Mini Gender Changers



Maretron cables have a male connector on one end and a female connector on the other end. Normally, the male connector points back towards the network power supply, but on some occasions, this gets reversed and a gender changer can be used to get back to the desired connector type.

- Waterproof seals for reliable connections
- Easily swap connector gender to get back to desired connector type

Mini Bulkhead Feed-Thru



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

N2KMeter®



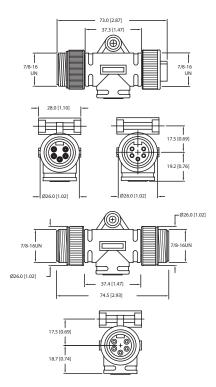
The N2KMeter® enables trained and untrained personnel to diagnose and trouble-shoot network installations quickly and easily. Completely passive on the network, the meter analyzes both data and power lines on the network. In seconds, both networkwide and device-specific traffic as well as power monitoring information is captured and displayed on a simple user interface.

- Diagnostic tool for NMEA 2000® networks
- Evaluates physical layer device functions on a network
- Data at boat can be locked in and then evaluated later on bench

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Mini Gender Changers



Specifications

MECHANICAL

Molded Body Mat/Color: Contact Carrier Mat/Color: Contact Mat/Plating: Coupling Nut Mat/Plating

> **ELECTRICAL** Rated Current: Rated Voltage:

ENVIRONMENTAL

Protection Class:

Temperature Range:

APPROVALS NMEA:

Thermoplastic PUR/Blue-Gray Thermoplastic PUR/Blue-Gray Brass/Gold Brass/Nickel

9.0 Amps 600 V

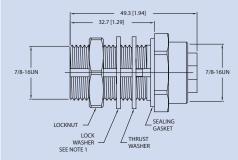
IEC IP67, NEMA 1,3,4,6P - NM-NM IEC IP67, NEMA 1,3,4,13 - NF-NF -40°C to 70°C (-40°F to 158°F) - NM-NM -40°C to 55°C (-40°F to 131°F) - NF-NF

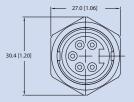
NMEA 2000® Approved IEC 61162-3

Products

PART NUMBER	DESCRIPTION
NM-NM	Mini Gender Changer (Male/Male)
NF-NF	Mini Gender Changer (Female/Female)

Mini Bulkhead Feed-Thru





MALE END VIEW



FEMALE END VIEW



Specifications

MECHANICAL

Contact Carrier Mat/Color: Housing Mat/Plating: Contact Mat/Plating Gasket Material: Accommodates Wall (thick): Thermoplastic PUR/Blue-Grav Brass/Nickel Brass/Gold Nitrile (Buna N) .040" (1.0 mm) to .875" (22.2 mm)

ELECTRICAL

Voltage Rating: Max Amperage: Number of Conductors:

9.0 Amps 5x22 AWG (0.65mm)

ENVIRONMENTAL

Protection Class: Temperature Range:

IFC IP67 -40°C to 105°C (-40°F to 221°F)

APPROVALS NMEA:

NMEA 2000® Approved

Products

PART NUMBER	DESCRIPTION
BHF-NM-NF	Mini Bulkhead Feed-Thru

N2KMeter®

Electrician Mode (Simple)

1. Plug in and set N2KMeter® rotary switch to "autosearch"

2. Identify network health

· Happy face = healthy



Neutral face = nominal

· Sad face = faulty



3. Scroll through faults. Refer to user manual to link these faults to most likely network problems or freeze and lock settings for review back at the shop by an NMEA 2000° expert.



Expert Mode (Advanced)

1. Scroll through NMEA 2000® parameters for each active NMEA 2000® node (MAC ID)

- . Communication errors (rate, cumulative #)
- . Bandwidth (% of full usage)
- · Power supply and shield voltages
- Data bit quality (dominant, recessive, +, -, differential voltage, CMV)
- 2. Check values (both numeric and icons)
 - Happy face = within spec
- . Neutral face = very close to limit
- . Sad face = out of limit

3.Refer to user manual to link these faults to most likely network problems

Specifications

MECHANICAL

Power Supply:

Band Rates: Analog Accuracy: Analog Range:

Analog Sample Rate:

Signal Error Threshold: Bus Load Measurement: Bus Message Rate Measurement:

Error Rate Measurement:

APPROVALS NMEA:

Batteries 2 X AA Alkaline Batteries 6 Hours Of Operation Approx. 1 Year Data Retention Micro Connector 125k, 250k and 500k (Auto-detect) Bus Power±100mv, Bus Signal±20mv

Network 7 - 30v DC < 90MA

Bus Power 0 to 25v with over/under Range Indication Bus signal -5 To 10v with over/under range Indication Bus Power 1 Khz Bus Signal Ideal Sample Pt±250ns NMFA 2000® Spec for Network Power Detects Bus Idle In Real Time

Detects 100% of Individual CAN Frames in Real Time Detects 100% of Individual Error Frames in Real Time

NMEA 2000® Approved

Products

PART NUMBER	DESCRIPTION	
N2KMETER-01	Diagnostic Meter w/1m Micro Cordset	