

# M2 Network Wiring Specification

## Wire Specification:

The M2 RS-485 network shall use 3 conductor cable with characteristic impedance between 100 and 130 ohms. Distributed capacitance between conductors shall be less than 60 pF per foot. Distributed capacitance between conductors and shield shall be less than 100 pF per foot. Foil or braided shields are acceptable. The maximum recommended length of an RS-485 segment is 1200 meters (4000 feet) with 22 AWG cable.

### Belden:

Plenum/Non Plenum: 6501FE/3106A

### Alpha:

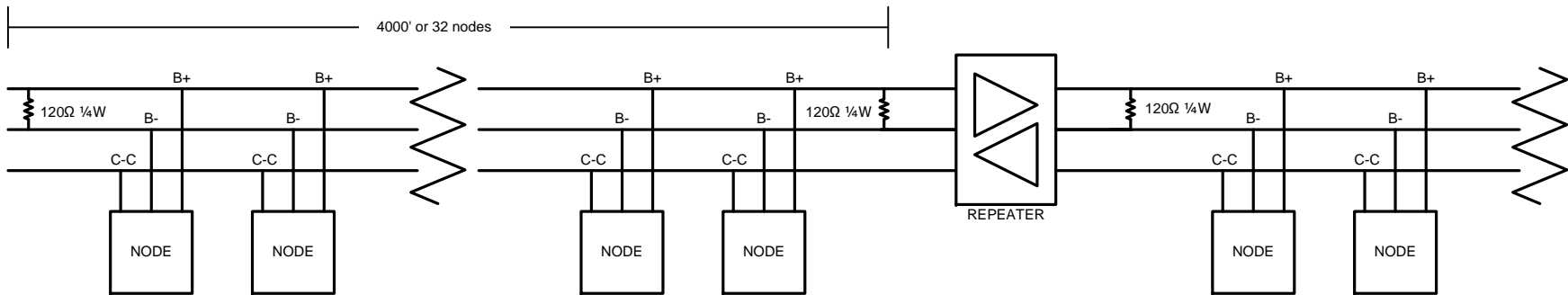
Plenum/Non Plenum: 58113/2403C


## Connections and Terminations:

The maximum number of nodes per segment shall be 32. Additional nodes may be accommodated by the use of repeaters.

An M2 RS-485 network shall have no T connections. A termination resistance of 120 ohms plus or minus 5%, ¼ watt, shall be connected at each of the two ends of the segment medium. No other termination resistors are allowed at intermediate nodes.

The shield shall be grounded at one end only to prevent ground currents from being created.



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M2 Network Wiring Specification					
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