



MP24 Right-Angle Gearmotor

MobilePower™ Series

Low Voltage - High Torque

MP24 MobilePower™

RIGHT-ANGLE GEARMOTOR

ElectroCraft's MP24 integrates a 4-pole Brushless DC motor with a 2-stage right-angle worm gearbox, designed for industrial applications, adding industrial grade cabling plus encoder feedback options to support positioning capability. The MP24 combines optimum performance with increased efficiency, reduced noise and longer-life.

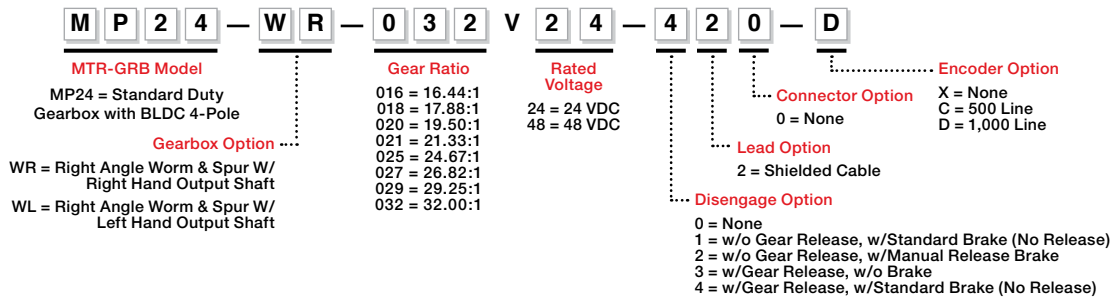
ElectroCraft MobilePower™ gearmotors feature an integrated design that provides increased performance and reliability at an affordable price compared to traditional motor/gearbox combinations. As with all ElectroCraft products, MobilePower™ gearmotors are customizable to meet specific application requirements.

Features:

- Smooth, efficient motion
- Durable and highly reliable integrated worm-gear design
 - Suitable for uneven terrain and curb-climbing
- High starting torque:
 - Peak starting torque up to 138.01Nm
 - 15-minute continuous torque up to 61.8Nm
- Configurable or completely customizable designs
 - Motor, gearbox, brake, encoder, cabling

Typical applications:

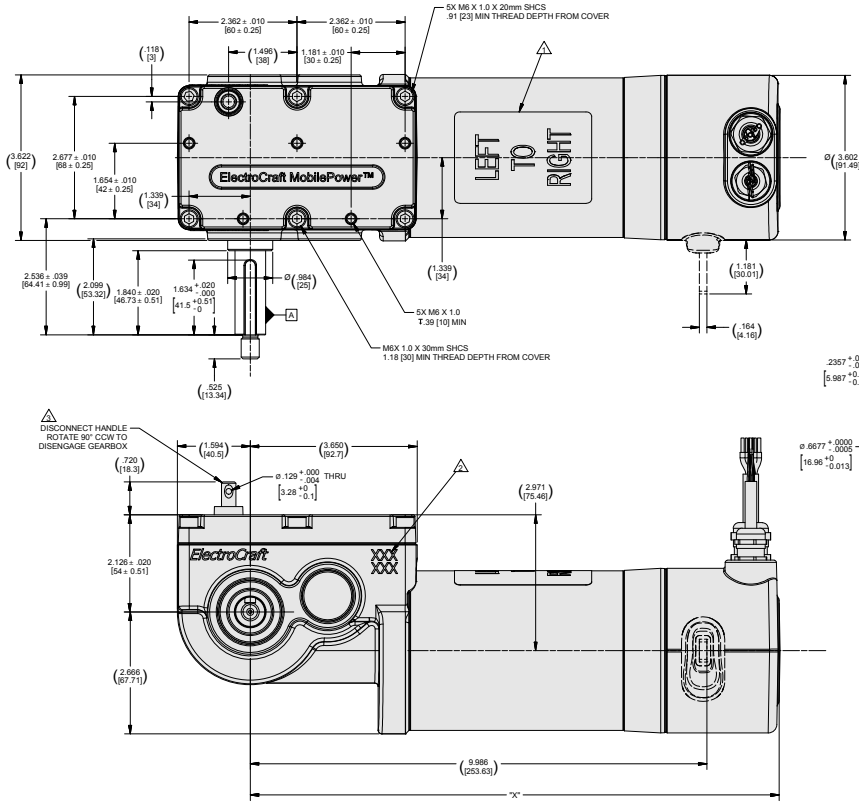
- Industrial traction applications
- Industrial lifts
- Automated Guided Vehicles
- Autonomous Mobile Robots



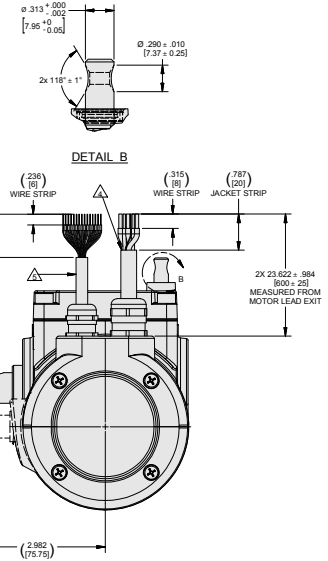
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MOTOR LENGTH TABLE	
VALUE ADDED	X"
W/O BRAKE & W/O ENCODER	10.396 (264.05) MAX
STANDARD BRAKE	10.908 (277.06) MAX
MANUAL RELEASE BRAKE	11.908 (277.06) MAX
ENCODER	10.514 (267.65) MAX
ENCODER & STANDARD BRAKE	11.617 (295.07) MAX
ENCODER & MANUAL RELEASE BRAKE	11.617 (295.07) MAX



MP24 Motor Parameters

Gear Ratio	32.00:1	29.25:1	26.82:1	24.67:1	21.33:1	19.50:1	17.88:1	16.44:1
Operating Voltage (VDC)	24							
No Load Speed (RPM)	119	130	142	155	179	196	213	232
Peak Torque (Nm)	138.01	126.15	115.67	106.40	91.99	84.10	77.11	70.90
Peak Current (Amps)	80							
Peak Power (Watts)	625							
S2 Torque (15 min) (Nm)	61.78	56.47	51.78	47.63	41.18	37.65	34.52	31.74
S2 Current (15 min) (Amps)	25							
S2 Power (15 min) (Watts)	510							
S1 Torque (Continuous) (Nm)	24.08	22.01	20.18	18.75	16.05	14.68	13.46	12.37
S1 Current (Continuous) (Amps)	10.0							
S1 Power (Continuous) (Watts)	257							
Torque Constant (Nm/A)	0.0585							
Voltage Constant (V/KRPM)	6.12							
Motor Inertia (Armature) (kg.mm ²)	274.518							
Motor Winding Resistance (Ohms)	0.066							
Motor Winding Inductance (µH)	370							
Motor Max Winding Temp (°C)	155							
Motor Poles	4							
Motor Mass (kg)	7.12							

Notes:

Gear Motor specifications (torque, current, power) are reference values based on 25°C operating temperature.

Do not apply maximum current for more than 5 seconds or more than twice without 10 minutes between cycles



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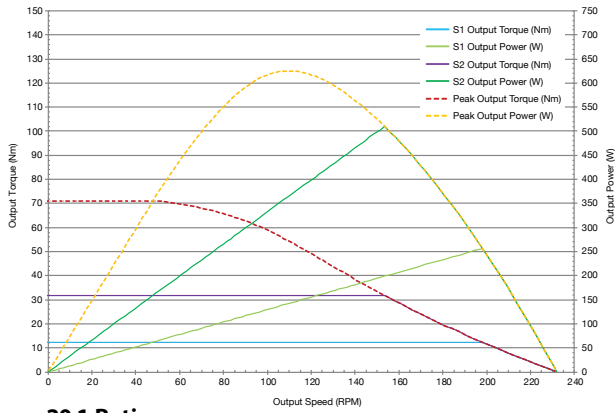
ElectroCraft, Inc.
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Stratham, NH 03885-2578 USA

Tel: (844) 565-6144

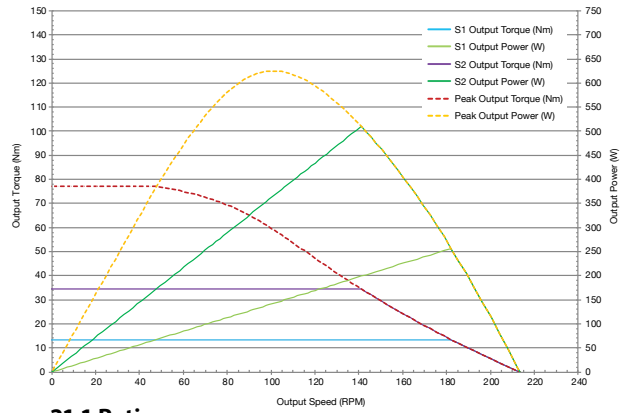
Email: sales@electrocrafter.com
www.electrocrafter.com

MP24 Motor Performance

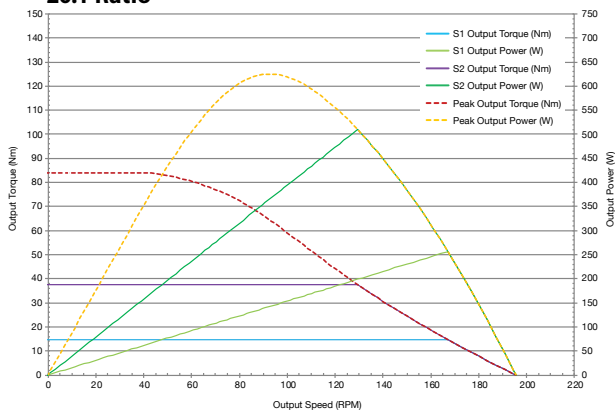
16:1 Ratio



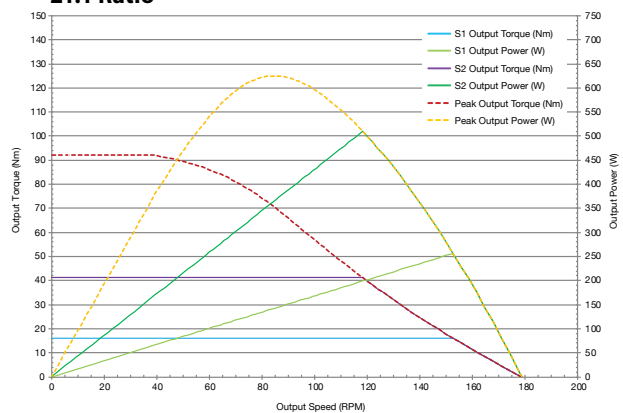
18:1 Ratio



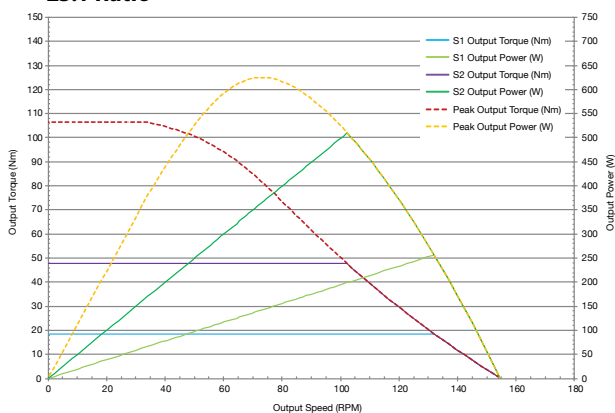
20:1 Ratio



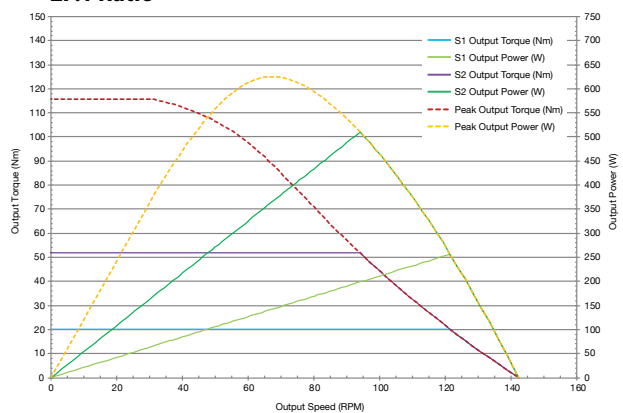
21:1 Ratio



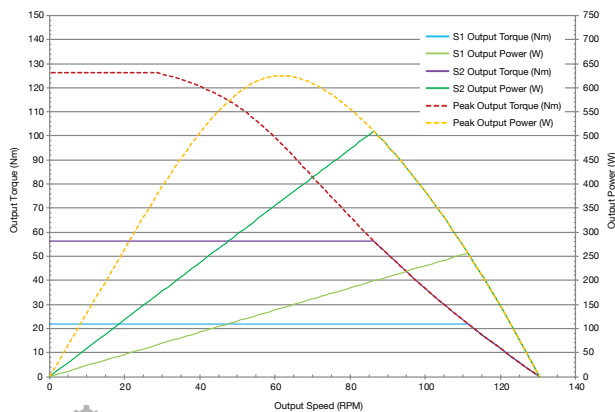
25:1 Ratio



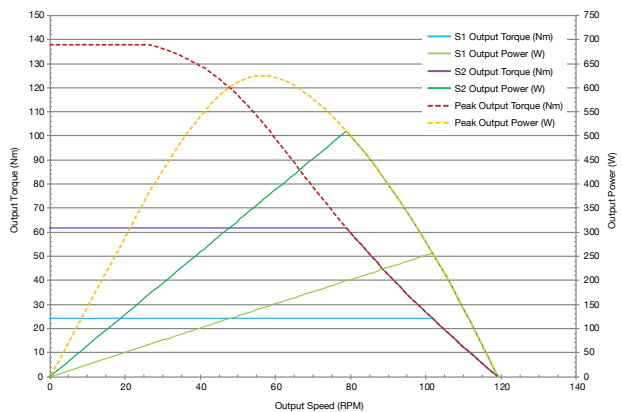
27:1 Ratio



29:1 Ratio



32:1 Ratio



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