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BEI NEWALL MEASUREMENT SYSTEMS
BEI TECHNOLOGIES, INC.

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NEWALL NEWALL MEASUREMENT SYSTEMS LTD

SCC-100 Sine-Cosine Converter

Sine-Cosine Converter

for use with SHG-VV, SHG-VM, MHG-VV, and MHG-VM Linear Encoders

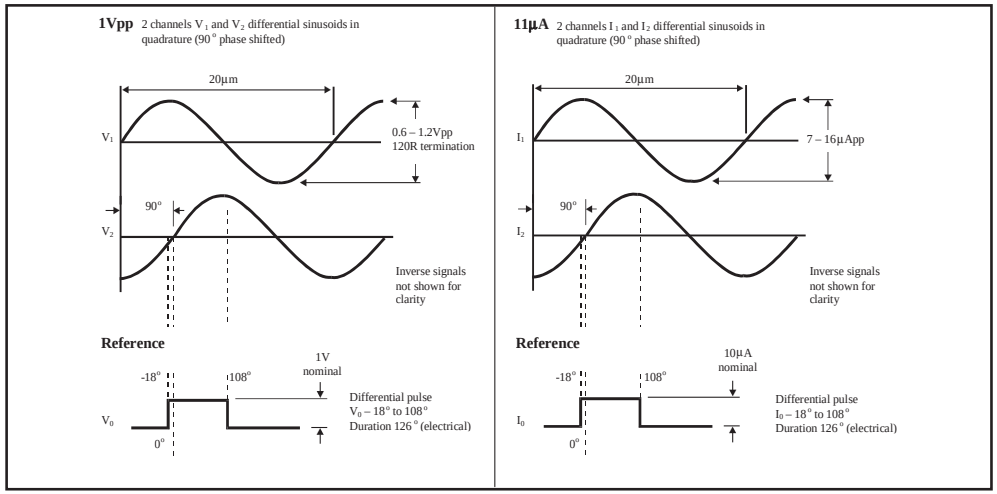
SCC-100 SINE-COSINE CONVERTER

1.0 Introduction

The SCC-100 Sine-Cosine converter takes the quadrature, differential, output signals from an SHG-VV, SHG-VM, MHG-VV, or MHG-VM Linear Encoder and converts these signals to analogue Sine and Cosine levels.

A Single version of the converter meets both 1V p-p and 11µA p-p standards. Both provide a 'digital' reference marker signal as shown below.

2.0 Analogue Output Signals



3.0 Electrical Requirements

Supply from Controller:	5V +/-5%
Encoder Input:	9 pin D type connector (Newall pin-out specification)
Output to Controller:	Differential analogue signals
Cable to Controller:	15-way ' D' type connector (output format selected during installation)
Typical current consumption: (no encoder)	110mA (VCC = 5.0V)
Typical current consumption: (with Spherosyn™/Microsyn™ Digital)	290mA
Maximum input quadrature rates:	12 MHz.

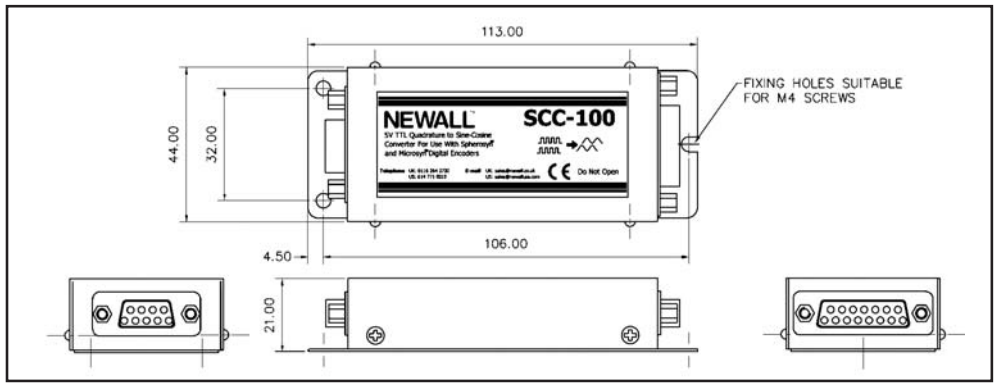
Certificate No FM36096

4.0 Connections

Function	1V p-p	11µA p-p
+5V	PIN 1	PIN 1
0V	PIN 2	PIN 2
A-	PIN 3	PIN 10
A+	PIN 4	PIN 11
B-	PIN 5	PIN 12
B+	PIN 6	PIN 13
Z-	PIN 7	PIN 14
Z+	PIN 8	PIN 15
Ground	SHELL	SHELL

5.0 Installation

Ensure the unit is located clear of any coolants or sources of contamination. The unit should be firmly mounted using the mounting points and screws provided.



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