

*CTC*

# ***BNC Connector Options***

***EXPLAINED***



**WHEN RELIABILITY MATTERS  
CONNECT TO CONFIDENCE**



**CTC BNC Connector Options**

**for use in specialized applications where a floating shield is a better solution**

BNC connectors are widely used throughout many industrial applications for cable and instrumentation connections. Frequently BNCs may be grouped together on an instrumentation board so that multiple signals can be read simultaneously.



**CTC's polycarbonate molded F Connector**

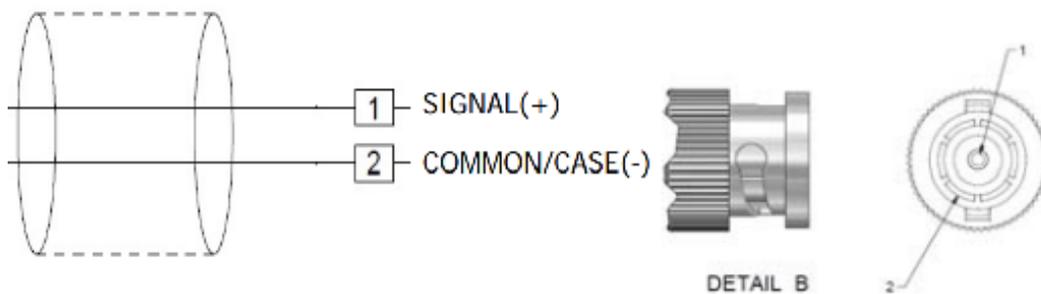
**CTC's polycarbonate molded E Connector**



In the vibration industry, we frequently use BNC cables to collect data and make connections with proximity probe systems and other sensitive electronics. In these situations, having the shield of the cable connected to the common can have undesirable effects such as an increase in cable induced noise, or in negative voltage applications, having the shield tied to the common conductor is detrimental to collecting good data.

In these situations, CTC has designed our **FN** and **EN** series of connectors where the shield is not connected to the common, but "floating." These cables still provide outstanding durability and carry the full CTC lifetime warranty, but are a better solution for use in situations where a floating shield is required.

**BNC Connector with Floating Shield**



**Schematic detail of a CTC cable showing the shield drain floating instead of tied to the case of the BNC. In this case, the shield is connected to the backshell of the connector at the opposite end of the cable.**

### **The CTC Difference**

BNCs were originally designed to be used with coaxial cable, where the signal is carried on the center conductor and the common is the outer core or shield of the cable. At CTC, twisted shielded pair is utilized to build our BNC connectors with the cable shield connected to the common conductor of our twisted shielded pair cabling. For many years, this has proven to be an excellent method of manufacturing, providing durable cables that mimic the electrical properties of coaxial type cables.

### **CTC's BNC Offerings**

**CTC E Series Connectors**  
molded BNC jacks



**CTC EMPP Connector**  
BNC jack with threaded nylon backshell and measurement point protector



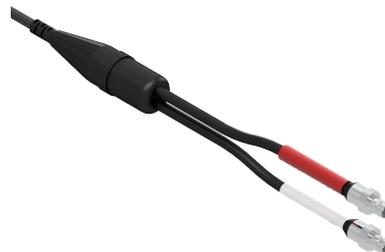
**CTC F Series Connectors**  
BNC plugs



**CTC FX90 Connector**  
right angle BNC plug



**CTC BNC Breakout Cables**  
offering 2, 3, and 4-channel BNC jack and BNC plug connector options



CTC is the world leader in the design and manufacture of industrial accelerometers, piezo velocity transducers, 4-20 mA vibration sensors, and proximity probes as well as all related mounting hardware, cabling, and junction boxes. Our products enable efficient vibration monitoring for predictive maintenance in a wide variety of industries. Industries served include cement, mining, petrochemical, food & beverage, auto, steel, wind, paper & pulp, power generation, water & wastewater treatment, pharmaceutical, hospitals, bottling, and more. Our mission is to offer the widest variety of accelerometers and vibration hardware products, which are compatible with data collectors and online monitoring systems, as well as the tools for installation.



The CTC product line features vibration analysis hardware for heavy industry.

All CTC products are backed by our unconditional, lifetime warranty. If any CTC product should ever fail, we will repair or replace it at no charge.



The PRO line offers the industry's most reliable proximity probe sets.

All PRO products are backed by a lifetime warranty on materials and workmanship. PRO will repair or replace any of our products as long as the product was not subjected to misuse, neglect, natural disasters, improper installation, or modification.

All stock products may be returned for a 25% restocking fee if returned in new and unused condition within 90 days of shipment. Built-to-order and private-label products qualify for a 50% refund if returned in new and unused condition within 90 days of shipment. Custom products are quoted and built specifically to the requirements of the customer, which may include completely custom product design or private-labeled versions of standard products for OEM customers. Custom products are non-cancellable, non-returnable, and non-refundable.

*Image Credit: Notebook (page 2) courtesy of upklyak / Freepik*

