

<b>Datasheet</b>	<b>PRODUCT SPECIFICATION</b>	<b>Rev: A/0</b> <b>Page: 1/3</b>
<b>Model: MR-10116</b>	<b>Document: Mini Micro 3.7g Digital Servo with Accessories</b>	

**1. Description**

MR-10116 is a compact 3.7 g class digital micro servo intended for lightweight RC aircraft, micro robotics, miniature control mechanisms, and embedded motion applications.

The servo features a digital control circuit, coreless (hollow-cup) motor, nylon gear train, and 3-wire control interface. Its lightweight construction and small footprint make it suitable for installations where minimum mass and volume are critical.

**2. Key Features**

- Ultra-lightweight 3.7 g class digital servo
- Coreless / hollow-cup motor
- Nylon gear transmission
- Small-size form factor for compact assemblies
- PWM control interface
- 3-wire standard servo connection
- Approx. 150 mm lead wire
- Supplied with horn and mounting accessories

**3. Environmental Conditions**

Operating temperature	0 °C to 60 °C
Storage temperature	-30 °C to 60 °C
Standard test temperature	25 °C

**4. Electrical Characteristics**

Parameter	3.6 V	4.8 V
Operating voltage	3.6 V – 4.8 V DC	
No-load speed	—	0.13 s / 60°
Reference speed	0.15 s / 60°	0.10 s / 60°
Torque	0.5 kg·cm	0.7 kg·cm
Stall torque	0.42 ± 0.1 kg·cm	0.6 ± 0.1 kg·cm
Running current (no load)	≤ 10 mA	≤ 40 mA
Stall current	≤ 60 mA	≤ 200 mA
Typical working current	< 300 mA	

**5. Mechanical Specifications**

Dimensions	20.0 × 8.75 × 22.0 mm
Weight	3.7 g nominal
Motor type	Coreless / hollow-cup
Gear material	Nylon
Lead wire length	150 mm
Connector type	Standard JR / Futaba-compatible 3-pin
Housing color	Blue

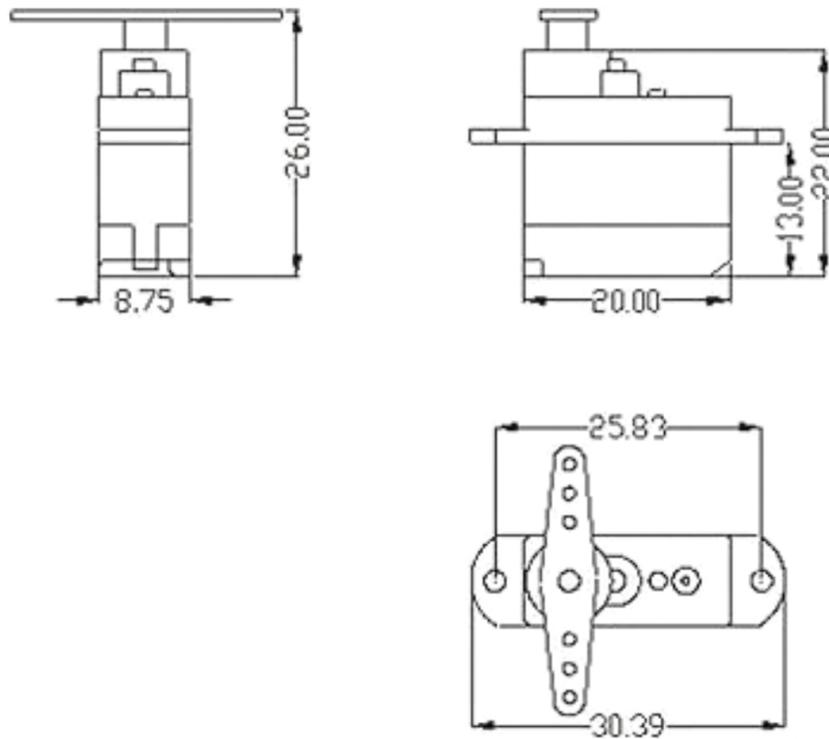
**6. Control Specifications**

Control signal	PWM (Pulse Width Modulation)
Standard pulse range	1000 $\mu$ s – 2000 $\mu$ s
Neutral pulse width	1500 $\mu$ s (typ.)
Dead band width	4 $\mu$ s
Working angle	90°
Control cable	Signal / VCC / GND

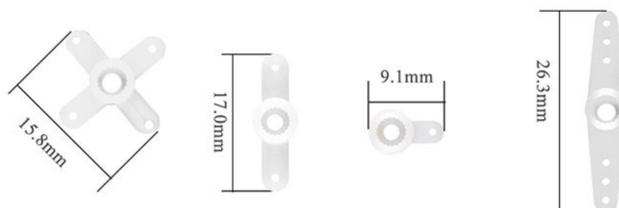
### 7. Package Contents

No.	Item	Remarks
1	Digital micro servo	MR-10116 main unit
2	Servo horn set	Included accessory set
3	Mounting screws / fittings	As supplied with product

### 8. Mechanical Dimensions



## 9. Accessories / Servo Horn Dimensions



## 10. Product Appearance



## 11. Connector Pin Definition

Pin	Name	Description
1	Signal	PWM control input
2	VCC	DC supply input
3	GND	Ground reference