	Specification
Temperature Range	-15° – 60° C
Max Efficiency	80%
Speed	150 rpm
Torque	90 Nm
Output Power	1.2 kW
Max AC Current	5:00 AM
DC Voltage	415 V
Motor Type	PMSM
Description	Particular



Parameter	Specification
Temperature Range	-15° – 60° C
Max Efficiency	90%
Speed	1500 rpm
Torque	9 Nm
Output Power	1.2 kW
Max AC Current	5:00 AM
DC Voltage	380 V
Motor Type	PMSM
Description	Particular

The motor can be designed &manufactured with customized request.