

## Aexit M6x12mm

# Aexit M6x12mm Hex Socket Head Cap Machine Screws Instruction Manual

Model: M6x12mm

## 1. PRODUCT OVERVIEW

The Aexit M6x12mm Hex Socket Head Cap Machine Screws are high-quality fasteners designed for secure and reliable connections. Manufactured from durable 304 stainless steel, these screws offer excellent corrosion resistance and strength, making them suitable for a wide range of applications.

This package contains 30 pieces of M6x12mm screws, each featuring a 1.0mm thread pitch and a hex socket head requiring a 5mm hex key for installation.

## 2. KEY FEATURES

- **Material:** 304 Stainless Steel for superior corrosion resistance and durability.
- **Screw Type:** M6 x 12mm Hex Socket Head Cap Machine Screw.
- **Thread Pitch:** 1.0mm.
- **Hex Width:** 5mm (0.2 inches) for compatible hex key tools.
- **Head Size:** 10mm (0.4 inches) diameter x 6mm (0.24 inches) height.
- **Overall Size:** 18mm (0.7 inches) length x 10mm (0.4 inches) diameter.
- **Applications:** Ideal for home and office appliances, communication equipment, ship assembly, and various machinery industries.

## 3. SETUP AND INSTALLATION

These M6x12mm hex socket head cap screws are designed for straightforward installation into pre-tapped holes or with appropriate nuts. Follow these steps for proper setup:

1. **Prepare the Hole:** Ensure the receiving hole is correctly sized and threaded for an M6 screw. If using with a nut, ensure the nut is also M6 compatible.
2. **Select the Tool:** Use a 5mm hex key (also known as an Allen wrench) that fits snugly into the screw's socket head.
3. **Insert the Screw:** Place the screw into the hole and begin turning it clockwise by hand to ensure

proper alignment and prevent cross-threading.

4. **Tighten the Screw:** Once the screw is engaged, use the 5mm hex key to tighten it. Apply firm, even pressure. Avoid over-tightening, which can strip the threads or damage the material being fastened.
5. **Verify Security:** After tightening, ensure the connection is secure and stable.



Figure 1: Top view of the hex socket head, illustrating the 5mm hex key interface.

## 4. OPERATING AND USAGE

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These machine screws are designed for creating strong, removable joints in various assemblies. Their 304 stainless steel construction makes them suitable for environments where resistance to rust and corrosion is important, such as outdoor applications, marine settings, or areas with high humidity.

Common uses include:

- Securing components in machinery and equipment.
- Assembly of furniture and fixtures.
- Fastening panels or covers in electronic enclosures.
- General construction and repair tasks requiring a robust fastener.



Figure 2: Side profile of the M6x12mm screw, highlighting the threaded shaft.

## 5. MAINTENANCE

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Aexit M6x12mm Hex Socket Head Cap Machine Screws require minimal maintenance due to their 304 stainless steel composition. However, proper care can extend their lifespan and ensure continued performance:

- **Cleaning:** If exposed to dirt or grime, clean the screws with a damp cloth and mild detergent. Rinse thoroughly and dry completely to prevent water spots.
- **Storage:** Store unused screws in a dry environment to prevent potential surface contamination, even though 304 stainless steel is highly corrosion-resistant. Keep them organized to easily identify sizes.
- **Inspection:** Periodically inspect installed screws in critical applications for any signs of loosening or damage. Re-tighten if necessary, ensuring not to over-torque.



Figure 3: Angled view of the screw, providing a comprehensive look at its design.

## 6. TROUBLESHOOTING

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While these screws are designed for reliability, issues can sometimes arise during installation or use:

- **Screw Not Engaging:** Ensure the hole is properly threaded and clear of debris. Verify that the screw diameter (M6) matches the hole. Do not force the screw.
- **Hex Socket Stripping:** This usually occurs from using an incorrect size hex key or applying excessive torque. Always use a 5mm hex key that fits snugly. If stripping occurs, the screw may need to be extracted and replaced.
- **Screw Loosening Over Time:** In applications subject to vibration, consider using thread-locking compounds or lock washers to prevent loosening.
- **Corrosion:** Although 304 stainless steel is corrosion-resistant, it is not entirely immune to all corrosive agents. If corrosion appears, ensure the environment is suitable for 304 stainless steel or consider a higher grade of stainless steel for future applications.

## 7. SPECIFICATIONS

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Specification	Value
Product Name	Hex Socket Cap Screw
Material	304 Stainless Steel
Color	Silver Tone
Screw Type	M6 x 12mm
Thread Diameter	6mm (0.24")
Thread Length	12mm (0.5")
Thread Pitch	1.0mm
Hex Width	5mm (0.2")
Head Size (D*H)	10mm x 6mm (0.4" x 0.24")
Overall Size (L*D)	18mm x 10mm (0.7" x 0.4")
Weight (for 30 pcs)	136g
Fastener Type	Machine Screw
Head Type	Socket
Thread Coverage	Fully Threaded

## 8. WARRANTY AND SUPPORT

For any questions regarding the Aexit M6x12mm Hex Socket Head Cap Machine Screws, please contact your retailer or the manufacturer directly. Please refer to your purchase documentation for specific warranty information, if applicable.

Ensure proper handling and installation as described in this manual to maximize product performance and longevity.