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.

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

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

R. M. YOUNG COMPANY **2801 Aero Park Drive , Traverse City, Michigan 49686 U.S.A.**
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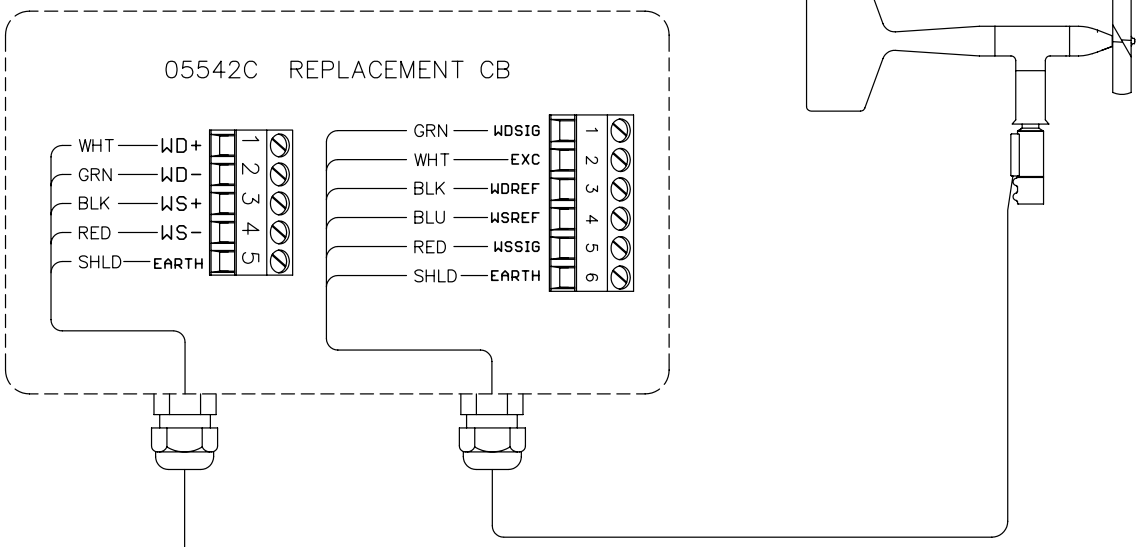
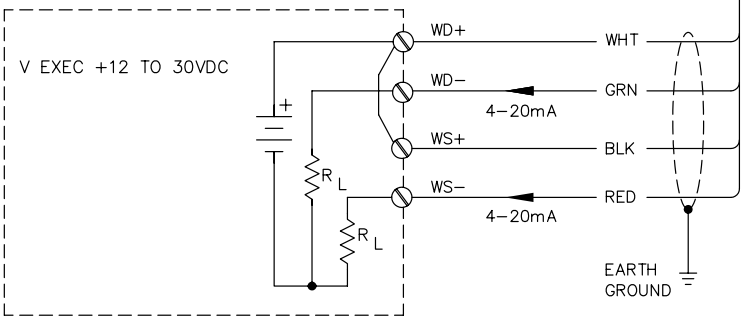
WIND LINE DRIVER

WIND MONITOR–MA



MEASURING INSTRUMENT



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

V SUPPLY (MIN) = 0.02 x RL + 12 (RL IS WIRE RESISTANCE)

WIND MONITOR