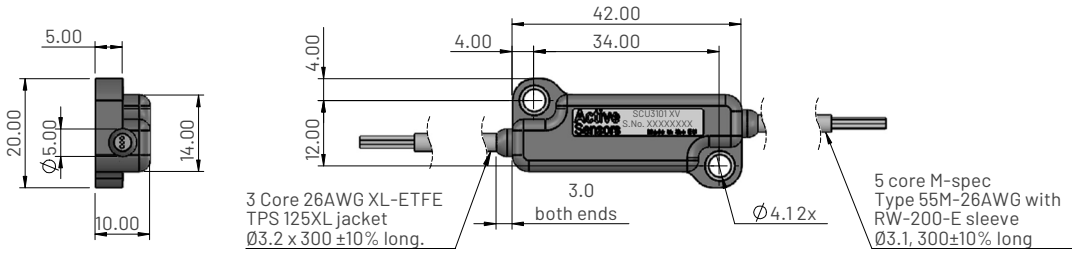


SCU3101 XV Series LVDT Signal Conditioning Unit (SCU)

Ultra-compact housing. Analogue voltage output.

Dimensions



Ordering information

SCU3101-XV

Output

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

Please advise the LVDT specification for pairing with the SCU

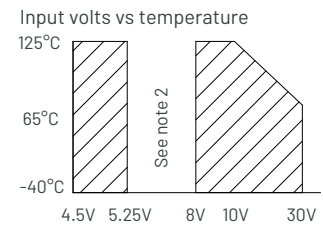
Electrical and mechanical specification

Parameters	Values		Units
Supply voltage (+Vs)	5.0±5% regulated	8 to 30 unregulated	Vdc
Line regulation	Ratiometric with supply	<0.01% FS/V	%
Supply current	<60		mA
Output (Vout)	0.5 - 4.5		Vdc
SCU non-linearity (Note 3)	<0.20		%
Output ripple	<10		mV
Output load	>2		K Ohms
LVDT excitation voltage	3		Vrms
LVDT excitation frequency	5		KHz
Temperature coefficient	<50	<110	ppm/°C
Operating temperature	-40 to +125		°C
Environmental	IP67		
Weight (approx.)	12		grams
SCU error conditions (Iout)			
LVDT disconnected	0.25		VDC
LVDT sum voltage error	0.25		VDC
SCU initialisation failure	0		VDC

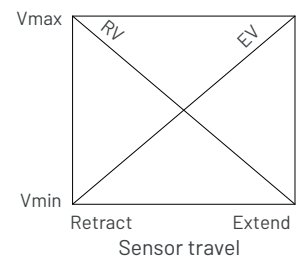
Electrical connections (see note 1)

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. Do not operate between 5.25V and 8V.
3. Non-linearity is calculated from least squares best fit method.
4. LVDT wire colours listed match Active Sensors standard LVDTs.
5. When ordering SCU please state which LVDT the SCU will be paired with.
6. General dimension tolerance is ±0.25.

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