

## Optical Distance Sensor

**GeBE®**

Elektronik und  
Feinwerktechnik GmbH

Modules and devices for input,  
analysis, display and printing of  
analog and digital data.

### GSE-NPE-004

Operating Power: 8 – 40 VDC  
Automatic PowerDown

GeBE Document-No.:

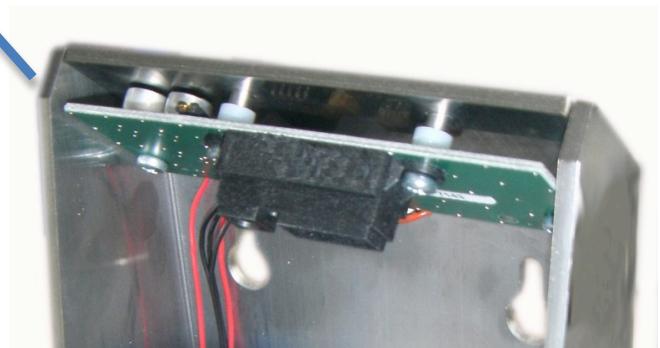
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# Technical Datasheet

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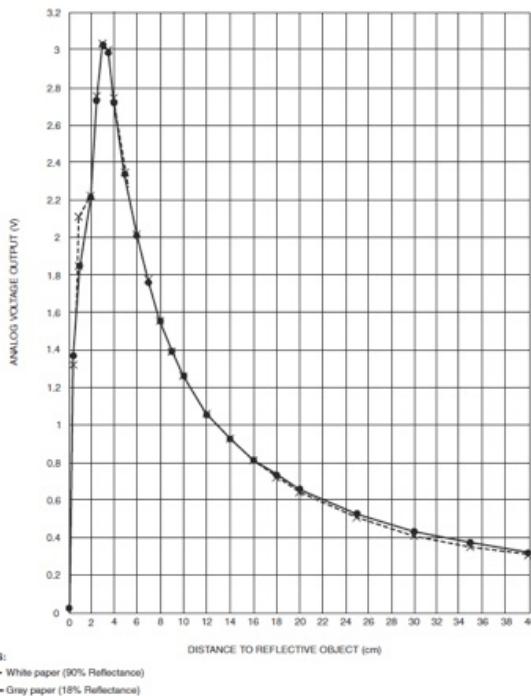
# Optical Distance Sensor GSE-NPE-004

## Description

The GeBE GSE-NPE-004 is a digital distance sensor on optical basis. The measuring signal is connected to the NPE (NearPaperEnd) input of a GeBE printer. Only parameter changing in the firmware settings are required for using the GSE-NPE-004 sensor.

## Measuring range

The sensor uses the triangle measuring method and detects distances of 4 – 30 cm from a paper surface. Accuracy: 1 mm.



## Distance calibration

The distance signal (volt) is a 8 bit digital value, which will be output from the printer interface. The volt signal has to be calibrated once (volt-cm) provided by the customer.

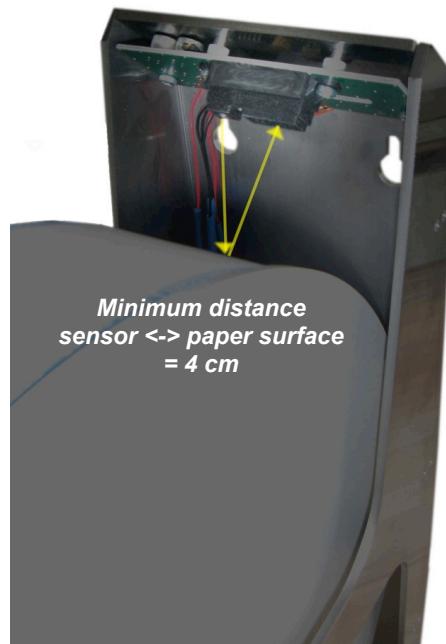
## Power management

When switching off the printer, the sensor automatically starts the power down mode.

## Influence resistant

The speciality of the GSE-NPE-004 sensor is its simple operation just using the power supply and the output signal. No complex clock signal has to be generated.

The evaluation electronics detects the distance and outputs an analog signal. The measurement is nearly unaffected by glossy or coloured paper.



## Messaging at paper end

Nevertheless using the NPE interface for the distance sensor, the NPE functionality persists. The threshold level for a NPE message will be set via parameter 35.

## Technical Data:

|                   | unit | range            | remarks  |
|-------------------|------|------------------|--|
| Type              |      | digital, optical |  |
| Temperature range | °C   | -10°C to +60°C   |  |
| Measuring range   | cm   | 4 - 30           |  |
| Operating power   | V    | 8 - 40 VDC       |  |
| Space requirement | mm   | 90 x 32          | length x width                                   |
|                   | mm   | 22,1             | height: top side + bottom side + board thickness |
| Boreholes         | mm   | Ø 3.2            |  |

## Connections:

