

Amphenol® /Matrix® Miniature Cylindrical MIL-C-26482, Series 2 Connectors



MS3470
wall mounting receptacle
with narrow flange



MS3472
wall mounting receptacle
with wide flange



MS3474
jam nut receptacle



MS3476
straight plug
MS3475
plug with RFI grounding
fingers

Amphenol broadens their Miniature Cylindrical Family of Connectors with the addition of the Matrix® Product line of MIL-C-26482, Series 2 connectors.

This series provides a bayonet coupling connector with crimp rear insertable, rear releasable contacts.

DESIGN CHARACTERISTICS

- Medium size, environmentally resistant connector
- Recommended operating voltage to 1,000 VAC (RMS) at sea level
- Quick positive coupling assured by 3 point bayonet coupling system
- Visual confirmation of complete coupling
- Eliminates mismatching by the use of five key/keyway design
- Insertion and removal of contacts from the rear of the connector assures no damage to the front that might affect the sealing characteristics
- Utilizes same standard qualified rear-release type plastic tool for contact insertion and removal
- Contacts are qualified to MIL-C-39029 requirements – BIN coded (three color bands), and are crimped with standard crimp tools per MIL-C-22520
- Grommets are constructed of tear-resistant elastomer and experience no degradation when exposed to a broad range of fluids
- Sealing over a range of wire diameters is assured by a triple webbed grommet at the rear of the connector
- Closed entry socket side of the insert is designed with a lead-in chamfer and a hard face that will accept a pin contact bent within pre-established limits
- Elastomer interfacial seal on the pin side has raised barriers around each pin which displace into the socket chamfer when mated, providing a positive moisture seal

CUSTOMER OPTIONS

- Shell styles within this family include:
Wall mount with either a narrow or a wide flange, jam nut single hole mount, and cable connecting receptacles, along with standard plugs or plugs with RFI grounding fingers, in shell sizes 8 to 24
- MS and Proprietary versions available
- Accommodation of contact sizes 20, 16 and 12
- 34 insert arrangement patterns available, accommodating from a minimum of 3 to a maximum of 55 circuits
- Alternate positioning available
- Various finishes are available (for information on non-cadmium zinc alloy plating, consult Amphenol, Sidney, NY)

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class descriptions, performance specifications

CLASS DESCRIPTIONS

Military MIL-C-26482, Series 2	Amphenol/Matrix Proprietary MB1 Series	Description
Class L	Class R	Aluminum shell, electroless nickel finish, fluid resistant
Class E	–	Inactive, superceded by Class L*
Class R	–	Inactive, superceded by Class L*
Class A	Class A	Aluminum shell, black non-conductive anodized finish, fluid resistant
–	Class G	Stainless steel shell, passivated, fluid resistant
Class W	Class W	Aluminum shell, olive drab cadmium plated, corrosion/fluid resistant

* Ref. MIL-C-26482

PERFORMANCE SPECIFICATIONS

SERVICE RATINGS**

Service Rating	Recommended Operating AC Voltage at Sea Level	Test Voltage AC (RMS), 60 cps			
		Sea Level	50,000 ft.	70,000 ft.	110,000 ft.
I	600	1,500	500	375	200
II	1,000	2,300	750	500	200

** Service Rating is comparable to MS rating A. Miniature connectors rated Service Rating I will provide a minimum flashover voltage at sea level of 2,000 volts AC (RMS). Service Rating II is comparable to MS Service Rating D, and will provide a minimum flashover voltage of 2,800 volts AC (RMS) at sea level.

Please note that the electrical data given is not an establishment of electrical safety factors. This is left entirely in the designer's hands, as he can best determine which peak voltage, switching surges, transients, etc. can be expected in a particular circuit.

OPERATING TEMPERATURE RANGE

–65°C (–85°F) to 200°C (392°F)

ENVIRONMENTAL SEAL

Wired, mated connectors with the specified accessory attached will meet the altitude immersion test specified in MIL-C-26482.

DURABILITY

Minimum of 500 mating cycles.

SHOCK AND VIBRATION REQUIREMENTS

When tested as follows, the connector shall sustain no physical damage, or electrical discontinuity exceeding one microsecond.

SHOCK:

Pulse of an approximate half sine wave of 300g magnitude with duration of 3 milliseconds applied in three axes.

VIBRATION:

Sixteen hours of random vibration having a range of 50 to 2,000 Hz with a 41.7G peak level.

MIL-C-26482, Series 2

how to order

HOW TO ORDER BY MILITARY PART NUMBER MIL-C-26482 SERIES 2 CONNECTORS

<u>MS</u>	<u>3470</u>	<u>W</u>	<u>12</u>	<u>10</u>	<u>P</u>	<u>W</u>
1	2	3	4	5	6	7

1. Connector Type
MS designates Military Standard
2. Connector Style
 - 3470 wall mounting receptacle with narrow flange
 - 3472 wall mounting receptacle with wide flange
 - 3471 cable connecting receptacle
 - 3474 jam nut receptacle
 - 3476 straight plug
 - 3475 straight plug with RFI grounding fingers
3. Service Class
 - L aluminum shell, electroless nickel finish, fluid resistant insert
 - A aluminum shell, black anodized finish, non-conductive fluid resistant insert
 - W aluminum shell, olive drab cadmium plated, fluid resistant insert

Note: For stainless steel shell, passivated, order by Amphenol®/Matrix® proprietary Class G.
Class L inactivates older classes E and R (Ref. MIL-C-26482)
- 4., 5. Shell size and insert arrangement - See chart on page 9 and pattern drawings that follow.
6. Contact Types
 - P designates pin
 - S designates socket
 - A designates less pins
 - B designates less sockets

Note: Use A & B only when other than a full complement of power contacts is to be installed.
7. Insert Rotation
“W”, “X”, “Y”, “Z” designate that insert is rotated in its shell from normal position. No letter required for normal (no rotation) position. See page 9 for description of alternate positions.

HOW TO ORDER BY PROPRIETARY PART NUMBER MIL-C-26482 SERIES 2 CONNECTORS

<u>MB1</u>	<u>0</u>	<u>W</u>	<u>12</u>	<u>10</u>	<u>P</u>	<u>W</u>	<u>***</u>
1	2	3	4	5	6	7	8

1. Connector Type
MB1 designates Amphenol®/Matrix® Bayonet Coupling Connector
2. Connector Style
 - 0 wall mounting receptacle with narrow flange
 - 1 wall mounting receptacle with wide flange
 - 3 cable connecting receptacle
 - 4 jam nut receptacle
 - 6 straight plug
 - 8 straight plug with RFI grounding fingers
3. Service Class
 - A aluminum shell, black anodize finish, non-conductive, fluid resistant insert
 - R aluminum shell, electroless nickel finish, fluid resistant insert
 - G stainless steel shell, passivated, fluid resistant insert
 - W aluminum shell, cadmium plated, olive drab finish, fluid resistant insert
- 4., 5. Shell size and insert arrangement - See chart on page 9 and pattern drawings that follow.
6. Contact Types
 - P designates pin
 - S designates socket
7. Insert Rotation
“W”, “X”, “Y”, “Z” designate that insert is rotated in its shell from normal position. No letter required for normal (no rotation) position. See page 9 for description of alternate positions.
8. Modification Number
Consult Amphenol, Sidney, NY for information.

For ordering information on accessories, such as protection caps and backshell hardware, contact Amphenol, Sidney, NY.