

# Heat and Frost: Sensor Technology for Extremes

## Inductive Sensors for Temperature Ranges from $-60$ to $+450^{\circ}\text{C}$



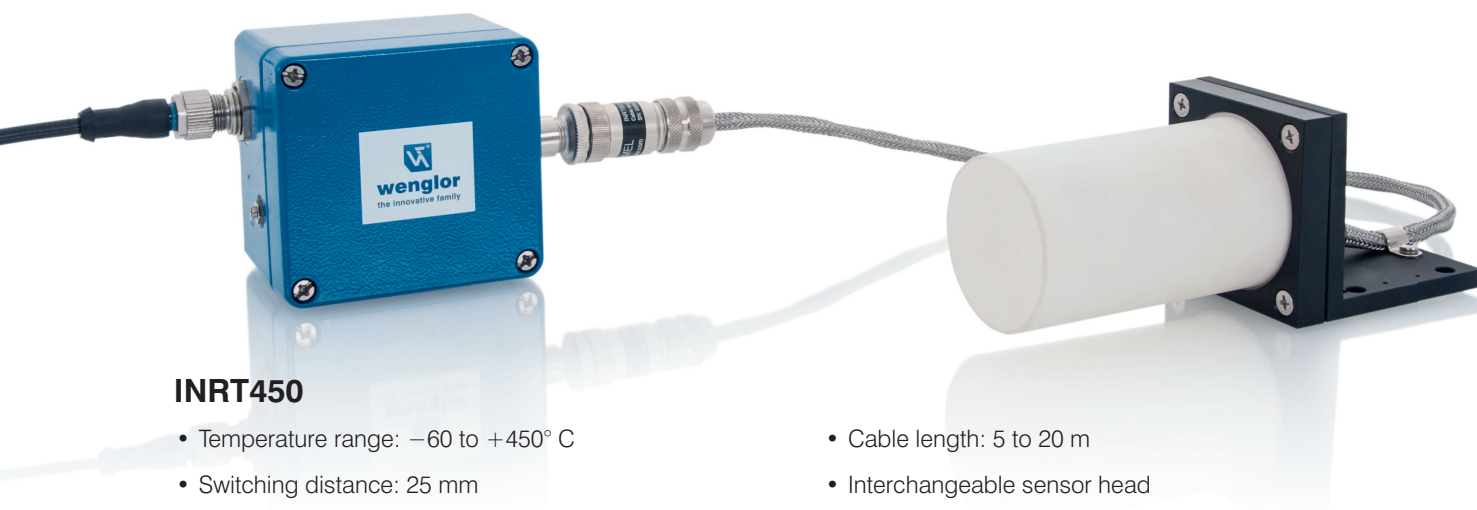


# Resistant to Heat and Cold, Long Service Life

wenglor's Inductive Sensors ensure reliable detection of metallic objects in extreme temperature ranges. With three different sensor series, the product portfolio covers a comprehensive range of temperatures from  $-60$  to  $+450^{\circ}\text{C}$ . Availability of your system is increased thanks to extended switching distances and the patented maintenance output. With a long service life of seven to ten years, the twelve intelligent sensors are reliable, high-performance products for use in the automotive, metalworking, food and glass industries.

## INRT450 Inductive Sensor for Extreme Temperature Ranges

The INRT450 Inductive Sensor for extreme temperature ranges is the absolute worldwide forerunner where resistance to heat and cold is concerned. With a range of use from  $-60$  to  $+450^{\circ}\text{C}$  and a switching distance of 25 mm, the sensor masters demanding detection tasks in extreme temperature ranges.



### INRT450

- Temperature range:  $-60$  to  $+450^{\circ}\text{C}$
- Switching distance: 25 mm
- Cable length: 5 to 20 m
- Interchangeable sensor head



### Metalworking Industry

The range of applications in the metalworking industry is highly diverse: the Inductive Sensors can be used for a great variety of monitoring tasks in extreme heat in rolling plants, forges, steel mills, foundries and sinter plants.



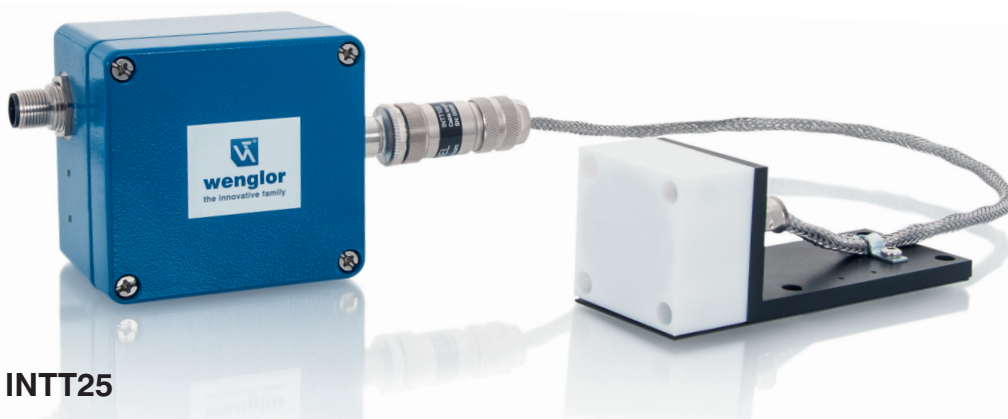
### Deep-Frozen Food Production

Not only in high temperature zones, but rather in applications involving extremely low temperatures as well, wenglor's Inductive Sensors earn high scores. They function reliably and accurately in cold storage facilities and shock-freezing systems for foods at down to  $-60^{\circ}\text{C}$ .



## INTT25 and INTT40 Inductive Sensors for Extreme Temperature Ranges

With switching distances of 25 and 40 mm as well as a temperature range of  $-10$  to  $+250^{\circ}\text{C}$ , INTT25 and INTT40 Inductive Sensors have been designed for applications in the metalworking, automotive and food industries. The patented maintenance output provides for optimized system utilization and availability.



### INTT25

- Switching distance: 25 mm
- Temperature range:  $-10$  to  $+250^{\circ}\text{C}$
- Cable length: 5 to 20 m
- Patented maintenance output
- Interchangeable sensor head



© Dür Systems GmbH

### Automotive Industry

In particular cathodic dip painting and other coating processes are classic applications for this sensor series. However they're ideally suited for use in the production of ceramic parts such as brake calipers, spark plugs and catalytic converters as well.



### Tile Production

Monitoring of oven doors, flaps and plates in tile production plants are central applications for this product series.





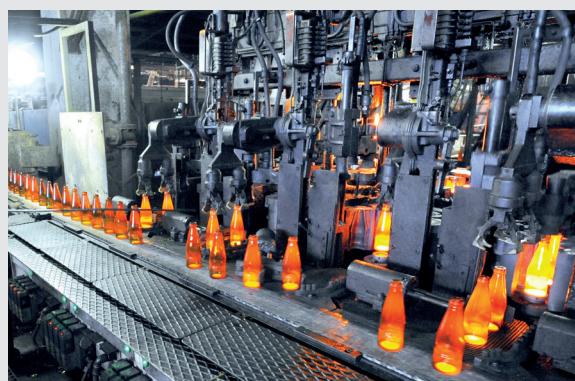
### INTT40

- Switching distance: 40 mm
- Temperature range:  $-10$  to  $+250^{\circ}\text{C}$
- Cable length: 5 to 20 m
- Patented maintenance output
- Interchangeable sensor head



### Food Industry

Large bakeries and coffee roasting facilities also profit from the range of applications covered by these Inductive Sensors. At temperatures beyond  $+200^{\circ}\text{C}$ , lasting reliable monitoring of metallic objects is decisive for the production process.



### Glass Production

The sensors can be ideally integrated into the value creation sequence for the production of all types of glass products. They execute monitoring and detection tasks in high temperature zones where the deployment of personnel is impossible.

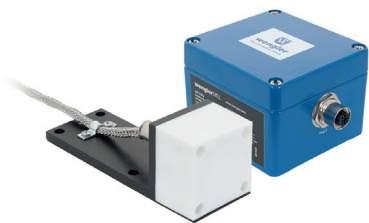


## Product Overview

INRT450 Inductive Sensor for Extreme Temperature Ranges				
Order number	INRT003	INRT007	INRT009	INRT011
Cable length	5 m	10 m	15 m	20 m
Switching distance	25 mm, adjustable via potentiometer			
Sensor head temperature range	−60 to 450° C			
Analysis module temperature range	0 to 50° C			
Service life (450° C)	100 000 hours			
Sensor head material	Ceramic			



INTT25 Inductive Sensor for Extreme Temperature Ranges				
Order number	INTT003	INTT007	INTT009	INTT011
Cable length	5 m	10 m	15 m	20 m
Switching distance	25 mm			
Sensor head temperature range	−10 to 250° C			
Analysis module temperature range	0 to 50° C			
Service life (200° C)	100 000 hours			
Service life (250° C)	60 000 hours			
Sensor head material	Teflon (PTFE)			



INTT40 Inductive Sensor for Extreme Temperature Ranges				
Order number	INTT103	INTT107	INTT109	INTT111
Cable length	5 m	10 m	15 m	20 m
Switching distance	40 mm			
Sensor head temperature range	−10 to 250° C			
Analysis module temperature range	0 to 50° C			
Service life (200° C)	100 000 hours			
Service life (250° C)	60 000 hours			
Sensor head material	Teflon (PTFE)			



Order designations and technical data for all products are available at [www.wenglor.com](http://www.wenglor.com).





**Discover further innovations.**



More information concerning our products is available at:  
**[www.wenglor.com](http://www.wenglor.com)**