

TSL-GB3506

Gimbal Motor | GB Series



Rated Voltage	Rated Torque	Rated Speed	Motor Size
12 V	0.09 N.m	467 RPM	Ø40 × 16mm

1. Electrical and Mechanical Parameters

Parameter	Unit	TSL-GB306
Rated Voltage	V	12
Rated Current	A	1.1
Rated Torque	N.m	0.09
Rated Speed	RPM	467
Peak Speed	RPM	1610
Stall Torque	N.m	0.15
Stall Current	A	1.9
Winding Turns of Motor	T	40
Phase Resistance	Ω	6.34
Phase Inductance	mH	1.08
Speed Constant	rpm/V	117
Torque Constant	N.m/A	0.08
Rotor Inertia	g.cm ²	56
Number of Pole Pairs	Pairs	11
Motor Weight without Encoder	g	58.3
Motor Weight with Encoder	g	71
Encoder Type	-	AS5048A / AS5600
Working Temperature	°C	20 to 80
Max Demagnetization Temperature	°C	120

Note: The above parameters are for reference only and can be customized according to customer requirements.

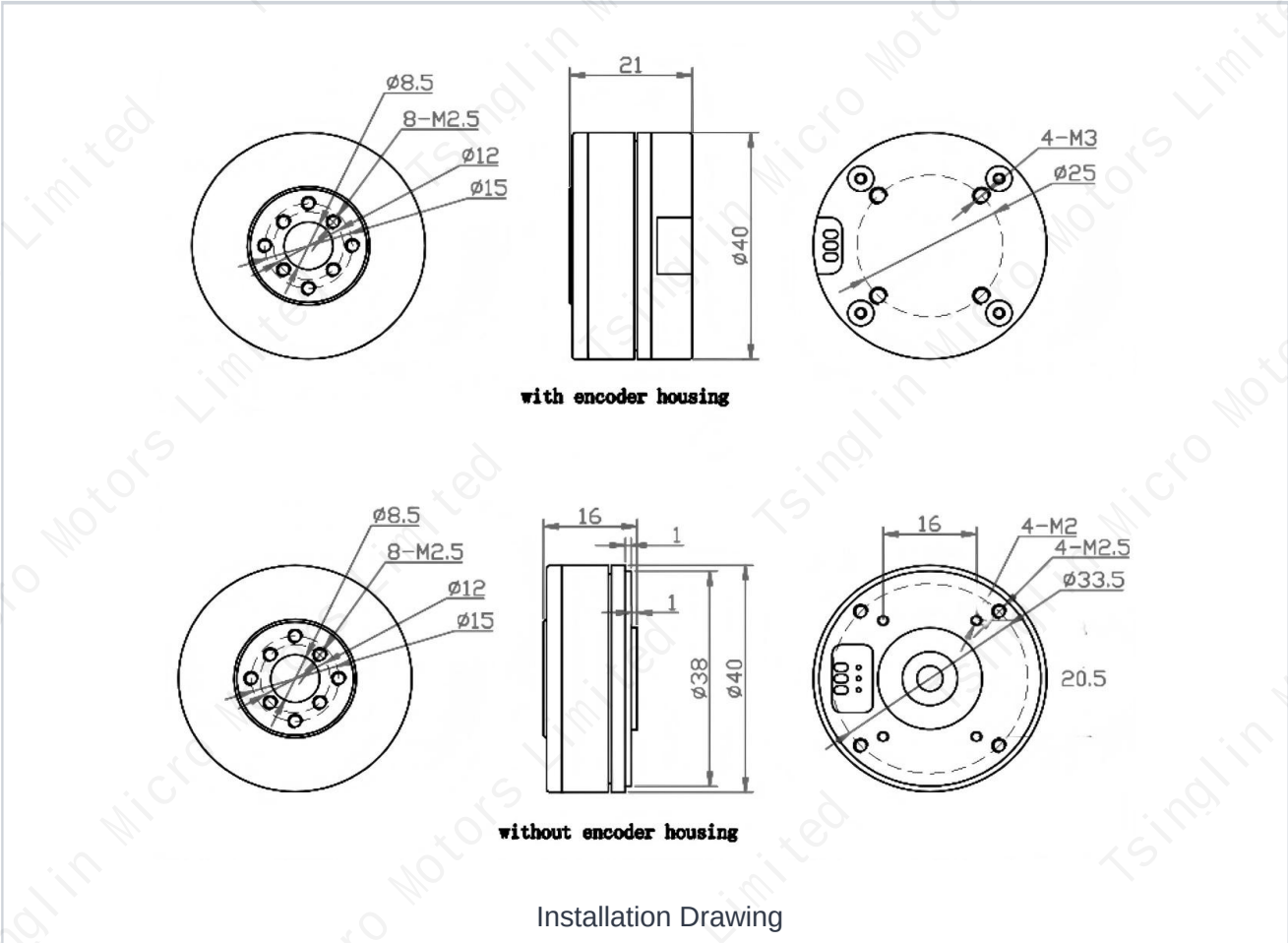
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2. Installation Drawing

All dimensions are in millimeters unless otherwise specified.



Drawing	TSL-GB3506
Version	V1.0
Updated	2025-07-10

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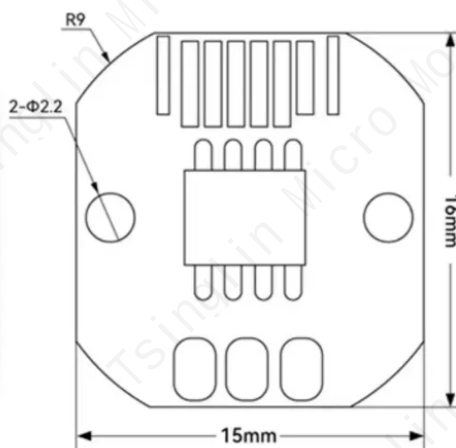
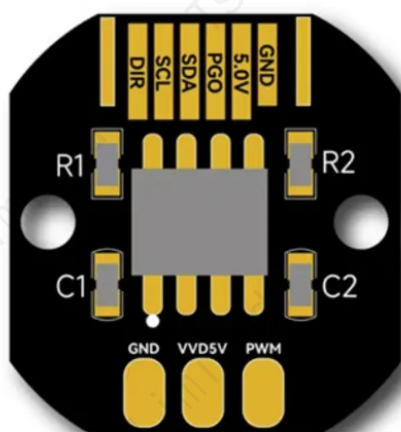
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3. AS5600 Encoder Board Option

The magnetic encoder board is an optional customer-selectable configuration.

AS5600 编码器板文档

AS5600 Encoder Board Document



引脚描述

Pin Description

名称Name	类型Type	说明Description
GND	电源(Supply)	电源地(Ground)
5.0V	电源(Supply)	5V直流电源(supply in 5V)
PWM	输出(Output)	460HzPWM输出(460HzPWM utput)
PGO	输入(Input)	编程引脚(Program option)
SDA	输入/输出(Input/Output)	I ² C 数据引脚(I ² C Data)
SCL	输入(Input)	I ² C 时钟引脚(I ² C Clock)
DIR	输入(Input)	方向(Direction polarity)

磁铁安装要求

Magnet Installation Requirements



根据磁铁，磁铁与编码器表面距离为 0.5-3mm

According to the magnet, the distance between the magnet and the encoder surface is 0.5 – 3 mm.

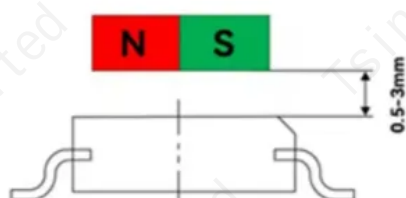
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4. AS5048A Encoder Board Option

The magnetic encoder board is an optional customer-selectable configuration.

Magnet Installation Requirements



根据磁铁，磁铁与编码器表面距离为 0.5-3mm

According to the magnet, the distance between the magnet and the encoder surface is 0.5 – 3 mm.

AS5048A 编码器板文档

AS5048A Encoder Board Document

