LVSEDTAL BT50-AMFMB22-170

LVSEDTAL BT50-AMFMB22-170 Right Angle Milling Head Instruction Manual

1. Introduction

This manual provides essential information for the safe and effective use of the LVSEDTAL BT50-AMFMB22-170 Right Angle Milling Head. Please read this manual thoroughly before installation, operation, or maintenance to ensure proper function and to prevent injury or damage to the equipment.

2. Safety Information

Always adhere to standard industrial safety practices when operating machinery. Failure to follow these safety guidelines may result in serious injury or equipment damage.

- Read and understand all instructions before use.
- Wear appropriate personal protective equipment (PPE), including safety glasses, gloves, and hearing protection.
- Ensure the machine is powered off and locked out before performing any installation, adjustment, or maintenance.
- Do not operate the milling head beyond its specified maximum speed or torque.
- Keep hands and clothing clear of moving parts during operation.
- Ensure the milling head is securely mounted before starting any operation.

3. Product Overview

The LVSEDTAL BT50-AMFMB22-170 is a robust right-angle milling head designed for industrial automation applications. It offers enhanced stability and durability for long-term use. Its compact size allows for efficient space utilization in various machining setups.

Figure 1: General view of the LVSEDTAL BT50-AMFMB22-170 Right Angle Milling Head.

Key Features:

- **Stability:** Engineered for stable and consistent performance over extended periods.
- **Durable:** Constructed for a long service life in demanding industrial environments.
- **Small size:** Compact design for space-saving integration.
- **Wide range of applications:** Primarily suited for industrial automation and various milling tasks.

4. Specifications

The following table details the technical specifications and dimensions of the BT50-AMFMB22-170 Right Angle Milling Head.

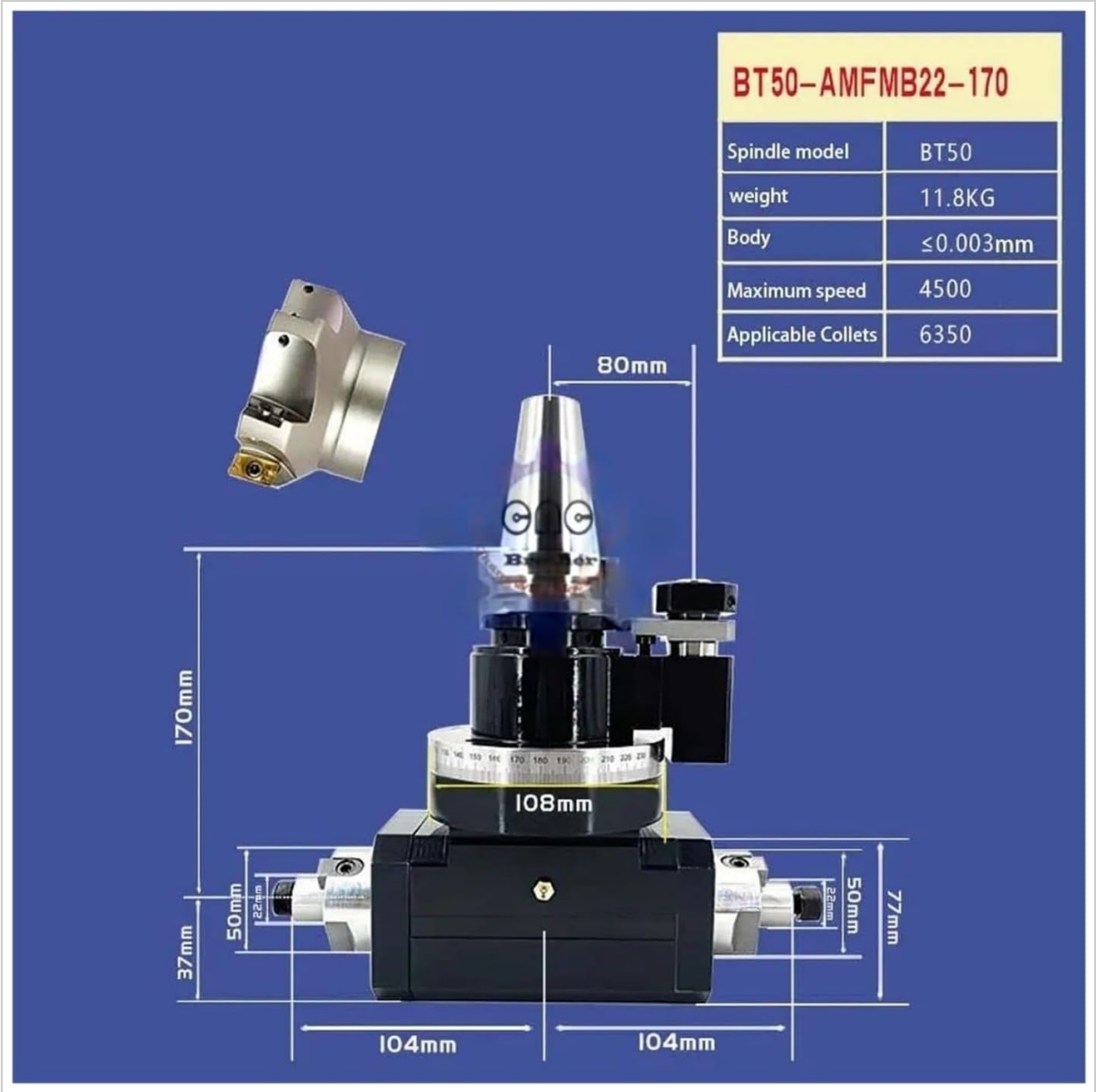

Figure 2: Detailed dimensions and specifications of the BT50-AMFMB22-170.

Attribute	Value
Model Number	BT50-AMFMB22-170
Spindle Model	BT50
Item Weight	11.8 KG (26.01 lbs)
Body Precision	≤0.003 mm
Maximum Operating Speed	4500 rpm
Maximum Torque	18 NM
Applicable Collets	6350
Overall Length	170 mm
Head Width	108 mm
Manufacturer	LVSEDTAL
Assembly Required	No
Number of Pieces	1

5. Setup

Proper installation is crucial for the performance and safety of the milling head. Follow these general steps for mounting:

1. **Preparation:** Ensure the machine spindle and the milling head's taper are clean and free of debris.
2. **Mounting:** Carefully align the BT50 taper of the milling head with the machine spindle.
3. **Securing:** Use the appropriate drawbar or clamping mechanism to securely fasten the milling head to the spindle. Refer to your machine's manual for specific clamping procedures.
4. **Tool Installation:** Install the desired cutting tool into the milling head's collet or tool holder, ensuring it is properly seated and tightened.
5. **Initial Check:** Before operation, manually rotate the spindle to confirm smooth movement and proper seating of the milling head and tool.

6. Operating Instructions

The BT50-AMFMB22-170 Right Angle Milling Head is designed for various milling applications. Observe the following guidelines for operation:

- **Speed and Feed:** Operate within the specified maximum speed of 4500 rpm and maximum torque of 18 NM. Adjust cutting speeds and feed rates according to the material being machined and the cutting tool used.
- **Coolant:** Use appropriate cutting fluid or coolant to prolong tool life and improve surface finish, especially during heavy cuts.
- **Monitoring:** Continuously monitor the machining process for unusual noises, vibrations, or excessive heat, which may indicate an issue.
- **Workpiece Securement:** Always ensure the workpiece is rigidly clamped to the machine table to prevent movement during machining.

7. Maintenance

Regular maintenance ensures the longevity and optimal performance of your milling head.

- **Cleaning:** After each use, clean the milling head to remove chips, coolant residue, and other debris. Pay special attention to the taper and collet areas.
- **Lubrication:** Periodically check and lubricate moving parts as recommended by general machine tool maintenance practices.
- **Inspection:** Regularly inspect the milling head for any signs of wear, damage, or loose components. Replace worn parts immediately.
- **Storage:** When not in use, store the milling head in a clean, dry environment to prevent corrosion and damage.

8. Troubleshooting

If you encounter issues during operation, consider the following common problems and solutions:

Problem	Possible Cause	Solution
Excessive Vibration	Unbalanced tool, loose mounting, worn bearings, incorrect cutting parameters.	Balance tool, re-secure milling head, inspect bearings, adjust speed/feed.
Poor Surface Finish	Dull cutting tool, incorrect speed/feed, insufficient coolant, excessive runout.	Replace/sharpen tool, optimize cutting parameters, ensure adequate coolant, check for runout.
Tool Breakage	Excessive feed rate, insufficient rigidity, wrong tool for material, chip accumulation.	Reduce feed, check setup rigidity, use correct tool, ensure chip evacuation.
Overheating	Lack of lubrication, excessive load, high ambient temperature.	Check lubrication, reduce load, ensure proper ventilation.

9. Warranty and Support

For specific warranty information or technical support regarding your LVSEDTAL BT50-AMFMB22-170 Right Angle Milling Head, please contact the manufacturer or your authorized distributor. Keep your purchase receipt and product model number handy for faster service.