



长沙美福沛林电子科技有限公司  
Changsha Metric Electronic Technology Co.,Ltd

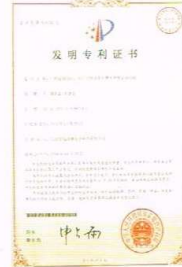
## Introduction

Changsha Metric Electronic Technology Co.,Ltd is a high-tech enterprise specialized in developing, manufacturing and selling of brushless servos. The company occupies over 1000 square meters of workshops and 400 square meters of office space and has professional technical teams dedicated to designing and manufacturing servos for many years. We fully own the intellectual property rights to several of our leading products. The company has built a reputation for high quality products which are sold overseas. We have established good, long-term relationships with many companies. Our goal is to provide premium products and excellent service for our clients.



## Quality Assurance

Effective quality management systems and sophisticated testing equipments. From R&D, production to quality inspection we have strict control points at every step to ensure product quality. Our client's satisfaction is what we have always pursued and our ultimate purpose of service.

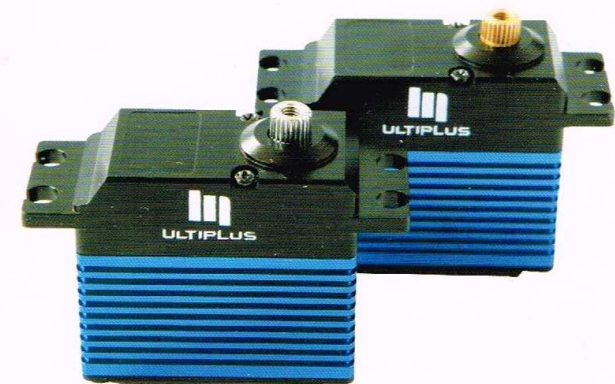


★ Several Intellectual properties over our leading products

## Product Introduction

### ■ Large torque & high speed at load

Metric independent brushless servos are not only smart in structures, but also performance.



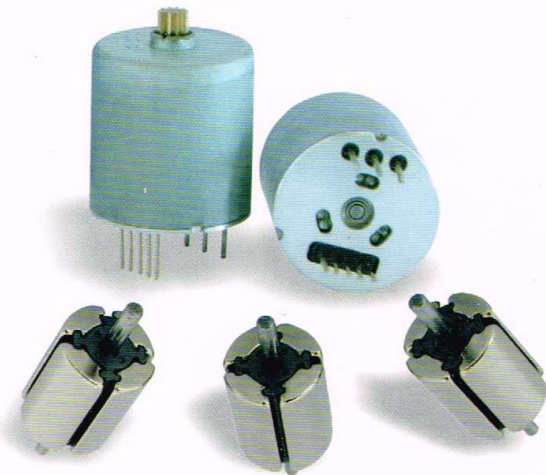
### ■ All-metal case and heat sink design

This product was designed to optimize heat dissipation for excellent cooling performance and operate reliably under high temperature. And make servomotors run at a higher rate and output larger torque.



# Product Introduction

**Metric digital high accuracy brushless servos**



- **Powerful multi-pole brushless motor**  
More powerful, more durable and more effective.

# Product Introduction

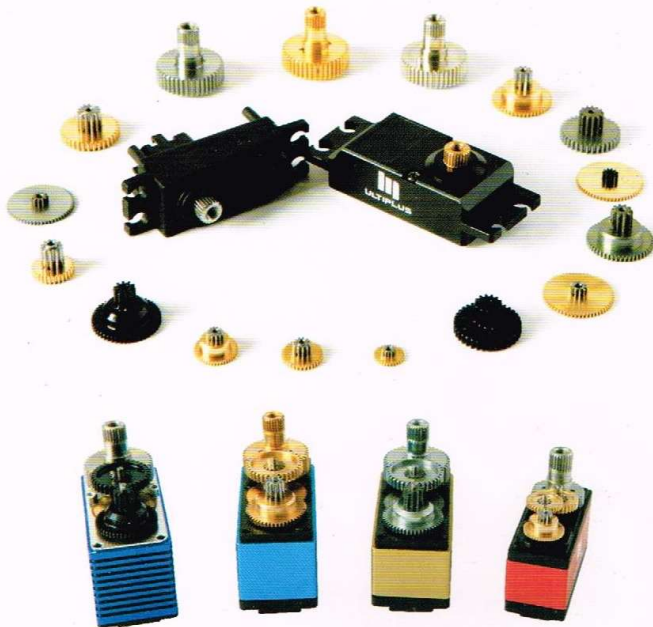


- **Integrated gear box**  
Easier to mount and maintain. The gear was designed to be replaceable which will save user' s budget greatly and save more time.

## Product Introduction

- **Dual ball bearings and metal/aluminum alloy (Titanium Plating surface)/stainless steel gear train**

Make our servos respond more rapidly and quickly, operate more smoothly.



## Product Introduction

### *Servo testing signal Generator*

Servos testing signal generator is a measuring device which can generate high-accurate PWM signal. It owns following features:

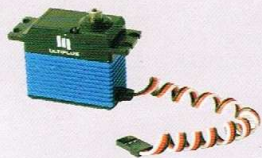
- Adjustable signal width and cycle.
- Min adjusting step: 0.1us.
- Signal Vibration: less than 0.025us.
- Motor voltage & current measured in real time.
- PWM output manually or automatically change is available.
- Operation Voltage: 3V-20V. Max Current: 10A





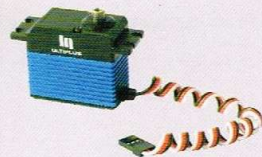
## Main Technical Specification

### BLS3516H



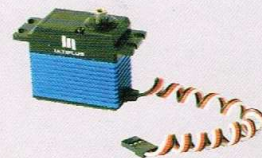
Dimensions:	40 × 20 × 36.8
Operating Voltage:	3.3V~7.6V
Dead band:	0.5us
Operating Speed (6.0V):	0.17s/60°
Operating Speed (6.6V):	0.16s/60°
Operating Speed (7.4V):	0.15s/60°
Stall Torque (6.0V) :	32kg.cm ( 444.4oz/in )
Stall Torque (6.6V) :	35kg.cm ( 486.2oz/in )
Stall Torque (7.4V) :	37.8kg.cm ( 524.9oz/in )
Weight:	77g ( 2.72oz )

### BLS3015H



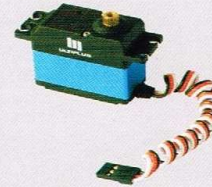
Dimensions:	40 × 20 × 36.8
Operating Voltage:	3.3V~7.6V
Dead band:	0.5us
Operating Speed (6.0V):	0.16s/60°
Operating Speed (6.6V):	0.15s/60°
Operating Speed (7.4V):	0.14s/60°
Stall Torque (6.0V) :	27.1kg.cm ( 376.3oz/in )
Stall Torque (6.6V) :	30kg.cm ( 416.7oz/in )
Stall Torque (7.4V) :	32.8kg.cm ( 455.5oz/in )
Weight:	76.7g ( 2.71oz )

### BLS2514H



Dimensions:	40 × 20 × 36.8
Operating Voltage:	3.3V~7.6V
Dead band:	0.5us
Operating Speed (6.0V):	0.15s/60°
Operating Speed (6.6V):	0.145s/60°
Operating Speed (7.4V):	0.13s/60°
Stall Torque (6.0V) :	22.8kg.cm ( 316.6oz/in )
Stall Torque (6.6V) :	25kg.cm ( 347.3oz/in )
Stall Torque (7.4V) :	27.3kg.cm ( 379.1oz/in )
Weight:	75.8g ( 2.67oz )

### BLS2014H



Dimensions:	40 × 20 × 36.3
Operating Voltage:	3.3V~7.6V
Dead band:	0.5us
Operating Speed (6.0V):	0.14s/60°
Operating Speed (6.6V):	0.13s/60°
Operating Speed (7.4V):	0.12s/60°
Stall Torque (6.0V) :	18.7kg.cm ( 259.7oz/in )
Stall Torque (6.6V) :	20kg.cm ( 277.8oz/in )
Stall Torque (7.4V) :	22.6kg.cm ( 313.8oz/in )
Weight:	66.2g ( 2.34oz )

### BLS1509H



Dimensions:	40 × 20 × 34.4
Operating Voltage :	3.3V~7.6V
Dead band:	0.5us
Operating Speed (6.0V):	0.11s/60°
Operating Speed (6.6V):	0.10s/60°
Operating Speed (7.4V):	0.09s/60°
Stall Torque (6.0V) :	14.6kg.cm ( 202.8oz/in )
Stall Torque (6.6V) :	15kg.cm ( 208.4oz/in )
Stall Torque (7.4V) :	17.2kg.cm ( 238.9oz/in )
Weight:	51.8g ( 1.83oz )

### BLS1511



Dimensions:	40 × 20 × 34.4
Operating Voltage:	3.3V~7.6V
Dead band:	0.5us
Operating Speed (4.8V):	0.12s/60°
Operating Speed (6.0V):	0.10s/60°
Stall Torque (4.8V) :	15kg.cm ( 208.4oz/in )
Stall Torque (6.0V) :	17.4kg.cm ( 241.6oz/in )
Weight:	51.8g ( 1.83oz )

### BLS1007H



Dimensions:	40 × 20 × 33.6
Operating Voltage :	3.3V~7.6V
Dead band:	0.5us
Operating Speed (6.0V):	0.08s/60°
Operating Speed (6.6V):	0.07s/60°
Operating Speed (7.4V):	0.06s/60°
Stall Torque (6.0V) :	9.2kg.cm ( 127.8oz/in )
Stall Torque (6.6V) :	10kg.cm ( 138.9oz/in )
Stall Torque (7.4V) :	11.4kg.cm ( 158.3oz/in )
Weight:	51.1g ( 1.805oz )



### BLS1010



Dimensions:	40 × 20 × 33.6
Operating Voltage:	3.3V-7.6V
Dead band:	0.5us
Operating Speed (4.8V):	0.09s/60°
Operating Speed (6.0V):	0.07s/60°
Stall Torque (4.8V) :	10kg.cm ( 138.9oz/in )
Stall Torque (6.0V) :	12.4kg.cm ( 172.2oz/in )
Weight:	51.1g ( 1.805oz )

### BLS0505H



Dimensions:	40 × 20 × 33.6
Operating Voltage:	3.3V-7.6V
Dead band:	0.5us
Operating Speed (6.0V):	0.06s/60°
Operating Speed (6.6V):	0.05s/60°
Operating Speed (7.4V):	0.04s/60°
Stall Torque (6.0V) :	4.3kg.cm ( 59.7oz/in )
Stall Torque (6.6V) :	5kg.cm ( 69.4oz/in )
Stall Torque (7.4V) :	6.8kg.cm ( 94.4oz/in )
Weight:	50.7g ( 1.79oz )

### BLS0507



Dimensions:	40 × 20 × 33.6
Operating Voltage:	3.3V-7.6V
Dead band:	0.5us
Operating Speed (4.8V):	0.08s/60°
Operating Speed (6.0V):	0.07s/60°
Stall Torque (4.8V) :	3.8kg.cm ( 52.8oz/in )
Stall Torque (6.0V) :	5kg.cm ( 69.4oz/in )
Weight:	50.7g ( 1.79oz )

### MFS0513



Dimensions:	35 × 15 × 31.2
Operating Voltage:	3.3V-7.6V
Dead band:	0.5us
Operating Speed (4.8V):	0.15s/60°
Operating Speed (6.0V):	0.13s/60°
Operating Speed (7.4V):	0.11s/60°
Stall Torque (4.8V) :	3.8kg.cm ( 52.8oz/in )
Stall Torque (6.0V) :	5kg.cm ( 69.4oz/in )
Stall Torque (7.4V) :	6.1kg.cm ( 84.7oz/in )
Weight:	29.8g ( 1.05oz )

## Technical Support

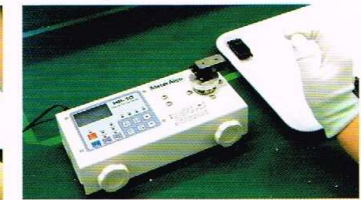
### Sales Representative

Responsible for providing customer service concerning consultation over products, order placing, logistics tracking, settlement of payment, information changing, etc.



### Product Engineer

Responsible for providing technical service, related parameters can be customized per the customers' requirements, handling technical problems together with sales representative.



### Product application

Our brushless servos offer significant features of high accuracy and speed, large torque and so on, so it has been widely used in model fields, like in RC cars, Helis and robots. We desire to be the first choice for model enthusiasts and robots users.

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## 公司简介

长沙美福沛林电子科技有限公司是一家专注于研发、生产和销售无刷舵机的高新技术企业。公司拥有生产厂房1000m<sup>2</sup>，办公场地400m<sup>2</sup>。拥有一支经验丰富的舵机设计和制造专业技术团队及多项自主知识产权。公司产品广销海外，与多家企业建立了长期合作的伙伴关系，在国外享有较高的声誉和形象，我们将全心致力于为您提供最优质的产品 & 最真诚的服务！

## 质量保证

公司建立了规范的管理流程和质量管理体系，研发制造了一系列专用的检测工装和设备，使得产品从研发设计到生产、质量检验等每一个环节都得到严密控制，以确保产品质量对每一个客户都能做到认真负责。我们追求的是——您的满意是我们永恒的服务宗旨！

## 产品介绍

### 数字高精度无刷舵机

我们的无刷舵机结构合理、性能优越。针对舵机应用的主要要求和特点而采用的多对极无刷电机，更有效地提高了舵机的输出扭矩和准确度；表面散热槽设计使得金属壳体的散热性能更显著，进一步提高了大扭矩舵机的稳定性和可靠性；相对独立的可分离式齿轮箱设计，则充分体现了人性化的特点，与同行产品结构相比：在用户长时间使用舵机后只需对磨损的齿轮进行维修或更换，而不必对整个产品进行报废，大大节约了客户的使用成本。多种材质铜、不锈钢和铝合金（表面镀钛）的齿轮组合，使得客户可以根据承受传动力的不同需求而进行选用。

### 舵机测试信号发生器

舵机测试信号发生器是可以产生高精度脉宽调制（PWM）信号的舵机测试设备。本产品具有如下特点：

- 能够产生宽度、周期可调整的高精度PWM信号
- PWM的周期和宽度的最小调节步进为0.1uS
- PWM信号抖动小于0.025uS
- 能够实时测量驱动舵机的电压和电流
- 能够手动和定时按设置改变PWM脉宽输出
- 操作电压范围：3V-20V。最大电流：10A



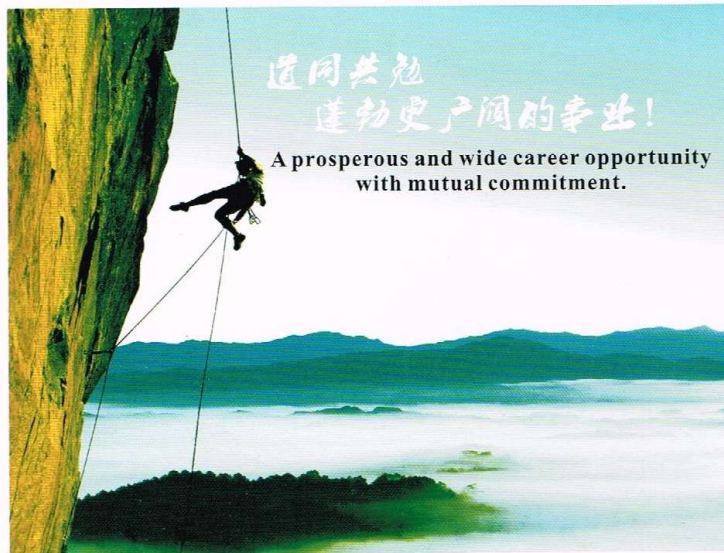
## 技术支持

销售代表是用户使用美福沛林产品的联络人，负责为用户提供咨询、订货、跟单、物流跟踪、货款结算和反馈信息等全方位服务。

产品工程师负责提供技术服务，可以根据客户的需求定制相关参数，与销售代表共同解决技术难题。

## 产品用途

我们的无刷舵机重要的特性：精度高、扭矩大、速度快，因此被广泛运用于车、船、飞机等运动模型及机器人，我们正在努力打造运动模型用户爱好者和机器人爱好者首选的产品。



We warmly welcome friends from all works of  
life to guide and negotiate Win-win business !

长沙美福沛林电子科技有限公司

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