



DESCRIPTION

The model **103 speed switch** has been designed to monitor the speed of an engine or piece of rotating machinery by detecting the pulses from a magnetic pick-up device.

The electronics are housed in a **robust metal case** encapsulated in resin for environmental protection. The case is suitable for vertical mounting. Connections to the module are via 1/4" blade terminals.

The module can be set to operate the **independent relays** at different speed settings. Either relay can be adjusted to operate from between 10% to 140% of the engines rated running speed.

This **flexibility** allows the module to be used for many different applications including Underspeed or Overspeed protection or crank disconnect facilities.

Adjustment of the trip points is via two pre-set potentiometers. Turning clockwise increases the appropriate trip point and turning anti-clockwise decreases the appropriate trip point. The appropriate LED will be illuminated to indicate that the trip has been activated.

On application of a continuous DC supply voltage, the module will start counting pulses from the magnetic pick-up. Should these pulses exceed the pre-set RPM level, then the trips will be activated and the relay contact will change state.

A **latch** is provided to prevent the release of the relays, which can be disabled by applying a continuous negative signal to the 'RESET' terminal.

To **reset** the latch, apply a negative signal to the 'RESET' terminal. Removal of the +Ve DC supply from the module will also reset the latch

Meter calibration is via a pre-set potentiometer, which enables the meter output to be scaled to match the optional RPM meter. Rotating the pre-set potentiometer clockwise increases the meter reading.

NOTE
A version is available where relay 1 is permanently non-latching. Relay 2 is latching/non-latching as normal.



SPECIFICATION

DC SUPPLY :

The 103 is powered from the plant battery or from a low voltage supply between 10 to 32V Continuous. The module is electronically stabilised and requires no internal batteries to meet this specification. Internal protection is provided for polarisation errors.

SENSOR INPUT :

Magnetic Pick-up
Impedance 10Ω to 1KΩ.
Input signal range 1V to 70V AC RMS.

TRIP LEVELS :

10% to 140% of rated RPM.

RELAY CONTACTS :

16Amp @32VDC rated voltage
free change-over
(50V DC Max Rating).

DIMENSIONS :

72x87x27.5mm housing.

OPERATING TEMPERATURE

RANGE :

-15 to +70°C

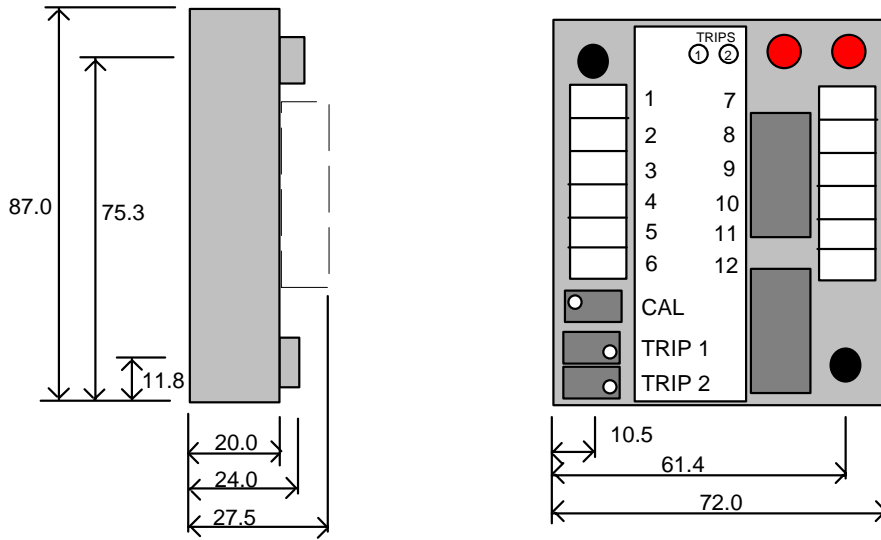
INDICATIONS :

'Trip' Active LED per channel.

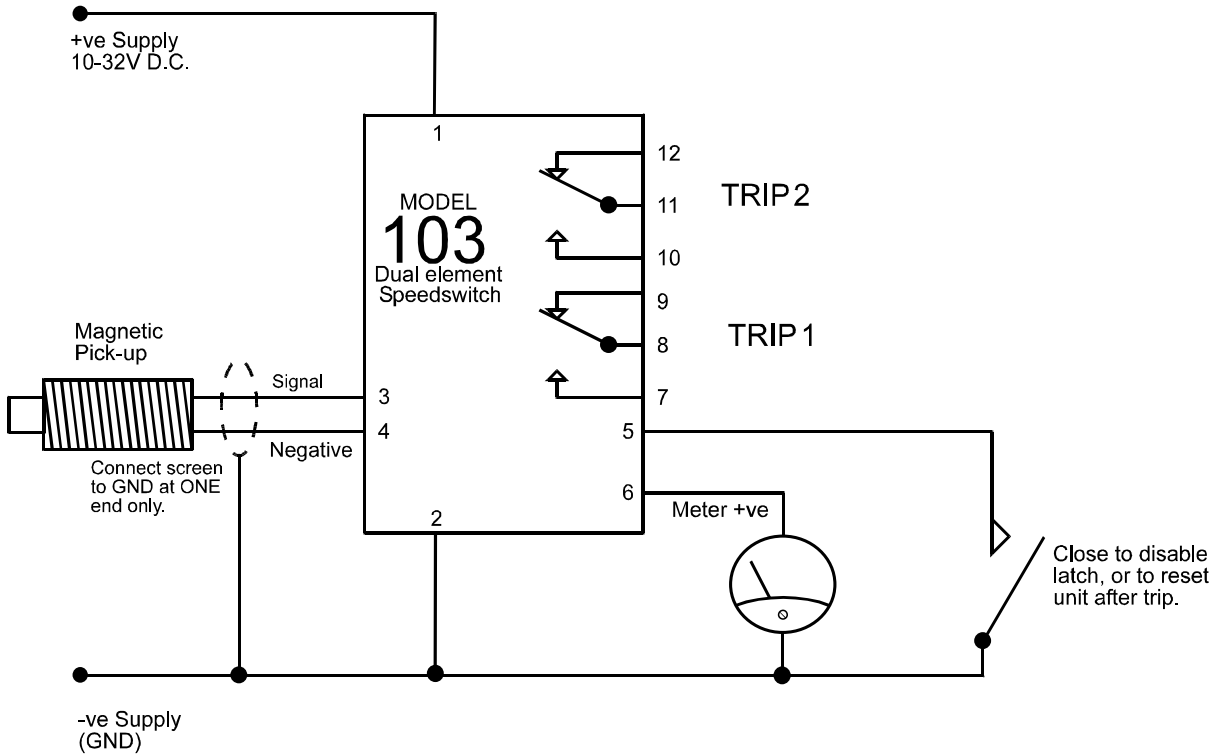
METER OUTPUT :

1 milli-amp full scale deflection drive available.

CASE DIMENSIONS



TYPICAL CONNECTIONS



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