



SPIRAL CUTTERHEAD

Operating Instructions and Parts Manual



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TS-50 (ordinary version) simple description

Equipment characteristics

- 1: Magnetic grid ruler + motor positioning system
- 2: Single speed and double speed positioning operation mode
- 3: Measurement and control precision is high, repeated measurement accuracy $\pm 0.01\text{mm}$, the highest resolution 0.01mm
- 4: A quasi absolute measurement, even if the external power supply is closed, the backup power is still measured in real time.
- 5: A variety of measurement and control methods, menu parameters set free, easy and quick operation
- 6: AC 220V direct power supply, the maximum power consumption 6W
- 7: 1 section backup battery, 2, 1.5V, life expectancy of about two and a half years
- 8: Read head sensor signal line length: the standard is 3 meters
- 9: Display: 6 bright red digital tube
- 10: Output mode: 4 way, relay, normally open output, relay withstand voltage 250V, current 5A
- 11: Input: 3 Road, optocoupler input voltage 12V.

Introduction of some key

- SET : Set the key (set the current value, or the target value, or modify the parameter values, etc.)
- C : Clear key
- STEP /- : Move the key / value modification minus input key
- ENTER : Menu key / confirm key
- ESC : Exit / return
-  : Short press: increase the distance of a point moving value
Long press: manual control to move forward
-  : Short press: to reduce the distance of a point moving value
Long press: manual control to run backward
-  : Start an automatic positioning
-  : Stop key

Parameter setting

A: Menu operation procedure:

- 1 By long press "ENTER" key to enter
- 2 Then enter the menu number
- 3 And then "ENTER key" to confirm to enter the menu
- 4 Modify parameters by "numeric keys" or "SET" keys
- 5 Then press the "ENTER key" to confirm the changes, save the value of the modified
- 6 Operation process, can press the "ESC key" exit settings, do not save the value of the modified

B: Parameter table

Serial number	function	Adjusting range	Default value	Remarks
F 1	Measure and control display unit	0: Inch 1: 0.1mm 2: 0.05mm 3: 0.01mm	1	Select the "SET" key in the menu
F 2	Orientation direction	—— : Positive	——	

		--- : reverse --- ---: two-way		Ditto
F 4	Upper and lower key point dynamic function	0: Not allow 1: allow	1	Ditto
F 5	Upper and lower key long press run function to allow setting	0: Not allow 1: allow	1	Ditto
F 6	External push button reset function allows setting	0: Not allow 1: allow	1	Ditto
F 8	Point move value modification	0: Not allow 1: allow	1.	Ditto
F 9	On the panel, the next key function settings	0: Do not swap (up key: forward running. Down key: reverse running 1: Exchange (on the key: reverse run. Lower key: forward operation	0	Ditto
F 11	Proportional coefficient setting	0.00001---2.99999	1.0000 0	Modify the "number" key in the menu.
F 13	External button operation fixed power value	0-----99999.9	5.00	Ditto
F 14	Motor switch waiting / pause time	400mS-----60000mS	600mS	Ditto
F 17	Tolerance zone setting	0-----10mm	0.1	Ditto
F 19	Maximum position limit	-1999.99-----9999.99	1000.0	The same as above (must be greater than the value set by the F20)
F 20	Lowest position limit	-1999.99-----9999.99	-50.0	The same as above (must be less than the value set in the F19)
F 21	Quick and automatic saving method for point moving value	0: No quick and automatic save 1: Numerical automatic preservation of the moving operation of the opposite direction 2: Numerical automatic preservation of positive direction point moving operation 3: The forward and reverse direction point moving operation is automatically saved	0	Select the "SET" key in the menu
F 30	Menu lock option	Password 1234		Through the

		0: The corresponding menu is not adjustable 1: The corresponding menu can be adjusted		menu “ upper” “lower” Key and "SET" key selection
F 33	Software version number			TS5061
F 34	Numerical control of measurement and control	0: Forward run, measured data + 1: Reverse run, measured data+	0	Select the "SET" key in the menu
F 35	Single speed and double speed positioning	0: Single speed (full speed) 1: Double speed (high speed and low speed)	0	Ditto
F 36	Positioning complete relay output time	0-----59S	2	Modify the "number" key in the menu.
F 37	Motor fault detection time	0.1-----9S	2	Ditto
F 38	Number of times to allow for repeated positioning	1-----5	1	Select the "SET" key in the menu
F 39	Allow input minus	0: Not allow 1: allow	0	Ditto
F 70	Upward momentum	0-----30	3	Modify the "number" key in the menu.
F 71	Downward inertia	0-----30	3	Ditto
F 72	Distance of motor reverse return	0.5-----200	1.5	Ditto
F 98	Factory Reset	Enter the password 4321		Press "ENTER" key to confirm
F 99	Automatic reading head and tape installation spacing error (improve measurement accuracy)			In the menu through the panel on the "up" button to run about 100mm

C: Other settings

1: Current value setting:

Press "SET" → "Enter the current position value" → long press "SET" key, save and switch

Current position value display

2: Point move value modification:



According to the "STEP /-" button on the panel → "Enter a value to be run at a time" → again

Press "ENTER" key to save settings



Debugging steps

1: Check the line to ensure that the connection is correct, the reading head and tape installation gap is

1.0mm

2: Press the panel  button or , running direction and direction is a numerical expected to, if in the process of "E02" alarm message, motor operation and measurement in the opposite direction, please replace the line or set the "F 34" menu parameters, until the correct

3: The implementation of the "F 99" menu, automatic installation error, improve the measurement accuracy (if the read head installed too close or too far away, in the process there will be error), about running 100mm, during the show "GO_ __" said progress.

4: Current value setting, press "SET"  "Enter the current position value"  Press "SET" key again, save and switch the current position value display

5: Other menu parameters, according to the need to set free

Alarm prompt information

E01 Input error

E02 Swap measurement/control direction

E03 Motor no action

E04 Ultra low limit

E05 Super high limit

E06 Sensor fault

E07 No magnetic stripe

E08 Low battery

E09 Tape distance head too close

E10 The tape is too far away from the head.

E12 No battery or battery

E20 Display area super range

Operation mode

1 : Press "SET"  "Enter target value"  按 " " key, Start automatic operation

2 : Press "SET"  "Enter a numeric value that needs to be added / reduced"

 Press " " key, or " " key, Start automatic operation

3: Long press " " key, or " " key, Start automatic operation

4: By pressing the external function key, start the auto increase, or reduce the height of the fixed value

Line connection (terminal number right)

1: AC0V

2: AC220

3: AC110V(Need order)

4: DC12V output (max 0.3A)

5: DC0V

7: The external motor position is reset to the upper one.

8: External up a fixed length value button

9: External drop with a fixed length value button

14, 15 : Relay output position "-" contact (contact pressure Max 240V, 5A)

16, 17 : Relay output position "+" contact (contact pressure Max 240V, 5A)

18, 19 : Relay output "positioning complete" contact (contact voltage maximum 240V, 5A)

20, 21 : Relay output "deceleration" contact (contact pressure maximum 240V, 5A)

Appearance structure diagram (unit mm)

