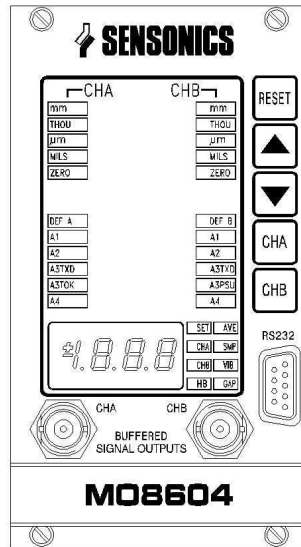


## SENTRY SYSTEM

### MO8604 - DUAL CHANNEL ROD DROP MODULE



- \* 3 EDDY CURRENT PROBE INPUTS.
- \* MODULAR, RACK MOUNTED.
- \* INDEPENDENT MICROPROCESSOR.
- \* PROGRAMMABLE SET UP VIA RS232.
- \* INDEPENDENT POWER SUPPLY.
- \* MONITORS IN DYNAMIC & STATIC LEVELS.
- \* HIGH VISIBILITY DISPLAY.
- \* 4 ALARM RELAYS PER MODULE.
- \* 6 RECORDER OUTPUTS PER MODULE.
- \* DESIGNED TO MEET API 670

The Sensonics MO8604 Module forms one of the SENTRY Microprocessor based series and is a signal conditioning unit for monitoring the signal from three eddy current probes. The modules in the SENTRY series are designed to be housed in the Sensonics RA8600 series 19 inch 3U extended eurocard rack system.

The signal conditioning unit is fitted with a digital indicator, this will indicate dynamic or static displacement in the selected units (selectable on the front panel) from either channel. Front panel buttons permit selected operational software settings to be viewed on the indicator/display. A "time out" function ensures that the display will revert to the normal reading after a preset time.

#### Signal Conditioning

The module accepts 2 input signals with levels proportional to 'rod drop' from 2 eddy current probes. These are conditioned to give two independent measurements of displacement accurate to within +/- 0.5% of the true level. The inputs are conditioned to measure rod drop and the reading displayed in terms of mm, thou,  $\mu$ m or mils. The module also accepts a pulsed tachometer input, to allow synchronisation of the 'rod drop' measurement within the compressors' cycle.

For each channel there are 2 independent displacement level alarms, A1 and A2. When the signal level exceeds an alarm level for a specified period the associated lamp will be illuminated on the display and the state of the appropriate relay changed. The module has four alarm relays as standard each of which may be set independently to be latching or non-latching, normally energised or de-energised and normally open or closed. There is provision for two extra relays to be fitted allowing the settings of the A1 and A2 alarm relays for each channel to be independent. A control input is provided which will cause the alarm levels to be multiplied by a factor of 2 or 3 as selected to prevent tripping during machine start-up.

A channel integrity alarm A3, monitors the Transducer/PSU and Microprocessor for each channel and a common A3 alarm relay is provided. A green A3 TXD and A3 PSU "OK" LED illuminates on the front panel for each channel. If the TXD or PSU are faulty (green LED unlit) then the associated A3 relay will change state.

An A4 Channel Integrity alarm monitors the appropriate integrated inputs for each channel and an A4 alarm tripped indicates that the reading is "not valid". A common A4 alarm relay is available, and an individual indication is available for each channel by the illumination of a red A4 LED.

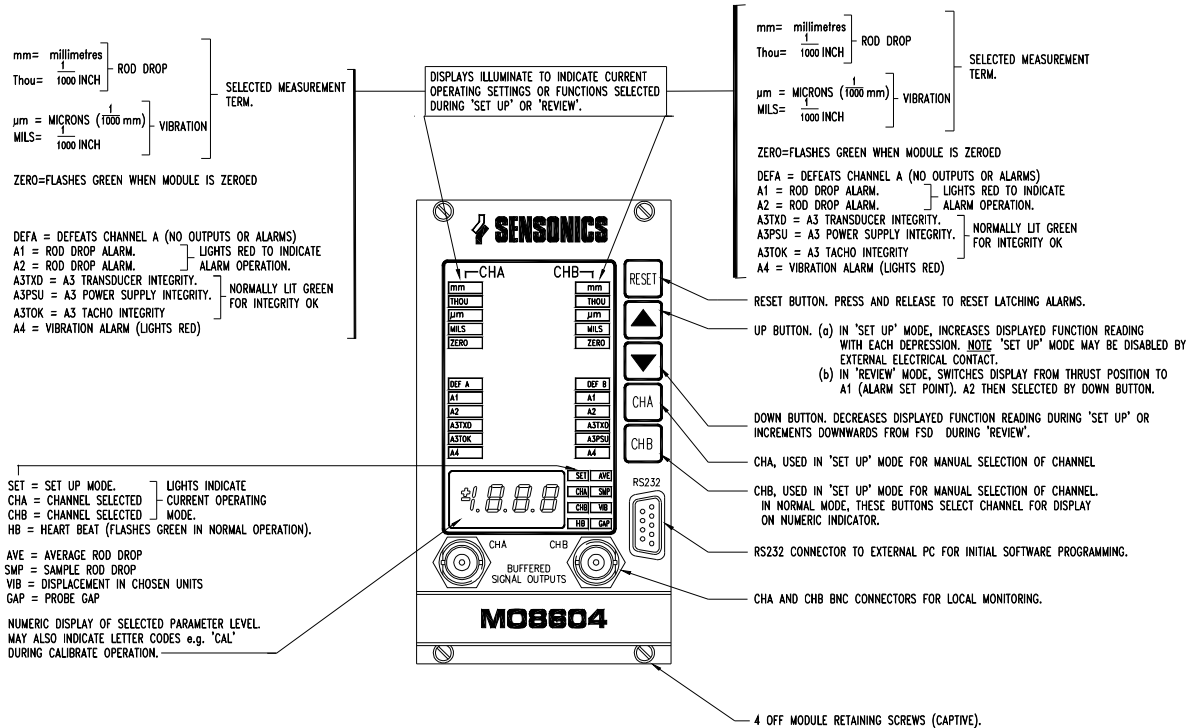
#### Signal Outputs

The module will provide up to 3 outputs per channel of a combination of current and voltage outputs as required. The range of the outputs may be set independently of the display and may also be set to increase or decrease with an increasing displacement.

# SENTRY SYSTEM

## MO8604 - DUAL CHANNEL ROD DROP MODULE

### Front Panel Facilities and Functions



### SPECIFICATIONS

#### Input

Sensitivity	100mV/ thou or 200mV/ thou
Transducer Type	Eddy current probe system
Frequency Range	DC to 10 KHz
Power Supply	110V or 240V AC 50-60 Hz
Operating temperature range	0°C to 50°C

#### Output

Displays	3 1/2 digit indicator.
Meter accuracy	+/- 5% of true value
Recorder outputs	Up to 6 voltage or current outputs per module
Relays	4 alarm relays per module as standard
	A1 and A2 - level alarms
	A3 - Channel integrity alarm
	A4 - Reading invalid alarm
Buffered output	BNC connector on front of panel, and rear of rack.

#### Dimensions

Height	128.8mm (3U)
Width	70.7mm (14HP)

DS1034



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