



CORREVIT[®] S-350 Racing

Non-Contact
Optical Sensor

for

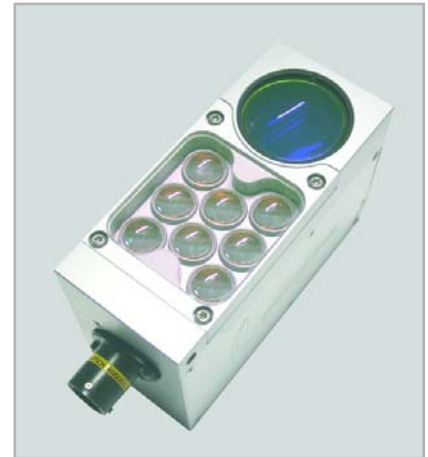
**slip-free measurement of
longitudinal and transversal dynamics**

- Working range 350 ±50 mm
- Applicable from 0.5 kph ... 400 kph
- Adjustable filter time (unfiltered, 8 ... 512 ms)
FIR Filter with constant filter time (adjustable)

Considerably improved performance is enabled by the application of the latest technologies:

- ⇒ LED-IR illumination
 - ⇒ Smallest dimensions
 - ⇒ Improved distance linearity,
 - ⇒ Easier mounting
 - ⇒ Improved signal processing by ideal combination of the analog and digital signal conditioning (DSP-FPGA technology).
 - ⇒ Reduced noise of the output signal
 - ⇒ Improved measurement features on various surfaces
 - ⇒ Quick filter start-up, also during movement
- Extremely high measuring accuracy* better than ±0.1% as a result of precise optics and digital signal processing.
 - Programmable standard analog and digital signal outputs
 - All measured values available
 - Direct connection to PC and virtually all data acquisition systems

Signal outputs: Analog
 Digital
 CAN Bus
 RS232



Art. No.:
S-350 Racing long 15989
S-350 Racing trans. 15990

* with calibration on the test surface

Typical Technical Data

Performance specifications

Speed range:	0.5 ... 400 kph
Distance resolution:	2.47 mm
Distance measurement deviation:	<±0.2% *
Angle range:	±40°
Angle resolution:	<±0.1°
Working distance and range:	350 ±50 mm

Signal outputs

Digital output 1 - V or V_L^{**} :	1 ... 1000 pulses/m
Digital output 2 - V_q or angle **: :	$f_{center} = 5 \text{ kHz}$
Analog output 1 - V or V_L^{**} :	0 ... 10 V (16 bit resolution)
Analog output 2 - V_q or angle: :	-10 ... +10 V (16 bit resolution)

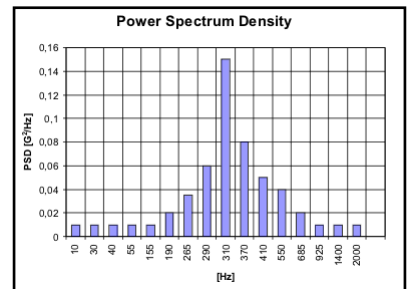
Interfaces:

CAN 2.0B - switchable termination resistor (Motorola or Intel format)

RS232

System specifications

Power supply:	10 ... 26 V; 52 W (12 V DC)
Temperature range:	Operation: - 25 ... 50° C
	Storage: - 40 ... 85° C
	Rel. humidity: 5 ... 80% non condensing
Protection standard sensor head:	IP 67 (with cable connected)
Protection standard electronics:	IP 50 (with cable connected)
Dimensions of the sensor head (l x w x h):	125 x 107 x 36.5 mm (w/o plug)
Weight of the sensor head:	500 g
Dimensions of the electronics (l x w x h):	105 x 70 x 100 mm
Weight of the electronics:	555 g
Shock:	50 g half-sine, 6 ms
Vibration:	see chart →
Illumination:	LED-IR, 850 nm laser class 1
Expected lifetime:	≥ 10,000 Kilometer



CAUTION: INVISIBLE RADIATION FROM LIGHT EMITTING DIODES!

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

* with calibration on test surface

** switching-over between the respective measured variables via CeCalWin Pro possible

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

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