

Full 360°, configurable non-contact position sensing

- Analogue / digital output
- Fully configurable range
- Non-contact reliability
- Full 360° measurement
- Unlimited mechanical life
- Submersible



ANALOGUE OUTPUT

Measurement range	0 - 360° (configurable)
Voltage output range	0 - 5.5V (unless limited by V supply)
Range accuracy	±0.5° over temperature range
Error level	0.3V default (configurable)

PWM OUTPUT

Measurement range	0 - 360° (configurable)
Frequency	1KHz

SERIAL OUTPUT

Data type	RS485, 19.2K 8N
------------------	-----------------

SWITCH OUTPUT

Type	May be used as V Ref or switch from V supply to ground
-------------	--

ENVIRONMENTAL

Protection	IP67
Operating temperature	-40° to +85°C (32VDC Max) -40° to +125°C (14VDC Max)

ELECTRICAL

Supply voltage	4.8V DC to 32V DC
Over voltage protection	>33V DC
Supply current	<25mA without comms
Reverse polarity protection	Up to -32V DC
Resolution	10 bit over configured range
Sample rate	1KHz
Rise time	2ms*
Pulse energy absorption	1.0J

MECHANICAL

Size	16mm x Ø38mm
Sensor - activator clearance	0.5 - 2mm
Sensor - activator concentricity	<0.5mm
Mounting	3 x M3 screws
Mounting torque	0.25 Nm maximum
Weight	22.8 grams (0.8 ounces) excluding cable
Activator materials	Tinned 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:
 068 = 26 AWG side exit cable (preferred stock product)
 069 = 26 AWG centre exit cable
 070 = 20 AWG heavy duty cable

1498 - 00 - **Tinned mild steel activator = 1498-30-065**

> More information at gillsc.com

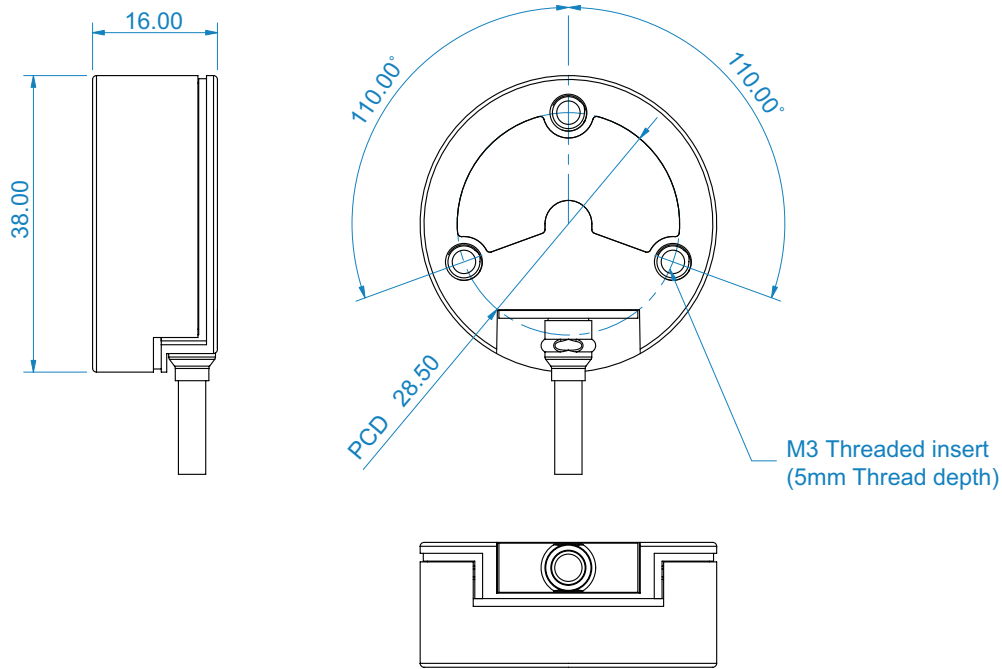
E support@gillsc.com

T +44 (0)1590 613900



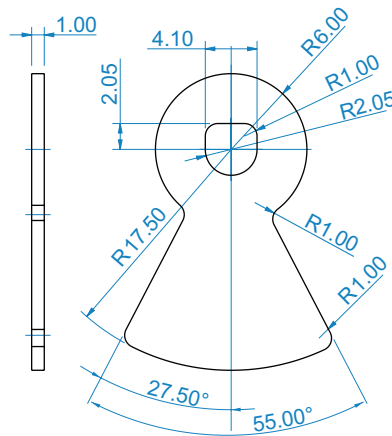
Sensors & Controls

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 end of a rotating shaft or machined into the tip of a rotating part. Shown right is a drawing showing the dimensions of the activator for optimum performance. 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), RS485 compatible
White	Serial comms output (Tx), RS485 compatible
Yellow	Analogue output #1: Voltage or PWM
Orange	Not used