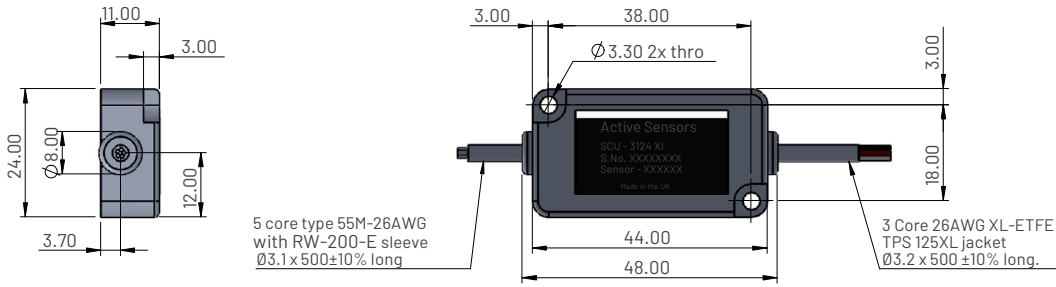


# SCU3124 XA Series - LVDT Signal Conditioning Unit (SCU)

Compact housing. Analogue current output.

## Dimensions



## Ordering information

SCU3124-XI

### Output

R = Output retracting  
E = Output extending  
(See output graph)

Please advise the LVDT specification for pairing with the SCU

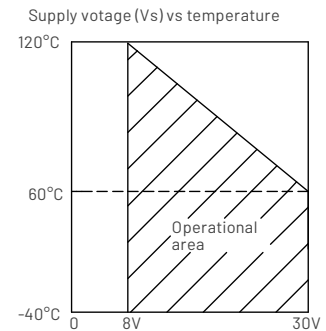
## Electrical and mechanical specification

Parameters	Values	Units
Supply voltage (+Vs)	8 to 30 (see graph)	VDC
Line regulation	<0.10 TBD	%FS
Supply current	<60	mA
Reverse polarity protection	50	VDC
Over voltage protection	Up to 50	VDC
Short circuit protection	Yes, continuous	
Output type	Analog current	
Output range (typical)	4 - 20	mA
Output resolution	0.024	% LVDT MR
Update rate (nominal)	500	Hz
SCU non-linearity (Note 2)	<0.20 TBD	%FS
Min. load resistance	Vs/20mA	Ohms
Output ripple	<10	$\mu$ A RMS
LVDT excitation voltage (typical)	3	VAC
LVDT excitation frequency (typical)	5	KHz
Thermal drift	TBD	%FS/°C
Operating temperature	See de-rating graph	°C
Storage temperature	-55 to 150	°C
Environmental	IP68 and IP69K	
Weight (approx.)	20	grams
Materials	Case - Anodised aluminium, Cover - Stainless steel 304	
SCU error conditions (Iout)		
LVDT disconnected	2	mA
LVDT sum voltage error	2	mA
SCU initialisation failure	0	mA

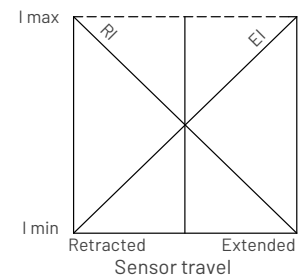
## Electrical connections (see note 1)

Wire Colour	LVDT Connection
Red	Primary +
Black	Primary -
Green	Secondary centre
Blue	Secondary A
Yellow	Secondary B
Wire Colour	System Connection
Red	Supply (+Vs)
White	Analogue signal (Vout)
Black	Supply (0V)

## Operational temperature



## Typical output voltage



## Notes

1. Incorrect wiring may cause internal damage.
2. Non-linearity is calculated from least squares best fit method.
3. LVDT wire colours listed match Active Sensors standard LVDTs.
4. When ordering SCU please state which LVDT the SCU will be paired with.
5. General dimension tolerance is  $\pm 0.25$ .

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