

# ULTRATEMP 6000

Ultrasonic temperature measurement system  
for polyethylene melts



# ULTRATEMP 6000

Ultra-strong temperature measurement



Certified according to  
DIN EN ISO 9001

## Ultrasonic temperature measurement system for polyethylene melts

The ULTRATEMP 6000 is an ultrasonic temperature measuring device for the reliable measurement of polyethylene melts. The melt temperature of the polyethylene, which is used for the insulation of cables, is extremely critical. A few degrees decide between a homogeneous and thus optimum melt and the risk of unmelted or burned material.

The ULTRATEMP 6000 is a temperature measuring system, which continuously measures the temperature of polyethylene melt precisely, directly in the mechanical flow channel between extruder and crosshead. Therefore, it is an essential tool for longer production runs. It operates on a non-contact basis. Besides temperature measurement, the ULTRATEMP 6000 detects inhomogeneities in the melt. Early cross-linking after screens, which may lead to ambers and scorches in the polyethylene material, are avoided.

The high measuring rate allows a fast response time and registers small temperature variations.

The system does not influence the melt flow properties, as the ultrasonic sensors are positioned outside of the flow channel. Therefore, melt shear heating effects do not occur.

ULTRATEMP 6000 contributes to process optimization and costs reduction in CCV or VCV lines.

### Typical features

- Maximization of the extruder output through optimum melt temperature
- Elimination of "scorches" and early cross-linking in the extruder head
- Detects inhomogeneities in the melt
- Non-contact, no melt shear heating effects

## Technical Data ULTRATEMP 6000

### Measuring Principle

Non-contact, non-invasive temperature measurement based on ultrasonic technology

### Measuring Range

+ 100 to + 180°C

### Accuracy

< ± 1°C deviation

### Interfaces

RS485 + RS232 diagnostic interface serially  
Optional: Profibus-DP interface, Analog output

### Power Supply

110 ... 230 V AC ± 10%, 50/60 Hz, 35 VA

Technical data is subject to change



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