

**Our Mission** is to offer the widest variety of accelerometers and vibration analysis hardware products which are compatible with data collectors and online monitoring systems. This brochure highlights the adapters and cables we manufacture that are compatible with Emerson CSI's broad range of data collectors. Our products reflect the inputs of our customers and distributors around the country, and the world. Every CTC product is designed and tested to meet the real world demands of harsh plant environments.

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. Those 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.

**ALL STOCK PRODUCTS** qualify for a full refund if returned in new condition within 90 days of shipment. Build to order products qualify for a 50% refund if returned in new 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 designs or private labeled versions of standard products for OEM customers. Custom products ordered are non-cancellable, non-returnable and non-refundable.



# Cable Adapters

| EMERSON (AMS 214 | O CTC EQUIVALENT |
|------------------|------------------|
| D25473           | CMX2147          |
| D25483           | CMX2154          |
| D25501           | CMX2155          |
| D25504           | CMX2161-E        |
| D25505           | CMX2162-E        |
| D25506           | CMX2173          |
| D25688           | CMX2178          |

| Emerson (csi 2130) | CTC Equivalent |
|--------------------|----------------|
| A06280A            | CMX2105        |
| A06290V            | CMX2136-VV     |
| A611               | CMX2101        |
| A625               | CMX2104        |

#### CMX2101

A611

25 pin adapter, single BNC jack, acceleration input.

For CSI 2120/2130



# CMX2104

A625

25 pin adapter, acceleration or voltage input.

For CSI 2120/2130



# CMX2105

A06280A

25 pin adapter, dual BNC inputs for Channels A + B, acceleration input.

For CSI 2120/2130



# CMX2136-VV

A06290V

25 pin adapter, 2 BNC jacks wired for voltage Channel 1, and voltage Channel 2.

For CSI 2130 only





# **Cable Adapters**

### CMX2147

D25473

8 pin molded M12 connector, 2 conductor polyurethane cable, 4 pin LEMO connector, tachometer input.

For CSI 2140 only



#### CMX2154

D25483

5 pin molded M12 connector, 2 conductor polyurethane cable, BNC plug, acceleration input.

For CSI 2130/2140



### CMX2155

D25501

5 pin straight female M12 connector, 6 conductor polyurethane cable, 9-inch length, 5 pin straight male M12 connector, 4 channel acceleration input.





#### CMX2161-E

D25504

Two channel 5 pin molded M12 connector, 18 in. length, two BNC "E" jacks, wired for Channel A (red) and Channel B (blue), acceleration input only.

For CSI 2140 only



# CMX2162-E

D25505

Two channel 5 pin molded M12 connector, 18-inch length, two BNC "E" jacks, wired for Channel C (gray) and Channel D (black), acceleration input only.

For CSI 2140 only





# Cable Adapters

# CMX2173

#### D25506

8 pin circular M12 connector, 4 conductor polyurethane cable, dual BNC jacks for Channel A (red) and Channel B (blue), dual channel voltage input adapter.



**For CSI 2140** 

#### CMX2178

#### D25688

8 pin circular M12 connector, 5 conductor polyurethane cable, dual BNC jacks for Channel A (red), Channel B (blue) and one BNC jack for tach (yellow), acceleration and tach inputs.



**For CSI 2140** 



# **Cable and Connector Configuration**

The most important thing to remember about data collector cables is safety. Do not get wound up in your work! It doesn't matter if you are using a coiled cable or a straight cable; a break-away safety connector can be a lifesaver.

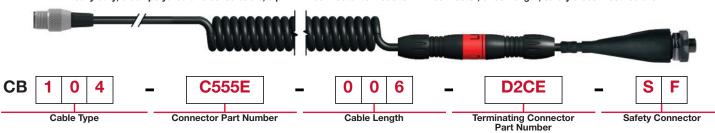
When a data collector cable gets wrapped around a rotating shaft, it can be hazardous. It could result in a life-threating injury to the analyst or severe damage to the data collector. Photo number 1 shows a data collector cable that wrapped around a rotating shaft with no safety break-away connector. Note that not only is the cable destroyed, but both connectors have been ripped off the cable. Photo number 2 shows a data collector cable that wrapped around a rotating shaft; however, the presence of a break-away safety connector protected the analyst from injury and saved the data collector from being severely damaged.





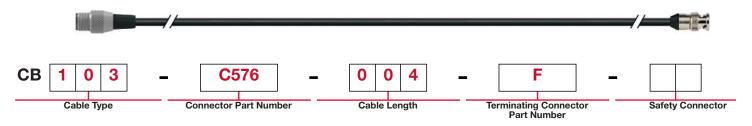
#### Example Cordset: CB104-C555E-006-D2CE-SF

Heavy duty, black polyurethane coiled cable, 5 pin M12 connector to 2 socket MIL connector, 6 foot length, safety disconnect feature



#### Example Cordset: CB103-C576-004-F

Heavy duty, black polyurethane jacketed cable, 8 pin M12 connector to BNC plug connector, 4 foot length





| EMERSON | CTC Equivalent        |
|---------|-----------------------|
| D25472  | CB103-C576-004-F      |
| D25473  | CB110-C566-002-C330   |
| D25474  | CB110-C566-003.5-C330 |
| D25475  | CB110-C566-006-C330   |
| D25476  | CB103-C563-002M-C613  |
| D25479  | CB103-C585-004-F      |
| D25480  | CB103-C555-005-D2C-RR |
| D25481  | CB103-C579-005-D2C-BB |
| D25483  | CB103-C555-002M-F-RR  |
| D25484  | CB103-C579-002M-F-BB  |
| D25485  | CB103-D2C-009-F-RR    |
| D25486  | CB103-D2C-009-F-BB    |
| D25487  | CB103-D2C-009-F-WW    |

| <b>E</b> MERSON | CTC Equivalent          |
|-----------------|-------------------------|
| D25488          | CB103-D2C-009-F         |
| D25489          | CB103-D2C-004-F-RR      |
| D25490          | CB103-D2C-004-F-BB      |
| D25491          | CB103-D2C-004-WW        |
| D25492          | CB103-D2C-004-F         |
| D25498          | CB105-C465-002M-C466    |
| D25499          | CB103-F-004-F           |
| D25500          | CB103-F-009-F           |
| D25525          | CB103-C558-002M-F       |
| D25526          | CB103-C558-005-D2C      |
| D25543          | CB104-C555E-006-D2CE-SF |
| D25777          | CB105-C614-006-C611     |
| D25782          | CB104-C555E-006-D2CE    |

### CB103-C555-002M-F-RR

D25483

5 pin molded M12 connector, Channel A acceleration input, 2 conductor black polyurethane .250 in. OD cable, 2 m length, BNC plug connector, red heat shrinks.



#### CB103-C555-005-D2C-RR

D25480

5 pin molded M12 connector, Channel A acceleration input, 2 conductor black polyurethane .250 in. OD cable, 5 ft length, 2 socket MIL polycarbonate 250 °F (121 °C) connector, red heat shrinks.



### CB103-C558-002M-F

D25525

5 pin molded M12 connector, Channel D acceleration input, 2 conductor black polyurethane .250 in. OD cable, 2 m length, BNC plug connector.





#### CB103-C558-005-D2C

D25526

5 pin molded M12 connector, Channel D acceleration input, 2 conductor black polyurethane .250 in. OD cable, 5 ft length, 2 socket MIL polycarbonate 250 °F (121 °C) connector.



#### CB103-C563-002M-C613

D25476

8 pin molded M12 connector, tach input only, 2 conductor black polyurethane .250 in. OD cable, 2 m length, 4 socket Amphenol connector for CSI 404 tach.



#### CB103-C576-004-F

D25472

8 pin molded M12 connector, tach input only, 2 conductor black polyurethane .250 in. OD cable, 4 ft length, BNC plug connector.



#### CB103-C579-002M-F-BB

D25484

5 pin molded M12 connector, Channel B acceleration input, 2 conductor black polyurethane .250 in. OD cable, 2 m length, BNC plug connector, blue heat shrinks.



### CB103-C579-005-D2C-BB

D25481

5 pin molded M12 connector, Channel B acceleration input, 2 conductor black polyurethane .250 in. OD cable, 5 ft length, 2 socket MIL polycarbonate 250 °F (121 °C) connector, blue heat shrinks.



#### CB103-C585-004-F

D25479

8 pin molded M12 connector, Channel A voltage input, 2 conductor black polyurethane .250 in. OD cable, 4 ft length, BNC plug connector.



#### CB103-D2C-004-F

D25492

2 socket MIL polycarbonate 250 °F (121 °C) connector, 2 conductor black polyurethane .250 in. OD cable, 4 ft length, BNC plug connector.



# CB103-D2C-004-F-BB

D25490

2 socket MIL polycarbonate 250 °F (121 °C) connector, 2 conductor black polyurethane .250 in. OD cable, 4 ft length, BNC plug connector, blue heat shrinks.



### CB103-D2C-004-F-RR

D25489

2 socket MIL polycarbonate 250 °F (121 °C) connector, 2 conductor black polyurethane .250 in. OD cable, 4 ft length, BNC plug connector, red heat shrinks.



## CB103-D2C-004-F-WW

D25491

2 socket MIL polycarbonate 250 °F (121 °C) connector, 2 conductor black polyurethane .250 in. OD cable, 4 ft length, BNC plug connector, white heat shrinks.





### CB103-D2C-009-F

D25488

2 socket MIL polycarbonate 250 °F (121 °C) connector, 2 conductor black polyurethane .250 in. OD cable, 9 ft length, BNC plug connector.



#### CB103-D2C-009-F-BB

D25486

2 socket MIL polycarbonate 250 °F (121 °C) connector, 2 conductor black polyurethane .250 in. OD cable, 9 ft length, BNC plug connector, blue heat shrinks.



2 socket MIL polycarbonate 250 °F (121 °C) connector, 2 conductor black polyurethane .250 in. OD cable, 9 ft length, BNC plug connector, red heat shrinks.



### CB103-D2C-009-F-WW

D25487

2 socket MIL polycarbonate 250 °F (121 °C) connector, 2 conductor black polyurethane .250 in. OD cable, 9 ft length, BNC plug connector, white heat shrinks.



BNC plug connector, 2 conductor black polyurethane .250 in. OD cable, 4 ft length, BNC plug connector.





CB103-F-009-F

D25500

BNC plug connector, 2 conductor black polyurethane .250 in. OD cable, 9 ft length, BNC plug connector.



CB104-C555E-006-D2CE

D25782

5 pin molded M12 connector, Channel A acceleration input, 2 conductor black polyurethane coiled .250 in. OD cable, 6 ft length, 2 socket MIL polycarbonate 250 °F (121 °C) connector.



CB104-C555E-006-D2CE-SF

D25543

5 pin molded M12 connector, Channel A acceleration input, 2 conductor black polyurethane coiled .250 in. OD cable, 6 ft length, 2 socket MIL polycarbonate 250°F (121 °C) connector, safety feature.



CB105-C465-002M-C466

D25498

5 pin molded M12 connector, 4 conductor black polyurethane .250 in. OD cable, 2 m length, 5 socket molded M12 connector.



CB105-C614-006-C611

D25777

5 pin molded M12 connector for CSI A0643TX, "Z-X-Y" orientation, 4 conductor black polyurethane .250 in. OD cable, 6 ft length, 5 socket molded M12 connector for CSI triaxial sensor.





### CB110-C566-002-C330

D25473

8 pin molded M12 connector, tach input only, 2 conductor black polyurethane .175 in. OD cable, 2 ft length, 4 pin LEMO connector for CSI Speedvue.



#### CB110-C566-003.5-C330

D25474

8 pin molded M12 connector, tach input only, 2 conductor black polyurethane .175 in. OD cable, 3.5 ft length, 4 pin LEMO connector for CSI Speedvue.



# CB110-C566-006-C330

D25475

8 pin molded M12 connector, tach input only, 2 conductor black polyurethane .175 in. OD cable, 6 ft length, 4 pin LEMO connector for CSI Speedvue.



# Compatible Accelerometers

| EMERSON   | CTC Equivalent |
|-----------|----------------|
| A0120LF   | AC133-1D       |
| A0220HF   | UEB330         |
| A0322LC   | MEB210         |
| A0322L5   | AC192-1D       |
| A0322R5   | AC104-1A       |
|           | AC194-1D       |
| A0322R5HT | AC208-1D       |
| A0420HT   | AC207-1D       |
| A0643TX   | AC365-1D       |
|           | TREA330        |
| A0710GP   | AC294-1D       |
| A0760GP   | AC292-1D       |

# AC104-1A

#### A0322R5

2 pin MIL, standard size, 100 mV/g, single-axis, side exit, acceleration, 0.5Hz -15kHz.



# AC133-1D

#### A0120LF

Low power, 2 pin MIL, standard size, 500 mV/g, single-axis, top exit, acceleration, 0.1 – 10000 Hz.



# AC192-1D

#### A0322L5

2 pin MIL, compact size, 100 mV/g, single-axis, top exit, acceleration, 0.4 – 13000 Hz.





# Compatible Accelerometers

### AC194-1D A0322R5

2 pin MIL, compact size, 100 mV/g, single-axis, side exit, acceleration, 0.4 – 13000 Hz.



### AC207-1D A0420HT

2 pin MIL, standard size, 100 mV/g, single-axis, top exit, acceleration, 0.5 – 12500 Hz, resistant to temperatures up to 325 °F (162 °C).



### AC208-1D A0322R5HT

2 pin MIL, standard size, 100 mV/g, single-axis, side exit, acceleration, 0.5 – 12500 Hz, resistant to temperatures up to 325 °F (162 °C).



## AC292-1D A0760GP

Premium, 2 pin MIL, compact size, 100 mV/g, single-axis, top exit, acceleration, 0.3 – 15000 Hz.



## AC294-1D A0710GP

Premium, 2 pin MIL, compact size, 100 mV/g, single-axis, side exit, acceleration, 0.3 – 15000 Hz.





# Compatible Accelerometers

# AC365-1D

#### A0643TX

4 pin mini-MIL, standard size, 100 mV/g, triaxial, top exit, acceleration, 0.6 – 10000 Hz.



### **MEB210**

#### A0322LC

Molded, lightweight, 100 mV/g, single-axis, integral, 0.5 – 15000 Hz.



# TREA330

#### A0643TX

4 pin mini-MIL, standard size, 100 mV/g, triaxial, side exit, acceleration, 0.5 – 15000 Hz.



# **UEB330**

#### A0220HF

Ultrasound, 2 pin mini-MIL, mini size, 100 mV/g, single-axis, top exit, acceleration, 0.5 – 25000 Hz.



# General Purpose Adapters

# CB908-1A

2 pin MIL to BNC plug (F connector) adapter.



# CB909-1A

2 pin MIL to BNC jack (E connector) adapter.



# CB910-1A

In-line BNC jack to jack adapter.



# CB911-1A

BNC tee adapter, jack-plug-jack configuration.



# CB911-3A

In-line BNC plug-to-plug adapter.



# General Purpose Adapters

# CB912-1A

2 socket MIL to BNC plug (F Connector) adapter.



# CB913-1A

2 socket MIL to BNC jack (E connector) adapter.



# CB919-1A

Right angle BNC connector "E" jack to "F" plug.



