Two termination resistors are required on every NMEA 2000 network, one on each end of the trunk line. Normally, a male termination is used since male pins tend to point back to the power source. In cases where the gender is reversed, a female terminator may be required. The inline terminator is used where the network is terminated at a product, for example a GPS or weather station at the top of a mast.

- Screw terminal connector for positive connections
- Termination resistors are used to terminate both ends of the trunk line

The Bulkhead Feed-Thru allows ease of installation through panels or bulkheads and establishes future connection points in a network installation. The bulkhead feed-thru also maintains the integrity of watertight bulkheads by providing a waterproof seal and connection.

- Features rugged keyways for positive alignment of connections
- Waterproof rated to IP67

Multiport boxes allow several drop cables to be consolidated and connected back to the trunk, which eliminates the need to have numerous tees connected near a single point. Multiport boxes connect back to the trunk through a double-ended cordset and Tee.

- Ideal for consolidating many connections; for example behind dashboards
- Requires the purchase of an additional double-ended cordset for connection back to the trunk
Specifications

**MECHANICAL**
- Molded Body Mat/Color: Thermoplastic PUR/Blue-Gray – TR-CM, TR-CF
- Contact Carrier Mat/Color: Thermoplastic PUR/Black – IT-CM-CF
- Contact Mat/Plating: Brass/Gold
- Housing Mat/Plating: Brass/Nickel

**ELECTRICAL**
- Rated Voltage: 10-30 V DC
- Internal Resistor: 120 Ohms (1/2 W) – TR-CM, TR-CF
- 121 Ohms (1/4 W) – IT-CM-CF

**ENVIRONMENTAL**
- Protection Class: IEC IP68, NEMA 1,3,4,6P

**APPROVALS**
- NMEA: NMEA 2000® APPROVED
- IEC: IEC 61162-3

Products

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR-CM</td>
<td>Micro Termination Resistor (Male)</td>
</tr>
<tr>
<td>TR-CF</td>
<td>Micro Termination Resistor (Female)</td>
</tr>
<tr>
<td>IT-CM-CF</td>
<td>Micro Inline Terminator</td>
</tr>
</tbody>
</table>

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Specifications

**MECHANICAL**
- Contact Carrier Mat/Color: PA 6 (Nylon)/Blue-Gray
- Contact Mat/Plating: Brass/Gold
- Housing Mat/Plating: Brass/Nickel
- Gasket Material: Nitrile (Buna N)
- Accommodates Wall (thick): .40” (1.0 mm) to .875” (22.2 mm)

**ELECTRICAL**
- Operating Voltage: 250 V
- Operating Current: 4.0 Amps
- Number of Conductors: 5x22 (0.65mm) AWG

**ENVIRONMENTAL**
- Protection Class: IEC IP67 – when receptacles are covered
- Temperature Range: -30°C to 80°C (-22°F to 176°F)

**APPROVALS**
- NMEA: NMEA 2000® Approved
- IEC: IEC 61162-3

Products

<table>
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<tr>
<th>PART NUMBER</th>
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</thead>
<tbody>
<tr>
<td>BHF-CM-CF</td>
<td>Micro Bulkhead Feed-Thru</td>
</tr>
</tbody>
</table>

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Specifications

**MECHANICAL**
- Housing Mat/Color: Nylon/Gray
- Receptacle Mat/Plating: Brass/Nickel
- Contact Carrier Mat/Color: Nylon/Black
- Contact Mat/Plating: Brass/Gold
- Coupling Nut Mat/Plating: Brass/Nickel

**ELECTRICAL**
- Rated Voltage: 10-30 V DC
- Internal Resistor: 120 Ohms (1/2 W) – TR-CM, TR-CF
- 121 Ohms (1/4 W) – IT-CM-CF

**ENVIRONMENTAL**
- Protection Class: IEC IP67, NEMA 1,3,4,6
- Temperature Range: -40°C to 80°C (-40°F to 176°F)

**APPROVALS**
- NMEA: NMEA 2000® APPROVED
- IEC: IEC 61162-3

Products

<table>
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<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>CM-CF-4</td>
<td>Multiport Box (Micro-Mid Male Homerun / Micro-Mid Female Drops)</td>
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</tbody>
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