

# SCU-31X1

## Signal-conditioning unit (Analogue)

For applications that do not permit the use of sensors with integral electronics, which are usually a high temperature environment or mounting space restrictions, we offer the compact SCU3100 signal-conditioning unit that is designed to operate remotely from the LVDT or RVDT sensor. The SCU operates from either a 5Vdc regulated or 8V to 30Vdc unregulated supply and the output options are 0.5V to 4.5V, PWM, 4-20mA and serial CAN 2.0 or RS485.

The unit is used extensively in motor sport data acquisition and control systems as the operating circuit for inductive position sensors.

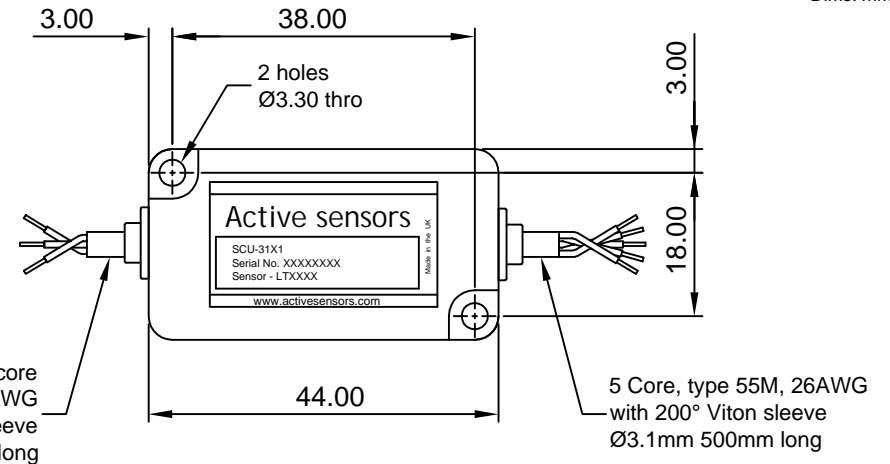
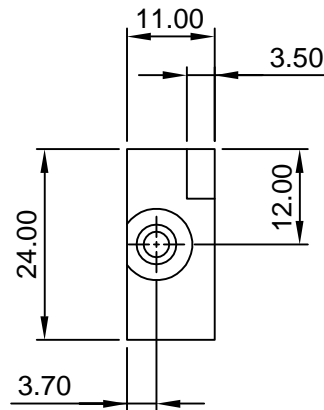
The SCU is housed in a machined aluminium ultra-compact casing and is fitted with fire and chemical resistant DR25/type 55 cabling. It has fully encapsulated electronics for maximum reliability when mounted close to the hostile environment. For ease of installation the SCU3100 output configuration is factory set at the time of ordering. This SCU is also available with dual or quad outputs in a very compact housing for system integration.

### Other models in this range

- SCU-31X2 - RS485 output
- SCU-31X3 - CANBUS output
- SCU-31X4 - 4-20mA output
- SCU-31X5 - PWM output
- SCU-31X6 - Mod Bus output



sales@activesensors.com

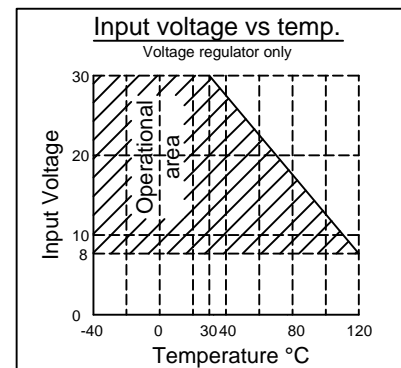
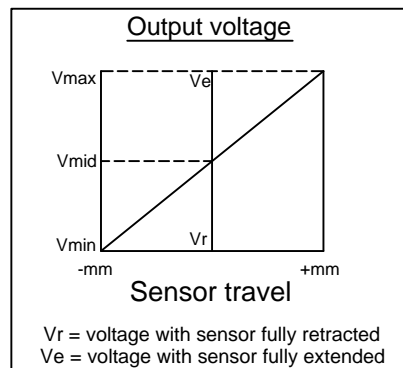


Raychem, 3 core type 55M, 26AWG with FDR25 sleeve Ø3.2mm, 500mm long

### Specification

Supply voltage +Vs	5 ±10%	8 - 30	V dc
Line regulation	Ratiometric with supply	<0.1	%
Supply current	<60		mA
Output Vout	0.5 - 4.5	0 - 4.096	V dc
Linearity	<0.05		%
Output ripple	10		mV
Output load	>2		K Ohm
LVDT excitation voltage	3		V rms
LVDT excitation frequency	5		KHz
Temperature performance	<50		ppm/°C
Operating temperature	-40 - +125		°C
Environmental	IP66		
Weight without cable	20 (±5)		grams

Electrical connections		*Active Sensors LVDTs
Wire Colour *	LVDT Connection	
Red	Primary +	
Black	Primary -	
Green	Secondary Centre	
Blue	Secondary A	
Yellow	Secondary B	
Wire Colour	System Connection	
Red	Supply +Vs	
Black	Supply 0V	
White	Analogue signal Vout	



### Ordering Information

**SCU-31X1**

1 = 5Vdc input

2 = 8 - 30Vdc input