

LINTRAN™ Linear Position Transducers Product Guide



No contacts, no bearings, no bushes, no fine wires.....just reliable measurements all day, every day.

Zettlex LINTRAN™ transducers are **non-contacting, absolute**, linear position measuring devices. They utilise a unique inductive technique and comprise two main components – a Target and an Antenna. The Antenna is longer than the Target and is powered with an electrical supply and can be moving or stationary. An electrical output from the Antenna shows the position of the Target relative to the Antenna. The Target has no electrical connections and can be moving or stationary.

Zettlex LINTRAN™ encoders are **sealed to IP67** so they are ideally suited to harsh environments where electrical contacts or optical transducers would prove unreliable. The LINTRAN™ range offers a cost effective alternative to LVDTs, resolvers, synchros, magnetostrictive devices or precision potentiometers. LINTRAN™ units **do not require precision mounting** and are **field programmable without a PC**.

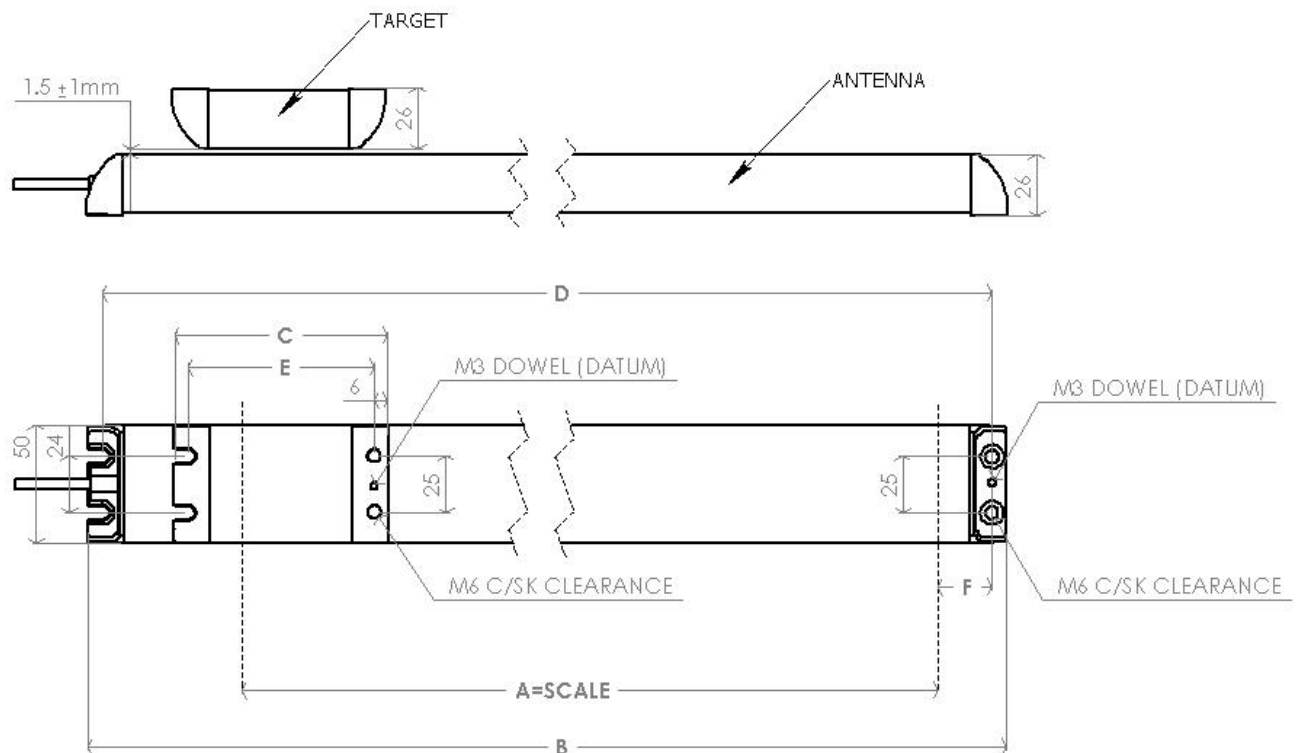
Custom versions are available for OEMs with alternative temperature ranges, mechanical mounts, finer linearity etc. - simply contact Zettlex for further details.

Outline Specification

Output signal	Analogue
Full scale*	200, 300, 400, 500, 600, 700, 800, 1000mm – other options for OEM volumes
Measurement type	Absolute
Resolution	0.025% full scale (12 bit resolution)
Repeatability	0.050% full scale (1 LSB)
Linearity	+/- 0.250% full scale (<i>finer linearity available as an option</i>)
Operating temp.	-40 to +85 Celsius
Output signal	4...20mA or 0-10VDC – other options for OEM volumes
Power supply	24VDC +/-20% with <50mA
Measurement frequency	1000Hz

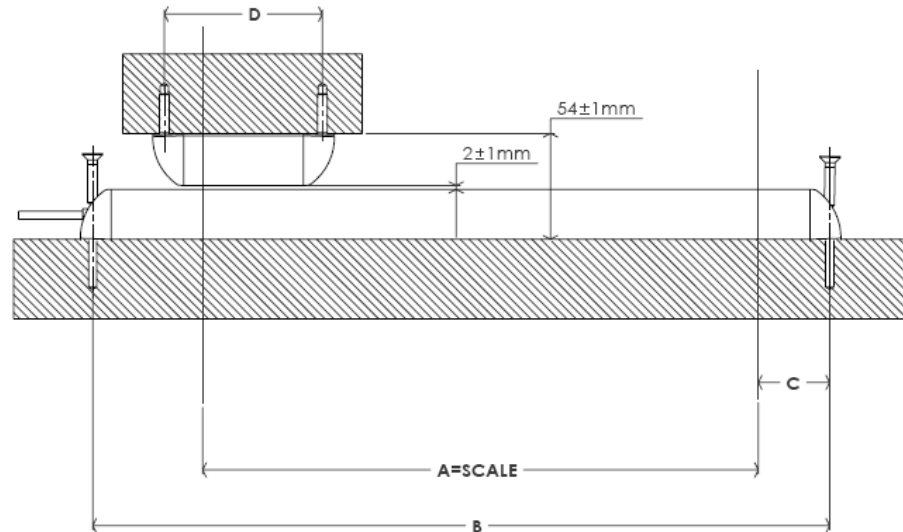
* Actual scale selectable down to 10% of full scale.

Dimensions



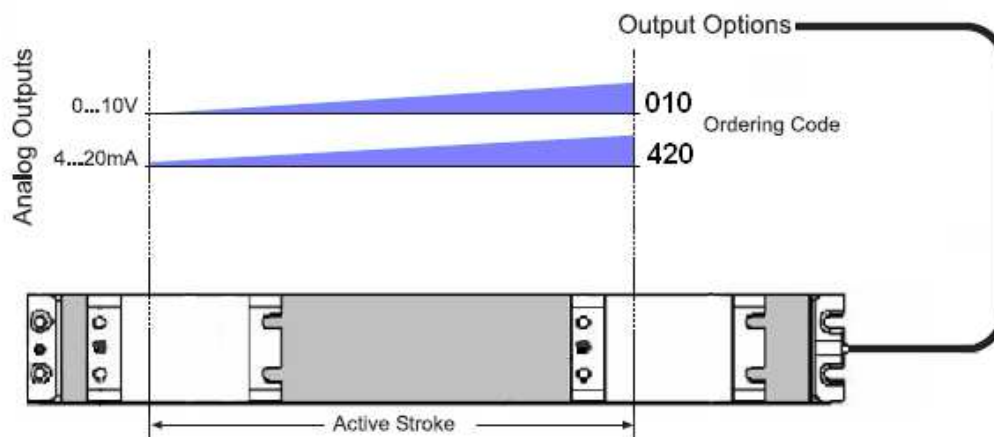
RANGE [A] mm	B± 2mm	C± 2mm	D± 2mm	E± 2mm	F±1mm
200	436	103	424	91	44
300	573	119	561	107	60
400	703	123	691	111	76
500	840	138	828	126	93

Installation



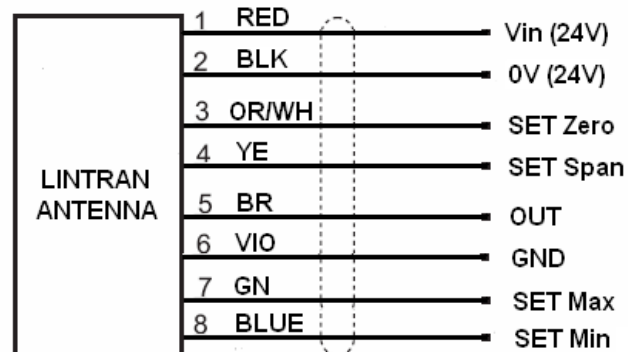
Storage temperature	-40 to 100°C
EMC	Complies with EN61326 emissions & immunity
Temperature coefficient	<80ppm/K
Ingress protection	IP67
Reverse polarity protection	Yes
Connector	Integral cable - multi-strand PVC sheathed cable 2m long

Electrical Outputs



NOTE - 0% or 100% can be at either end of actual stroke. Actual stroke can be any portion (>10%) of full-scale

Wiring Diagram & Programming



LINTRAN factory settings are with 0% and 100% at the extremes of the measurement range.

To set an alternative 0% (0V or 4milliamp) of scale, power up the LINTRAN, then move the Target to the desired 0% position and connect Orange/White wire to 0V wire for >1 second.

To set an alternative 100% (10V or 20milliamp) of scale, power up the LINTRAN, then move the Target to the desired 100% position and connect Yellow wire to 0V wire for >1 second.

Once 0% and 100% are set, we recommend that the relevant wires are terminated and insulated.

'Set Max' and 'Set Min' are factory settings and should not be connected without prior consultation with Zettlex.

Ordering code

ST-LINT-AAA-XXX-V1.0

AAA = Range – choose from 200, 300, 400, 500, 600, 700, 800 or 1000 [mm]

XXX = Output – choose 010 for 0-10VDC or 420 for 4...20mA

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