

HH FASTENERS PM4

M4 Phillips Pan Head Machine Screws User Manual

Brand: HH FASTENERS | Model: PM4

1. INTRODUCTION

This manual provides essential information for the safe and effective use of HH FASTENERS M4 Phillips Pan Head Machine Screws. These screws are designed for various fastening applications requiring a secure, full-thread connection. They are made from A2 Stainless Steel (equivalent to 304 stainless steel), offering good corrosion resistance and durability. All screws feature a standard metric thread pitch and are fully threaded.

2. PRODUCT FEATURES

- **Fastener Type:** Machine Screw
- **Drive Type:** Phillips
- **Head Style:** Pan Head
- **Thread Diameter:** 4mm (M4)
- **Thread Pitch:** 0.7mm
- **Material:** A2 Stainless Steel (304 Grade)
- **Thread Coverage:** Fully Threaded

3. COMPONENTS

Each package contains 50 pieces of M4 Phillips Pan Head Machine Screws of the specified length (e.g., M4 x 4mm). No additional components or tools are included with the screws themselves.



Figure 3.1: A collection of M4 Phillips pan head machine screws, showcasing their design and finish.

4. SETUP

4.1 Preparation

1. **Identify Application:** Determine the material and thickness of the components to be joined.
2. **Select Correct Length:** Choose a screw length appropriate for the combined thickness of the materials, ensuring adequate thread engagement without bottoming out.
3. **Pre-drill (if necessary):** For materials that may split or require precise alignment, pre-drill a pilot hole. The pilot hole diameter should be slightly smaller than the screw's major thread diameter (typically 3.3mm for M4 screws in softer materials, or a tap drill size for metal).
4. **Gather Tools:** Ensure you have a Phillips head screwdriver (PH2 is common for M4) or a power drill with a compatible Phillips bit.

4.2 Installation

1. **Align Components:** Position the parts to be joined, ensuring any pre-drilled holes align.
2. **Insert Screw:** Place the tip of the M4 machine screw into the aligned hole.
3. **Drive Screw:** Using the Phillips head screwdriver or drill, apply steady, even pressure while rotating clockwise to drive the screw. Ensure the screwdriver bit is fully seated in the screw head to prevent cam-out.
4. **Tighten Appropriately:** Tighten until snug. Avoid over-tightening, especially in softer materials, as this can strip the threads or damage the material.



Figure 4.1: An assortment of M4 Phillips pan head machine screws, illustrating different available lengths.

5. OPERATING INSTRUCTIONS

M4 Phillips Pan Head Machine Screws are designed for creating strong, threaded connections. They are typically used with a corresponding M4 nut or a pre-tapped hole. The pan head provides a broad bearing surface, suitable for applications where a flush finish is not required but a secure hold is important.

- **Thread Engagement:** Ensure sufficient thread engagement for a secure connection. A minimum of 1.5 times the screw diameter (6mm for M4) is generally recommended for full strength.
- **Torque:** Apply appropriate torque. Over-tightening can lead to stripped threads or screw breakage. Under-tightening can result in loose connections. Consult specific application guidelines for recommended torque values if available.
- **Material Compatibility:** While A2 stainless steel offers good corrosion resistance, avoid direct contact with dissimilar metals in corrosive environments to prevent galvanic corrosion.



Figure 5.1: Four M4 Phillips pan head machine screws, demonstrating variations in length.

6. MAINTENANCE

M4 Phillips Pan Head Machine Screws made from A2 Stainless Steel require minimal maintenance due to their inherent corrosion resistance. However, proper care can extend their lifespan and maintain their appearance.

- **Cleaning:** If exposed to dirt, grime, or corrosive substances, clean the screws with a mild detergent and water. Rinse thoroughly and dry completely to prevent water spots or residue buildup.
- **Inspection:** Periodically inspect installed screws for signs of loosening, corrosion, or damage. Re-tighten loose screws as needed, ensuring not to over-tighten.
- **Storage:** Store unused screws in a dry environment, away from moisture and corrosive chemicals, to preserve their finish and integrity. Original packaging or sealed containers are recommended.

7. TROUBLESHOOTING

Common issues encountered during the use of machine screws and their potential solutions.

Problem	Possible Cause	Solution
Screw head strips (cam-out)	Incorrect Phillips bit size; insufficient downward pressure; worn bit; excessive torque.	Use correct bit size (PH2 for M4); apply firm downward pressure; replace worn bits; reduce torque.
Threads strip in material	Pilot hole too large; over-tightening; material too soft.	Use correct pilot hole size; avoid over-tightening; consider using a larger diameter screw or a threaded insert for soft materials.
Screw does not tighten	Threads are stripped; screw too short; incorrect thread pitch.	Replace screw/nut or repair threads; use longer screw; ensure M4 screw is used with M4 nut/tapped hole.
Screw breaks	Excessive torque; material binding; fatigue.	Reduce torque; ensure clear path for screw; replace screw if fatigued.

8. SPECIFICATIONS

Detailed technical specifications for the M4 Phillips Pan Head Machine Screws.

Attribute	Value
Fastener Type	Machine Screw
Drive System	Phillips
Head Style	Pan
Thread Diameter	M4 (4mm)
Thread Pitch	0.7mm
Thread Coverage	Fully Threaded
Material	A2 Stainless Steel (304 Grade)
Color	Silver
Measurement System	Metric
Number of Pieces (per pack)	50
Manufacturer	HZ Ltd
Part Number	PM4
UPC	767550612533



Figure 8.1: Close-up view of M4 Phillips pan head machine screws, highlighting the head and thread details.

9. WARRANTY AND SUPPORT

HH FASTENERS products are manufactured to high standards. For specific warranty information or technical support regarding your M4 Phillips Pan Head Machine Screws, please refer to the seller's return policy or contact the seller directly through the platform where the purchase was made. General product inquiries can also be directed to the manufacturer, HZ Ltd.

Return Policy: Typically, a 30-day refund/replacement policy is offered by the seller. Please check your purchase details for exact terms.

For further assistance, please visit the HH FASTENERS brand page or contact customer service.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question