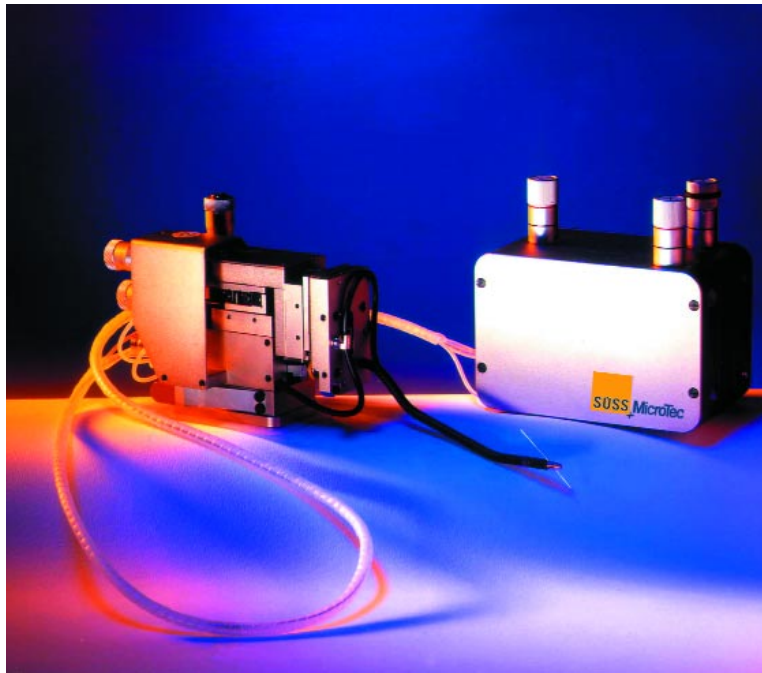


# MANUAL SUBMICRON PROBEHEAD PH400



## SUSS PH400 Manual Submicron ProbeHead

The SUSS line of manual ProbeHeads offers the advantages of proven high quality, superior mechanical and ergonomic design as well as complete product line compatibility.

Without bulky motors or electronics, the PH400 offers the significant advantages of zero-noise probing, a small footprint and an economical cost.

The actuators on the body of the ProbeHead are connected via hydraulic cable to hydro-micrometers located on the remote control unit. The user can choose which set of micrometers to use, depending on the sensitivity of the measurement. The orientation of the remote micrometers on the controller matches those on the ProbeHead for ease of use and guarantees a fine positioning for all axis with a travel range of 0.4 mm.

[www.suss.com](http://www.suss.com)

## Features and Benefits

- Ultra-high-resolution remote control
- Superior mechanical and ergonomic design
- True submicron hands-off probing
- Silent probing (no electronics or motors)
- Extremely cost-effective remotely controlled manual ProbeHead
- Compatible with all PH150 arms and bases
- Single and double arms with gold-plated collet clamping

The mechanical design of the PH400 body is based on the same reliable mechanics as the PH150, making the PH400 completely compatible with all PH150 accessories. This gives the advantage of sharing probe arms and bases, depending on application needs.

The faceplate of the PH400 provides extra coarse Z movement of  $\pm 7.5$  mm for maximizing the flexibility of the ProbeHead. Additionally, all probe arms can be fixed in different places on the faceplate to broaden the positioning scope. This remote control positioner is designed with interchangeable arms such as Triax, Coax, and Kelvin as well as arms for backside probing. This variety gives the operator highest application flexibility, covering DC and HF as well as high voltage and low leakage testing with the one ProbeHead body.

The design of the PH400 incorporates a robust, independent X, Y and Z stage system, which is free of mechanical cross talk and achieves true, submicron positioning with zero backlash.

**SUSS** + MicroTec

Lithography

Bonding

Wet Processing

Testing

## Technical Data: SUSS PH400 Manual Submicron ProbeHead

### Travel Range

Travel Range X, Y	10 mm
Travel Range Z	8 mm
Z Coarse Adjustment	± 7.5 mm
Fine Adjustment Range	
X, Y, Z (hydraulic)	0.4 mm

### Resolution

Feature Resolution	0.2 µm
Remote Capability	900 mm hose length
Screw Resolution X, Y, Z	500 µm/rev (50 tpi)
Fine Adjustment Screws	5 µm/rev (5000 tpi)

### Bases

Choose between	Vacuum
	Magnetic
	Clamping

### Footprint

Footprint Dimension	75 x 50 mm
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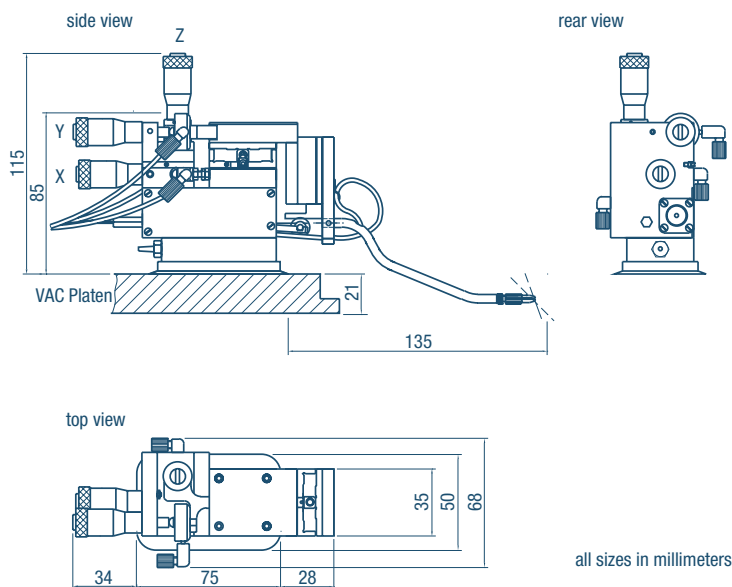
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SUSS' gold-plated collet clamping design provides maximum flexibility and freedom to adjust the needles to three pre-defined angles while guaranteeing that the tip is held firmly in place.

**SUSS. Our Solutions Set Standards.**