



**Probing Solutions.
Made in Germany.**

EN



3D Probe Positioners

Stepless Adjustable, Hands-free Testing

0 °C to +50 °C

About 3D Probe Positioners

The 3D probes positioners are the third helping hand in any lab for precise and semi-permanent positioning of probes. Various probe holder models are available for different probe shapes allowing to start and stop measurements all the time without losing contact to the test point, e.g. when using PMK probes with spring loaded tips for best signal fidelity. The setup is quick and easy offering greatest flexibility during every day's measurement tasks. The operating and storage temperature range is 0°C to +50°C, at non-condensing humidity.

Each 3D probe positioners consist out of three items, a base, an arm, and a probe holder itself. All components can be exchanged to fit the specific requirements of different test setups and accessories* in use. The customer may choose from four different bases, steel base, table clamp magnetic foot and vacuum cup, as well as different arm lengths of 130mm and 200mm, and multiple probe holders.

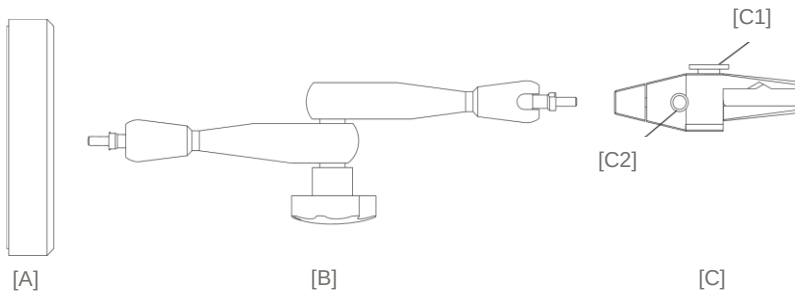
The arms and probe holders from the 3D positioners are compatible to PMK's SKID positioning systems for probes and PCBs, which are also available for temperature ranges from -55°C to +155°C.

Getting Started

Read the Getting Started section before first use. The 3D Probe Positioners are delivered in three single components: Base [A], positioning arm [B] and probe holder [C]. The base, arm length, and probe holder can vary, depending on the use case and lab environment.

Assembly

Screw the positioner arm [B] to the product specific base [A] with M6 thread, and tighten it with the 7mm wrench from the scope of delivery. The base [A] is available in three different variants: Steel base, vacuum base or table clamp. The positioner arms [B] with M6 thread are available with 130mm and 200mm span width. The probe holder [C] depends on the probe being in use. The drawing below shows the universal probe holder as example.



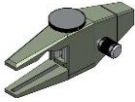
Assembly Overview, Example

Notes:

* PMK offers a variety of high quality connectivity solutions maintaining measurements with highest signal fidelity.

Clamping the Probe

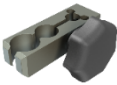
- **Universal Probe Holder (893-090-000)**



Release the holder adjustable screw [C1] and clamp the probe into the probe holder [C], as shown in the figure above. To fix the probe, turn the holder adjustable screw [C1] contrary until the probe is fixed.

To increase the pressure on a rigid probe tip, if necessary, trim the Probe-Holder by the means of the spring-mounted set-screw [C2]. When using PMK's spring loaded tips, this setting is not required.

- **PMK Probe Holder (893-050-000)**



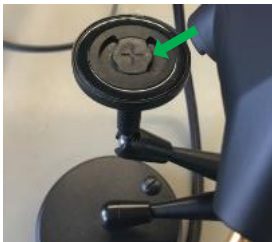
Release the holder adjustable screw [C1] and clamp the probe into the probe holder [C]. To fix the probe into the holder turn the holder adjustable screw [C1] contrary until the probe is fixed.

- **FireFly® Probe Holder (FF-HAL10kV)**

Insert the FireFly® probe from the top. Before turning the FireFly® probe by 90° to mount or unmount, make sure the probe is fully inserted and seated into the holder.



The probe holder consists of an insulating material that provides an isolation voltage up to 10kV. Observe the required distance of the FireFly® probe head to earth ground.



Insert / remove probe



Make sure probe head is fully inserted and seated into holder



Twist by 90° to mount or unmount



Make sure to use the 10kV insulating FireFly® probe positioner FF-3DPOS200 and FireFly® probe holder FF-HAL10kV in a clean lab environment without any pollution, dust or dirt to maintain the specified isolation voltage.

- **BumbleBee® Twin Holder (893-100-004)**



Insert the BumbleBee® high-voltage differential probe's input leads equipped with BumbleBee® probe tip adapters 4mm to 0.8mm (890-880-103) and needle pin tips (890-880-101 / 890-880-102) to the opening of this dual lead holder for hands-free positioning.

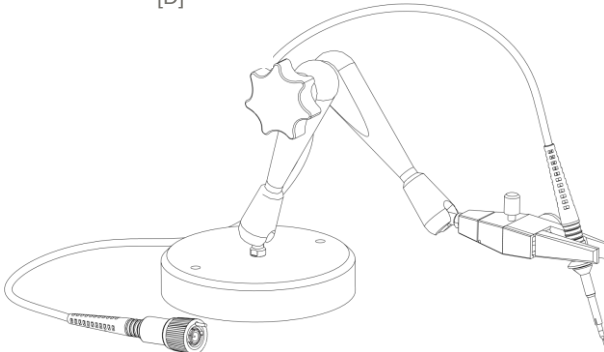
Handling and Re-Positioning

The 3D Probe Positioner can be operated easily. Hold the 3D Probe Positioner and loosen the central tensioning knob [D] until the 3D Probe Positioner can be moved.



Do not release the tensioning knob [D] completely, otherwise the 3D Probe Positioner collapses in itself and could damage your measuring setup.

[D]



Tensioning knob [D], Example

Bring the 3D Probe Positioner into the desired position and fix the device by turning the central tensioning knob [D] contrary. With the spring tip of PMK probes you can precisely set the contact to the measuring point.

Maintenance and General Notes

The 3D Probe Positioners are almost maintenance-free. However if the device is exposed to pollution, regular cleaning is necessary. Remove dust and dirt from the joints.



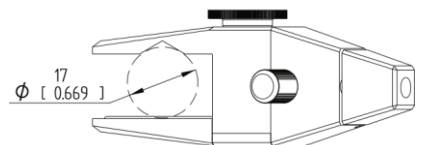
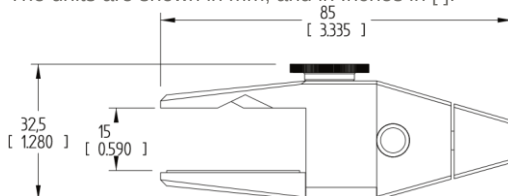
Make sure to use the 10kV insulating FireFly® probe positioner FF-3DPOS200 and FireFly® probe holder FF-HAL10kV in a clean lab environment without any pollution, dust or dirt to maintain the specified isolation voltage.

For cleaning purposes use standard cleaning agents commercially available. Don't use any lye or acids.

Apply a little amount of lubricant to the screws and joints, as needed.

Dimensional Drawing Universal holder (893-090-000)

The units are shown in mm, and in Inches [].



Scope of Delivery

3D Probe Positioning System
Wrench 7mm (893-000-SW7)
Instruction Manual

Ordering Information

Ready to Use Systems

Select one of the 3D probe positioning systems. All items can be exchanged.

Order No.	Item	Picture
893-350-006	Universal 3D Probe Positioner MSU1500 with steel base (893-100-001), arm with span width 200mm (893-200-200), universal probe holder (893-090-000)	
893-350-011	Universal 3D Probe Positioner with magnet foot (893-100-004), arm with span width 200mm (893-200-200), universal probe holder (893-090-000)	
FF-3DPOS200	FireFly® 3D Probe Positioner for 10kV Insulation with steel base (893-100-001), arm with span width 200mm (893-200-200), FireFly® probe holder (FF-HAL10kV)	
893-350-010	BumbleBee® 3D positioner with steel base, 200 mm span width and Twin Holder, ideal for positioning of a BumbleBee® probe with spring loaded tips	
893-350-001	PMK 3D Probe Positioner "MSA100" with steel base (893-100-001), arm with span width 200mm (893-200-200), PMK probe holder 5-12mm (893-050-000)	
893-350-002	PMK 3D Probe Positioner "MSB40" with table clamp (893-100-002), arm with span width 200mm (893-200-200), PMK probe holder 5-12mm (893-050-000)	
893-350-003	PMK 3D Probe Positioner "MSC85" with vacuum cup (893-100-003), arm with span width 200mm (893-200-200), PMK probe holder 5-12mm (893-050-000)	
893-350-004	PMK 3D Probe Positioner "MSM130" with magnet foot (893-100-004), arm with span width 130mm (893-200-130), PMK probe holder 5-12mm (893-050-000)	
893-350-005	PMK 3D Probe Positioner "MSM200" with magnet foot (893-100-004), arm with span width 200mm (893-200-200), PMK probe holder 5-12mm (893-050-000)	

Extend your System

The probe holders can be used with any ready to use positioning system or with the PMK SKID series for probe and PCB board positioning.

Order No.	Item	Picture
893-090-000	Universal Probe holder for probes with diameter up to 17mm, M6 thread	
893-100-004	BumbleBee® Series Probe Holder for most precise measurements with needle pin tips (890-880-101 / 890-880-102) and Probe Tip Adapters 4mm to 0.8mm (890-880-103), holding two 4mm banana plugs, M6 thread	
FF-HAL10kV-3	FireFly® Series non-conducting High Voltage Differential Probe Holder for 10kV Voltage Insulation, M6 thread, pack of three	
893-050-000	PMK probe holder for probes with 5mm to 12mm probe tip diameter, M6 thread	
893-010-000	Twin Adapter to 2xM6 thread Ball End for connecting two of PMK's probe holders to one positioning arm, M6 thread	
893-000-SW7	Wrench 7mm	

Notes

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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Änderungen der Spezifikationen vorbehalten.