



STAR UNION  
WUXING

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WUXING

MGM

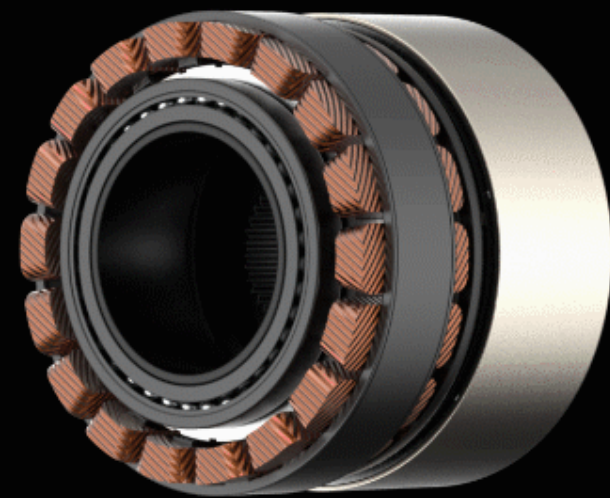
# MGM

Magnetic Gear Motor

# **MGM** Magnetic Gear Motor



*The World's First*  
Ebike Magnetic Gear Motor



# What Is a Frictionless Gear Motor?

- No Friction
- Contactless

▪Low Noise

- High Reliability
- Low Maintenance Cost

▪Almost Never Breaks





Max Efficiency **90%**

80%-85%

Planetary Gear or  
Harmonic Gear Motors

90%

Magnetic Gear  
Motor

5%-10%

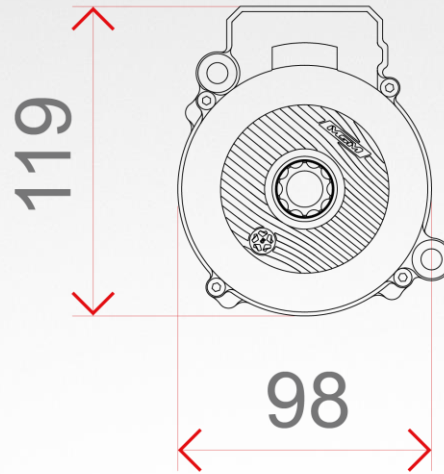
Contrast Enhancement

LONGER RANGE

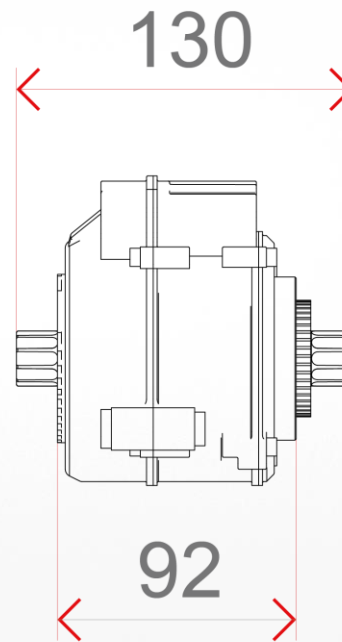


"IT JUST  
LOOKS RIGHT."

Minimalist Aesthetic



Coaxial Design





# Product Parameter

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**75N·m** Max Torque

Magnesium Alloy Case, **2.3Kg** weight

**250W** Rated Power

**580W** Peak Power



# Sustainable High Torque Output

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***75N·m***      ***120S***

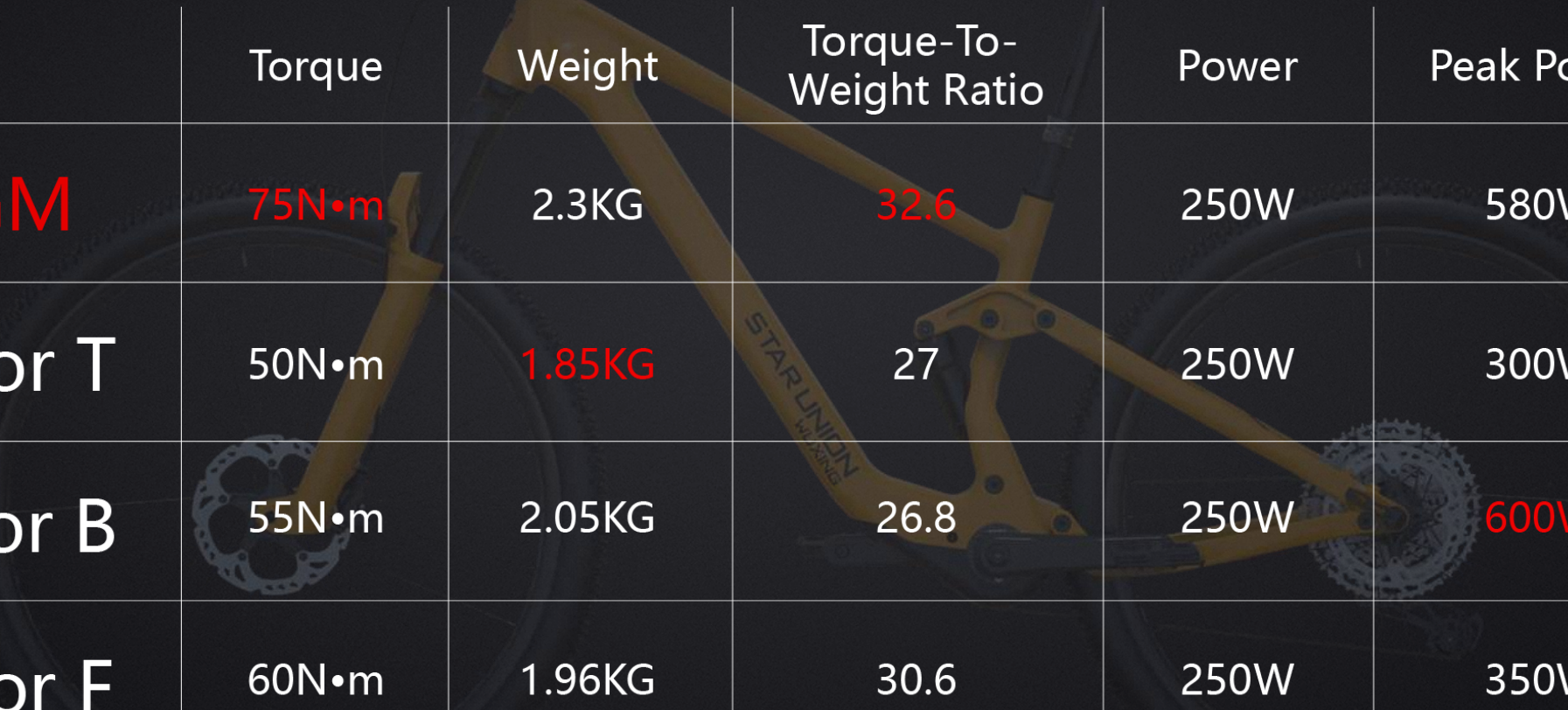
***60N·m***      ***480S***

***35N·m***      ***Forever***



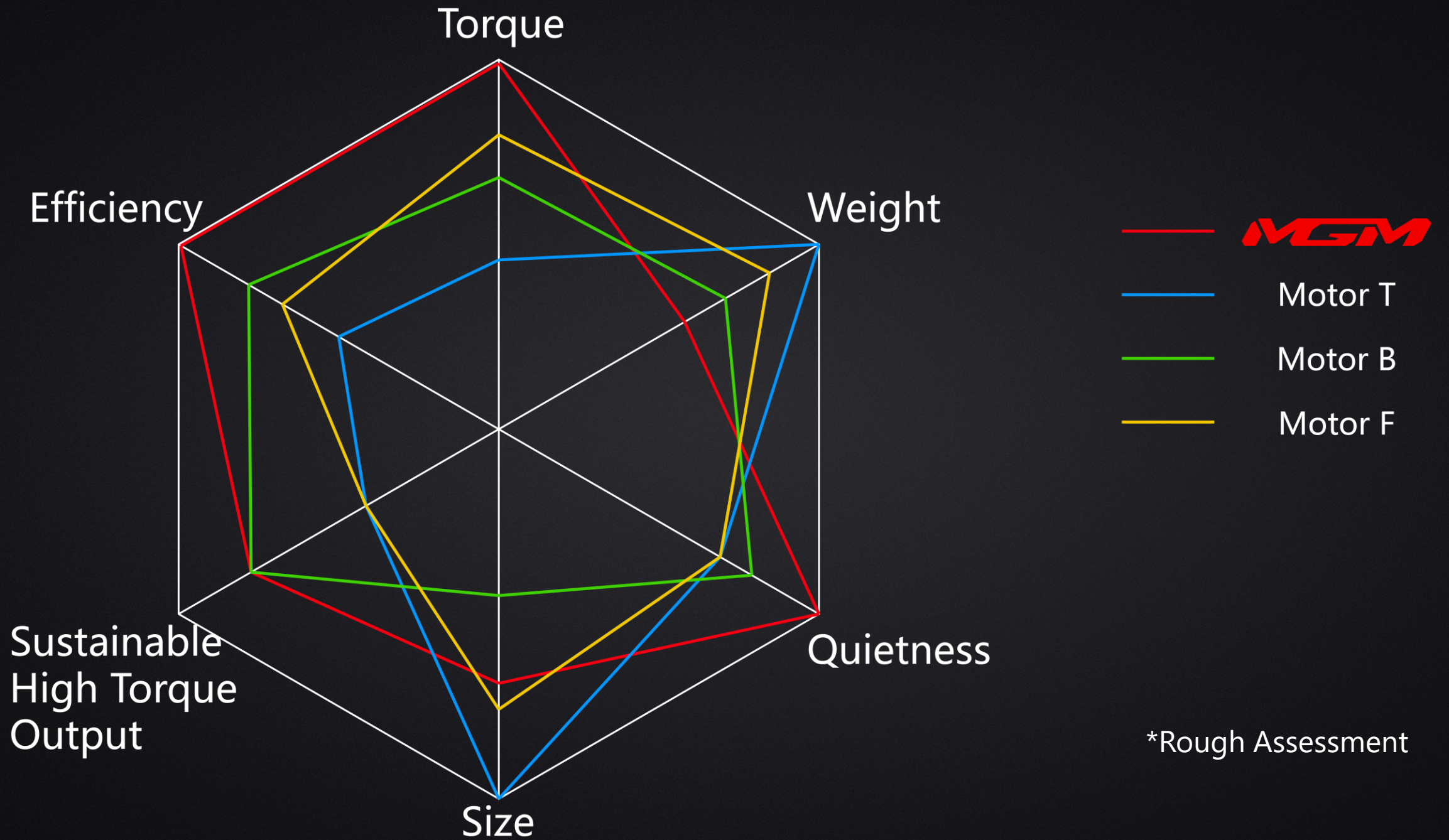


## Best In The Class



	Torque	Weight	Torque-To-Weight Ratio	Power	Peak Power
<b>MGM</b>	75N•m	2.3KG	32.6	250W	580W
Motor T	50N•m	1.85KG	27	250W	300W
Motor B	55N•m	2.05KG	26.8	250W	600W
Motor F	60N•m	1.96KG	30.6	250W	350W





# Flux Concentrating Design

Better Volume, Efficiency, And Torque



2-3% Higher Efficiency



Much Smaller Size





# Mountain Bike System

B03



48v, 160 Wh

MGM



DK438

DZ45-T



B01



48v, 480 Wh



# Road/City Bike System

B03



48v, 160 Wh

B02



48v, 312 Wh

MGM



DK176

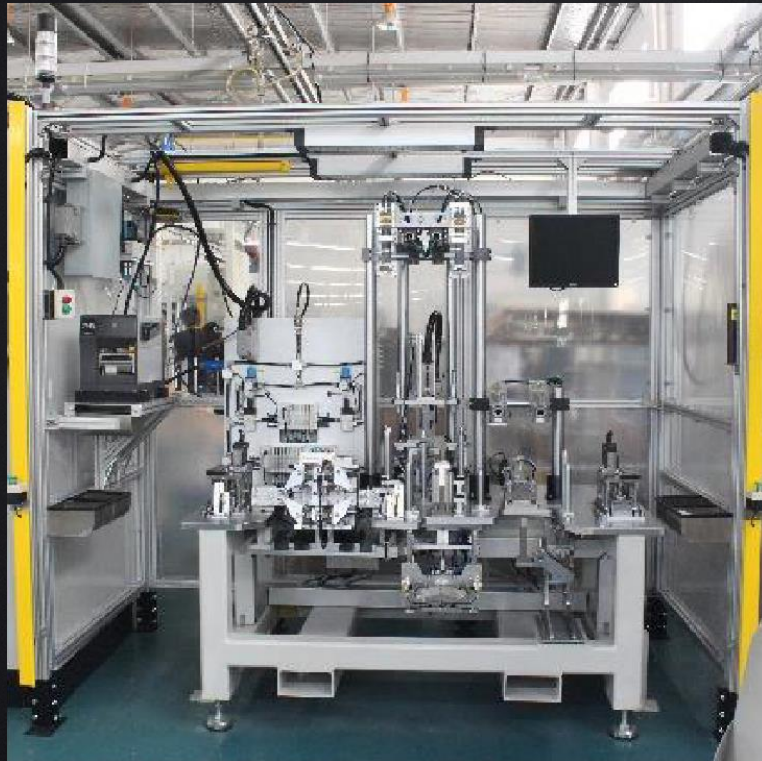


DZ49-3



# AUTOMATIC PRODUCTION LINE

IATF 16949





# Service Tool: Pc Software & Handheld Device

View System Parameter Information, Adjust Power Settings, Perform Testing And Diagnostics, Upgrade Firmware







Founded in 1985, Star Union has been a key player in the two-wheeler industry for nearly 40 years. In the 1990s, we led the market in bicycle shifts and brakes in China. Since 1997, we have been a global leader in throttle and brake levers.

Since 2010, we have focused on e-bike components, offering mid-drive motors, hydraulic disc brakes, displays, lights, throttles, and brake levers. Each product is developed by specialized divisions, ensuring strong R&D and manufacturing capabilities.

In the recent two years, we created the world's first e-bike magnetic gear motor and established the SUHR sub-department for high-performance hydraulic disc brakes.

Our motor team is arguably the top motor team in China. It consists of highly experienced PhDs and masters who have participated in motor projects related to fighter jets, heart pacemakers, high-speed trains, and electric vehicles.

Looking forward, we are committed to pioneering cutting-edge technologies and continuously innovating in the two-wheeler industry.





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**WUXING**



**Magnetic Gear Motor**