

The capacity measuring device CAPACITANCE 2000 is installed in the cooling trough and measures online precisely the capacitance of the wire insulation and reliably detects bare patches. Furthermore, the system recognizes periodical capacitance changes and determines the Structural Return Loss (SRL).

## Innovative capacitance measuring

### Multi-Zone-Elektrode

The assurance of highest quality is realized via the combination of a short and long measuring electrode (multi-zone technology), which is integrated into the measuring tube. The short measuring electrode of 10 mm length identifies periodical capacitance variations with high spatial resolution by means of Fast Fourier Transformation (FFT). From the FFT data, the SRL is determined and gives information about the expected attenuation of the RF signal during data transmission. The long measuring zone measures with high precision the average value of the capacitance.

### CD-Control (Capacitance/Diameter-Control)

Precise measuring values for the capacitance and diameter are the basis for a perfect CD-Control. The CD-Control assures that the capacitance and the diameter comply with requirements. This is achieved by an automatic adjustment of the cooling trough and with the control of the line speed. Both influence quantities are controlled by the [ECOCONTROL 6000](#).

### Your Benefits

- Auto-adjusting stand-alone measuring system
- Unique Multi-Zone Electrode
- Reliable capacitance measurement and bare patch detection
- Integrated FFT analysis and SRL prediction

### Specifications

	CAPACITANCE 2010	CAPACITANCE 2025	CAPACITANCE 2060
<b>Product Diameter</b>	0.5 - 10 mm	1,0 - 25 mm	1,0 - 60 mm
<b>Capacitance Range*</b>	0 - 300 pF/m	0 - 300 pF/m	0 - 100 pF/m
<b>Measuring Rate</b>	1,000 Hz	1,000 Hz	1,000 Hz
<b>Accuracy</b>	0.15 % deviation of the measuring range	0.15 % deviation of the measuring range	0.15 % deviation of the measuring range
<b>Resolution</b>	14 bit (10 fF/m at measuring range 100 pF/m, 30 fF/m at measuring range 300 pF/m)	14 bit (10 fF/m at measuring range 100 pF/m, 30 fF/m at measuring range 300 pF/m)	14 bit (10 fF/m at measuring range 100 pF/m, 30 fF/m at measuring range 300 pF/m)
<b>Active Length</b>	125 mm (separated to two measuring zones with 125 and 10 mm)	125 mm (separated to two measuring zones with 125 and 10 mm)	125 mm (separated to two measuring zones with 125 and 10 mm)
<b>Interfaces</b>	RS485, RS232 diagnostic interface optional: two high speed analog outputs 0 to 10 V, industrial fieldbusses like Profibus-Dp, CANopen, DeviceNet, EtherNet/IP or Profinet IO	RS485, RS232 diagnostic interface optional: two high speed analog outputs 0 to 10 V, industrial fieldbusses like Profibus-Dp, CANopen, DeviceNet, EtherNet/IP or Profinet IO	RS485, RS232 diagnostic interface optional: two high speed analog outputs 0 to 10 V, industrial fieldbusses like Profibus-Dp, CANopen, DeviceNet, EtherNet/IP or Profinet IO
<b>Power Supply</b>	115 or 230 V AC $\pm$ 10 %, 50/60 Hz	115 or 230 V AC $\pm$ 10 %, 50/60 Hz	115 or 230 V AC $\pm$ 10 %, 50/60 Hz

\*Other capacitance ranges on demand