

# MANUAL PROBEHEAD PH120

Lithography

Bonding

Wet Processing

Testing



## SUSS PH120 Manual ProbeHead

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

The SUSS ProbeHead PH120 is the ultimate blend of cost-effective probing and high quality mechanics. This compact and robust 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.

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

## Features and Benefits

- Robust, cost-effective, 3  $\mu$ m probing
- Superior mechanical and ergonomic design
- True, independent X, Y and Z linear travel
- Adjustable faceplate for additional coarse Z movement
- Variable positioning of arms on the faceplate
- Interchangeable arms for all types of probing applications (e.g. HF, low leakage)
- Ball-bearing slides
- High-resolution micrometers
- Single and double arms with gold-plated collet clampings

The PH120 incorporates an independent X, Y and Z stage system with a maximum mechanical cross-talk deviation of 3 microns. Each stage incorporates hardened steel rails and ball bearings assembled to strict specifications. Each axis has 8 mm of travel with the choice of either 50 or 100 tpi (threads per inch) resolution.

The faceplate provides additional coarse Z movement of  $\pm 5$  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.

All micrometers are ergonomically located at the rear of the ProbeHead. Accordingly, the same PH120 can be placed either on the left or on the right side of the platen making dedicated left or right positioners unnecessary. Accurate, gentle probe needle touch down is not influenced by finger pressure.

**SUSS** + MicroTec

## Technical Data: SUSS PH120 Manual ProbeHead

### Travel Range

Travel Range X, Y, Z 8 mm

Z Coarse Adjustment  $\pm 5$  mm

### Resolution

Feature Resolution 3  $\mu$ m

Screw Resolution X, Y 250  $\mu$ m/rev (100 tpi)

or 500  $\mu$ m/rev (50 tpi)

Screw Resolution Z 250  $\mu$ m/rev (100 tpi)

### Bases

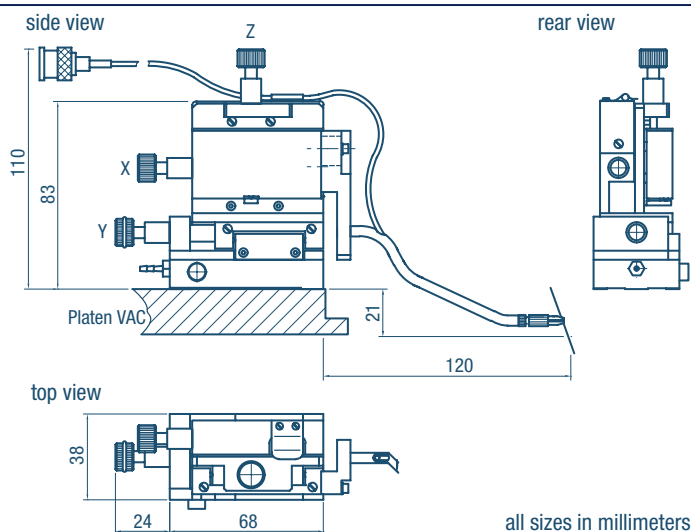
Choose between Vacuum

Magnetic

Clamping

### Footprint

Footprint Dimension 68 x 38 mm



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.

The PH120 vacuum base system uses dual circular vacuum ports to guarantee strong holding power. Vacuum actuation is controlled by a convenient, body-mounted, "easy touch" plunger. This gives the operator complete control of the ProbeHead positioning without gross probe-needle deviation in the Z direction. Magnetic or clamping bases are also available.

### ASIA

#### SUSS MicroTec KK (Japan)

GITC 1-18-2, Hakusan, Midori-ku

Yokohama, Kanagawa, Japan 226-0006

Phone (+81)-45-9 31-56 00 · Fax (+81)-45-931-56 01

#### SUSS MicroTec (Shanghai) Co., Ltd.

580 Nanjing W. Rd

Nanzheng Building Room 606 · 200041 Shanghai PRC

Phone (+86) 21-52 34 04 32 · Fax (+86) 21-52 34 04 30

#### SUSS MicroTec (Taiwan) Co., Ltd.

8F-11 · No. 81 · Shui-Lee Road · Hsin-Chu · 300 · Taiwan

Phone (+886)-(3)-5 16 90 98 · Fax (+886)-(3)-5 16 92 62

#### SUSS MicroTec Co., Ltd. (South and Northeast Asia)

3388/92-93 · 25th Floor · Sirinrat Building

Rama IV Road · Klongtoey · Bangkok 10110 · Thailand

Phone (+66)-(0)-23 50 60 38 · Fax (+66)-(0)-26 33 57 28

### EUROPE

#### SUSS MicroTec S.A.

Avenue des Colombières · F-74490 Saint Jeoire · France

Phone (+33)-(0) 4 50 35 83 92 · Fax (+33)-(0) 4 50 35 88 01

#### SUSS MicroTec Test Systems GmbH

Süss-Strasse 1 · D-01561 Sacka/Dresden · Germany

Phone (+49)-(0) 35240-73-0 · Fax (+49)-(0) 35240-73-700

### NORTH AMERICA

#### SUSS MicroTec Inc.

228 Suss Drive · Waterbury Center, VT 05677 · USA

Phone (+1) (802) 244-5181 · Fax (+1) (802) 244-7853

#### SUSS MicroTec Inc.

Western Regional Sales Office

8240 So. Kyrene Road Suite 101

Tempe, AZ 85284-2117 · USA

Phone (+1) (480) 557-9370 · Fax (+1) (480) 557-9371

SUSS. Our Solutions Set Standards.