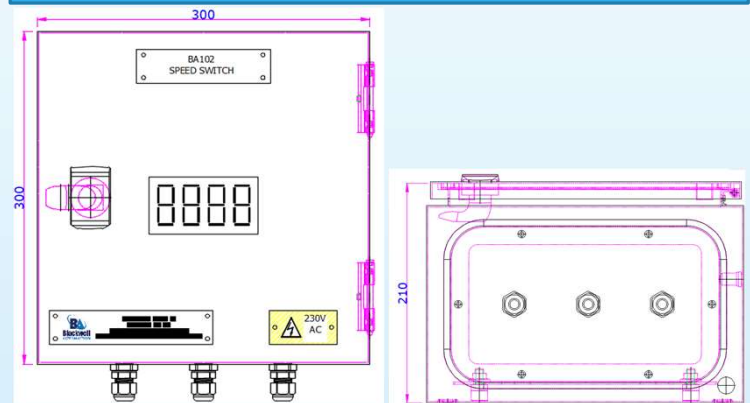# BA102    RPM MONITORING SPEED SWITCH



## Dimensions



## Description

The BA102 speed switch monitors the speed of your rotating machinery and displays the RPM on a digital indicator as well as providing relay outputs to start/stop machinery, trip, indicate or for alarm functions.

By use of a PNP or NPN proximity sensor which is placed over your rotating machinery, pulses can be detected from geared / toothed wheels, pulse belts etc. The BA102 RPM Monitoring Speed Switch converts these pulses into an RPM value.

From here, the RPM value is outputted in a scaled 0-20mA or 0-10VDC signal to drive a PLC input, Building Management Systems or other RPM indicators.

The Speed Switch also uses the RPM value to activate trip alarms or indications. These signals can be sent to control safety systems for use as Cranking speed, Underspeed, Running or Overspeed for example.

The BA102 can either be supplied loose for mounting inside a panel, or delivered built inside a small enclosure.

If your existing system uses a magnetic type of proximity sensor, then this can be integrated to our system using the BA109 converter.

## Technical Data

Power Supply: 24VDC or 110 – 230VAC

Frequency of input: Up to 20kHz

Sensor: PNP, NPN or Inductive compatible

Digital Outputs: 4

Analogue Outputs: 1, either 0-20mA or 0-10VDC

Enclosure: 300x300x210

IP: 66

Max RPM displayed: 9999

Approvals: All hardware used is marine approved

Installation: Either supplied with an enclosure, or loose items to go inside a control panel

## Optional Extras

Modbus RS485 RTU slave.

2nd Pick up for rotation direction or redundancy.

HMI Display (remote or door mounted) to display RPM and allow for calibration / programming.

Magnetic type can be interfaced using our BA109 converter