

# M26D-20 Tool Setter Manual

### **Product profile**

Silvercnc tool setter with built-in "High-precision machine tools including CNC machining centers.

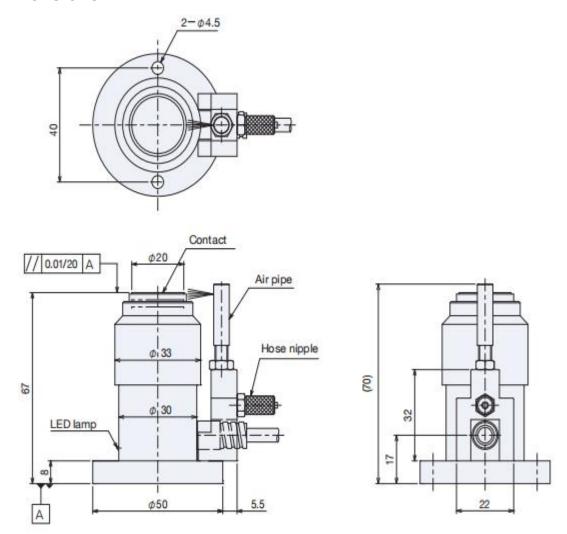
In addition to presetting tool length, tool setters can be used to detect wear and breakage and correct thermal distortion.

Shorten the measuring time of tools and improve the running time of machine tools, Save manpower and prevent unqualified products

#### **Fundamentals**

The output switching signal of the cutter is received by the NUMERICAL control system, and then the signal is controlled by the program to realize the tool length setting, tool wear, breakage detection, compensation and so on.

#### **Dimensions**



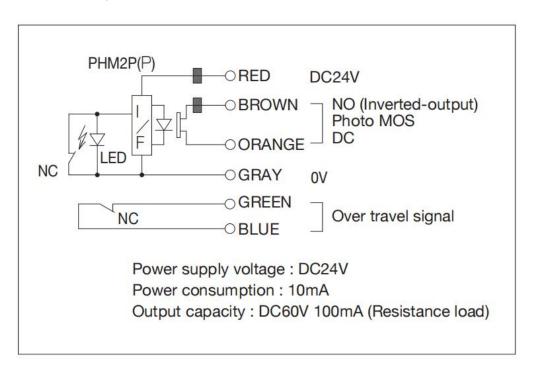


## **Specifications**

Product name	M26D-20
Contact diameter	Ø20mm
Surface finishing	Grinding 4s
Contact material	Tungsten carbide
Contact structure	NC (Normally closed)
Pretravel	0
Stroke	5mm
Repeatability	0.002(Recommended operating speed of 50 - 200mm/min)
Contact life time	3 million
Protective structure	IP67
Contact force	1.5N (Installation position: Vertical)
Cable	Oil resistant, standard 5 m (length can be customized)φ4.8 / 6 cores
LED lamp	Default : LED OFF / Operating : LED ON
Over travel signal (built-in microswitch)	,
Output made	NC normally closed (an emergency stop when the signal

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Output mode	NC normally closed (an emergency stop when the signal
	broken )
Contact rating	DC24V 20 mA resistive load

## Circuit diagram





### installation precautions

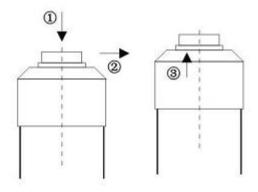
- 1, try to install in the table with less iron filings and splash.
- 2. It must be installed vertically to ensure that the bottom is flat to avoid excessive accuracy error.
- 3. After the completion of wiring, place the tool setter in place of the tool setting, and fix the correct position after testing the tool setter.
- 4. Please use it within the DC+24V $\pm$ 10% 20mA(MAX) , to avoid overload and burn out the internal components.
- 4. The tension resistance of power supply and signal line is below 20N (2kg), and the bending radius of the metal tube of power line is R7.
- 5. If it is necessary to use pneumatic, the outer diameter and inner diameter of the air pipe shall be 4mm and 2.5mm respectively, and the recommended air pressure shall be 0.3-0.6Mpa.

### **Special precautions**

- 1. The diameter of the tool should be controlled below 20mm
- 2. The tool speed below 50-200mm/min (the speed is related to the electrical response of the machine)
- 3. Please pay attention to the chip and clean the surface where the air pipe cannot be blown, and do not accumulate filings
- 4. Please do not rotate the head of the tool setter, which may hurt the precision components
- 5.Install the blowing device properly to prevent leakage and detonation of the pipe
- 6. Use ambient temperature at -25-70 degrees Celsius
- 7. When high pressure coolant and water jet impact the tool setter face, please set a protective cover
- 8. Do not exceed the stroke of the tool setter (the stroke is 5mm) during contact, otherwise the internal precision components will be damaged
- 9. Please do not use your hands to press the surface to spring, which will damage the internal precision components
- 10. Use the center of the tool setter face as far as possible , lift the surface in vertically way , do not leave horizontally

## Key points of the tool setter program

The following parameters need to be changed in the first time use of the tool macro program.





```
09020 (AUTO-TOOL-LENGTH-MEASUREMENT)
           (The center position of the tool setter mechanical coordinate X axis direction)
#511=-70.8 (The center position of the tool setter mechanical coordinate Y axis direction)
#100=1500 (FIRST FEED)
#101=1200 (SECOND FEED)
#102=511. (Z MAX TRAVEL)
#103=4 (RE MEASUREMENT ERROR)
#104=0.05(TOOL MAX WEAR)
#105=50(MAX DIAMETER)
#106=15(OVER TOOL DIAMETER Y OFFSET)
#513=539.661(OFFSET)
#3003=1 (SINGLE BLOCK DISABLE):
#512=-350
                (First tool position)
M99
%
```

#### Guarantee

- 1. If the instrument is damaged, please take good care of it for the maintenance certificate.
- 2. The warranty period shall be 12 months from the date of purchase, and any problem within 15 days will be guaranteed.
- 3. In the case of normal use and maintenance of the product within the warranty period, if the material and process of the fuselage has problems or faults, the company will provide free repair and replacement of parts upon verification.

## Not free under the following circumstances:

- 1. Tool setter is damaged due to improper installation and operation
- 2. Disassemble the product, modify and replace the internal parts
- 3. Water, oil and other substances infiltrate into the machine and cause damage due to negligent use
- 4. Failure or damage caused by natural disasters