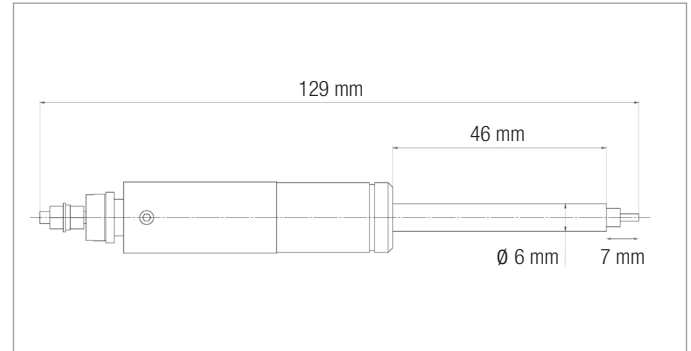


# DATA SHEET

## Accessories: High voltage Kelvin pins KK 10



High voltage Kelvin pin KK 10-6 with various shaft lengths



High voltage Kelvin pin KK 10-6-13 (standard)

<b>Description</b>	<p>The name Kelvin describes the applied 4-wire-technique. This means that the test signal and the measurement signal (sensor wire) are separately led to the DUT. Only with this technique low-ohm measurements are possible. This is one possible application of the high voltage Kelvin pins. The actual application however is with the high voltage test. By means of this technique the high voltage is conducted via a pin and measured back by a second pin. As the DUT itself short-circuits the test line with the measurement line it can be 100% ensured that the high voltage is applied during the test. As all manufacturers of electrotechnical devices have to prove in case of an error the implementation of the safety test (and that is almost always mainly the high voltage test), there is no way around this Kelvin technique. A particular problem is presented in regard to the high voltage test if there are metallic screws in the DUT made of plastic (such as e.g. in power tools). These screws can due to faulty production be live and thus dangerous. A high voltage test is absolutely unavoidable. However if the screw is not there a PASS test will always be displayed as a result. Here the high voltage Kelvin pin can remedy that. This example of the screw is applicable to many other metallic components. Only if the implementation of the high voltage test is ensured proof can be furnished according to the applicable product liability law.</p>	
<b>Mechanical data</b>	Smallest permissible distance of assembly:	22 mm (0.87 in.)
	Recommended mounting hole:	15 mm +0,1 mm/+0,05 mm (0.59 in. +0.004 in./+0.002 in.)
	Maximum spring travel:	15 mm (0.59 in.)
	Spring pressure:	8 N
<b>Electrical data</b>	Maximum current:	10 A
	Maximum voltage in a not contacted state:	3.5 kV
	Ri (typical):	50 mΩ
<b>KK 10-6-9 (standard)</b>	<ul style="list-style-type: none"> <li>• High voltage Kelvin pin with 6 mm (0.24 in.) outer diameter, 46 mm (1.81 in.) shaft length and 129 mm (5.08 in.) total length</li> <li>• Electrical connections via soldering tag</li> <li>• Impact-proof plastic housing, black</li> <li>• POM insulation between source and sense pin</li> <li>• Test voltage source / sense = 2,000 V AC</li> <li>• Test voltage housing / Kelvin pin = 5,500 V AC</li> <li>• Step model available</li> </ul>	

### Versions

Type	Shaft length	Total length
KK 10-6-9	16 mm (0.63 in.)	99 mm (3.90 in.)
KK 10-6-13	46 mm (1.81 in.)	129 mm (5.08 in.)
KK 10-6-14	70 mm (2.76 in.)	153 mm (5.63 in.)
KK 10-6-18	93 mm (3.66 in.)	176 mm (6.93 in.)