

Linear or angular, configurable non-contact position sensing

- 60mm linear, 90° angular measurement
- Analogue / digital output
- Fully configurable range
- Non-contact reliability
- Unlimited mechanical life
- Submersible



ANALOGUE OUTPUT

| | |
|-----------------------------|--|
| Measurement range | Linear: ±30mm (configurable) Angular: ±45° (configurable) |
| Voltage output range | 0 - 4.2V |
| Range accuracy | ±0.1mm or equivalent |

PWM OUTPUT

| | |
|--------------------------|--|
| Measurement range | Linear: ±30mm (configurable) Angular: ±45° (configurable) |
| Frequency | 250Hz or 1KHz |

SERIAL OUTPUT

| | |
|------------------|-----------------|
| Data type | RS232, 19.2K 8N |
|------------------|-----------------|

SWITCH OUTPUT

| | |
|-------------|-------------------------------|
| Type | Switch to GND 30 VDC Max, 8mA |
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ENVIRONMENTAL

| | |
|------------------------------|---|
| Protection | IP67 |
| Operating temperature | -40° to +85°C (standard) -40° to +125°C (optional) |
| Dither life | Non-contact: no deterioration through use |

ELECTRICAL

| | |
|------------------------------------|------------------------------|
| Supply voltage | 4.8V DC to 30V DC |
| Over voltage protection | >31V DC |
| Supply current | <10mA with comms |
| Reverse polarity protection | Up to -30V DC |
| Resolution | 10 bit over configured range |
| Sample rate | 1KHz |
| Rise time | 2ms* |
| Pulse energy absorption | 1.0J |

MECHANICAL

| | |
|-------------------------------------|---|
| Size | 6 x 77 x 32.5mm (D x W x L) |
| Sensor - activator clearance | 0.5 - 2mm |
| Mounting | 2 x Ø4mm holes on a 65.5mm pitch |
| Weight | 25.6 grams (0.9 ounces) excluding cable |
| Activator materials | Zinc & colour passivated CR4 mild steel, EN3B painted mild steel or similar, plastic/copper foil. Contact Gill for more details |
| Materials compatibility | Water, engine oil, engine coolant, diesel fuel, gasoline, salt spray, degreaser, degreaser tsp, ammonia and dust. All common automotive liquids and materials |

*The sensor samples the position at 1ms intervals. Each sample is processed then made available via an analogue filter with a rise time of 1.5ms. The total delay to 50% output is approximately 2ms.

ORDERING

Wiring options:
 006 = 30 AWG 6 wire (85°C) (preferred stock product)
 010 = 28 AWG 6 wire (125°C)
 026 = 20 AWG 5 wire (125°C)

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Zinc & colour passivated CR4 mild steel activator = 1484-30-050

> More information at gillsc.com

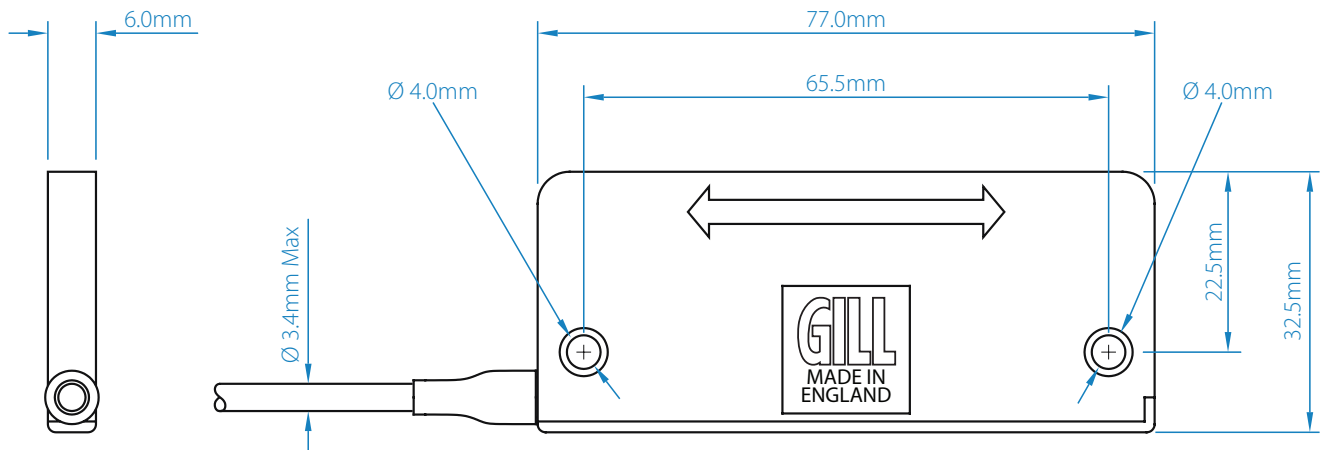
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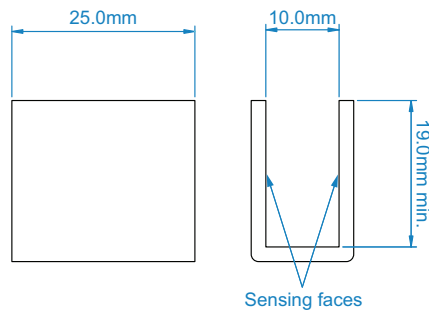
Sensors & Controls

DIMENSIONS - SENSOR



DIMENSIONS - ACTIVATOR

The sensor requires a metallic activator to be mounted 0.5-2mm away from the sensing face. This can either be mechanically mounted to the moving object or machined into the application for minimal installation overhead. Shown right is a drawing detailing the dimensions of our recommended standard activator. Please consult Gill for more information on activator design.



WIRING DESIGNATION

| | |
|--|--|
| ■ Red | 4.8V DC to 32V DC supply |
| ■ Black | System & power ground (GND) |
| ■ Blue | Switch output |
| ■ Green | Serial comms input (Rx), RS232 compatible |
| ■ White | Serial comms output (Tx), RS232 compatible |
| ■ Yellow | Analogue output: Voltage or PWM |