



# CORREVIT® LF II P

non-contact  
1-axis optical Sensor

for  
**Slip-Free Measurement of  
Vehicle Speed and Distance**

- Small and lightweight - just 250 g
- Distance and speed measurement up to 250 kph  
Racing version with speed range 0.3 ... 400 kph available
- Adjustable filter time (unfiltered, 8 ... 512 ms)
- Speed linearity - desired distance  $< \pm 0.5 \%$   
Distance linearity  $< \pm 0.2 \%$
- Improved features by application of advanced DSP technology
- Direct connection to PC or other evaluation systems
- Illumination by long-life, high-power infrared LEDs
- Signal outputs:
  - analog 0-10 V
  - digital 0-1000 pulses/m
  - CAN Bus V2.0B
  - USB 1.1 or RS232
- Negligible service and maintenance requirements as a result of durable technology
- Tested and used under extreme environmental conditions



**NEW:** With exchangeable  
protection glass!

Article no.  
LF II Sensor

14395

# CORREVIT® LF-II P

The new CORREVIT® LF-II P Optical Sensor represents yet another a major step forward in the advancement of optical measurement technology. Based on the Formula-1 proven CORREVIT® SF Sensor, the LF-II P Sensor is even smaller and lighter than the compact SF model.

The further miniaturization of the exceptionally lightweight LF-II P Sensor enables mounting positions -such as under the vehicle - that were virtually unimaginable until now. Long-life, vibration-resistant infrared LED illumination and digital filters with advanced DSP technology provide improved performance, even under harsh environmental conditions.

For connection to any current data acquisition system, the LF-II P Sensor is equipped with analog (0...10V) and digital outputs, as well as CAN Bus, RS232, and USB for high-speed data transfer.

A protective optical-glass lens prevents damage to the optics and the illumination source. The lens is optimized to the wavelength of the LED illumination source, and can be easily replaced without use of special tools.

## Typical Technical Specifications

### Performance Specifications

Speed range:	0.3 ... 250 kph
Distance resolution	2.08 mm
Uncertainty of measurement*:	< ±0.2%
Speed linearity - desired distance	< ± 0.5 %
Distance linearity	< ± 0.2 %
Working distance and range:	200 +/-70 mm

### Outputs

CAN Bus:	CAN V2.0B - switchable terminating resistor (Intel or Motorola Format)
Analog Output:	0...10V
Digitale Output:	1...1000 pulses/m
USB:	USB 1.1 or RS232 **

### System Specifications

Power supply:	10,5 V ... 24 V; 28 W (12 VDC)
Temperature range:	operation: -25 ... 50°C
	storage: -40 ... 85°C
	rel. humidity: 5 ... 80%, non condensing
System Protection of the sensor head:	IP 67
Illumination:	IR-LEDs, 850 nm, laser class 1M
Dimensions of the sensor head (l x w x h):	100 x 33 x 45 mm (without plug)
Weight of sensor head:	250 g
Dimensions of the electronics (l x w x h):	130 x 86 x 33 mm
Weight of the electronics:	approx. 490 g
Shock:	50 g half-sine, 6 ms
Vibration:	10 g, 10 ... 150 Hz

USB interface for connection to the PC, automatic sensor identification, function control.

\*with calibration on the test surface

\*\* please choose when placing an order!

CORREVIT® is a registered trademark of CORRSYS-DATRON Sensorsysteme GmbH  
LFII-P\_d-061-e-rev001 10/08



INVISIBLE RADIATION FROM  
LIGHT EMITTING DIODES

DO NOT OBSERVE WITH  
OPTICAL INSTRUMENTS  
LASER CLASS 1M  
IN COMPLIANCE WITH DIN EN  
60825-1:2001

In a continuous effort to improve our products, CORRSYS-DATRON reserves the right to change specifications without prior notice.

**CORRSYS-DATRON**  
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