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: ±X, ±Y, ±Z;
   ◆ Stylus sensing over-travel: X-Y±15°, Z±5 mm;
   ◆ The trigger force in Z direction: 1000 g;
   ◆ Trigger force in X-Y surface (standard stylus): 65-130 g;
   ◆ Unidirectional repeatability (2σ): ≤2 μm;
   ◆ Seal grade: IP68.

2) The technical parameters of probe’s interface:
   ◆ Input voltage is 24 ± 10% 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.

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.

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.