### PRODUCT

## EMTx40 Series EM Transmitter //





THE EMTX40 TRANSMITTER IS AN ELECTROMAGNETIC TRANSMITTER THAT CAN BE USED FOR PIG TRACKING AND LOCATING FUNCTIONS, INTENDED FOR USE IN PIPELINE DIAMETERS OF 10" AND ABOVE. THE TRANSMITTERS OPERATE EFFECTIVELY IN EVERY TYPE OF PIPELINE, I.E. TOP-SIDE, BURIED, GAS OR LIQUID AND IN PIPELINE BUNDLES WHERE ACOUSTIC TRANSMITTERS ARE EITHER LESS EFFECTIVE OR INEFFECTIVE.

#### Key Benefits:

- Exact location of the transmitter can be determined to within a few cm by detecting the inherent EM null spot of the transmitter.
- Self-regulation ensures the signal strenth is constant over the battery's lifetime.
- Several activation methods designed to conserve battery life when deployed in advance of pigging operations.
- Bluetooth connection and OEL's EMTx CONFIG Application allows transmitter parameters such as pulse rate, pulse width and power output to be modified by the user providing flexibility to manage signal strength and battery requirements.
- Mounting holes are built in to aid centralising the transmitter within a pig body, eliminating the need for a transmitter carrier. This dramatically increases the received EM signal.



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The standard transmission frequency is 22Hz however the frequency is configurable between 10Hz and 30Hz. Once the approximate location of the transmitter has been established using an EM receiver with the antenna held parallel to the pipeline/transmitter, the exact location can be determined to within a few cm by orientating the antenna perpendicular to the pipe and detecting the inherent EM null spot of the transmitter.

The EMTx40 series offers several activation methods designed to conserve battery life when deployed in advance of pigging operations including bleedscrew, pressure switch and delayed activation. These methods may be used individually or in combination. Contact Online Electronics Ltd to discuss your individual requirements.

The received signal strength is dependent on several factors and frequency, signal strength and transmission pattern can be configured to achieve the desired balance between detectability and battery life.

#### **PRODUCT SPECIFICATION**//

Battery Type (Alkaline) Battery Type (Lithium) Battery Life at + 5°C in air **Frequency Range** Temperature Range (Alkaline) Temperature Range (Lithium) **External Pressure Rating** Standard Signal at 1m MATERIALS & DIMENSIONS// Housing Material **Endcap Material O-Ring Material** Length Diameter Transmitter Weight (including batteries) **CERTIFICATION**// **ATEX Notified Body Number** ATEX Type Examination Number ATEX Code **IECEx Cert No UKEx Cert No** 

5x Duracell Industrial ID1300 Alkaline D Cells 5x SAFT LS33600 Lithium D Cells 5-85 days dependent on battery type and pulse rate 10Hz-30Hz -20°C to + 54°C (-4°F to + 129.2°F) -40°C to + 80°C (-40°F to + 176°F) 500bar (7252Psi) 650mVpp (with OEL reference antenna in air)

ASTM B348 Grade 5 Titanium Ti-6Al-4V Alloy Bronze CA 104 EN 12163 NBR70 374mm (14.7") 76.8mm (3.02") 7kg (15.5lbs)

2812 ERO23ATEX0011X Ex II 2 G Ex db IIB+H2 T6...T5 Gb IECEx EMT 23.0008X EMA23UKEX0026X



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