

Capacitance & Resistance Specifications IVECO

CAPACITANCE

Compare readings from all capacitance tests to the following graphs according to the tank size being tested and feed through cable
(+/- 15 pF)

Dual Tanks
3.4m/11ft crossover patch cable = ~195pf

Note: If tank contains LNG, capacitance readings will reflect that level as a reading within the range between "Empty" & "Full" capacitances listed.

Capacitances listed are for single and dual tank set-ups.
In a dual tank system with resistance type senders both tanks will have a sending unit and a 381mm/15" feed through cable

Tank Outside Diameter	Empty Capacitance	Full Capacitance	381mm/15" Feed Through
610mm/24"	342	477	
660mm/26" Bonus	380	531	

Tank Outside Diameter	Empty Capacitance	Full Capacitance	Bare Wire
610mm/24"	317	452	
660mm/26" Bonus	355	506	

Input Voltage

Supply voltage will be measured on the "RED" wire. Supply voltage will be ~24 VDC depending if the engine is operating, and the functional state of the batteries & charging system. Low/High supply voltages can cause incorrect signal voltages

Signal Voltage & Amperage

Signal voltage & amperage will be measured on the "Green" wire. Signal voltage is driven by capacitance and will vary depending on the amount of LNG in the tank, and supply voltage.

Ground Resistance


Ground resistance will be measured on the "Black" wire. Connect one test lead to the black wire from the sending unit and the other to the tank for ground. Reading should be less than one ohm.

Red Wire = Supply Voltage
Green Wire = Signal Voltage
Black Wire = Ground



NOTE: Working resistance needs to be determined for troubleshooting. Use the following formula: $\Omega = \text{Signal Voltage} / \text{Signal Current-Amperage}$. To obtain signal current it is necessary to break the signal wire (green) from the sending unit. Insert a test meter set to measure DC milliamps (mA) in the circuit:

Sending Unit



Truck Wiring

Example: $\frac{3.337 \text{ V}}{14.17 \text{ mA}} = 235 \Omega$

Compare reading to chart below.

Resistance Type IVECO			
	Tank Capacity		
	Standard	Bonus	
26" Outer		198Ω	Empty
26" Outer		50Ω	Full
24" Outer	198Ω		Empty
24" Outer	50Ω		Full

$\Omega = \frac{\text{Signal Voltage}}{\text{Signal Current-Amperage}}$

Capacitance Meter with Test Leads & Separate BNC Test Lead

Capacitance Meter 11633137
Capacitance Test Lead 11385436



Breakout Harness

Breakout Harness 10989182



Volt Meter with DC voltage & DC mA settings and test leads

