

# 4003 MAGSIG® PIG SIGNALLER



The 4003 MAGSIG® is a fully ATEX, IECEx and UL/CSA Class 1 Division 1 certified, non-intrusive pig signaller which quickly and accurately detects, signals and logs the passage of magnetic pigs at critical points along a pipeline both on land and offshore.

## Key Benefits

- Removes any uncertainty over confirmation of pig passage.
- Quick and easy installation using ratchet strap or stainless steel banding.
- Minimal set-up required ensuring time is not lost setting up multiple parameters.
- Complementary Bluetooth Application displays pig passage data and allows for parameters to be modified from a handheld device, providing flexibility.
- Versatile - can be installed on any pipeline up to 60" diameter with wall thickness up to 50mm, carrying any medium and with pigs running at varying speeds.
- No location restrictions - can be located on major barrel and magnetic sensor can be supplied on a cable up to 10m long for use on buried pipelines or where access is limited.
- Unit can be installed close to receiver door, allowing for confirmation that pig has passed isolation valve and easy pig recovery.

Interested in hearing more about this, or other applications?  
Contact our IK Trax specialists at:

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Events are signalled as they occur via a graphical display and high brightness LEDs positioned around the perimeter of the display. The unit logs the time and date of up to 99 events. A removable SD card enables detailed history of sensor data over time. Logged events can be viewed locally on the display or transmitted remotely over several optional interfaces. These include DPDT (VFC) dry relay, 4-20mA, LoRaWAN and satellite communication. The user can turn the unit ON and OFF as well as modify several settings using the single control button and intuitive menu system.

Pipeline mount and post mount options are available. For extreme direct sunlight environments, sunshades can be provided.

The detection capabilities vary depending on the background magnetic noise, pig speed, pipeline diameter, wall thickness and the quality of magnets fitted. It is recommended that pigs are fitted with rare earth magnets (neodymium iron boron) to maximise magnetic signal.

## PRODUCT SPECIFICATION

|                                     |                                        |
|-------------------------------------|----------------------------------------|
| Battery Type (Alkaline)             | 4x Alkaline 1.5V 18Ah D cells          |
| Battery Type (Lithium)              | 2x Lithium Thionyl Chloride 3.6V 1     |
| Typical Battery Life                | 365 days (Alkaline) 365 days (Lithium) |
| External Supply                     | +21.6VDC to +26.4VDC, <1.0W            |
| Entries                             | 2x 3/4" NPT                            |
| Temperature Range (Alkaline)        | -20°C to +50°C (-4°F to +122°F)        |
| Temperature Range (Lithium)         | -40°C to +80°C (-40°F to +176°F)       |
| Temperature Range (External Supply) | -50°C to +85°C (-58°F to +185°F)       |

## MATERIALS & DIMENSIONS

|                                   |                                  |
|-----------------------------------|----------------------------------|
| Housing Material                  | Aluminium or 316 Stainless Steel |
| Length (including mounting plate) | 240mm (9.4")                     |
| Width (including mounting plate)  | 192mm (7.6")                     |
| Height (including mounting plate) | 165mm (6.5")                     |
| Weight in Aluminium               | 3.5kg (8lbs)                     |
| Weight in 316 Stainless Steel     | 5.5kg (12lbs)                    |

## CERTIFICATION

|                                   |                                                 |
|-----------------------------------|-------------------------------------------------|
| ATEX/IECEX Code (Internal Sensor) | II 2 (1) G Ex db [ia Ga] IIC T4...T6 Gb         |
| ATEX/IECEX Code (External Sensor) | II 1/2 (1) G Ex db ia [ia Ga] IIC T4...T6 Ga/Gb |
| EC Type Examination Cert No       | SIRA 18 ATEX 1244 X                             |
| IECEX Cert No                     | SIR 18.0059 X                                   |
| EMC Cert No                       | 5024TC1                                         |
| CSA/CSA-US                        | CSA18CA70166719                                 |
| Enclosure Ingress Protection      | IP66                                            |
| Enclosure Rating                  | NEMA 4X/NEMA 7                                  |

## STANDARD OUTPUTS

|                                        |                         |
|----------------------------------------|-------------------------|
| DPDT Relay (Volt Free Contacts)        | 2A @ 30VDC/0.5A @125VAC |
| ISA Type II 2 Wire Current Loop Output | >18mA (Detection)       |
| MODBUS                                 | RTU (RS485)             |
| Bluetooth                              | Class 4 (BLE)           |

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