

1. Intruduce

This product is a special tool measuring system for CNC machining center. It uses cable connection to continue real-time communication with CNC machine tool. The measuring signal of probe is output to CNC system in real time through cable. With special macro program, it can realize tool length / tool diameter / deflection measurement.

Five direction tool setting USER MANUAL

2. Construction, dimensions and specifications

A. Dimensions

B Installation examples:







3. Precautions for installation

(1) Mechanics

- 1. Please try to install it on the worktable where there are few iron filings
- 2. Please install the base correctly before use
- 3. Please ensure that the levelness of the upper surface of the tool block is less than 0.005mm after installation. And ensure that the bolt can provide enough tightening force to protect the stability and safety of the tool setting instrumen

(2) Electrical

- 1.Be sure to use it within the rated power range. (12-30vdc)
- 2. Grounding protection or shielding is required for the mounting base.

(3) Output signal of tool setting:

Signal: normally open(NO)

(4) Installation and replacement of tool block

- 1.In order to avoid the damage of tool setting instrument and measuring needle during transportation, our company has disassembled the tool setting block from the tool setting and packed it separately before delivering and transporting the probe; Please install the probe according to the instruction manual.
- 2. When installing the measuring needle, special spanner should be used; Screw the measuring needle into the measuring needle base. When the measuring needle is screwed to a fixed position, tighten it properly with a matching wrench.
- 3.The tool setting instrument can be installed with a variety of measuring needles with M4 coarse thread. When the user needs to replace the measuring needles, the removal and installation of the measuring needles should be in accordance with the above instructions

4. Specification

model	DMTS-L
output	NO(Normally open)
Sense directions	±X,±Y,+Z
Pretravel	0
travel	XY +/-15°, Z-6.35mm
Repeatability	<1um
Trigger life	>10million
Protect structure	IP68
contact force	XY0.4N~0.8N,Z-4.0N
Signal transmission method	Cable
Contact material	Tungsten carbide
Surface finishing	Grinding 4s
Rated voltage and current	DC24V 20mA
Cable	Oilresistant, standard
	3m(length can be
	customized)Minimum radius R7
LED lamp	Default: LED OFF/
	Operating: LED ON

5. Wiring diagram of tool setting

A output mode of high level signal::

Electrical circuit diagram

	0	Red 24V DC
Main	0	Black OV DC
circuit	0	Yellow 24V DC
	0	Green output mode of high level signal

B output mode of low level signal:

Electrical circuit diagram

	0	Red 24V DC
Main	0	Black OV DC
circuit	0	Yellow OV DC
	0	Green output mode of low level signal