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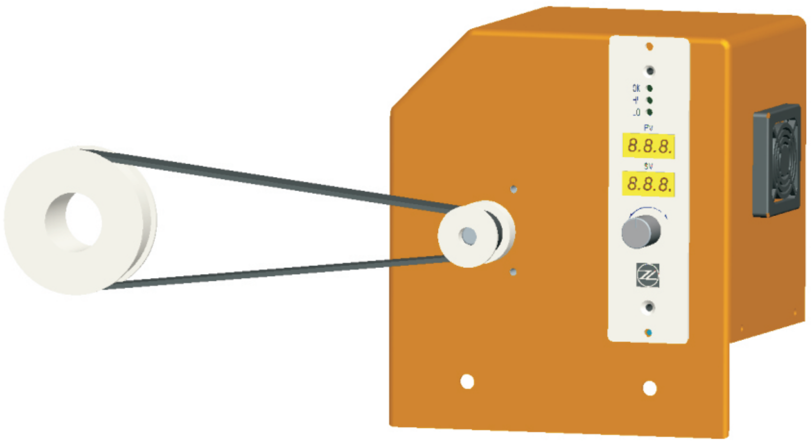
Due to the continuous improvement of products,
such as the technical parameters in this manual are modified without prior notice.
If you have any questions or view the contents of this manual and the details of all time,
please put the consultation,
we will be very glad to answer your questions, advice and criticism.
Thank you again for your choice and your trust。

VALIDMAGNETICS

ETR Series

ETR Series Electronic Tensioner Product Manual



☐ ETR-2000OL

❶ Introduction

The features of ETR series electronic tensioner for unwinding as follows:

Traditional unwinding tensioners are mainly mechanical, using physical contact to generate a friction force to control the tension. However, the tension keeps increasing when the unwinding diameter is getting smaller so that frequent manual adjustment on the tensioner is required. ETR series tensioners are able to reduce the output tension values gradually depending on the unwinding diameters to keep the tension constant during the process. Simply setting the initial tension value required and no more adjustment is needed, which is convenient and stable to be used.

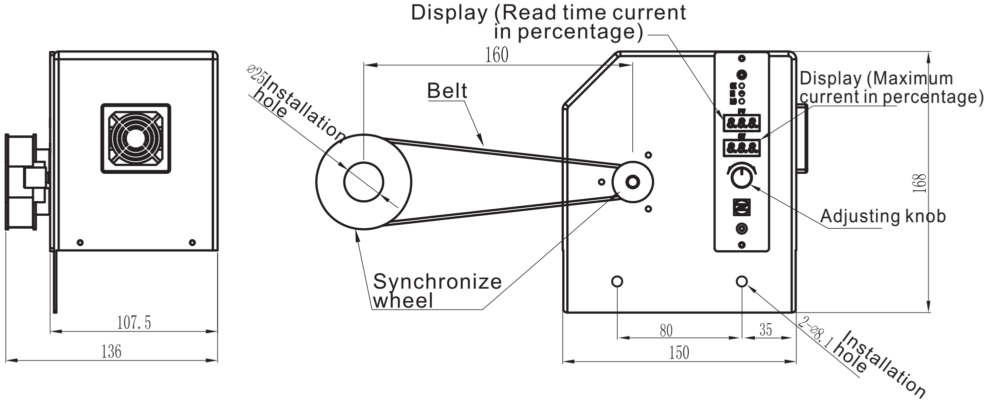
ETR-2000-OL

- ETR: Unwinding electronic tensioner
- 2000: The maximum output tension value
- OL: Open-looped operation

Reference Table

Model	Tension range (g.f)
ETR-2000OL	100-2000

❷ Structure



❸ Operation Environment

1.Temperature: -5 ~ 45 Humidity: 30%-80%
2.Wheels: Clean. Periodically clean the wheels to make sure there are no oil or impurities on the surface of wheels.

ETR series unwinding tension controller

Product Warranty Card

Username		Telephone	
Address			
Zipcode		Purchasedate	
Purchaseaddress			
Retailprice		SalesNO.	
Producttype		Product'sP/N	
Dealersignature		Usersignature	

(STAMPED)

Maintenance Records

	Date	Descriptionoffault	Partsreplaced	Serviceman	User signature
1					
2					
3					
4					
5					

This product manual was revised in April 2020.
Information content is subject to change without notice

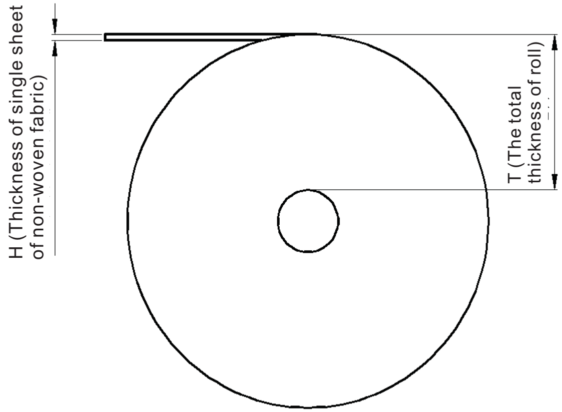
❽ Packing List:

You are welcome to purchase this series products, when you open the package, please accept the following content:

Series No.	Item	Quantity	Unit	Remarks
1	Tensioner	1	pc	Standard
2	Synchronize belt	1	pc	Standard
3	Synchronize wheel	1	pc	Standard
4	Power cord	1	pc	Standard
5	Screw: M8x16	2	pc	Standard
6	Screw nut	2	pc	Standard
7	Pad A	2	pc	Standard
8	Pad B	2	pc	Standard
9	Product manual	1	pc	Standard

Reminder: Please check the parts on the packing list upon receiving. Contact your local distributor or reseller should there are any missing parts.

❹ Unwinding reference table



	t	P02	P03	P04
	300	190	30	90
	280	183	30	90
	260	176	30	90
	240	169	30	90
	220	162	30	90
	200	155	30	90
	180	148	30	90
When h = 0.1mm	160	141	30	90
	140	135	30	90
	120	128	30	90
	100	121	30	90
	80	115	30	90
	60	108	30	90
	40	101	30	90
	20	95	30	90

	t	P02	P03	P04
	300	190	15	90
	280	183	15	90
	260	176	15	90
	240	169	15	90
	220	162	15	90
	200	155	15	90
	180	148	15	90
When h = 0.2mm	160	141	15	90
	140	135	15	90
	120	128	15	90
	100	121	15	90
	80	115	15	90
	60	108	15	90
	40	101	15	90
	20	95	15	90

❺ Installation and commissioning

1. Installation:

M8 screws are used on the tensioner. It is fixed tightly on customer's chassis or workstation with twoφ8.2 installation holes (spacing distance:80). The big synchronize wheel is fixed on the axis withφ25 diameter. Adjust the synchronize wheel until it is in a suitable tightness, and finally lock the big synchronize wheel on workstation.

2. Operation of knob

The tensioner is operated by setting parameters through the knob.There are three types of operation on the knob: 1. Short pressed (single press), Long pressed (press and hold for 3s) and rotation (clockwise / anticlockwise).

3.Commissioning

1)Display On while switching on. There is a red spot lights up next to the value representing the knob is locked. Long pressed the dark knob (3s) to unlock the knob until the red spot disappears. Adjust the P02 value (refer to the reference table) by rotating the knob. Short press the knob to save the value. The knob will be in locked mode automatically after several seconds left unattended to prevent error operation. The tensioner is in working condition now. Adjustment of parameters may be required if there are any changes on thickness of non-woven fabrics.

2)Long press the knob to enter the menu after unlocking the knob. Enter the password “567” (by rotating the knob) and short press to enter menu.

3)Skip the P01 parameter setting (not necessary)

4)Clockwise rotate the knob to set the P02 (maximum tension value). Short press to adjust the value (refer to the reference table) and short press again to confirm. Remarks: P02 refers to the maximum output tension limit. The default value is 190 at ex-factory. It is unnecessary to be changed in most cases.

5)Clockwise rotate to enter P03 setting. Short press to adjust the value (refer to the reference table) and short press again to confirm.

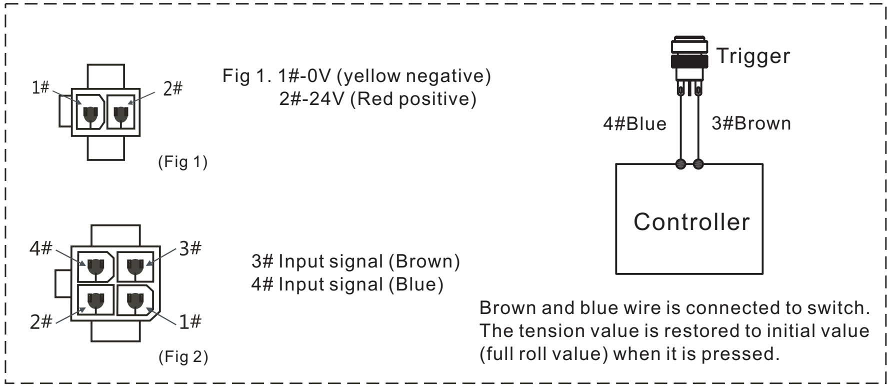
6)Clockwise rotate to enter P04 (Minimum tension value) setting. Short press to adjust the value (refer to the reference table) and short press again to confirm. Clockwise rotate to enter the P05 and P06 parameter settings (The default value is set at factory. It is unnecessary to be changed in most cases.)

7)Long press to exit the interface and enter the operation interface.
Commissioning done.

8)Parameters definition
P01: reserved
P02: Maximum tension value
P03: Number of turns (fixed number of turns – 1 tension unit)
P04: Minimum tension value
P05: Reserved
P06: Speed reduction ratio (1:3)

4. Connection:

Connect the terminals as fig. 2 below with:
Input power: 24VDC +/- 10% (1A)   Input signal: 24VDC



❻ Cautions

1)Do not touch the belt and wheel when operating
2)Do not crash or break the wheels or the accuracy will be affected
3)Prevent the falling of tensioner which will cause damages.
4)Do not work with inappoiate models or beyond the tension limit of models. Do not self-refit on tensioner or parts.

❼ Maintenance

Clean the belt and wheels to make sure the tension in good working condition periodically.