

## VLS Series Optical Speed Sensors VLS5/J

### VLS Series Optical Speed Sensors - Standard Models

The VLS series of Visible Light Optical Sensors is primarily designed for speed related use. Ideal for use with our range of Digital Tachometers, including hand held, panel mounted and bench style instruments. A range of mounting devices is available for hands free applications.

### Condition monitoring applications

There are 2 versions with on/off switch fitted so that battery power is conserved when used with battery powered equipment.

### Mains/battery pack

A suitable mains adaptor/battery pack is available for use with all 5vdc VLS versions.

### Optical ranges

Up to 1 metre for visible light versions and up to 2 metres with the Laser light types (with reflective tape).

### High speed applications

A clip on prefocussed adaptor lens (LN1) is available which can allow operation without reflective tape in certain controlled conditions.

### Power options

These sensors are available in 5vdc and 7.5-40vdc powered options, normally provided by the associated instrument from our range.

### Contact Adaptor -

(not suitable for laser models)

The contact adaptor converts the optical function into direct shaft contactor for both RPM and linear speed measurement. This bayonet fitting device operates via a Hall Effect magnetic sensor built into the Sensor housing which picks up from a magnet in the VLS sensor.

### Optional Accessories

A range of mounting devices is available for use with these sensors, brackets, clamps, fixed focus lens for high speed and small shafts.

### General Specification

Optical range	50mm - 2 metre (1 metre Visible light version)
Overall speed	0-250,000 rpm (with lens range adaptor at high speed)
Optical angle	Up to +/- 80 deg (45 deg visible light version)
Ext. Power input	9-12vdc @ 300mA (ext. Adpt.)
Lens	Double lens reflex
Light sources	Visible light 5vdc minilamp - typical 2,000hrs Visible Laser 635nm CLASS II
Power requirements	VLS5/versions = 120mA@ 5vdc (Laser max. 85mA)
Operating temp.	-10 to +70 deg C (45 deg C Laser type)
Dimensions	L 130mm x D 34mm
Connections	Various cable & connector options
Output Pulse	NPN
Analogue	0-4v dc (VLS/DA1 only)

### VLS/DA1 Optical Speed Sensor with Analogue output

The new VLS/DA1 Optical Sensor with integral Digital/Analogue convertor, is designed for datalogging applications and where general speed monitoring of machines is required. It is particularly useful for monitoring & recording speed data.

The VLS/DA1 is designed for use with Datalogging and Condition monitoring equipment.

Order Code	Description
Pulse output versions	
<b>VLS5/J</b>	for CT Hand Tachometer
<b>VLS5/D</b>	for Bench/Panel Tachometer
<b>VLS5/T</b>	for general purpose
<b>VLS5/J/LSR</b>	for CT Hand Tachometer
<b>VLS5/D/LSR</b>	for Bench/Panel Tachometer
<b>VLS5/T/LSR</b>	for general purpose
Analogue output versions	
<b>VLS/DA1</b>	for general purpose
<b>VLS/DA1/LSR</b>	for general purpose

