


**MODEL 05631C**  
**WIND LINE DRIVER**
**INSTRUCTION SHEET 05631C-90**  
**REV: B051311**
**SPECIFICATIONS**

Wind Speed Input:	YOUNG Wind Monitor series of sensors AC sine wave, Frequency proportional to wind speed. 3 pulses per revolution. Input sensitivity nom. 40 mV p-p
Wind Direction Input:	Analog voltage from azimuth potentiometer. Regulated excitation voltage is supplied from interface circuit to potentiometer.
Wind Speed Output:	4 to 20 mA = 0-100 M/S
Wind Direction Output:	4 to 20 mA = 0 to 360°
Overall accuracy:	± 1% of full scale over temperature and supply voltage range
Dimensions:	110 mm W x 75 mm H x 56 mm D (4.3 in W x 2.9 in H x 2.2 in D)
Mounting:	U-bolt for vertical pipe 25-50mm (1-2 in) Diameter
Power Requirement:	12-30 VDC
Temperature Range:	-50 to 50°C (-58 to 122°F)

**INTRODUCTION**

The Wind Line Driver converts raw signals from the wind sensors to proportional 4 to 20 mA current loop values. The Line Driver acts like a variable resistance that draws 4 - 20 mA when powered with 12 to 30 VDC. Although it has only one PC board, the Line Driver contains two completely independent circuits - one for wind speed and the other for wind direction. See wiring diagram below.

**IMPORTANT!**

**The Wind Line Driver provides a calibrated current signal for wind speed and wind direction. Externally connected devices should be reviewed for compatibility and correct signal scaling.**

Repairs should be attempted only by qualified service personnel.

**WARRANTY**

This product is warranted to be free of defects in materials and construction for a period of 12 months from date of initial purchase. Liability is limited to repair or replacement of defective item. A copy of the warranty policy may be obtained from R. M. Young Company.

**CE COMPLIANCE**

This product has been tested and shown to comply with European CE requirements for the EMC Directive. Please note that shielded cable must be used.

**Declaration of Conformity**

R. M. Young Company  
 2801 Aero Park Drive  
 Traverse City, MI 49686 USA

Model 05631C Wind Line Driver

The undersigned hereby declares on behalf of R. M. Young Company that the above-referenced product, to which this declaration relates, is in conformity with the provisions of:

Council Directive 2004/108/EC (December 15, 2004)  
 on Electromagnetic Compatibility

David Poinsett  
 R&D Manager

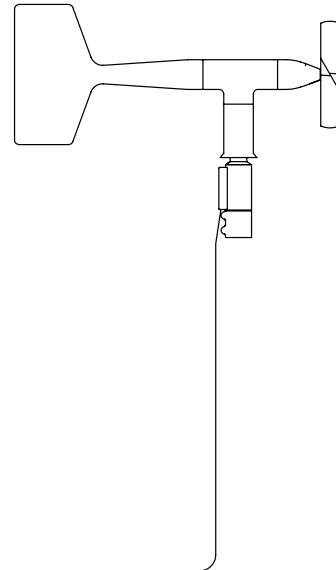
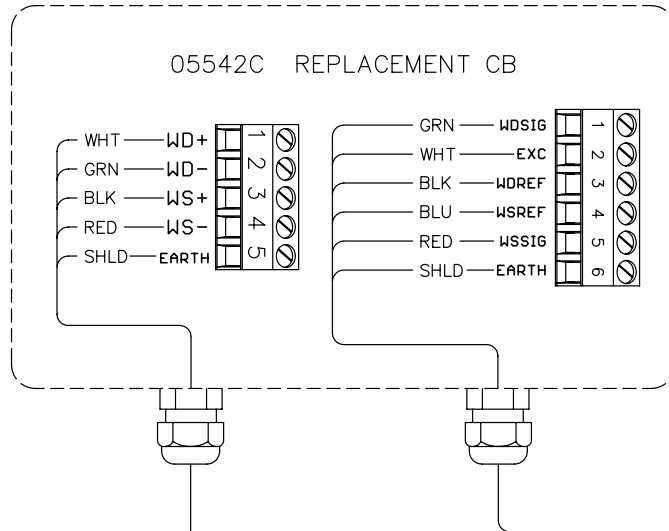
**CALIBRATION FORMULAS**

WIND SPEED	vs	mA OUTPUT
m/s	=	( 6.250 x mA)-25
knots	=	(12.149 x mA)-48.6
mph	=	(13.980 x mA)-56
km/h	=	(22.500 x mA)-90
WIND DIRECTION	vs	mA OUTPUT
DEGREES	=	(22.5 x mA)-90

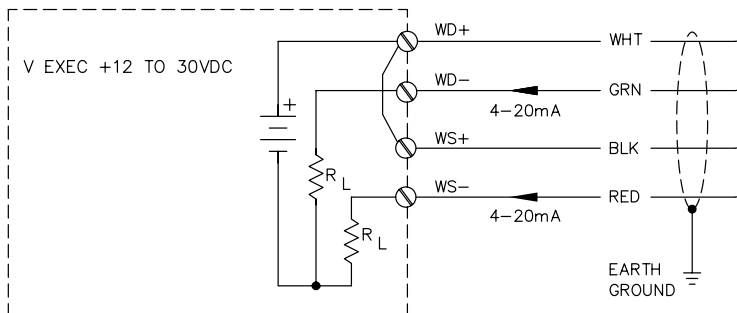


### WIND LINE DRIVER

### WIND MONITOR-MA



### MEASURING INSTRUMENT



$$\text{MAX LOAD RESISTOR } (R_L) \text{ VALUE} = \frac{V_{\text{EXEC}} - 12}{0.02} = R_L$$

$$V \text{ SUPPLY (MIN)} = 0.02 \times R_L + 12 \text{ (} R_L \text{ IS WIRE RESISTANCE)}$$

### WIND MONITOR

