



Sense  
Measure  
Control

## Model RHL3 Laser Ride Height Sensor

- **Miniature Size**
- **8" or 20" Range**
- **32 to +176°F Operating Temperature**
- **Ruggedized Construction**
- **Replaceable Lens**
- **±0.2% Linearity**



The Model RHL3 series of laser ride height sensors are designed to withstand the harsh environment of Industrial and Motorsport applications. The sensor has a small diameter visible laser which is reflected off the track surface to a precision CCD detector which determines the height from the ground.

Supplied in two standard measurement ranges of 8" (2.4"-10.4") or 20" (8"-28"), the RHL3 is ideal for use on all types of vehicle including Formula Cars, NASCAR, Touring, Indy Cars, GT, LMP, Rally, Off Road, Karts and more.

The measurement rate of 750Hz and linearity between 0.2 to 0.5% ensures a fast and accurate recording of real time car data.

The supply voltage is a common 11-30V which is readily available on most data logging systems and the analog voltage output is 1-5V.

Construction is ruggedized against high vibration and temperature. An anodized aluminum case has a choice of electrical connection. Either Deutsch connector or a low profile cable exit can be selected. The glass lens can be replaced easily in the event of damage.

Model RHL3 can also be used for other non-contact displacement measurements such as:

**Wing deflection, Chassis distortion, Bodywork deflection, Suspension setup.**

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KA Sensors is a dynamic company with over 30 years of sensor and instrumentation experience in the motorsport industry.

We offer a strong engineering led service to all of our customers, with speed of response and confidentiality being paramount.

Please contact us for further expert assistance with your application.

Process Measurement & Controls, Inc. - 11 Old Sugar Hollow Road – Danbury – CT 06810 - USA

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RHL3.1012U

## Specifications

Range: (inches)	Linearity ± % FS	Resolution (inches)
8" (2.4"-10.4")	0.2	0.0039"
20" (8"-28")	0.5	0.0236"

- **Measurement Rate**  
750Hz
- **Supply**  
11-30V (50mA)
- **Output**  
1-5V
- **Temperature Range**  
Operating: 32 to +176°F  
Storage: -20 to +185°F
- **Thermal Effects**  
0.04% FS/°F
- **Ambient Light**  
<4000lx
- **Weight**  
3.2oz without cable or mating connector
- **Protection Class**  
IP67
- **Vibration**  
20G 10Hz-1kHz
- **Shock**  
15G 6ms (IEC 68-2-29)
- **Laser Type**  
1mW, 670nm, class 2 (DIN EN 60825-1 2007)
- **Construction**  
Black anodized aluminum case. Glass lens
- **Electrical connection**  
Deutsch connector ASL006-05PC-HE or 39"  
26AWG 55spec cable + DR25 sleeve
- **Options**  
Anti-vibration mounts  
Cable lengths

KA/PMC adopts a continuous development program which sometimes necessitates specification changes without notice

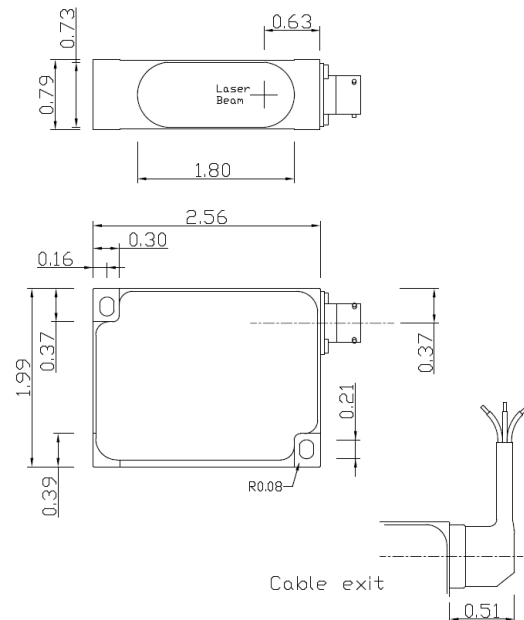
## How to Order

- **Please provide information as below:**  
Model: RHL3  
Range: Range (inches)  
Electrical Connection: ASL Connector or cable

E.g.: RHL3-8-ASL  
Model RHL3  
8" range with connector

## Standard Configuration

Dimensions in inches



## Other Products

- **KA Sensors offer a wide range of products and services to the Motor Sport Industry.**
- **Sensors:** Pressure, Force, Torque, Temperature, Acceleration, Displacement, Angle, Speed
- **Other capabilities:** Telemetry, data logging, Electronics design, Controls, Wiring. Please contact us for additional information.

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