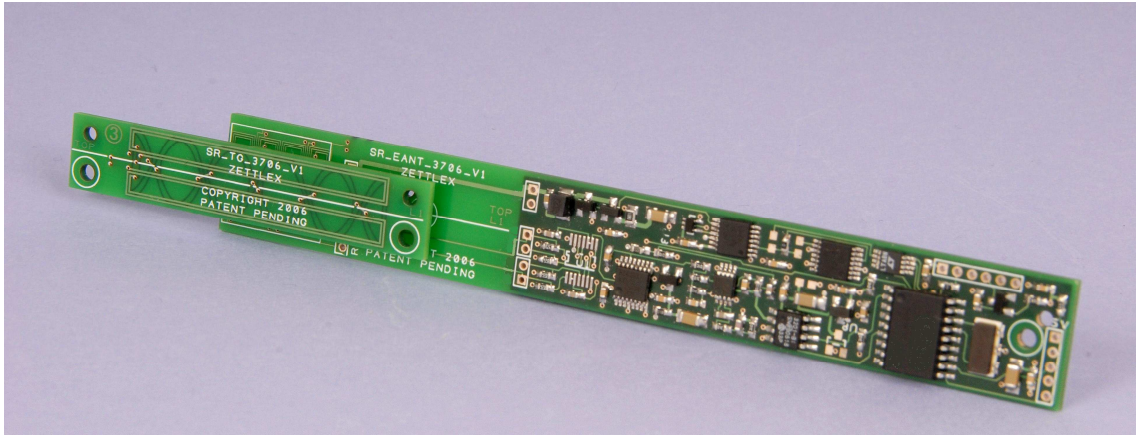


Product Guide - Linear Transducer Type 3706-OEM



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

Zettlex transducers are **non-contacting, absolute** position measuring devices. They utilise a unique inductive technique and comprise two main components – a Target and an Antenna. The Antenna 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.

The 3706 unit is an unpackaged (OEM) transducer for **precision measurement of linear displacement**. The transducer's Target & Antenna can simply be screwed or glued to a host product such as an actuator. The transducer is ideally suited to harsh environments where electrical contacts or optical transducers would prove unreliable.

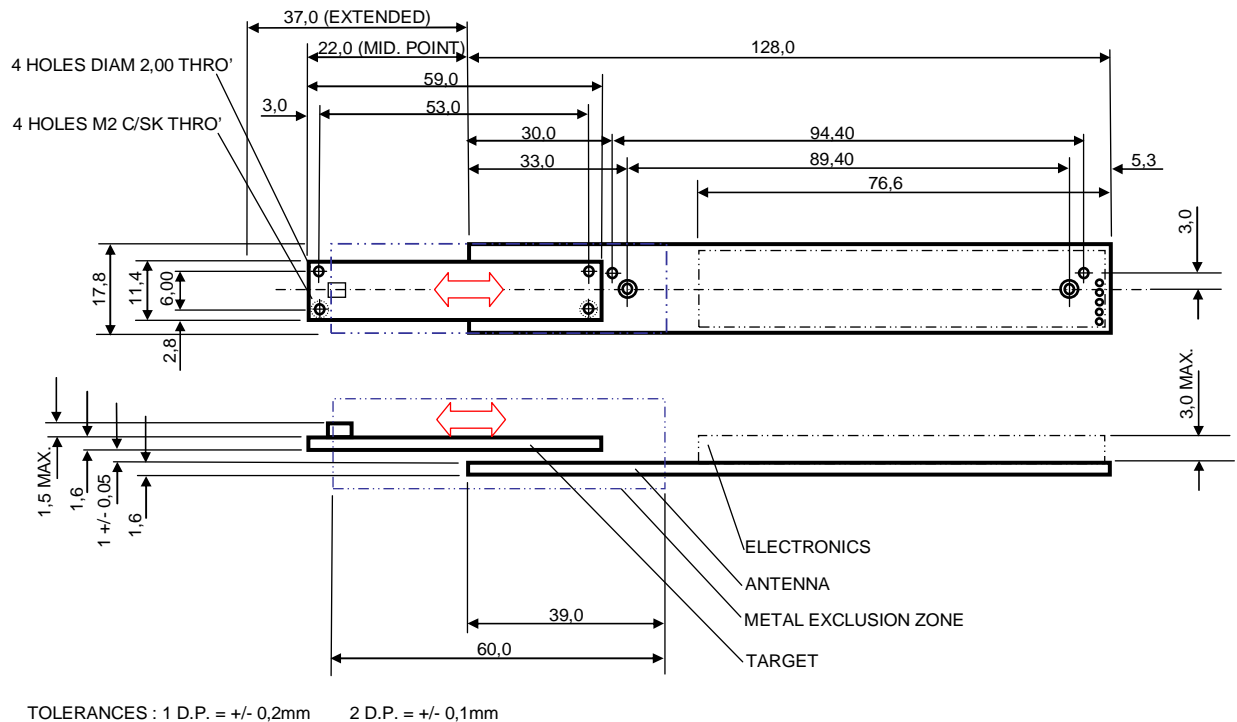
Custom versions are available for OEMs with alternative temperature ranges, mechanical mounts, finer linearity etc. - simply contact Zettlex for further details.

Outline Specification

Full-scale	15mm
Measurement type	Absolute
Resolution	$\leq 5\mu\text{m}$
Repeatability	$\leq \pm 5\mu\text{m}$
Linearity	$\leq \pm 0.25\%$ Full-scale (<i>finer linearity available as an option</i>)
Operating temp.	-40 to 85 Celsius
Power supply	5VDC $\pm 10\%$ & $< 30\text{mA}$
Measurement frequency	1000Hz
EMC	EN50082-2 & EN55011 Group 1, Class A
Temperature coefficient	$< 40\text{ppm/K}$
Connector	5 pin, 2mm pitch header

Output signal	PWM + 2 digital outputs (D1, D2) PWM range = 0 to 750 positions Position = PWM + (D1 x 750) + (D2 x 1500)
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Dimensions & Installation



Recommended installation method is to align the unit using M2 plastic dowels then secure with adhesive (such as 2 part epoxy) and/or nylon M2 screws.

Wiring

- Connector Pin 1 5V
- Connector Pin 2 D2 Digital Data MSB2
- Connector Pin 3 D1 Digital Data MSB1
- Connector Pin 4 PWM
- Connector Pin 5 0V

Ordering code

3706 - OEM

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