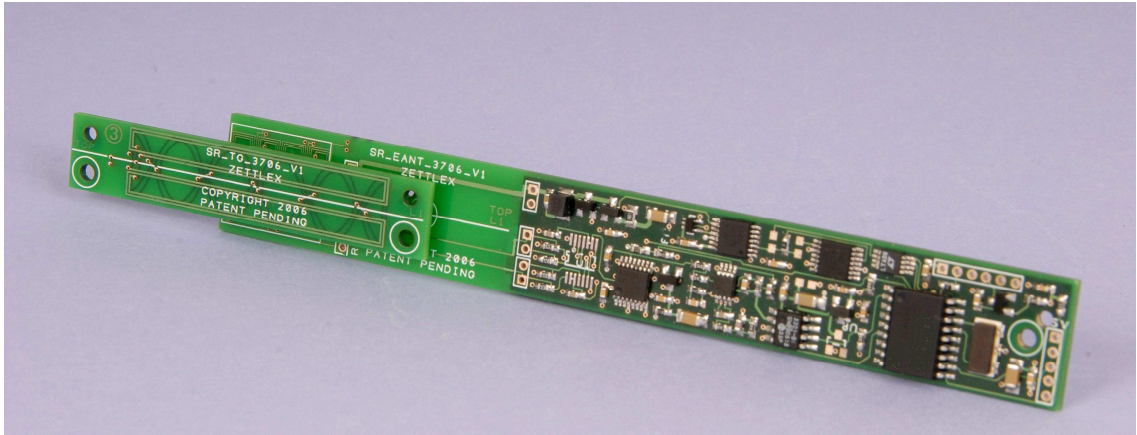


## Product Guide - Linear Transducer Type 3706-OEM



***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** over small distances (<15mm). The unpackaged form makes it ideally suited for inclusion within a customer's host product such as a gauging probe, actuator or wear sensor.

The transducer is ideally suited to harsh environments where electrical contacts or optical transducers would prove unreliable.

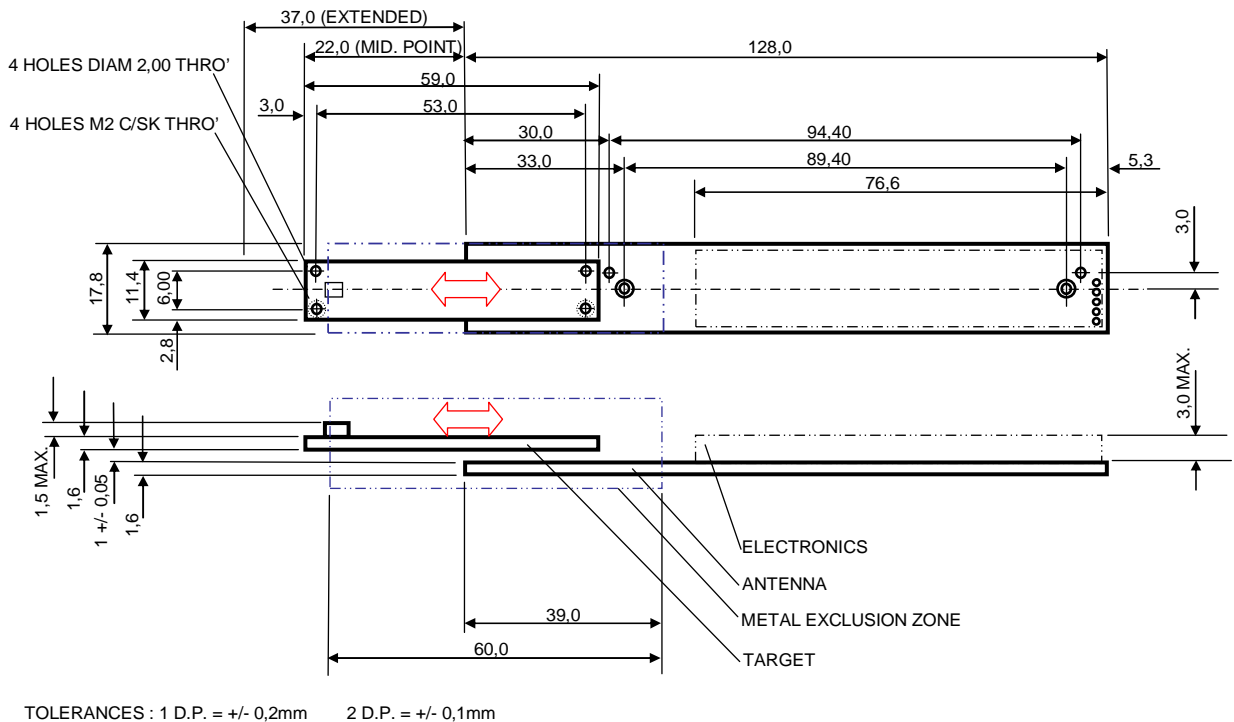
**Custom versions are available for OEMs** with alternative temperature ranges, mechanical mounts, finer linearity etc. - simply contact Zettlex for further details.

### Outline Specification

Measurement Geometry	Linear
Full-scale	15mm
Measurement type	Absolute
Resolution	$\leq 5\mu\text{m}$
Repeatability	$\leq \pm 5\mu\text{m}$
Linearity	$\leq \pm 0.250\%$ Full-scale ( <i>finer linearity available as an OEM option</i> )
Operating temp.	-40 to 85 Celsius
Power supply	5VDC $\pm 10\%$ & <30mA

Measurement frequency	1000Hz
EMC	EN50082-2 & EN55011 Group 1, Class A
Temperature coefficient	<20ppm/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)

### 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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