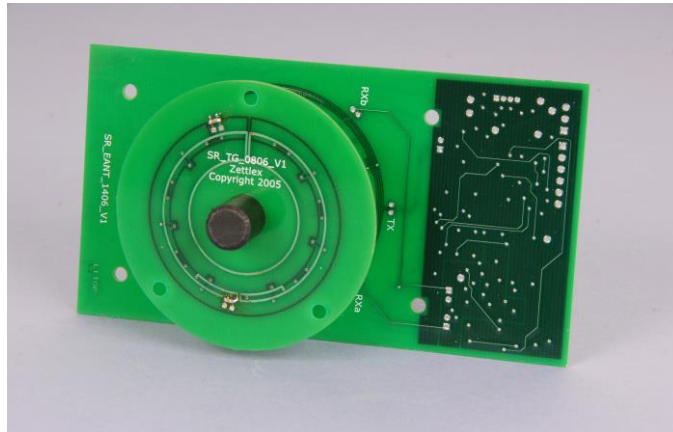


Product Guide

Rotary Transducer: Type 1406-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 and the Target is passive. An electrical output from the Antenna shows the position of the Target relative to the Antenna.

The 1406 unit is an unpackaged (OEM) transducer for **precision measurement of rotary position** with a digital data output. The Targets & Antennae can simply be screwed to a host product such as a robotic arm, actuator etc. The transducers are ideally suited to harsh environments where electrical contacts or optical transducers would prove unreliable. **Precise mechanical mounting is not required and operation is unaffected by condensation or dust.**

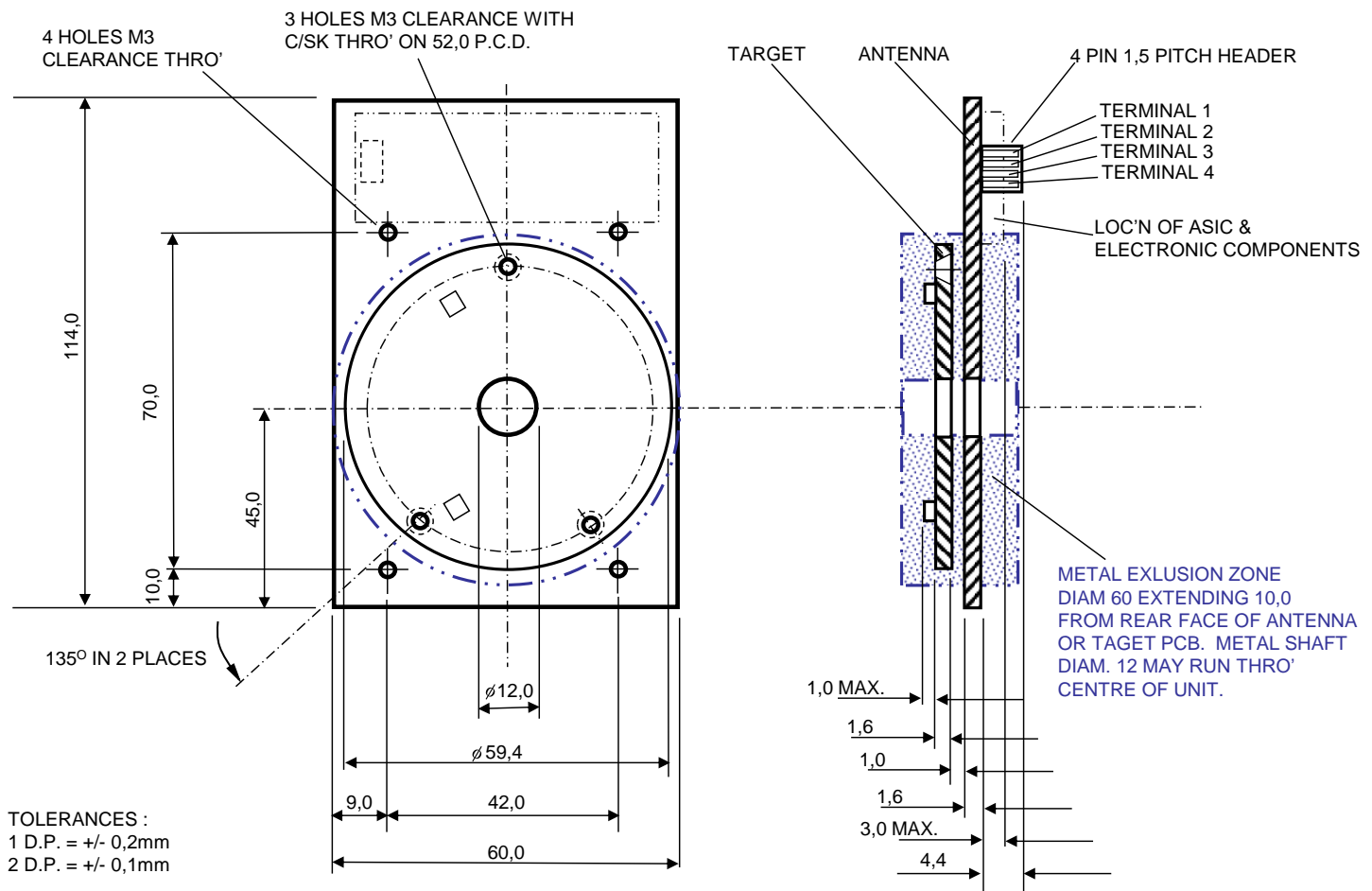
Custom versions are available for OEMs with alternative temperature ranges, mechanical mounts, finer linearity etc. - simply contact Zettlex for further details.

Specification

Output signal	Digital Data at 9600 Baud
Full-scale	360 degrees continuous
Measurement type	Absolute
Resolution	14 bit
Repeatability	+/- 1 LSB
Linearity	<0,05%
Measurement frequency	150Hz
Operating temp. range	-40 to 85°C
Power supply	5V and <50mA at 100% duty cycle
EMC	EN50082-2 & EN55011 Group 1, Class A

Temperature coefficient	<20ppm/K
Connector	Header, 4 pin, 1.5mm pitch
Ingress protection	IP00 – however, all electronics are conformally coated so that temporary immersion in liquid will not affect operation.
Over voltage protection	Not provided
Reverse polarity protection	Not provided
Mounting method	Rotor - M3 C/SK Nylon Screws Stator – M3 Cap Head Steel Screws
Comms protocol	9600 Baud, 8 Bit Data, 1 Stop Bit, No Parity, No Flow-Control. The output is a string of ASCII characters. The first character is a "+" or "-". The next 5 characters represent an ASCII decimal value from +0 to +16380 over 360 degrees of rotor position. The final character is a carriage return. When there is an internal error, or if the rotor is removed, the output value is "-1".

Dimensions



Terminal 1 = DATA; Terminal 2 = 5V; Terminal 3 = 0V; Terminal 4 = NC

Ordering code

1406 - OEM

Zettlex UK Ltd.
Newton Court
Newton, Cambridge
CB22 7PE
United Kingdom
Web www.zettlex.com
Email info@zettlex.com
Telephone +44 (0) 1223 874444