

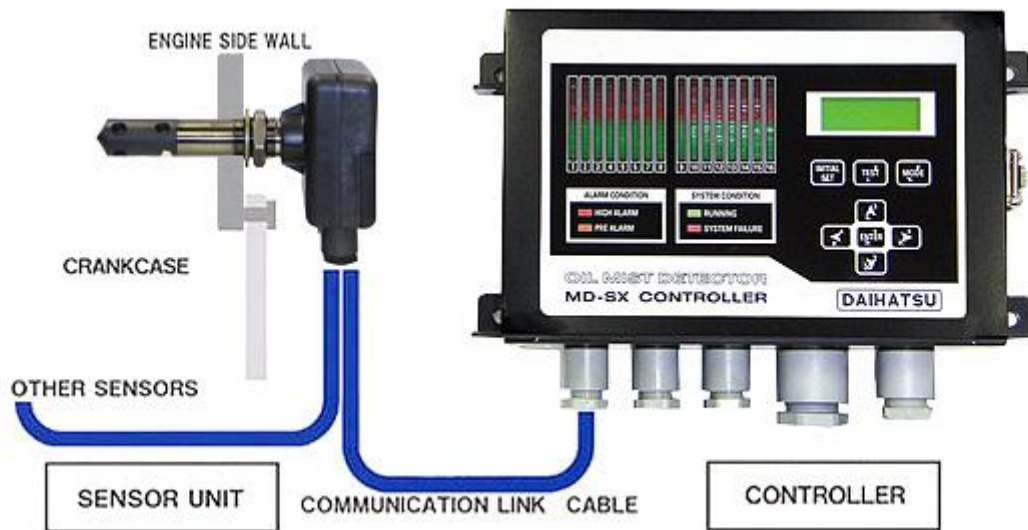
DAIHATSU

Oil Mist Detector MD-SX

Patent and design granted
Patent GB2408798
Patent JP3840470
Design JP1212448

LOW-SPEED DIESEL ENGINES ~ MEDIUM, HIGH-SPEED DIESEL ENGINES
serious failures can be found early or predicted.

Recently, responding to the requirements of engine builders, the manufacturer has developed the sensor type MD-SX oil mist detector, which consists of multiple sensor units that are directly inserted through a side wall of the crank case and fitted to each cylinder of the diesel engine; and a controller for integrated control of these units via communication means.



The detector has already gone through type approval certificate tests by major classification societies NK, LR, DNV, BV, ABS, GL, KR, CR and CCS, and CE marking.



Compactification and improvement of reliability, realization of easiness of maintenance

This detector uses a natural diffusion system based on technology for detection of oil mist concentrations that Daihatsu has built up over the years, augmented with new techniques and ideas. The system requires no sucking mechanism or drive air/piping for mist detection by the sensor units. The further use of an optical dispersion system makes possible detection of mist concentrations by a compact arrangement, which contributes to greater reliability and ease of maintenance.

Marine Technical Library – <http://engine.od.ua>

*Manufacturer's instructions, Spare parts code books, Workshop manuals
for your success marine business*

Flexible system constitution

The maximum number of detection points is 16, which means detectability at eight points in twin engines. The system configuration is made flexible, including the fitting of the controller.

Early detection / a foresight of a serious accident of an engine

The controller has been improved in terms of operating ease by the use of key switches and liquid crystal display (LCD); it can also monitor the overall state of the device, including the sensor units, with its self-diagnosing function.

The detector constantly monitors the oil mist concentration in the crank case, indicates the mist level and, if the concentration is raised beyond a set point by the overheating of the bearings or any other cause, issues an alarm. Accordingly, the device makes possible early detection or prediction of what might otherwise develop into-serious trouble not only in low-speed marine engines but also medium-speed and high-speed diesels.

Specifications

	Sensor unit	Controller
Function	Oil mist concentration & mist level output	Mist level indication & alarm monitoring
Detection point / No. of sensor unit	1Point /1 Unit	16 units (max.)/1Eng. (8 units x2Eng.)
Mist Detection / Detection time	Natural diffusion system Continuous	Response time \leq 1sec
Detection system / Concentration	Optical dispersion system	0~2.0mg / l
Display / Operation	3 color LEDs (Power, Alarm, Failure)	Mist level :3-color bar-graph indication LED:4 color LEDs (Run, Pre alarm, High alarm, Failure) LCD Key switch
Contact output		5 Points (AC125V-0.4A / DC24V-2A) (2xPre alarm, 2xHigh alarm, Failure)
Power supply	Supply from controller	DC24V (+30%~-25%)
Power consumption	60mA (max.) / 1Unit	1.5A (max.) (internal:0.5A)
Protection class	IP 55	IP55
Weight	500g include ACCESSORY(NUT etc.)	4.0Kg
Paint color	Munsell N1.0 (Black)	Munsell N1.0 (Black)