



Optimum online monitoring of filament yarn means quality improvements and cost reductions in terms of less downgrades, less customer complaints and less costs for raw material, just to mention a few of the advantages which come with the implementation of an online monitoring system in the spinning plant.

With Lenzing Instruments optical sensor **PROMPT OLO**, optimum process control of filament yarn is achieved, since both yarn defects as well as crucial yarn characteristics are monitored continuously with real time graphical and numerical feedback.

Even the smallest defects are detected by **PROMPT OLO**, thereby enabling online monitoring of defects in applications, where this was not possible before due to sensor limitations.

PROMPT OLO monitors multifilament yarn for broken filaments, fluff, titer (dtex, den), interlace and twist. Monofilament yarn is monitored for thin and thick places as well as for diameter variations.

The slim dimensions of **PROMPT OLO** makes positioning easy in productions where common sensors are too wide. The sensor is also available without yarn guides, an option which is suitable for processes where existing yarn guide elements may be applied.

Continuous graphical and numerical results reports are displayed on a user-defined number of client PC's by means of the sophisticated **PROMPT Visualization** software.

Scope:

Optical online sensor for real time monitoring of defects and vital product parameters of filament yarn.

Suitable for all kind of filament like POY, FDY, DTY and filament yarn made of PET, PA, PP and similar materials.

Method:

The filament is guided through the optical **PROMPT OLO** sensor. Defects or varying yarn parameters induce signal fluctuations, which are communicated to the PC by means of a bridge box for data evaluation.

Results:

The results presentation of the received sensor signals depends on if **PROMPT OLO** is used together with a PC system or a PLC.

If the parameterisation of the sensor signals is done via a PC, the results will be presented in the **PROMPT Visualize** software, which offers numerous analysis possibilities. If the parameterisation is done via a PLC, the active sensor status is given by means of the LED display of the sensor and digital signals.

Titer range:

7 - 4000 dtex

Diameter:

10 - 2500 µm

Interlace:

0 - 250 nodes/m

Twist:

0 - 300 twists/m

Production speed:

Up to 8000 m/min

Yarn guide:

Ceramic (exchangeable)

Optional:

Without yarn guides

Sampling rate:

100 kHz

Evaluation and control unit:

PC with Windows® based software

Data communication:

CAN bus from the PROMPT OLO sensor to the bridge box and Ethernet from the bridge box to the PC

- 1 open collector output or 24 V output, optically decoupled, for quality signals and status information
- 1 digital input for winder contacts, optically decoupled for input voltages from 5 to 24 VDC

Input voltage range:

24 VDC

Measuring principle:

Optical

Temperature range:

15 to 45 °C

Relative humidity:

Max. 90 %, not condensing

Protection class:

IP 67

Dimensions:

Height: 27 mm

Width: 50 mm

Depth: 85 mm

Housing:

Aluminium, anodized in black

Technical data and pictures are subject to change!

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