RHL3 Series
Laser Ride Height Sensor

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 inches (2.4 to 10.4 inches) or 20 inches (8 to 28 inches), 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 analogue 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 tough plastic lens can be replaced easily in the event of damage.

Technical Specifications

Ranges	8 ins (2.4 to 10.4ins) and 20 ins (8 to 28 ins)
Resolution	8 ins is 0.004 ins & 20 ins is 0.02 ins
Linearity	8 ins is ±0.2% FS & 20 ins is ±0.5% FS
Measurement Rate	750Hz
Thermal Effects	0.05% FS/°F
Output	1 to 5V
Ambient Light	<4000lx
Supply	11-30V (50mA)
Operating Temperature Range	32˚F to 230˚F (0°C to +110°C)
Storage Temperature Range	-5˚F to 250˚F (-20°C to +125°C)
Construction	Black anodized aluminum case. Plastic replaceable lens
Electrical Connection	Cable: 26AWG, 55spec wire+DR25 sleeve or ASL Connector
Protection Class	IP67
Laser Type	1mW, 670nm, class2 (DIN EN 60825-1 2007)
Vibration & Shock	20G 10kHz-1kHz & 15G 6ms (IEC 68-2-29)
Weight	3.2oz (Excluding cable or connector)
Options	Cable length, connector fitted, AV mounts and labelling

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

Sense
Measure
Control

Features

- *Miniature Size*
- *8 or 20 inch Range*
- *32-230˚F Temp Range*
- *Rugged Construction*
- *Replaceable Lens*

Applications

- *Ride Height*
- *Chassis Distortion*
- *Bodywork Deflection*
- *Suspension Setup*

Contact us

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Represented by:

Sensors and solutions for Motorsport and On-Vehicle applications

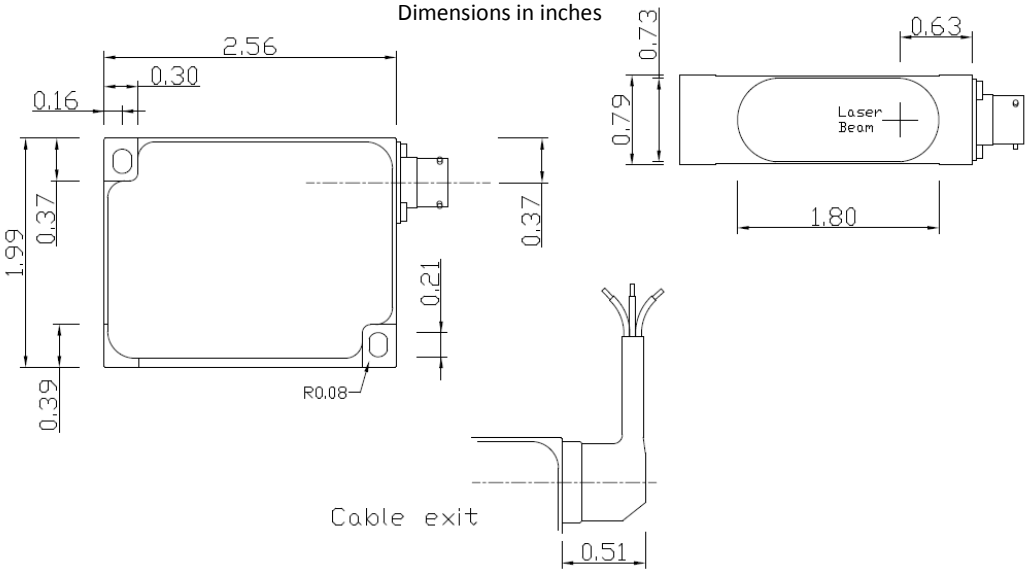
KAfigurator

		RHL3	A08	CAB	P	C	000	000
Range (ins)	8 Inch		A08					
	20 inch		A20					
Electrical Connection	Connector & mating half			ASL				
	Cable: 26AWG, 55spec wire+DR25 sleeve			CAB				
Pin Type	Pins				P			
	Sockets				S			
	Not Applicable				0			
Key Way	N Keyway					N		
	C Keyway					C		
	Not Applicable					0		
Cable Length (If applicable)	Not Applicable (Connector)						000	
	40 inches						A40	
	80 inches						A80	
Special Code	None							000

The KA configuration tool is used to specify a standard KA Sensor, **other options are available**.

Mechanical Details

Dimensions in inches



Electrical Details

+Ve Supply	0V Supply	Signal	Not Connected
Red (Pin1)	Black (Pin 2)	White (Pin 3)	Pin 4 & 5

Sense Measure Control

Sensors for

- *Temperature*
- *Acceleration*
- *Pressure*
- *Position*
- *Torque*
- *Speed*
- *Angle*
- *Force*

Services for

- *Data Logging*
- *Telemetry*
- *Controls*
- *Wiring*
- *Design*

KA Sensors are

- *Engineering led*
- *Confidential*
- *Experienced*
- *Responsive*
- *Dynamic*
- *Friendly*

Sensors and solutions for Motorsport and On-Vehicle applications