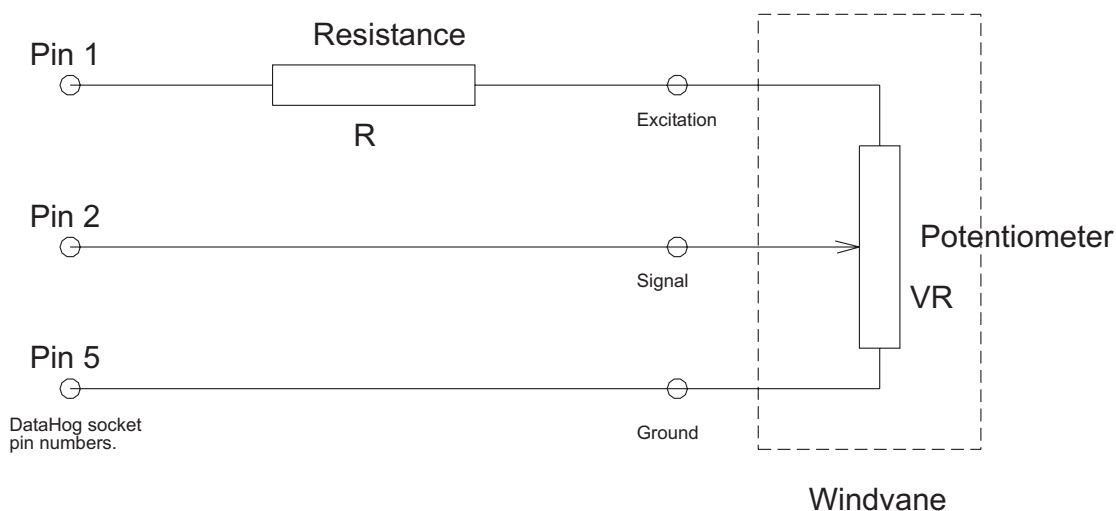




DATALOGGERS

Connecting wind vanes to single ended voltage inputs on DataHog2

In order for the windvane to work correctly (i.e. using scale code 04) on the DataHog2 then we must arrange that the excitation voltage to the windvane is 1.293 volts. This can be done by connecting a resistance in series with the excitation wire of the windvane as shown.



The resistance R must be calculated using the windvane potentiometer resistance VR.

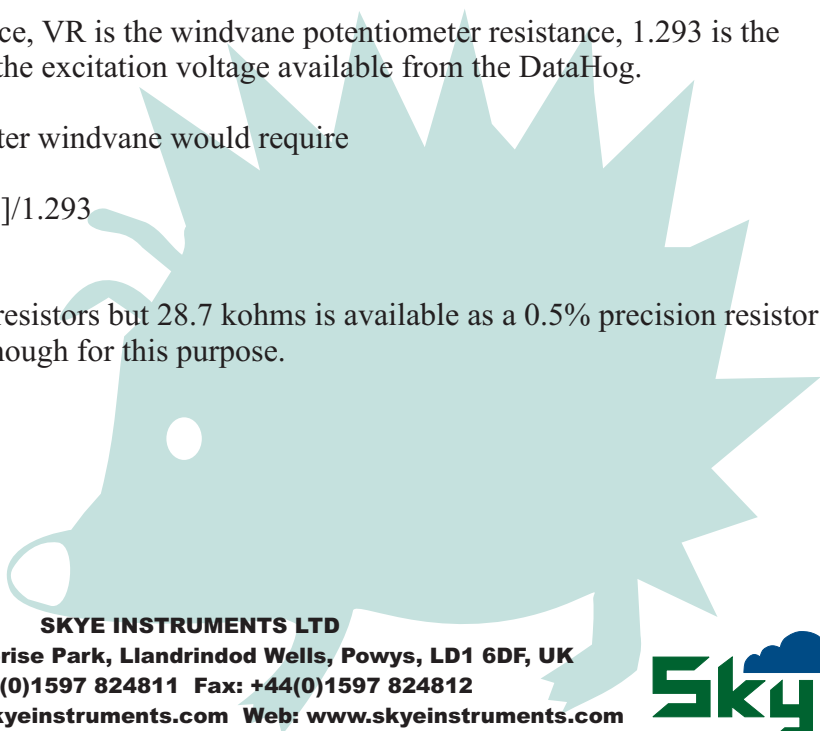
$$R = [(5 * VR) - (1.293 * VR)] / 1.293$$

Where R is the required series resistance, VR is the windvane potentiometer resistance, 1.293 is the required windvane excitation and 5 is the excitation voltage available from the DataHog.

So for example a 10 kohm potentiometer windvane would require

$$R = [(5 * 10) - (1.293 * 10)] / 1.293 = 28.67 \text{ kohms}$$

this could be made up of two or more resistors but 28.7 kohms is available as a 0.5% precision resistor and this would certainly be accurate enough for this purpose.



SKYE INSTRUMENTS LTD
 21, Ddole Enterprise Park, Llandrindod Wells, Powys, LD1 6DF, UK
 Tel: +44(0)1597 824811 Fax: +44(0)1597 824812
 Email: skyemail@skyeinstruments.com Web: www.skyeinstruments.com

