

SUBMERSIBLE SUMP PUMP SEAL SENSOR & RELAY

DEPEND ON
DAVEY

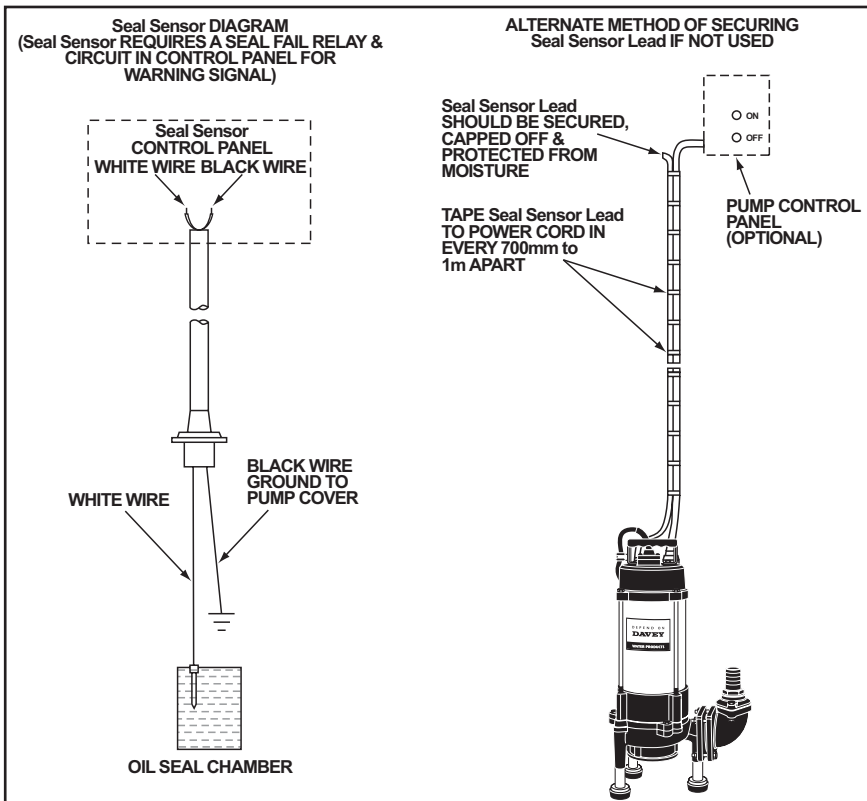
WATER PRODUCTS

SUMP PUMPS

PRODUCT DESCRIPTION

Seal sensors are designed to provide warnings about possible seal failure in sump pumps.

The sump pump should be fitted with the seal sensor and lead, while a control relay and circuit is required in the pump control panel.



PRINCIPLES OF OPERATION

Sensor - Principles of Operation

Also known as a seal failure circuit (or moisture detection circuit) is designed to inform the pump operator that there is moisture within the oil chamber. This early warning can allow the operator to schedule repair & inspection on the pump. The seal sensor probe is inside the oil chamber (the oil chamber houses the mechanical seals that are cooled & lubricated by oil). The seal sensor, when properly connected to a control panel, can help indicate seal failure. The seal sensor requires a seal fail circuit in the control panel to work. The circuit can operate warning signals, or even switch off the pump system.

The open end of the seal sensor circuit lead should be connected to a control panel with the optional seal fail relay or a stand alone seal fail panel.

The seal sensor lead only has 2 leads (1 black & 1 white). The power cord is much larger in diameter and has 3, 4 or 5 leads depending on model pump, voltage & phase. The black lead on the seal lead should be connected to the panel "terminal" going to the relay ground (NOTE: Do not connect the black wire to the panel ground screw). the white lead on the seal lead should be connected to the panel "terminal" going to the probe. For proper wiring, please see detailed relay or panel information.

Although recommended, the pump does not need a control box with seal fail relay or stand alone seal panel to operate.

If the operator does not use the seal sensor

Secure the seal sensor lead if not being used. Tape the seal sensor lead to the power lead with suitable waterproof tape or wide round edged cable ties. Make sure that the leads are taped together in an even run, at about 700mm to 1m apart. Use electrical tape or heat shrink to seal off the end of the seal sensor lead (do not connect to power source). The taped leads should be kept dry and out of the liquid (see next page for detailed drawing).

TECHNICAL SPECIFICATIONS

INSTALLATION & PRIMING

Use a rope to position and retrieve the pump. Do not lower or retrieve the pump using the power lead as this may damage the cable entry seals, causing water leaks and unsafe operation.

Don't use this product for recirculating or filtering swimming pools, spas, etc. While these pumps are built to high safety standards, they are not approved for installations where people will be in the water while they are operating.

Don't pump abrasive materials. Sand and grit in the water being pumped will accelerate wear, causing shortened pump life.

Keep your pump clean, particularly in situations where lint, hair or fibrous materials may get bound around the pump shaft. Regular inspection and cleaning will extend pump life.

Make room for the float switch to operate. Automatic models have a float switch to turn them on when the water level rises and turn them off again when it has been pumped down to the safe operating level of the pump. If the float switch is not free to rise and fall, correct pump operation may not be possible.

Don't run your pump dry. Non-automatic models must be switched off manually or by way of an external float/level switch when the water level is reduced to the top of the pump housing.

This literature is not a complete guide to product usage. Further information is available from your Davey dealer, Davey Customer Service Centre and from the relevant product Installation and Operating Instructions. This data sheet must be read in conjunction with the relevant product Installation and Operating Instructions and all applicable statutory requirements. Product specifications may change without notice.

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