

## **Sample Specification for Oil Thickness Monitor (Model 4100-HCF2)**

The floating sensor shall be of a high frequency capacitance technology to monitor for the dielectric change as the oil separates to the water surface in a sump, tank or containment.

A pulse card embedded in the float assembly will translate the sensor signal to a frequency for high accuracy transmission via 2-conductor shielded cable to the main controller. The controller can be mounted up to 1 km distance from the probe. The sensing probe shall be of PVC and 304 SS wetted parts. Optional materials shall be available where specified for high temperature or corrosive environments.

All calibration, power and control wiring shall be done at the wall mounted Type 4X/IP 65 controller unit. Power input shall be specified as 24vdc or 80 to 240 vac.

A graphical display on the housing door will provide a view of oil thickness on water and display oil thickness in selectable engineered units. The alarm status will also be indicated.

The alarm relays shall be four SPDT, 10 amp dry contact. A time delay ON and time delay OFF shall be standard to avoid nuisance alarms. A fully adjustable differential shall be available to allow the relays to cycle on and off between two distinct setpoints.

A 4-20 mA non-isolated proportional level output signal will be optional as required by the datasheet. An RS-485 Modbus communication port will be optional.

The float sensor model shall be as indicated on the data sheet. Model #A00761 will be specified for 0-25mm oil thickness or Model #A00765 for a 0-300mm oil thickness.

An optional Intrinsic Barrier may be specified to make the sensor assembly Intrinsically Safe where applicable (Part. #A00071)

The controller and sensor shall be the Model 4100-HCF2 series as manufactured by Arjay Engineering Ltd., [www.ArjayEng.com](http://www.ArjayEng.com).