

METHOD AND SYSTEM FOR PASSIVELY DETECTING AND LOCATING WIRE HARNESS DEFECTS

ABSTRACT

A method and system for detecting defects in a wire or wire bundle includes a pair of sensors wrapped around the wire or bundle, a data acquisition device for monitoring pulses in the signal produced by the sensors around the wires, and a diagnostics engine. The diagnostics engine includes an analysis module to determine features of the signals captured by the data acquisition device and a decision module for determining whether the pulse represents a defect in the wire and the location of the defect. The system operates passively and can be used to monitor the wires while they are in use for carrying signals or current and does not require disconnecting the wires to be monitored.

Figure 3