PROMPT OLR

LENZING INSTRUMENTS

ONLINE RESISTANCE SENSOR

Electrical resistance and conductivity are decisive quality parameters in the production and processing of filament yarns, especially for conductive or antistatic types and filaments with electrically conductive coatings. By monitoring this property online, manufacturers gain valuable insight into the yarn's electrical behavior, its suitability for downstream operations, and the consistency of its overall performance.

Therefore, the ability to monitor this parameter in real time becomes an essential tool for maintaining high product standards and stable production efficiency.

The **PROMPT OLR** has been developed to provide filament producers with real-time information on resistance and conductivity fluctuations. Immediate feedback minimizes the risk of downgraded material, reduces waste, and secures consistently high product quality. The continuous data stream enables operators to optimize process settings and identify potential issues before they escalate.

EIts robust design and carefully selected materials ensure reliable operation under demanding production conditions, unaffected by vibration, dust, or environmental changes.

With Lenzing Instruments' **PROMPT OLR**, manufacturers obtain continuous, real-time data on the electrical resistance and conductivity of running yarns - allowing for a new level of transparency and control in filament production.

PROMPT OLR is particularly suitable for monitoring conductive and antistatic filaments, as well as filaments with conductive coatings. By continuously measuring resistance and conductivity, the sensor supports customers in maintaining stable product characteristics and ensuring that antistatic or conductive performance is preserved throughout the entire production process.

FILAMENT TESTING

PROMPT OLR

ONLINE RESISTENCE SENSOR

Scope:
Real-time online monitoring of the electrical resistance and conductivity of running filament yarns, including conductive, antistatic, and coated filaments, enabling manufacturers to ensure stable product properties, minimize downgrades, and optimize efficiency across various production applications.

Method:
As the yarn passes through the **PROMPT OLR** sensor, electrical resistance is determined by conductivity-based technology. Instead of pins, conductive precision rollers are used for signal pick-up, ensuring stable contact, gentle yarn handling, and reliable measurement results even at high production speed.

Results:
Depending on configuration, the received sensor signals can be processed either via a PC system with the PROMPT Visualization software - offering comprehensive analysis and reporting

In addition to the live values for assessing product quality, long-term evaluations and statistics can be created thanks to the integrated database system.

Measuring range:
Depending on filament type and application

Yarn speeds:
5 - 200 m/min (others on request)

Sampling rate:
1.6 kHz

Measuring contact:
Conductive precision rollers for gentle yarn handling and reliable signal pick-up

Measuring principle:
Conductivity, resistance measurement via conductive precision rollers

Evaluation and control unit:
PC-controlled evaluation unit

Data communication:
CAN bus from the sensor to the bridge box, Ethernet from the bridge box to PC/PLC

SQL-Database for long-term evaluations

Power supply:
24 VDC

Temperature range:
15 - 45 °C

Relative humidity:
Max. 90 %, non-condensing

Dimensions:
depends on application

Options:
- OPC UA interface

Technical data and pictures are subject to change.

THE TEXTECHNO GROUP

Lenzing Instruments GmbH & Co. KG
A-4851 Gampern, Austria
E-Mail: team@lenzing-instruments.com
www.lenzing-instruments.com

Your reliable partners for quality improvement

Textechno Herbert Stein GmbH & Co. KG
D-41066 Mönchengladbach, Germany
E-Mail: info@textechno.com
www.textechno.com