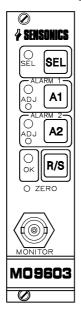
# PREDICTIVE MAINTENANCE SYSTEMS



### **AEGIS SYSTEM**

## MO9603 – THRUST (AXIAL POSITION) MONITOR MODULE



- ECP + DRIVER INPUTS.
- SINGLE CHANNEL.
- ANALOGUE OUTPUTS.
- FIELD SELECTABLE DISPLACEMENT RANGE WITH ZERO ADJUSTMENT IN SITU.
- ADJUSTABLE ALARMS (ALERT AND TRIP).
- INDIVIDUAL POWER SUPPLY (AC OR DC INPUT).
- UP TO 14 MODULES PER 19 INCH RACK, (OR 12 WITH A COMMON DISPLAY).

The low cost MO9603 Thrust (Axial Position) Monitor Module is designed to accept inputs from Eddy Current Probe and Driver systems. It is ideally suited to applications where constant displacement monitoring is required on rotating machinery, to protect against sudden deterioration in condition and avoid costly breakdowns. (e.g. thrust wear). The MO9603 can also be effectively used with LVDT's for valve position monitoring.

Current and Voltage signal outputs are factory set as required for the specified displacement range. Adjustable level, latching or fleeting alarms may operate with either normally open or normally closed contact outputs. All these signal outputs are continuously available via the rack rear panel terminal blocks.

The module uses only the highest quality components and has been extensively type tested to ensure effective monitoring and prevent spurious alarms.

Up to 12 modules can fit into a standard 19" rack (3U high) with a single shared LED digital display module. Further modules in second and third racks can utilise the same display module by simple connection of the racks. The level of any particular channel is brought up on the display in engineering units, by depressing the 'select' button on the front of each module. An Amber LED illuminates next to the button to indicate which module is currently being displayed. Alarm levels are displayed by pressing and holding the A1 or A2 buttons on the selected module.

The signals available for routing to the monitor are: - a thrust position signal, together with alarms 1 and 2 setpoints.

### MO9603 - THRUST (AXIAL POSITION) MONITOR MODULE

Each module has it's own PSU for increased system integrity, a front panel BNC enables monitoring of the input signal via a buffer amplifier.

Three off volt free change over relays are provided for each module, A1 and A2 level alarms, and A3 Transducer/PSU integrity. The status of A1 and A2 is displayed on the front panel by red LED's illuminating when the alarms are initiated. The A3 alarm is annunciated by a normally lit green LED in the front panel, when required the Transducer/PSU integrity alarm is able to inhibit A1 and A2 relays when in the Alarm state. A time delay of up to 5 seconds can be applied to alarms and is strongly recommended when the units are used for trip purposes.

### TECHNICAL SPECIFICATION

<u>Input</u> Eddy Current Probe, Eddy Current Driver.

**Driver Supply** 

Output -24Vdc @ 40mA max.

Transducer Integrity

<u>Limits</u> -1V to -19V

Zero Adjustment Available at front panel.

Outputs 1x Current (4-20mA) for 1mm.

1x Voltage (0-1V, 0-10V, 1-5V or Buffered Raw Signal)
Available on detachable block connectors at rear of the rack.

Also Buffered Transducer Signal provided on front panel BNC.

<u>Alarms</u> Al Field adjustable level alarms (positive or negative going).

A2 Field adjustable level alarms (positive or negative going).

A1 & A2 Field adjustable to be;

Normally Open or Closed Latching or Non-latching

Normally Energised or De-energised.

A3 PSU integrity alarm.

All alarms have front panel LED annunciation, are rated to 0.5A @ 110VAC and can have delays of up to 5 seconds.

**DS1116** 



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