

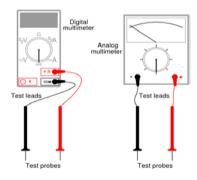
Insulation Resistance

Motor & Lead Condition	Megohm Value
New motor (without drop cable)	200 M Ω or more
Used motor (without drop cable)	20 M Ω or more
New motor with drop cable	4 MΩ or more
Used motor with drop cable	1 M Ω of more
Insulation damage*	less than 1 MΩ

Motors of all kilowatt ratings have similar values of insulation resistance Above is recommended from using a megohm meter at 500VDC, 1 min

Testing the insulation:

Connect lead/probe to the ground/earth
Ensure contact points are clean
Connect the other lead/probe to every core in succession.
View and record the meter reading for each measurement



What test result mean:

If the ohms values meet or exceed the values in the table above, the motor is not Down To Earth (DTE) or grounded and the motor lead insulation is not damaged. If tested with a drop cable fitted, then the drop cable, splice, motor lead and motor windings as an assembly are not damaged.

If the ohms values are below the values in the table above, either the windings are damaged or down to earth or the motor lead is damaged or is faulty. If connected to a drop cable, the check the drop cable for damage and/or the splice for damage of poor connections.

When installing:

Test for insulation resistance of the new motor.

Test insulation resistance after splice and fitting drop cable.

Test insulation resistance when the motor and splice area are submerged in water.

Test insulation when the motor is at its final position in bore/well.

*Any failures of insulation, lift the pump and motor assembly and troubleshoot which area could be the issue; the motor, motor lead, splice or drop cable. Replace or repair as required.