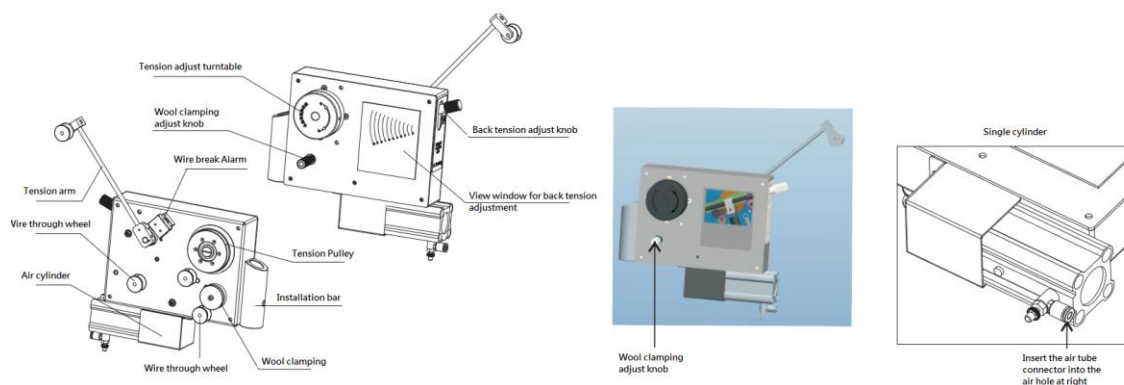


## 1 Product Introduction

Magnetic torque tension device produced through the magnetic damping, no mechanical friction, so they can have long-term and stable tension, and the precision can be effectively guaranteed. MTA-S series which can shift from one back tension to another back tension through cylinder are pneumatic type of magnetic tensioner, specification is shown as form on the right, you can choose the applicable model according to wire diameter scope. The function of the main component are as follow: wool felt can catch impurities of enamelled wire; tension pulley is core part of creating tension; tension adjust turntable can adjust tension value, the larger the scale interval, the greater the tension values; back tension adjust knob can adjust angle of tension arm.

Model	Reference wire diameter (mm)	Tension range (g.f)
MTA-2000	0.35 - 0.7	300 - 2000



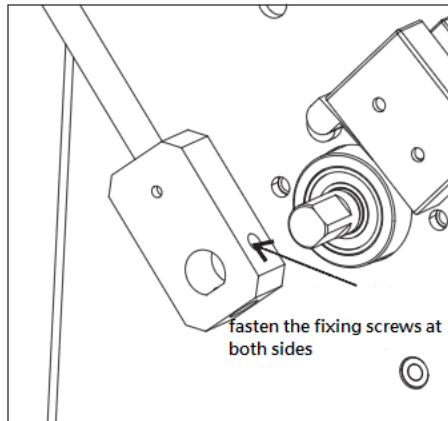
## 2 Environmental conditions

1. Temperature range:-5℃-40℃ Humidity range: 30%-80%.
2. Cleaning requirements of enamelled wire: Keep the enamelled wire without any oil, dust and impurity outside. If the surface of enamelled wire with waxiness, you'd better clean wire rolling frequently and replace wool clampingring regularly. Otherwise, it will cause frequent tension change or wire-through wheel skidding, and shorten operating life of O Ring in tension pulley.
3. 5-7Kg clean and dry air should be provided to cylinder.

## 4 Operation

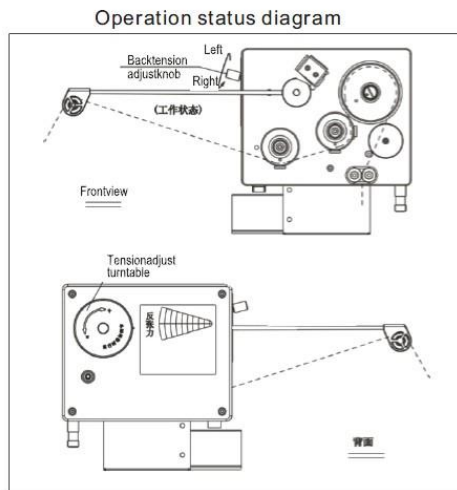
### 1. Installation

- Step1** Install tension arm and fasten lateral locking screw in accordance with the details shown in Figure 4. The screw should be aligned with the axial plane.
- Step2** Insert the foot mounting into fixed link and tighten it by fasten handle.
- Step3** Connect gas-type fitting to air vent and then joint gas-type fitting with  $\Phi 4\text{mm}$  air pipe. Open the purge valve.

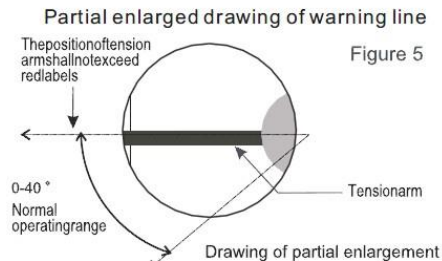


## 2. Commissioning

- Step1** Enamelled wire through the associated components of tensioner along the route as shown in figure 5 below. Note: The enamelled wire should be wrapped in wool felt of wool clamping in order to catch impurities. You can adjust degree of tightness of wool felt by wool clamping adjust knob. Wool felt should be appropriately relaxed to create tiny resistance when tension is small, on the contrary, it should be clamped when tension is large.
- Step2** Make sure the scale interval of tension adjust turntable and viewing window of back tension are transferred 0, and then began trial operation.
- Step3** After tensioner operating, the position of tension arm will move down with the increase of tension value. Tensioner is at normal working status when tension arm within the realm of the 40 degrees below horizontal line (see figure 6). Tension arm



will be above the horizontal line if tension is too small, you'd better raise tension to avoid abnormally wearing of tensioner. There are two methods for reference: (1) Turn the tension adjust turntable to the right to make tension arm fall down; (2) Turn the back tension adjust knob to the right. In contrast, if the tension arm is below normal work angle you should reduce tension — turn the back tension adjust knob to the left and try to keep the tension arm horizontal. You can adjust appropriate tension value according to this method. The relationship between wire diameter and tension value is recorded in a table which can be downloaded in our company's website. Normally, back tension value is proportional to tension value but less than it.



## 5 Note

- Do not touch the transmission or rotatable parts or stop the tension rod when the tensioner is running.
- Tension value can be only turned from small to big but from big to small in the operation! If tension should be smaller, you must shut down tensioner to avoid breaking line.
- To make the tensioner work properly, the routine adjustment and the changes of the wool felt are needed.
- Keep the oil contamination from the tension pulley, otherwise it will affect the machine running. If there are oil contamination, just use the cotton thread with absolute alcohol, and then pull back and forth to clean.
- Check the angle of tension arm before you use it, if it is as the same as static state when installation, you must adjust tension all over again to avoid abnormal wear caused by components of tensioner.

## 6 Troubleshooting

FAULTS		TREATMENT
1	Tension pulley slip while operating	1, Clampe wool felt appropriately; 2, Use the cotton thread with absolute alcohol, and then pull back and forth to clean tension pulley; 3, Wrap around tension pulley by enamelled wire more than 1 in order to increase drags.
2	Tension pulsating exists	First turn right the tension adjust turntable to largest scale, and then turn left it from high to low slowly, turn around tension pulley continuously at the same time until pulsation disappear.



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NO.	ITEMS	QUANTITY	REMARKS
1	MagneticTensioner	1	Standard configuration
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3	FastenHandle	1	Standard configuration
4	Gas-typefitting	1	Standard configuration
5	Product Manual	1	Standard configuration
6	Wirebreakalarm	1	Optional
7	Warningholdingwire	1	Optional

Note: Check all parts. If you find any defective or missing parts contact your local dealer when you opening the package.

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