Inductive analog sensors are the technology of choice in agricultural and off-highway machinery for distance sensing applications on metal objects and allow for robust, non-contact measurement. Baumer inductive technology and designed for reliability improves end customer uptime and productivity. The proven Baumer design and full industry compliance reduce R&D cost and time to market.

- High reliability design tested according to the highest off-highway industry standards
- Heavy Duty PUR cable for reliable crimping of heavy vehicle connectors
- Platform incorporates over 40 years inductive sensor know-how
- Best in class accuracy, linearity, temperature drift

Simple and easy design in due to full industry compliance (EN ISO 14982, EN 13309, ISO 13766, EN60947-5-7)

- High reliability design reduces sensor fails and warranty issues
- Suitable wire thickness for industry typical connectors reduces likelihood of connector failures
- Due to analog output signals better process control and enhanced diagnostics
- No wear, contactless, measurement
## Product overview IR18

### Part number | Electrical specification | Mechanical interface | Ambient conditions | Output function
--- | --- | --- | --- | ---
IR18V.D08L-11177441 | Supply voltage: 7 V ... 32 V (12 V vehicle power)  
Supply current: ≤ 15 mA  
Max. output current: ≤ 5 mA  
EMC: 100 V/m radiated, 200 mA BCI | Cylindrical threaded: (M18 × 1)  
Cable: PUR 3 × 0.75mm²  
Connector: DEUTSCH DT04-3P (other connector systems are possible)  
L=350 mm (other lengths possible) | Storage / operating temperature: −40 °C ... +85 °C  
Protection class: IP 68 (1.5 m for 24 h) / IP 69K | Measuring distance Sd: 0 ... 8 mm  
Output voltage: 0.5 V ... 4.5 V  
Temperature drift: typ. ±5%  
Resolution: < 0.008 mm (static), < 0.01 mm (dynamic)  
Cutoff frequency: < 450 Hz

IR18V.D08L-11176397 | Supply voltage: 4.75 V ... 5.25 V  
Supply current: ≤ 12 mA  
Max. output current: ≤ 1 mA  
EMC: 100 V/m radiated, 200 mA BCI | | |

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### Some application fields for Baumer inductive distance sensors.

- Precise positioning of objects
- Shaft centering
- Cost effective load determination (deflection on load bearing parts)

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**Baumer**

Passion for Sensors

Baumer Group  
International Sales  
P.O. Box · Hummelstrasse 17 · CH-8501 Frauenfeld  
Phone +41 (0)52 728 1122 · Fax +41 (0)52 728 1144  
sales@baumer.com · www.baumer.com

Learn more about the Baumer inductive sensors at www.baumer.com

Find your local partner: www.baumer.com/worldwide