

Incremental Sinusoidal Signals

~1V_{pp}

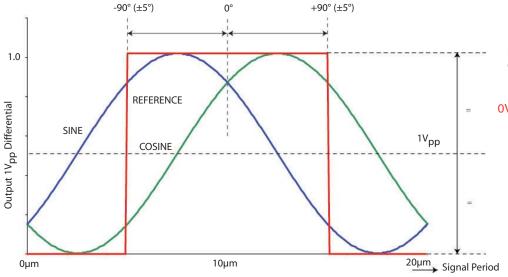
The SCC 200 signal converter is for use with Newall MHG-VP, SHG-VP, SHG-VS and SHG-AV series Incremental and Absolute Linear Encoders.

The sinusoidal incremental signals are produced by advanced processing of both the A and B signal channels. These channels are phase shifted by 90° and have a signal level of $1V_{pp}$ differential when terminated using the recommended circuitry with a common mode voltage of 2.5V. The signal levels are maintained at all speed levels providing no loss of signal integrity with increasing scanning frequency.

Note: The SCC200 is designed for DIN rail mount. (European DIN rail standards: EN50022 & EN50035)

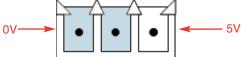
Part Numbers

- 600-82870 For use wih MHG-VP Incremental Linear Encoders
- 600-82875 For use with SHG-VP, SHG-VS and SHG-AV Incremental and Absolute Linear Encoders

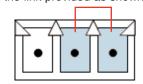


Input Power Connection

If the control **cannot** provide the required power, an external supply can be connected.



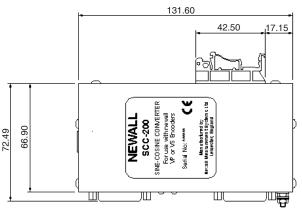
If the control **can** supply the required power, insert the link provided as shown below.



Recommended Input Circuitry at Terminating Electronics

+5VDC SCC200 Output Drivers V+ OUT- 56Ω OUT+ 56Ω 1Vpp 120Ω

Dimensions







Specification

Power Supply (System)	5VDC ±5% <300mA
Operating Temperature	0° to 55°C
Storage Temperature	-20° to 70°C
Ingress Protection Level	IP54
EMC Compliance	BS EN 50081-2 BS EN 50082-2
Sinusoidal Voltage Output Signal	~1V _{pp} differential
Sinusoidal Signals A & B* Signal Levels	0.8 to 1.2 V_{pp}^* , typically $1V_{pp}$
Amplitude Ratio (A to B)	0.95 to 1.05
Phase Angle	90° ± 5° elec
Ref. Mark Zero Crossover Point	± 90° ± 5° elec
Dimensions (SCC200 only)	131mm x 67mm x 24mm**
Weight (SCC200 only)	0.5lbs (0.23kg)



Optional link shown in picture

SCC200 Connections Signal Out Connector 15 pin male D type

Pin Number	VS, VP Function	AV Function	
1	Reserved	SSI CLK +	
2	Reserved	Reserved	
3	Reserved	Reserved	
4	RM- Reserved		
5	B-	B-	
6	A-	A-	
7	Reserved	Reserved	
8	5V	5V	
9	Reserved	SSI CLK-	
10	Reserved	SSI DATA+	
11	Reserved SSI DATA-		
12	RM	Reserved	
13	B+	B+	
14	A+	A+	
15	OV	OV	
Shall	Ground	Ground	

SCC200 LED Conditions

Power				
LED	Power Status			
Off	No Power			
Orange	Low 5V to encoder			
Green	Operational			

Status					
LED	MHG-VP	SHG-VS	SHG-VP	SHG-AV	
Off	Normal	Normal	N/A	Normal	
Orange	REF	REF	REF	N/A	
Green	N/A	Sensor	Normal	N/A	
Red	Encoder disconnected or Encoder failure				

Connections marked as reserved should be left unconnected to avoid damage

^{*} With recommended input circuitry at terminating electronics

^{**} Dimensions do not include optional link or DIN rail mount