

Options for Water Terminations Series Pico 75 kV...150 kV

Conductivity Meter for Process Water Model Vario-Cond

With new resin the conductivity of the process water in the water terminations will be around 0.1 $\mu\text{S}/\text{cm}$ (10 $\text{M}\Omega\text{cm}$).

If the conductivity increases to more than 1 $\mu\text{S}/\text{cm}$ it is time to exchange the resin.

This can be noticed when the temperature of the process water rises to more than 50 $^{\circ}\text{C}$, if the test voltage is applied during a longer period of time.

In order to avoid surprises it is advisable to measure the conductivity in set periods of time, typically once week.

The Vario-Cond is the right tool for this task. The sensor is simply introduced into the cable opening of the Pico. The conductivity (specific resistance) and the temperature is indicated immediately on the large touch screen.

You can choose whether you want to have indicated the specific resistance or the conductivity.



Main features:

- Large measuring range 0.01....200 $\mu\text{S}/\text{cm}$
- Touch screen
- Automatic range selection
- 1000 h of operation with one battery
- Automatic switch off after 10 min in standby state.
- Ergonomic handling
- Sturdy design

Spare ion exchange resin Model SR50

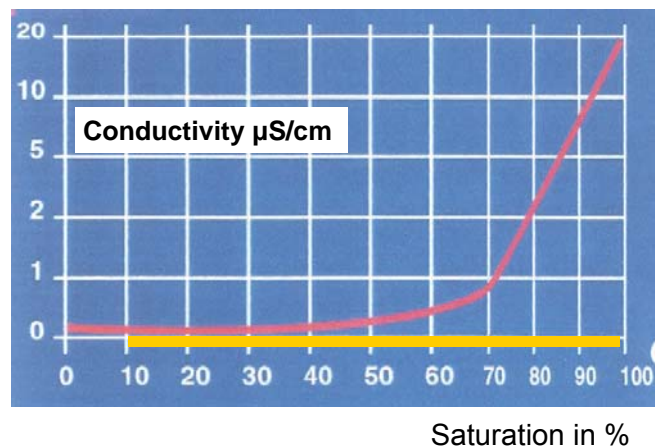
The life time of the resin in the Pico water terminations depends on many factors, such as the

- Cleanliness of the cables to be tested
- Type of semicon of the cables
- Intensity of operation
- Pollution of process water through cable opening (Protection, when out of service)
- Conductivity of water which is used for topping up

The typical life time of a batch of resin is 1 to 2 years.

The conductivity of the process water increases at the beginning rather slowly. After the resin has reached about 70 % of the saturation, the conductivity rises rapidly.

Hivotec delivers the resin in barrels containing 50 liters of resin. The resin is new, not reconditioned. Hivotec does not recondition the resin.



1 Barrel of 50l is good for replacing the resin of a pair of Pico terminations

New resin should not be stored longer than 2 years. We therefore recommend to purchase a barrel of spare resin with the terminations. And then buy another barrel each time the resin is replaced.

Filter Box Model FB230-3/1

For Power supply circuit and safety interlock circuit of the Pico Water Terminations

The pumps for circulating the process water of the terminations are connected to the power supply. The safety interlock circuit is connected to the control system.

In order to make sure that the measuring sensitivity in the PD test field is sufficient, no interference should be introduced into the screened test area.

The power supply and the safety interlock circuit must be free from interference.

Hivotec offers an optional filter box which reduces interference in the power supply and the safety interlock circuit considerably.

Main Features

Rating for power supply 230 V , 3 A
Typical insertion loss, 0,1...10 MHz 30 dB

Rating for safety interlock circuit 230 V , 1 A
Typical insertion loss, 0,1...10 MHz 40 dB



High Voltage Connections Series HVC

In order to make sure that no corona discharges occur on the HV side, correctly dimensioned HV connections are needed.

The Hivotec light-weight, flexible HV connections are matched perfectly to the Pico terminations.

The HVC Series may also be used for interconnecting other components of the HV test circuit, such as the coupling capacitor, HV-filter, and the HV-transformer or resonant test system.



HVC150 with matching plug

Model	HVC75-3	HVC75-5	HVC150-3	HVC150-5
Un	75 kV	75 kV	150 kV	150 kV
Length	3 m	5 m	3 m	5 m

The PD-level is less than 1 pC up the rated voltage. Other lengths are available on request.

The HV Connections come with matching parts to be attached to the HV components for connection.



HVC75

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