

## **RLC DC Cable Measurement**

For a single cable, eliminate all outer layers of cable (sheath, armour etc). This can be done by enabling conductor elimination for all layers as follows.

Configuration		
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4 General		
Cable number	1	
Placement in relation to ground plane	Underground	
Depth below ground surface	1 [m]	
Height above ground surface	2.0 [m]	
Horizontal translation from centre	0 [m] 0	
Layer configuration	C1   I1   C2   I2   C3   I3	
Layer thickness is specified as	radial from centre	
Detailed graphic labels	show	
<ul> <li>Ideal Cross-Bonding (Transposition)</li> </ul>	1	
Ideal cross-bonding is	disabled	
Cross-bonding group	1	
Conducting core is	excluded	
1st conducting layer is	included	
2nd conducting layer is	excluded	
3rd conducting layer is	excluded	
4 Labeling		
Core conductor	Conductor	
1st conducting layer	Sheath	
2nd conducting layer	Armour	
3rd conducting layer	Outside Cond.	
<ul> <li>Mathematical Conductor Elimination</li> </ul>		
Conductors to eliminate	all concentric	
1st concentric conductor	retain	
2nd concentric conductor	retain	
Tod an analysis and then	an halo	
Conductors to eliminate Choose which conducting layers to eliminate	t (if any).	

In the OUTPUT page, you can see the RXB data (Z=R+Xj, Y=jB) SERIES IMPEDANCE MATRIX (Z) [ohms/m]:

0.166890964E-03,0.885137674E-04

SHUNT ADMITTANCE MATRIX (Y) [mhos/m]: 0.00000000E+00,0.146925120E-06

For two dc cables, eliminate all conductive layers as described above and then solve cable. This will create 2\*2 matrix. For RXB data for ground and conductor modes can be computed manually using transformation matrix described in help (see Modal Analysis in help)