

# TSL-GB7215

Gimbal Motor | GB Series



Rated Voltage 24 V	Rated Torque 1.2 N.m	Rated Speed 354 RPM	Motor Size Ø79 × 35 mm
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## 1. Electrical and Mechanical Parameters

Parameter	Unit	TSL-GB7215
Rated Voltage	V	24
Rated Current	A	2.9
Rated Torque	N.m	1.2
Rated Speed	RPM	354
Peak Speed	RPM	516
Stall Torque	N.m	3.7
Stall Current	A	16
Phase Resistance	Ω	1
Phase Inductance	mH	0.63
Speed Constant	rpm/V	21.5
Torque Constant	N.m/A	0.41
Rotor Inertia	g.cm <sup>2</sup>	1555
Number of Pole Pairs	Pairs	21
Motor Weight without Encoder	g	389.5
Motor Weight with Encoder	g	489.5
Encoder Type	-	AS5048A / AS5600
Working Temperature	°C	-10 to 80
Max Demagnetization Temperature	°C	120

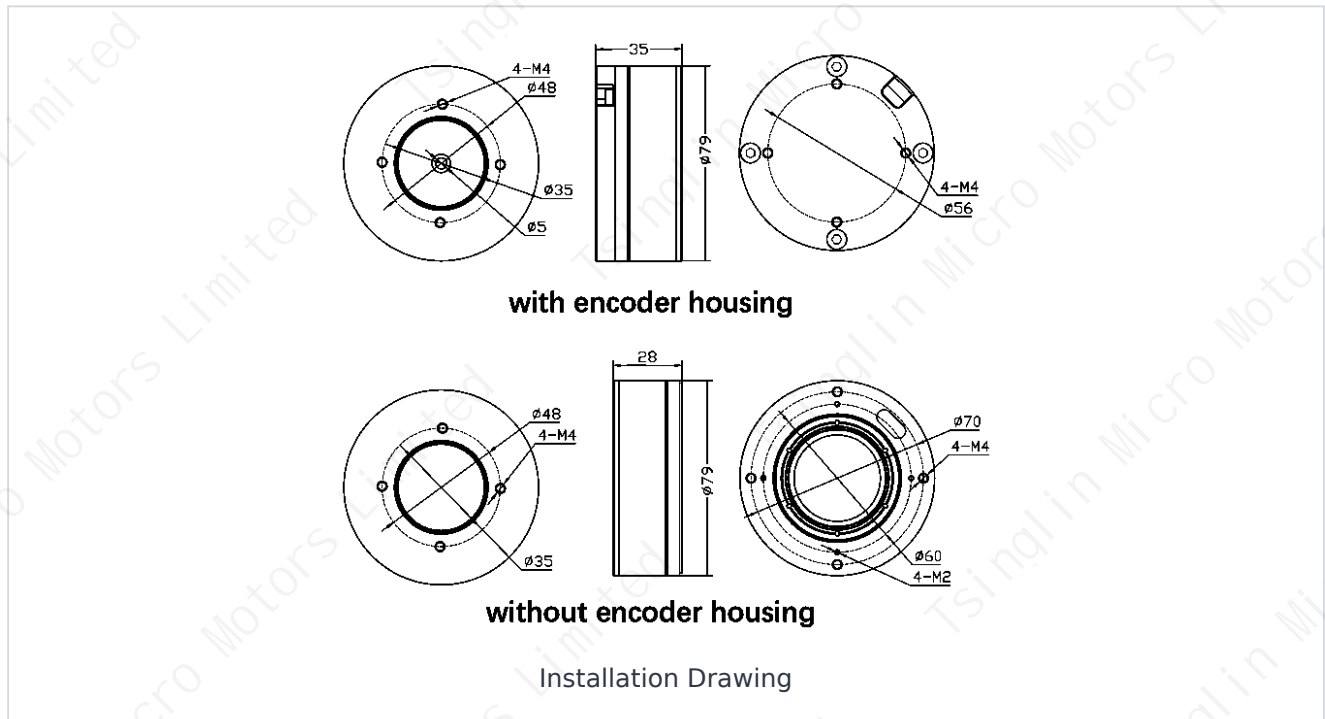
Note: The above parameters are for reference only and can be customized according to customer requirements.

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## 2. Installation Drawing

All dimensions are in millimeters unless otherwise specified.



<b>Drawing</b>	TSL-GB7215
<b>Version</b>	V1.0
<b>Updated</b>	2025-07-10

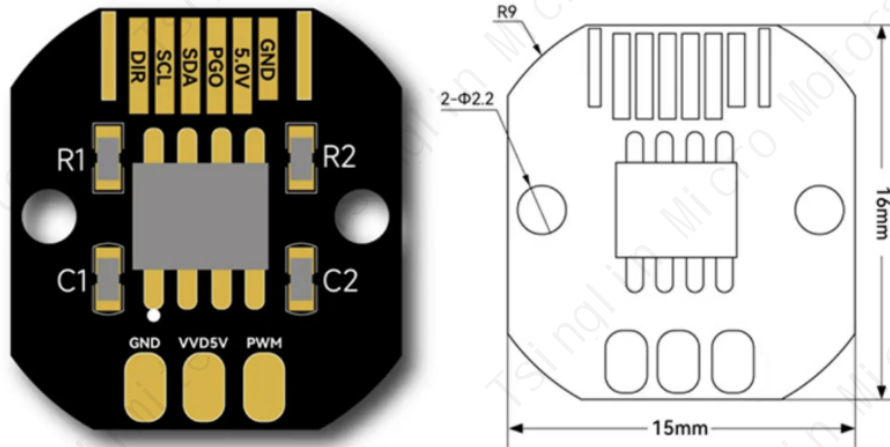
# TSL-GB7215

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## 3. AS5600 Encoder Board Option

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

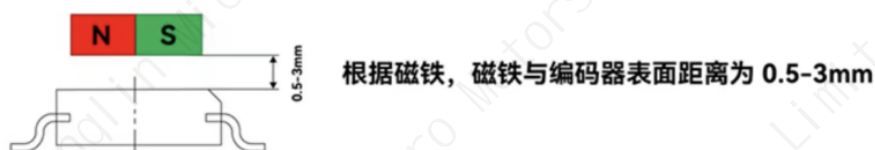
### AS5600 编码器板文档 AS5600 Encoder Board Document



### 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 <sup>2</sup> C 数据引脚(I <sup>2</sup> C Data)
SCL	输入(Input)	I <sup>2</sup> C 时钟引脚(I <sup>2</sup> C Clock)
DIR	输入(Input)	方向(Direction polarity)

### 磁铁安装要求 Magnet Installation Requirements



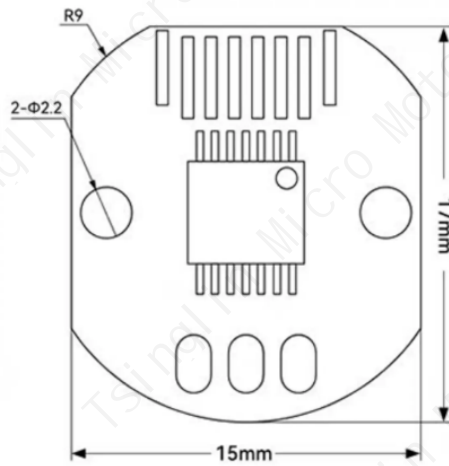
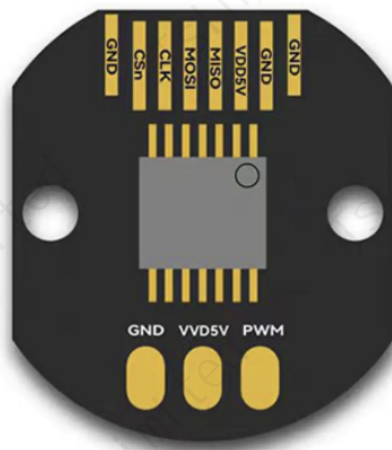
# TSL-GB7215

Gimbal Motor | GB Series

## 4. AS5048A Encoder Board Option

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

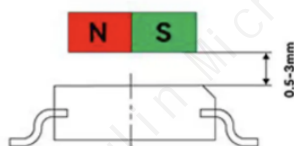
### AS5048A 编码器板文档 AS5048A Encoder Board Document



### 引脚描述 Pin Description

名称Name	类型Type	说明Description
GND	电源(Supply)	电源地(Ground)
CSn	数字输入(Digital input)	SPI片选信号, 低有效(SPI chip select, active low)
CLK	数字输入(Digital input)	SPI时钟信号(SPI clock)
MOSI	数字输入(Digital input)	SPI MOSI信号(SPI master data output, slave input)
MISO	数字输入(Digital input)	SPI MISO信号(SPI master data input, slave output)
VDD5V	电源(Supply)	5V直流电源(supply in 5V)
PWM	输出(Output)	460HzPWM输出(460HzPWM utput)

### 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