

BOOST MACHINING EFFICIENCY WITH PERFORMANCE INTUITIVE PROBING SYSTEMS (PIPS)

Offering a range of probing and tool measurement solutions for CNC machine tools, the Performance Intuitive Probing Systems (PIPS) enhances machining accuracy and efficiency. Our automated systems deliver significant cost savings and improve overall quality.

Probing and on-machine tool measurement are industry best practices. Manual tool and part setup can negatively impact performance and profitability. Our systems help reduce scrap rates, eliminate downtime, and improve component quality. They support automated setup, in-cycle gauging, tool setting, and broken tool detection, with automatic offset updates, resulting in reduced setup times and enhanced process control.



PIPS (POSP40): Performance Optical Spindle Probe

Key Highlights

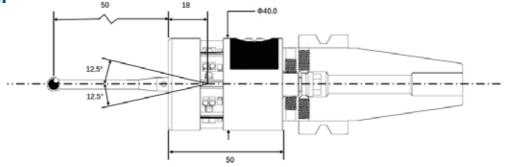
- With a compact design and a probe diameter of only 40mm, it can be utilized on various machine tools, equipped with a tool holder.
- Exhibiting a repeatability of 1um (with 50mm styli at a speed of 600mm/min), ensuring excellent stability.
- Featuring an ultra-low power design, providing a battery life of up to 300 days per year under normal usage.



Technical Specifications:

| Model | POSP40 | |
|---|----------------------------|-----------------------|
| Unidirectional repeatability Use standard 50mm probe at 600mm/min speed | 1um (2σ) | |
| Sense directions | ±X,±Y,+Z | |
| Stylus trigger force Use standard 50mm probe | XY plane 0.4 - 0.8N | Z direction 4.0N |
| Trigger protection trip | XY plane +/-15° | Z direction 6.35mm |
| Signal transmission method | Optical transmission | |
| Operating range | 5m | |
| Trigger life | >10 Million times | |
| Transmission angle | 360 ° along the probe axis | |
| Transmission on/off style | Smart switch | |
| Weight without shank (including batteries) | 280g | |
| Type of battery | 2x lithium battery 14250 | |
| Battery life | Standby | >600 days |
| | 5% use | >540 days |
| | Continue use | >360 days |
| Sealing | IP68 | |
| Operating temperature | 0-60 | |

Dimension:



PIPS (POTP): Performance Optical Table Probe

Key Highlights

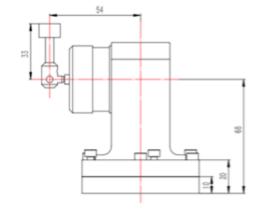
- The wireless tool setter utilizes either an infrared or radio probe as its trigger signal source.
- The signal receiver for the tool setter can be either SIR or SRR.
- This technology is well-established, offering 1um repeatability and stable signal transmission.
- It is capable of sharing a receiver with the workpiece touch probe.

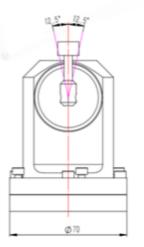


Technical Specifications:

| Model | РОТР | |
|---------------------------|--|--|
| Output | No (Normally open) | |
| Sense directions | ±X,±Y,+Z | |
| Pretravel | 0 | |
| Travel | XY +/-12.5° ,Z -6.35mm | |
| Repeatability | <1um | |
| Trigger life | >10 Million | |
| Protect structure | IP68 | |
| Contact force | XY 0.4~0.8N, Z-4.0N | |
| Signal transmission | Infrared | |
| Contact material | Tungsten carbide | |
| Surface finishing | Grinding 4s | |
| Rated voltage and current | DC24V 20mA | |
| Cable | Oil resistant, standard3m (length can be customized), Minimum radius R7 | |
| LED lamp | Default: LED OFF/ Operating: LED ON | |

Dimension:





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