

Composition of Probe

TP300 series of cable probe consist of three pieces:

- 1) TP300 trigger probe unit;
- 2) HPI-A16 (axial outlet) or HPI-R16 (radial outlet) probe shank containing the probe's interface and cable;
- 3) Stylus(standard model: M4-P50-RB6-S36).



Technical Parameters

1) The technical parameters of TP300 trigger probe :

- ◆ Stylus sensing direction: $\pm X, \pm Y, +Z$;
- ◆ Stylus sensing over-travel : $X-Y \pm 15^\circ, Z +5 \text{ mm}$;
- ◆ The trigger force in Z direction: 1000 g;
- ◆ Trigger force in X-Y surface (standard stylus) : 65-130g;
- ◆ Unidirectional repeatability (2σ) : $\leq 2 \mu\text{m}$;
- ◆ Seal grade: IP68.

2) The technical parameters of probe's interface:

- ◆ Input voltage is $24 \pm 10\% \text{ V DC}$ and output load current is 50 mA.
- ◆ Seal grade: IP68.

Technical Characteristics

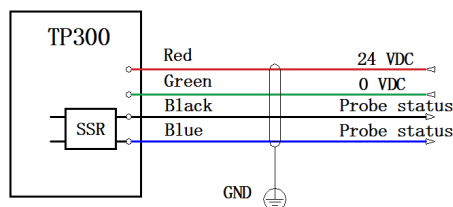
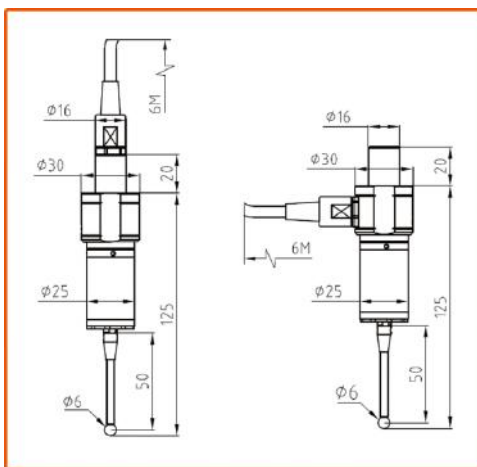
- ◆ The signal interface of probe is integrated inside the probe shank, and the trigger signal is transmitted by cable;
- ◆ By changing the power supply's polarity at the probe interface, the logic state of the output signal can be reversed;
- ◆ The stylus connector of the probe is protected by double layers of rubber seal.

Application

- ◆ Setting work-piece coordinate system and machining zero points automatically before processing;
- ◆ Detect and control the key dimensions, position coordinates and their precision automatically between two processes;
- ◆ Detect precision of the key dimensions, shapes, position after processing.
- ◆ Applicable equipments: various specifications of CNC grinding machines, CNC lathes and specially measuring devices.

Notes for purchase

- ◆ As for special stylus, check whether the standard stylus equipped with the TP300 probe can meet the requirements and whether it is necessary to order special stylus;
- ◆ About sealing protection of the connectors for stylus and probe: for TP300 probe applied in CNC lathe, it is recommended that the customer give protecting instruction to use metal cover + rubber sealing cover when ordering the probe.



Basic configuration

- ◆ The standard: M4-P50-RB6-S36;
- ◆ The model of crash protecting pole: S-11-016;
- ◆ The cable: 4 cores' shielded, oil - proof moving cable, length: 6m.