Quality Products · Innovative Solution



NMEA 2000 Receptacle

PCB LAYOUT

NMEA MF-FM

Male Connecter
Male Pin

&
Female Connecter
Female Pin



Current

5A

WIRE COLOR PIN ASSIGNMENT

NMEA

Male



Female



1 = Drain 2 = Red 3 = Black 4 = White 5 = Blue

NMEA 2000 Receptacle

Product Specifications

Contact Number	5P	Voltage Rating	125VDC
Coding	MICRO-C	Contact Resistance	≦1mΩ (Initial)
Contact Housing	Nylon + GF	Insulation Resistance	≥100MΩ at DC 500V
	Metal: Copper or Zinc Alloy, Nickel	Withstanding Voltage	AC 1000V/1 minute
Shell / Screw Nut	Plated	Temperature Range	-40°C ~ +90°C
	Plastic: Nylon + GF	Salt Spray	48 hr.
Terminal	Copper Alloy, Gold Plated 30u"	Protection Class	IPX8 (unmated)
Mating Style	Screw Thread	Durability	1000 times
Max Panel Thickness	4.5mm (Without Cap Chain)	Standard	NMEA2000
Current Rating	5A		

How to Order

NXAXM05MCC - SHX800X

P - Front Fastened R - Rear Fastened

NA - Metal Shell (Certified)

NB - Metal Shell (Non Certified)

NP - Plastic Shell (Certified)

NR - Plastic Shell (Non Certified)

Serial Number

Assembly Style S - Solder Type P - PCB Type

NMH - MM1MF1000001

Style H - Bulkhead

NMEA 2000 Receptacle (Metal)

Front Fastened, IPX8



Electronics

Electronics







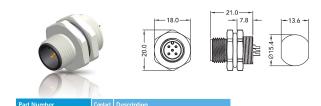
Features and Benefits

- Provides panel-mount capability ideal for use in enclosures
- Available in solder or PCB contacts
- Rugged, IPX8 rated connectors for continued connection integrity in marine environment
- Certified NMEA 2000 M12 Metal panel mount receptacles in PG9 Metal Thread

Part Number	Contact	Description	Part Number	Contact	Description
NAAPM05MCC-SHS8001	5	Male Conn. MICRO-C, Solder Contact	NAAPM05MCC-SHP8001	5	Male Conn. MIRCO-C, PCB Contact

NMEA 2000 Receptacle (Metal)

Rear Fastened, IPX8



5 Male Conn, MICRO-C, Solder Contact

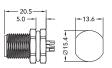
Features and Benefits

- Provides panel-mount capability ideal for use in enclosures
- Available in solder or PCB contacts
- · Rugged, IPX8 rated connectors for continued connection integrity in marine environment
- Non-Certified NMEA 2000 M12 Metal panel mount receptacles in PG9 Thread

NMEA 2000 Receptacle (Metal)

Front Fastened, IPX8





Features and Benefits

- · Provides panel-mount capability ideal for use in enclosures
- Available in solder or PCB contacts
- Rugged, IPX8 rated connectors for continued connection integrity in marine environment
- Non-Certified NMEA 2000 M12 Metal panel mount receptacles in M12 Thread

umber		Description	Part Number	Contact	Description
405MCC-SHS8002	5	Male Conn. MICRO-C, Solder Contact	NBAPM05MCC-SHP8002	5	Male Conn. MIRCO-C, PCB Contact

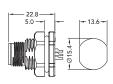
NBAPM

NMEA 2000 Receptacle (Plastic)

Front Fastened, IPX8







Features and Benefits

- Provides panel-mount capability ideal for use in enclosures
- Available in solder or PCB contacts
 Rugged, IPX8 rated connectors for continued connection integrity in marine environment
- Certified NMEA 2000 M12 Plastic panel mount receptacles in PG9 Thread

Part Number	Contact	Description	Part Number	Contact	Description
NPAPM05MCC-SHS8001	5	Male Conn. MICRO-C, Solder Contact	NPAPM05MCC-SHP8001	5	Male Conn. MIRCO-C, PCB Contact

NMEA 2000 Receptacle (Metal)

Bulkhead, IPX8









Features and Benefits

- Allows new connection points in a network through panels or bulkheads
- Creates positive alignment of connections
- Waterproof rated to IPX8 for reliable connections
- Certified NMEA 2000

Part Number Contact Description

NMH-MM1MF1000001 5 Bulkhead MICRO-C

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NMEA 2000 Light Cable Assy

Product Specifications

Electronics

Contact Number	5P	Contact Resistance	≦1mΩ (Initial)
Coding	MICRO-C	Withstanding Voltage	AC 1000V/1 minute
Contact Housing	Nylon + GF	Temperature Range	-20°C ~ +80°C
	Metal: Copper or Zinc Alloy, Nickel	Salt Spray	48 hr.
Screw Nut	Plated	Protection Class	IPX7 (mated)
	Plastic: Nylon + GF	Durability	1000 times
Terminal	Copper Alloy, Gold Plated 30u"	Standard	NMEA2000
Mating Style	Screw Thread		(1P*24AWG+Al/Mylon)+
Current Rating	3A	Cable Style	(1P*22AWG+Al/Mylon)+B+D
Voltage Rating	125VDC		

How to Order

NXMBX05XCC - SXC7GXXX

Contact Type F – Female M – Male

Connector Gender F - Female M - Male

Series

NA - Metal Nut (Certified)

NB - Metal Nut (Non Certified) NP - Plastic Nut (Certified)

NP = Plastic Nut (Certified)
NR = Plastic Nut (Non Certified)

Cable Type / Length Meter: G01M~G20M Feet: G01F~G66F

Back Shell L - Straight(180°) R - Right Angle (90°)

NX X - MM1MF1000GXXX

Style P - Tap-Cable D - Double End Cable

Series

NA - Metal Nut (Certified)

NB - Metal Nut (Non Certified) NP - Plastic Nut (Certified)

NR - Plastic Nut (Non Certified)

Cable Type / Length Meter: G01M~G20M Feet: G01F~G66F

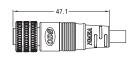


NMEA 2000 Light Cable Assy (Metal Nut)

Single-Ended Cordset, IPX7 (Mated)







Features and Benefits

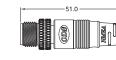
- · Used with field-installable connectors
- · Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Certified NMEA 2000

Electronics

obs Electronics

NAMBM05MCC-SLC7GXXX 5 Male Conn. MICRO-C, Overmoulded With Cable

NMEA 2000 Light Cable Assy (Metal Nut)



Single-Ended Cordset, IPX7 (Mated)

Features and Benefits

- · Used with field-installable connectors
- Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Certified NMEA 2000

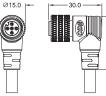
NAMBF05FCC-SLC7GXXX 5 Female Conn. MICRO-C, Overmoulded With Cable

NMEA 2000 Light Cable Assy (Metal Nut)

Single-Ended Cordset, IPX7 (Mated)







Features and Benefits

- Used with field-installable connectors
- · Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Non-Certified NMEA 2000







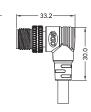
NBMBF05FCC-SRC7GXXX 5 Female Conn. MICRO-C, Overmoulded With Cable

NMEA 2000 Light Cable Assy (Metal Nut)

Single-Ended Cordset, IPX7 (Mated)







Features and Benefits

- Used with field-installable connectors
- Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Non-Certified NMEA 2000

NBMBM05MCC-SRC7GXXX 5 Male Conn. MICRO-C, Overmoulded With Cable



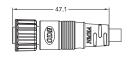


NMEA 2000 Light Cable Assy (Plastic Nut)

Single-Ended Cordset, IPX7 (Mated)







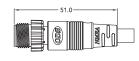
Features and Benefits

- · Used with field-installable connectors
- · Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Certified NMEA 2000

Electronics

obs Electronics

NPMBM05MCC-SLC7GXXX 5 Male Conn. MICRO-C, Overmoulded With Cable



Single-Ended Cordset, IPX7 (Mated)

Features and Benefits

- Used with field-installable connectors
- Available in various cable lengths to match installation requirements
- · Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Certified NMEA 2000

Part Number	
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NPMBF05FCC-SLC7GXXX 5 Female Conn. MICRO-C, Overmoulded With Cable

NMEA 2000 Light Cable Assy (Plastic Nut)

Single-Ended Cordset, IPX7 (Mated)









Features and Benefits

- Used with field-installable connectors
- · Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Certified NMEA 2000





NPMBF05FCC-SRC7GXXX 5 Female Conn. MICRO-C, Overmoulded With Cable

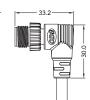
NMEA 2000 Light Cable Assy (Plastic Nut)

NMEA 2000 Light Cable Assy (Plastic Nut)

Single-Ended Cordset, IPX7 (Mated)







Features and Benefits

- Used with field-installable connectors
- Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Non-Certified NMEA 2000

NRMBM05MCC-SRC7GXXX 5 Male Conn. MICRO-C, Overmoulded With Cable



NMEA 2000 Light Cable Assy (Metal Nut)

Tee-Cable, IPX7 (Mated)



Features and Benefits

- Gives power to the NMEA 2000®
- · Male and Female on each end · Available in various cable lengths to
- match installation requirements • Rugged, IPX7 rated connectors for continued connection integrity in
- marine environment Certified NMEA 2000

Electronics

obs Electronics

NMEA 2000 Light Cable Assy (Metal Nut)

Double-Ended Cordset, IPX7 (Mated)

Features and Benefits

- Male and female cable ends for trunk
- Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Certified NMEA 2000

Part Number	
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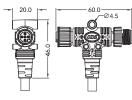
NAP-MM1MF1000GXXX

5 Tee Conn. MICRO-C, Overmoulded With Cable

NMEA 2000 Light Cable Assy (Plastic Nut)

Tee-Cable, IPX7 (Mated)







Features and Benefits

- Gives power to the NMEA 2000® network Male and Female on each end
- · Available in various cable lengths to
- match installation requirements • Rugged, IPX7 rated connectors for
- continued connection integrity in marine environment
- Certified NMEA 2000

NPP-MM1MF1000GXXX

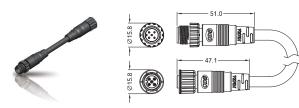
5 Tee Conn. MICRO-C, Overmoulded With Cable

NAD-MM1MF1000GXXX

5 Double-Ended MICRO-C, Overmoulded With Cable

NMEA 2000 Light Cable Assy (Plastic Nut)

Double-Ended Cordset, IPX7 (Mated)



Features and Benefits

- Male and female cable ends for trunk or drop lines
- Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Certified NMEA 2000

NPD-MM1MF1000GXXX

5 Double-Ended MICRO-C, Overmoulded With Cable



NMEA 2000 Field Installable Screw In

Product Specifications

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Contact Number	5P	Insulation Resistance	≥100MΩ at DC 500V
Coding	MICRO-C	Withstanding Voltage	AC 1000V/1 minute
Contact Housing	Nylon + GF	Wire Gauge	24AWG ~ 18AWG
Screw Nut	Copper or Zinc Alloy, Nickel Plated		Seal 1: O.D= Φ4~6mm
Terminal	Copper Alloy, Gold Plated 30u"	Cable OD	Seal 2: O.D.= Φ6~8mm
Mating Style	Screw Thread	Temperature Range	-25°C ~ +85°C
Mode of Connection	Screw-In Terminals	Salt Spray	48 hr.
Current Rating	5A	Protection Class	IPX7 (mated)
Voltage Rating	125VDC	Durability	1000 times
Contact Resistance	≦5mΩ (Initial)	Standard	NMEA2000

How to Order

NBMD X 05 X CC-SLW700X

Contact Type F - Female M – Male

Serial Number

Connector Gender F - Female M - Male

NMEA 2000 Field Installable Screw In (Metal Nut)

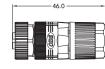
Straight, IPX7 (Mated)



Electronics

Electronics





Features and Benefits

- · Used with single-ended cordsets, available in Male and Female connector versions
- · Easily installed in the field thru screwin termination
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Non Certified NMEA 2000

Part Number	Со
NBMDF05FCC-SLW700X	

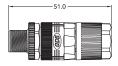
5 Female Conn. MICRO-C

NMEA 2000 Field Installable Screw In (Metal Nut)

Straight, IPX7 (Mated)







Features and Benefits

- · Used with single-ended cordsets, available in Male and Female connector versions
- · Easily installed in the field thru screwin termination
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Non Certified NMEA 2000

NBMDM05MCC-SLW700X 5 Male Conn. MICRO-C



NMEA Female Field Installable (Screw-In)

Assembly Instructions





Strip the cable sheath and insulation.



Insert each wire to the respective hole and tighten each screw.



Insert the cable through the sealing nut, clip, seal and



Connect and tighten the body.







Unscrew the screws.

3

Connect the seal and the clip respectively.



NMEA Male Field Installable (Screw-In)

Assembly Instructions Housing





Connect the sealing nut and tighten using hand tool (optional) or your hand while holding assy.

NMEA 2000 Adaptors & Terminators

Product Specifications

Contact Number	5P	Voltage Rating	125VDC
Coding	MICRO-C	Contact Resistance	≤1mΩ (Initial)
Contact Housing	Nylon + GF	Insulation Resistance	≥100MΩ at DC 500V
	Metal: Copper or Zinc Alloy, Nickel	Withstanding Voltage	AC 1000V/1 minute
Screw Nut	Plated	Temperature Range	-20°C ~ +80°C
	Plastic: Nylon + GF	Salt Spray	48 hr.
Terminal	Copper Alloy, Gold Plated 30u"	Protection Class	IPX7 (mated)
Mating Style	Screw Thread	Durability	1000 times
Current Rating	5A	Standard	NMEA2000

How to Order



W - More Way Adaptor E - Elbow Adaptor

T - Tee Adaptor L - Inline Adaptor

Series

NA - Metal Nut (Certified)

NB - Metal Nut (Non Certified) NP - Plastic Nut (Certified)

NR - Plastic Nut (Non Certified)

1, 2, 4

Connector Set

Connector Gender F - Female

NXR - MX100000001

Connector Gender F - Female M - Male

NA - Metal Nut (Certified) NP - Plastic Nut (Certified)

NMEA 2000 Adaptor (Metal Nut)



Features and Benefits · 4-Way Adaptor Allow several drop

- cables to be consolidated and
- connected back to the trunk
 Provides neat connections along the
- T-adaptor allows for a drop connection
 Blow adaptor easily connects to a tee or double-ended cordsets making 90 turns at the end or anywhere along
- the system

 Waterproof rated to IPX7 for reliable connections
 • Certified NMEA 2000

Part Number	Contact	Description
NAW-MM1MF1MF4001	5	4 Way Adaptor MICRO-C
NAE-MM1MF1000001	5	Elbow Adaptor MICRO-C
NAT-MM1MF1MF1001	5	Tee Adaptor MICRO-C

NMEA 2000 Adaptor (Metal Nut)

PX7 (Mated)



Features and Benefits

- 2-Way Adaptor Allow several drop cables to be consolidated and connected back to the trunk
- Provides neat connections along the
- In-line adaptor easily swaps connector gender to get back to desired
- Waterproof rated to IPX7 for reliable connections
- Non Certified NMEA 2000

Part Number	Contact	Description
NBL-MM1MF1000001	5	Inline Adaptor MICRO-C
NBW-MM1MF1MF2001	5	2 Way Adaptor MICRO-C



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Electronics

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NMEA 2000 Adaptor (Plastic Nut)



Features and Benefits

- 2 and 4-Way Adaptor Allow several drop cables to be consolidated and connected back to the trunk
- Provides neat connections along the network
- T-adaptor allows for a drop connection Elbow adaptor easily connects to a tee or double-ended cordsets making 90 turns at the end or anywhere along the system
- Waterproof rated to IPX7 for reliable
- connections
 Certified NMEA 2000

Part Number	Contact	Description
NPW-MM1MF1MF4001	5	4 Way Adaptor MICRO-C
NPW-MM1MF1MF2001	5	2 Way Adaptor MICRO-C
NPE-MM1MF1000001	5	Elbow Adaptor MICRO-C
NPT-MM1MF1MF1001	5	Tee Adaptor MICRO-C

NMEA 2000 Adaptor (Plastic Nut)

IPX7 (Mated)



Features and Benefits

- In-line adaptor easily swaps connector gender to get back to desired connector type

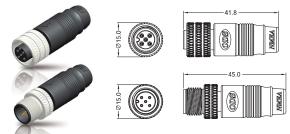
 • Waterproof rated to IPX7 for reliable
- connections

 Non Certified NMEA 2000

Part Number	Contact	Description	
NRL-MM1MF1000001	5	Inline Adaptor MICRO-C	



NMEA Termination Resistor (Metal Nut)



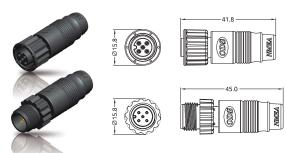
Features and Benefits

- Terminates both ends of a network
 Available in Male and Female
- connector versions
- Waterproof rated to IPX7 for reliable
- connections
 Certified NMEA 2000

Part Number	Contact	Description
NAR-MF1000000001	5	Female Terminator MICRO-C
NAR-MM1000000001	5	Male Terminator MICRO-C

NMEA Termination Resistor (Plastic Nut)

IPX7 (Mated)



Features and Benefits

- Terminates both ends of a network
- · Available in Male and Female
- connector versions
 Waterproof rated to IPX7 for reliable
- connections
 Certified NMEA 2000

Part Number	Contact	Description
NPR-MF1000000001	5	Female Terminator MICRO-C
NPR-MM1000000001	5	Male Terminator MICRO-C

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NMEA 2000 Mid Cable Assy

Product Specifications

Treader epecimeations			
Contact Number	5P	Contact Resistance	≦1mΩ (Initial)
Coding	MICRO-C	Withstanding Voltage	AC 1000V/1 minute
Contact Housing	Nylon + GF	Temperature Range	-20°C ~ +80°C
	Metal: Copper or Zinc Alloy, Nickel	Salt Spray	48 hr.
Screw Nut	Plated	Protection Class	IPX7 (mated)
	Plastic: Nylon + GF	Durability	1000 times
Terminal	Copper Alloy, Gold Plated 30u"	Standard	NMEA2000
Mating Style	Screw Thread	C-bl- Chd-	(1P*18AWG+Al/Mylon)+
Current Rating	4A	Cable Style	(1P*20AWG+Al/Mylon)+B+D
Voltage Rating	125VDC		

How to Order

NXMBX05XCC - SLC7HXXX

Contact Type F - Female M - Male

Connector Gender F - Female M - Male

NB - Metal Nut (Non Certified) NR - Plastic Nut (Non Certified) Cable Type / Length Meter: H01M~H20M H01F~H66F

NX X - MM1MF100XHXXX

P - Tap-Cable D - Double End Cable

NB - Metal Nut (Non Certified) NR - Plastic Nut (Non Certified) Cable Type / Length

H01M~H20M H01F~H66F

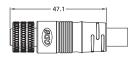
Serial Number

NMEA 2000 Mid Cable Assy (Metal Nut)

Single-Ended Cordset, IPX7 (Mated)







Features and Benefits

- · Used with field-installable connectors
- Optimized for voltage drop sensitive networks (long runs)

because power pair wires have half the resistance of Micro cable

- Available in various cable lengths to match installation requirements
- · Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Non Certified NMEA 2000

rt Number	Contact

NBMBF05FCC-SLC7HXXX

Electronics

Electronics

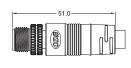
5 Female Conn. MID, Overmoulded With Cable

NMEA 2000 Mid Cable Assy (Metal Nut)

Single-Ended Cordset, IPX7 (Mated)







Features and Benefits

- Used with field-installable connectors Optimized for voltage drop sensitive
- networks (long runs) because power pair wires have half the resistance of Micro cable
- Available in various cable lengths to match installation requirements
- · Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Non Certified NMEA 2000

NBMBM05MCC-SLC7HXXX 5 Male Conn. MID, Overmoulded With Cable

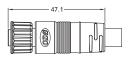


NMEA 2000 Mid Cable Assy (Plastic Nut)

Single-Ended Cordset, IPX7 (Mated)







Features and Benefits

- · Used with field-installable connectors
- · Optimized for voltage drop sensitive networks (long runs) because power pair wires have half the

resistance of Micro cable

- · Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Non Certified NMEA 2000

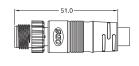
NRMBF05FCC-SLC7HXXX 5 Female Conn. MID, Overmoulded With Cable

NMEA 2000 Mid Cable Assy (Plastic Nut)

Single-Ended Cordset, IPX7 (Mated)







Features and Benefits

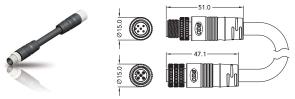
- Used with field-installable connectors
- Optimized for voltage drop sensitive networks (long runs) because power pair wires have half the
- resistance of Micro cable Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Non Certified NMEA 2000

NRMBM05MCC-SLC7HXXX 5 Male Conn. MID, Overmoulded With Cable



NMEA 2000 Mid Cable Assy (Metal Nut)

Double-Ended Cordset, IPX7 (Mated)



Features and Benefits

- Male and female cable ends for trunk or drop lines
- · Optimized for voltage drop sensitive networks (long runs)
- because power pair wires have half the resistance of Micro cable
- Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in
- Non Certified NMEA 2000

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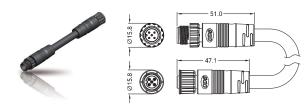
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NBD-MM1MF1000HXXX

5 Double-Ended MID, Overmoulded With Cable

NMEA 2000 Mid Cable Assy (Plastic Nut)

Double-Ended Cordset, IPX7 (Mated)



Features and Benefits

- Male and female cable ends for trunk or drop lines
- Optimized for voltage drop sensitive networks (long runs)

because power pair wires have half the resistance of Micro cable

- Available in various cable lengths to match installation requirements
- · Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Non Certified NMEA 2000

5 Double-Ended MID, Overmoulded With Cable



NMEA 2000 Mid Cable Assy (Metal Nut)

Tee-Cable, IPX7 (Mated)



Features and Benefits Gives power to the NMEA 2000® network

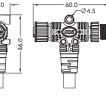
- Male and Female on each end · Available in various cable lengths to match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Non Certified NMEA 2000

5 Tee Conn. MID, Overmoulded With Cable NBP-MM1MF100XHXXX

NMEA 2000 Mid Cable Assy (Plastic Nut)

Tee-Cable, IPX7 (Mated)









- Gives power to the NMEA 2000® network
- Male and Female on each end · Available in various cable lengths to
- match installation requirements
- Rugged, IPX7 rated connectors for continued connection integrity in marine environment
- Non Certified NMEA 2000

NRP-MM1MF100XHXXX 5 Tee Conn. MID, Overmoulded With Cable



NMEA2000 Accessories Cap

Features and Benefits

Electronics

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Electronics

- One sealing surface means less likelihood of failure
- Maintains IPX7 rating for functional integrity when connector is not mated

 IPX7 ratings ensures cable assemblies are water and dust tight for functional interest 	egrit
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