

# Amphenol®

**Military standard connectors**

**Bayonet coupling connectors**

**High tension connectors**



**Amphenol Daeshin Korea**

## Amphenol Corporation Worldwide



## The Company

**Amphenol** Corporation is one of the world's largest designers, manufacturers and marketers of electrical, electronics and fiber optic connectors, interconnect systems and coaxial and flat-ribbon cable. The primary end markets for our products are in the fast growing segments of telephone, wireless and data communication systems; commercial and military aerospace electronics; cable television systems; automotive and mass transportation application; and industrial factory automation equipment.

**Amphenol Daeshin Electronics Precision Ltd ( ADS )**, located in Bucheon Korea, is a subsidiary of Amphenol corporation, a worldwide manufacturer and supplier of connector and interconnects products. We are supplying wide range of interconnect solution and design, manufacture, supply Mil-C-5015 style circular connectors. The primary end markets for ADS is Military, Aerospace and Industrial with full range of Amphenol product group.

## Amphenol Daeshin Korea

### Introduction



#### **MS / Standard MIL-C-5015 Style Connector**

Amphenol MIL-C-5015 connectors meet the latest performance requirements of MIL-C-5015.

These connectors represent well-proven electrical capability at an acceptable cost for most equipment where durability is important.

MIL-C-5015 features threaded coupling & single key & keyway polarization maximum simplicity in design.

Applications include industrial machines, military ground support equipment, ordnance & shipboard installation.

Amphenol MIL-C-5015 connectors are available in classes A, B, E/F, R, and also offers a range of pre-earth connectors.

Therefore, you will always find the right connector in Amphenol, with us, for conditions & performance requirements you may have.



#### **ADGC Series(Bayonet Coupling Connectors)**

The connectors presented in this catalog are identified as ADGC.

They are used principally in the transit rail industry and heavy applications;

Their main characteristic is the fast and precise coupling of the receptacle and plug connectors.

Three bayonet ramps on the receptacle allow for the fast and perfect mating with only a one quarter turn of the coupling nut.

ADGC Bayonet coupling connectors in accordance with VG95234.

They withstand exposure to moisture, oil and vibration.

Bayonet lock coupling.

ADGC series connectors meet the performance required for subway coupler applications.



#### **AMHTC Series(Amphenol High Tension Connectors)**

Amphenol "AMHTC", high tension connector series for railway vehicle installable power distribution systems, offers the ultimate in safety and reliability under the most severe operating conditions.

The AMHTC series connectors allow the user to connect electrical equipment quickly with ultimate safety.

AMHTC is available in two standard formats, which allow complete hook up through the standard daisy chain principle.

## Amphenol Daeshin Korea

### Introduction



By taking advantage of the expertise in connector production, we upgraded our capability to support railway requirements.

Currently our major railway parts are inter-vehicle jumpers for power and/or signal transmission, junction boxes and harness for traction motor.

We possess designing/engineering capability and resources to satisfy the requirements of railway customers and even those of railway operators.

We not only produce and supply those products but we also participate in designing stage with customer and provide optimal interconnection solution.

We have completed various railway projects with our own design and we are ready to propose reliable solution.

### Table of Contents Page

ADS all products general information & Introduction  
Amphenol® MS Standard Cylindrical MIL-C-5015 Type Connectors

General Information, Class Designations

#### MS-A General Information

|                                                     |    |
|-----------------------------------------------------|----|
| MS3100A Wall mounting receptacle-dimension .....    | 9  |
| MS3101A Cable connecting receptacle-dimension ..... | 10 |
| MS3102A Box mounting receptacle-dimension .....     | 11 |
| MS3106A Straight plug-dimension .....               | 12 |
| MS3108A 90° Right angle plug-dimension .....        | 13 |

#### MS/DS-E/F General Information

|                                                       |    |
|-------------------------------------------------------|----|
| MS3100E/F Wall mounting receptacle-dimension .....    | 15 |
| MS3101E/F Cable connecting receptacle-dimension ..... | 16 |
| MS3102E Box mounting receptacle-dimension .....       | 17 |
| MS3106E/F Straight plug-dimension .....               | 18 |
| MS3108E 90° Right angle plug-dimension .....          | 19 |

#### MS/DS-R General Information

|                                                     |    |
|-----------------------------------------------------|----|
| MS3100R Wall mounting receptacle-dimension .....    | 21 |
| MS3101R Cable connecting receptacle-dimension ..... | 22 |
| MS3102R Box mounting receptacle-dimension .....     | 23 |
| MS3106R Straight plug-dimension .....               | 24 |
| MS3108R 90° Right angle plug-dimension .....        | 25 |

#### Insert Arrangements

|                                                                    |         |
|--------------------------------------------------------------------|---------|
| MS-A.E(F).R class insert arrangement & Alternate Positioning ..... | 26, 27  |
| MS-A.E(F).R Contact arrangements .....                             | 28 ~ 37 |

#### MS Connector Accessories

|                                                         |    |
|---------------------------------------------------------|----|
| MS25042 & MS25043 Protection cap .....                  | 39 |
| MS3057A cable clamp, MS3420 sleeve .....                | 40 |
| Sealing gaskets & Panel mounting hole information ..... | 41 |
| Solder contacts & Crimp contacts information .....      | 42 |
| How to order for MS-Standard class .....                | 43 |

#### MS-B General Information

|                                                     |    |
|-----------------------------------------------------|----|
| MS3101B Cable connecting receptacle-dimension ..... | 47 |
| MS3102B Box mounting receptacle-dimension .....     | 48 |
| MS3106B Straight plug-dimension .....               | 49 |
| MS3108B 90° Right angle plug-dimension .....        | 50 |

### Table of Contents Page

#### Insert Arrangements

|                                                             |         |
|-------------------------------------------------------------|---------|
| MS-B class insert arrangement & Alternate Positioning ..... | 51      |
| MS-B class contact arrangements .....                       | 52 ~ 54 |
| How to order for MS-B Class .....                           | 55      |

#### MS-DL General Information

|                                                                    |    |
|--------------------------------------------------------------------|----|
| DL3102A Box mounting receptacle-dimension .....                    | 59 |
| DL3106A Straight plug-dimension .....                              | 60 |
| DL3108A 90° Right angle plug-dimension .....                       | 61 |
| DL/Standard insert arrangement & contact arrangement .....         | 62 |
| MS3057A cable clamp, DL3420 sleeve & contact electrical data ..... | 63 |
| How to order for DL- Class .....                                   | 64 |

#### ADG, ADGC General Information

|                                                          |         |
|----------------------------------------------------------|---------|
| ADG, ADGC00A Wall mounting receptacle-dimension .....    | 67      |
| ADG, ADGC01A Cable connecting receptacle-dimension ..... | 68      |
| ADG, ADGC02A Box mounting receptacle-dimension .....     | 69      |
| ADG, ADGC06A Straight plug-dimension .....               | 70      |
| ADG, ADGC08A 45° Right angle plug-dimension .....        | 71      |
| ADG, ADGC Standard insert arrangement .....              | 72. 73  |
| ADG, ADGC Special insert arrangement .....               | 74      |
| ADG, ADGC Contact arrangements .....                     | 75 ~ 85 |
| ADG, ADGC Accessories information protection cap .....   | 86      |
| Contacts information .....                               | 87. 88  |
| ADG, ADGC Characteristics .....                          | 89      |
| How to order for ADG,ADGC .....                          | 90      |
| ADG, ADGC Tool information .....                         | 91      |

#### AMHTC General Information

|                                              |     |
|----------------------------------------------|-----|
| ALPF Box mounting receptacle dimension ..... | 95  |
| AMLM Straight plug dimension .....           | 95  |
| HLPF Box mounting receptacle dimension ..... | 96  |
| HLLM Straight plug dimension .....           | 96  |
| SLPF Box mounting receptacle dimension ..... | 97  |
| SLLM Straight plug dimension .....           | 97  |
| AMTHC Accessories information .....          | 98  |
| How to order for AMHTC .....                 | 99  |
| AMHTC Tool information .....                 | 100 |



# Amphenol MIL-C-5015 Connectors

## MS General Information, Class Designations



### DESIGN CHARACTERISTICS

- Medium to heavy weight cylindrical
- Durable, field-proven design
- Environmental resistant
- Resilient inserts
- Operating voltage to 3000 VAC (RMS) at sea level
- Threaded couplings
- Single key / keyway shell polarization
- Cost effective



### CUSTOMER OPTIONS

- Five shell styles
- Fourteen shell sizes
- Five class designations
- Alternate insert positioning
- Zinc alloy plating (cadmium-free) available



**MS connectors** meet the latest performance requirements of MIL-C-5015.

These connectors represent well proven electrical capability at an acceptable cost for most equipment where durability is important.

MIL-C-5015 features threaded couplings and single key/ keyway polarization, representing maximum simplicity in design.

Applications include military ground support equipment, ordnance and shipboard installations.

Amphenol Industrial Operations manufactures five classes of connectors to meet different requirements.

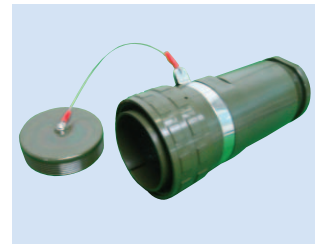
Class designations and brief descriptions are listed below.

**A** - Solid Shell - for general, non-environmental applications.

**B** - Split end bell, for general, non-environmental applications.

**E/F** - Environmental Resisting with Strain Relief-designed for applications where the connector will be exposed to moisture, vibration, and rapid changes in pressure and temperature.

**R** - Lightweight Environmental Resisting-shorter in length and lighter in weight than the E and F classes, the MS-R offers a high degree of reliability under adverse conditions: recommended for new design applications.





**MS/Standard  
A,E(F),R Class**

DaeShin

# Amphenol MIL-C-5015 Connectors

## MS-A Class



Wall Mounting Receptacle



Cable connecting Receptacle



Box Mounting Receptacle



Straight Plug



Right Angle Plug

### MS-A

MS-A class connectors perform many of the virtual functions in powering, testing and ground support system. Class A applications include communication equipment, computers and shipboard installation where mechanical forces and physical parameters are not subject to extreme or rapid environmental changes.

### Shells:

Shell components are fabricated from high grade aluminum alloy.

Electrically Zinc plate finish with an olive drab chromate after treatment offers corrosion resistance.

### Contacts:

Pins and sockets are machined from copper alloy with silver plated finish.

Size 16 and 12 socket contacts incorporate a closed entry design.

### Inserts:

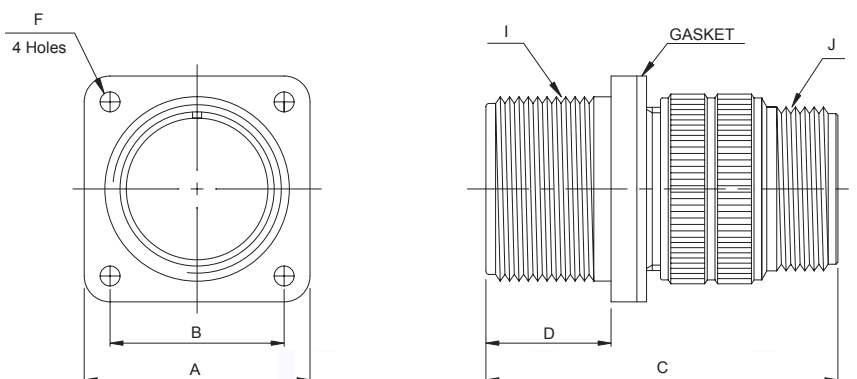
Inserts are resilient synthetic rubber, offering high dielectric strength, high arc resistance to vibration.

Proprietary design permits pressurization of either pin or socket insert.

# Amphenol MIL-C-5015 Connectors

## MS3100A

### Wall mounting receptacle



MS3100A wall mounting receptacles are used with the MS3057 cable clamp or with conduit to eliminate need for the conduit box in applications where wires are carried thru walls or bulkheads.

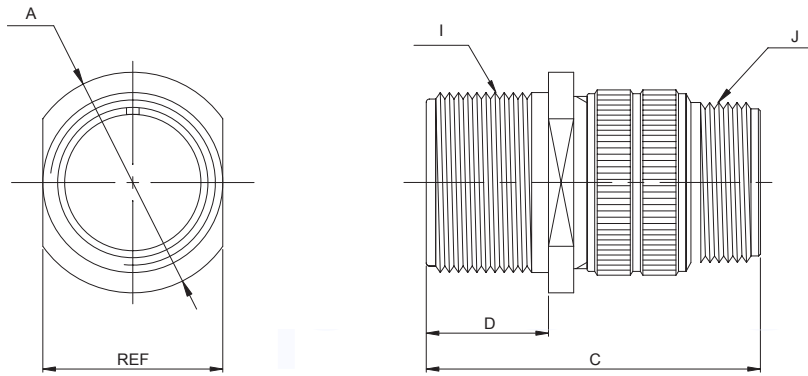
(mm)

| Shell Size | □A<br>±0.79 | □B<br>±0.12 | C<br>Max | D<br>+0.79<br>-0.00 | ØF<br>+0.25<br>-0.12 | I<br>Thread-2A<br>(UNEF) | J<br>Thread-2A<br>(UNEF) |
|------------|-------------|-------------|----------|---------------------|----------------------|--------------------------|--------------------------|
| 10SL       | 25.40       | 18.26       | 38.88    | 14.28               | 3.20                 | 5/8-24 NEF               | 5/8-24 NEF               |
| 12S        | 27.79       | 20.62       | 42.87    | 14.28               | 3.20                 | 3/4-20 NEF               | 5/8-24 NEF               |
| 12         | 27.79       | 20.62       | 52.37    | 19.05               | 3.20                 | 3/4-20 NEF               | 5/8-24 NEF               |
| 14S        | 30.18       | 23.01       | 42.87    | 14.28               | 3.20                 | 7/8-20 NEF               | 3/4-20 NEF               |
| 14         | 30.18       | 23.01       | 52.37    | 19.05               | 3.20                 | 7/8-20 NEF               | 3/4-20 NEF               |
| 16S        | 32.54       | 24.61       | 42.87    | 14.28               | 3.20                 | 1-20 NEF                 | 7/8-20 NEF               |
| 16         | 32.54       | 24.61       | 52.37    | 19.05               | 3.20                 | 1-20 NEF                 | 7/8-20 NEF               |
| 18         | 34.93       | 26.97       | 52.37    | 19.05               | 3.20                 | 1 1/8-18 NEF             | 1-20 NEF                 |
| 20         | 38.10       | 29.36       | 55.57    | 19.05               | 3.20                 | 1 1/4-18 NEF             | 1 3/16-18 NEF            |
| 22         | 41.28       | 31.75       | 55.57    | 19.05               | 3.20                 | 1 3/8-18 NEF             | 1 3/16-18 NEF            |
| 24         | 44.45       | 34.93       | 58.72    | 20.63               | 3.73                 | 1 1/2-18 NEF             | 1 7/16-18 NEF            |
| 28         | 50.80       | 39.67       | 58.72    | 20.63               | 3.73                 | 1 3/4-18 NS              | 1 7/16-18 NEF            |
| 32         | 57.15       | 44.45       | 67.92    | 22.23               | 4.39                 | 2-18 NS                  | 1 3/4-18 NS              |
| 36         | 63.50       | 49.23       | 67.92    | 22.23               | 4.39                 | 2 1/4-16 UN              | 2-18 NS                  |

# Amphenol MIL-C-5015 Connectors

## MS3101A

### Cable Connecting Receptacle



MS3101A solid endbell cable connecting receptacles are used for cable extension requirements where mounting provisions are unnecessary.

(mm)

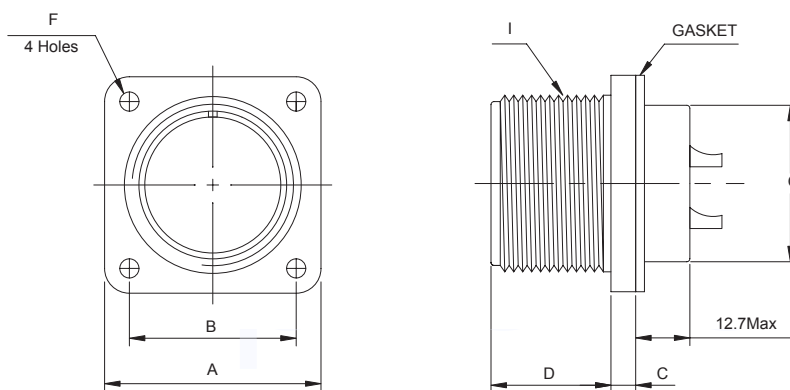
| Shell Size | Ø A Max | C Max | D<br>+0.79<br>-0.00 | I<br>Thread-2A<br>(UNEF) | J<br>Thread-2A<br>(UNEF) |
|------------|---------|-------|---------------------|--------------------------|--------------------------|
| 10SL       | 24.61   | 38.88 | 14.28               | 5/8-24 NEF               | 5/8-24 NEF               |
| 12S        | 26.97   | 42.87 | 14.28               | 3/4-20 NEF               | 5/8-24 NEF               |
| 12         | 26.97   | 52.37 | 19.05               | 3/4-20 NEF               | 5/8-24 NEF               |
| 14S        | 29.36   | 42.87 | 14.28               | 7/8-20 NEF               | 3/4-20 NEF               |
| 14         | 29.36   | 52.37 | 19.05               | 7/8-20 NEF               | 3/4-20 NEF               |
| 16S        | 31.75   | 42.87 | 14.28               | 1-20 NEF                 | 7/8-20 NEF               |
| 16         | 31.75   | 52.37 | 19.05               | 1-20 NEF                 | 7/8-20 NEF               |
| 18         | 34.13   | 52.37 | 19.05               | 1 1/8-18 NEF             | 1-20 NEF                 |
| 20         | 37.31   | 55.57 | 19.05               | 1 1/4-18 NEF             | 1 3/16-18 NEF            |
| 22         | 40.48   | 55.57 | 19.05               | 1 3/8-18 NEF             | 1 3/16-18 NEF            |
| 24         | 43.66   | 58.72 | 20.63               | 1 1/2-18 NEF             | 1 7/16-18 NEF            |
| 28         | 50.01   | 58.72 | 20.63               | 1 3/4-18 NS              | 1 7/16-18 NEF            |
| 32         | 56.36   | 67.92 | 22.23               | 2-18 NS                  | 1 3/4-18 NS              |
| 36         | 62.71   | 67.92 | 22.23               | 2 1/4-16 UN              | 2-18 NS                  |

# Amphenol MIL-C-5015 Connectors

## MS3102A

### BOX Mounting Receptacle

(Available with Plastic or Rubber insulators)



MS3102A box mounting receptacles are used on boxes and equipment cases where no cable support is required.

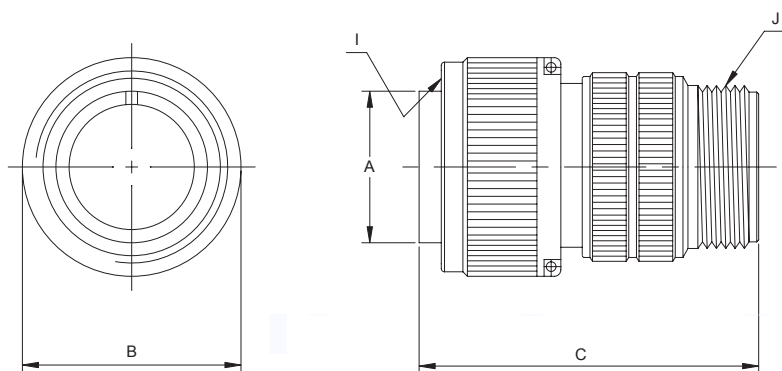
(mm)

| Shell Size | □A<br>±0.79 | □B<br>±0.12 | C<br>±0.50 | D<br>+0.79<br>-0.00 | ØF<br>+0.25<br>-0.12 | ØG<br>Max | I<br>Thread-2A<br>(UNEF) |
|------------|-------------|-------------|------------|---------------------|----------------------|-----------|--------------------------|
| 10SL       | 25.40       | 18.26       | 3.00       | 14.28               | 3.05                 | 16.00     | 5/8-24 NEF               |
| 12S        | 27.80       | 20.62       | 3.00       | 14.28               | 3.05                 | 16.50     | 3/4-20 NEF               |
| 12         | 27.80       | 20.62       | 3.00       | 19.05               | 3.05                 | 16.50     | 3/4-20 NEF               |
| 14S        | 30.20       | 23.01       | 3.00       | 14.28               | 3.05                 | 20.00     | 7/8-20 NEF               |
| 14         | 30.20       | 23.01       | 3.00       | 19.05               | 3.05                 | 20.00     | 7/8-20 NEF               |
| 16S        | 32.50       | 24.61       | 3.00       | 14.28               | 3.05                 | 23.00     | 1-20 NEF                 |
| 16         | 32.50       | 24.61       | 3.00       | 19.05               | 3.05                 | 23.00     | 1-20 NEF                 |
| 18         | 34.90       | 26.97       | 4.00       | 19.05               | 3.05                 | 26.00     | 1 1/8-18 NEF             |
| 20         | 38.10       | 29.36       | 4.00       | 19.05               | 3.05                 | 29.00     | 1 1/4-18 NEF             |
| 22         | 41.30       | 31.75       | 4.00       | 19.05               | 3.05                 | 32.50     | 1 3/8-18 NEF             |
| 24         | 44.50       | 34.93       | 4.00       | 20.63               | 3.73                 | 35.50     | 1 1/2-18 NEF             |
| 28         | 50.80       | 39.67       | 4.00       | 20.63               | 3.73                 | 42.00     | 1 3/4-18 NEF             |
| 32         | 57.20       | 44.45       | 4.00       | 22.23               | 4.39                 | 48.00     | 2-18 NS                  |
| 36         | 63.50       | 49.23       | 4.00       | 22.23               | 4.39                 | 54.50     | 2 1/4-16 UN              |

# Amphenol MIL-C-5015 Connectors

## MS3106A

### Straight Plug



MS3106A straight plugs are used with 3100, 3101 and 3102 receptacles.

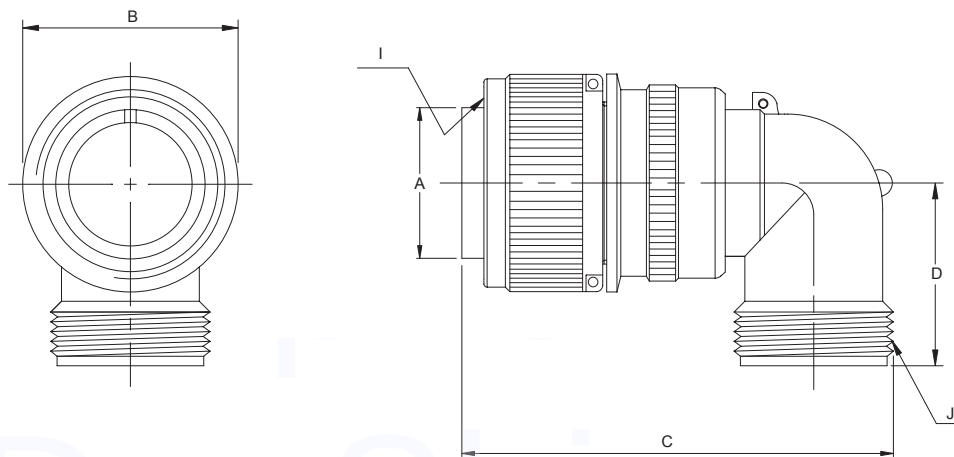
(mm)

| Shell Size | Ø A<br>+0.00<br>-0.38 | Ø B<br>Max | C<br>Max | I<br>Thread-2B<br>(UNEF) | J<br>Thread-2A<br>(UNEF) |
|------------|-----------------------|------------|----------|--------------------------|--------------------------|
| 10SL       | 11.33                 | 24.61      | 38.88    | 5/8-24 NEF               | 5/8-24 NEF               |
| 12S        | 14.10                 | 26.97      | 42.87    | 3/4-20 NEF               | 5/8-24 NEF               |
| 12         | 14.10                 | 26.97      | 52.37    | 3/4-20 NEF               | 5/8-24 NEF               |
| 14S        | 17.15                 | 29.36      | 42.87    | 7/8-20 NEF               | 3/4-20 NEF               |
| 14         | 17.15                 | 29.36      | 52.37    | 7/8-20 NEF               | 3/4-20 NEF               |
| 16S        | 20.45                 | 31.75      | 42.87    | 1-20 NEF                 | 7/8-20 NEF               |
| 16         | 20.45                 | 31.75      | 52.37    | 1-20 NEF                 | 7/8-20 NEF               |
| 18         | 23.62                 | 34.13      | 52.37    | 1 1/8-18 NEF             | 1-20 NEF                 |
| 20         | 26.67                 | 37.31      | 55.57    | 1 1/4-18 NEF             | 1 3/16-18 NEF            |
| 22         | 29.85                 | 40.48      | 55.57    | 1 3/8-18 NEF             | 1 3/16-18 NEF            |
| 24         | 33.02                 | 43.66      | 58.72    | 1 1/2-18 NEF             | 1 7/16-18 NEF            |
| 28         | 38.61                 | 50.01      | 58.72    | 1 3/4-18 NS              | 1 7/16-18 NEF            |
| 32         | 44.96                 | 56.36      | 67.92    | 2-18 NS                  | 1 3/4-18 NS              |
| 36         | 50.29                 | 62.71      | 67.92    | 2 1/4-16 UN              | 2-18 NS                  |

# Amphenol MIL-C-5015 Connectors

## MS3108A

### Right Angle Plug



MS3108A Right Angle plugs, have a solid endbell and are used where wire must be brought at an abrupt angle. Either the split or solid endbells on the 3108 are capable of being rotated and locked.

(mm)

| Shell Size | Ø A<br>+0.00<br>-0.38 | Ø B<br>Max | C<br>Max | D<br>Max | I<br>Thread-2B<br>(UNEF) | J<br>Thread-2A<br>(UNEF) |
|------------|-----------------------|------------|----------|----------|--------------------------|--------------------------|
| 10SL       | 11.33                 | 24.61      | 46.02    | 25.40    | 5/8-24 NEF               | 5/8-24 NEF               |
| 12S*       | 14.10                 | 26.97      | 50.80    | 26.90    | 3/4-20 NEF               | 5/8-24 NEF               |
| 12         | 14.10                 | 26.97      | 57.15    | 26.90    | 3/4-20 NEF               | 5/8-24 NEF               |
| 14S        | 17.15                 | 29.36      | 53.97    | 28.50    | 7/8-20 NEF               | 3/4-20 NEF               |
| 14         | 17.15                 | 29.36      | 58.72    | 28.50    | 7/8-20 NEF               | 3/4-20 NEF               |
| 16S        | 20.45                 | 31.75      | 60.32    | 30.10    | 1-20 NEF                 | 7/8-20 NEF               |
| 16         | 20.45                 | 31.75      | 65.07    | 30.10    | 1-20 NEF                 | 7/8-20 NEF               |
| 18         | 23.62                 | 34.13      | 68.27    | 33.30    | 1 1/8-18 NEF             | 1-20 NEF                 |
| 20         | 26.67                 | 37.71      | 76.98    | 34.90    | 1 1/4-18 NEF             | 1 3/16-18 NEF            |
| 22         | 29.85                 | 40.48      | 76.98    | 34.90    | 1 3/8-18 NEF             | 1 3/16-18 NEF            |
| 24         | 33.02                 | 43.66      | 86.51    | 39.60    | 1 1/2-18 NEF             | 1 7/16-18 NEF            |
| 28         | 38.61                 | 50.01      | 86.51    | 39.60    | 1 3/4-18 NS              | 1 7/16-18 NEF            |
| 32         | 44.96                 | 56.36      | 95.25    | 47.60    | 2-18 NS                  | 1 3/4-18 NS              |
| 36         | 50.29                 | 62.71      | 100.02   | 52.30    | 2 1/4-16 UN              | 2-18 NS                  |

\* No Tooling

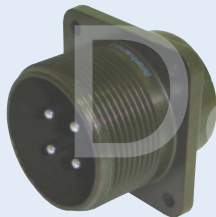
## Amphenol MIL-C-5015 Connectors MS/DS-E/F Class



Wall Mounting Receptacle



Cable connecting Receptacle



Box Mounting Receptacle



Straight Plug



Right Angle Plug

These MS connectors satisfy all the performance requirements of MIL-C-5015 and are recommended for conditions where vibration, moisture, pressure and/ or temperature and extreme. Strain relief is supplied on most shell sizes.

### Shells:

Shell components are fabricated from high grade aluminum alloy.

The standard hardware plating is electrically zinc plated finish with an olive drab chromate after treatment for corrosion resistance.

Consult Amphenol Daeshin for other plating options.

### Contacts:

Contacts are silver plated copper alloy for maximum corrosion resistance, maximum current carrying capacity and low millivolt drop.

Size 16 and 12 socket contacts incorporate a closed entry design.

### Inserts:

Inserts are resilient synthetic rubber, offering high dielectric strength, high arc resistance arc resistance to vibration.

Proprietary design permits pressurization of either pin or socket insert.

### Strain relief clamp:

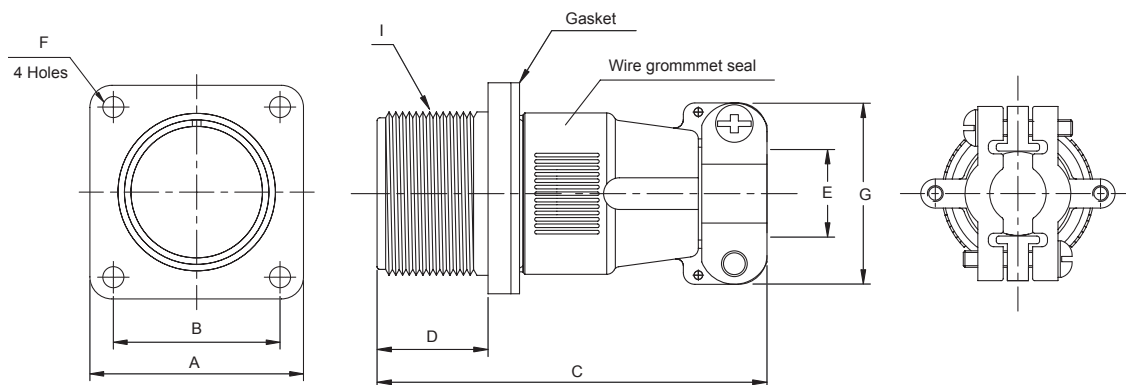
Strain relief clamp minimizes tension at the solder well connection and provides a positive mechanical moisture seal.

Complete field serviceability is possible with the strain relief clamp.

# Amphenol MIL-C-5015 Connectors

## MS3100E(F)

Wall Mounting Receptacle  
Integral Cable Clamp



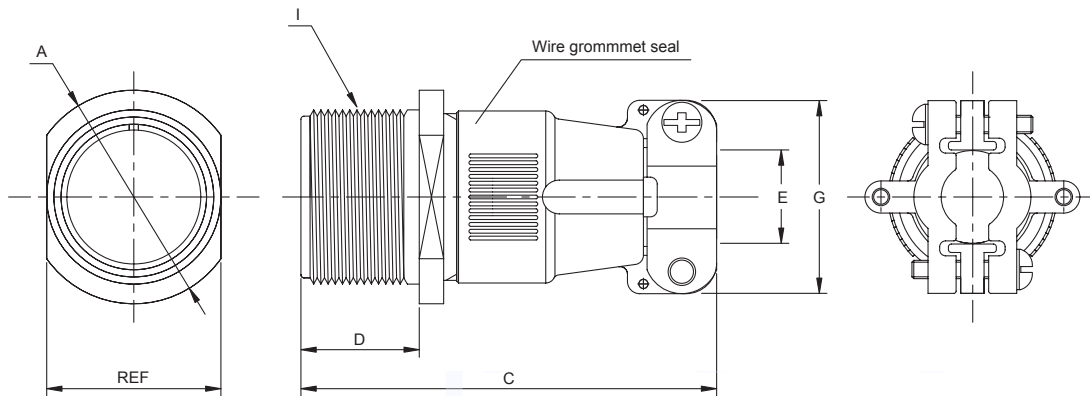
MS3100E/F wall mounting receptacles are used to carry wires thru walls or bulkheads, or to provide a means of disconnection at a bulkhead MS 3100E/F receptacles mate with 3106 and 3108 plugs.

(mm)

| Shell Size | □A<br>±0.79 | □B<br>±0.12 | C<br>Max | D<br>+0.79<br>-0.00 | ØE<br>Max | ØF<br>+0.25<br>-0.12 | ØG<br>Max | I<br>Thread-2A<br>(UNEF) |
|------------|-------------|-------------|----------|---------------------|-----------|----------------------|-----------|--------------------------|
| 10SL       | 25.40       | 18.26       | 57.15    | 14.28               | 7.90      | 3.05                 | 23.0      | 5/8-24 NEF               |
| 12S        | 27.79       | 20.62       | 57.15    | 14.28               | 7.90      | 3.05                 | 23.0      | 3/4-20 NEF               |
| 12         | 27.79       | 20.62       | 66.67    | 19.05               | 7.90      | 3.05                 | 23.0      | 3/4-20 NEF               |
| 14S        | 30.18       | 23.01       | 57.15    | 14.28               | 11.2      | 3.05                 | 26.0      | 7/8-20 NEF               |
| 14         | 30.18       | 23.01       | 66.67    | 19.05               | 11.2      | 3.05                 | 26.0      | 7/8-20 NEF               |
| 16S        | 32.54       | 24.61       | 57.15    | 14.28               | 14.2      | 3.05                 | 29.0      | 1-20 NEF                 |
| 16         | 32.54       | 24.61       | 66.67    | 19.05               | 14.2      | 3.05                 | 29.0      | 1-20 NEF                 |
| 18         | 34.93       | 26.97       | 68.27    | 19.05               | 16.0      | 3.05                 | 31.6      | 1 1/8-18 NEF             |
| 20         | 38.10       | 29.36       | 69.85    | 19.05               | 19.1      | 3.05                 | 37.5      | 1 1/4-18 NEF             |
| 22         | 41.28       | 31.75       | 69.85    | 19.05               | 19.1      | 3.05                 | 37.5      | 1 3/8-18 NEF             |
| 24         | 44.45       | 34.93       | 75.41    | 20.63               | 23.8      | 3.73                 | 43.0      | 1 1/2-18 NEF             |
| 28         | 50.80       | 39.67       | 76.98    | 20.63               | 23.8      | 3.73                 | 43.0      | 1 3/4-18 NS              |
| 32         | 57.15       | 44.45       | 76.98    | 22.23               | 32.0      | 4.39                 | 52.0      | 2-18 NS                  |
| 36         | 63.50       | 49.23       | 83.33    | 22.23               | 35.0      | 4.39                 | 58.0      | 2 1/4-16 UN              |

# Amphenol MIL-C-5015 Connectors MS3101E(F)

## Cable Connecting Receptacle Integral Cable Clamp



MS3101E/F cable connecting receptacles are used for cable extension requirements, where mounting provisions are unnecessary. MS3101E/F receptacles mate with 3106 and 3108 plugs.

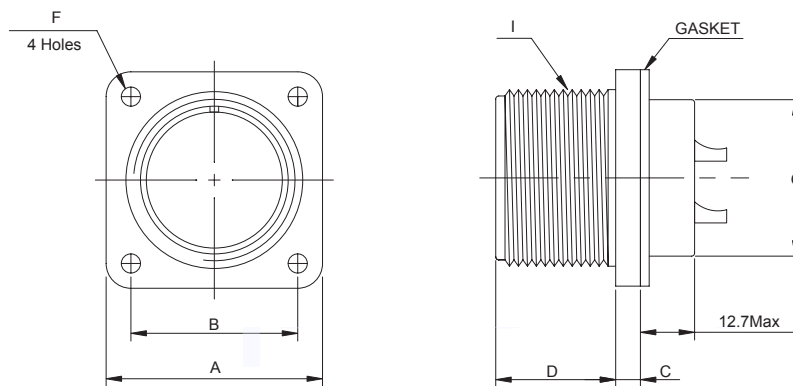
(mm)

| Shell Size | A Max | C Max | D<br>+0.79<br>-0.00 | Ø E Max | Ø G Max | I<br>Thread-2A<br>(UNEF) |
|------------|-------|-------|---------------------|---------|---------|--------------------------|
| 10SL       | 25.40 | 57.15 | 14.28               | 7.9     | 23.0    | 5/8-24 NEF               |
| 12S        | 27.79 | 57.15 | 14.28               | 7.9     | 23.0    | 3/4-20 NEF               |
| 12         | 27.79 | 66.67 | 19.05               | 7.9     | 23.0    | 3/4-20 NEF               |
| 14S        | 30.18 | 57.15 | 14.28               | 11.2    | 26.0    | 7/8-20 NEF               |
| 14         | 30.18 | 66.67 | 19.05               | 11.2    | 26.0    | 7/8-20 NEF               |
| 16S        | 32.54 | 57.15 | 14.28               | 14.2    | 29.0    | 1-20 NEF                 |
| 16         | 32.54 | 66.67 | 19.05               | 14.2    | 29.0    | 1-20 NE                  |
| 18         | 34.93 | 68.27 | 19.05               | 16.0    | 31.6    | 1 1/8-18 NEF             |
| 20         | 38.10 | 69.85 | 19.05               | 19.1    | 37.5    | 1 1/4-18 NEF             |
| 22         | 41.28 | 69.85 | 19.05               | 19.1    | 37.5    | 1 3/8-18 NEF             |
| 24         | 44.45 | 75.41 | 20.63               | 23.8    | 43.0    | 1 1/2-18 NEF             |
| 28         | 50.80 | 76.98 | 20.63               | 23.8    | 43.0    | 1 3/4-18 NS              |
| 32         | 57.15 | 76.98 | 22.23               | 32.0    | 52.0    | 2-18 NS                  |
| 36         | 63.50 | 83.33 | 22.23               | 35.0    | 58.0    | 2 1/4-16 UN              |

# Amphenol MIL-C-5015 Connectors

## MS3102E

### Box Mounting Receptacle



MS3102E box mounting receptacles are used in junction boxes or as an integral part of equipment. These connectors are identical with 3102A in construction.

(mm)

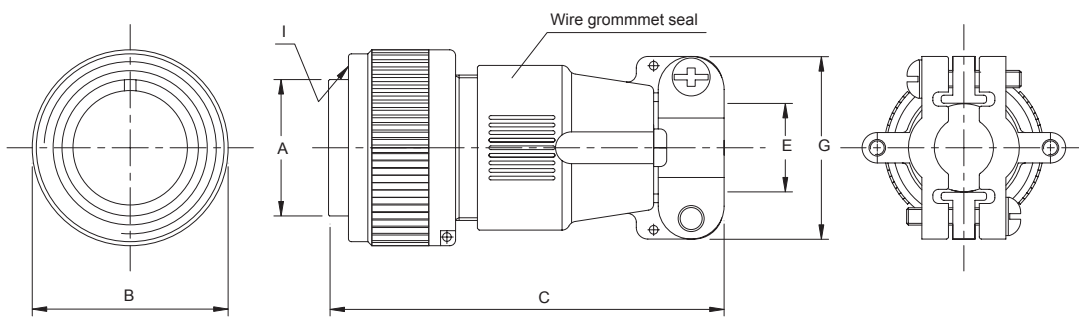
| Shell Size | □A<br>±0.79 | □B<br>±0.12 | C<br>±0.5 | D<br>+0.79<br>-0.00 | Ø F<br>+0.25<br>-0.12 | Ø G<br>Max | I<br>Thread-2A<br>(UNEF) |
|------------|-------------|-------------|-----------|---------------------|-----------------------|------------|--------------------------|
| 10SL       | 25.40       | 18.26       | 3.0       | 14.28               | 3.05                  | 16.0       | 5/8-24 NEF               |
| 12S        | 27.79       | 20.62       | 3.0       | 14.28               | 3.05                  | 16.5       | 3/4-20 NEF               |
| 12         | 27.79       | 20.62       | 3.0       | 19.05               | 3.05                  | 16.5       | 3/4-20 NEF               |
| 14S        | 30.18       | 23.01       | 3.0       | 14.28               | 3.05                  | 20.0       | 7/8-20 NEF               |
| 14         | 30.18       | 23.01       | 3.0       | 19.05               | 3.05                  | 20.0       | 7/8-20 NEF               |
| 16S        | 32.54       | 24.61       | 3.0       | 14.28               | 3.05                  | 23.0       | 1-20 NEF                 |
| 16         | 32.54       | 24.61       | 3.0       | 19.05               | 3.05                  | 23.0       | 1-20 NEF                 |
| 18         | 34.93       | 26.97       | 4.0       | 19.05               | 3.05                  | 26.0       | 1 1/8-18 NEF             |
| 20         | 38.10       | 29.36       | 4.0       | 19.05               | 3.05                  | 29.0       | 1 1/4-18 NEF             |
| 22         | 41.28       | 31.75       | 4.0       | 19.05               | 3.05                  | 32.5       | 1 3/8-18 NEF             |
| 24         | 44.45       | 34.93       | 4.0       | 20.63               | 3.73                  | 35.5       | 1 1/2-18 NEF             |
| 28         | 50.80       | 39.67       | 4.0       | 20.63               | 3.73                  | 42.0       | 1 3/4-18 NS              |
| 32         | 57.15       | 44.45       | 4.0       | 22.23               | 4.39                  | 48.0       | 2-18 NS                  |
| 36         | 63.50       | 49.23       | 4.0       | 22.23               | 4.39                  | 54.5       | 2 1/4-16 UN              |

# Amphenol MIL-C-5015 Connectors

## MS3106E(F)

### Straight Plug

### Integral Cable Clamp



MS3106E/F straight plugs mate with 3100,3101 and 3102 receptacles

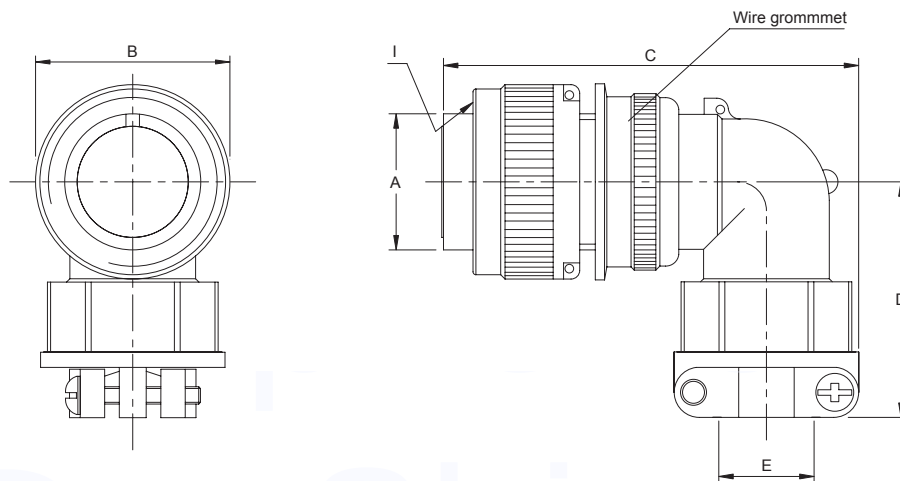
(mm)

| Shell Size | A<br>+0.00<br>-0.38 | B<br>Max | C<br>Max | Ø E<br>Max | Ø G<br>Max | I<br>Thread-2B<br>(UNEF) |
|------------|---------------------|----------|----------|------------|------------|--------------------------|
| 10SL       | 11.33               | 24.61    | 57.15    | 7.9        | 23.0       | 5/8-24 NEF               |
| 12S        | 14.10               | 26.97    | 57.15    | 7.9        | 23.0       | 3/4-20 NEF               |
| 12         | 14.10               | 26.97    | 66.67    | 7.9        | 23.0       | 3/4-20 NEF               |
| 14S        | 17.15               | 29.36    | 57.15    | 11.2       | 26.0       | 7/8-20 NEF               |
| 14         | 17.15               | 29.36    | 66.67    | 11.2       | 26.0       | 7/8-20 NEF               |
| 16S        | 20.45               | 31.75    | 57.15    | 14.2       | 29.0       | 1-20 NEF                 |
| 16         | 20.45               | 31.75    | 66.67    | 14.2       | 29.0       | 1-20 NEF                 |
| 18         | 23.62               | 34.13    | 68.27    | 16.0       | 31.6       | 1 1/8-18 NEF             |
| 20         | 26.67               | 37.31    | 69.85    | 19.1       | 37.5       | 1 1/4-18 NEF             |
| 22         | 29.85               | 40.48    | 69.85    | 19.1       | 37.5       | 1 3/8-18 NEF             |
| 24         | 33.02               | 43.66    | 75.41    | 23.8       | 43.0       | 1 1/2-18 NEF             |
| 28         | 38.61               | 50.01    | 76.98    | 23.8       | 43.0       | 1 3/4-18 NS              |
| 32         | 44.96               | 56.36    | 76.98    | 32.0       | 52.0       | 2-18 NS                  |
| 36         | 50.29               | 62.71    | 83.33    | 35.0       | 58.0       | 2 1/4-16 UN              |

# Amphenol MIL-C-5015 Connectors

## MS3108E

### Right Angle Plug



MS3108E Right angle plugs are used where there is limited space and where wires must be brought at abrupt angles. This plug mate with 3100, 3101 and 3102 receptacles

(mm)

| Shell Size | A<br>+0.00<br>-0.38 | B<br>Max | C<br>Max | D<br>Max | Ø E<br>Max | I<br>Thread-2B<br>(UNEF) |
|------------|---------------------|----------|----------|----------|------------|--------------------------|
| 10SL       | 11.33               | 24.61    | 55.57    | 38.1     | 7.9        | 5/8-24 NEF               |
| 12S*       | 14.10               | 26.97    | 55.57    | 38.1     | 7.9        | 3/4-20 NEF               |
| 12*        | 14.10               | 26.97    | 64.28    | 38.1     | 7.9        | 3/4-20 NEF               |
| 14S        | 17.15               | 29.36    | 58.72    | 40.4     | 11.2       | 7/8-20 NEF               |
| 14         | 17.15               | 29.36    | 68.27    | 40.4     | 11.2       | 7/8-20 NEF               |
| 16S        | 20.45               | 31.75    | 61.11    | 42.8     | 14.2       | 1-20 NEF                 |
| 16         | 20.45               | 31.75    | 70.63    | 42.8     | 14.2       | 1-20 NEF                 |
| 18         | 23.62               | 34.13    | 72.23    | 45.2     | 16.0       | 1 1/8-18 NEF             |
| 20         | 26.67               | 37.31    | 82.55    | 50.0     | 19.1       | 1 1/4-18 NEF             |
| 22         | 29.85               | 40.48    | 82.55    | 50.8     | 19.1       | 1 3/8-18 NEF             |
| 24         | 33.02               | 43.66    | 94.46    | 53.9     | 23.8       | 1 1/2-18 NEF             |
| 28         | 38.61               | 50.01    | 94.46    | 55.5     | 23.8       | 1 3/4-18 NS              |
| 32         | 44.96               | 56.36    | 106.37   | 65.8     | 32.0       | 2-18 NS                  |
| 36         | 50.29               | 62.71    | 109.14   | 69.0     | 35.0       | 2 1/4-16 UN              |

\* No Tooling

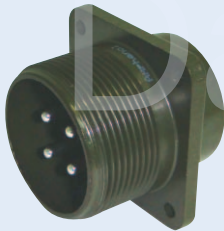
## Amphenol MIL-C-5015 Connectors MS/DS R-Class



Wall Mounting Receptacle



Cable connecting Receptacle



Box Mounting Receptacle



Straight Plug



Right Angle Plug

Specification requirements for greater reliability in a shorter, lighter weight environmental resistant connector led to the design of the MS-R.

These low profile assemblies were attained by moving the axial compression nut and grommet assembly forward and flash with the rear of the insert.

The silicon rubber grommet, with its low coefficient of friction, assures easier threading of wire bundles and quicker assembly and serviceability of the unit.

Molded webs in each wire hole insure a moisture barrier around each wire.

The addition 'O'ring at the main joint of all MS3106R plugs provide a main joint seal supplementary to interfacial seal, thus insuring of higher degree of reliability when connectors halves from different sources are employed.

MS-R types are recommended for new design applications.

### Shells:

Shell component are fabricated from high grade aluminum alloy. All components have the standard electrically zinc plated finish with an olive drab chromate after treatment for corrosion resistance. Consult Amphenol Daeshin for other plating options.

### Contacts:

Contacts are machined from copper alloy for maximum current carrying capacity and low millivolt drop.

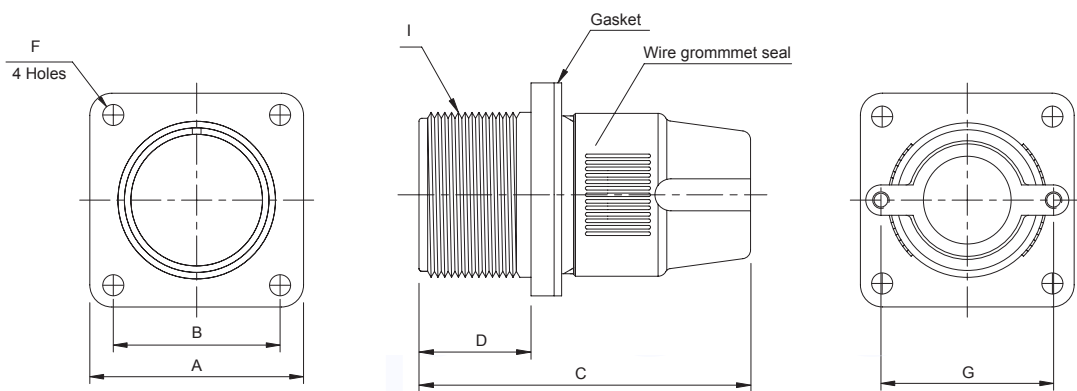
### Inserts:

Resilient synthetic rubber insert provide an outstanding moisture barrier, maximum vibration resistance and high dielectric strength. Either pin or socket insert can be pressurized.

# Amphenol MIL-C-5015 Connectors

## MS3100R

### Wall Mounting Receptacle



MS3100R receptacles are identical in purpose to the MS3100F.  
The MS3100R features a shorter lightweight endbell.

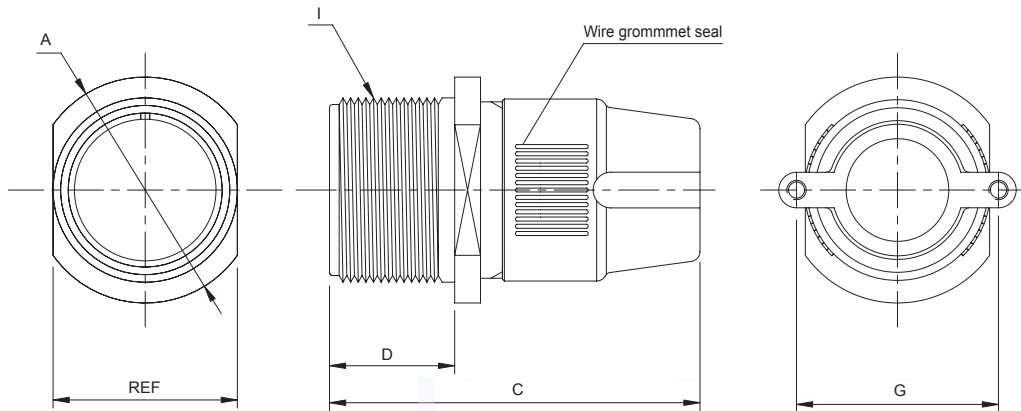
(mm)

| Shell Size | □A<br>±0.79 | □B<br>±0.12 | C<br>Max | D<br>+0.79<br>-0.00 | G<br>±0.12 | Ø F<br>+0.25<br>-0.12 | I<br>Thread-2A<br>(UNEF) |
|------------|-------------|-------------|----------|---------------------|------------|-----------------------|--------------------------|
| 10SL       | 25.40       | 18.26       | 46.68    | 14.28               | 19.0       | 3.05                  | 5/8-24 NEF               |
| 12S        | 27.79       | 20.62       | 46.68    | 14.28               | 19.0       | 3.05                  | 3/4-20 NEF               |
| 12         | 27.79       | 20.62       | 55.39    | 19.05               | 19.0       | 3.05                  | 3/4-20 NEF               |
| 14S        | 30.18       | 23.01       | 46.68    | 14.28               | 22.6       | 3.05                  | 7/8-20 NEF               |
| 14         | 30.18       | 23.01       | 66.67    | 19.05               | 22.6       | 3.05                  | 7/8-20 NEF               |
| 16S        | 32.54       | 24.61       | 46.68    | 14.28               | 26.2       | 3.05                  | 1-20 NEF                 |
| 16         | 32.54       | 24.61       | 55.39    | 19.05               | 26.2       | 3.05                  | 1-20 NEF                 |
| 18         | 34.93       | 26.97       | 57.93    | 19.05               | 31.2       | 3.05                  | 1 1/8-18 NEF             |
| 20         | 38.10       | 29.36       | 57.93    | 19.05               | 34.3       | 3.05                  | 1 1/4-18 NEF             |
| 22         | 41.28       | 31.75       | 57.93    | 19.05               | 39.8       | 3.05                  | 1 3/8-18 NEF             |
| 24         | 44.45       | 34.93       | 57.93    | 20.63               | 40.5       | 3.73                  | 1 1/2-18 NEF             |
| 28         | 50.80       | 39.67       | 57.93    | 20.63               | 40.5       | 3.73                  | 1 3/4-18 NS              |
| 32         | 57.15       | 44.45       | 57.93    | 22.23               | 48.0       | 4.39                  | 2-18 NS                  |
| 36         | 63.50       | 49.23       | 58.97    | 22.23               | 53.0       | 4.39                  | 2 1/4-16 UN              |

# Amphenol MIL-C-5015 Connectors

## MS3101R

Cable Connecting Receptacle  
(Receptacle with no mounting flange)



MS3101R cable connecting receptacles are identical in purpose to the MS3101E.  
The MS3101R features a shorter lightweight endbell.

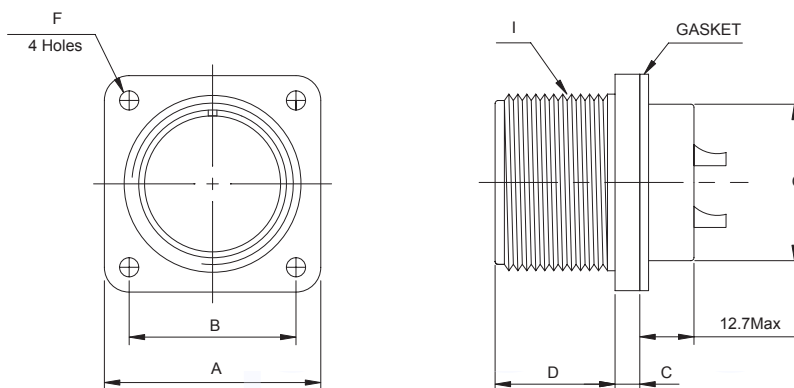
(mm)

| Shell Size | A Max | C Max | D<br>+0.79<br>-0.00 | G<br>±0.12 | I<br>Thread-2A<br>(UNEF) |
|------------|-------|-------|---------------------|------------|--------------------------|
| 10SL       | 24.61 | 46.68 | 14.28               | 19.0       | 5/8-24 NEF               |
| 12S        | 26.97 | 46.68 | 14.28               | 19.0       | 3/4-20 NEF               |
| 12         | 26.97 | 55.39 | 19.05               | 19.0       | 3/4-20 NEF               |
| 14S        | 29.36 | 46.68 | 14.28               | 22.6       | 7/8-20 NEF               |
| 14         | 29.36 | 55.39 | 19.05               | 22.6       | 7/8-20 NEF               |
| 16S        | 31.75 | 46.68 | 14.28               | 26.2       | 1-20 NEF                 |
| 16         | 31.75 | 55.39 | 19.05               | 26.2       | 1-20 NEF                 |
| 18         | 34.13 | 57.93 | 19.05               | 31.2       | 1 1/8-18 NEF             |
| 20         | 37.31 | 57.93 | 19.05               | 34.3       | 1 1/4-18 NEF             |
| 22         | 40.48 | 57.93 | 19.05               | 39.8       | 1 3/8-18 NEF             |
| 24         | 43.66 | 57.93 | 20.63               | 40.5       | 1 1/2-18 NEF             |
| 28         | 50.01 | 57.93 | 20.63               | 40.5       | 1 3/4-18 NS              |
| 32         | 56.36 | 57.93 | 22.23               | 48.0       | 2-18 NS                  |
| 36         | 62.71 | 58.97 | 22.23               | 53.0       | 2 1/4-16 UN              |

# Amphenol MIL-C-5015 Connectors

## MS3102R

### Box Mounting Receptacle



MS3102R box mounting receptacles are used in junction boxes or as an integral part of equipment. These connectors are identical with 3102A in construction.

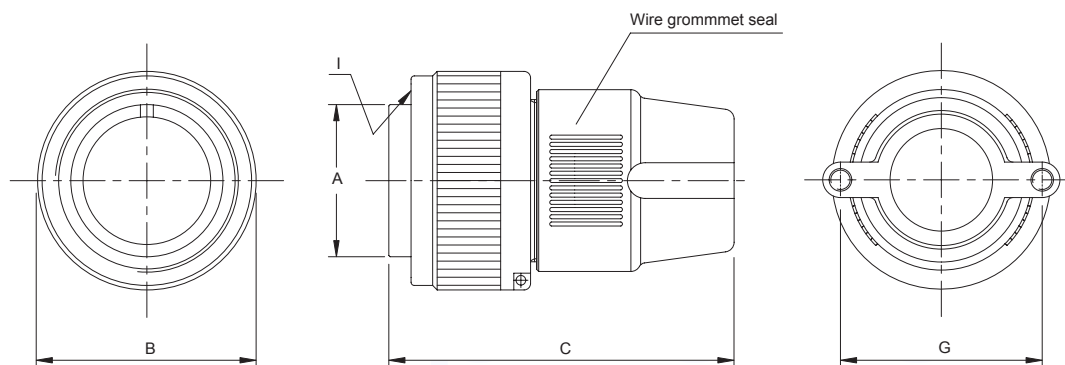
(mm)

| Shell Size | □A<br>±0.79 | □B<br>±0.12 | C<br>±0.5 | D<br>+0.79<br>-0.00 | Ø F<br>+0.25<br>-0.12 | Ø G<br>Max | I<br>Thread-2A<br>(UNEF) |
|------------|-------------|-------------|-----------|---------------------|-----------------------|------------|--------------------------|
| 10SL       | 25.40       | 18.26       | 3.0       | 14.28               | 3.05                  | 16.0       | 5/8-24 NEF               |
| 12S        | 27.79       | 20.62       | 3.0       | 14.28               | 3.05                  | 16.5       | 3/4-20 NEF               |
| 12         | 27.79       | 20.62       | 3.0       | 19.05               | 3.05                  | 16.5       | 3/4-20 NEF               |
| 14S        | 30.18       | 23.01       | 3.0       | 14.28               | 3.05                  | 20.0       | 7/8-20 NEF               |
| 14         | 30.18       | 23.01       | 3.0       | 19.05               | 3.05                  | 20.0       | 7/8-20 NEF               |
| 16S        | 32.54       | 24.61       | 3.0       | 14.28               | 3.05                  | 23.0       | 1-20 NEF                 |
| 16         | 32.54       | 24.61       | 3.0       | 19.05               | 3.05                  | 23.0       | 1-20 NEF                 |
| 18         | 34.93       | 26.97       | 4.0       | 19.05               | 3.05                  | 26.0       | 1 1/8-18 NEF             |
| 20         | 38.10       | 29.36       | 4.0       | 19.05               | 3.05                  | 29.0       | 1 1/4-18 NEF             |
| 22         | 41.28       | 31.75       | 4.0       | 19.05               | 3.05                  | 32.0       | 1 3/8-18 NEF             |
| 24         | 44.45       | 34.93       | 4.0       | 20.63               | 3.73                  | 35.5       | 1 1/2-18 NEF             |
| 28         | 50.80       | 39.67       | 4.0       | 20.63               | 3.73                  | 42.0       | 1 3/4-18 NS              |
| 32         | 57.15       | 44.45       | 4.0       | 22.23               | 4.39                  | 48.0       | 2-18 NS                  |
| 36         | 63.50       | 49.23       | 4.0       | 22.23               | 4.39                  | 55.0       | 2 1/4-16 UN              |

# Amphenol MIL-C-5015 Connectors

## MS3106R

### Straight Plug



MS3106R straight plugs are identical in purpose to the MS3106F.  
The MS3106R has the shorter endbell.

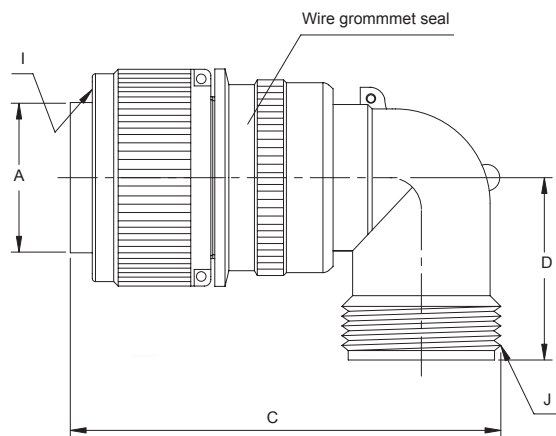
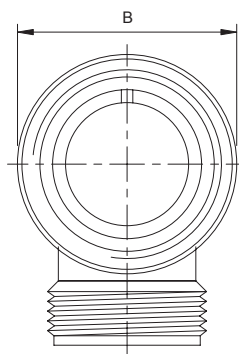
(mm)

| Shell Size | A<br>+0.00<br>-0.38 | B<br>Max | C<br>Max | G<br>±0.12 | I<br>Thread-2B<br>(UNEF) |
|------------|---------------------|----------|----------|------------|--------------------------|
| 10SL       | 11.33               | 24.61    | 46.68    | 19.0       | 5/8-24 NEF               |
| 12S        | 14.10               | 26.97    | 46.68    | 19.0       | 3/4-20 NEF               |
| 12         | 14.10               | 26.97    | 55.39    | 19.0       | 3/4-20 NEF               |
| 14S        | 17.15               | 29.36    | 46.68    | 22.6       | 7/8-20 NEF               |
| 14         | 17.15               | 29.36    | 55.39    | 22.6       | 7/8-20 NEF               |
| 16S        | 20.45               | 31.75    | 46.68    | 26.2       | 1-20 NEF                 |
| 16         | 20.45               | 31.75    | 55.39    | 26.2       | 1-20 NEF                 |
| 18         | 23.62               | 34.13    | 57.93    | 31.2       | 1 1/8-18 NEF             |
| 20         | 26.67               | 37.31    | 57.93    | 34.3       | 1 1/4-18 NEF             |
| 22         | 29.85               | 40.48    | 57.93    | 39.8       | 1 3/8-18 NEF             |
| 24         | 33.02               | 43.66    | 57.93    | 40.5       | 1 1/2-18 NEF             |
| 28         | 38.61               | 50.01    | 57.93    | 40.5       | 1 3/4-18 NS              |
| 32         | 44.96               | 56.36    | 57.93    | 48.0       | 2-18 NS                  |
| 36         | 50.29               | 62.71    | 58.97    | 53.0       | 2 1/4-16 UN              |

# Amphenol MIL-C-5015 Connectors

## MS3108R

### Right Angle Plug



MS3108R Right angle plugs are used where there is limited space and where wires must be brought at abrupt angles.

(mm)

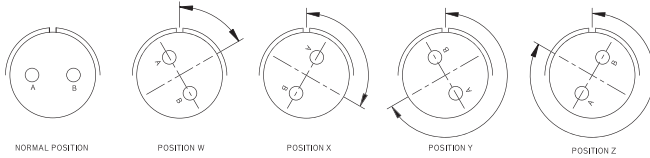
| Shell Size | Ø A<br>+0.00<br>-0.38 | Ø B<br>+0.00<br>-0.38 | C<br>Max | D<br>Max | I<br>Thread-2B<br>(UNEF) | J<br>Thread-2A<br>(UNEF) |
|------------|-----------------------|-----------------------|----------|----------|--------------------------|--------------------------|
| 10SL       | 11.33                 | 24.61                 | 46.02    | 25.4     | 5/8-24 NEF               | 5/8-24NEF                |
| 12S*       | 14.10                 | 26.97                 | 50.80    | 26.9     | 3/4-20 NEF               | 5/8-24 NEF               |
| 12*        | 14.10                 | 26.97                 | 57.15    | 26.9     | 3/4-20 NEF               | 5/8-24 NEF               |
| 14S        | 17.15                 | 29.36                 | 53.97    | 28.5     | 7/8-20 NEF               | 3/4-20 NEF               |
| 14         | 17.15                 | 29.36                 | 58.72    | 28.5     | 7/8-20 NEF               | 3/4-20 NEF               |
| 16S        | 20.45                 | 31.75                 | 60.32    | 30.1     | 1-20 NEF                 | 7/8-20 NEF               |
| 16         | 20.45                 | 31.75                 | 65.07    | 30.1     | 1-20 NEF                 | 7/8-20 NEF               |
| 18         | 23.62                 | 34.13                 | 68.27    | 33.3     | 1 1/8-18 NEF             | 1-20 NEF                 |
| 20         | 26.67                 | 37.31                 | 76.98    | 34.9     | 1 1/4-18 NEF             | 1 3/16-18 NEF            |
| 22         | 29.85                 | 40.48                 | 76.98    | 34.9     | 1 3/8-18 NEF             | 1 3/16-18 NEF            |
| 24         | 33.02                 | 43.66                 | 86.51    | 39.6     | 1 1/2-18 NEF             | 1 7/16-18 NEF            |
| 28         | 38.61                 | 50.01                 | 86.51    | 39.6     | 1 3/4-18 NS              | 1 7/16-18 NEF            |
| 32         | 44.96                 | 56.36                 | 95.25    | 47.6     | 2-18 NS                  | 1 3/4-18 NS              |
| 36         | 50.29                 | 62.71                 | 100.02   | 52.3     | 2 1/4-16 UN              | 2-18 NS                  |

\* No tooling

## Amphenol MIL-C-5015 Connectors

### MS- A,E/F,R Class

### Insert Arrangements & Alternate Positioning



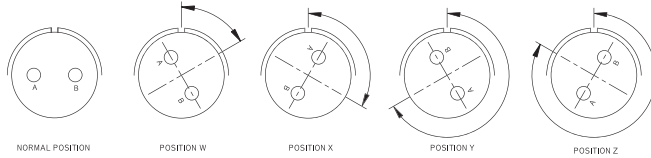
| Contact<br>Arrange-<br>ment | Service<br>Rating | Total<br>Contacts | Contact Size |   |   |    |    | Alternate Position-<br>Degrees |     |     |     |
|-----------------------------|-------------------|-------------------|--------------|---|---|----|----|--------------------------------|-----|-----|-----|
|                             |                   |                   | 0            | 4 | 8 | 12 | 16 | W                              | X   | Y   | Z   |
| 10SL-2                      | A                 | 1                 |              |   |   |    | 1  | -                              | -   | -   | -   |
| 10SL-3                      | A                 | 3                 |              |   |   |    | 3  | -                              | -   | -   | -   |
| 10SL-4                      | A                 | 2                 |              |   |   |    | 2  | 63                             | -   | -   | -   |
| 12S-1                       | A                 | 2                 |              |   |   |    | 2  | -                              | -   | -   | -   |
| 12S-3                       | A                 | 2                 |              |   |   |    | 2  | 70                             | 145 | 215 | 290 |
| 12S-5                       | D                 | 1                 |              |   |   | 1  |    | -                              | -   | -   | -   |
| 14S-1                       | A                 | 3                 |              |   |   |    | 3  | -                              | -   | -   | -   |
| 14S-2                       | Inst              | 4                 |              |   |   |    | 4  | -                              | 120 | 240 | -   |
| 14S-5                       | Inst              | 5                 |              |   |   |    | 5  | -                              | 110 | -   | -   |
| 14S-6                       | Inst              | 6                 |              |   |   |    | 6  | -                              | -   | -   | -   |
| 14S-7                       | A                 | 3                 |              |   |   |    | 3  | 90                             | 180 | 270 | -   |
| 14S-9                       | A                 | 2                 |              |   |   |    | 2  | 70                             | 145 | 215 | 290 |
| 14S-07                      | A                 | 7                 |              |   |   |    | 7  | -                              | -   | -   | -   |
| 16S-1                       | A                 | 7                 |              |   |   |    | 7  | 80                             | -   | -   | 280 |
| 16S-4                       | D                 | 2                 |              |   |   |    | 2  | 35                             | 110 | 250 | 325 |
| 16S-5                       | A                 | 3                 |              |   |   |    | 3  | 70                             | 145 | 215 | 290 |
| 16S-8                       | A                 | 5                 |              |   |   |    | 5  | -                              | 170 | 265 | -   |
| 16-9                        | A                 | 4                 |              |   |   | 2  | 2  | 35                             | 110 | 250 | 325 |
| 16-10                       | A                 | 3                 |              |   |   | 3  |    | 90                             | 180 | 270 | -   |
| 16-11                       | A                 | 2                 |              |   |   | 2  |    | 35                             | 110 | 250 | 325 |
| 16-12                       | A                 | 1                 |              | 1 |   |    |    | -                              | -   | -   | -   |
| 16-13                       | A                 | 2                 |              |   |   | 2  |    | 35                             | 110 | 250 | 325 |
| 18-1                        | A/Inst            | 10                |              |   |   |    | 10 | 70                             | 145 | 215 | 290 |
| 18-3                        | D                 | 2                 |              |   |   | 2  |    | 35                             | 110 | 250 | 325 |
| 18-4                        | D                 | 4                 |              |   |   |    | 4  | 35                             | 110 | 250 | 325 |
| 18-5                        | D                 | 3                 |              |   |   | 2  | 1  | 80                             | 110 | 250 | 280 |
| 18-8                        | A                 | 8                 |              |   |   | 1  | 7  | 70                             | -   | -   | 290 |
| 18-9                        | Inst.             | 7                 |              |   |   | 2  | 5  | 80                             | 110 | 250 | 280 |
| 18-10                       | A                 | 4                 |              |   |   | 4  |    | -                              | 120 | 240 | -   |
| 18-11                       | A                 | 5                 |              |   |   | 5  |    | -                              | 170 | 265 |     |
| 18-12                       | A                 | 6                 |              |   |   |    | 6  | 80                             | -   | -   | 280 |
| 18-13                       | A                 | 4                 |              |   | 1 | 3  |    | 80                             | 110 | 250 | 280 |
| 18-15                       | A                 | 4                 |              |   |   | 4  |    | -                              | 120 | 240 | -   |

| Contact<br>Arrange-<br>ment | Service<br>Rating | Total<br>Contacts | Contact Size |   |   |    |    | Alternate Position-<br>Degrees |     |     |     |
|-----------------------------|-------------------|-------------------|--------------|---|---|----|----|--------------------------------|-----|-----|-----|
|                             |                   |                   | 0            | 4 | 8 | 12 | 16 | W                              | X   | Y   | Z   |
| 18-19                       | A                 | 10                |              |   |   |    | 10 | -                              | 120 | 240 | -   |
| 18-20                       | A                 | 5                 |              |   |   |    | 5  | 90                             | 180 | 270 | -   |
| 18-21                       | A                 | 3                 |              |   |   | 3  |    | -                              | -   | -   | -   |
| 18-22                       | D                 | 3                 |              |   |   |    | 3  | 70                             | 145 | 215 | 290 |
| 18-32                       | A                 | 8                 |              |   |   |    | 8  | -                              | -   | -   | -   |
| 20-2                        | D                 | 1                 | 1            |   |   |    |    | -                              | -   | -   | -   |
| 20-3                        | D                 | 3                 |              |   |   | 3  |    | 40                             | 145 | 215 | 290 |
| 20-4                        | D                 | 4                 |              |   |   | 4  |    | 45                             | 110 | 250 | -   |
| 20-7                        | D/A               | 8                 |              |   |   |    | 8  | 80                             | 110 | 250 | 280 |
| 20-8                        | Inst.             | 6                 |              |   | 2 |    | 4  | 80                             | 110 | 250 | 280 |
| 20-11                       | Inst.             | 13                |              |   |   |    | 13 | -                              | -   | -   | -   |
| 20-15                       | A                 | 7                 |              |   |   | 7  |    | 80                             | -   | -   | 280 |
| 20-16                       | A                 | 9                 |              |   |   | 2  | 7  | 80                             | 110 | 250 | 280 |
| 20-17                       | A                 | 6                 |              |   |   | 5  | 1  | 90                             | 180 | 270 | -   |
| 20-18                       | A                 | 9                 |              |   |   | 3  | 6  | 35                             | 110 | 250 | 325 |
| 20-19                       | A                 | 3                 |              |   | 3 |    |    | 90                             | 180 | 270 | -   |
| 20-22                       | A                 | 6                 |              |   | 3 |    | 3  | 80                             | 110 | 250 | 280 |
| 20-23                       | A                 | 2                 |              |   | 2 |    |    | 35                             | 110 | 250 | 325 |
| 20-27                       | A                 | 14                |              |   |   |    | 14 | 35                             | 110 | 250 | 325 |
| 20-29                       | A                 | 17                |              |   |   |    | 17 | 80                             | -   | -   | 20  |
| 20-33                       | A                 | 11                |              |   |   |    | 11 | -                              | -   | -   | -   |
| 20-01                       | A                 | 10                |              |   |   |    | 10 | -                              | -   | -   | -   |
| 22-1                        | D                 | 2                 |              |   | 2 |    |    | 35                             | 110 | 250 | 325 |
| 22-2                        | D                 | 3                 |              |   | 3 |    |    | 70                             | 145 | 215 | 290 |
| 22-4                        | A                 | 4                 |              |   | 2 | 2  |    | 35                             | 110 | 250 | 325 |
| 22-7                        | E                 | 1                 | 1            |   |   |    |    | -                              | -   | -   | -   |
| 22-8                        | E                 | 2                 |              |   |   | 2  |    | 35                             | 110 | 250 | 325 |
| 22-9                        | E                 | 3                 |              |   |   | 3  |    | 70                             | 145 | 215 | 290 |
| 22-10                       | E                 | 4                 |              |   |   |    | 4  | 35                             | 110 | 250 | 325 |
| 22-11                       | B                 | 2                 |              |   |   |    | 2  | 35                             | 110 | 250 | 325 |
| 22-12                       | D                 | 5                 |              |   | 2 |    | 3  | 80                             | 110 | 250 | 280 |
| 22-13                       | D/A               | 5                 |              |   |   | 4  | 1  | 34                             | 110 | 250 | 325 |
| 22-14                       | A                 | 19                |              |   |   |    | 19 | 80                             | 110 | 250 | 280 |

# Amphenol MIL-C-5015 Connectors

## MS- A,E/F,R Class

### Insert Arrangements & Alternate Positioning



| Contact Arrange-ment | Service Rating | Total Contacts | Contact Size |   |   |    |    | Alternate Position-Degrees |     |     |     |
|----------------------|----------------|----------------|--------------|---|---|----|----|----------------------------|-----|-----|-----|
|                      |                |                | 0            | 4 | 8 | 12 | 16 | W                          | X   | Y   | Z   |
| 22-15                | E/A            | 6              |              |   |   | 5  | 1  | 80                         | 110 | 250 | 280 |
| 22-18                | A/D            | 8              |              |   |   |    | 8  | 80                         | 110 | 250 | 280 |
| 22-19                | A              | 14             |              |   |   |    | 14 | 80                         | 110 | 250 | 280 |
| 22-20                | A              | 9              |              |   |   |    | 9  | 35                         | 110 | 250 | 325 |
| 22-21                | A              | 3              | 1            |   |   |    | 2  | -                          | -   | -   | -   |
| 22-22                | A              | 4              |              |   | 4 |    |    | -                          | 110 | 250 | -   |
| 22-23                | D/A            | 8              |              |   |   | 8  |    | 35                         | -   | 250 | -   |
| 22-27                | D/A            | 9              |              |   | 1 |    | 8  | 80                         | -   | 250 | 280 |
| 22-28                | A              | 7              |              |   |   | 7  |    | 80                         | -   | -   | 280 |
| 24-2                 | D              | 7              |              |   |   | 7  |    | 80                         | -   | -   | 28  |
| 24-5                 | A              | 16             |              |   |   |    | 16 | 80                         | 110 | 250 | 280 |
| 24-6                 | D/A            | 8              |              |   |   | 8  |    | 80                         | 110 | 250 | 280 |
| 24-7                 | A              | 16             |              |   |   | 2  | 14 | 80                         | 110 | 250 | 280 |
| 24-9                 | A              | 2              |              | 2 |   |    |    | 35                         | 110 | 250 | 325 |
| 24-10                | A              | 7              |              |   | 7 |    |    | 80                         | -   | -   | 280 |
| 24-11                | A              | 9              |              |   | 3 | 6  |    | 35                         | 110 | 250 | 32  |
| 24-12                | A              | 5              |              | 2 |   | 3  |    | 80                         | 110 | 250 | 280 |
| 24-20                | D              | 11             |              |   |   | 2  | 9  | 80                         | 110 | 250 | 280 |
| 24-22                | D              | 4              |              |   | 4 |    |    | 45                         | 110 | 250 | -   |
| 24-28                | Inst           | 24             |              |   |   |    | 24 | 80                         | 110 | 250 | 280 |
| 24-02                | A              | 9              |              |   |   | 9  |    | -                          | -   | -   | -   |
| 24-03                | A              | 12             |              |   |   |    | 12 | -                          | -   | -   | -   |
| 28-1                 | D/A            | 9              |              |   | 3 | 6  |    | 80                         | 110 | 250 | 280 |
| 28-3                 | E              | 3              |              |   | 3 |    |    | 70                         | 145 | 215 | 290 |
| 28-6                 | D              | 3              |              | 3 |   |    |    | 70                         | 145 | 215 | 290 |
| 28-7                 | D              | 2              |              | 2 |   |    |    | 35                         | 110 | 250 | 325 |
| 28-9                 | D              | 12             |              |   |   | 6  | 6  | 80                         | 110 | 250 | 280 |
| 28-10                | D/A            | 7              |              | 2 | 2 | 3  |    | 80                         | 110 | 250 | 280 |
| 28-11                | A              | 22             |              |   |   | 4  | 18 | 80                         | 110 | 250 | 280 |
| 28-12                | A              | 26             |              |   |   |    | 26 | 90                         | 180 | 270 | -   |
| 28-15                | A              | 35             |              |   |   |    | 35 | 80                         | 110 | 250 | 280 |
| 28-16                | A              | 20             |              |   |   |    | 20 | 80                         | 110 | 250 | 280 |
| 28-17                | B/D/A          | 15             |              |   |   |    | 15 | -                          | -   | -   | -   |

| Contact Arrange-ment | Service Rating | Total Contacts | Contact Size |   |   |    |    | Alternate Position-Degrees |     |     |     |
|----------------------|----------------|----------------|--------------|---|---|----|----|----------------------------|-----|-----|-----|
|                      |                |                | 0            | 4 | 8 | 12 | 16 | W                          | X   | Y   | Z   |
| 28-18                | A              | 12             |              |   |   |    | 12 | -                          | -   | -   | -   |
| 28-19                | B/D/A          | 10             |              |   |   | 4  | 6  | 80                         | 110 | 250 | 280 |
| 28-20                | A              | 14             |              |   |   | 10 | 4  | 80                         | 110 | 250 | 280 |
| 28-21                | A              | 37             |              |   |   |    | 37 | 80                         | 110 | 250 | 280 |
| 28-22                | D              | 6              |              | 3 |   |    | 3  | 70                         | 145 | 215 | 290 |
| 28-05                | A              | 5              |              |   | 5 |    |    | -                          | -   | -   | -   |
| 28-51                | A              | 12             |              |   |   | 12 |    | -                          | -   | -   | -   |
| 32-1                 | E/D            | 5              | 2            |   |   | 3  |    | 80                         | 110 | 250 | 280 |
| 32-5                 | D              | 2              | 2            |   |   |    |    | 35                         | 110 | 250 | 325 |
| 32-6                 | A              | 23             |              | 2 | 3 | 2  | 16 | 80                         | 110 | 250 | 325 |
| 32-7                 | INST/A         | 35             |              |   |   | 7  | 28 | 80                         | 125 | 235 | 280 |
| 32-8                 | A              | 30             |              |   |   | 6  | 24 | 80                         | 125 | 235 | 280 |
| 32-9                 | D              | 14             |              | 2 |   |    | 12 | 80                         | 110 | 250 | 280 |
| 32-15                | D              | 8              | 2            |   |   | 6  |    | 35                         | 110 | 250 | 280 |
| 32-17                | D              | 4              |              | 4 |   |    |    | 45                         | 110 | 250 | 280 |
| 32-22                | A              | 54             |              |   |   |    | 54 | 80                         | 110 | 250 | 280 |
| 32-03                | A              | 3              |              | 3 |   |    |    | -                          | -   | -   | -   |
| 32-59                | A              | 42             |              |   | 2 |    | 40 | -                          | -   | -   | -   |
| 36-1                 | D              | 22             |              |   |   | 4  | 18 | 80                         | 110 | 250 | 280 |
| 36-3                 | D              | 6              | 3            |   |   | 3  |    | 70                         | 145 | 215 | 290 |
| 36-4                 | D/A            | 3              | 3            |   |   |    |    | 70                         | 145 | 215 | 290 |
| 36-5                 | A              | 4              | 4            |   |   |    |    | -                          | 120 | 240 | -   |
| 36-7                 | A              | 47             |              |   |   | 7  | 40 | 80                         | 110 | 250 | 280 |
| 36-8                 | A              | 47             |              |   |   | 1  | 46 | 80                         | 110 | 250 | 280 |
| 36-9                 | A              | 31             |              | 1 | 2 | 14 | 14 | 80                         | 125 | 235 | 280 |
| 36-10                | A              | 48             |              |   |   |    | 48 | 80                         | 125 | 235 | 280 |
| 36-15                | D/A            | 35             |              |   |   |    | 35 | 60                         | 125 | 245 | 305 |
| 36-30                | A              | 30             |              |   |   | 30 |    | -                          | -   | -   | -   |
| 36-40                | A              | 40             |              |   |   | 22 | 18 | -                          | -   | -   | -   |
| 36-52                | A              | 52             |              |   |   |    | 52 | 72                         | 144 | 216 | 288 |
| 36-02                | A              | 27             |              |   |   | 27 |    | -                          | -   | -   | -   |
| 36-03                | A              | 20             |              |   |   | 20 |    | -                          | -   | -   | -   |
| 36-04                | A              | 22             |              |   |   | 22 |    | -                          | -   | -   | -   |

# Amphenol MIL-C-5015 Connectors

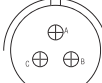
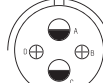
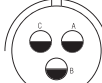
## MS- A,E/F,R Class

## Contact Arrangements

Front face of pin insert or rear face of socket insert illustrated

|                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |  |  |
|                    | Front of<br>Socket Insert                                                         |                                                                                   | Front of<br>Socket Insert                                                         |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Insert Arrangement | 10SL-2                                                                            | 10SL-3                                                                            | 10SL-4                                                                            | 12S-1                                                                             | 12S-3                                                                               | 12S-5                                                                               | 14S-1                                                                               |
| Service Rating     | A                                                                                 | A                                                                                 | A                                                                                 | A                                                                                 | A                                                                                   | D                                                                                   | A                                                                                   |
| Number of Contacts | 1                                                                                 | 3                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                   | 1                                                                                   | 3                                                                                   |
| Contact Size       | 16                                                                                | 16                                                                                | 16                                                                                | 16                                                                                | 16                                                                                  | 12                                                                                  | 16                                                                                  |

|                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |  |  |
| Insert Arrangement | 14S-2                                                                               | 14S-5                                                                               | 14S-6                                                                               | 14S-7                                                                               | 14S-9                                                                                | 14S-07                                                                                | 16S-1                                                                                 |
| Service Rating     | Inst.                                                                               | Inst.                                                                               | Inst.                                                                               | A                                                                                   | A                                                                                    | A                                                                                     | A                                                                                     |
| Number of Contacts | 4                                                                                   | 5                                                                                   | 6                                                                                   | 3                                                                                   | 2                                                                                    | 7                                                                                     | 7                                                                                     |
| Contact Size       | 16                                                                                  | 16                                                                                  | 16                                                                                  | 16                                                                                  | 16                                                                                   | 16                                                                                    | 16                                                                                    |

|                    |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |  |
| Insert Arrangement | 16S-4                                                                               | 16S-5                                                                               | 16S-8                                                                               | 16-9                                                                                 | 16-10                                                                                 | 16-11                                                                                 |
| Service Rating     | D                                                                                   | A                                                                                   | A                                                                                   | A                                                                                    | A                                                                                     | A                                                                                     |
| Number of Contacts | 2                                                                                   | 3                                                                                   | 5                                                                                   | 2 2                                                                                  | 3                                                                                     | 2                                                                                     |
| Contact Size       | 16                                                                                  | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12                                                                                    | 12                                                                                    |



# Amphenol MIL-C-5015 Connectors

## MS- A,E/F,R Class

### Contact Arrangements

Front face of pin insert or rear face of socket insert illustrated

|                    |       |       |                         |      |      |
|--------------------|-------|-------|-------------------------|------|------|
|                    |       |       |                         |      |      |
| Insert Arrangement | 16-12 | 16-13 | 18-1                    | 18-3 | 18-4 |
| Service Rating     | A     | A     | B, C, F, G=A; Bal.=Inst | D    | D    |
| Number of Contacts | 1     | 2     | 10                      | 2    | 4    |
| Contact Size       | 4     | 12    | 16                      | 12   | 16   |

|                    |       |       |       |       |       |
|--------------------|-------|-------|-------|-------|-------|
|                    |       |       |       |       |       |
| Insert Arrangement | 18-5  | 18-8  | 18-9  | 18-10 | 18-11 |
| Service Rating     | D     | A     | Inst. | A     | A     |
| Number of Contacts | 2 1   | 1 7   | 2 5   | 4     | 5     |
| Contact Size       | 12 16 | 12 16 | 12 16 | 12    | 12    |

|                    |       |       |       |       |       |
|--------------------|-------|-------|-------|-------|-------|
|                    |       |       |       |       |       |
| Insert Arrangement | 18-12 | 18-13 | 18-15 | 18-19 | 18-20 |
| Service Rating     | A     | A     | A     | A     | A     |
| Number of Contacts | 6     | 1 3   | 4     | 10    | 5     |
| Contact Size       | 16    | 8 12  | 12    | 16    | 16    |

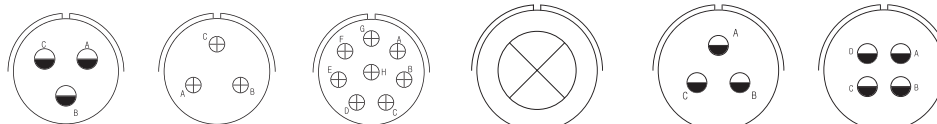


## Amphenol MIL-C-5015 Connectors

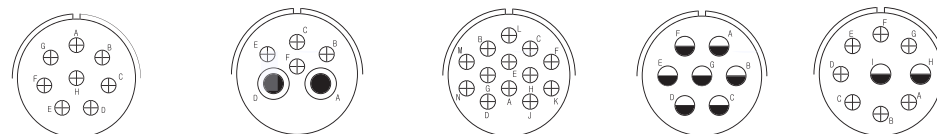
### MS- A,E/F,R Class

### Contact Arrangements

Front face of pin insert or rear face of socket insert illustrated



|                    |       |       |       |      |      |      |
|--------------------|-------|-------|-------|------|------|------|
| Insert Arrangement | 18-21 | 18-22 | 18-32 | 20-2 | 20-3 | 20-4 |
| Service Rating     | A     | D     | A     | D    | D    | D    |
| Number of Contacts | 3     | 3     | 8     | 1    | 3    | 4    |
| Contact Size       | 12    | 16    | 16    | 0    | 12   | 12   |



|                    |                      |       |       |       |       |
|--------------------|----------------------|-------|-------|-------|-------|
| Insert Arrangement | 20-7                 | 20-8  | 20-11 | 20-15 | 20-16 |
| Service Rating     | H, G=D: C, D, E, F=A | Inst. | Inst. | A     | A     |
| Number of Contacts | 8                    | 2 4   | 13    | 7     | 2 7   |
| Contact Size       | 16                   | 8 16  | 16    | 12    | 12 16 |



|                    |       |       |       |       |
|--------------------|-------|-------|-------|-------|
| Insert Arrangement | 20-17 | 20-18 | 20-19 | 20-22 |
| Service Rating     | A     | A     | A     | A     |
| Number of Contacts | 5 1   | 3 6   | 3     | 3 3   |
| Contact Size       | 12 16 | 12 16 | 8     | 8 16  |



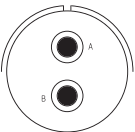
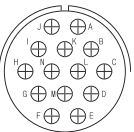
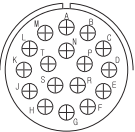
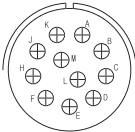
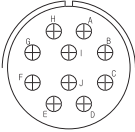
CONTACT LEGEND 16 12 8 4 0

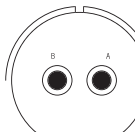
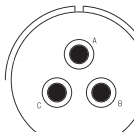
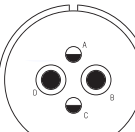
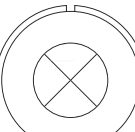
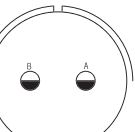
# Amphenol MIL-C-5015 Connectors

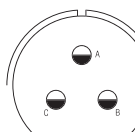
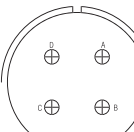
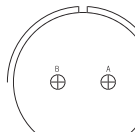
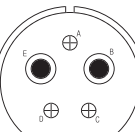
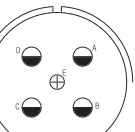
## MS- A,E/F,R Class

### Contact Arrangements

Front face of pin insert or rear face of socket insert illustrated

|                    |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |
| Insert Arrangement | 20-23                                                                             | 20-27                                                                             | 20-29                                                                              | 20-33                                                                               | 20-01                                                                               |
| Service Rating     | A                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   | A                                                                                   |
| Number of Contacts | 2                                                                                 | 14                                                                                | 17                                                                                 | 11                                                                                  | 10                                                                                  |
| Contact Size       | 8                                                                                 | 16                                                                                | 16                                                                                 | 16                                                                                  | 16                                                                                  |

|                    |                                                                                    |                                                                                    |                                                                                     |                                                                                      |                                                                                      |
|--------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |
| Insert Arrangement | 22-1                                                                               | 22-2                                                                               | 22-4                                                                                | 22-7                                                                                 | 22-8                                                                                 |
| Service Rating     | D                                                                                  | D                                                                                  | A                                                                                   | E                                                                                    | E                                                                                    |
| Number of Contacts | 2                                                                                  | 3                                                                                  | 2 2                                                                                 | 1                                                                                    | 2                                                                                    |
| Contact Size       | 8                                                                                  | 8                                                                                  | 8 12                                                                                | 0                                                                                    | 12                                                                                   |

|                    |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |
| Insert Arrangement | 22-9                                                                                | 22-10                                                                               | 22-11                                                                                | 22-12                                                                                 | 22-13                                                                                 |
| Service Rating     | E                                                                                   | E                                                                                   | B                                                                                    | D                                                                                     | E=D; A, B, C, D=A                                                                     |
| Number of Contacts | 3                                                                                   | 4                                                                                   | 2                                                                                    | 2 3                                                                                   | 4 1                                                                                   |
| Contact Size       | 12                                                                                  | 16                                                                                  | 16                                                                                   | 8 16                                                                                  | 12 16                                                                                 |

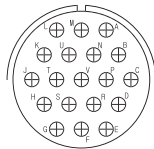


## Amphenol MIL-C-5015 Connectors

### MS- A,E/F,R Class

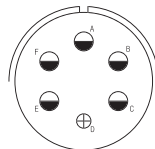
### Contact Arrangements

Front face of pin insert or rear face of socket insert illustrated

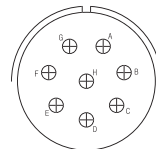


Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

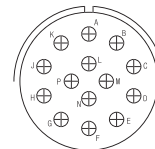
22-14  
A  
19  
16



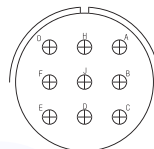
22-15  
D=E; A, B, C, E, F=A  
5 1  
12 16



22-18  
A,B,F,G,H=D; C,D,E=A  
8  
16

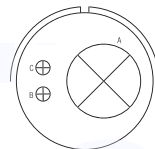


22-19  
A  
14  
16

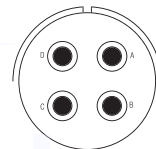


Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

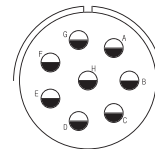
22-20  
A  
9  
16



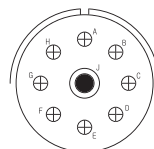
22-21  
A  
1 2  
0 16



22-22  
A  
4  
8

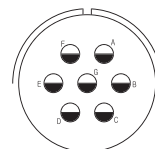


22-23  
H=D; Bal.=A  
8  
12

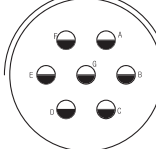


Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

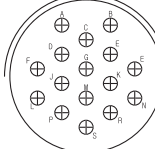
22-27  
J=D; Bal.=A  
1 8  
8 16



22-28  
A  
7  
12



24-2  
D  
7  
12



24-5  
A  
16  
16



CONTACT LEGEND

16 12 8 4 0

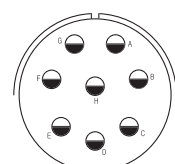
# Amphenol MIL-C-5015 Connectors

## MS- A,E/F,R Class

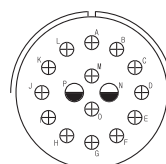
### Contact Arrangements

Front face of pin insert or rear face of socket insert illustrated

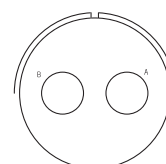
Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size



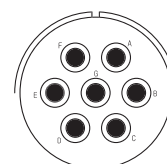
24-6  
A, G, H=D; Bal.=A  
8  
12



24-7  
A  
2 14  
12 16

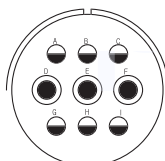


24-9  
A  
2  
4

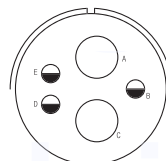


24-10  
A  
7  
8

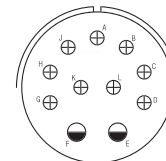
Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size



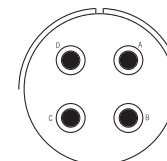
24-11  
A  
3 6  
8 12



24-12  
A  
2 3  
4 12

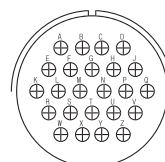


24-20  
D  
2 9  
1 16

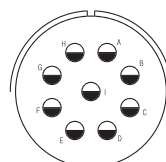


24-22  
D  
4  
8

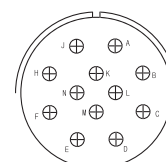
Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size



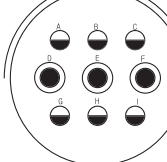
24-28  
Inst.  
24  
16



24-02  
A  
9  
12



24-03  
A  
12  
16



28-1  
A,J,E=D; Bal.=A  
3 6  
8 12

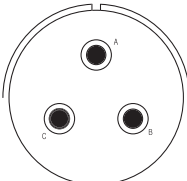
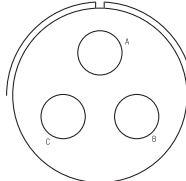
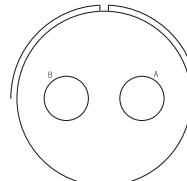
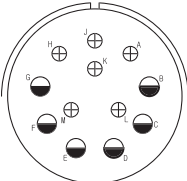
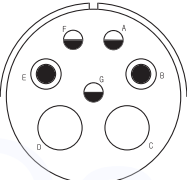
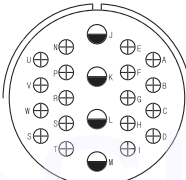
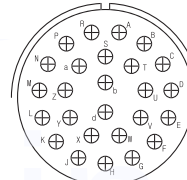
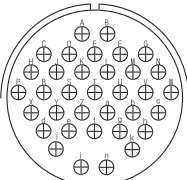
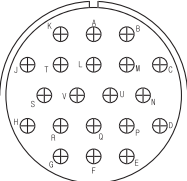
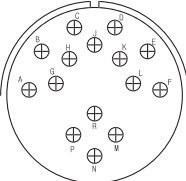
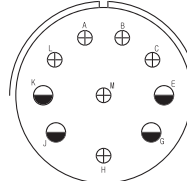
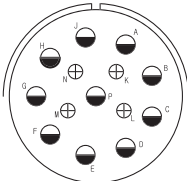


# Amphenol MIL-C-5015 Connectors

## MS- A,E/F,R Class

### Contact Arrangements

Front face of pin insert or rear face of socket insert illustrated

|                    |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Insert Arrangement |    |    |    |    |
|                    | 28-3                                                                                | 28-6                                                                                | 28-7                                                                                 | 28-9                                                                                  |
|                    | E                                                                                   | D                                                                                   | D                                                                                    | D                                                                                     |
|                    | 3                                                                                   | 3                                                                                   | 2                                                                                    | 6 6                                                                                   |
| Service Rating     | 8                                                                                   | 4                                                                                   | 4                                                                                    | 12 16                                                                                 |
|                    | 8                                                                                   | 4                                                                                   | 4                                                                                    | 12 16                                                                                 |
|                    | 8                                                                                   | 4                                                                                   | 4                                                                                    | 12 16                                                                                 |
|                    | 8                                                                                   | 4                                                                                   | 4                                                                                    | 12 16                                                                                 |
| Number of Contacts |   |   |   |   |
|                    | 28-10                                                                               | 28-11                                                                               | 28-12                                                                                | 28-15                                                                                 |
|                    | G=D; Bal. A                                                                         | A                                                                                   | A                                                                                    | A                                                                                     |
|                    | 2 2 3                                                                               | 4 18                                                                                | 26                                                                                   | 35                                                                                    |
| Contact Size       | 4 8 12                                                                              | 12 16                                                                               | 16                                                                                   | 16                                                                                    |
|                    | 4 8 12                                                                              | 12 16                                                                               | 16                                                                                   | 16                                                                                    |
|                    | 4 8 12                                                                              | 12 16                                                                               | 16                                                                                   | 16                                                                                    |
|                    | 4 8 12                                                                              | 12 16                                                                               | 16                                                                                   | 16                                                                                    |
| Insert Arrangement |  |  |  |  |
|                    | 28-16                                                                               | 28-17                                                                               | 28-19                                                                                | 28-20                                                                                 |
|                    | A                                                                                   | R=B;M,N,P=D;A to L=A                                                                | H,M=B;A,B=D;Bal.=A                                                                   | A                                                                                     |
|                    | 20                                                                                  | 15                                                                                  | 4 6                                                                                  | 10 4                                                                                  |
| Service Rating     | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12 16                                                                                 |
|                    | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12 16                                                                                 |
|                    | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12 16                                                                                 |
|                    | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12 16                                                                                 |
| Number of Contacts | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12 16                                                                                 |
|                    | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12 16                                                                                 |
|                    | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12 16                                                                                 |
|                    | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12 16                                                                                 |
| Contact Size       | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12 16                                                                                 |
|                    | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12 16                                                                                 |
|                    | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12 16                                                                                 |
|                    | 16                                                                                  | 16                                                                                  | 12 16                                                                                | 12 16                                                                                 |



CONTACT LEGEND

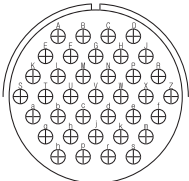
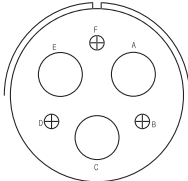
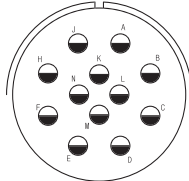
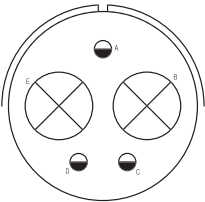
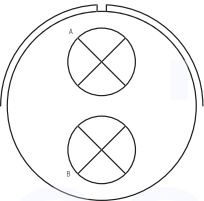
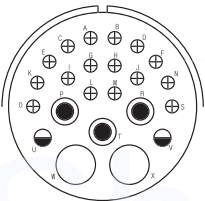
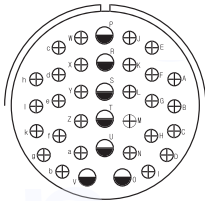
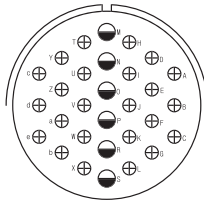
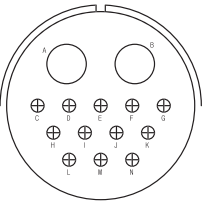
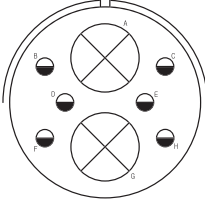
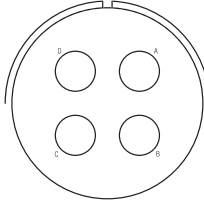
16 12 8 4 0

# Amphenol MIL-C-5015 Connectors

## MS- A,E/F,R Class

### Contact Arrangements

Front face of pin insert or rear face of socket insert illustrated

|                    |                                                                                     |  |                                                                                      |  |                                                                                       |  |                                                                                      |  |
|--------------------|-------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------|--|
| Insert Arrangement |    |  |     |  |     |  |   |  |
|                    | 28-21                                                                               |  | 28-22                                                                                |  | 28-51                                                                                 |  | 32-1                                                                                 |  |
|                    | A                                                                                   |  | D                                                                                    |  | A                                                                                     |  | A=E; B, C, D, E=D                                                                    |  |
|                    | 37                                                                                  |  | 3      3                                                                             |  | 12                                                                                    |  | 2      3                                                                             |  |
| Service Rating     | 16                                                                                  |  | 4      16                                                                            |  | 12                                                                                    |  | 0      12                                                                            |  |
|                    | Contact Size                                                                        |  |                                                                                      |  |                                                                                       |  |                                                                                      |  |
|                    |                                                                                     |  |                                                                                      |  |                                                                                       |  |                                                                                      |  |
|                    |                                                                                     |  |                                                                                      |  |                                                                                       |  |                                                                                      |  |
| Insert Arrangement |   |  |    |  |    |  |  |  |
|                    | 32-5                                                                                |  | 32-6                                                                                 |  | 32-7                                                                                  |  | 32-8                                                                                 |  |
|                    | D                                                                                   |  | A                                                                                    |  | A, B, h, j=Inst.; Bal.=A                                                              |  | A                                                                                    |  |
|                    | 2                                                                                   |  | 2    3    2    16                                                                    |  | 7      28                                                                             |  | 6      24                                                                            |  |
| Service Rating     | 0                                                                                   |  | 4    8    12    16                                                                   |  | 12      16                                                                            |  | 12      16                                                                           |  |
|                    | Contact Size                                                                        |  |                                                                                      |  |                                                                                       |  |                                                                                      |  |
|                    |                                                                                     |  |                                                                                      |  |                                                                                       |  |                                                                                      |  |
|                    |                                                                                     |  |                                                                                      |  |                                                                                       |  |                                                                                      |  |
| Insert Arrangement |  |  |  |  |  |  |                                                                                      |  |
|                    | 32-9                                                                                |  | 32-15                                                                                |  | 32-17                                                                                 |  |                                                                                      |  |
|                    | D                                                                                   |  | D                                                                                    |  | D                                                                                     |  |                                                                                      |  |
|                    | 2      12                                                                           |  | 2      6                                                                             |  | 4                                                                                     |  |                                                                                      |  |
| Service Rating     | 4      16                                                                           |  | 0      12                                                                            |  | 4                                                                                     |  |                                                                                      |  |
|                    | Contact Size                                                                        |  |                                                                                      |  |                                                                                       |  |                                                                                      |  |
|                    |                                                                                     |  |                                                                                      |  |                                                                                       |  |                                                                                      |  |
|                    |                                                                                     |  |                                                                                      |  |                                                                                       |  |                                                                                      |  |

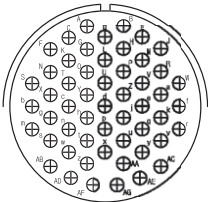
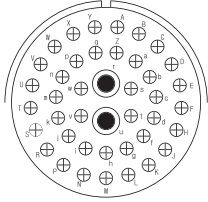
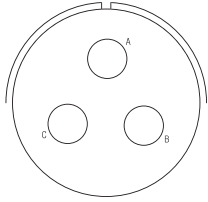
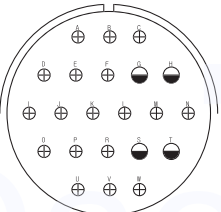
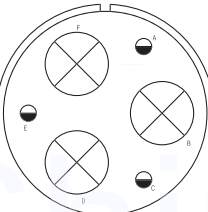
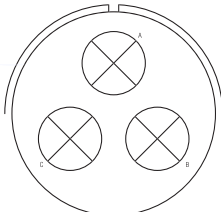
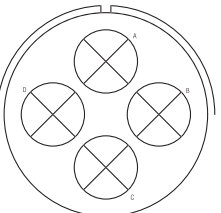
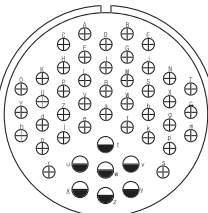
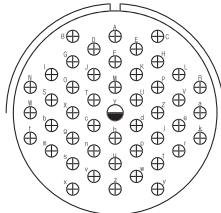


# Amphenol MIL-C-5015 Connectors

## MS Series A,E/F,R Class

### Contact Arrangements

Front face of pin insert or rear face of socket insert illustrated

|                                                                            |                                                                                       |              |                    |           |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------|--------------------|-----------|
| Insert Arrangement<br>Service Rating<br>Number of Contacts<br>Contact Size |      | <b>32-22</b> | <b>A</b>           |           |
|                                                                            |                                                                                       |              | <b>A</b>           |           |
|                                                                            |                                                                                       |              | <b>54</b>          |           |
|                                                                            |                                                                                       |              | <b>16</b>          |           |
|                                                                            |     | <b>32-59</b> | <b>2</b>           | <b>40</b> |
|                                                                            |                                                                                       |              | <b>8</b>           | <b>16</b> |
|                                                                            |                                                                                       |              | <b>A</b>           |           |
|                                                                            |                                                                                       |              | <b>A</b>           |           |
|                                                                            |    | <b>32-03</b> | <b>A</b>           |           |
|                                                                            |                                                                                       |              | <b>3</b>           |           |
|                                                                            |                                                                                       |              | <b>4</b>           |           |
|                                                                            |                                                                                       |              | <b>A</b>           |           |
|                                                                            |     | <b>36-1</b>  | <b>4</b>           | <b>18</b> |
|                                                                            |                                                                                       |              | <b>12</b>          | <b>16</b> |
|                                                                            |                                                                                       |              | <b>D</b>           |           |
|                                                                            |                                                                                       |              | <b>D</b>           |           |
|                                                                            |    | <b>36-3</b>  | <b>3</b>           | <b>3</b>  |
|                                                                            |                                                                                       |              | <b>0</b>           | <b>12</b> |
|                                                                            |                                                                                       |              | <b>D</b>           |           |
|                                                                            |                                                                                       |              | <b>D</b>           |           |
|                                                                            |   | <b>36-4</b>  | <b>A=D; B, C=A</b> |           |
|                                                                            |                                                                                       |              | <b>3</b>           |           |
|                                                                            |                                                                                       |              | <b>0</b>           |           |
|                                                                            |                                                                                       |              | <b>A=D; B, C=A</b> |           |
|                                                                            |    | <b>36-5</b>  | <b>A</b>           |           |
|                                                                            |                                                                                       |              | <b>4</b>           |           |
|                                                                            |                                                                                       |              | <b>0</b>           |           |
|                                                                            |                                                                                       |              | <b>A</b>           |           |
|                                                                            |   | <b>36-7</b>  | <b>7</b>           | <b>40</b> |
|                                                                            |                                                                                       |              | <b>12</b>          | <b>16</b> |
|                                                                            |                                                                                       |              | <b>A</b>           |           |
|                                                                            |                                                                                       |              | <b>A</b>           |           |
|                                                                            |  | <b>36-8</b>  | <b>1</b>           | <b>46</b> |
|                                                                            |                                                                                       |              | <b>12</b>          | <b>16</b> |
|                                                                            |                                                                                       |              | <b>A</b>           |           |
|                                                                            |                                                                                       |              | <b>A</b>           |           |

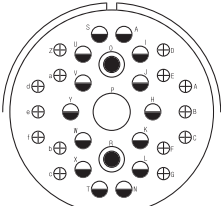
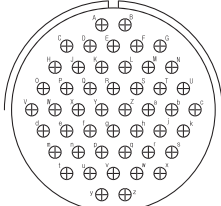
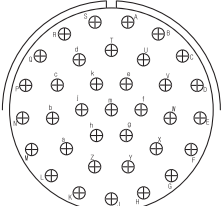
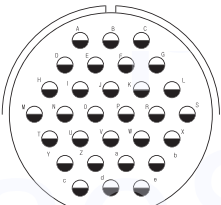
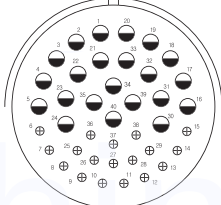
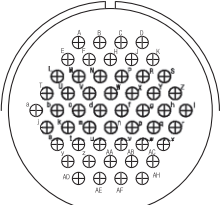
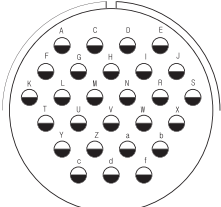
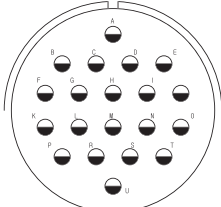
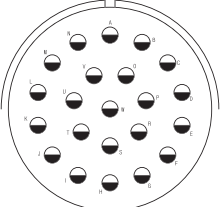


# Amphenol MIL-C-5015 Connectors

## MS Series A,E/F,R Class

### Contact Arrangements

Front face of pin insert or rear face of socket insert illustrated

|                                                                            |                                                                                     |                                                                                      |                                                                                       |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Insert Arrangement<br>Service Rating<br>Number of Contacts<br>Contact Size |    |    |    |
|                                                                            | 36-9                                                                                | 36-10                                                                                | 36-15                                                                                 |
|                                                                            | A                                                                                   | A                                                                                    | M=D; Bal.=A                                                                           |
|                                                                            | 1 2 14 14<br>4 8 12 16                                                              | 48<br>16                                                                             | 35<br>16                                                                              |
| Insert Arrangement<br>Service Rating<br>Number of Contacts<br>Contact Size |   |   |   |
|                                                                            | 36-30                                                                               | 36-40                                                                                | 36-52                                                                                 |
|                                                                            | A                                                                                   | A                                                                                    | A                                                                                     |
|                                                                            | 30<br>12                                                                            | 22 18<br>12 16                                                                       | 52<br>16                                                                              |
| Insert Arrangement<br>Service Rating<br>Number of Contacts<br>Contact Size |  |  |  |
|                                                                            | 36-02                                                                               | 36-03                                                                                | 36-04                                                                                 |
|                                                                            | A                                                                                   | A                                                                                    | A                                                                                     |
|                                                                            | 27<br>12                                                                            | 20<br>12                                                                             | 22<br>12                                                                              |



## Amphenol MIL-C-5015 Connectors

### MS Series

### Accessories



Plug Protection Cap



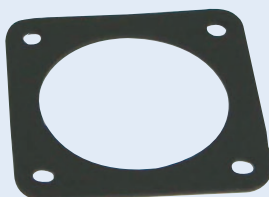
Receptacle Protection Cap



Cable Clamp



Telescoping Bushing



Sealing Gasket

#### Protection Caps

These metal dust caps are used to protect the plugs and receptacles.

They are furnished with sash chains and are available with bead chains.

#### MS3057 Cable Clamp

MS3057 style cable clamp was designed for use with jacketed cable or wire protected by tubing. Both clamping halves float maximum strain relief. For unjacketed cable or wires, Use corresponding MS3420 telescoping bushing. Telescoping bushings keep dirt, oil and moisture out of end bell.

#### Sealing Gasket

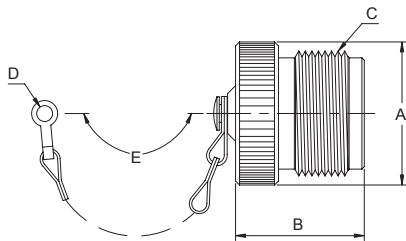
Sealing Gasket is being supplied separately

# Amphenol MIL-C-5015 Connectors

## MS Series

### Accessories Dimension

#### Plug Protection Cap MS25042



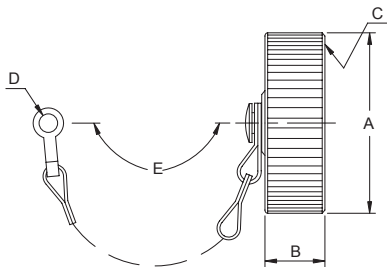
| Part Number | Size     | Ø A Max | Ø B Max | C Thread 2A | Ø D -0.3 | E Approx |
|-------------|----------|---------|---------|-------------|----------|----------|
| MS25042-10D | 10S,10SL | 18.5    | 17.2    | 5/8-24 NEF  | 4.2      | 102      |
| MS25042-12D | 12S,12   | 20.4    | 21.4    | 3/4-20 NEF  | 4.2      | 114      |
| MS25042-14D | 14S,14   | 23.6    | 21.4    | 7/8-20 NEF  | 4.2      | 114      |
| MS25042-16D | 16S,16   | 26.0    | 21.4    | 1-20 NEF    | 4.2      | 114      |
| MS25042-18D | 18       | 29.9    | 21.4    | 1/8-18 NEF  | 4.2      | 114      |
| MS25042-20D | 20       | 33.1    | 21.4    | 1/4-18 NEF  | 4.2*     | 127      |
| MS25042-22D | 22       | 36.2    | 21.4    | 3/8-18 NEF  | 4.2*     | 127      |
| MS25042-24D | 24       | 39.4    | 21.4    | 1/2-18 NEF  | 4.2*     | 140      |
| MS25042-28D | 28       | 45.7    | 21.4    | 3/4-18 NS   | 4.2*     | 197      |
| MS25042-32D | 32       | 52.0    | 21.4    | 2-18 NS     | 4.2**    | 197      |
| MS25042-36D | 36       | 59.0    | 21.4    | 1/4-16 UN   | 4.2**    | 197      |

These externally threaded metal dust caps are used to protect the MS3106 and MS3108 plugs.

Material is aluminum alloy. They are furnished with sash chains and are available with bead chains.

Optional termination holes are also available. (\*5.0) (\*\*5.8)

#### Receptacle Protection Cap MS25043



| Part Number | Size     | Ø A Max | Ø B Max | C Thread 2A  | Ø D -0.3 | E Approx |
|-------------|----------|---------|---------|--------------|----------|----------|
| MS25043-10D | 10S,10SL | 20.2    | 15.8    | 5/8-24 NEF   | 4.2      | 102      |
| MS25043-12D | 12S,12   | 23.4    | 15.8    | 3/4-20 NEF   | 4.2      | 114      |
| MS25043-14D | 14S,14   | 27.9    | 15.8    | 7/8-20 NEF   | 4.2      | 114      |
| MS25043-16D | 16S,16   | 29.8    | 15.8    | 1-20 NEF     | 4.2      | 114      |
| MS25043-18D | 18       | 32.2    | 15.8    | 1 1/8-18 NEF | 4.2      | 114      |
| MS25043-20D | 20       | 36.3    | 15.8    | 1 1/4-18 NEF | 4.2      | 127      |
| MS25043-22D | 22       | 39.9    | 15.8    | 1 3/8-18 NEF | 4.2      | 127      |
| MS25043-24D | 24       | 43.7    | 15.8    | 1 1/2-18 NEF | 4.2*     | 140      |
| MS25043-28D | 28       | 50.0    | 15.8    | 1 3/4-18 NS  | 4.2*     | 197      |
| MS25043-32D | 32       | 56.5    | 15.8    | 2-18 NS      | 4.2**    | 197      |
| MS25043-36D | 36       | 61.5    | 15.8    | 2 1/4-16 UN  | 4.2**    | 197      |

These internally threaded metal dust caps are used to protect MS3100, MS3101 and MS3102 receptacles.

Material is aluminum alloy. They are furnished with sash chains and are available with bead chains.

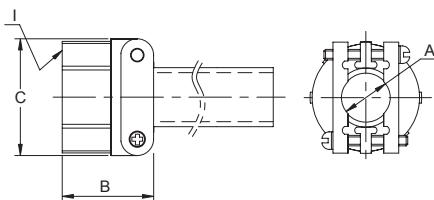
Optional termination holes are also available. (\*4.58) (\*\*5.00)

# Amphenol MIL-C-5015 Connectors

## MS/DS Series

### Accessories Dimension

#### Cable Clamp MS3057

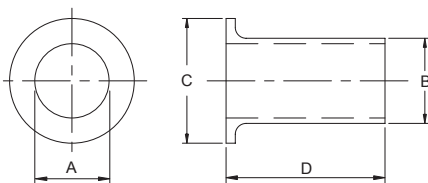


| Part Number | Size     | Ø A<br>±0.4 | B<br>±0.8 | Ø C<br>±0.8 | I<br>Thread-2B |
|-------------|----------|-------------|-----------|-------------|----------------|
| MS3057-4A   | 10SL,12S | 5.6         | 20.3      | 23.3        | 5/8-24 NEF     |
| MS3057-6A   | 14S,14   | 7.9         | 22.5      | 25.9        | 3/4-20 NEF     |
| MS3057-8A   | 16S,16   | 11.1        | 24.4      | 28.9        | 7/8-20 NEF     |
| MS3057-10A  | 18       | 14.3        | 23.6      | 32.2        | 1-20 NEF       |
| MS3057-12A  | 20,22    | 15.9        | 23.6      | 37.8        | 1 3/16-18 NEF  |
| MS3057-16A  | 24,28    | 19.1        | 26.0      | 43.4        | 1 7/16-18 NEF  |
| MS3057-20A  | 32       | 23.8        | 27.7      | 52.1        | 1 3/4-18 NS    |
| MS3057-24A  | 36       | 31.8        | 29.2      | 57.3        | 2-18 NS        |

MS3057 style cable clamp was designed for use with jacketed cable or wire protected by tubing.

Both clamping halves float maximum strain relief. for unjacketed cable or wires, use corresponding MS3420 telescoping bushing. To order clamp without bushing, add-1 to the P/N.

#### Telescoping Bushing MS3420



| Part Number | Size     | Ø A<br>Max | Ø B<br>Max | Ø C  | D    |
|-------------|----------|------------|------------|------|------|
| MS3420-4    | 10SL,12S | 5.6        | 7.7        | 12.8 | 69.9 |
| MS3420-6    | 14S,14   | 7.9        | 10.9       | 15.7 | 66.7 |
| MS3420-8    | 16S,16   | 11.1       | 14.0       | 18.9 | 63.5 |
| MS3420-10   | 18       | 14.3       | 15.6       | 22.6 | 60.3 |
| MS3420-12   | 20,22    | 15.9       | 18.8       | 27.5 | 57.2 |
| MS3420-16   | 24,28    | 19.1       | 23.6       | 33.4 | 54.0 |
| MS3420-20   | 32       | 23.8       | 31.5       | 40.6 | 50.8 |
| MS3420-24   | 36       | 31.8       | 34.7       | 46.9 | 47.6 |

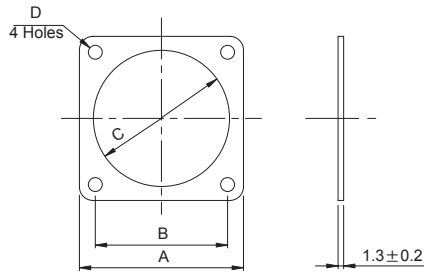
Telescoping grand bushings (used with 3057 clamp) keep dirt, oil and moisture out of endbell.

Taping or wrapping wires is eliminated since bushing protects wires going thru clamp.

Combinations of bushing may be used to decrease cable entry diameter to improve sealing.

## Amphenol MIL-C-5015 Connectors MS-A,E/F,R & B Class Accessories Dimension

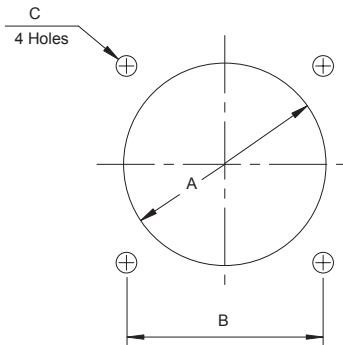
### Sealing Gasket BMA 31



| Part Number | Shell Size | □ A   | □ B   | Ø C  | D<br>+0.2 |
|-------------|------------|-------|-------|------|-----------|
| BMA31-10    | 10S,10SL   | 25.40 | 18.26 | 14.9 | 3.2       |
| BMA31-12    | 12S,12     | 27.79 | 20.62 | 16.4 | 3.2       |
| BMA31-14    | 14S,14     | 30.18 | 23.01 | 20.4 | 3.2       |
| BMA31-16    | 16S,16     | 32.54 | 24.61 | 23.0 | 3.2       |
| BMA31-18    | 18         | 34.94 | 26.97 | 25.9 | 3.2       |
| BMA31-20    | 20         | 38.10 | 29.36 | 29.1 | 3.2       |
| BMA31-22    | 22         | 41.28 | 31.75 | 32.0 | 3.2       |
| BMA31-24    | 24         | 44.45 | 34.93 | 35.3 | 3.8       |
| BMA31-28    | 28         | 50.80 | 39.67 | 41.5 | 3.8       |
| BMA31-32    | 32         | 57.15 | 44.45 | 47.5 | 4.6       |
| BMA31-36    | 36         | 63.50 | 49.23 | 54.7 | 4.6       |

The flat gasket of synthetic rubber material is provided to take complete advantage of waterproof and pressure sealing features. It is use with the flange mounted receptacle.

### Panel Mounting Hole(Reference)



| Shell Size | Ø A<br>± 0.5 | □ B<br>± 0.12 | C<br>+0.2 |
|------------|--------------|---------------|-----------|
| 10SL       | 17.5         | 18.26         | 3.2       |
| 12S        | 18.5         | 20.62         | 3.2       |
| 12         | 18.5         | 20.62         | 3.2       |
| 14S        | 22.0         | 23.01         | 3.2       |
| 14         | 22.0         | 23.01         | 3.2       |
| 16S        | 25.0         | 24.61         | 3.2       |
| 16         | 25.0         | 24.61         | 3.2       |
| 18         | 30.0         | 26.97         | 3.2       |
| 20         | 33.0         | 29.36         | 3.2       |
| 22         | 35.0         | 31.75         | 3.2       |
| 24         | 39.0         | 34.93         | 3.8       |
| 28         | 45.0         | 39.67         | 3.8       |
| 32         | 52.0         | 44.45         | 4.6       |
| 36         | 59.0         | 49.23         | 4.6       |

## Amphenol MIL-C-5015 Connectors MS Basic Construction

Amphenol MIL-C-5015 connectors meet the latest performance requirements of MIL-C-5015.

These connectors represent well-proven electrical capability at an acceptable cost for most equipment where durability is important. MIL-C-5015 features threaded coupling & single key & keyway polarization representing maximum simplicity in design. Applications include industrial machines, military ground support equipment, ordnance & shipboard installation. Amphenol MIL-C-5015 connectors are available in classes A, B, E/F, R, and also offer a range of pre-earth connectors.

Therefore, you will always find the right connector in Amphenol, with us, for conditions & performance requirements you may have.

### 1. Characteristics

|                        |                                    |
|------------------------|------------------------------------|
| Insulation resistance. | 5,000 Mega ohms minimum(at 25 °C)  |
| Temperature range      | -55°C to 125°C                     |
| Durability             | 500 Cycle connection/Disconnection |

### 2. Dielectric with standing voltage

| Service rating | Test voltage AC(rms) | Operating voltage |       |
|----------------|----------------------|-------------------|-------|
|                |                      | AC                | DC    |
| Inst           | 1,000                | 200               | 250   |
| A              | 2,000                | 500               | 700   |
| D              | 2,800                | 900               | 1,250 |
| E              | 3,500                | 1,250             | 1,750 |
| B              | 4,500                | 1,750             | 2,450 |
| C              | 7,000                | 3,000             | 4,200 |

### 3. Contact engagement and seperation forces

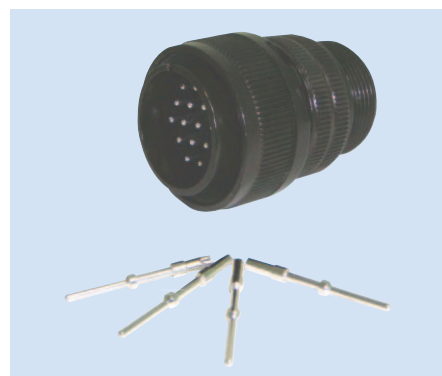
| Contact mating end size | Minimum separation force(ounce) | Maximum average engagement force (ounce) | Maximum average engagement force (ounce) |
|-------------------------|---------------------------------|------------------------------------------|------------------------------------------|
| #16                     | 2                               | 24                                       | 30                                       |
| #12                     | 3                               | 24                                       | 30                                       |
| #8                      | 5                               | -                                        | 160                                      |
| #4                      | 10                              | -                                        | 240                                      |
| #0                      | 15                              | -                                        | 320                                      |

### 4. Electrical data

| Contact size | Pin contact Diam, | Solder Pot Diam, | Rated Current (Mated with insulators) | Contact resistance |                        |
|--------------|-------------------|------------------|---------------------------------------|--------------------|------------------------|
|              |                   |                  |                                       | Test current DC A  | Potential Drop(Max) mV |
| #16          | 1.6               | 1.9              | 13A                                   | 13A                | 49                     |
| #12          | 2.4               | 3.0              | 23A                                   | 23A                | 42                     |
| #8           | 3.6               | 5.4              | 46A                                   | 46A                | 26                     |
| #4           | 5.7               | 8.4              | 80A                                   | 80A                | 23                     |
| #0           | 9.1               | 12.2             | 150A                                  | 150A               | 21                     |

### 5. Wire range accommodations

| Size | A.W.G   | Wire normal square size(mm²) | Dielectric material outer diam. |
|------|---------|------------------------------|---------------------------------|
| #16  | #22~#16 | ≤1.3                         | 1.7~3.3                         |
| #12  | #14~#12 | ≤3.5                         | 2.9~4.3                         |
| #8   | #10~#8  | ≤8.0                         | 4.2~6.4                         |
| #4   | #6~#4   | ≤22.0                        | 7.0~9.4                         |
| #0   | #2~#0   | ≤50.0                        | 10.6~14.0                       |



## Amphenol MIL-C-5015 Connectors

### MS/DS Series

### How to order

#### MIL-C-5015 (Solder Contacts)

MS   3102   A   18 - 10   P   W   XXX  
1   2   3   4   5   6   7   8

1. Connector Type  
 MS - designates Military Standard  
 DS - Amphenol MIL- C-5015 Europe use
2. Connector Style  
 3100- wall mounting receptacle  
 3101- cable connecting plug  
 3102- box mounting receptacle  
 3106- straight plug  
 3108- 90° Right angle plug
3. Service Class  
 A - General purpose, Solid Endbell  
 E - Environmental resisting, with grommet seal & strain relief back shell  
 F - Environmental resisting with grommet seal & strain relief back shell  
     3106F and 3108E style include a front 'O' ring seal  
 R - Environmental resisting with grommet seal, light weight and shorter  
     Overall length 310R style include a front 'O' ring seal
- 4, 5. Shell size and insert arrangement - see tables, page 26.27
6. Contact Types  
 P- designates pin contact, (+) Male  
 S- designates socket contact, (-) Female
7. Insert Rotation  
 No suffix-Normal  
 "W", "X", "Y", or "Z" - See page 26.27
8. Plating information  
 No suffix - Olive Drab Zinc  
 CD - Cadmium  
 C1 - Cobalt (Without +6 Cr)  
 621 - Black Zinc  
 689 - Electro-less Nickel  
 426 - Electro-less Nickel & gold flash contacts

#### MIL-C-5015 (Crimp Contacts)

MS   4102   A   18 - 10   P   W   XXX  
1   2   3   4   5   6   7   8

1. Connector Type  
 MS - designates Military Standard
2. Connector Style  
 4100 - wall mounting receptacle  
 4101 - cable connecting plug  
 4102 - box mounting receptacle  
 4106 - straight plug  
 4108 - 90° Right angle plug
3. Service Class  
 A - General purpose, Solid Endbell  
 E - Environmental resisting, with grommet seal & strain relief back shell  
 F - Environmental resisting with grommet seal & strain relief back shell  
     3106F and 3108E style include a front 'O' ring seal  
 R - Environmental resisting with grommet seal, light weight and shorter  
     Overall length 310R style include a front 'O' ring seal
- 4, 5. Shell size and insert arrangement - see tables, page 26.27
6. Contact Types  
 P- designates pin contact, (+) Male  
 S- designates socket contact, (-) Female
7. Insert Rotation  
 No suffix - Normal  
 "W", "X", "Y", or "Z" - See page 26.27
8. Plating information  
 No suffix - Olive Drab Zinc  
 CD - Cadmium  
 C1 - Cobalt (Without +6 Cr)  
 621 - Black Zinc  
 689 - Electro-less Nickel  
 426 - Electro-less Nickel & gold flash contacts



**MS/Standard  
B - Class**

DaeShin

## Amphenol MIL-C-5015 Connectors MS - B Class



Cable Connecting Receptacle



Box mounting Receptacle



Straight Plug



Right Angle Plug

**MS-B class** connector is a general duty standard cylindrical connector. It is a widely used for the automotive machine tool & welding industries, as well as numerous other commercial applications, mechanical forces and physical parameters not subject to extreme or rapid environmental changes [UL](#), approved.

### Shells:

Shell components are split endbell and fabricated from high aluminum alloy. Electrically zinc plate finish with an olive drab chromate after-treat offers corrosion resistance.

### Contacts:

Pins and sockets are machined from copper alloy with silver plated finish. Size 16 incorporate a closed entry design.

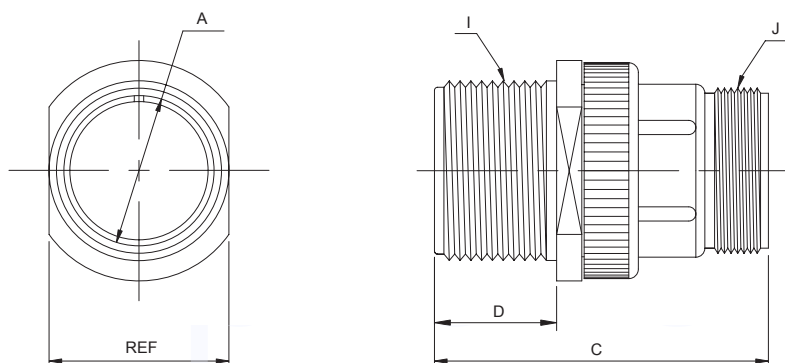
### Inserts:

Inserts are plastic, offering high dielectric strength, high arc resistance to vibration proprietary design permits pressurization of either pin or socket

# Amphenol MIL-C-5015 Connectors

## MS3101B

### Cable Connecting Receptacle



MS3101B split endbell cable connecting receptacles are used for cable extension requirements where mounting provisions are unnecessary.

(mm)

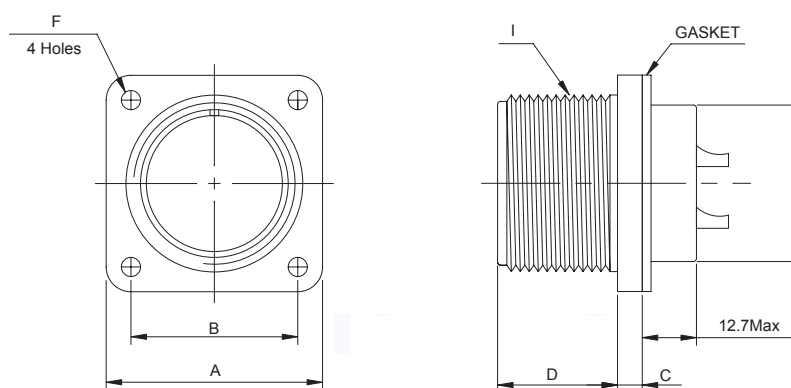
| Shell Size | Ø A Max | C Max | D +0.79 -0.00 | I Thread-2A (UNEF) | J Thread-2A (UNEF) |
|------------|---------|-------|---------------|--------------------|--------------------|
| 10SL       | 24.61   | 38.88 | 14.28         | 5/8-24 NEF         | 5/8-24 NEF         |
| 12S*       | 26.97   | 42.87 | 14.28         | 3/4-20 NEF         | 5/8-24 NEF         |
| 12*        | 26.97   | 52.37 | 19.05         | 3/4-20 NEF         | 5/8-24 NEF         |
| 14S        | 29.36   | 42.87 | 14.28         | 7/8-20 NEF         | 3/4-20 NEF         |
| 14*        | 29.36   | 52.37 | 19.05         | 7/8-20 NEF         | 3/4-20 NEF         |
| 16S        | 31.75   | 42.87 | 14.28         | 1-20 NEF           | 7/8-20 NEF         |
| 16*        | 31.75   | 52.37 | 19.05         | 1-20 NEF           | 7/8-20 NEF         |
| 18         | 34.13   | 52.37 | 19.05         | 1 1/8-18 NEF       | 1-20 NEF           |
| 20         | 37.31   | 55.57 | 19.05         | 1 1/4-18 NEF       | 1 3/16-18 NEF      |
| 22         | 40.48   | 55.57 | 19.05         | 1 3/8-18 NEF       | 1 3/16-18 NEF      |
| 24         | 43.66   | 58.72 | 20.63         | 1 1/2-18 NEF       | 1 7/16-18 NEF      |
| 28         | 50.01   | 58.72 | 20.63         | 1 3/4-18 NS        | 1 7/16-18 NEF      |
| 32         | 56.36   | 67.92 | 22.23         | 2-18 NS            | 1 3/4-18 NS        |
| 36         | 62.71   | 67.92 | 22.23         | 2 1/4-16 UN        | 2-18 NS            |

\* No tooling

# Amphenol MIL-C-5015 Connectors

## MS3102A-K

### Box Mounting Receptacle



MS3102B box mounting receptacles are used on boxes and equipment cases where no cable support is required.

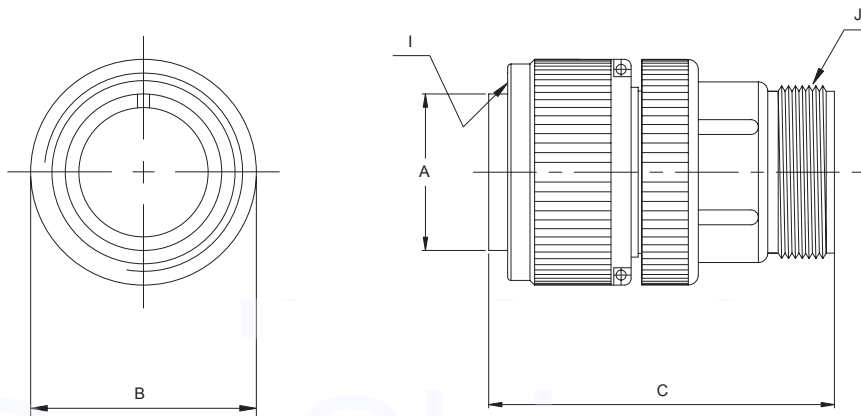
(mm)

| Shell Size | □A<br>±0.79 | □B<br>±0.12 | C<br>±0.50 | D<br>+0.79<br>-0.00 | ØF<br>+0.25<br>-0.12 | ØG<br>Max | I<br>Thread-2A<br>(UNEF) |
|------------|-------------|-------------|------------|---------------------|----------------------|-----------|--------------------------|
| 10SL       | 25.40       | 18.26       | 3.00       | 14.28               | 3.05                 | 16.00     | 5/8-24 NEF               |
| 12S        | 27.80       | 20.62       | 3.00       | 14.28               | 3.05                 | 16.50     | 3/4-20 NEF               |
| 12         | 27.80       | 20.62       | 3.00       | 19.05               | 3.05                 | 16.50     | 3/4-20 NEF               |
| 14S        | 30.20       | 23.01       | 3.00       | 14.28               | 3.05                 | 20.00     | 7/8-20 NEF               |
| 14         | 30.20       | 23.01       | 3.00       | 19.05               | 3.05                 | 20.00     | 7/8-20 NEF               |
| 16S        | 32.50       | 24.61       | 3.00       | 14.28               | 3.05                 | 23.00     | 1-20 NEF                 |
| 16         | 32.50       | 24.61       | 3.00       | 19.05               | 3.05                 | 23.00     | 1-20 NEF                 |
| 18         | 34.90       | 26.97       | 4.00       | 19.05               | 3.05                 | 26.00     | 1 1/8-18 NEF             |
| 20         | 38.10       | 29.36       | 4.00       | 19.05               | 3.05                 | 29.00     | 1 1/4-18 NEF             |
| 22         | 41.30       | 31.75       | 4.00       | 19.05               | 3.05                 | 32.50     | 1 3/8-18 NEF             |
| 24         | 44.50       | 34.93       | 4.00       | 20.63               | 3.73                 | 35.50     | 1 1/2-18 NEF             |
| 28         | 50.80       | 39.67       | 4.00       | 20.63               | 3.73                 | 42.00     | 1 3/4-18 NEF             |
| 32         | 57.20       | 44.45       | 4.00       | 22.23               | 4.39                 | 48.00     | 2-18 NS                  |
| 36         | 63.50       | 49.23       | 4.00       | 22.23               | 4.39                 | 54.50     | 2 1/4-16 UN              |

# Amphenol MIL-C-5015 Connectors

## MS3106B

### Straight Plug



MS3106B straight plugs with split endbell are used with 3100, 3101 and 3102 receptacles.

(mm)

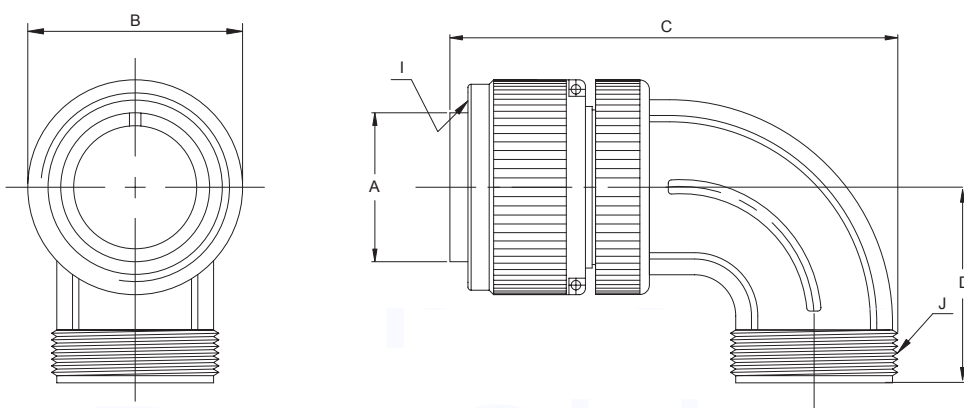
| Shell Size | Ø A<br>+0.00<br>-0.38 | Ø B<br>Max | C<br>Max | I<br>Thread-2B<br>(UNEF) | J<br>Thread-2A<br>(UNEF) |
|------------|-----------------------|------------|----------|--------------------------|--------------------------|
| 10SL       | 11.33                 | 24.61      | 38.88    | 5/8-24 NEF               | 5/8-24 NEF               |
| 12S*       | 14.1                  | 26.97      | 42.87    | 3/4-20 NEF               | 5/8-24 NEF               |
| 12*        | 14.1                  | 26.97      | 52.37    | 3/4-20 NEF               | 5/8-24 NEF               |
| 14S        | 17.15                 | 29.36      | 42.87    | 7/8-20 NEF               | 3/4-20 NEF               |
| 14*        | 17.15                 | 29.36      | 52.37    | 7/8-20 NEF               | 3/4-20 NEF               |
| 16S        | 20.45                 | 31.75      | 42.87    | 1-20 NEF                 | 7/8-20 NEF               |
| 16*        | 20.45                 | 31.75      | 42.87    | 1-20 NEF                 | 7/8-20 NEF               |
| 18         | 23.62                 | 34.13      | 52.37    | 1 1/8-18 NEF             | 1-20 NEF                 |
| 20         | 26.67                 | 37.31      | 55.57    | 1 1/4-18 NEF             | 1 3/16-18 NEF            |
| 22         | 29.85                 | 40.48      | 55.57    | 1 3/8-18 NEF             | 1 3/16-18 NEF            |
| 24         | 33.02                 | 43.66      | 58.72    | 1 1/2-18 NEF             | 1 7/16-18 NEF            |
| 28         | 39.61                 | 50.01      | 58.72    | 1 3/4-18 NS              | 1 7/16-18 NEF            |
| 32         | 44.96                 | 56.36      | 61.92    | 2-18 NS                  | 1 3/4-18 NS              |
| 36         | 50.29                 | 62.71      | 61.92    | 2 1/4-16 UN              | 2-18 NS                  |

\* No tooling

# Amphenol MIL-C-5015 Connectors

## MS3108B

### Straight Plug



MS3108B Right angle plugs, have a split endbell and are used where wires must be brought at an abrupt angle. Either the split or solid endbells on the 3108 are capable of being rotated and locked.

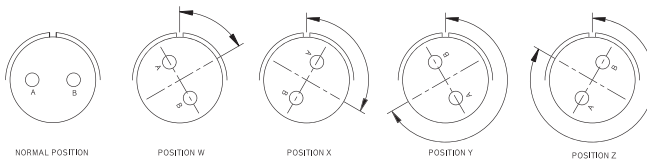
(mm)

| Shell Size | Ø A<br>+0.00<br>-0.38 | Ø B<br>Max | C<br>Max | D<br>Max | I<br>Thread-2A<br>(UNEF) | J<br>Thread-2A<br>(UNEF) |
|------------|-----------------------|------------|----------|----------|--------------------------|--------------------------|
| 10SL       | 11.33                 | 24.61      | 46.02    | 25.4     | 5/8-24 NEF               | 5/8-24 NEF               |
| 12S*       | 14.10                 | 26.97      | 50.80    | 26.9     | 3/4-20 NEF               | 5/8-24 NEF               |
| 12*        | 14.10                 | 26.97      | 57.15    | 26.9     | 3/4-20 NEF               | 5/8-24 NEF               |
| 14S        | 17.15                 | 29.36      | 53.97    | 28.5     | 7/8-20 NEF               | 3/4-20 NEF               |
| 14*        | 17.15                 | 29.36      | 58.72    | 28.5     | 7/8-20 NEF               | 3/4-20 NEF               |
| 16S*       | 20.45                 | 31.75      | 60.32    | 30.1     | 1-20 NEF                 | 7/8-20 NEF               |
| 16*        | 20.45                 | 31.75      | 65.07    | 30.1     | 1-20 NEF                 | 7/8-20 NEF               |
| 18         | 23.62                 | 34.13      | 68.27    | 33.3     | 1 1/8-18 NEF             | 1-20 NEF                 |
| 20         | 26.67                 | 37.31      | 76.98    | 34.9     | 1 1/4-18 NEF             | 1 3/16-18 NEF            |
| 22         | 29.85                 | 40.48      | 76.98    | 34.9     | 1 3/8-18 NEF             | 1 3/16-18 NEF            |
| 24         | 33.02                 | 43.66      | 86.51    | 39.6     | 1 1/2-18 NEF             | 1 7/16-18 NEF            |
| 28         | 38.61                 | 50.01      | 86.51    | 39.6     | 1 3/4-18 NS              | 1 7/16-18 NEF            |
| 32         | 44.96                 | 56.36      | 95.25    | 47.6     | 2-18 NS                  | 1 3/4-18 NS              |
| 36         | 50.29                 | 62.71      | 100.02   | 52.3     | 2 1/4-16 UN              | 2-18 NS                  |

\* No tooling

## Amphenol MIL-C-5015 Connectors MS-B Class

### Insert Arrangements & Alternate Positioning



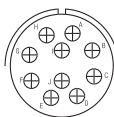
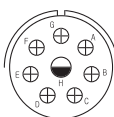
| Contact<br>Arrange-<br>ment | Service<br>Rating | Total<br>Contacts | Contact Size |   |    |    |    | Alternate Position-<br>Degrees |     |     |     |  |
|-----------------------------|-------------------|-------------------|--------------|---|----|----|----|--------------------------------|-----|-----|-----|--|
|                             |                   |                   | 0            | 4 | 8  | 12 | 16 | W                              | X   | Y   | Z   |  |
|                             | A                 | 3                 |              |   |    |    | 3  | -                              | -   | -   | -   |  |
| 10SL-3                      | Inst              | 4                 |              |   |    |    | 4  | -                              | 120 | 240 | -   |  |
| 14S-2                       | Inst              | 6                 |              |   |    |    | 6  | -                              | -   | -   | -   |  |
| 14S-6                       | A                 | 3                 |              |   |    |    | 3  | 90                             | 180 | 270 | -   |  |
| 14S-7                       | A/Inst            | 10                |              |   |    |    | 10 | 70                             | 145 | 215 | 290 |  |
| 18-1                        | A                 | 8                 |              |   |    | 1  | 7  | 70                             | -   | -   | 290 |  |
| 18-8                        | A                 | 4                 |              |   |    | 4  |    | -                              | 120 | 240 | -   |  |
| 18-10                       | A                 | 5                 |              |   |    | 5  |    | -                              | 170 | 265 |     |  |
| 18-11                       | D                 | 4                 |              |   |    | 4  |    | 45                             | 110 | 250 | -   |  |
| 20-4                        | A                 | 7                 |              |   |    | 7  |    | 80                             | -   | -   | 280 |  |
| 20-15                       | A                 | 9                 |              |   |    | 2  | 7  | 80                             | 110 | 250 | 280 |  |
| 20-16                       | A                 | 9                 |              |   |    | 3  | 6  | 35                             | 110 | 250 | 325 |  |
| 20-18                       | A                 | 14                |              |   |    |    | 14 | 35                             | 110 | 250 | 325 |  |
| 20-27                       | A                 | 17                |              |   |    |    | 17 | 80                             | -   | -   | 20  |  |
| 20-29                       | A                 | 19                |              |   |    |    | 19 | 80                             | 110 | 250 | 280 |  |
| 22-14                       | A                 | 4                 |              |   | 4  |    |    | -                              | 110 | 250 | -   |  |
| 22-22                       | D/A               | 8                 |              |   |    | 8  |    | 35                             | -   | 250 | -   |  |
| 22-23                       | A                 | 7                 |              |   | 7  |    |    | 80                             | -   | -   | 280 |  |
| 24-10                       | A                 | 9                 |              |   | 3  | 6  |    | 35                             | 110 | 250 | 325 |  |
| 24-11                       | Inst              | 24                |              |   |    |    | 24 | 80                             | 110 | 250 | 280 |  |
| 24-28                       | A                 | 22                |              |   |    | 4  | 18 | 80                             | 110 | 250 | 280 |  |
| 28-11                       | A                 | 26                |              |   |    |    | 26 | 90                             | 180 | 270 | -   |  |
| 28-12                       | A                 | 35                |              |   |    |    | 35 | 80                             | 110 | 250 | 280 |  |
| 28-15                       | A                 | 20                |              |   |    |    | 20 | 80                             | 110 | 250 | 280 |  |
| 28-16                       | A                 | 14                |              |   | 10 | 4  |    | 80                             | 110 | 250 | 280 |  |
| 28-20                       | A                 | 37                |              |   |    |    | 37 | 80                             | 110 | 250 | 280 |  |
| 28-21                       | A                 | 23                |              | 2 | 3  | 2  | 16 | 80                             | 110 | 250 | 325 |  |
| 32-6                        | Inst/A            | 35                |              |   |    | 7  | 28 | 80                             | 125 | 235 | 280 |  |
| 32-7                        | A                 | 30                |              |   |    | 6  | 24 | 80                             | 125 | 235 | 280 |  |
| 32-8                        | A/U/V             | 54                |              |   |    |    | 54 | 80                             | 110 | 250 | 280 |  |
| 32-22                       | A                 | 48                |              |   |    |    | 48 | 80                             | 125 | 235 | 280 |  |
| 36-10                       | A                 | 40                |              |   |    | 22 | 18 | -                              | -   | -   | -   |  |
| 36-40                       | A                 | 73                |              |   |    |    | 73 | -                              | -   | -   | -   |  |

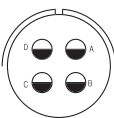
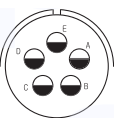
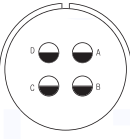
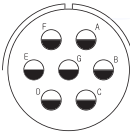
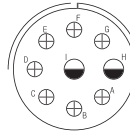
36-73

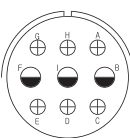
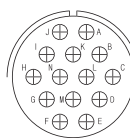
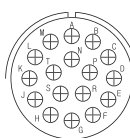
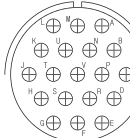
## Amphenol MIL-C-5015 Connectors

### MS-B Class

### Contact Arrangements

|                    |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |  |
| Insert Arrangement | Front of<br>Socket Insert                                                         | 14S-2                                                                             | 14S-6                                                                             | 14S-7                                                                              | 18-1                                                                                | 18-8                                                                                |
| Service Rating     | 10SL-3                                                                            | Inst.                                                                             | Inst.                                                                             | A                                                                                  | B, C, F, G=A; Bal.=Inst                                                             | A                                                                                   |
| Number of Contacts | 3                                                                                 | 4                                                                                 | 6                                                                                 | 3                                                                                  | 10                                                                                  | 1 7                                                                                 |
| Contact Size       | A                                                                                 | 16                                                                                | 16                                                                                | 16                                                                                 | 16                                                                                  | 12 16                                                                               |

|                    |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |
| Insert Arrangement | 18-10                                                                               | 18-11                                                                               | 20-4                                                                                | 20-15                                                                                 | 20-16                                                                                 |
| Service Rating     | A                                                                                   | A                                                                                   | D                                                                                   | A                                                                                     | A                                                                                     |
| Number of Contacts | 4                                                                                   | 5                                                                                   | 4                                                                                   | 7                                                                                     | 2 7                                                                                   |
| Contact Size       | 12                                                                                  | 12                                                                                  | 12                                                                                  | 12                                                                                    | 12 16                                                                                 |

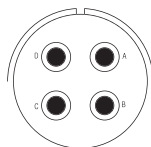
|                    |                                                                                     |                                                                                     |                                                                                      |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    |  |  |  |  |
| Insert Arrangement | 20-18                                                                               | 20-27                                                                               | 20-29                                                                                | 22-14                                                                                 |
| Service Rating     | A                                                                                   | A                                                                                   | A                                                                                    | A                                                                                     |
| Number of Contacts | 3 6                                                                                 | 14                                                                                  | 17                                                                                   | 19                                                                                    |
| Contact Size       | 12 16                                                                               | 16                                                                                  | 16                                                                                   | 16                                                                                    |



# Amphenol MIL-C-5015 Connectors

## MS-B Class

### Contact Arrangements



22-22

Insert Arrangement

Service Rating

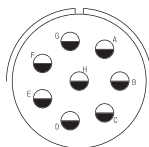
Number of Contacts

Contact Size

A

4

8

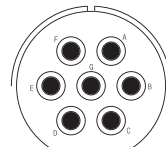


22-23

H=D; Bal.=A

4

8

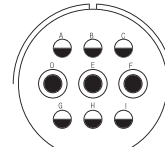


24-10

A

7

8

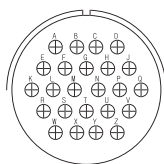


24-11

A

3 6

8 16



24-28

Insert Arrangement

Service Rating

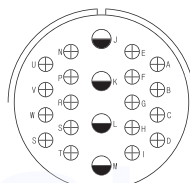
Number of Contacts

Contact Size

Inst.

24

16

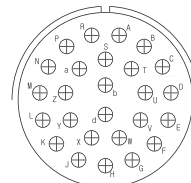


28-11

A

4 18

12 16

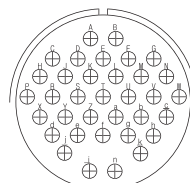


28-12

A

26

16

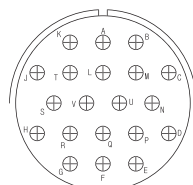


28-15

A

35

16



28-16

Insert Arrangement

Service Rating

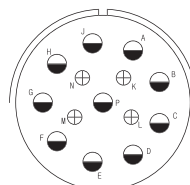
Number of Contacts

Contact Size

A

20

16

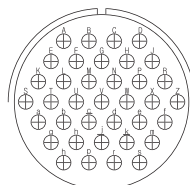


28-20

A

10 4

12 16



28-21

A

37

16



CONTACT LEGEND

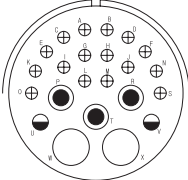
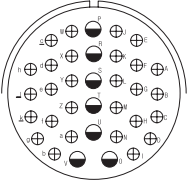
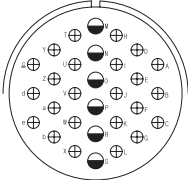
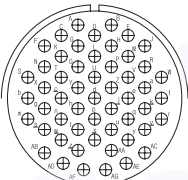
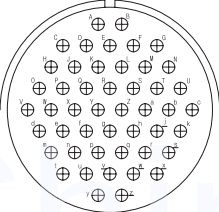
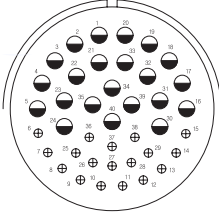
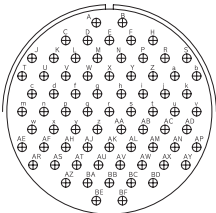
16 12 8 4 0

Amphenol®

Amphenol MIL-C-5015 Connectors

MS-B Class

Contact Arrangements

|                    |                                                                                     |                                                                                     |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    |    |   |    |
| Insert Arrangement | 32-6                                                                                | 32-7                                                                                | 32-8                                                                                  |
| Service Rating     | A                                                                                   | A, B, h, j=Insert.; Bal.=A                                                          | A                                                                                     |
| Number of Contacts | 2 3 2 16                                                                            | 7 28                                                                                | 6 24                                                                                  |
| Contact Size       | 4 8 12 16                                                                           | 12 16                                                                               | 12 16                                                                                 |
|                    |   |  |   |
| Insert Arrangement | 32-22                                                                               | 36-10                                                                               | 36-40                                                                                 |
| Service Rating     | A                                                                                   | A                                                                                   | A                                                                                     |
| Number of Contacts | 54                                                                                  | 48                                                                                  | 22 18                                                                                 |
| Contact Size       | 16                                                                                  | 16                                                                                  | 12 16                                                                                 |
|                    |  |                                                                                     |                                                                                       |
| Insert Arrangement | 36-73                                                                               |                                                                                     |                                                                                       |
| Service Rating     | A                                                                                   |                                                                                     |                                                                                       |
| Number of Contacts | 73                                                                                  |                                                                                     |                                                                                       |
| Contact Size       | 16                                                                                  |                                                                                     |                                                                                       |
|                    |                                                                                     |                                                                                     |  |
|                    |                                                                                     |                                                                                     | CONTACT LEGEND 16 12 8 4 0                                                            |

## Amphenol MIL-C-5015 Connectors MS-B Class How to order

MIL-C-5015 (Solder Contacts)

|           |              |                |          |          |            |
|-----------|--------------|----------------|----------|----------|------------|
| <u>MS</u> | <u>3106B</u> | <u>18 - 10</u> | <u>S</u> | <u>W</u> | <u>XXX</u> |
| <u>1</u>  | <u>2</u>     | <u>3 4</u>     | <u>5</u> | <u>6</u> | <u>7</u>   |

1. Connector Type  
MS - designates Military Standard
2. Connector Style  
3101B - cable connecting plug with split endbell  
3102A-K - box mounting receptacle(with plastic insulator)  
3106B - straight plug with split endbell  
3108B - 90° Right angle plug with split endbell
- 3, 4. Shell size and insert arrangement - see tables, page 51
5. Contact Types  
P - designates pin contact, (+) Male  
S - designates socket contact, (-) Female
6. Insert Rotation  
No suffix - Normal  
"W", "X", "Y", or "Z" - See page 51
7. Plating information  
No suffix - Olive Drab Zinc  
C1 - Cobalt (Without +6 Cr)  
621 - Black Zinc  
689 - Electro-less Nickel



**MS/Standard  
DL-Class  
Pre-Earth type**

DaeShin

## Amphenol MIL-C-5015 Connectors

### DL Series

### Pre-earth type



Box mounting Receptacle



Straight Plug



Right Angle Plug

**DL Series** are highly reliable circular connectors (wire soldering type) approved by **TÜV** satisfying European safety standards and **UL** standards.

They feature IP67 class water and dust proof, when mated and a protective earth circuit with first mate break grounding contacts.

They are ideal for use in machine tools, robots, and other industrial machines. Compatible with MS connector.

#### Shells:

Shell components are fabricated from high grade aluminum alloy. Electrically zinc plate finish with an black chromate after treatment offers corrosion resistance.

Consult Amphenol Daeshin for other plating options.

#### Contacts:

Pins and sockets are machined from copper alloy with silver plated finish. Size 16 and 12 socket incorporate a closed entry design.

#### Insulators:

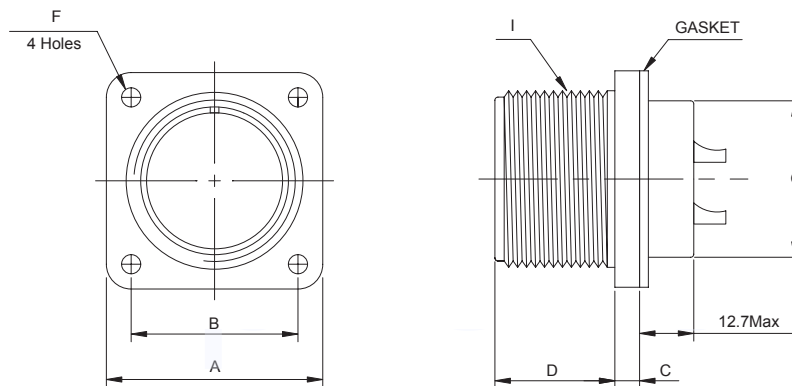
Front inserts are Silicone rubber and Rear inserts are PPS resin for box mount receptacle only.

and also straight & right angle plug's insert is PPS resin.

# Amphenol MIL-C-5015 Connectors

## DL3102A

### Box mounting receptacle



DL3102A box mounting receptacles are used on boxes and equipment cases where no cable support is required.

(mm)

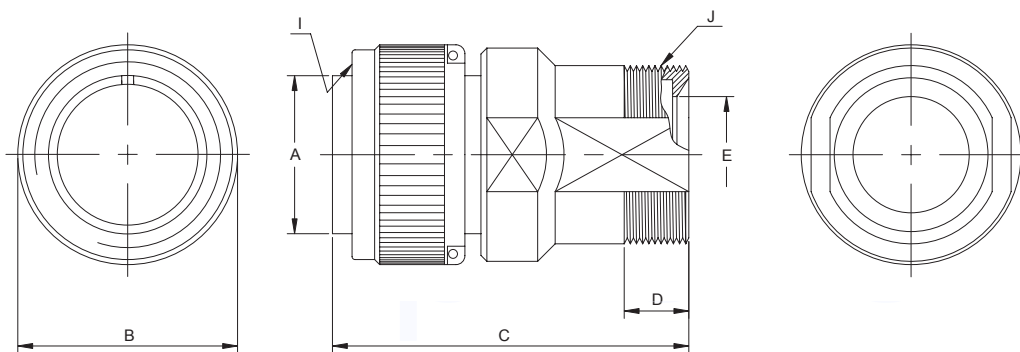
| Shell Size | □ A<br>±0.79 | □ B<br>±0.12 | C<br>±0.3 | D<br>+0.79<br>-0.00 | E<br>±0.2 | Ø F<br>+0.25<br>-0.12 | Ø G<br>Max | I<br>Thread-2A<br>(UNEF) |
|------------|--------------|--------------|-----------|---------------------|-----------|-----------------------|------------|--------------------------|
| 10SL       | 25.40        | 18.26        | 2.1       | 14.28               | 23.5      | 3.05                  | 16         | 5/8-24 NEF               |
| 18         | 34.93        | 26.97        | 2.7       | 19.05               | 28.0      | 3.05                  | 25         | 1 1/8-18 NEF             |
| 20         | 38.10        | 29.36        | 2.7       | 19.05               | 30.0      | 3.05                  | 30         | 1 1/4-18 NEF             |
| 22         | 41.28        | 31.75        | 2.7       | 19.05               | 30.8      | 3.05                  | 33         | 1 3/8-18 NEF             |
| 24         | 44.45        | 34.93        | 2.7       | 20.63               | 32.4      | 3.73                  | 36         | 1 1/2-18 NEF             |
| 24-10(G)*  | 44.45        | 34.93        | 2.7       | 20.63               | 32.4      | 3.73                  | 36         | 1 1/2-18 NEF             |
| 32         | 57.05        | 44.45        | 3.9       | 22.5                | 33.9      | 4.4                   | 48         | 2-18 NS                  |

\* Attention: No grounding pin in DL3102A24-10P(G)

# Amphenol MIL-C-5015 Connectors

## DL3106A

### Straight Plug



DL3106A straight plugs are used with 3102 receptacles.

(mm)

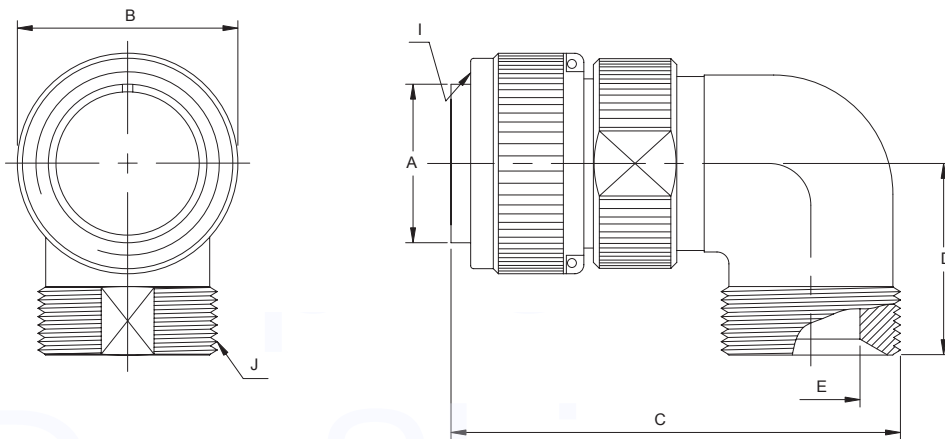
| Shell Size | Ø A<br>+0.00<br>-0.38 | Ø B<br>Max | C<br>Max | D<br>Min | E<br>Max | I<br>Thread-2B<br>(UNEF) | J<br>Thread-2A<br>(UNEF) |
|------------|-----------------------|------------|----------|----------|----------|--------------------------|--------------------------|
| 10SL       | 11.33                 | 24.61      | 44.2     | 10.0     | 6.8      | 5/8-24 NEF               | 5/8-24 NEF               |
| 18         | 23.62                 | 34.13      | 58.3     | 11.5     | 15.0     | 1 1/8-18 NEF             | 1-20 NEF                 |
| 20         | 26.27                 | 37.31      | 60.0     | 11.0     | 17.0     | 1 1/4-18 NEF             | 1 3/16-18 NEF            |
| 22         | 29.85                 | 40.48      | 67.6     | 11.0     | 17.0     | 1 1/4-18 NEF             | 1 3/16-18 NEF            |
| 24         | 33.02                 | 43.66      | 71.8     | 11.5     | 19.8     | 1 1/2-18 NEF             | 1 7/16-18 NEF            |
| 24-10(G)*  | 33.02                 | 43.66      | 71.8     | 11.5     | 19.8     | 1 1/2-18 NEF             | 1 7/16-18 NEF            |
| 32         | 44.9                  | 57.00      | 73.0     | 10.5     | 27.0     | 2-18 NS                  | 1 3/4-18 NS              |

\* Attention: No grounding pin in DL3102A24-10P(G)

# Amphenol MIL-C-5015 Connectors

## DL3108A

### Right Angle Plug



DL3108A Right angle plugs have a solid endbell and are used where wire must be brought at an abrupt angle.

(mm)

| Shell Size | Ø A<br>+0.00<br>-0.38 | Ø B<br>Max | C<br>Max | D<br>Max | E<br>Max | I<br>Thread-2B<br>(UNEF) | J<br>Thread-2A<br>(UNEF) |
|------------|-----------------------|------------|----------|----------|----------|--------------------------|--------------------------|
| 10SL       | 11.33                 | 24.61      | 44.0     | 24.0     | 6.8      | 5/8-24 NEF               | 5/8-24 NEF               |
| 18         | 23.62                 | 34.13      | 65.0     | 30.01    | 5.0      | 1 1/8-18 NEF             | 1-20 NEF                 |
| 20         | 26.27                 | 37.31      | 74.2     | 32.01    | 7.0      | 1 1/4-18 NEF             | 1 3/16-18 NEF            |
| 22         | 29.85                 | 40.48      | 73.0     | 32.01    | 7.0      | 1 3/8-18 NEF             | 1 3/16-18 NEF            |
| 24         | 33.02                 | 43.66      | 82.0     | 38.21    | 9.8      | 1 1/2-18 NEF             | 1 7/16-18 NEF            |
| 24-10(G)*  | 33.02                 | 43.66      | 82.0     | 38.21    | 9.8      | 1 1/2-18 NEF             | 1 7/16-18 NEF            |
| 32         | 44.9                  | 57.00      | 91.0     | 44.5     | 27.0     | 2-18 NS                  | 1 3/4-18 NS              |

\* Attention: No grounding pin in DL3102A24-10P(G)

Amphenol®

Amphenol MIL-C-5015 Connectors

DL Series

Insert Arrangements

| Contact Arrangement | Service Rating | Total Contacts | Contact Size |   |   |    |    | Alternate Position-Degrees |     |     |     |
|---------------------|----------------|----------------|--------------|---|---|----|----|----------------------------|-----|-----|-----|
|                     |                |                | 0            | 4 | 8 | 12 | 16 | W                          | X   | Y   | Z   |
| 10SL-3              | A              | 3              |              |   |   |    | 3  | -                          | -   | -   | -   |
| 18-10               | A              | 4              |              |   |   | 4  |    | -                          | 120 | 240 | -   |
| 18-12               | A              | 6              |              |   |   |    | 6  | 80                         | -   | -   | 280 |
| 20-15               | A              | 7              |              |   |   | 7  |    | 80                         | -   | -   | 280 |
| 22-22               | A              | 4              |              |   | 4 |    |    | -                          | 110 | 250 | -   |
| 24-10               | A              | 7              |              |   | 7 |    |    | 80                         | -   | -   | 280 |
| 32-17               | D              | 4              |              | 4 |   |    |    | 45                         | 110 | 250 | 280 |

Contact Arrangement

Front of Socket Insert

Insert Arrangement

Service Rating

Number of Contacts

Contact Size

10SL-3

A

3

16

18-10

A

4

12

18-12

A

6

16

20-15

A

7

12

22-22

A

4

8

24-10

A

7

8

32-17

D

4

4

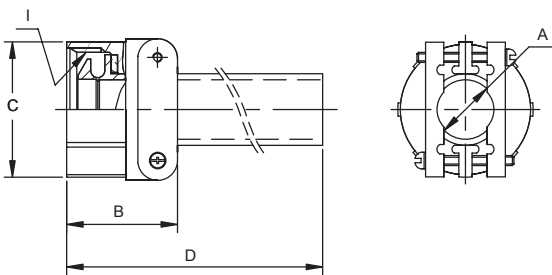
CONTACT LEGEND

## Amphenol MIL-C-5015 Connectors

### DL Series

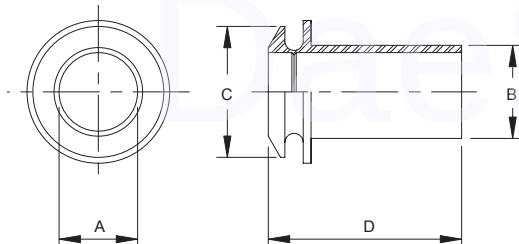
### Accessories Dimension

#### Cable Clamp DL3057

| (mm)                                                                              |             |           |      |      |      |      |
|-----------------------------------------------------------------------------------|-------------|-----------|------|------|------|------|
|  | Part Number | Size      | Ø A  | B    | Ø C  | D    |
|                                                                                   | I           | Thread-2B |      |      |      |      |
|                                                                                   | DL3057-4A   | 10SL      | 6.0  | 20.3 | 23.3 | 53.3 |
|                                                                                   | DL3057-10A  | 18        | 14.0 | 23.6 | 32.2 | 54.4 |
|                                                                                   | DL3057-12A  | 20,22     | 15.9 | 23.6 | 37.8 | 57.3 |
|                                                                                   | DL3057-16A  | 24        | 18.0 | 26.0 | 43.4 | 56.4 |

DL3057 style cable clamp was designed for use with jacketed cable or wire protected by tubing.  
Both clamping halves float maximum strain relief.  
for unjacketed cable or wires, use corresponding DL3420 telescoping bushing.  
To order clamp without busing, add -1 to the P/N.

#### Telescoping Bushing DL3420

| (mm)                                                                                |             |       |         |         |      |
|-------------------------------------------------------------------------------------|-------------|-------|---------|---------|------|
|  | Part Number | Size  | Ø A Max | Ø B Max | Ø C  |
|                                                                                     | D           |       |         |         |      |
|                                                                                     | DL3420-4    | 10SL  | 6.0     | 7.7     | 12.0 |
|                                                                                     | DL3420-10   | 18    | 14.0    | 15.6    | 20.7 |
|                                                                                     | DL3420-12   | 20,22 | 15.9    | 18.8    | 24.5 |
|                                                                                     | DL3420-16   | 24    | 18.0    | 23.6    | 30.0 |

Telescoping grand bushings (used with 3057 clamp) keep dirt, oil and moisture out of endbell.  
Taping or wrapping wires is eliminated since bushing protects wires going thru clamp.  
Combinations of bushing may be used to decrease cable entry diameter to improve sealing.

#### Characterics & Electrical data

| (mm)                  |                 |           |           |          |         |
|-----------------------|-----------------|-----------|-----------|----------|---------|
| Current Rating        | Contact Size    | #16       | #12       | #8       | #4      |
|                       | Max.value       | 13A       | 23A       | 46A      | 80A     |
| Wire Range            | A.W.G           | #20 ~ #16 | #14 ~ #12 | #10 ~ #8 | #6 ~ #4 |
| Voltage Rating        | AC(r.m.s)       | 200V      | 250V      | 250V     | 250V    |
|                       | DC              | 350V      | 500V      | 500V     | 500V    |
| Operating Temperature | -40°C to +125°C |           |           |          |         |



# Amphenol MIL-C-5015 Connectors

## DL-Series, Pre-Earth type

### How to order

MIL-C-5015 (Solder Contacts)

| <u>DL</u> | <u>3102A</u> | <u>32 - 17</u> | <u>P</u> | <u>XXX</u> |   |
|-----------|--------------|----------------|----------|------------|---|
| 1         | 2            | 3              | 4        | 5          | 6 |

1. Connector Type  
DL - designates
2. Connector Style  
3102A - box mounting receptacle  
3106A - straight plug  
3108A - 90° Right angle plug
- 3, 4. Shell size and insert arrangement - see tables, pages 62
5. Contact Types  
P - designates pin contact, (+) Male  
S - designates socket contact, (-) Female
6. Plating information  
No suffix - Olive Drab Zinc  
C1 - Cobalt (Without +6 Cr)  
621 - Black Zinc  
689 - Electro-less Nickel



**Bayonet Coupling -  
Connector  
ADG, ADGC Series**

## Amphenol MIL-C-5015 Connectors ADG, ADGC Series



**ADG Bayonet coupling connectors** in accordance with VG95234, well known as Amphenol ADG bayonet connectors, are basically MIL-C-5015 type connectors.

They withstand exposure to moisture, oil and vibration.

Bayonet lock coupling.

ADG series connectors meet the performance most subway coupler applications.

### Shells:

- Five shell styles
- Fourteen shell sizes
- Solder or crimp contacts, sizes 16-0 accepting 22-0 AWG.
- Five class designations
- Alternate insert positioning

### Contacts:

- Pins and sockets are machined from copper alloy with silver plated finish.
- Size 16 and socket contacts incorporate a closed entry design.

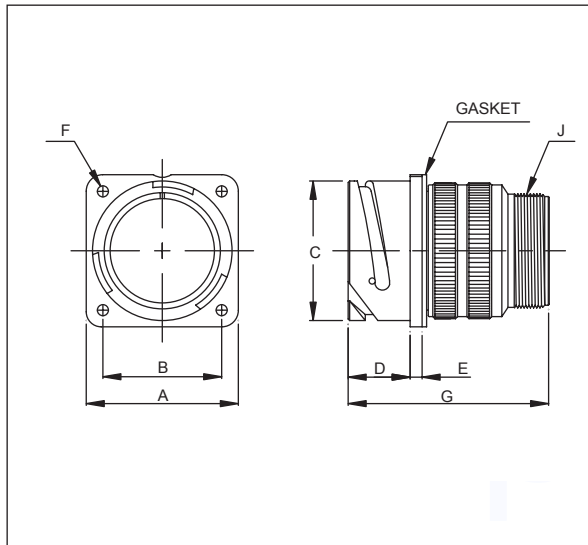
### Insulators:

- Inserts are resilient synthetic rubber for ADG series, and chloroprene rubber for ADGC series offering high dielectric strength, high arc resistance arc to vibration.
- Proprietary design permits pressurization of pin or socket insert..

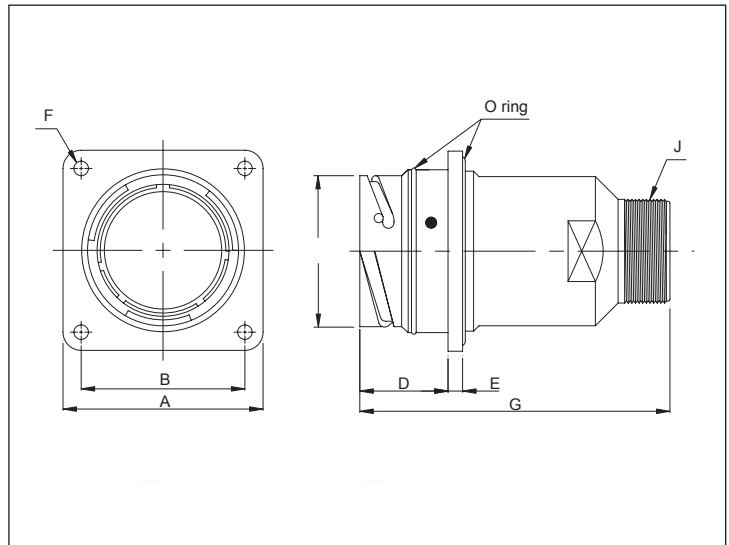
# Amphenol Bayonet Coupling Connectors

## ADG00A, ADGC00A

### Wall mounting receptacle



under 36 size shell only



over 48 size shell only

(mm)

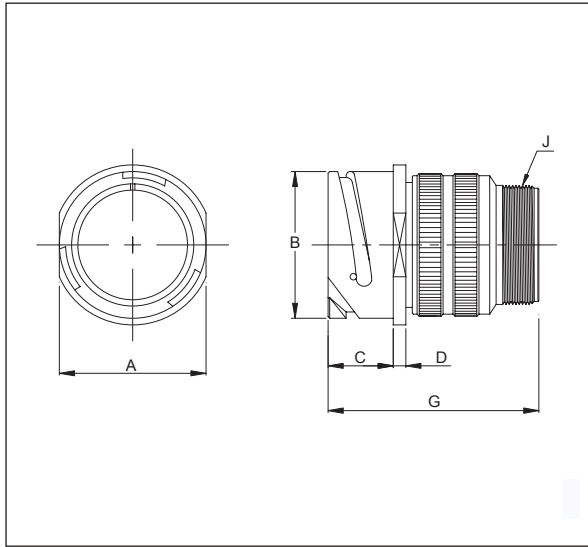
| Shell Size | □A<br>±0.79 | □B<br>±0.79 | C<br>±0.3 | D<br>+0.79<br>-0.00 | E<br>±0.5 | F<br>+0.25<br>-0.12 | G<br>Max | J<br>(UNEF)   |
|------------|-------------|-------------|-----------|---------------------|-----------|---------------------|----------|---------------|
| 10SL       | 25.40       | 18.26       | 18.2      | 14.28               | 2.8       | 3.2                 | 40.5     | 5/8-24 NEF    |
| 14S        | 30.18       | 23.01       | 24.6      | 14.28               | 3.2       | 3.2                 | 43.5     | 3/4-20 NEF    |
| 16S        | 32.54       | 24.61       | 27.4      | 14.28               | 3.2       | 3.2                 | 40.5     | 7/8-20 NEF    |
| 16         | 32.54       | 24.61       | 27.4      | 19.05               | 3.2       | 3.2                 | 54.0     | 7/8-20 NEF    |
| 18         | 34.93       | 26.97       | 30.8      | 19.05               | 4.0       | 3.2                 | 54.0     | 1-20 NEF      |
| 20         | 38.10       | 29.36       | 34.2      | 19.05               | 4.0       | 3.2                 | 56.0     | 1 3/16-18NEF  |
| 22         | 41.28       | 31.75       | 37.4      | 19.05               | 4.0       | 3.2                 | 56.0     | 1 3/16-18NEF  |
| 24         | 44.45       | 34.93       | 40.9      | 20.63               | 4.0       | 3.7                 | 60.0     | 1 7/16-18 NEF |
| 28         | 50.80       | 39.67       | 46.7      | 20.63               | 4.0       | 3.7                 | 60.0     | 1 7/16-18 NEF |
| 32         | 57.15       | 44.45       | 53.4      | 22.23               | 4.0       | 4.3                 | 70.0     | 1 7/16-18 NEF |
| 36         | 63.50       | 49.23       | 59.6      | 22.23               | 4.0       | 4.3                 | 70.0     | 2-18 NS       |
| 48         | 110.00      | 90.00       | 83.0      | 48.50               | 8.0       | 8.5                 | 170.0    | 2 1/4-16 UN   |

All dimensions for reference only

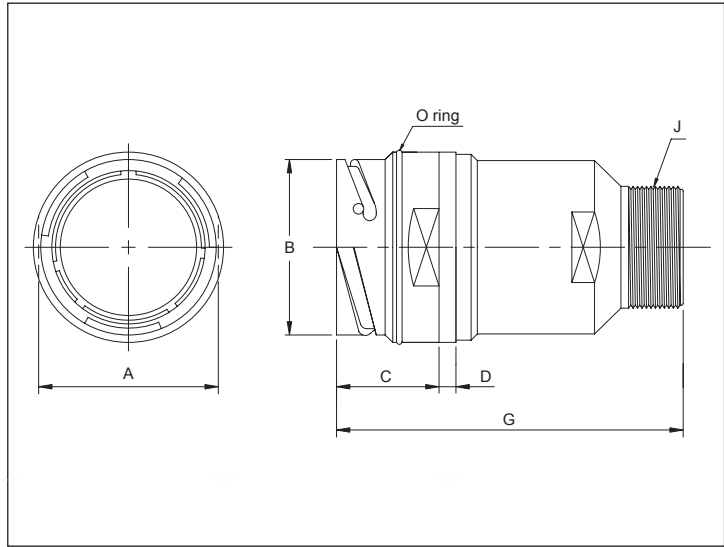
# Amphenol MIL-C-5015 Connectors

## ADG01A, ADGC01A

### Inline receptacle



under 36 size shell only



over 48 size shell only

DaeShin

(mm)

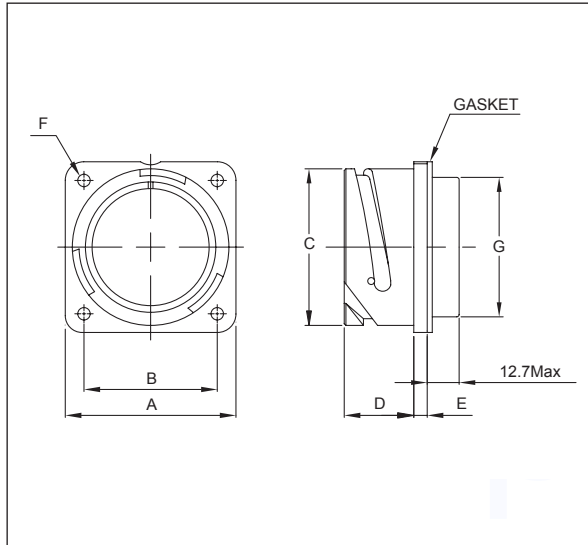
| Shell Size | A Max | B $\pm 0.3$ | C $+0.79$<br>$-0.00$ | D $\pm 0.5$ | G Max | J (UNEF)      |
|------------|-------|-------------|----------------------|-------------|-------|---------------|
| 10SL       | 23.00 | 18.2        | 14.28                | 2.8         | 40.5  | 5/8-24 NEF    |
| 14S        | 29.00 | 24.6        | 14.28                | 3.2         | 43.5  | 3/4-20 NEF    |
| 16S        | 29.00 | 27.4        | 14.28                | 3.2         | 40.5  | 7/8-20 NEF    |
| 16         | 33.00 | 27.4        | 19.05                | 3.2         | 54.0  | 7/8-20 NEF    |
| 18         | 34.93 | 30.8        | 19.05                | 4.0         | 54.0  | 1-20 NEF      |
| 20         | 38.10 | 34.2        | 19.05                | 4.0         | 56.0  | 1 3/16-18NEF  |
| 22         | 41.28 | 37.4        | 19.05                | 4.0         | 56.0  | 1 3/16-18NEF  |
| 24         | 44.45 | 40.9        | 20.63                | 4.0         | 60.0  | 1 7/16-18 NEF |
| 28         | 50.80 | 46.7        | 20.63                | 4.0         | 60.0  | 1 7/16-18 NEF |
| 32         | 57.15 | 53.4        | 22.23                | 4.0         | 70.0  | 1 7/16-18 NEF |
| 36         | 63.50 | 59.6        | 22.23                | 4.0         | 70.0  | 2-18 NS       |
| 48         | 85.00 | 83.0        | 48.50                | 8.0         | 170.0 | 2 1/4-16UN    |

All dimensions for reference only

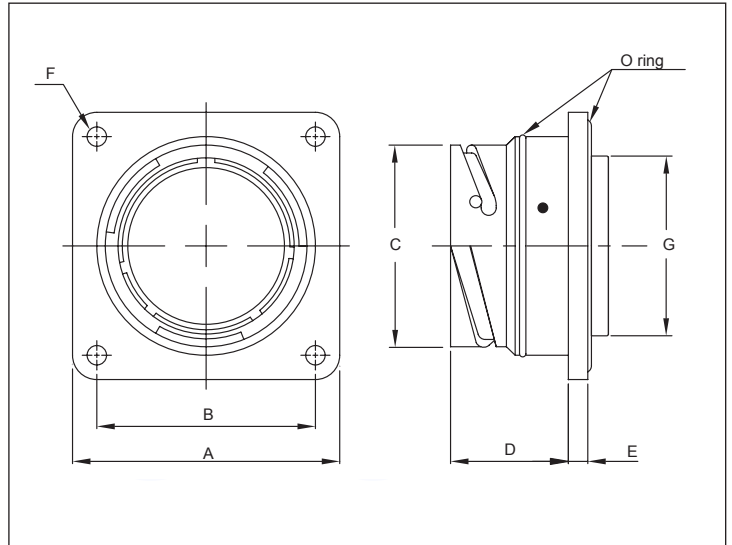
# Amphenol Bayonet Coupling Connectors

## ADG02A, ADGC02A

### Box mounting receptacle



under 36 size shell only



over 48 size shell only

(mm)

| Shell Size | □ A<br>±0.79 | □ B<br>±0.79 | C<br>±0.3 | D<br>+0.79<br>-0.00 | E<br>±0.5 | F<br>+0.25<br>-0.12 | G<br>Max |
|------------|--------------|--------------|-----------|---------------------|-----------|---------------------|----------|
| 10SL       | 25.40        | 18.26        | 18.2      | 14.28               | 2.8       | 3.20                | 16.2     |
| 14S        | 30.18        | 23.01        | 24.6      | 14.28               | 3.2       | 3.20                | 19.2     |
| 16S        | 32.54        | 24.61        | 27.4      | 14.28               | 3.2       | 3.20                | 22.4     |
| 16         | 32.54        | 24.61        | 27.4      | 19.05               | 3.2       | 3.20                | 22.4     |
| 18         | 34.93        | 26.97        | 30.8      | 19.05               | 4.0       | 3.20                | 25.6     |
| 20         | 38.10        | 29.36        | 34.2      | 19.05               | 4.0       | 3.20                | 29       |
| 22         | 41.28        | 31.75        | 37.4      | 19.05               | 4.0       | 3.20                | 32.2     |
| 24         | 44.45        | 34.93        | 40.9      | 20.63               | 4.0       | 3.70                | 35.3     |
| 28         | 50.80        | 36.67        | 46.7      | 20.63               | 4.0       | 3.70                | 41.4     |
| 32         | 57.15        | 44.45        | 53.4      | 22.23               | 4.0       | 4.30                | 47.8     |
| 36         | 63.50        | 49.23        | 59.6      | 22.23               | 4.0       | 4.30                | 54.1     |
| 48         | 110.00       | 90.00        | 83.0      | 48.50               | 8.0       | 8.50                | 74.0     |
| 70         | 190.00       | 160.00       | 145.5     | 70.00               | 8.0       | 11.00               | 136.5    |

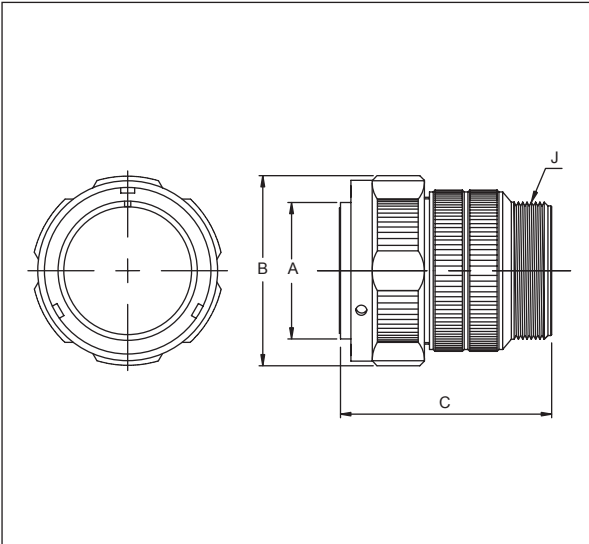
All dimensions for reference only

Amphenol®

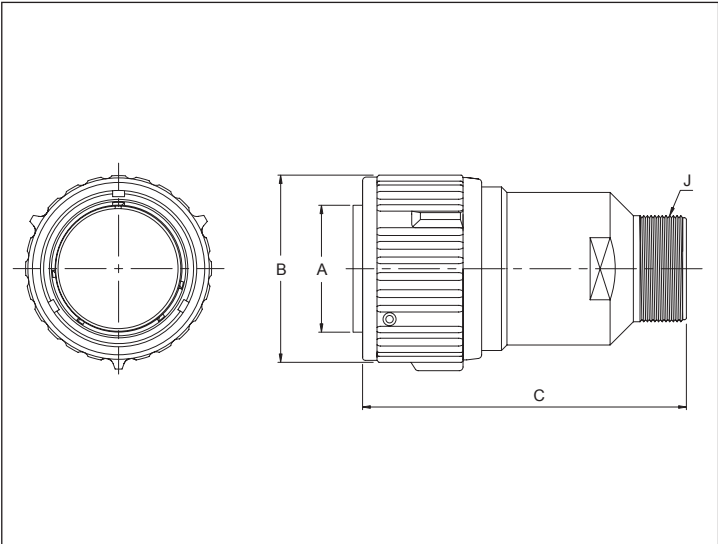
Amphenol Bayonet Coupling Connectors

ADG06A, ADGC06A

Straight Plug



under 36 size shell only



over 48 size shell only

DaeShin

(mm)

| Shell Size | A<br>+0.00<br>-0.38 | B<br>Max | C<br>Max | J<br>(UNEF)    |
|------------|---------------------|----------|----------|----------------|
| 10SL       | 11.33               | 28.0     | 40.0     | 5/8-24 NEF     |
| 14S        | 17.15               | 35.0     | 44.0     | 3/4-20 UNEF    |
| 16S        | 20.45               | 38.0     | 40.0     | 7/8-20 UNEF    |
| 16         | 20.45               | 38.0     | 52.5     | 7/8-20 UNEF    |
| 18         | 23.62               | 43.0     | 52.5     | 1-20 UNEF      |
| 20         | 26.67               | 46.0     | 54.0     | 1 3/16-18 UNEF |
| 22         | 29.85               | 49.0     | 54.0     | 1 3/16-18 UNEF |
| 24         | 33.02               | 52.0     | 58.0     | 1 7/16-18 UNEF |
| 28         | 38.61               | 58.5     | 58.0     | 1 7/16-18 UNEF |
| 32         | 44.96               | 65.0     | 69.0     | 1 3/4-18 UNS   |
| 36         | 50.29               | 72.0     | 69.0     | 2-18 UNS       |
| 48         | 68.30               | 101.0    | 177.0    | 2 1/4-16 UN    |

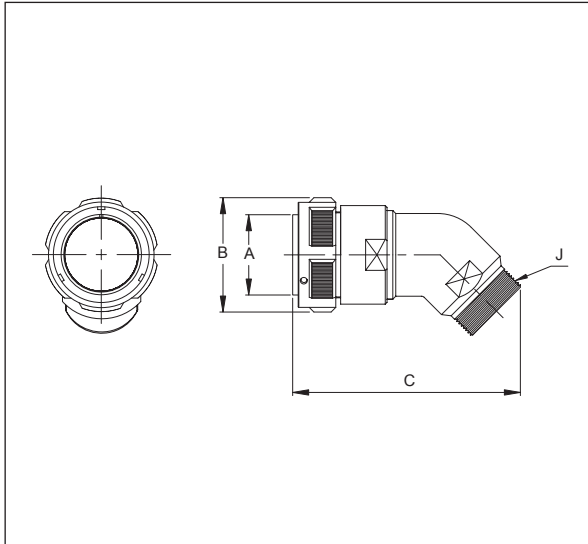
All dimensions for reference only

**Amphenol®**

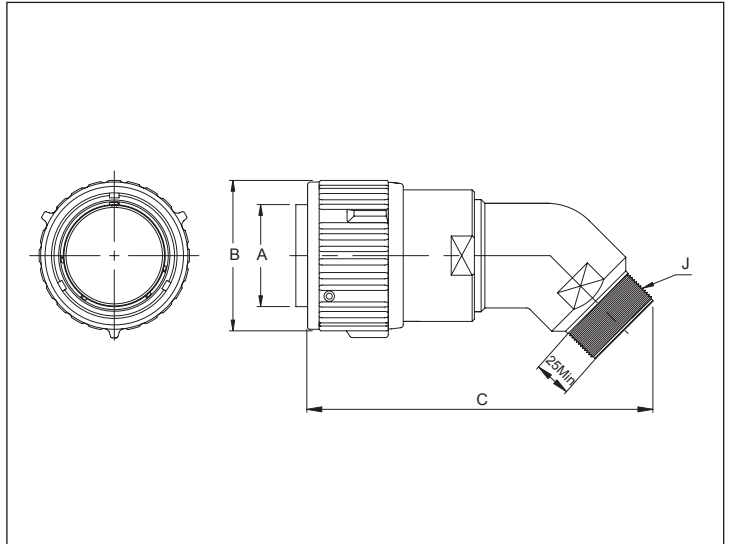
## Amphenol Bayonet Coupling Connectors

### ADG08A, ADGC08A

45° Angle plug



under 36 size shell only



over 48 size shell only

DaeShin

(mm)

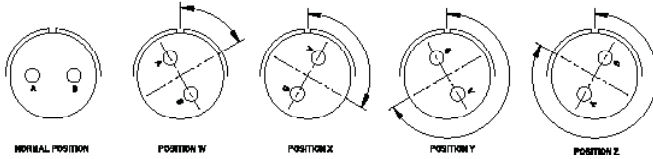
| Shell Size | A<br>+0.00<br>-0.38 | B<br>Max | C<br>Max | J<br>(UNEF) |
|------------|---------------------|----------|----------|-------------|
| 36         | 50.3                | 72.0     | 136.0    | 2-18 UN     |
| 48         | 68.3                | 101.0    | 232.0    | 2 1/4-16 UN |
| 70         | 126.3               | 161.0    | 233.0    | 2 1/4-16 UN |

All dimensions for reference only

## Amphenol Bayonet Coupling Connectors

### ADG, ADGC Series

### Insert Arrangements & Alternate Positioning



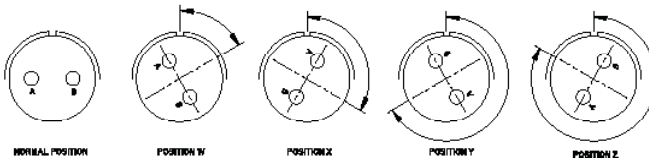
| Contact Arrangement | Service Rating | Total Contacts | Contact Size |   |   |    |    | Alternate Position-Degrees |     |     |     |
|---------------------|----------------|----------------|--------------|---|---|----|----|----------------------------|-----|-----|-----|
|                     |                |                | 0            | 4 | 8 | 12 | 16 | W                          | X   | Y   | Z   |
| 10SL-2              | A              | 1              |              |   |   |    | 1  | -                          | -   | -   | -   |
| 10SL-3              | A              | 3              |              |   |   |    | 3  | -                          | -   | -   | -   |
| 10SL-4              | A              | 2              |              |   |   |    | 2  | 63                         | -   | -   | -   |
| 14S-2               | Inst           | 4              |              |   |   |    | 4  | -                          | 120 | 240 | -   |
| 14S-5               | Inst           | 5              |              |   |   |    | 5  | -                          | 110 | -   | -   |
| 14S-6               | Inst           | 6              |              |   |   |    | 6  | -                          | -   | -   | -   |
| 14S-7               | A              | 3              |              |   |   |    | 3  | 90                         | 180 | 270 | -   |
| 14S-9               | A              | 2              |              |   |   |    | 2  | 70                         | 145 | 215 | 290 |
| 14S-07              | A              | 7              |              |   |   |    | 7  | -                          | -   | -   | -   |
| 16S-1               | A              | 7              |              |   |   |    | 7  | 80                         | -   | -   | 280 |
| 16S-4               | D              | 2              |              |   |   |    | 2  | 35                         | 110 | 250 | 325 |
| 16S-5               | A              | 3              |              |   |   |    | 3  | 70                         | 145 | 215 | 290 |
| 16S-8               | A              | 5              |              |   |   |    | 5  | -                          | 170 | 265 | -   |
| 16-9                | A              | 4              |              |   |   | 2  | 2  | 35                         | 110 | 250 | 325 |
| 16-10               | A              | 3              |              |   |   | 3  |    | 90                         | 180 | 270 | -   |
| 16-11               | A              | 2              |              |   |   | 2  |    | 35                         | 110 | 250 | 325 |
| 16-12               | A              | 1              |              | 1 |   |    |    | -                          | -   | -   | -   |
| 16-13               | A              | 2              |              |   |   | 2  |    | 35                         | 110 | 250 | 325 |
| 18-1                | A/Inst         | 10             |              |   |   |    | 10 | 70                         | 145 | 215 | 290 |
| 18-3                | D              | 2              |              |   |   | 2  |    | 35                         | 110 | 250 | 325 |
| 18-4                | D              | 4              |              |   |   |    | 4  | 35                         | 110 | 250 | 325 |
| 18-5                | D              | 3              |              |   |   | 2  | 1  | 80                         | 110 | 250 | 280 |
| 18-8                | A              | 8              |              |   |   | 1  | 7  | 70                         | -   | -   | 290 |
| 18-9                | Inst.          | 7              |              |   |   | 2  | 5  | 80                         | 110 | 250 | 280 |
| 18-10               | A              | 4              |              |   |   | 4  |    | -                          | 120 | 240 | -   |
| 18-11               | A              | 5              |              |   |   | 5  |    | -                          | 170 | 265 |     |
| 18-12               | A              | 6              |              |   |   |    | 6  | 80                         | -   | -   | 280 |
| 18-13               | A              | 4              |              |   | 1 | 3  |    | 80                         | 110 | 250 | 280 |
| 18-15               | A              | 4              |              |   |   | 4  |    | -                          | 120 | 240 | -   |
| 18-19               | A              | 10             |              |   |   |    | 10 | -                          | 120 | 240 | -   |
| 18-20               | A              | 5              |              |   |   |    | 5  | 90                         | 180 | 270 | -   |
| 18-21               | A              | 3              |              |   |   | 3  |    | -                          | -   | -   |     |

| Contact Arrangement | Service Rating | Total Contacts | Contact Size |   |   |    |    | Alternate Position-Degrees |     |     |     |
|---------------------|----------------|----------------|--------------|---|---|----|----|----------------------------|-----|-----|-----|
|                     |                |                | 0            | 4 | 8 | 12 | 16 | W                          | X   | Y   | Z   |
| 18-22               | D              | 3              |              |   |   |    | 3  | 70                         | 145 | 215 | 290 |
| 18-32               | A              | 8              |              |   |   |    | 8  | -                          | -   | -   | -   |
| 20-2                | D              | 1              | 1            |   |   |    |    | -                          | -   | -   | -   |
| 20-3                | D              | 3              |              |   |   | 3  |    | 40                         | 145 | 215 | 290 |
| 20-4                | D              | 4              |              |   |   | 4  |    | 45                         | 110 | 250 | -   |
| 20-7                | D/A            | 8              |              |   |   |    | 8  | 80                         | 110 | 250 | 280 |
| 20-8                | Inst.          | 6              |              |   | 2 |    | 4  | 80                         | 110 | 250 | 280 |
| 20-11               | Inst.          | 13             |              |   |   |    | 13 | -                          | -   | -   | -   |
| 20-15               | A              | 7              |              |   |   | 7  |    | 80                         | -   | -   | 280 |
| 20-16               | A              | 9              |              |   |   | 2  | 7  | 80                         | 110 | 250 | 280 |
| 20-17               | A              | 6              |              |   |   | 5  | 1  | 90                         | 180 | 270 | -   |
| 20-18               | A              | 9              |              |   |   | 3  | 6  | 35                         | 110 | 250 | 325 |
| 20-19               | A              | 3              |              |   | 3 |    |    | 90                         | 180 | 270 | -   |
| 20-22               | A              | 6              |              |   | 3 |    | 3  | 80                         | 110 | 250 | 280 |
| 20-23               | A              | 2              |              |   | 2 |    |    | 35                         | 110 | 250 | 325 |
| 20-27               | A              | 14             |              |   |   |    | 14 | 35                         | 110 | 250 | 325 |
| 20-29               | A              | 17             |              |   |   |    | 17 | 80                         | -   | -   | 20  |
| 20-33               | A              | 11             |              |   |   |    | 11 | -                          | -   | -   | -   |
| 20-01               | A              | 10             |              |   |   |    | 10 | -                          | -   | -   | -   |
| 22-1                | D              | 2              |              |   | 2 |    |    | 35                         | 110 | 250 | 325 |
| 22-2                | D              | 3              |              |   | 3 |    |    | 70                         | 145 | 215 | 290 |
| 22-4                | A              | 4              |              |   | 2 | 2  |    | 35                         | 110 | 250 | 325 |
| 22-7                | E              | 1              | 1            |   |   |    |    | -                          | -   | -   | -   |
| 22-8                | E              | 2              |              |   |   | 2  |    | 35                         | 110 | 250 | 325 |
| 22-9                | E              | 3              |              |   |   | 3  |    | 70                         | 145 | 215 | 290 |
| 22-10               | E              | 4              |              |   |   |    | 4  | 35                         | 110 | 250 | 325 |
| 22-11               | B              | 2              |              |   |   |    | 2  | 35                         | 110 | 250 | 325 |
| 22-12               | D              | 5              |              |   | 2 |    | 3  | 80                         | 110 | 250 | 280 |
| 22-13               | D/A            | 5              |              |   |   | 4  | 1  | 34                         | 110 | 250 | 325 |
| 22-14               | A              | 19             |              |   |   |    | 19 | 80                         | 110 | 250 | 280 |
| 22-15               | E/A            | 6              |              |   |   | 5  | 1  | 80                         | 110 | 250 | 280 |
| 22-18               | A/D            | 8              |              |   |   |    | 8  | 80                         | 110 | 250 | 280 |

# Amphenol Bayonet Coupling Connectors

## ADG, ADGC Series

### Insert Arrangements & Alternate Positioning



| Contact Arrange-ment | Service Rating | Total Contacts | Contact Size |   |   |    |    | Alternate Position-Degrees |     |     |     |  |
|----------------------|----------------|----------------|--------------|---|---|----|----|----------------------------|-----|-----|-----|--|
|                      |                |                | 0            | 4 | 8 | 12 | 16 | W                          | X   | Y   | Z   |  |
| 22-19                | A              | 14             |              |   |   |    | 14 | 80                         | 110 | 250 | 280 |  |
| 22-20                | A              | 9              |              |   |   |    | 9  | 35                         | 110 | 250 | 325 |  |
| 22-21                | A              | 3              | 1            |   |   |    | 2  | -                          | -   | -   | -   |  |
| 22-22                | A              | 4              |              |   | 4 |    |    | -                          | 110 | 250 | -   |  |
| 22-23                | D/A            | 8              |              |   |   | 8  |    | 35                         | -   | 250 | -   |  |
| 22-27                | D/A            | 9              |              |   | 1 |    | 8  | 80                         | -   | 250 | 280 |  |
| 22-28                | A              | 7              |              |   |   | 7  |    | 80                         | -   | -   | 280 |  |
| 24-2                 | D              | 7              |              |   |   | 7  |    | 80                         | -   | -   | 28  |  |
| 24-5                 | A              | 16             |              |   |   |    | 16 | 80                         | 110 | 250 | 280 |  |
| 24-6                 | D/A            | 8              |              |   |   | 8  |    | 80                         | 110 | 250 | 280 |  |
| 24-7                 | A              | 16             |              |   |   | 2  | 14 | 80                         | 110 | 250 | 280 |  |
| 24-9                 | A              | 2              |              | 2 |   |    |    | 35                         | 110 | 250 | 325 |  |
| 24-10                | A              | 7              |              |   | 7 |    |    | 80                         | -   | -   | 280 |  |
| 24-11                | A              | 9              |              |   | 3 | 6  |    | 35                         | 110 | 250 | 32  |  |
| 24-12                | A              | 5              |              | 2 |   | 3  |    | 80                         | 110 | 250 | 280 |  |
| 24-20                | D              | 11             |              |   |   | 2  | 9  | 80                         | 110 | 250 | 280 |  |
| 24-22                | D              | 4              |              |   | 4 |    |    | 45                         | 110 | 250 | -   |  |
| 24-28                | Inst           | 24             |              |   |   |    | 24 | 80                         | 110 | 250 | 280 |  |
| 24-02                | A              | 9              |              |   |   | 9  |    | -                          | -   | -   | -   |  |
| 24-03                | A              | 12             |              |   |   |    | 12 | -                          | -   | -   | -   |  |
| 28-1                 | D/A            | 9              |              |   | 3 | 6  |    | 80                         | 110 | 250 | 280 |  |
| 28-3                 | E              | 3              |              |   | 3 |    |    | 70                         | 145 | 215 | 290 |  |
| 28-6                 | D              | 3              |              | 3 |   |    |    | 70                         | 145 | 215 | 290 |  |
| 28-7                 | D              | 2              |              | 2 |   |    |    | 35                         | 110 | 250 | 325 |  |
| 28-9                 | D              | 12             |              |   |   | 6  | 6  | 80                         | 110 | 250 | 280 |  |
| 28-10                | D/A            | 7              |              | 2 | 2 | 3  |    | 80                         | 110 | 250 | 280 |  |
| 28-11                | A              | 22             |              |   |   | 4  | 18 | 80                         | 110 | 250 | 280 |  |
| 28-12                | A              | 26             |              |   |   |    | 26 | 90                         | 180 | 270 | -   |  |
| 28-15                | A              | 35             |              |   |   |    | 35 | 80                         | 110 | 250 | 280 |  |
| 28-16                | A              | 20             |              |   |   |    | 20 | 80                         | 110 | 250 | 280 |  |
| 28-17                | B/D/A          | 15             |              |   |   |    | 15 | -                          | -   | -   | -   |  |
| 28-18                | A              | 12             |              |   |   |    | 12 | -                          | -   | -   | -   |  |

| Contact Arrange-ment | Service Rating | Total Contacts | Contact Size |   |   |    |    | Alternate Position-Degrees |     |     |     |  |
|----------------------|----------------|----------------|--------------|---|---|----|----|----------------------------|-----|-----|-----|--|
|                      |                |                | 0            | 4 | 8 | 12 | 16 | W                          | X   | Y   | Z   |  |
| 28-19                | B/D/A          | 10             |              |   |   | 4  | 6  | 80                         | 110 | 250 | 280 |  |
| 28-20                | A              | 14             |              |   |   | 10 | 4  | 80                         | 110 | 250 | 280 |  |
| 28-21                | A              | 37             |              |   |   |    | 37 | 80                         | 110 | 250 | 280 |  |
| 28-22                | D              | 6              |              | 3 |   |    | 3  | 70                         | 145 | 215 | 290 |  |
| 28-05                | A              | 5              |              |   | 5 |    |    | -                          | -   | -   | -   |  |
| 28-51                | A              | 12             |              |   |   | 12 |    | -                          | -   | -   | -   |  |
| 32-1                 | E/D            | 5              | 2            |   |   | 3  |    | 80                         | 110 | 250 | 280 |  |
| 32-5                 | D              | 2              | 2            |   |   |    |    | 35                         | 110 | 250 | 325 |  |
| 32-6                 | A              | 23             |              | 2 | 3 | 2  | 16 | 80                         | 110 | 250 | 325 |  |
| 32-7                 | INST/A         | 35             |              |   |   | 7  | 28 | 80                         | 125 | 235 | 280 |  |
| 32-8                 | A              | 30             |              |   |   | 6  | 24 | 80                         | 125 | 235 | 280 |  |
| 32-9                 | D              | 14             |              | 2 |   |    | 12 | 80                         | 110 | 250 | 280 |  |
| 32-15                | D              | 8              | 2            |   |   | 6  |    | 35                         | 110 | 250 | 280 |  |
| 32-17                | D              | 4              |              | 4 |   |    |    | 45                         | 110 | 250 | 280 |  |
| 32-22                | A/U/V          | 54             |              |   |   |    | 54 | 80                         | 110 | 250 | 280 |  |
| 32-03                | A              | 3              |              | 3 |   |    |    | -                          | -   | -   | -   |  |
| 32-59                | A              | 42             |              |   | 2 |    | 40 | -                          | -   | -   | -   |  |
| 36-1                 | D              | 22             |              |   |   | 4  | 18 | 80                         | 110 | 250 | 280 |  |
| 36-3                 | D              | 6              | 3            |   |   | 3  |    | 70                         | 145 | 215 | 290 |  |
| 36-4                 | D/A            | 3              | 3            |   |   |    |    | 70                         | 145 | 215 | 290 |  |
| 36-5                 | A              | 4              | 4            |   |   |    |    | -                          | 120 | 240 | -   |  |
| 36-7                 | A              | 47             |              |   |   | 7  | 40 | 80                         | 110 | 250 | 280 |  |
| 36-8                 | A              | 47             |              |   |   | 1  | 46 | 80                         | 110 | 250 | 280 |  |
| 36-9                 | A              | 31             |              | 1 | 2 | 14 | 14 | 80                         | 125 | 235 | 280 |  |
| 36-10                | A              | 48             |              |   |   |    | 48 | 80                         | 125 | 235 | 280 |  |
| 36-15                | D/A            | 35             |              |   |   |    | 35 | 60                         | 125 | 245 | 305 |  |
| 36-30                | A              | 30             |              |   |   | 30 |    | -                          | -   | -   | -   |  |
| 36-40                | A              | 40             |              |   |   | 22 | 18 | -                          | -   | -   | -   |  |
| 36-52                | A              | 52             |              |   |   |    | 52 | 72                         | 144 | 216 | 288 |  |
| 36-02                | A              | 27             |              |   |   | 27 |    | -                          | -   | -   | -   |  |
| 36-03                | A              | 20             |              |   |   | 20 |    | -                          | -   | -   | -   |  |
| 36-04                | A              | 22             |              |   |   | 22 |    | -                          | -   | -   | -   |  |

## Amphenol Bayonet Coupling Connectors ADG, ADGC Series

Special insert Arrangements for transfer of High Power & Signal

| Contact Arrangement | Service Rating | Total Contacts | Contact Size |   |   |    |     |    | Alternate Position Degrees |     |   |   |
|---------------------|----------------|----------------|--------------|---|---|----|-----|----|----------------------------|-----|---|---|
|                     |                |                | 4/0          | 0 | 4 | 8  | 12  | 16 | W                          | X   | Y | Z |
| 48-03               | B              | 3              | 3            |   |   |    |     |    | 30                         | -   | - | - |
| 48-04               | D              | 4              | 4            |   |   |    |     |    | 30                         | -   | - | - |
| 48-06               | D              | 6              | 4            |   |   |    | 2   |    | 30                         | -   | - | - |
| 48-06A              | D              | 6              |              | 5 | 1 |    |     |    | 30                         | -   | - | - |
| 48-06B              | B              | 6              | 3            |   |   |    | 3   |    | 30                         | -   | - |   |
| 48-66               | A              | 66             |              |   |   |    | 66  |    | 80                         | 110 | - | - |
| 48-74               | A              | 74             |              |   |   |    |     | 74 | 60                         | 120 | - | - |
| 48-90               | A              | 90             |              |   |   | 10 | 80  |    | -                          | -   | - | - |
| 48-106              | A              | 106            |              |   |   |    | 106 |    | -                          | -   | - | - |

\*Railway only

DaeShin

# Amphenol Bayonet Coupling Connectors

## ADG, ADGC Series

### Contact Arrangements

|                    |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |  |  |
|                    |                                                                                   | Front of<br>Socket Insert                                                         | Front of<br>Socket Insert                                                         |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| Insert Arrangement | 10SL-2                                                                            | 10SL-3                                                                            | 10SL-4                                                                            | 14SL-1                                                                             | 14SL-2                                                                              | 14S-5                                                                               | 14S-6                                                                               |
| Service Rating     | A                                                                                 | A                                                                                 | A                                                                                 | A                                                                                  | Inst.                                                                               | Inst.                                                                               | Inst.                                                                               |
| Number of Contacts | 1                                                                                 | 3                                                                                 | 2                                                                                 | 3                                                                                  | 4                                                                                   | 5                                                                                   | 6                                                                                   |
| Contact Size       | 16                                                                                | 16                                                                                | 16                                                                                | 16                                                                                 | 16                                                                                  | 16                                                                                  | 16                                                                                  |

|                    |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |  |  |
| Insert Arrangement | 14S-7                                                                               | 14S-9                                                                               | 14S-07                                                                              | 16S-1                                                                                | 16S-4                                                                                 | 16S-5                                                                                 | 16S-8                                                                                 |
| Service Rating     | A                                                                                   | A                                                                                   | A                                                                                   | A                                                                                    | D                                                                                     | A                                                                                     | A                                                                                     |
| Number of Contacts | 3                                                                                   | 2                                                                                   | 7                                                                                   | 7                                                                                    | 2                                                                                     | 3                                                                                     | 5                                                                                     |
| Contact Size       | 16                                                                                  | 16                                                                                  | 16                                                                                  | 16                                                                                   | 16                                                                                    | 16                                                                                    | 16                                                                                    |

|                    |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |  |
| Insert Arrangement | 16-9                                                                                | 16-10                                                                               | 16-11                                                                               | 16-12                                                                                | 16-13                                                                                 | 18-1                                                                                  |
| Service Rating     | A                                                                                   | A                                                                                   | A                                                                                   | A                                                                                    | A                                                                                     | B,C,F,G=A; Bal.=Inst.                                                                 |
| Number of Contacts | 2 2                                                                                 | 3                                                                                   | 2                                                                                   | 1                                                                                    | 2                                                                                     | 10                                                                                    |
| Contact Size       | 12 16                                                                               | 12                                                                                  | 12                                                                                  | 4                                                                                    | 12                                                                                    | 16                                                                                    |








CONTACT LEGEND

16 12 8 4 0 4/0

## Amphenol Bayonet Coupling Connectors ADG, ADGC Series Contact Arrangements

|                    |      |      |       |       |       |       |
|--------------------|------|------|-------|-------|-------|-------|
|                    |      |      |       |       |       |       |
| Insert Arrangement | 18-3 | 18-4 | 18-5  | 18-8  | 18-9  | 18-10 |
| Service Rating     | D    | D    | D     | A     | Inst. | A     |
| Number of Contacts | 2    | 4    | 2 1   | 1 7   | 2 5   | 4     |
| Contact Size       | 12   | 16   | 12 16 | 12 16 | 12 16 | 12    |

|                    |       |       |       |       |       |       |
|--------------------|-------|-------|-------|-------|-------|-------|
|                    |       |       |       |       |       |       |
| Insert Arrangement | 18-11 | 18-12 | 18-13 | 18-15 | 18-19 | 18-20 |
| Service Rating     | A     | A     | A     | A     | A     | A     |
| Number of Contacts | 5     | 6     | 1 3   | 4     | 10    | 5     |
| Contact Size       | 12    | 16    | 8 12  | 12    | 16    | 16    |

|                    |       |       |       |      |      |      |
|--------------------|-------|-------|-------|------|------|------|
|                    |       |       |       |      |      |      |
| Insert Arrangement | 18-21 | 18-22 | 18-32 | 20-2 | 20-3 | 20-4 |
| Service Rating     | A     | D     | A     | D    | D    | D    |
| Number of Contacts | 3     | 3     | 8     | 1    | 3    | 4    |
| Contact Size       | 12    | 16    | 16    | 0    | 12   | 12   |



# Amphenol Bayonet Coupling Connectors

## ADG, ADGC Series

### Contact Arrangements

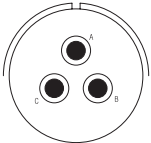
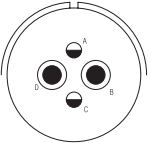
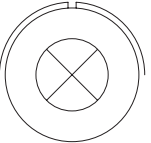
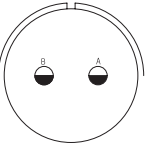
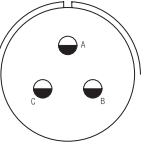
|                    |                 |       |       |       |       |
|--------------------|-----------------|-------|-------|-------|-------|
|                    |                 |       |       |       |       |
| Insert Arrangement | 20-7            | 20-8  | 20-11 | 20-15 | 20-16 |
| Service Rating     | H,G=D;C,D,E,F=A | Inst. | Inst. | A     | A     |
| Number of Contacts | 8               | 2 4   | 13    | 7     | 2 7   |
| Contact Size       | 16              | 8 16  | 16    | 12    | 12 16 |
|                    |                 |       |       |       |       |
| Insert Arrangement | 20-17           | 20-18 | 20-19 | 20-22 | 20-23 |
| Service Rating     | A               | A     | A     | A     | A     |
| Number of Contacts | 5 1             | 3 6   | 3     | 3 3   | 2     |
| Contact Size       | 12 16           | 12 16 | 8     | 8 16  | 8     |
|                    |                 |       |       |       |       |
| Insert Arrangement | 20-27           | 20-29 | 20-33 | 20-01 | 22-1  |
| Service Rating     | A               | A     | A     | A     | D     |
| Number of Contacts | 14              | 17    | 11    | 10    | 2     |
| Contact Size       | 16              | 16    | 16    | 16    | 8     |

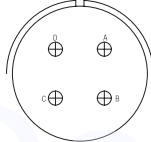
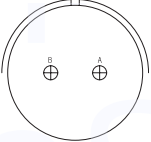
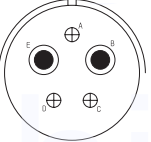
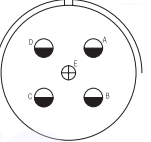
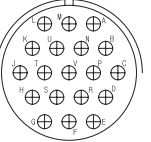
CONTACT LEGEND 16 12 8 4 0 4/0

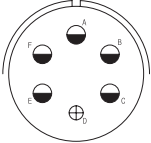
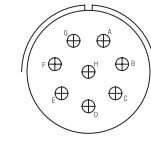
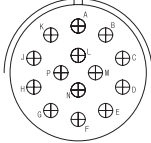
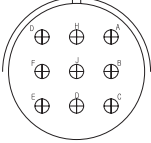
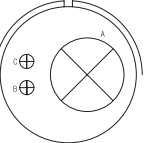
## Amphenol Bayonet Coupling Connectors

### ADG, ADGC Series

### Contact Arrangements

|                    |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |
| Insert Arrangement | 22-2                                                                              | 22-4                                                                              | 22-7                                                                              | 22-8                                                                                | 22-9                                                                                |
| Service Rating     | D                                                                                 | A                                                                                 | E                                                                                 | E                                                                                   | E                                                                                   |
| Number of Contacts | 3                                                                                 | 2 2                                                                               | 1                                                                                 | 2                                                                                   | 3                                                                                   |
| Contact Size       | 8                                                                                 | 8 12                                                                              | 0                                                                                 | 12                                                                                  | 12                                                                                  |

|                    |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |
| Insert Arrangement | 22-10                                                                               | 22-11                                                                               | 22-12                                                                               | 22-13                                                                                 | 22-14                                                                                 |
| Service Rating     | E                                                                                   | B                                                                                   | D                                                                                   | E=D; A,B,C,D=A                                                                        | A                                                                                     |
| Number of Contacts | 4                                                                                   | 2                                                                                   | 2 3                                                                                 | 4 1                                                                                   | 19                                                                                    |
| Contact Size       | 16                                                                                  | 16                                                                                  | 8 16                                                                                | 12 16                                                                                 | 16                                                                                    |

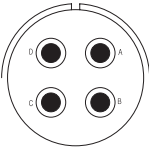
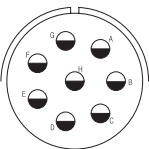
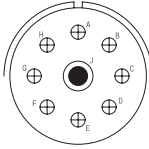
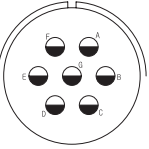
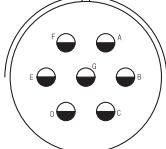
|                    |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |
| Insert Arrangement | 22-15                                                                               | 20-18                                                                               | 22-19                                                                               | 22-20                                                                                 | 22-21                                                                                 |
| Service Rating     | D=E; A,B,C,E,F=A                                                                    | A,B,F,G,H=D; C,D,E=A                                                                | A                                                                                   | A                                                                                     | A                                                                                     |
| Number of Contacts | 5 1                                                                                 | 8                                                                                   | 14                                                                                  | 9                                                                                     | 1 2                                                                                   |
| Contact Size       | 12 16                                                                               | 16                                                                                  | 16                                                                                  | 16                                                                                    | 0 16                                                                                  |



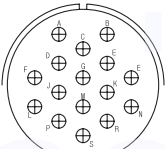
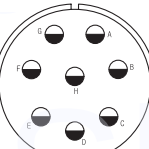
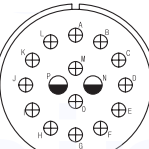
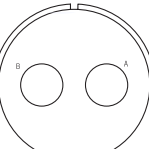
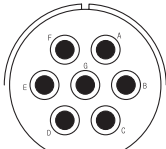
# Amphenol Bayonet Coupling Connectors

## ADG, ADGC Series

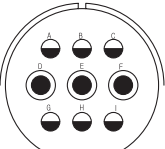
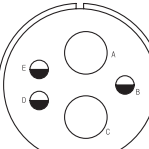
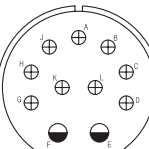
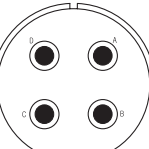
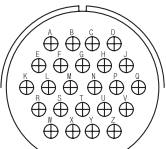
### Contact Arrangements

|                    |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|--------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                    |  |  |  |  |  |
| Insert Arrangement | 22-22                                                                             | 22-23                                                                             | 22-27                                                                              | 22-28                                                                               | 24-2                                                                                |
| Service Rating     | A                                                                                 | H=D; Ba.,=A                                                                       | J=D; Bal.=A                                                                        | A                                                                                   | D                                                                                   |
| Number of Contacts | 4                                                                                 | 8                                                                                 | 1 8                                                                                | 7                                                                                   | 7                                                                                   |
| Contact Size       | 8                                                                                 | 12                                                                                | 8 16                                                                               | 12                                                                                  | 12                                                                                  |

|                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |
| 24-5                                                                                | 24-6                                                                                | 24-7                                                                                 | 24-9                                                                                  | 24-10                                                                                 |
| A                                                                                   | A,G,H=D; Bal.=A                                                                     | A                                                                                    | A                                                                                     | A                                                                                     |
| 16                                                                                  | 8                                                                                   | 2 14                                                                                 | 2                                                                                     | 7                                                                                     |
| 16                                                                                  | 12                                                                                  | 12 16                                                                                | 4                                                                                     | 8                                                                                     |

|                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |
| 24-11                                                                               | 24-12                                                                               | 24-20                                                                                | 24-22                                                                                 | 24-28                                                                                 |
| A                                                                                   | A                                                                                   | D                                                                                    | D                                                                                     | Inst.                                                                                 |
| 3 6                                                                                 | 2 3                                                                                 | 2 9                                                                                  | 4                                                                                     | 24                                                                                    |
| 8 12                                                                                | 4 12                                                                                | 12 16                                                                                | 8                                                                                     | 16                                                                                    |



CONTACT LEGEND 16 12 8 4 0 4/0

# Amphenol Bayonet Coupling Connectors

## ADG, ADGC Series

### Contact Arrangements

|                    |       |       |                   |      |
|--------------------|-------|-------|-------------------|------|
|                    |       |       |                   |      |
| Insert Arrangement | 24-02 | 24-03 | 28-1              | 28-3 |
| Service Rating     | A     | A     | A, J, E=D; Bal.=A | E    |
| Number of Contacts | 9     | 12    | 3 6               | 3    |
| Contact Size       | 12    | 16    | 8 12              | 8    |

|                    |      |      |       |             |
|--------------------|------|------|-------|-------------|
|                    |      |      |       |             |
| Insert Arrangement | 28-6 | 28-7 | 28-9  | 28-10       |
| Service Rating     | D    | D    | D     | G=D; Bal.=A |
| Number of Contacts | 3    | 2    | 6 6   | 2 2 3       |
| Contact Size       | 4    | 4    | 12 16 | 4 8 12      |

|                    |       |       |       |
|--------------------|-------|-------|-------|
|                    |       |       |       |
| Insert Arrangement | 28-11 | 28-12 | 28-15 |
| Service Rating     | A     | A     | A     |
| Number of Contacts | 4 18  | 26    | 35    |
| Contact Size       | 12 16 | 16    | 16    |

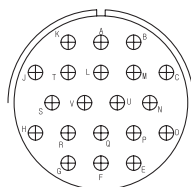


# Amphenol Bayonet Coupling Connectors

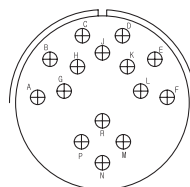
## ADG, ADGC Series

### Contact Arrangements

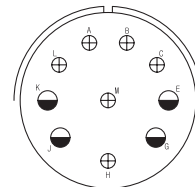
Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size



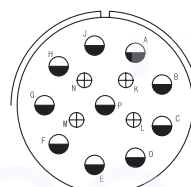
28-16  
A  
20  
16



28-17  
M,N,P=D; A to 1  
15  
16

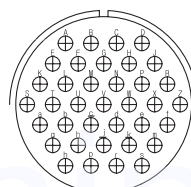


28-19  
H,M=B; A,B=D; Bal.=A  
4 6  
12 16

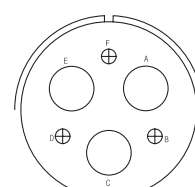


Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

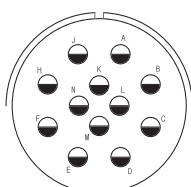
28-20  
A  
10 4  
12 16



28-21  
A  
37  
16

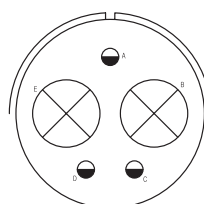


28-22  
D  
3 3  
4 16

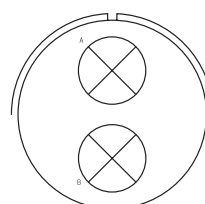


Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

28-51  
A  
12  
12

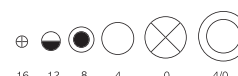


32-1  
A=E; B,C,D,E=D  
2 3  
0 12



32-5  
D  
2  
0

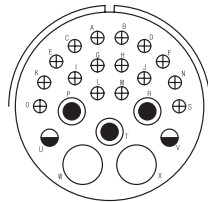
CONTACT LEGEND



# Amphenol Bayonet Coupling Connectors

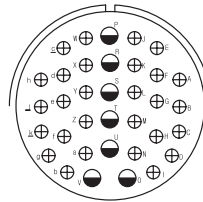
## ADG, ADGC Series

### Contact Arrangements



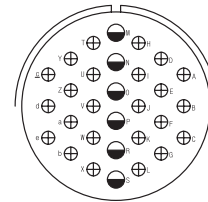
Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

|           |   |
|-----------|---|
| 32-6      | A |
| 2 3 2 16  |   |
| 4 8 12 16 |   |



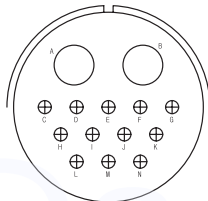
32-7  
A,B,h,j=Inst.; Bal=A

|       |
|-------|
| 7 28  |
| 12 16 |



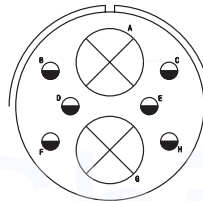
32-8  
A

|       |
|-------|
| 6 24  |
| 12 16 |



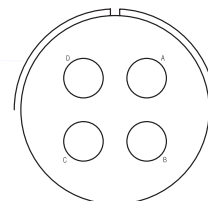
Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

|      |   |
|------|---|
| 32-9 | D |
| 2 12 |   |
| 4 16 |   |



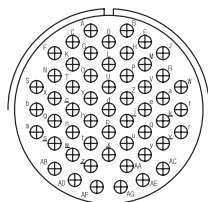
32-15  
D

|      |
|------|
| 2 6  |
| 0 12 |



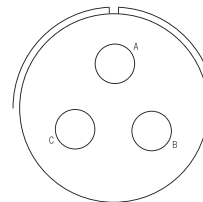
32-17  
D

|     |
|-----|
| 4 4 |
|-----|



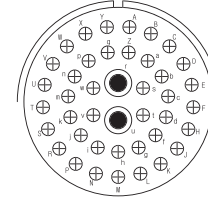
Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

|       |   |
|-------|---|
| 32-22 | A |
| 54    |   |
| 16    |   |



32-03  
A

|     |
|-----|
| 3 4 |
|-----|



32-59  
A

|      |
|------|
| 2 40 |
| 8 16 |



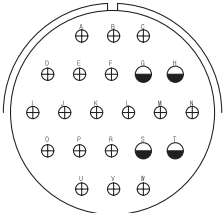
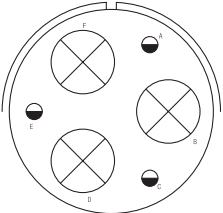
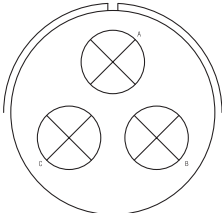
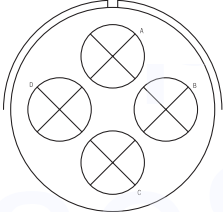
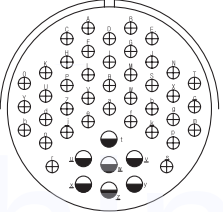
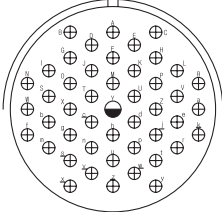
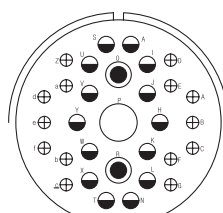
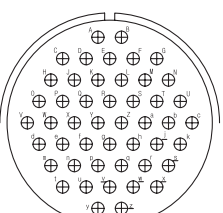
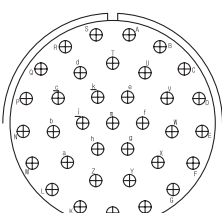
CONTACT LEGEND

16 12 8 4 0 4/0

# Amphenol Bayonet Coupling Connectors

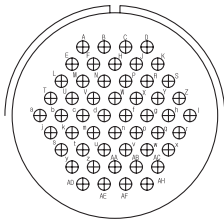
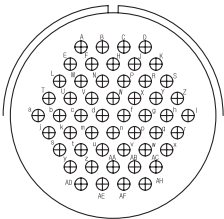
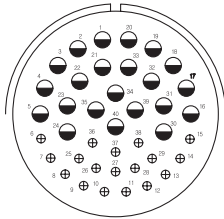
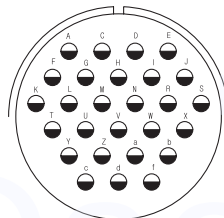
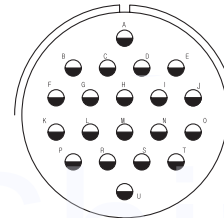
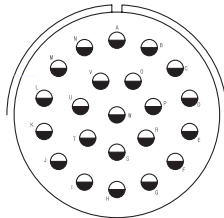
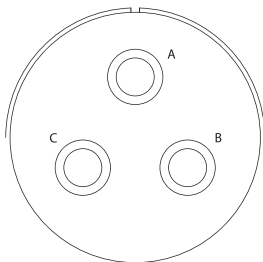
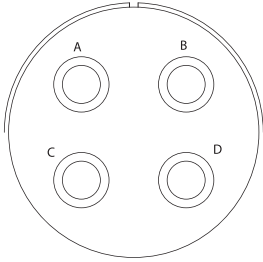
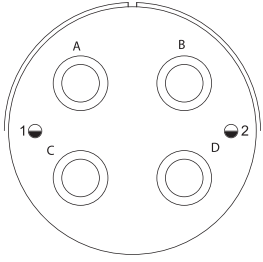
## ADG, ADGC Series

### Contact Arrangements

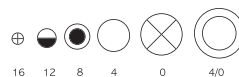
|                    |                                                                                     |                                                                                      |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                    |    |    |    |
| Insert Arrangement | 36-1                                                                                | 36-3                                                                                 | 36-4                                                                                  |
| Service Rating     | D                                                                                   | D                                                                                    | A=D; B,C=A                                                                            |
| Number of Contacts | 4 18                                                                                | 3 3                                                                                  | 3                                                                                     |
| Contact Size       | 12 16                                                                               | 0 12                                                                                 | 0                                                                                     |
|                    |   |   |   |
| Insert Arrangement | 36-5                                                                                | 36-7                                                                                 | 36-8                                                                                  |
| Service Rating     | A                                                                                   | A                                                                                    | A                                                                                     |
| Number of Contacts | 4                                                                                   | 7 40                                                                                 | 1 46                                                                                  |
| Contact Size       | 0                                                                                   | 12 16                                                                                | 12 16                                                                                 |
|                    |  |  |  |
| Insert Arrangement | 36-9                                                                                | 36-10                                                                                | 36-15                                                                                 |
| Service Rating     | A                                                                                   | A                                                                                    | M=D; Bal.=A                                                                           |
| Number of Contacts | 1 2 14 14                                                                           | 48                                                                                   | 35                                                                                    |
| Contact Size       | 4 8 12 16                                                                           | 16                                                                                   | 16                                                                                    |



## Amphenol Bayonet Coupling Connectors ADG, ADGC Series Contact Arrangements

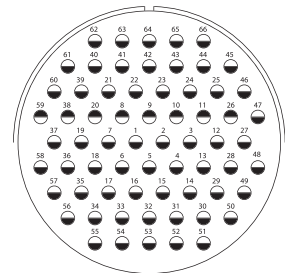
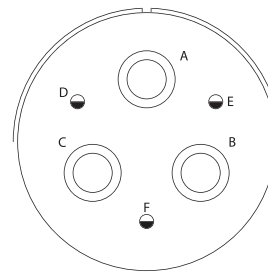
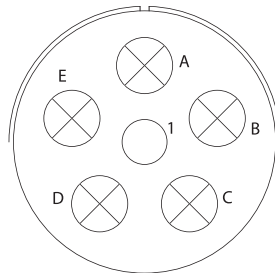
|                    |                                                                                     |                                                                                      |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Insert Arrangement |    |    |    |
|                    | 36-52                                                                               | 36-30                                                                                | 36-40                                                                                 |
|                    | A                                                                                   | A                                                                                    | A                                                                                     |
|                    | 52                                                                                  | 30                                                                                   | 22 18                                                                                 |
| Service Rating     | 16                                                                                  | 12                                                                                   | 12 16                                                                                 |
|                    | Number of Contacts                                                                  |                                                                                      |                                                                                       |
|                    | Contact Size                                                                        |                                                                                      |                                                                                       |
| Insert Arrangement |   |   |   |
|                    | 36-02                                                                               | 36-03                                                                                | 36-04                                                                                 |
|                    | A                                                                                   | A                                                                                    | A                                                                                     |
|                    | 20                                                                                  | 20                                                                                   | 22                                                                                    |
| Service Rating     | 12                                                                                  | 12                                                                                   | 12                                                                                    |
|                    | Number of Contacts                                                                  |                                                                                      |                                                                                       |
|                    | Contact Size                                                                        |                                                                                      |                                                                                       |
| Insert Arrangement |  |  |  |
|                    | *48-03                                                                              | *48-04                                                                               | *48-06                                                                                |
|                    | B                                                                                   | D                                                                                    | D                                                                                     |
|                    | 3                                                                                   | 4                                                                                    | 4 2                                                                                   |
| Service Rating     | 4/0                                                                                 | 4/0                                                                                  | 4/0 12                                                                                |
|                    | Number of Contacts                                                                  |                                                                                      |                                                                                       |
|                    | Contact Size                                                                        |                                                                                      |                                                                                       |
|                    |                                                                                     |                                                                                      |                                                                                       |

CONTACT LEGEND



\* Special arrangement for railway

## Amphenol Bayonet Coupling Connectors ADG, ADGC Series Contact Arrangements



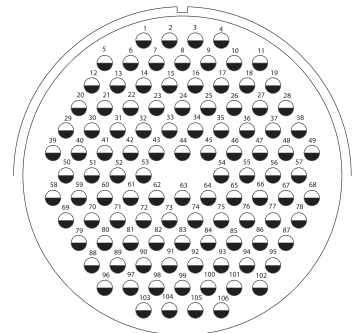
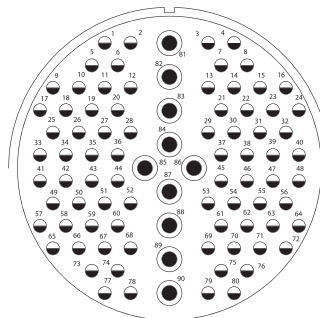
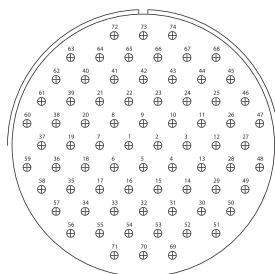
Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

**\*48-06A**  
D  
5 1  
0 4

**\*48-06B**  
B  
3 3  
4/0 12

**\*48-66**  
A  
66  
12

DaeShin



Insert Arrangement  
Service Rating  
Number of Contacts  
Contact Size

**\*48-74**  
A  
74  
16

**\*70-90**  
A  
80 10  
12 8

**\*70-106**  
A  
106  
12

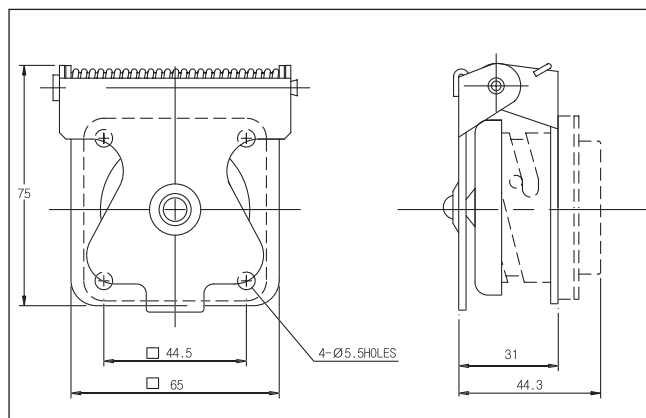


\* Special arrangement for railway

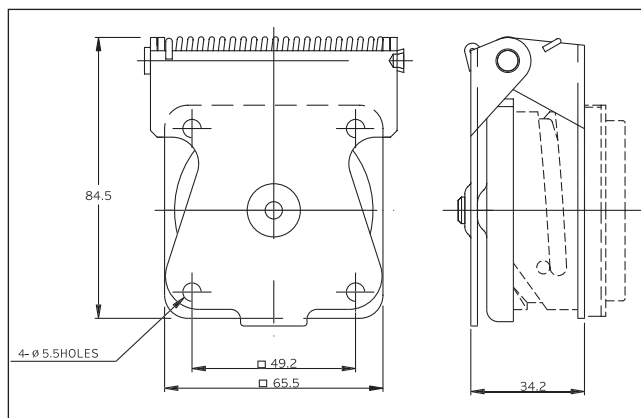
# Amphenol Bayonet Coupling Connectors

## ADG, ADGC Series

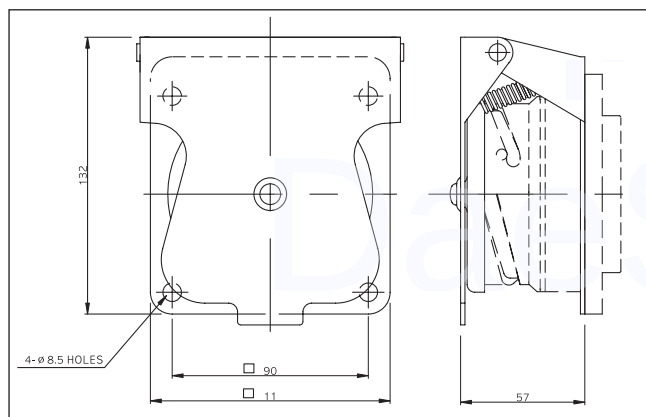
### Accessories



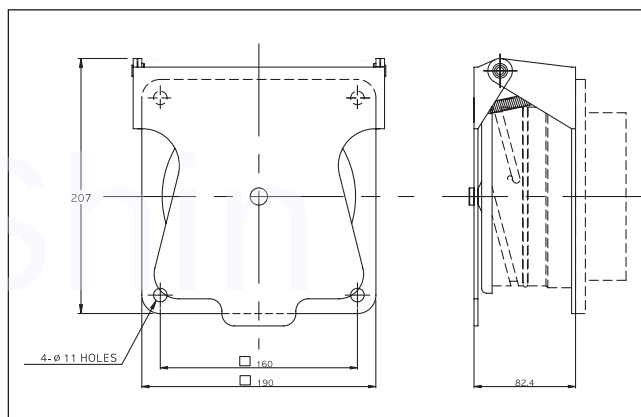
AMDC-28



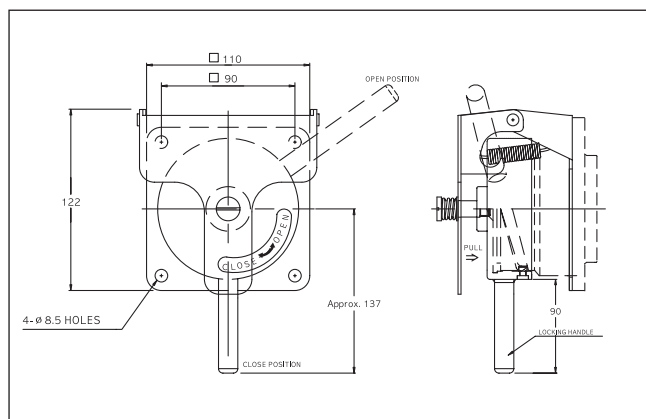
AMDC-36



AMDC-48



AMDC-70



AMPC-MT48



# Amphenol Bayonet Coupling Connectors

## ADG, ADGC Series

### Contact Dimension

Crimp contacts

| Size | mm <sup>2</sup> (Sq) | AWG | Ø A   | Ø B   | Ø C   | Ø D   | L     | Fig    |
|------|----------------------|-----|-------|-------|-------|-------|-------|--------|
| 16   | 0.50~0.75            | 20  | 1.58  | 1.20  | 2.60  | 3.80  | 33.20 | Male   |
| 16   | 1.00~2.00            | 16  | 1.58  | 2.00  | 2.90  | 3.80  | 33.20 |        |
| 16   | 2.50~3.00            | 14  | 1.58  | 2.50  | 3.80  | 3.80  | 33.20 |        |
| 12   | 0.50~0.75            | 20  | 2.40  | 1.20  | 2.60  | 5.70  | 38.50 |        |
| 12   | 1.00~2.00            | 16  | 2.40  | 2.00  | 2.90  | 5.70  | 38.50 |        |
| 12   | 2.50~3.00            | 14  | 2.40  | 2.50  | 3.80  | 5.70  | 38.50 |        |
| 12   | 4.00                 | 12  | 2.40  | 3.00  | 4.80  | 5.70  | 38.50 |        |
| 12   | 6.00                 | 10  | 2.40  | 3.60  | 4.80  | 5.70  | 38.50 |        |
| 8    | 3.00                 | 12  | 3.60  | 2.50  | 3.80  | 8.00  | 41.70 |        |
| 8    | 4.00                 | 11  | 3.60  | 3.00  | 4.80  | 8.00  | 41.70 |        |
| 8    | 6.00                 | 10  | 3.60  | 3.50  | 4.80  | 8.00  | 41.70 |        |
| 8    | 10.00                | 8   | 3.60  | 4.60  | 6.80  | 8.00  | 41.70 | Female |
| 4/0  | 16.00                | 5   | 14.00 | 9.50  | 6.20  | 23.30 | 80.90 |        |
| 4/0  | 25.00                | 3   | 14.00 | 9.50  | 7.80  | 23.30 | 80.90 |        |
| 4/0  | 35.00                | 2   | 14.00 | 14.40 | 9.00  | 23.30 | 80.90 |        |
| 4/0  | 38.00                | 2   | 14.00 | 14.40 | 9.50  | 23.30 | 80.90 |        |
| 4/0  | 50.00                | 1   | 14.00 | 14.40 | 10.70 | 23.30 | 80.90 |        |
| 4/0  | 70.00                | 2/0 | 14.00 | 20.00 | 14.40 | 23.30 | 80.90 |        |
| 4/0  | 95.00                | 3/0 | 14.00 | 20.00 | 15.50 | 23.30 | 80.90 |        |
| 16   | 0.50~0.75            | 20  | 1.65  | 1.20  | 2.60  | 3.80  | 38.00 |        |
| 16   | 1.00~2.00            | 16  | 1.65  | 2.00  | 2.90  | 3.80  | 38.00 |        |
| 16   | 2.50~3.00            | 14  | 1.65  | 2.50  | 3.80  | 3.80  | 38.00 |        |
| 12   | 0.50~0.75            | 20  | 2.48  | 1.20  | 2.60  | 5.70  | 38.50 |        |
| 12   | 1.00~2.00            | 16  | 2.48  | 2.00  | 2.90  | 5.70  | 38.50 |        |
| 12   | 2.50~3.00            | 14  | 2.48  | 2.50  | 3.80  | 5.70  | 38.50 |        |
| 12   | 4.00                 | 12  | 2.48  | 3.00  | 4.80  | 5.70  | 38.50 |        |
| 12   | 6.00                 | 10  | 2.48  | 3.50  | 4.80  | 5.70  | 38.50 |        |
| 8    | 3.00                 | 12  | 3.70  | 2.50  | 3.80  | 8.00  | 41.70 |        |
| 8    | 4.00                 | 11  | 3.70  | 3.00  | 4.80  | 8.00  | 41.70 |        |
| 8    | 6.00                 | 10  | 3.70  | 3.60  | 4.80  | 8.00  | 41.70 |        |
| 8    | 10.00                | 8   | 3.70  | 4.60  | 6.80  | 8.00  | 41.70 |        |
| 4/0  | 16.00                | 5   | 14.00 | 9.50  | 6.20  | 23.30 | 81.50 |        |
| 4/0  | 25.00                | 3   | 14.00 | 9.50  | 7.80  | 23.30 | 81.50 |        |
| 4/0  | 35.00                | 2   | 14.00 | 14.40 | 9.00  | 23.30 | 81.50 |        |
| 4/0  | 38.00                | 2   | 14.00 | 14.40 | 9.50  | 23.30 | 81.50 |        |
| 4/0  | 50.00                | 1   | 14.00 | 14.40 | 10.70 | 23.30 | 81.50 |        |
| 4/0  | 70.00                | 2/0 | 14.00 | 20.00 | 14.40 | 23.30 | 81.50 |        |
| 4/0  | 95.00                | 3/0 | 14.00 | 20.00 | 15.50 | 23.30 | 81.50 |        |

Above contacts used to **over 48 size** shell only.

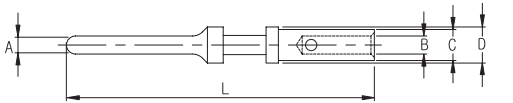
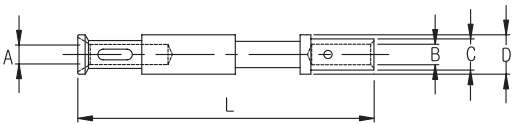
Amphenol®

Amphenol Bayonet Coupling Connectors

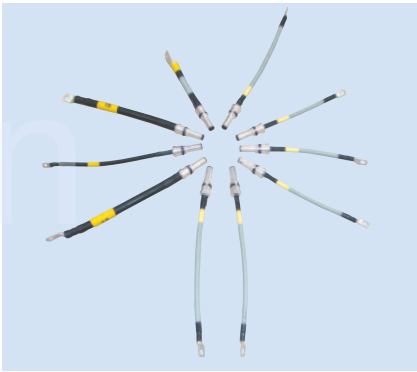
ADG, ADGC Series

Contact Dimension

Crimp contacts

| Size | mm <sup>2</sup> (Sq) | AWG | Ø A  | Ø B   | Ø C   | Ø D   | L     | Fig                                                                                                  |
|------|----------------------|-----|------|-------|-------|-------|-------|------------------------------------------------------------------------------------------------------|
| 16   | 1.00 ~ 1.50          | 16  | 1.57 | 1.80  | 2.75  | 3.20  | 31.90 | <div>male</div>    |
| 12   | 2.50 ~ 3.00          | 14  | 2.40 | 2.50  | 3.80  | 4.80  | 37.30 |                                                                                                      |
| 8    | 3.80 ~ 4.20          | 12  | 3.60 | 4.60  | 6.80  | 7.50  | 38.60 |                                                                                                      |
| 4    | 22.00                | 4   | 5.70 | 7.50  | 9.50  | 11.00 | 39.60 |                                                                                                      |
| 0    | 60SQ                 | 1/0 | 9.08 | 11.40 | 14.30 | 15.00 | 40.50 |                                                                                                      |
| 16   | 1.00 ~ 1.50          | 16  | 2.60 | 1.80  | 2.75  | 3.20  | 36.90 | <div>Female</div>  |
| 12   | 2.5 ~ 3.00           | 14  | 2.45 | 2.50  | 3.80  | 4.80  | 37.10 |                                                                                                      |
| 8    | 3.80 ~ 4.20          | 12  | 5.00 | 4.60  | 6.80  | 7.50  | 38.40 |                                                                                                      |
| 4    | 22.00                | 4   | 5.80 | 7.50  | 9.50  | 11.00 | 39.50 |                                                                                                      |
| 0    | 60SQ                 | 1/0 | 9.20 | 11.60 | 14.30 | 15.00 | 40.30 |                                                                                                      |

Above contacts used to **under 36 size** shell only.



## Amphenol Bayonet Coupling Connectors ADG, ADGC Series Characteristics

### 1. Material characteristics

|                   |                                                 |                                                                                                                                                       |
|-------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shell</b>      | Aluminium or Aluminium alloy                    | Indicated for indoor and outdoor not particularly heavy application.                                                                                  |
| <b>Insulator</b>  | Synthetic rubber<br>Plastic with silicon gasket | Under 36 size shell / Synthetic rubber.<br>Over 48 size shell / Plastic with silicon gasket.<br><br>Fire resistant & temperature range -40°C to 125°C |
| <b>Contact</b>    | Copper alloy                                    | Silver or gold plating.                                                                                                                               |
| <b>Durability</b> |                                                 | 500 Cycle connection/Disconnection                                                                                                                    |

### 2. Contact arrangement service rating & Dielectric strength

| Service rating | MIN.Flashover AC(rms) | Test voltage AC(rms)* | Operating voltage |       |
|----------------|-----------------------|-----------------------|-------------------|-------|
|                |                       |                       | AC                | DC    |
| Inst           | 1,400V                | 1,000                 | 200               | 250   |
| A              | 2,800V                | 2,000                 | 500               | 700   |
| D              | 3,600V                | 2,800                 | 900               | 1,250 |
| E              | 4,500V                | 3,500                 | 1,250             | 1,750 |
| B              | 5,700V                | 4,500                 | 1,750             | 2,450 |
| C              | 8,500V                | 7,000                 | 3,000             | 4,200 |

\* According to Mil-C-5015

The connectors do not show any signs of breakdown when the test voltage indicated in the table is applied for one minute between the two closest contacts and between the shell any of the contacts to the shell.

### 3. Electrical data

| Size | MAX.Current* | Test current DC A | MAX.Voltage drop** (mV) |
|------|--------------|-------------------|-------------------------|
| #16  | 22A          | 13A               | 74                      |
| #12  | 41A          | 23A               | 65                      |
| #8   | 73A          | 46A               | 63                      |
| #4   | 135A         | 80A               | 58                      |
| #0   | 245A         | 150A              | 53                      |
| #4/0 | 450A         | 350A              | 53                      |

\* Applicable for short time.

\*\* According to MIL-C- 39029D, Test with nickel-plated wire.

## Amphenol Bayonet Coupling Connectors ADG, ADGC Series

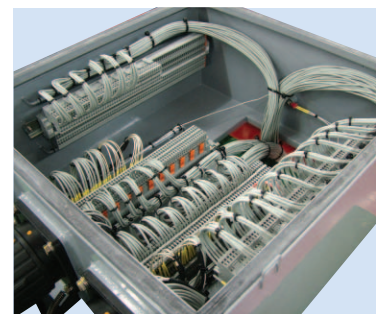
### How to order

| <u>ADG</u>  | <u>08A</u> |          | <u>18-10</u> | <u>P</u> | <u>W</u> |           |              |
|-------------|------------|----------|--------------|----------|----------|-----------|--------------|
| <u>ADGC</u> | <u>08A</u> | <u>G</u> | <u>48-03</u> | <u>P</u> | <u>W</u> | <u>5K</u> | <u>(XXX)</u> |
| 1           | 2          | 3        | 4            | 5        | 6        | 7         | 8            |

1. Connector Type  
ADG - Amphenol Daeshin Bayonet connector (Solder)  
ADGC - Amphenol Daeshin Bayonet connector (Crimp)
2. Connector Style  
00A - Wall mounting receptacle  
01A - Cable connecting plug  
02A - Box mounting receptacle  
06A - Straight plug  
08A - Right angle plug (45° degrees angle back shell)
3. Service Class  
Without letter-Normal type  
G - RFI (Radio Frequency interference) Grounding Finger Type
4. Shell size and insert arrangement - see tables, pages 72.73.74
5. Contact Types  
P- designates pin contact, (+) Male  
S- designates socket contact, (-) Female
6. Insert Rotation  
Without letter - Normal type  
"W", "X", "Y", or "Z" - See page 72.73
7. Polarization Keys  
Without letter - Normal  
5K - 5 keys (Only available for 48, 70 Size)
8. Plating information  
No suffix - Olive Drab Zinc  
CD - Cadmium  
P1 - Black paint  
426 - Electro-less Nickel & gold flash contacts  
608 : Black Zinc  
621 - Black Zinc  
640 - Conductive Black zinc alloy  
689 - Electro-less Nickel & gold flash contacts

## Amphenol Bayonet Coupling Connectors ADG, ADGC Series Tool Information

| Contact Size | Wire Size (mm <sup>2</sup> /AWG) | Tool Part Nr                                  |                  | Applicate Insert arrange  |
|--------------|----------------------------------|-----------------------------------------------|------------------|---------------------------|
|              |                                  | For crimping                                  | For removal      |                           |
| #16          | 0.5 ~ 0.75                       | TP201411-AG<br>or<br>DMC CAGE11851            | AMET-JC<br>16/12 | 48-74                     |
|              | 1.0 ~ 2.0                        |                                               |                  |                           |
|              | 2.5 ~ 3.0                        |                                               |                  |                           |
| #12          | 1.0 ~ 2.0mm <sup>2</sup>         | TP201411-AG<br>DMC CAGE11851<br>TP-201328-12D | AMET-JC<br>16/12 | 48-06<br>70-90<br>700-106 |
|              | 2.5mm <sup>2</sup>               |                                               |                  |                           |
|              | 12 AWG                           |                                               |                  |                           |
|              | 4.0mm <sup>2</sup>               |                                               |                  |                           |
| #8           | 3.0 (14AWG)                      | TP-201328-8D                                  | AMET-JC8         | 70-90                     |
|              | 4.0 (14AWG)                      |                                               |                  |                           |
|              | 6.0 (10AWG)                      |                                               |                  |                           |
|              | 8 AWG                            |                                               |                  |                           |
| #4/0         | 35                               | TP-201328-41G<br>or<br>IZUMIEP-510B           | AMET-JC4/0       | 48-03<br>48-04<br>48-06   |
|              | 50                               |                                               |                  |                           |
|              | 70                               |                                               |                  |                           |
|              | 95                               |                                               |                  |                           |



| Description    | Part Nr       | Fig |
|----------------|---------------|-----|
| Crimping Tool  | TP201411-AG   |     |
|                | DMC CAGE11851 |     |
|                | TP-201328     |     |
|                | IZUMIEP-510B  |     |
| Removal Tool   | AMET-JC16/12  |     |
|                | AMET-JC4/0    |     |
| Insertion Tool | BMD-297-16    |     |
|                | BMD-297-12    |     |



**High Tension  
Connectors  
AMHTC Series**

DaeShin

## Amphenol High Tension Connectors AMHTC Series



AMPF Box mounting Receptacle



AMLM Straight Plug



HLPF Box mounting Receptacle



HLLM Straight Plug



SLPF Box mounting Receptacle



SLLM Straight Plug

### 1. Introduction

Amphenol “AMHTC” high tension connector series for railway vehicle installable power distribution systems, offers the ultimate in safety and reliability under the most severe operating conditions.

The AMHTC series connectors allow the user to connect electrical equipment quickly with ultimate safety.

AMHTC is available in two standard formats, which allow complete hook up through the standard daisy chain principle.

### 2. Features

- Dead front contacts: An insulated tip on the contact element prevents accidental touching of current carry parts. Both the male and female contacts are protected.
- Super High impact Insulators: High impact, flame retardant thermoplastic insulators prevent impact and abrasion damage through continued use in harsh environment applications and also guarantee a high degree of insulation, with maximum resistance to oil, acids and water.
- Water proof when mated: Sealing is guaranteed through IP rated interfacial and cable gland compression seals. Connectors when mated are rated at up to IP67.

| Item    | Material     | Finish         | Remarks                  |
|---------|--------------|----------------|--------------------------|
| Shell   | Plastic      | -              | Fire resistant -30~125°C |
| Contact | Copper alloy | Sliver Plating | -                        |

### 4. Technical Data

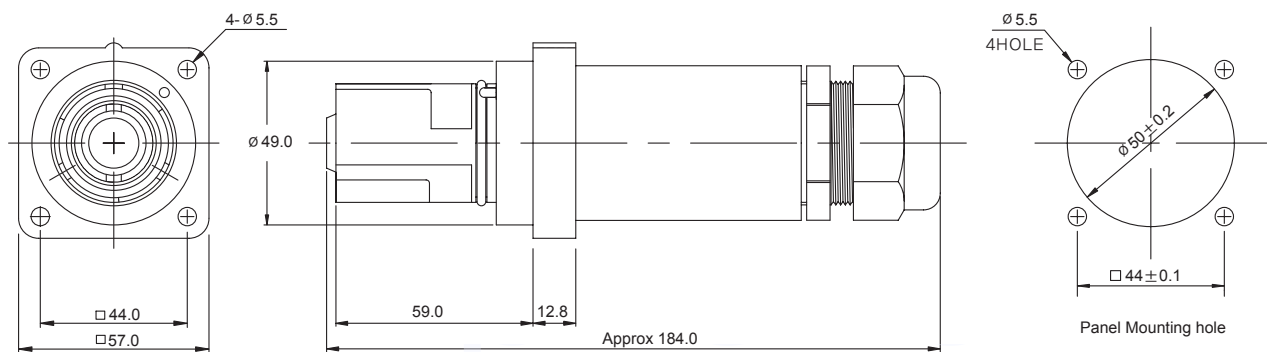
| Item                              | High Lock              |                   | Low Lock          |
|-----------------------------------|------------------------|-------------------|-------------------|
|                                   | AMPF, AMLM             | HLPF, HLLM        | SLPF, SLLM        |
| Continuous Current Rating         | 660A@ambient<70°C      | 350A@ambient<70°C | 250A@ambient<70°C |
| Maximum Current Rating            | 750A                   | 450A              | 400A              |
| Contact Size                      | Special                | #4/0              | #4/0              |
| Maximum Rated Voltage to Earth    | 2Kv AC / 3Kv DC        | 3Kv AC / 4.2Kv DC | 1.5Kv AC          |
| Minimum Flashover                 | 9.5Kv DC Peak          | 12.5Kv DC Peak    | -                 |
| Operating Temperature Range       | -30 °C ~ 125 °C        |                   |                   |
| Insulation Resistance             | Min 100 MΩ @ DC 1,000V |                   |                   |
| Ingress Protection (mated)        | IP67                   |                   |                   |
| Protection against Electric Shock | IP2X                   |                   |                   |
| Flammability                      | UL94-V0                |                   |                   |

## Amphenol High Tension Connectors Amphenol AMHTC Connectors

### High Lock Box mounting receptacle

(mm)

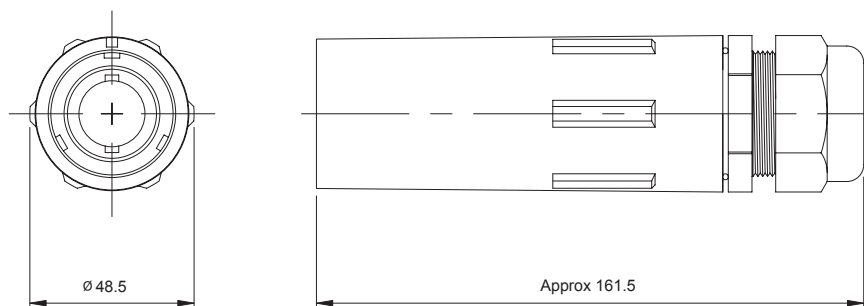
- AMPF TYPE: Female insulator rear panel mounting receptacle.



### High Lock Straight Plug

(mm)

- AMLM TYPE: Male insulator line plug.



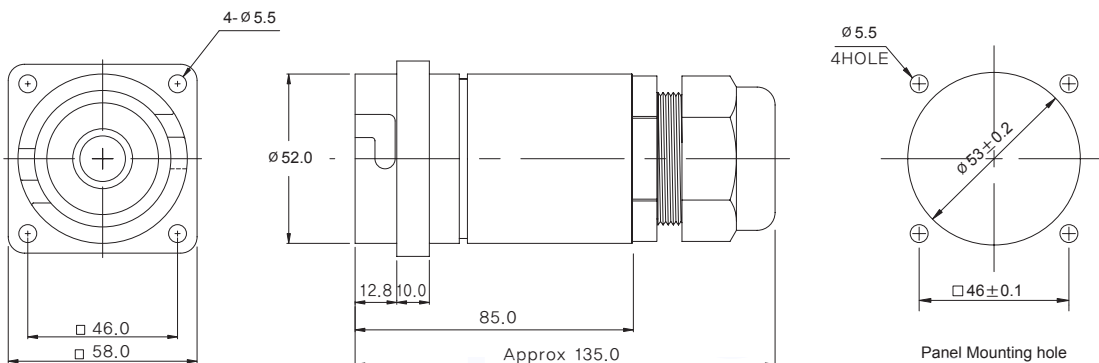
## Amphenol High Tension Connectors

### Amphenol AMHTC Connectors

#### High Lock Box mounting receptacle

(mm)

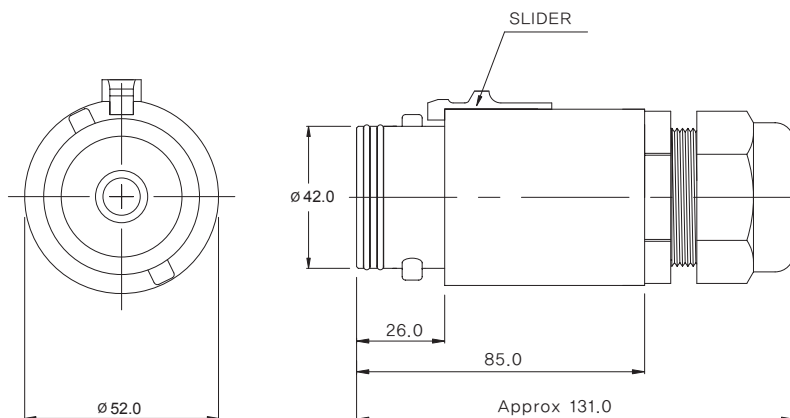
- HLPF TYPE: Female insulator front panel mounting receptacle.



#### High Lock Straight Plug

(mm)

- HLLM TYPE: Male insulator line plug.

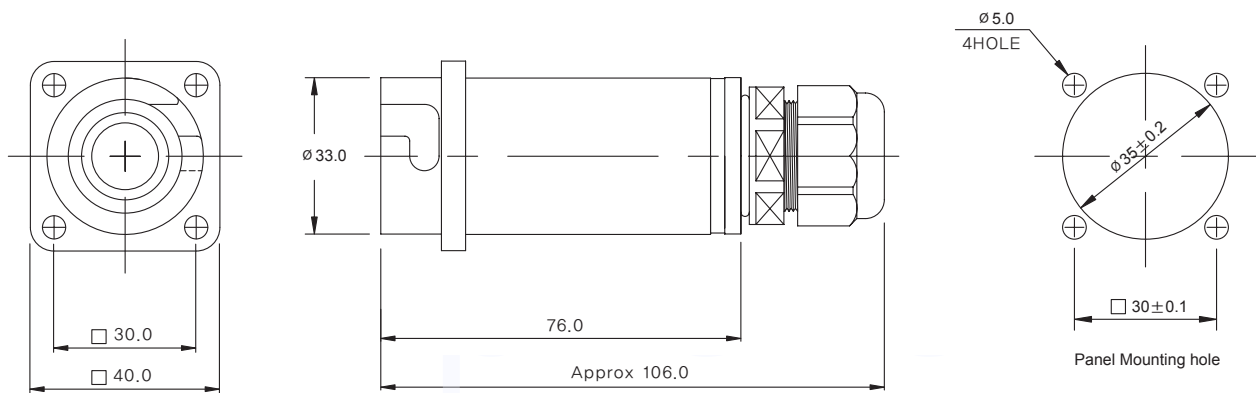


## Amphenol High Tension Connectors Amphenol AMHTC Connectors

### Low Lock Box mounting receptacle

(mm)

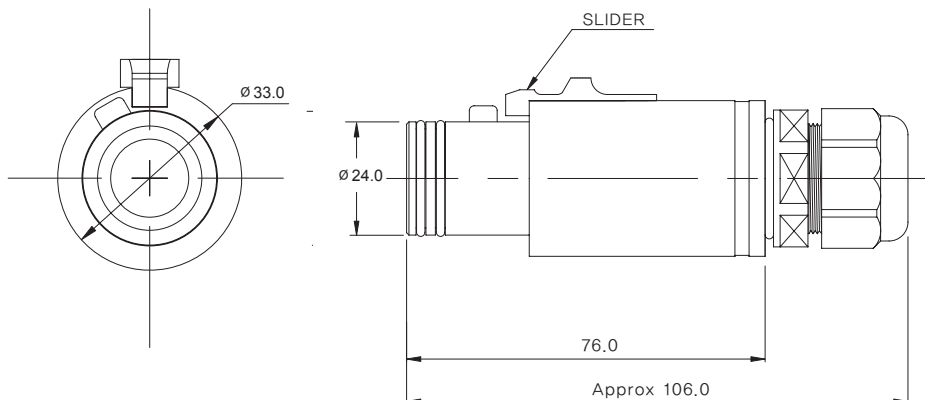
- SLPF TYPE: Female insulator front panel mounting receptacle.



### Low Lock Straight Plug

(mm)

- SLLM TYPE: Male insulator line plug.



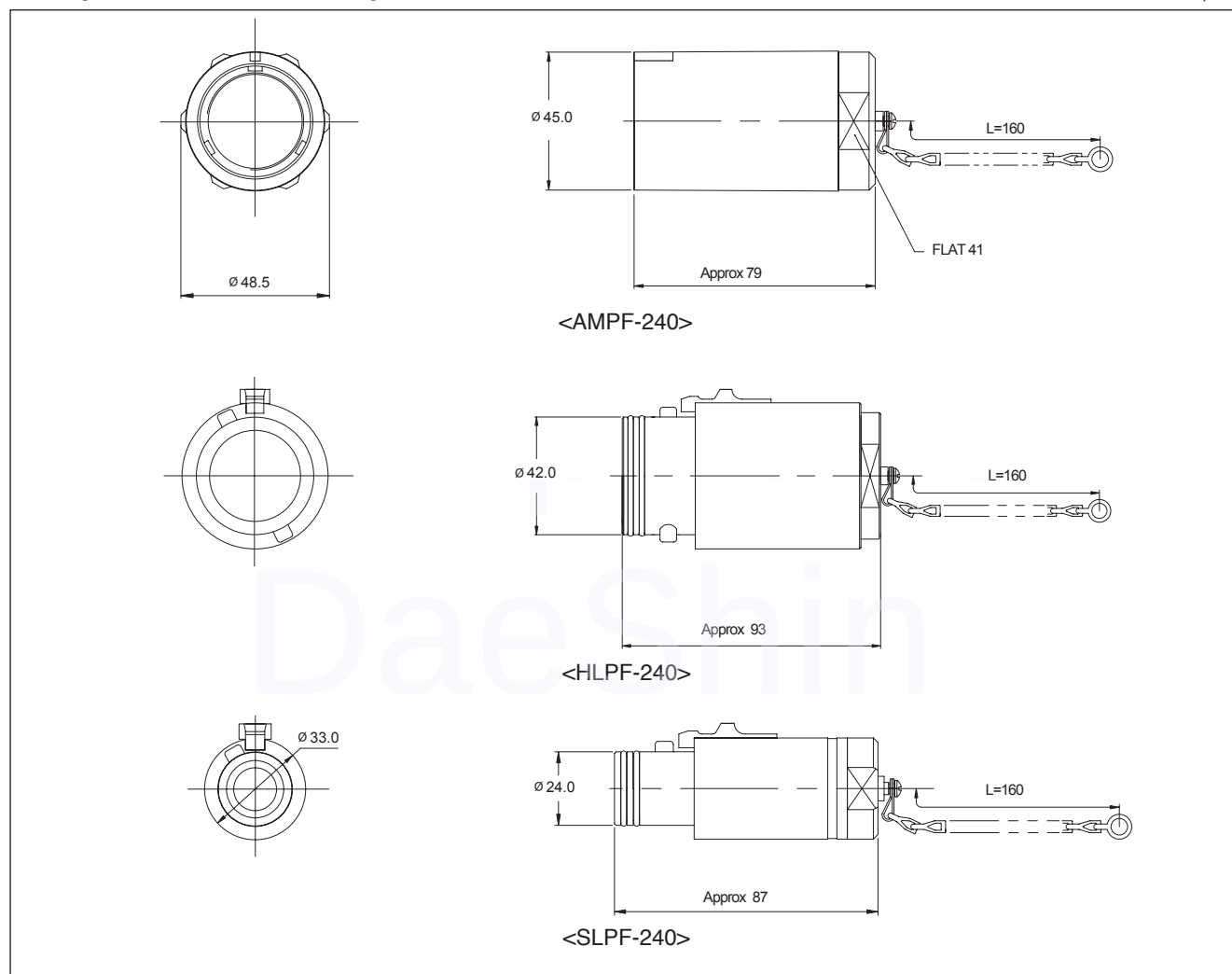
# Amphenol High Tension Connectors

## AMHTC Series

### Accessories Dimension

#### Receptacle Protection Cap

(mm)



## Amphenol High Tension Connectors

### Amphenol AMHTC Series

#### How to order

$\frac{\text{AMPF}}{1} - \frac{\text{S}}{2} - \frac{\text{BK}}{3} - \frac{\text{C95}}{4} - \frac{29}{5}$

#### 1. Connector Type

| High Lock |      | Low Lock | Remarks                |
|-----------|------|----------|------------------------|
| AMPF      | HLPF | SLPF     | Panel Female connector |
| AMLM      | HLLM | SLLM     | Line Male connector    |

#### 2. Contact Gender

S: Socket

P: Pin

#### 3. Colour

Bk: Black

Y : Yellow

R : Red

BL: Blue

GN: Green

#### 4. Contact type

C240 : 240mm ~ Crimp

C200 : 200mm ~ Crimp

C185 : 185mm ~ Crimp

C120 : 120mm ~ Crimp

C95 : 95mm ~ Crimp

C70 : 70mm ~ Crimp

C50 : 50mm ~ Crimp

C35 : 35mm ~ Crimp

C25 : 25mm ~ Crimp

C14 : 14mm ~ Crimp

#### 5. Cable grip(Consult factory)

13.5 : PG13.5 (6 ~ 12mm cable OD)

16 : PG16 (10 ~ 14mm cable OD)

21 : PG21 (13 ~ 18mm cable OD)

29 : PG29 (18 ~ 25mm cable OD)

36 : PG36 (22 ~ 32mm cable OD)

M20S : M20X1.5 (6 ~ 12mm cable OD)

M20L : M20X1.5 (10 ~ 14mm cable OD)

M25 : M25X1.5 (13 ~ 18mm cable OD)

M32 : M32X1.5 (18 ~ 25mm cable OD)

M40 : M40X1.5 (22 ~ 32mm cable OD)



## Amphenol High Tension Connectors AMHTC Series

| Contact Size   | Wire Size<br>(mm <sup>2</sup> /AWG) | Crimping Tool No.             | Removal Tool No. | Remarks        |
|----------------|-------------------------------------|-------------------------------|------------------|----------------|
| Special Pin    | 50 mm <sup>2</sup>                  | IZUMI EP-510                  | AMET-HTCSP       | AML M          |
|                | 70 mm <sup>2</sup>                  |                               |                  |                |
|                | 90 mm <sup>2</sup>                  |                               |                  |                |
|                | 120 mm <sup>2</sup>                 |                               |                  |                |
|                | 185 mm <sup>2</sup>                 |                               |                  |                |
| Special Socket | 50 mm <sup>2</sup>                  | IZUMI EP-510                  | AMET-HTCSP       | AMP F          |
|                | 70 mm <sup>2</sup>                  |                               |                  |                |
|                | 90 mm <sup>2</sup>                  |                               |                  |                |
|                | 120 mm <sup>2</sup>                 |                               |                  |                |
|                | 185 mm <sup>2</sup>                 |                               |                  |                |
| #4/0<br>Pin    | 16 mm <sup>2</sup>                  | TP=201328 or<br>IZUMI EP-510B | AMET-JC4/0       | HLL M          |
|                | 25 mm <sup>2</sup>                  |                               |                  |                |
|                | 35 mm <sup>2</sup>                  |                               |                  |                |
|                | 38 mm <sup>2</sup>                  |                               | AMET-SLL M       | SLL M          |
|                | 50 mm <sup>2</sup>                  |                               |                  |                |
|                | 70 mm <sup>2</sup>                  |                               |                  |                |
|                | 95 mm <sup>2</sup>                  |                               |                  |                |
| #4/0<br>Socket | 16 mm <sup>2</sup>                  | TP=201328 or<br>IZUMI EP-510B | AMET-JC4/0       | HLP F<br>SLP F |
|                | 25 mm <sup>2</sup>                  |                               |                  |                |
|                | 35 mm <sup>2</sup>                  |                               |                  |                |
|                | 38 mm <sup>2</sup>                  |                               |                  |                |
|                | 50 mm <sup>2</sup>                  |                               |                  |                |
|                | 70 mm <sup>2</sup>                  |                               |                  |                |
|                | 95 mm <sup>2</sup>                  |                               |                  |                |



TP-201328



AMET



IZUMI EP-510B

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