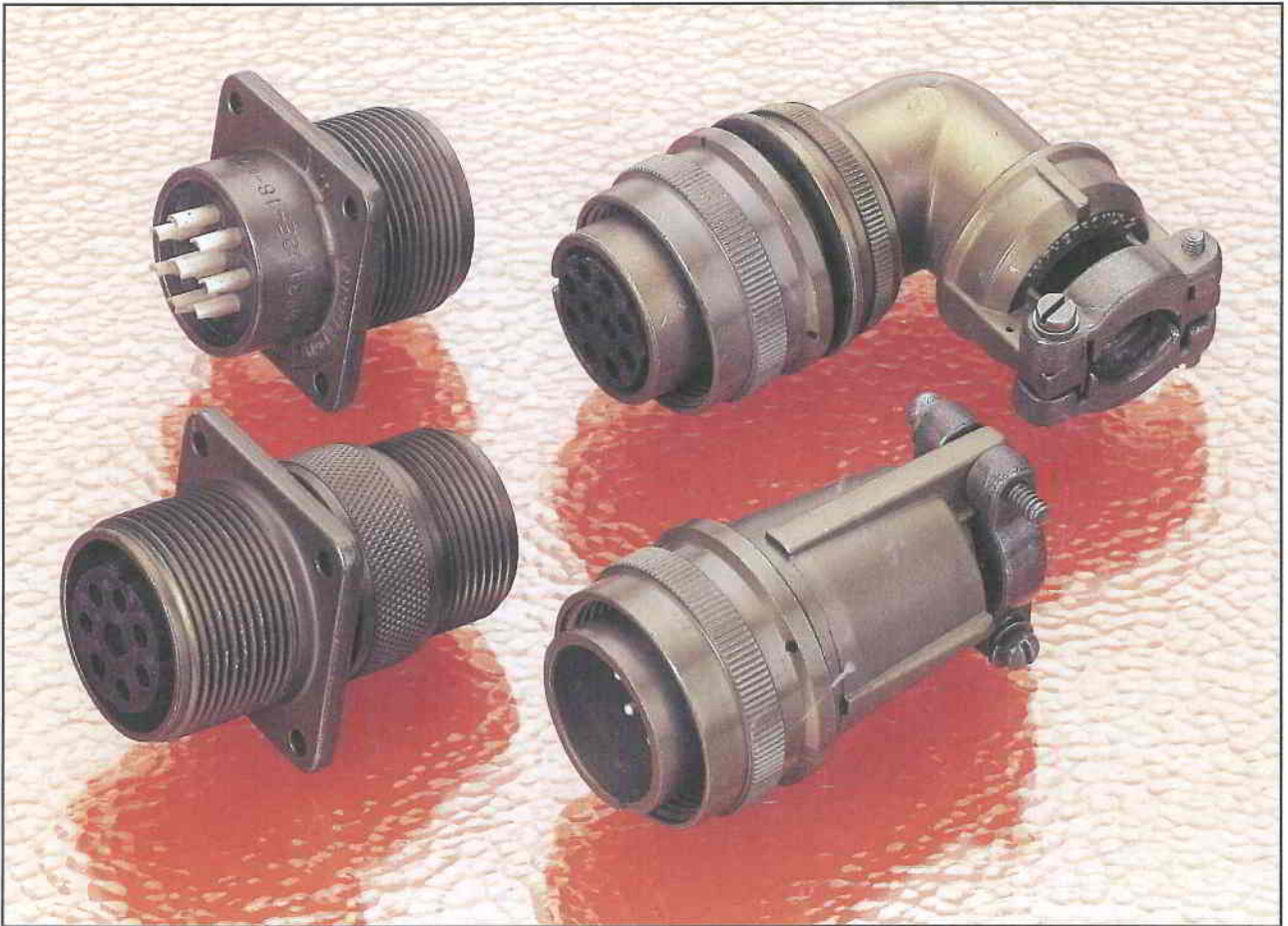


Amphenol

AMS Series

Mil-C-5015 Style Standard Connectors



General Description



AMS - "A" (MS-A)

Intended for general duty applications to provide a convenient means of connecting electrical circuits. Backshell allows a choice of cable clamps (see pages 30-32), or conduit to be fitted. eg. Part No. AMS-3106A 20-27P.



AMS - "AF"

Intended for general duty applications. Strain relief cable clamp is supplied as an integral part of this style. eg. Part No. AMS-3106AF 20-27P.

AMS - "F" (MS-E/F)

Environmental resisting. Designed for applications where the connector is exposed to moisture, vibration and rapid changes in temperature. The AMS-"F" (MS-E/F) has a cable clamp fitted with a wire sealing grommet. The plug has an 'O' ring which provides a supplementary interfacial seal. eg. Part No. AMS-3106F 20-27P.



AMS - "R" (MS-R)

Lightweight environmental resisting. Shorter in length and lighter than the "F" style. The AMS-"R" (MS-R) has a wire sealing grommet for individual wires. The plug has an 'O' ring which provides a supplementary interfacial seal. eg. Part No. AMS-3106R 20-27P.

The AMS Series of connectors meets the performance requirements of Mil-C-5015. Featuring threaded coupling and single keyway polarisation, these connectors represent well proven electrical capability, at an acceptable cost, for most equipment, where durability is important. Mil-C-5015 styles are widely used in the machine tool, robotics, automotive and welding industries as well as numerous other industrial applications. This family of connectors offers a wide variety of shell styles, contact patterns and accessories.

Shell components are fabricated from high grade aluminium alloy, plated in conductive cadmium with an olive drab conversion finish.

Contacts are machined from copper alloy with a silver plate finish.

Inserts are resilient neoprene, offering high dielectric strength, high arc and vibration resistance.

Design Characteristics

- Durable, field proven.
- Environment resisting.
- Resilient inserts.
- Threaded coupling.
- Single keyway shell polarisation.
- Alternate insert positioning.
- Solder contacts.
- Sizes from 16AWG to 0AWG.
- Operating temperatures from -55° to 125° C.
- Intermateable and intermountable with 97 Series and other Mil-C-5015 connectors.

Ordering Codes

AMS connectors can be ordered as per the example below:

AMS 3100 A 20 27 P W (XXX)

Series Designation

AMS - Amphenol proprietary series.
MS - Mil-C-5015 reference.

Shell Style

3100 - Wall mounting receptacle.
3101 - Cable connecting receptacle.
3102 - Box mounting receptacle.
3106 - Straight plug.
3108 - 90° plug.

Connector Class

A - General duty.
AF - General duty with strain relief cable clamp.
F - Environmental resisting with grommet seal and strain relief backshell. 3106F style includes a front "O" ring seal.
R - Environmental resisting with grommet seal, lightweight and shorter overall length. 3106R style includes a front "O" ring seal.

Note: See "General Descriptions", on page 1 for further information.

Deviations from Standard

Consult factory.

Alternate Position

W-X-Y-Z
(No suffix Normal)
Details on page 29.

Contact Type

P = Pin Contacts.
S = Socket Contacts.

Insert Arrangement

See pages 18-28.

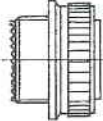
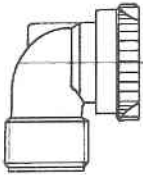
Shell Size

10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36.

AMS Connector Styles and Classes

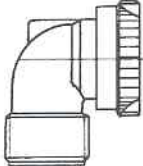
"O" Ring
"F" and "R" Styles

Style "A"

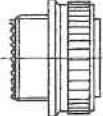
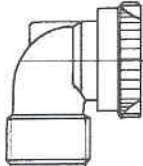
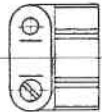


AMS-3108

Style "R"

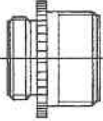
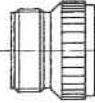


Style "F"



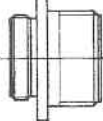
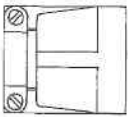
AMS-3106

Style "A"



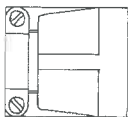
AMS-3101

Style "AF"

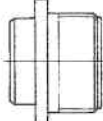
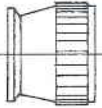


AMS-3100

Style "F"



Style "R"



AMS-3102A
or R

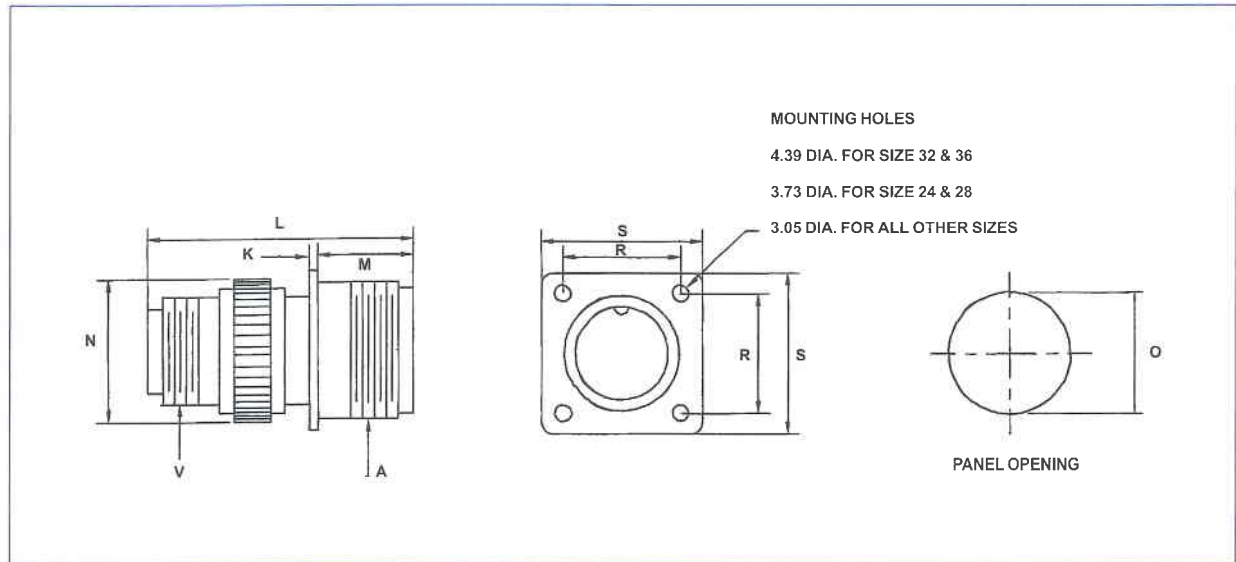
Cable Clamp Backshell Compression Ring Grommet

Note: "F" and "R" style plugs are fitted with "O" ring gasket to provide a supplementary seal.

Wall Mounting Receptacles

AMS 3100A (MS 3100A)

- Includes backshell for accessory attachment.
(See pages 30-34 for accessories).
- Non environment proof.



All dimensions in mm, unless otherwise stated.

| Connector Size | A Thread in Inches | K | L | M | N | O | R | S | V Thread in Inches |
|----------------|--------------------|------|-------|-------|-------|-------|-------|-------|--------------------|
| 10SL | .6250-24UNEF | 1.98 | 32.54 | 14.30 | 19.05 | 20.62 | 18.25 | 25.40 | .6250-24UNEF |
| 12S | .7500-20UNEF | 1.98 | 37.31 | 14.30 | 19.84 | 20.62 | 20.62 | 27.80 | .6250-24UNEF |
| 14S | .8750-20UNEF | 1.98 | 36.51 | 14.30 | 22.22 | 23.82 | 23.01 | 30.20 | .7500-20UNEF |
| 16S | 1.0000-20UNEF | 1.98 | 37.70 | 14.30 | 25.40 | 26.97 | 24.61 | 32.50 | .8750-20UNEF |
| 16 | 1.0000-20UNEF | 3.17 | 48.02 | 19.10 | 25.40 | 26.97 | 24.61 | 32.50 | .8750-20UNEF |
| 18 | 1.1250-18UNEF | 3.17 | 50.80 | 19.10 | 28.57 | 30.17 | 27.00 | 34.90 | 1.0000-20UNEF |
| 20 | 1.2500-18UNEF | 3.17 | 53.97 | 19.10 | 31.75 | 33.32 | 29.36 | 38.10 | 1.1875-18UNEF |
| 22 | 1.3750-18UNEF | 3.17 | 53.97 | 19.10 | 34.92 | 36.52 | 31.75 | 41.20 | 1.1875-18UNEF |
| 24 | 1.5000-18UNEF | 3.17 | 57.15 | 20.60 | 38.10 | 39.67 | 34.92 | 44.40 | 1.4375-18UNEF |
| 28 | 1.7500-18UNS | 3.17 | 57.15 | 20.60 | 44.45 | 46.02 | 39.67 | 50.60 | 1.4375-18UNEF |
| 32 | 2.0000-18UNS | 3.17 | 59.00 | 22.25 | 51.75 | 53.00 | 44.45 | 57.15 | 1.7500-18UNS |
| 36 | 2.2500-16UN | 3.17 | 60.32 | 22.25 | 57.15 | 58.72 | 49.21 | 63.50 | 2.0000-18UNS |

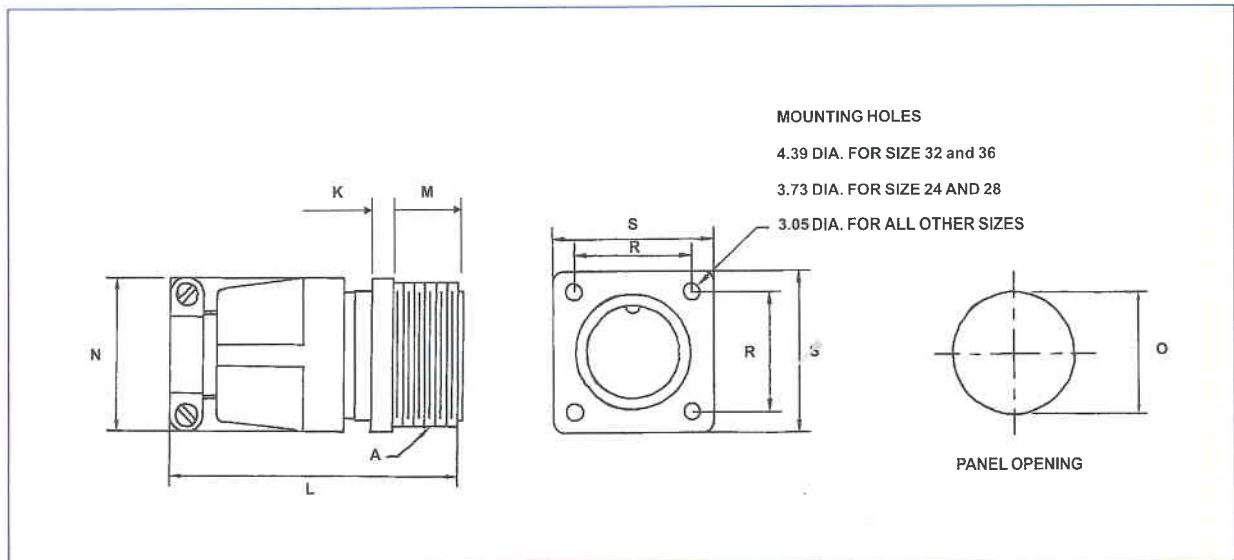
Wall Mounting Receptacles

AMS 3100 AF

- Includes cable clamp.
- Non environment proof.

AMS 3100 F (MS 3100 E/F)

- Includes cable clamp and wire sealing grommet.
- Environment proof.



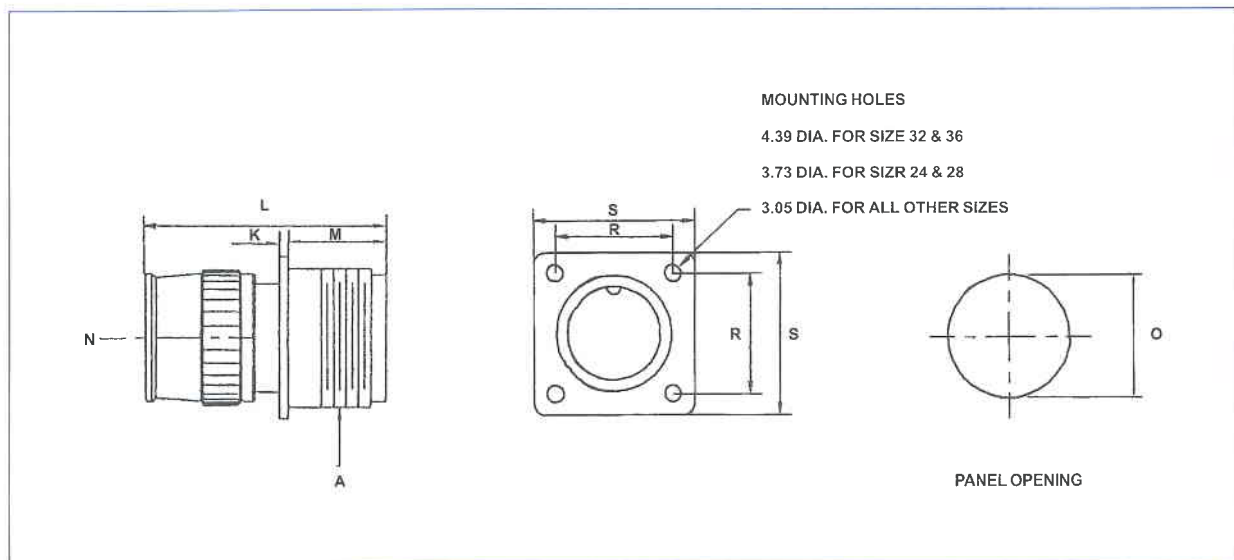
All dimensions in mm, unless otherwise stated.

| Connector Size | A Thread in Inches | K | L | M | N | O | R | S |
|----------------|--------------------|------|-------|-------|-------|-------|-------|-------|
| 10SL | .6250-24UNEF | 1.98 | 54.36 | 14.30 | 21.97 | 20.62 | 18.25 | 25.40 |
| 12S | .7500-20UNEF | 1.98 | 54.36 | 14.30 | 21.97 | 20.62 | 20.62 | 27.80 |
| 14S | .8750-20UNEF | 1.98 | 56.21 | 14.30 | 25.15 | 23.82 | 23.01 | 30.20 |
| 16S | 1.0000-20UNEF | 1.98 | 57.73 | 14.30 | 28.45 | 26.97 | 24.61 | 32.50 |
| 16 | 1.0000-20UNEF | 3.17 | 64.41 | 19.10 | 28.45 | 26.97 | 24.61 | 32.50 |
| 18 | 1.1250-18UNEF | 3.17 | 66.24 | 19.10 | 30.76 | 30.17 | 27.00 | 34.90 |
| 20 | 1.2500-18UNEF | 3.17 | 67.72 | 19.10 | 37.29 | 33.32 | 29.36 | 38.10 |
| 22 | 1.3750-18UNEF | 3.17 | 67.72 | 19.10 | 37.29 | 36.52 | 31.75 | 41.20 |
| 24 | 1.5000-18UNEF | 3.17 | 73.58 | 20.60 | 44.45 | 39.67 | 34.92 | 44.40 |
| 28 | 1.7500-18UNS | 3.17 | 73.58 | 20.60 | 44.45 | 46.02 | 39.67 | 50.60 |
| 32 | 2.0000-18UNS | 3.17 | 74.98 | 22.25 | 53.00 | 53.00 | 44.45 | 57.15 |
| 36 | 2.2500-16UN | 3.17 | 74.98 | 22.25 | 57.15 | 58.72 | 49.21 | 63.50 |

Wall Mounting Receptacles

AMS 3100R (MS 3100R)

- Includes wire sealing grommet.
- For use with individual wires.
- Environment proof.



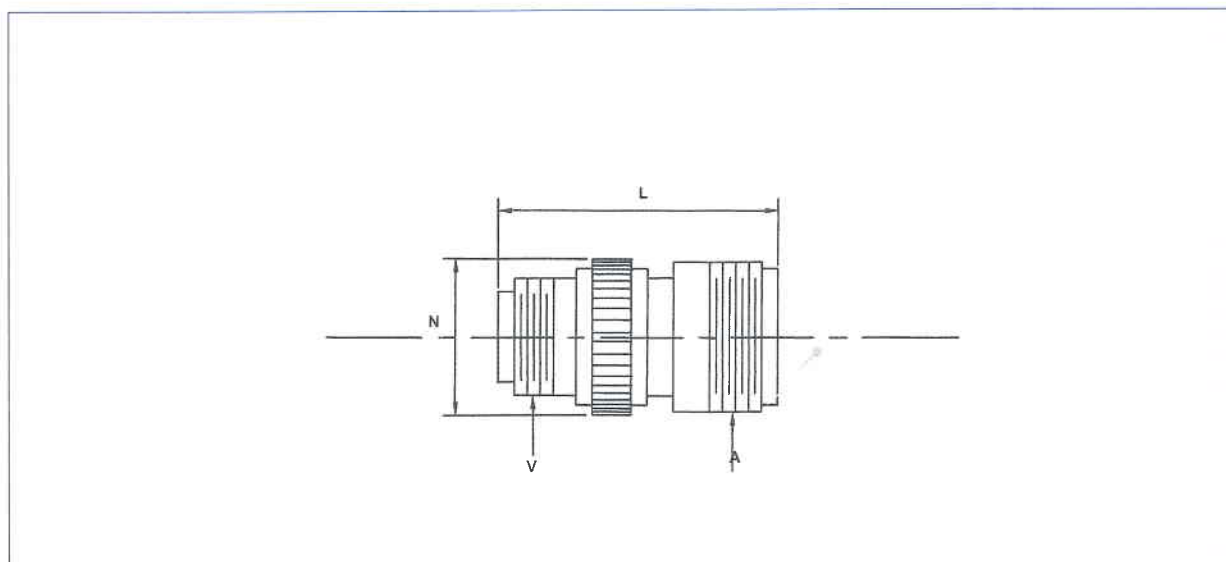
All dimensions in mm, unless otherwise stated.

| Connector Size | A Thread in Inches | K | L | M | N | O | R | S |
|----------------|--------------------|------|-------|-------|-------|-------|-------|-------|
| 10SL | .6250-24UNEF | 1.98 | 46.00 | 14.30 | 22.00 | 20.62 | 18.25 | 25.40 |
| 12S | .7500-20UNEF | 1.98 | 46.00 | 14.30 | 25.00 | 20.62 | 20.62 | 27.80 |
| 14S | .8750-20UNEF | 1.98 | 46.00 | 14.30 | 29.00 | 23.82 | 23.01 | 30.20 |
| 16S | 1.0000-20UNEF | 1.98 | 46.00 | 14.30 | 31.00 | 26.97 | 24.61 | 32.50 |
| 16 | 1.0000-20UNEF | 3.17 | 55.00 | 19.10 | 31.00 | 26.97 | 24.61 | 32.50 |
| 18 | 1.1250-18UNEF | 3.17 | 57.00 | 19.10 | 34.00 | 30.17 | 27.00 | 34.90 |
| 20 | 1.2500-18UNEF | 3.17 | 57.00 | 19.10 | 37.00 | 33.32 | 29.36 | 38.10 |
| 22 | 1.3750-18UNEF | 3.17 | 57.00 | 19.10 | 40.00 | 36.52 | 31.75 | 41.20 |
| 24 | 1.5000-18UNEF | 3.17 | 57.00 | 20.60 | 44.00 | 39.67 | 34.92 | 44.40 |
| 28 | 1.7500-18UNS | 3.17 | 57.00 | 20.60 | 49.50 | 46.02 | 39.67 | 50.60 |
| 32 | 2.0000-18UNS | 3.17 | 58.00 | 22.25 | 56.00 | 53.00 | 44.45 | 57.15 |
| 36 | 2.2500-16UN | 3.17 | 58.00 | 22.25 | 62.50 | 58.72 | 49.21 | 63.50 |

Cable Connecting Receptacles

AMS 3101A (MS 3101A)

- Includes backshell for accessory attachment.
(See pages 30-34 for accessories).
- Non environment proof.



All dimensions in mm, unless otherwise stated.

| Connector Size | A Thread in Inches | L | N | V Thread in Inches |
|----------------|--------------------|-------|-------|--------------------|
| 10SL | .6260-24UNEF | 32.54 | 19.05 | .6250-24UNEF |
| 12S | .7500-20UNEF | 37.31 | 19.84 | .6250-24UNEF |
| 14S | .8750-20UNEF | 36.51 | 22.22 | .7500-20UNEF |
| 16S | 1.0000-20UNEF | 37.70 | 25.40 | .8750-20UNEF |
| 16 | 1.0000-20UNEF | 48.02 | 25.40 | .8750-20UNEF |
| 18 | 1.1250-18UNEF | 50.80 | 28.57 | 1.0000-20UNEF |
| 20 | 1.2500-18UNEF | 53.97 | 31.75 | 1.1875-18UNEF |
| 22 | 1.3750-18UNEF | 53.97 | 34.92 | 1.1875-18UNEF |
| 24 | 1.5000-18UNEF | 57.15 | 38.10 | 1.4375-18UNEF |
| 28 | 1.7500-18UNS | 57.15 | 44.45 | 1.4375-18UNEF |
| 32 | 2.0000-18UNS | 59.00 | 51.75 | 1.7500-18UNS |
| 36 | 2.2500-16UN | 60.32 | 57.15 | 2.0000-18UNS |

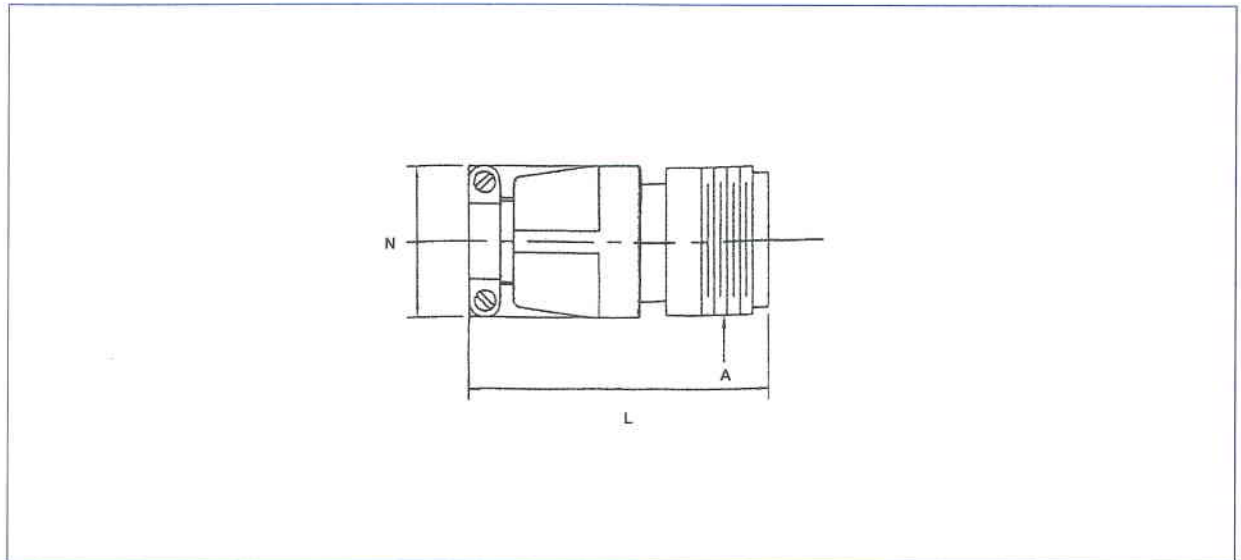
Cable Connecting Receptacles

AMS 3101AF

- Includes cable clamp.
- Non environment proof.

AMS 3101F (MS 3101E/F)

- Includes cable clamp and wire sealing grommet.
- Environment proof.



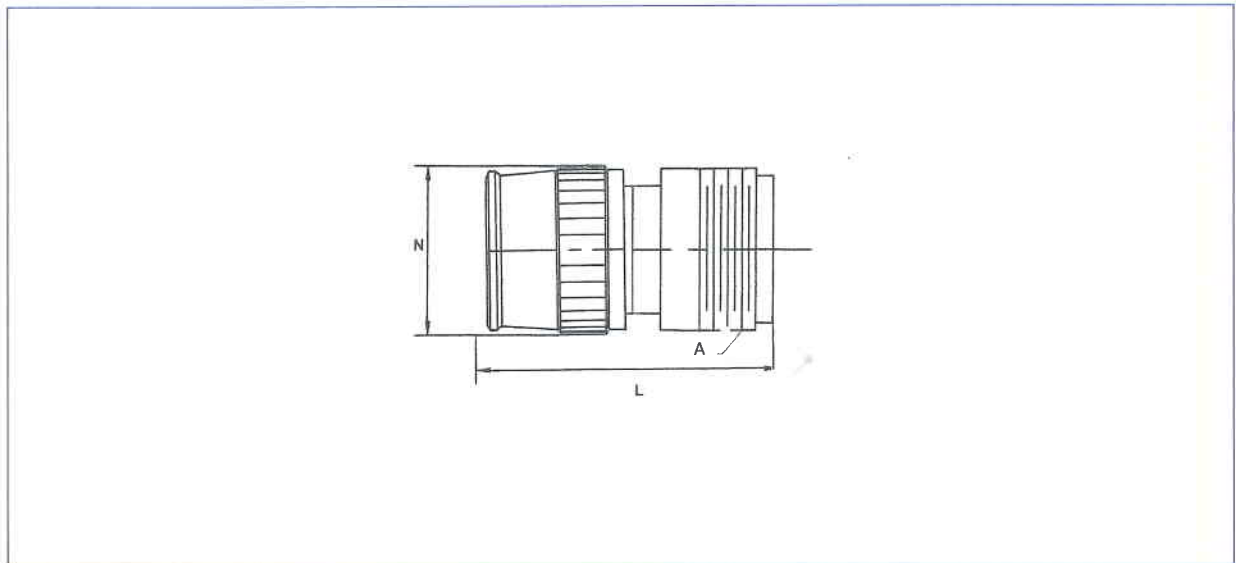
All dimensions in mm, unless otherwise stated.

| Connector Size | A Thread in Inches | L | N |
|----------------|--------------------|-------|-------|
| 10SL | .6250-24UNEF | 54.36 | 21.97 |
| 12S | .7500-20UNEF | 54.36 | 21.97 |
| 14S | .8750-20UNEF | 56.21 | 25.15 |
| 16S | 1.0000-20UNEF | 57.73 | 28.45 |
| 16 | 1.0000-20UNEF | 64.41 | 28.45 |
| 18 | 1.1250-18UNEF | 66.24 | 30.76 |
| 20 | 1.2500-18UNEF | 67.72 | 37.29 |
| 22 | 1.3750-18UNEF | 67.72 | 37.29 |
| 24 | 1.5000-18UNEF | 73.58 | 44.45 |
| 28 | 1.7500-18UNS | 73.58 | 44.45 |
| 32 | 2.0000-18UNS | 74.98 | 53.00 |
| 36 | 2.2500-16UN | 74.98 | 57.15 |

Cable Connecting Receptacles

AMS 3101R (MS 3101R)

- Includes wire sealing grommet.
- For use with individual wires.
- Environment proof.



All dimensions in mm, unless otherwise stated.

| Connector Size | A Thread in Inches | L | N |
|----------------|--------------------|------|------|
| 10SL | .6250-24UNEF | 46.0 | 22.0 |
| 12S | .7500-20UNEF | 46.0 | 25.0 |
| 14S | .8750-20UNEF | 46.0 | 29.0 |
| 16S | 1.0000-20UNEF | 55.0 | 31.0 |
| 16 | 1.0000-20UNEF | 57.0 | 31.0 |
| 18 | 1.1250-18UNEF | 57.0 | 34.0 |
| 20 | 1.2500-18UNEF | 57.0 | 37.0 |
| 22 | 1.3750-18UNEF | 57.0 | 40.0 |
| 24 | 1.5000-18UNEF | 57.0 | 44.0 |
| 28 | 1.7500-18UNS | 57.0 | 49.5 |
| 32 | 2.0000-18UNS | 58.0 | 56.0 |
| 36 | 2.2500-16UN | 58.0 | 62.5 |

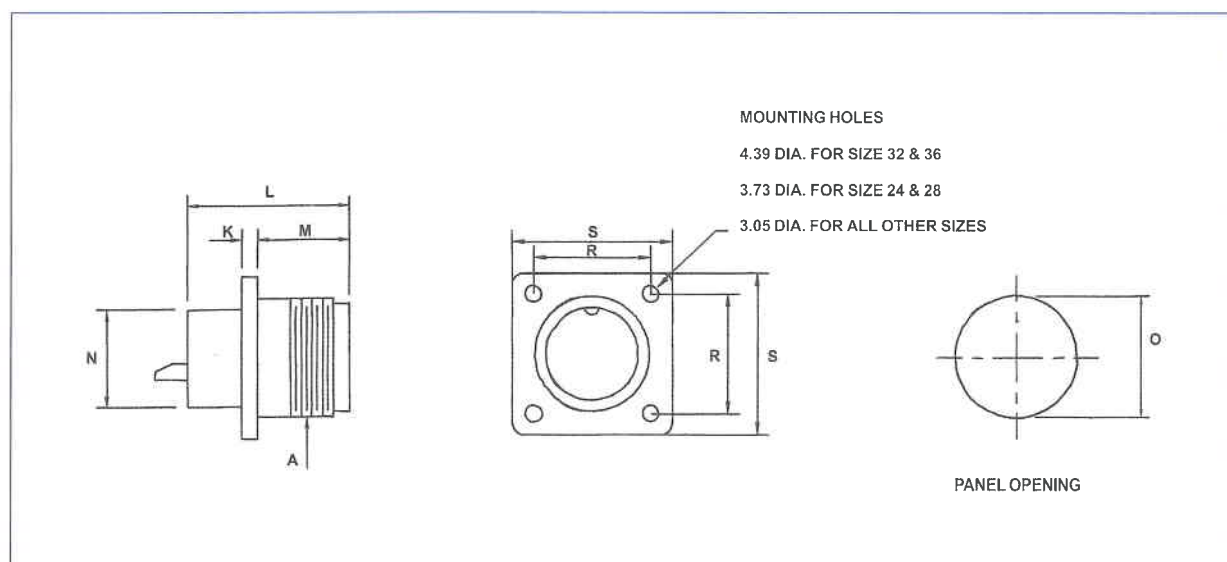
Box Mounting Receptacle

AMS 3102A
(MS 3102A)

- Non environment proof.

AMS 3102R
(MS 3102R)

- Environment proof.



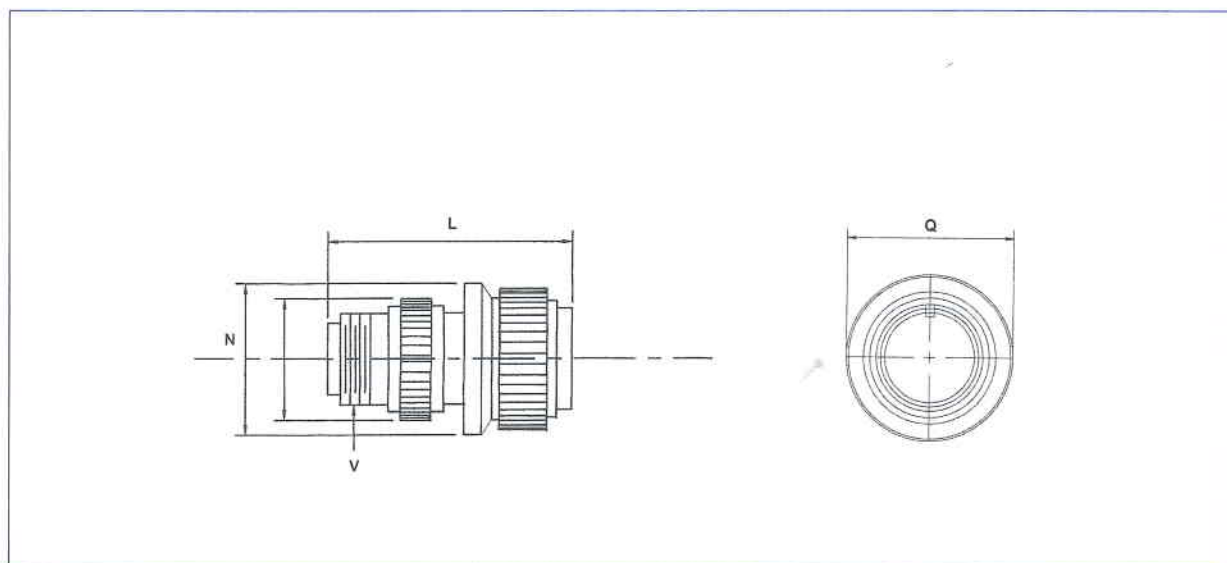
All dimensions in mm, unless otherwise stated.

| Connector Size | A Thread in Inches | K | L | M | N | O | R | S |
|----------------|--------------------|------|-------|-------|-------|-------|-------|-------|
| 10SL | .6250-24UNEF | 1.98 | 25.40 | 14.30 | 15.87 | 20.62 | 18.25 | 25.40 |
| 12S | .7500-20UNEF | 1.98 | 25.40 | 14.30 | 17.45 | 20.62 | 20.62 | 27.80 |
| 14S | .8750-20UNEF | 1.98 | 25.40 | 14.30 | 19.05 | 23.82 | 23.01 | 30.20 |
| 16S | 1.0000-20UNEF | 1.98 | 25.40 | 14.30 | 22.22 | 26.97 | 24.61 | 32.50 |
| 16 | 1.0000-20UNEF | 3.17 | 34.11 | 19.10 | 22.22 | 26.97 | 24.61 | 32.50 |
| 18 | 1.1250-18UNEF | 3.17 | 34.11 | 19.10 | 25.40 | 30.17 | 27.00 | 34.90 |
| 20 | 1.2500-18UNEF | 3.17 | 34.11 | 19.10 | 28.57 | 33.32 | 29.36 | 38.10 |
| 22 | 1.3750-18UNEF | 3.17 | 34.11 | 19.10 | 31.75 | 36.52 | 31.75 | 41.20 |
| 24 | 1.5000-18UNEF | 3.17 | 34.11 | 20.60 | 34.29 | 39.67 | 34.92 | 44.40 |
| 28 | 1.7500-18UNS | 3.17 | 34.11 | 20.60 | 41.27 | 46.02 | 39.67 | 50.60 |
| 32 | 2.0000-18UNS | 3.17 | 36.51 | 22.25 | 48.26 | 53.00 | 44.45 | 57.15 |
| 36 | 2.2500-16UN | 3.17 | 36.51 | 22.25 | 53.97 | 58.72 | 49.21 | 63.50 |

Straight Plugs

AMS 3106A
(MS 3106A)

- Includes backshell for accessory attachment.
(See page 30-34 for accessories.)
- Non environment proof.



All dimensions in mm, unless otherwise stated.

| Connector Size | L | N | Q | V Thread in Inches |
|----------------|-------|-------|-------|--------------------------|
| 10SL | 34.92 | 19.05 | 22.22 | .6250-24UNEF |
| 12S | 36.51 | 19.84 | 25.40 | .6250-24UNEF |
| 14S | 36.51 | 22.22 | 28.57 | .7500-20UNEF |
| 16S | 36.91 | 25.40 | 31.75 | .8750-20UNEF |
| 16 | 48.02 | 25.40 | 31.75 | .8750-20UNEF |
| 18 | 50.80 | 28.57 | 34.13 | 1.0000-20UNEF |
| 20 | 53.97 | 31.75 | 37.30 | 1.1875-18UNEF |
| 22 | 53.97 | 34.92 | 40.48 | 1.1875-18UNEF |
| 24 | 57.15 | 38.10 | 43.66 | 1.4375-18UNEF |
| 28 | 57.15 | 44.45 | 50.00 | 1.4375-18UNEF |
| 32 | 58.50 | 51.75 | 56.50 | 1.7500-18UNS |
| 36 | 60.32 | 57.15 | 62.71 | 2.0000-18UNS |

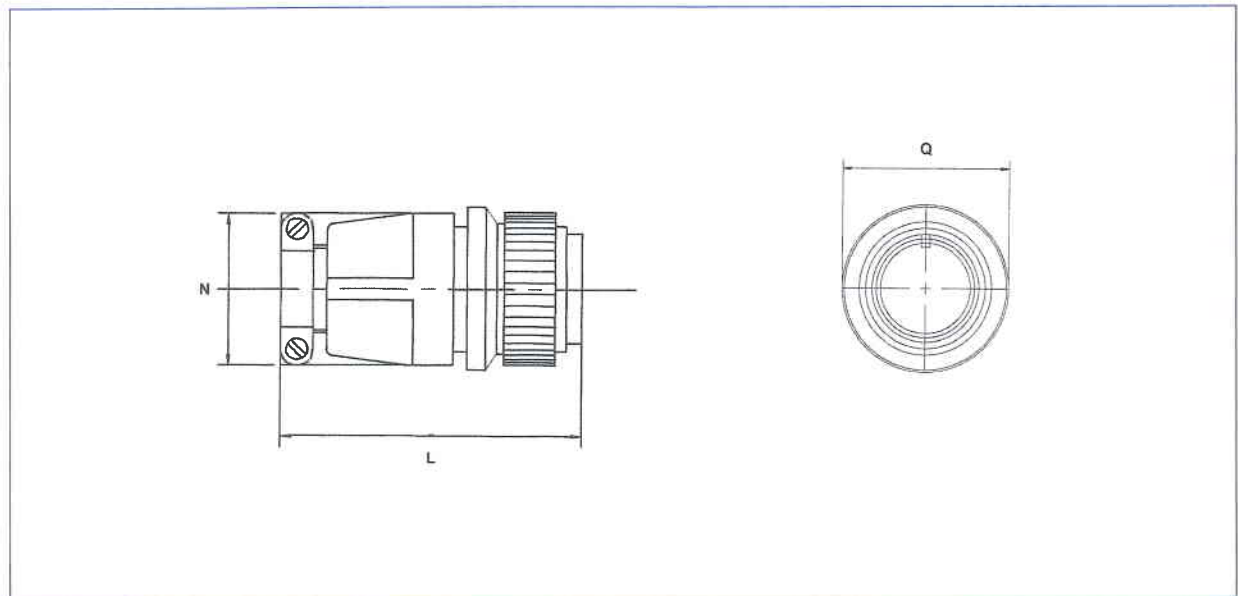
Straight Plugs

AMS 3106AF

- Includes cable clamp.
- Non environment proof.

AMS 3106F (MS 3106E/F)

- Includes cable clamp and wire sealing grommet.
- Fitted with an "O" ring gasket which provides a supplementary interfacial seal.
- Environment proof.



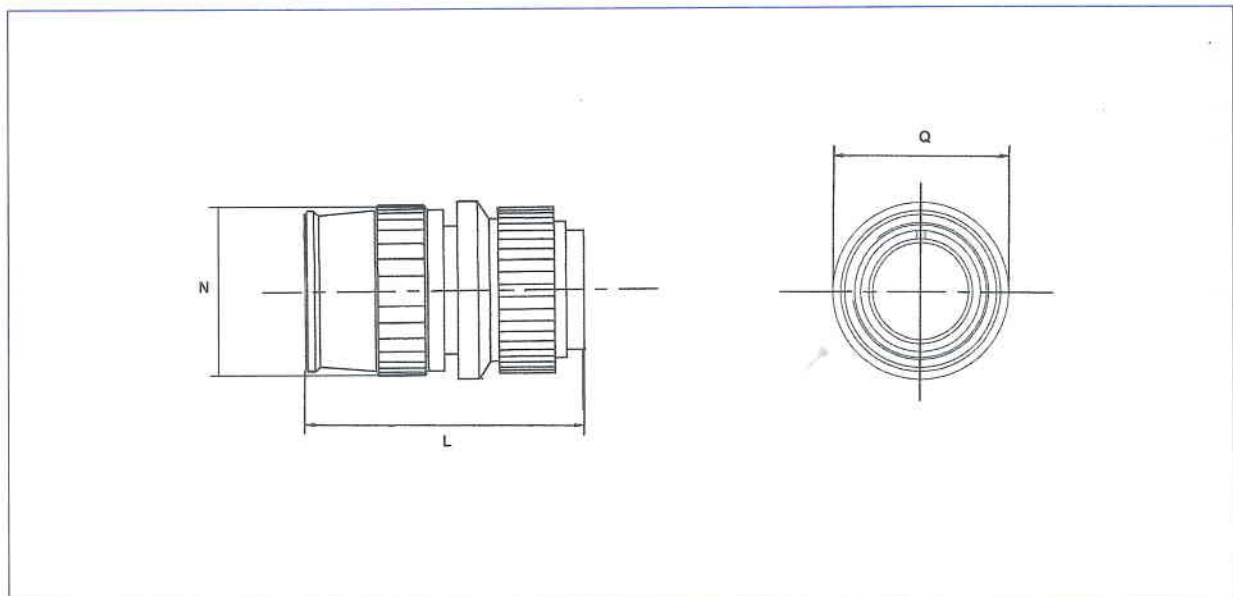
All dimensions in mm, unless otherwise stated.

| Connector Size | L | N | Q |
|----------------|-------|-------|-------|
| 10SL | 54.36 | 21.97 | 22.22 |
| 12S | 54.36 | 21.97 | 25.40 |
| 14S | 56.21 | 25.18 | 28.57 |
| 16S | 57.73 | 28.45 | 31.75 |
| 16 | 64.41 | 28.45 | 31.75 |
| 18 | 66.24 | 30.76 | 34.13 |
| 20 | 67.72 | 37.29 | 37.30 |
| 22 | 67.72 | 37.29 | 40.48 |
| 24 | 73.58 | 44.45 | 43.66 |
| 28 | 73.58 | 44.45 | 50.00 |
| 32 | 74.98 | 53.00 | 56.50 |
| 36 | 74.98 | 57.15 | 62.71 |

Straight Plugs

AMS 3106R
(MS 3106R)

- Includes wire sealing grommet.
- For use with individual wires.
- Fitted with an "O" ring gasket which provides a supplementary interfacial seal.
- Environment proof.



All dimensions in mm, unless otherwise stated.

| Connector Size | L | N | Q |
|----------------|-------|------|-------|
| 10SL | 47.00 | 22.0 | 22.23 |
| 12S | 47.00 | 25.0 | 25.40 |
| 14S | 47.00 | 29.0 | 28.57 |
| 16S | 47.00 | 31.0 | 31.75 |
| 16 | 55.05 | 31.0 | 31.75 |
| 18 | 56.05 | 34.0 | 34.13 |
| 20 | 56.05 | 37.0 | 37.30 |
| 22 | 56.05 | 40.0 | 40.48 |
| 24 | 56.05 | 44.0 | 43.66 |
| 28 | 56.05 | 49.5 | 50.00 |
| 32 | 58.25 | 56.0 | 56.50 |
| 36 | 58.25 | 62.5 | 62.71 |

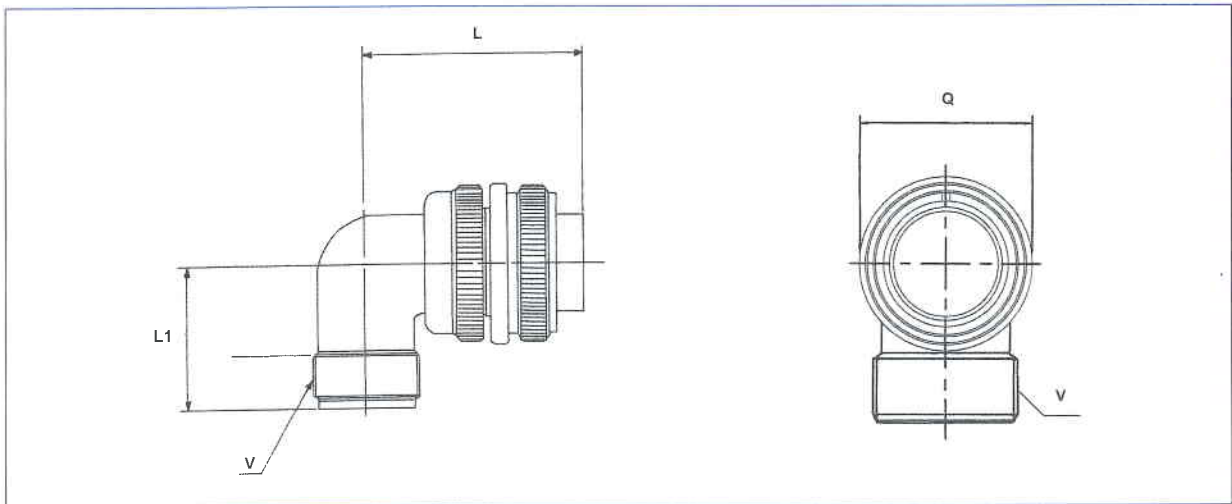
90° Angle Plugs

AMS 3108A (MS 3108A)

- Includes backshell for accessory attachment.
(See pages 30-34 for accessories.)
- Non environment proof.

AMS 3108R (MS 3108R)

- Includes wire sealing grommet.
- For use with individual wires.
- Fitted with an "O" ring gasket which provides a supplementary interfacial seal.
- Environment proof.



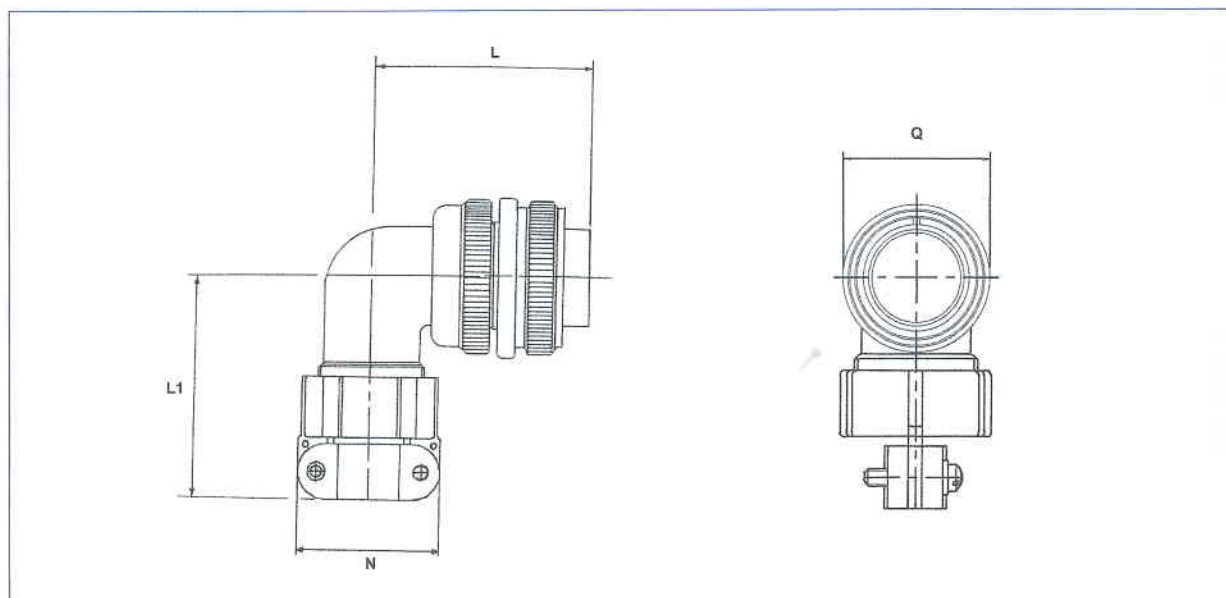
All dimensions in mm, unless otherwise stated.

| Shell Size | L | L1 | Q | V Thread in Inches |
|------------|------|----|-------|--------------------------|
| 10SL | 37.6 | 25 | 22.22 | .6250-24UNEF |
| 12S | 37.8 | 25 | 25.40 | .6250-24UNEF |
| 14S | 39.4 | 27 | 28.57 | .7500-20UNEF |
| 16S | 42.6 | 28 | 31.75 | .8750-20UNEF |
| 16 | 52.1 | 28 | 31.75 | .8750-20UNEF |
| 18 | 53.7 | 31 | 34.13 | 1.0000-20UNEF |
| 20 | 58.8 | 34 | 37.30 | 1.1875-18UNEF |
| 22 | 58.8 | 34 | 40.48 | 1.1875-18UNEF |
| 24 | 63.6 | 37 | 43.66 | 1.4375-18UNEF |
| 28 | 63.6 | 39 | 50.00 | 1.4375-18UNEF |
| 32 | 69.6 | 45 | 56.50 | 1.7500-18UNS |
| 36 | 72.8 | 48 | 62.71 | 2.0000-18UNS |

90° Angle Plugs

AMS 3108F (MS 3108F)

- Includes cable clamp and wire sealing grommet.
- Fitted with an "O" ring gasket which provides a supplementary interfacial seal.
- Environment proof.



All dimensions in mm, unless otherwise stated.

| Shell Size | L Max | L1 Max | N Max | Q Max |
|------------|-------|--------|-------|-------|
| 10SL | 37.6 | 37.0 | 23.0 | 22.22 |
| 12S | 37.8 | 37.0 | 23.0 | 25.40 |
| 14S | 39.4 | 40.0 | 28.0 | 28.57 |
| 16S | 42.6 | 42.5 | 29.0 | 31.75 |
| 16 | 52.1 | 42.5 | 29.0 | 31.75 |
| 18 | 53.7 | 50.2 | 34.0 | 34.13 |
| 20 | 58.8 | 49.0 | 36.0 | 37.30 |
| 22 | 58.8 | 50.0 | 36.0 | 40.48 |
| 24 | 63.6 | 53.0 | 44.0 | 43.66 |
| 28 | 63.6 | 55.0 | 44.0 | 50.00 |
| 32 | 69.6 | 65.0 | 53.0 | 56.50 |
| 36 | 72.8 | 68.0 | 60.0 | 62.71 |

AMS Standard Solder Contacts and Service Ratings

Machined, copper alloy contacts, are available in a range of sizes. A heavy silver-plated finish is deposited on all AMS style solder contacts for maximum corrosion resistance, maximum current carrying capacity and low millivolt drop.

AMS Standard Solder Contacts*

| Pin/Socket | Mating End Size | Wire Barrel Size | Allowable Wire Size A.W.G. | Test Current** Amps |
|------------|-----------------|------------------|----------------------------|---------------------|
| Pin/Socket | 16 Short | 16 | 16 | 13 |
| | | | 18 | 10 |
| | | | 20 | 7.5 |
| | | | 22 | 5 |
| Pin/Socket | 16 Long | 16 | 16 | 13 |
| | | | 18 | 10 |
| | | | 20 | 7.5 |
| | | | 22 | 5 |
| Pin/Socket | 12 | 12 | 12 | 23 |
| | | | 14 | 17 |
| Pin/Socket | 8 | 8 | 8 | 46 |
| | | | 10 | 33 |
| Pin/Socket | 4 | 4 | 4 | 80 |
| | | | 6 | 60 |
| Pin/Socket | 0 | 0 | 0 | 150 |
| | | | 1 | 125 |
| | | | 2 | 100 |

* Solder wells filled.

** Contact ratings, as stated, are test ratings only. The connector could not withstand full rated current through all contacts continuously. Please note that the electrical data given is not an establishment of electrical safety factors. This is left entirely in the designer's hands as he can best determine which peak voltage, switching surges and transients, etc. can be expected in a particular circuit.

AMS Standard Solder Contacts and Service Ratings

Table I
Contact Arrangement Service Rating

| MS Service Rating | Recommended Operating Voltage* at Sea Level | | Effective Creepage Distance Nom. in Inches | Mechanical Spacing Nom. in Inches |
|-------------------|---|----------|--|-----------------------------------|
| | DC | AC (RMS) | | |
| Inst. | 250 | 200 | 1/16 | |
| A | 700 | 500 | 1/8 | 1/16 |
| D | 1250 | 900 | 3/16 | 1/8 |
| E | 1750 | 1250 | 1/4 | 3/16 |
| B | 2450 | 1750 | 5/16 | 1/4 |
| C | 4200 | 3000 | 1 | 5/16 |

* The values listed in Table I, represent operating values which include a generous safety factor. It may be necessary for some applications to exceed the operating voltages listed here. If this is necessary, designers will find Table II useful for determining the degree to which the recommended values of Table I can be exceeded.

Table II

| MS Service Rating | Nominal Distance in Inches | | Standard Sea Level Conditions | |
|-------------------|----------------------------|----------|------------------------------------|-----------------------|
| | Airspace | Creepage | Minimum Flashover Voltage AC (RMS) | Test Voltage AC (RMS) |
| Inst. | 1/32 | 1/16 | 1400 | 1000 |
| A | 1/16 | 1/8 | 2800 | 2000 |
| D | 1/8 | 3/16 | 3600 | 2800 |
| E | 3/16 | 1/4 | 4500 | 3500 |
| B | 1/4 | 5/16 | 5700 | 4500 |
| C | 5/16 | 1 | 8500 | 7000 |

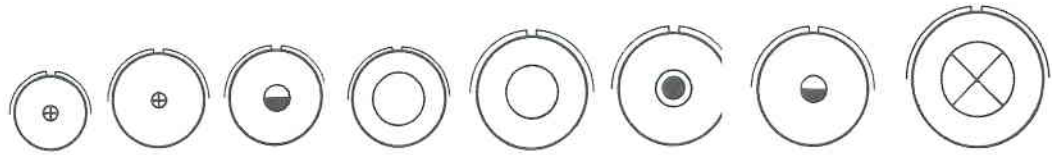
No attempt has been made to recommend operating voltages. The designer must determine his own operating voltage by the application of a safety factor, to the above chart, to compensate for circuit transients, surges etc.

Insert Arrangements

| Insert Arrangement | Service Rating | Total Contacts | Contact Size | | | | | Insert Arrangement | Service Rating | Total Contacts | Contact Size | | | | | Insert Arrangement | Service Rating | Total Contacts | Contact Size | | | | |
|--------------------|----------------|----------------|--------------|---|---|----|----|--------------------|----------------|----------------|--------------|---|---|----|----|--------------------|----------------|----------------|--------------|---|---|----|----|
| | | | 0 | 4 | 8 | 12 | 16 | | | | 0 | 4 | 8 | 12 | 16 | | | | 0 | 4 | 8 | 12 | 16 |
| 10SL-3 | A | 3 | | | | | 3 | 20-17 | A | 6 | | | | 5 | 1 | 24-22 | D | 4 | | | 4 | | |
| 10SL-4 | A | 2 | | | | | 2 | 20-18 | A | 9 | | | | 3 | 6 | 24-27 | E | 7 | | | | 7 | |
| 12S-3 | A | 2 | | | | | 2 | 20-19 | A | 3 | | | 3 | | | 24-28 | Inst | 24 | | | | 24 | |
| 14S-1 | A | 3 | | | | | 3 | 20-20 | A | 4 | | 1 | | 3 | | 28-1 | D/A | 9 | | | 3 | 6 | |
| 14S-2 | Inst | 4 | | | | | 4 | 20-21 | A | 9 | | | | 1 | 8 | 28-2 | D | 14 | | | | 2 | 12 |
| 14S-4 | D | 1 | | | | | 1 | 20-22 | A | 6 | | | 3 | | 3 | 28-3 | E | 3 | | | 3 | | |
| 14S-5 | Inst | 5 | | | | | 5 | 20-23 | A | 2 | | | 2 | | | 28-4 | E/D | 9 | | | | 2 | 7 |
| 14S-6 | Inst | 6 | | | | | 6 | 20-24 | A | 4 | | | 2 | | 2 | 28-5 | D | 5 | | 2 | | 1 | 2 |
| 14S-7 | A | 3 | | | | | 3 | 20-27 | A | 14 | | | | | 14 | 28-6 | D | 3 | | 3 | | | |
| 14S-9 | A | 2 | | | | | 2 | 20-29 | A | 17 | | | | | 17 | 28-7 | D | 2 | | 2 | | | |
| 16S-1 | A | 7 | | | | | 7 | 20-33 | A | 11 | | | | | 11 | 28-8 | E/D/A | 12 | | | | 2 | 10 |
| 16S-3 | B | 1 | | | | | 1 | 22-1 | D | 2 | | | 2 | | | 28-9 | D | 12 | | | | 6 | 6 |
| 16S-4 | D | 2 | | | | | 2 | 22-2 | D | 3 | | | 3 | | | 28-10 | D/A | 7 | | 2 | 2 | 3 | |
| 16S-5 | A | 3 | | | | | 3 | 22-4 | A | 4 | | | 2 | 2 | | 28-11 | A | 22 | | | | 4 | 18 |
| 16S-6 | A | 3 | | | | | 3 | 22-5 | D | 6 | | | | 2 | 4 | 28-12 | A | 26 | | | | | 26 |
| 16S-8 | A | 5 | | | | | 5 | 22-6 | D | 3 | | | 2 | | 1 | 28-15 | A | 35 | | | | | 35 |
| 16-2 | E | 1 | | | | 1 | | 22-7 | E | 1 | 1 | | | | | 28-16 | A | 20 | | | | | 20 |
| 16-7 | A | 3 | | | 1 | | 2 | 22-8 | E | 2 | | | 2 | | | 28-17 | B/D/A | 15 | | | | | 15 |
| 16-9 | A | 4 | | | | 2 | 2 | 22-9 | E | 3 | | | 3 | | | 28-18 | C/D/A/Inst | 12 | | | | | 12 |
| 16-10 | A | 3 | | | | 3 | | 22-10 | E | 4 | | | | 4 | | 28-19 | B/D/A | 10 | | | | 4 | 6 |
| 16-11 | A | 2 | | | | 2 | | 22-11 | B | 2 | | | | 2 | | 28-20 | A | 14 | | | | 10 | 4 |
| 16-12 | A | 1 | | 1 | | | | 22-12 | D | 5 | | | 2 | | 3 | 28-21 | A | 37 | | | | | 37 |
| 18-1 | A/Inst | 10 | | | | | 10 | 22-13 | D/A | 5 | | | | 4 | 1 | 28-22 | D | 6 | | 3 | | | 3 |
| 18-3 | D | 2 | | | | 2 | | 22-14 | A | 19 | | | | | 19 | 32-1 | E/D | 5 | 2 | | | 3 | |
| 18-4 | D | 4 | | | | 4 | | 22-15 | E/A | 6 | | | 5 | 1 | | 32-2 | E | 5 | | 3 | | | 2 |
| 18-5 | D | 3 | | | | 2 | 1 | 22-16 | A | 9 | | | 3 | 6 | | 32-3 | D | 9 | 1 | 2 | | 2 | 4 |
| 18-6 | D | 1 | | 1 | | | | 22-17 | D/A | 9 | | | | 1 | 8 | 32-4 | A/D | 14 | | | | 2 | 12 |
| 18-7 | B | 1 | | | 1 | | | 22-18 | D/A | 8 | | | | | 8 | 32-5 | D | 2 | 2 | | | | |
| 18-8 | A | 8 | | | | 1 | 7 | 22-19 | A | 14 | | | | | 14 | 32-6 | A | 23 | | 2 | 3 | 2 | 16 |
| 18-9 | Inst | 7 | | | | 2 | 5 | 22-20 | A | 9 | | | | | 9 | 32-7 | Inst. A | 35 | | | | 7 | 28 |
| 18-10 | A | 4 | | | | 4 | | 22-21 | A | 3 | 1 | | | 2 | | 32-8 | A | 30 | | | | 6 | 24 |
| 18-11 | A | 5 | | | | 5 | | 22-22 | A | 4 | | | 4 | | | 32-9 | D | 14 | | 2 | | | 12 |
| 18-12 | A | 6 | | | | 6 | | 22-23 | D/A | 8 | | | 8 | | | 32-10 | E/B/D/A | 7 | | 2 | 2 | | 3 |
| 18-13 | A | 4 | | | 1 | 3 | | 22-24 | D/A | 6 | | | 2 | 4 | | 32-12 | A/D | 15 | | | | 5 | 10 |
| 18-14 | A | 2 | | 1 | | 1 | | 22-27 | D/A | 9 | | | 1 | 8 | | 32-13 | D | 23 | | | | 5 | 18 |
| 18-16 | C | 1 | | | | 1 | | 22-28 | A | 7 | | | 7 | | | 32-15 | D | 8 | 2 | | | 6 | |
| 18-19 | A | 10 | | | | 10 | | 22-33 | D/A | 7 | | | | 7 | | 32-17 | D | 4 | | 4 | | | |
| 18-20 | A | 5 | | | | 5 | | 22-34 | D | 5 | | | 3 | 2 | | 36-1 | D | 22 | | | | 4 | 18 |
| 18-22 | D | 3 | | | | 3 | | 24-2 | D | 7 | | | 7 | | | 36-3 | D | 6 | 3 | | | 3 | |
| 18-29 | A | 5 | | | | 5 | | 24-3 | D | 7 | | | 2 | 5 | | 36-4 | D/A | 3 | 3 | | | | |
| 20-3 | D | 3 | | | | 3 | | 24-5 | A | 16 | | | | 16 | | 36-5 | A | 4 | 4 | | | | |
| 20-4 | D | 4 | | | | 4 | | 24-6 | D/A | 8 | | | | 8 | | 36-6 | A | 6 | 2 | 4 | | | |
| 20-6 | D | 3 | | | | 3 | | 24-7 | A | 16 | | | 2 | 14 | | 36-7 | A | 47 | | | | 7 | 40 |
| 20-7 | D/A | 8 | | | | 8 | | 24-9 | A | 2 | | 2 | | | | 36-8 | A | 47 | | | | 1 | 46 |
| 20-8 | Inst | 6 | | | 2 | 4 | | 24-10 | A | 7 | | | 7 | | | 36-9 | A | 31 | | 1 | 2 | 14 | 14 |
| 20-9 | D/A | 8 | | | | 1 | 7 | 24-11 | A | 9 | | | 3 | 6 | | 36-10 | A | 48 | | | | | 48 |
| 20-11 | Inst | 13 | | | | 13 | | 24-12 | A | 5 | | 2 | | 3 | | 36-13 | E/A | 17 | | | | 2 | 15 |
| 20-12 | A | 2 | | 1 | | 1 | | 24-16 | D/A | 7 | | | 1 | 3 | 3 | 36-14 | D | 16 | | | 5 | 5 | 6 |
| 20-14 | A | 5 | | | 2 | 3 | | 24-17 | D | 5 | | | 2 | 3 | | 36-15 | D/A | 35 | | | | | 35 |
| 20-15 | A | 7 | | | | 7 | | 24-20 | D | 11 | | | 2 | 9 | | 36-20 | A | 34 | | | 2 | 2 | 30 |
| 20-16 | A | 9 | | | | 2 | 7 | 24-21 | D | 10 | | | 1 | 9 | | 36-52 | A | 52 | | | | | 52 |

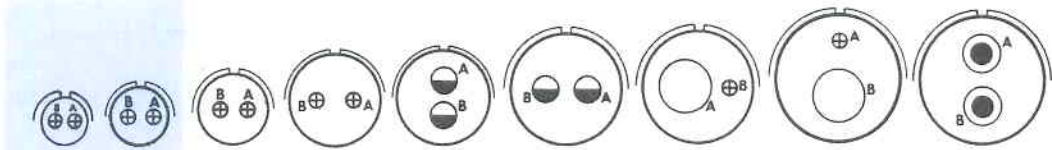
Insert Arrangement

1 Contact



| | | | | | | | | |
|--------------------|-------|-------|------|-------|------|------|-------|------|
| Insert Arrangement | 14S-4 | 16S-3 | 16-2 | 16-12 | 18-6 | 18-7 | 18-16 | 22-7 |
| Service Rating | D | B | E | A | D | B | C | E |
| Number of Contacts | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Contact Size | 16 | 16 | 12 | 4 | 4 | 8 | 12 | 0 |

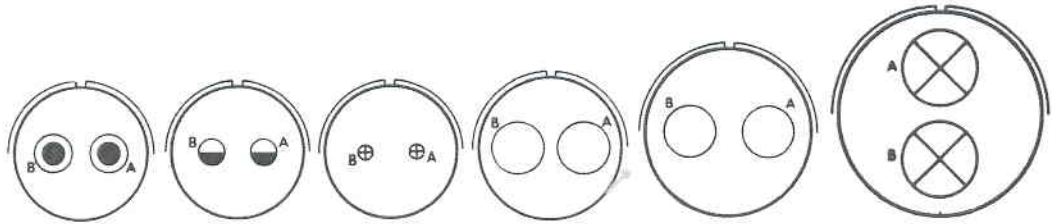
2 Contacts



Front of
Socket Insert

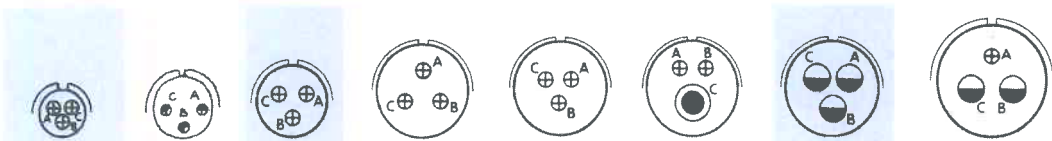
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|--------------------|--------|-------|-------|-------|-------|------|-------|-------|-------|
| Insert Arrangement | 10SL-4 | 12S-3 | 14S-9 | 16S-4 | 16-11 | 18-3 | 18-14 | 20-12 | 20-23 |
| Service Rating | A | A | A | D | A | D | A | A | A |
| Number of Contacts | 2 | 2 | 2 | 2 | 2 | 2 | 1 1 | 1 1 | 2 |
| Contact Size | 16 | 16 | 16 | 16 | 12 | 12 | 4 16 | 4 16 | 8 |

2 Contacts



| | | | | | | |
|--------------------|------|------|-------|------|------|------|
| Insert Arrangement | 22-1 | 22-8 | 22-11 | 24-9 | 28-7 | 32-5 |
| Service Rating | D | E | B | A | D | D |
| Number of Contacts | 2 | 2 | 2 | 2 | 2 | 2 |
| Contact Size | 8 | 12 | 16 | 4 | 4 | 0 |

3 Contacts



Front of
Socket Insert

| | | | | | | | | |
|--------------------|--------|-------|-------|-------|-------|------|-------|-------|
| Insert Arrangement | 10SL-3 | 14S-1 | 14S-7 | 16S-5 | 16S-6 | 16-7 | 16-10 | 18-5 |
| Service Rating | A | A | A | A | A | A | A | D |
| Number of Contacts | 3 | 3 | 3 | 3 | 3 | 1 2 | 3 | 2 1 |
| Contact Size | 16 | 16 | 16 | 16 | 16 | 8 16 | 12 | 12 16 |



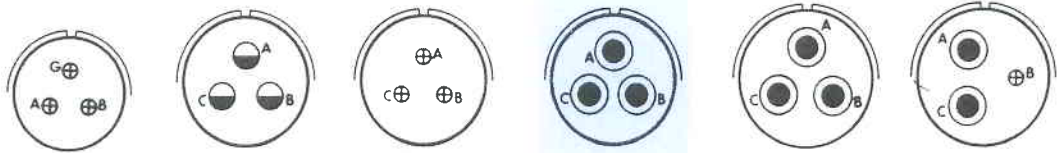
Contact Legend

16 12 8 4 0

Preferred Range

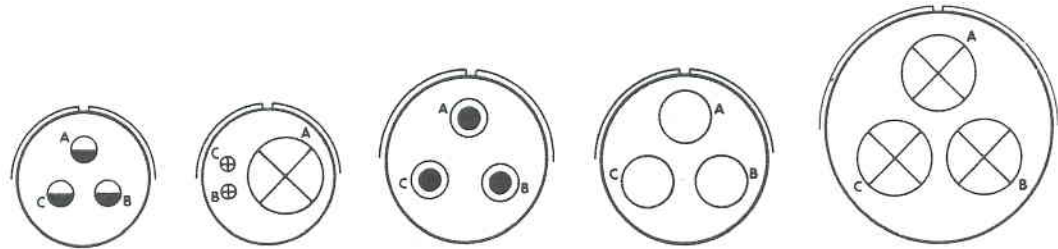
Insert Arrangement

3 Contacts



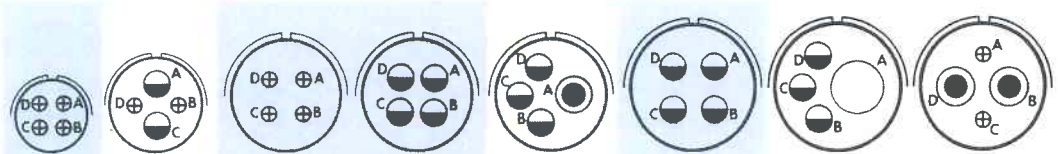
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|--------------------|-------|------|------|-------|------|------|
| Insert Arrangement | 18-22 | 20-3 | 20-6 | 20-19 | 22-2 | 22-6 |
| Service Rating | D | D | D | A | D | D |
| Number of Contacts | 3 | 3 | 3 | 3 | 3 | 2 1 |
| Contact Size | 16 | 12 | 16 | 8 | 8 | 8 16 |

3 Contacts



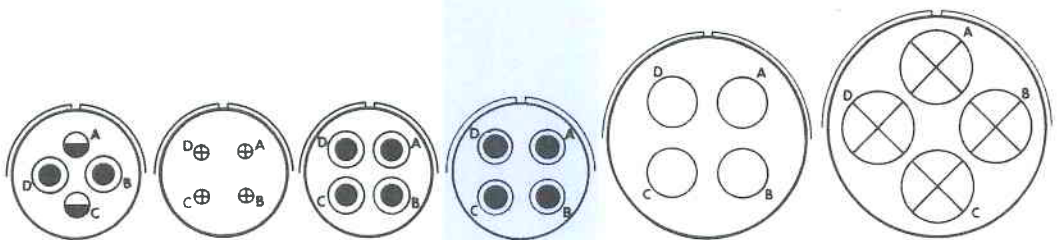
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|--------------------|------|-------|------|------|------------|
| Insert Arrangement | 22-9 | 22-21 | 28-3 | 28-6 | 36-4 |
| Service Rating | E | A | E | D | A=D; B,C=A |
| Number of Contacts | 3 | 1 2 | 3 | 3 | 3 |
| Contact Size | 12 | 0 16 | 8 | 4 | 0 |

4 Contacts



| | | | | | | | | |
|--------------------|-------|-------|------|-------|-------|------|-------|-------|
| Insert Arrangement | 14S-2 | 16-9 | 18-4 | 18-10 | 18-13 | 20-4 | 20-20 | 20-24 |
| Service Rating | Inst. | A | D | A | A | D | A | A |
| Number of Contacts | 4 | 2 2 | 4 | 4 | 1 3 | 4 | 1 3 | 2 2 |
| Contact Size | 16 | 12 16 | 16 | 12 | 8 12 | 12 | 4 12 | 8 16 |

4 Contacts



| | | | | | | |
|--------------------|------|-------|-------|-------|-------|------|
| Insert Arrangement | 22-4 | 22-10 | 22-22 | 24-22 | 32-17 | 36-5 |
| Service Rating | A | E | A | D | D | A |
| Number of Contacts | 2 2 | 4 | 4 | 4 | 4 | 4 |
| Contact Size | 8 12 | 16 | 8 | 8 | 4 | 0 |

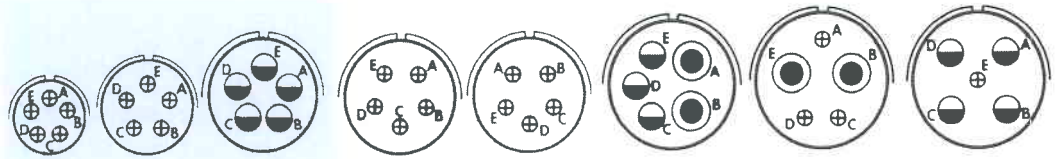


| | | | | | |
|----------------|----|----|---|---|---|
| Contact Legend | 16 | 12 | 8 | 4 | 0 |
|----------------|----|----|---|---|---|

Preferred Range

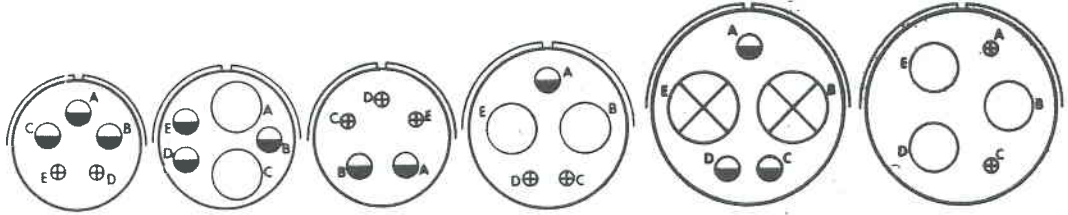
Insert Arrangement

5 Contacts



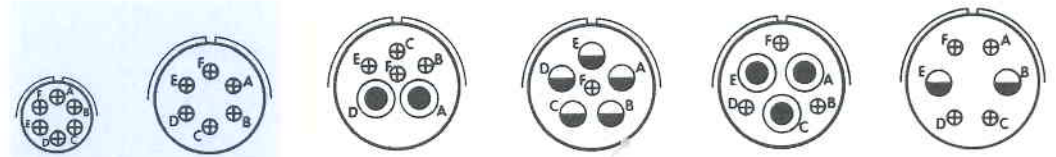
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|--------------------|-------|-------|-------|-------|-------|-------|-------|----------------|
| Insert Arrangement | 14S-5 | 16S-8 | 18-11 | 18-20 | 18-29 | 20-14 | 22-12 | 22-13 |
| Service Rating | Inst. | A | A | A | A | A | D | E=D; A,B,C,D=A |
| Number of Contacts | 5 | 5 | 5 | 5 | 5 | 2 3 | 2 3 | 4 1 |
| Contact Size | 16 | 16 | 12 | 16 | 16 | 8 12 | 8 16 | 12 16 |

5 Contacts



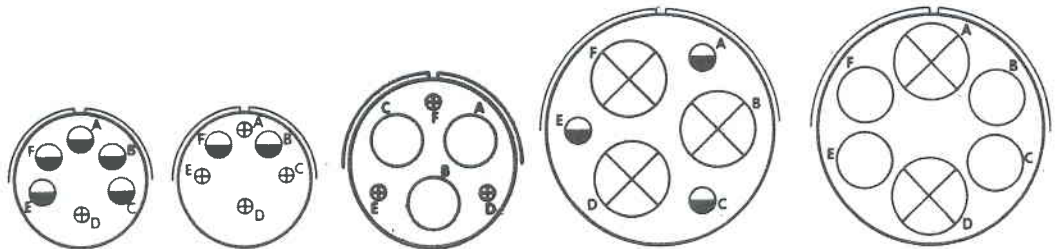
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|--------------------|-------|-------|-------|---------|-----------------------|------|
| Insert Arrangement | 22-34 | 24-12 | 24-17 | 28-5 | 32-1 | 32-2 |
| Service Rating | D | A | D | D | A = E; B, C, D, E = D | E |
| Number of Contacts | 3 2 | 2 3 | 2 3 | 2 1 2 | 2 3 | 3 2 |
| Contact Size | 12 16 | 4 12 | 12 16 | 4 12 16 | 0 12 | 4 16 |

6 Contacts



| | | | | | | |
|--------------------|-------|-------|-------|-------|-------|-------|
| Insert Arrangement | 14S-6 | 18-12 | 20-8 | 20-17 | 20-22 | 22-5 |
| Service Rating | Inst. | A | Inst. | A | A | D |
| Number of Contacts | 6 | 6 | 2 4 | 5 1 | 3 3 | 2 4 |
| Contact Size | 16 | 16 | 8 16 | 12 16 | 8 16 | 12 16 |

6 Contacts



| | | | | | |
|--------------------|------------------|------------------|-------|------|------|
| Insert Arrangement | 22-15 | 22-24 | 28-22 | 36-3 | 36-6 |
| Service Rating | D=E; A,B,C,E,F=A | C,D,E=D; A,B,F=A | D | D | A |
| Number of Contacts | 5 1 | 2 4 | 3 3 | 3 3 | 2 4 |
| Contact Size | 12 16 | 12 16 | 4 16 | 0 12 | 0 4 |

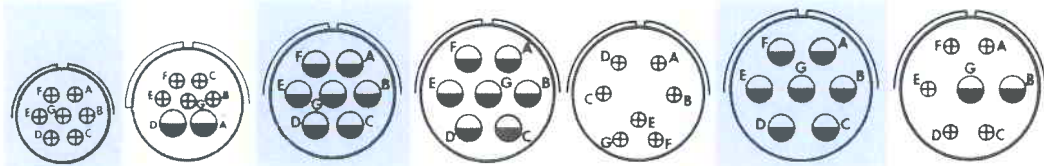


| | | | | | |
|----------------|----|----|---|---|---|
| Contact Legend | 16 | 12 | 8 | 4 | 0 |
|----------------|----|----|---|---|---|

Preferred Range

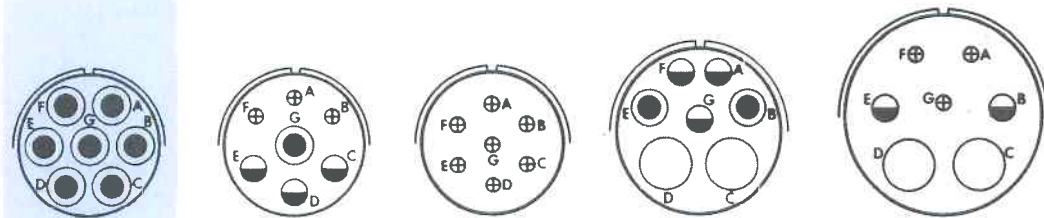
Insert Arrangement

7 Contacts



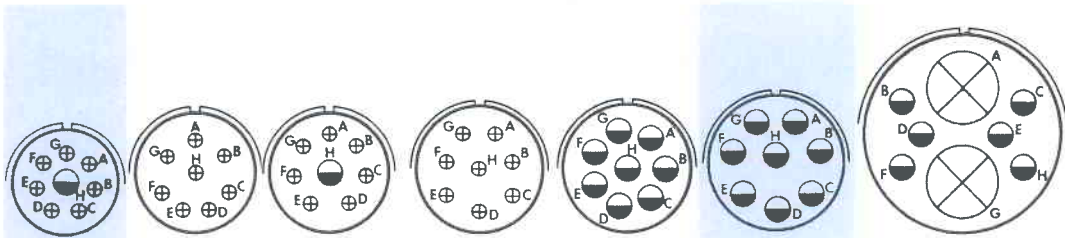
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|--------------------|-------|-------|-------|-------|--------------------|------|-------|
| Insert Arrangement | 16S-1 | 18-9 | 20-15 | 22-28 | 22-33 | 24-2 | 24-3 |
| Service Rating | A | Inst. | A | A | A,B,C,D,=D;E,F,G=A | D | D |
| Number of Contacts | 7 | 2 5 | 7 | 7 | 7 | 7 | 2 5 |
| Contact Size | 16 | 12 16 | 12 | 12 | 16 | 12 | 12 16 |

7 Contacts



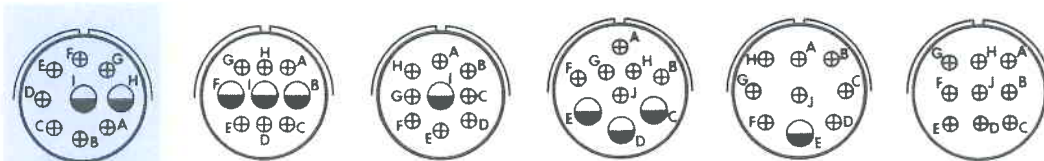
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|--------------------|-------|-------------------|-------|------------|-----------------------|
| Insert Arrangement | 24-10 | 24-16 | 24-27 | 28-10 | 32-10 |
| Service Rating | A | A,B,F,G=D;C,D,E=A | E | G=D;Bal.=A | A,F=E;G=B;B,E=D;C,D=A |
| Number of Contacts | 7 | 1 3 3 | 7 | 2 2 3 | 2 2 3 |
| Contact Size | 8 | 8 12 16 | 16 | 4 8 12 | 4 8 16 |

8 Contacts

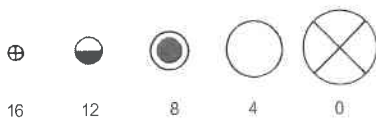


| | | | | | | | |
|--------------------|-------|---------------|------------|---------------------|------------|----------------|-------|
| Insert Arrangement | 18-8 | 20-7 | 20-9 | 22-18 | 22-23 | 24-6 | 32-15 |
| Service Rating | A | ABHG=DC,DEF=A | H=D;Bal.=A | A,B,F,G,H=D;C,D,E=A | H=D;Bal.=A | A,G,H=D;Bal.=A | D |
| Number of Contacts | 1 7 | 8 | 1 7 | 8 | 8 | 8 | 2 6 |
| Contact Size | 12 16 | 16 | 12 16 | 16 | 12 | 12 | 0 12 |

9 Contacts



| | | | | | | |
|--------------------|-------|-------|-------|-------|------------|-------|
| Insert Arrangement | 20-16 | 20-18 | 20-21 | 22-16 | 22-17 | 22-20 |
| Service Rating | A | A | A | A | A=D;Bal.=A | A |
| Number of Contacts | 2 7 | 3 6 | 1 8 | 3 6 | 1 8 | 9 |
| Contact Size | 12 16 | 12 16 | 12 16 | 12 16 | 12 16 | 16 |



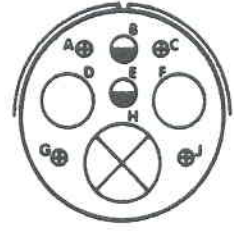
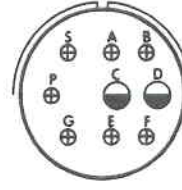
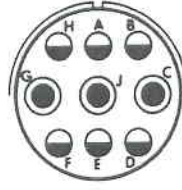
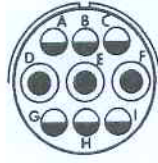
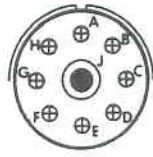
Contact Legend

16 12 8 4 0

Preferred Range

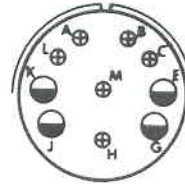
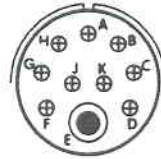
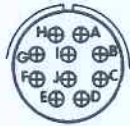
Insert Arrangement

9 Contacts



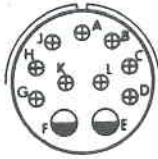
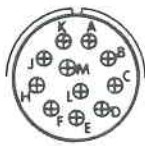
| | | | | | |
|--------------------|------------|-------|----------------|----------------|-----------|
| Insert Arrangement | 22-27 | 24-11 | 28-1 | 28-4 | 32-3 |
| Service Rating | J=D;Bal.=A | A | A,J,E=D;Bal.=A | G,P,S=E;Bal.=D | D |
| Number of Contacts | 1 8 | 3 6 | 3 6 | 2 7 | 1 2 2 4 |
| Contact Size | 8 16 | 8 12 | 8 12 | 12 16 | 0 4 12 16 |

10 Contacts



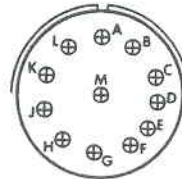
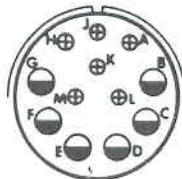
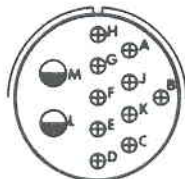
| | | | | |
|--------------------|----------------------|-------|-------|--------------------|
| Insert Arrangement | 18-1 | 18-19 | 24-21 | 28-19 |
| Service Rating | B,C,F,G=A;Bal.=Inst. | A | D | H,M=B;A,B=D;Bal.=A |
| Number of Contacts | 10 | 10 | 1 9 | 4 6 |
| Contact Size | 16 | 16 | 8 16 | 12 16 |

11 Contacts



| | | |
|--------------------|-------|-------|
| Insert Arrangement | 20-33 | 24-20 |
| Service Rating | A | D |
| Number of Contacts | 11 | 2 9 |
| Contact Size | 16 | 12 16 |

12 Contacts



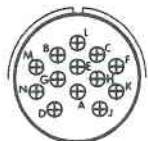
| | | | |
|--------------------|------------------|-------|----------------------------------|
| Insert Arrangement | 28-8 | 28-9 | 28-18 |
| Service Rating | L,M=E;B=D;Bal.=A | D | M=C;G,H,J,K,L=D;A,B=A;Bal.=Inst. |
| Number of Contacts | 2 10 | 6 6 | 12 |
| Contact Size | 12 16 | 12 16 | 16 |



| | | | | | |
|----------------|----|----|---|---|---|
| Contact Legend | 16 | 12 | 8 | 4 | 0 |
|----------------|----|----|---|---|---|

Preferred Range

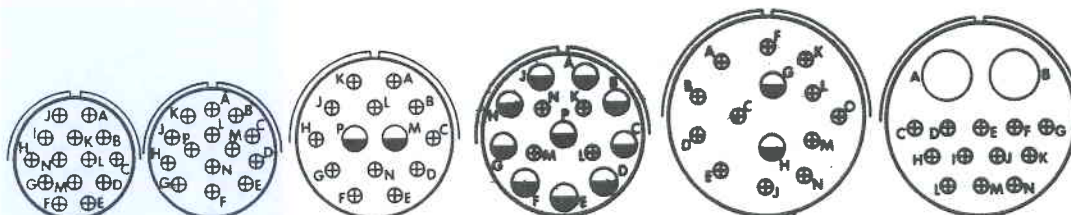
Insert Arrangement



13 Contacts

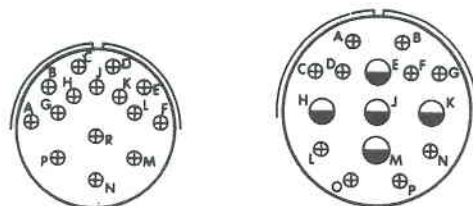
| | |
|--------------------|-------|
| Insert Arrangement | 20-11 |
| Service Rating | Inst. |
| Number of Contacts | 13 |
| Contact Size | 16 |

14 Contacts



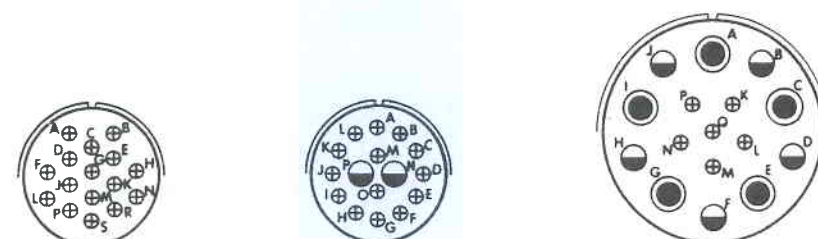
| | | | | | | |
|--------------------|-------|-------|-------|-------|------------------|------|
| Insert Arrangement | 20-27 | 22-19 | 28-2 | 28-20 | 32-4 | 32-9 |
| Service Rating | A | A | D | A | F,J,K,N=A;Bal.=D | D |
| Number of Contacts | 14 | 14 | 2 12 | 10 4 | 2 12 | 2 12 |
| Contact Size | 16 | 16 | 12 16 | 12 16 | 12 16 | 4 16 |

15 Contacts



| | | |
|--------------------|----------------------|--------------------|
| Insert Arrangement | 28-17 | 32-12 |
| Service Rating | R=B;M,N,P=D;A to L=A | C,D,E,F,G=A;Bal.=D |
| Number of Contacts | 15 | 5 10 |
| Contact Size | 16 | 12 16 |

16 Contacts



| | | | |
|--------------------|------|-------|---------|
| Insert Arrangement | 24-5 | 24-7 | 36-14 |
| Service Rating | A | A | D |
| Number of Contacts | 16 | 2 14 | 5 5 6 |
| Contact Size | 16 | 12 16 | 8 12 16 |

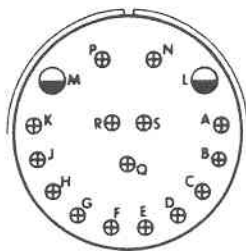
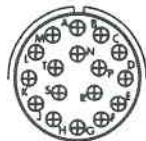


| | | | | | |
|----------------|----|----|---|---|---|
| Contact Legend | 16 | 12 | 8 | 4 | 0 |
|----------------|----|----|---|---|---|

Preferred Range

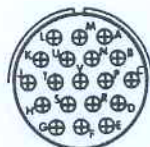
Insert Arrangement

17 Contacts



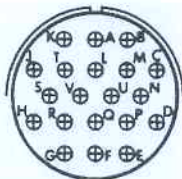
| | | |
|--------------------|-------|----------------|
| Insert Arrangement | 20-29 | 36-13 |
| Service Rating | A | N,P,Q=E;Bal.=A |
| Number of Contacts | 17 | 2 15 |
| Contact Size | 16 | 12 16 |

19 Contacts



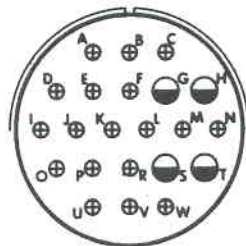
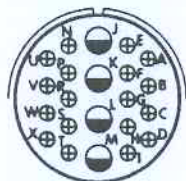
| | |
|--------------------|-------|
| Insert Arrangement | 22-14 |
| Service Rating | A |
| Number of Contacts | 19 |
| Contact Size | 16 |

20 Contacts



| | |
|--------------------|-------|
| Insert Arrangement | 28-16 |
| Service Rating | A |
| Number of Contacts | 20 |
| Contact Size | 16 |

22 Contacts



| | | |
|--------------------|-------|-------|
| Insert Arrangement | 28-11 | 36-1 |
| Service Rating | A | D |
| Number of Contacts | 4 18 | 4 18 |
| Contact Size | 12 16 | 12 16 |



Contact Legend

16

12

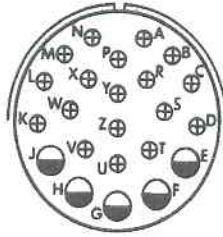
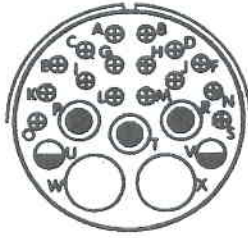
8

4

0

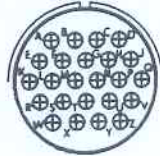
Preferred Range

Insert Arrangement



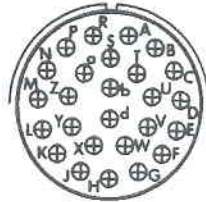
23 Contacts

| | | |
|--------------------|-----------|-------|
| Insert Arrangement | 32-6 | 32-13 |
| Service Rating | A | D |
| Number of Contacts | 2 3 2 16 | 5 18 |
| Contact Size | 4 8 12 16 | 12 16 |



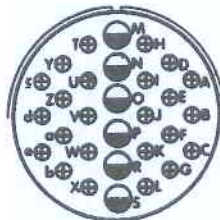
24 Contacts

| | |
|--------------------|-------|
| Insert Arrangement | 24-28 |
| Service Rating | Inst. |
| Number of Contacts | 24 |
| Contact Size | 16 |



26 Contacts

| | |
|--------------------|-------|
| Insert Arrangement | 28-12 |
| Service Rating | A |
| Number of Contacts | 26 |
| Contact Size | 16 |



30 Contacts

| | |
|--------------------|-------|
| Insert Arrangement | 32-8 |
| Service Rating | A |
| Number of Contacts | 6 24 |
| Contact Size | 12 16 |

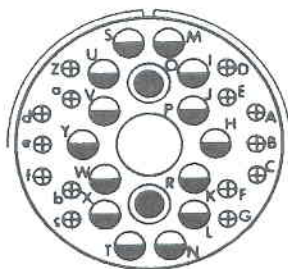


Contact Legend

16 12 8 4 0

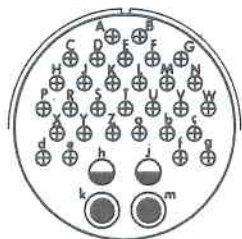
Preferred Range

Insert Arrangement



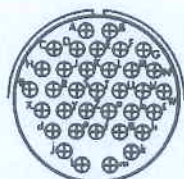
31 Contacts

| | |
|--------------------|-----------|
| Insert Arrangement | 36-9 |
| Service Rating | A |
| Number of Contacts | 1 2 14 14 |
| Contact Size | 4 8 12 16 |



34 Contacts

| | |
|--------------------|---------|
| Insert Arrangement | 36-20 |
| Service Rating | A |
| Number of Contacts | 2 2 30 |
| Contact Size | 8 12 16 |

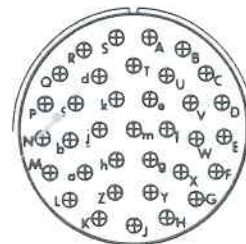


35 Contacts

| | |
|--------------------|-------|
| Insert Arrangement | 28-15 |
| Service Rating | A |
| Number of Contacts | 35 |
| Contact Size | 16 |



| | |
|--------------------|-------------------------|
| Insert Arrangement | 32-7 |
| Service Rating | A, B, h, j=Inst; Bal.=A |
| Number of Contacts | 7 28 |
| Contact Size | 12 16 |



| | |
|--------------------|-------------|
| Insert Arrangement | 36-15 |
| Service Rating | M=D; Bal.=A |
| Number of Contacts | 35 |
| Contact Size | 16 |



37 Contacts

| | |
|--------------------|-------|
| Insert Arrangement | 28-21 |
| Service Rating | A |
| Number of Contacts | 37 |
| Contact Size | 16 |

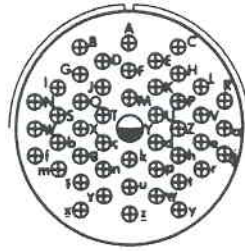
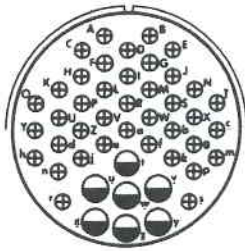


Contact Legend

16 12 8 4 0

Preferred Range

Insert Arrangement



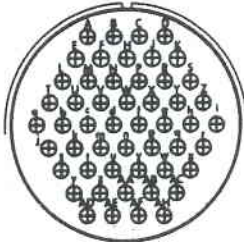
47 Contacts

| | | |
|--------------------|-------|-------|
| Insert Arrangement | 36-7 | 36-8 |
| Service Rating | A | A |
| Number of Contacts | 7 40 | 1 46 |
| Contact Size | 12 16 | 12 16 |



48 Contacts

| | |
|--------------------|-------|
| Insert Arrangement | 36-10 |
| Service Rating | A |
| Number of Contacts | 48 |
| Contact Size | 16 |



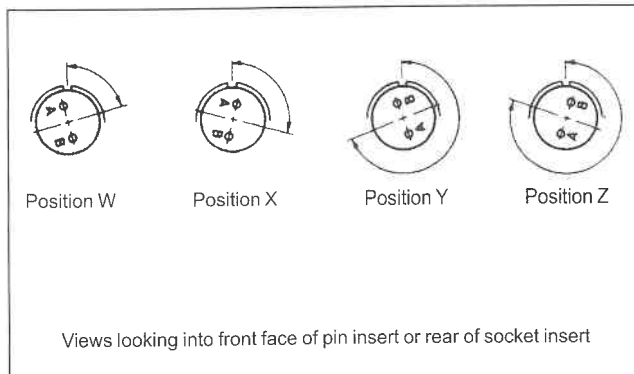
52 Contacts

| | |
|--------------------|-------|
| Insert Arrangement | 36-52 |
| Service Rating | A |
| Number of Contacts | 52 |
| Contact Size | 16 |



Contact Legend 16 12 8 4 0

Insert Alternate Positioning



To avoid cross-connecting problems in applications requiring the use of more than one connector of the same size and arrangement, alternate insert rotations are available as indicated in the accompanying chart on page 29.

As shown in the diagram, the front face of the pin insert is rotated within the shell in a clockwise direction from the normal shell key. The socket insert would be rotated counterclockwise the same number of degrees in respect to the normal shell key.

Insert Alternate Positioning

| Insert Layout | Degrees | | | |
|------------------|---------|-----|-----|-----|
| | W | X | Y | Z |
| 10SL - 3 | - | - | - | - |
| 10SL - 4 | - | - | - | - |
| 12S - 3 | 70 | 145 | 215 | 290 |
| 14S - 1 | - | - | - | - |
| 14S - 2 | - | 120 | 240 | - |
| 14S - 4 | - | - | - | - |
| 14S - 5 | - | 110 | - | - |
| 14S - 6 | - | - | - | - |
| 14S - 7 | 90 | 180 | 270 | - |
| 14S - 9 | 70 | 145 | 215 | 290 |
| 16S - 1 | 80 | - | - | 280 |
| 16S - 3 | - | - | - | - |
| 16S - 4 | 35 | 110 | 250 | 325 |
| 16S - 5 | 70 | 145 | 215 | 290 |
| 16S - 6 | 90 | 180 | 270 | - |
| 16S - 8 | - | 170 | 265 | - |
| 16 - 2 | - | - | - | - |
| 16 - 7 | 80 | 110 | 250 | 280 |
| 16 - 9 | 35 | 110 | 250 | 325 |
| 16 - 10 | 90 | 180 | 270 | - |
| 16 - 11 | 35 | 110 | 250 | 325 |
| 16 - 12 | - | - | - | - |
| 18 - 1 | 70 | 145 | 215 | 290 |
| 18 - 3 | 35 | 110 | 250 | 325 |
| 18 - 4 | 35 | 110 | 250 | 325 |
| 18 - 5 | 80 | 110 | 250 | 280 |
| 18 - 6 | - | - | - | - |
| 18 - 7 | - | - | - | - |
| 18 - 8 | 70 | - | - | 290 |
| 18 - 9 | 80 | 110 | 250 | 280 |
| 18 - 10 | - | 120 | 240 | - |
| 18 - 11 | - | 170 | 265 | - |
| 18 - 12 | 80 | - | - | 280 |
| 18 - 13 | 80 | 110 | 250 | 280 |
| 18 - 14 | 80 | 110 | 250 | 280 |
| 18 - 16 | - | - | - | - |
| 18 - 19 | - | 120 | 240 | - |
| 18 - 20 | 90 | 180 | 270 | - |
| 18 - 22 | 70 | 145 | 215 | 290 |
| 18 - 29 | 90 | 180 | 270 | - |
| 20 - 3 | 70 | 145 | 215 | 290 |
| 20 - 4 | 45 | 110 | 250 | - |
| 20 - 6 | 70 | 145 | 215 | 290 |
| 20 - 7 | 80 | 110 | 250 | 280 |
| 20 - 8 | 80 | 110 | 250 | 280 |
| 20 - 9 | 80 | 110 | 250 | 280 |
| 20 - 11 | - | - | - | - |
| 20 - 12 | 80 | 110 | 250 | 280 |
| 20 - 14 | 80 | 110 | 250 | 280 |
| 20 - 15 | 80 | - | - | 280 |
| 20 - 16 | 80 | 110 | 250 | 280 |

| Insert Layout | Degrees | | | |
|------------------|---------|-----|-----|-----|
| | W | X | Y | Z |
| 20 - 17 | 90 | 180 | 270 | - |
| 20 - 18 | 35 | 110 | 250 | 325 |
| 20 - 19 | 90 | 180 | 270 | - |
| 20 - 20 | 80 | 110 | 250 | 280 |
| 20 - 21 | 35 | 110 | 250 | 325 |
| 20 - 22 | 80 | 110 | 250 | 280 |
| 20 - 23 | 35 | 110 | 250 | 325 |
| 20 - 24 | 35 | 110 | 250 | 325 |
| 20 - 27 | 35 | 110 | 250 | 325 |
| 20 - 29 | 80 | - | - | 280 |
| 20 - 33 | - | - | - | - |
| 22 - 1 | 35 | 110 | 250 | 325 |
| 22 - 2 | 70 | 145 | 215 | 290 |
| 22 - 4 | 35 | 110 | 250 | 325 |
| 22 - 5 | 35 | 110 | 250 | 325 |
| 22 - 6 | 80 | 110 | 250 | 280 |
| 22 - 7 | - | - | - | - |
| 22 - 8 | 35 | 110 | 250 | 325 |
| 22 - 9 | 70 | 145 | 215 | 290 |
| 22 - 10 | 35 | 110 | 250 | 325 |
| 22 - 11 | 35 | 110 | 250 | 325 |
| 22 - 12 | 80 | 110 | 250 | 280 |
| 22 - 13 | 35 | 110 | 250 | 325 |
| 22 - 14 | 80 | 110 | 250 | 280 |
| 22 - 15 | 80 | 110 | 250 | 280 |
| 22 - 16 | 80 | 110 | 250 | 280 |
| 22 - 17 | 80 | 110 | 250 | 280 |
| 22 - 18 | 80 | 110 | 250 | 280 |
| 22 - 19 | 80 | 110 | 250 | 280 |
| 22 - 20 | 35 | 110 | 250 | 325 |
| 22 - 21 | 80 | 110 | 250 | 280 |
| 22 - 22 | - | 110 | 250 | - |
| 22 - 23 | 35 | - | 250 | - |
| 22 - 24 | 80 | 110 | 250 | 280 |
| 22 - 27 | 80 | - | 250 | 280 |
| 22 - 28 | 80 | - | - | 280 |
| 22 - 33 | 80 | 110 | 250 | 280 |
| 22 - 34 | 80 | 110 | 250 | 280 |
| 24 - 2 | 80 | - | - | 280 |
| 24 - 3 | 80 | 110 | 250 | 280 |
| 24 - 5 | 80 | 110 | 250 | 280 |
| 24 - 6 | 80 | 110 | 250 | 280 |
| 24 - 7 | 80 | 110 | 250 | 280 |
| 24 - 9 | 35 | 110 | 250 | 325 |
| 24 - 10 | 80 | - | - | 280 |
| 24 - 11 | 35 | 110 | 250 | 325 |
| 24 - 12 | 80 | 110 | 250 | 280 |
| 24 - 16 | 80 | 110 | 250 | 280 |
| 24 - 17 | 80 | 110 | 250 | 280 |
| 24 - 20 | 80 | 110 | 250 | 280 |
| 24 - 21 | 80 | 110 | 250 | 280 |

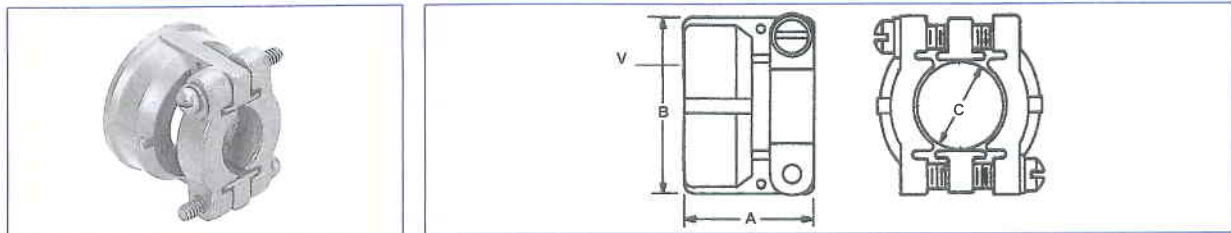
| Insert Layout | Degrees | | | |
|------------------|---------|-----|-----|-----|
| | W | X | Y | Z |
| 24 - 22 | 45 | 110 | 250 | - |
| 24 - 27 | 80 | - | - | 280 |
| 24 - 28 | 80 | 110 | 250 | 280 |
| 28 - 1 | 80 | 110 | 250 | 280 |
| 28 - 2 | 35 | 110 | 250 | 325 |
| 28 - 3 | 70 | 145 | 215 | 290 |
| 28 - 4 | 80 | 110 | 250 | 280 |
| 28 - 5 | 35 | 110 | 250 | 325 |
| 28 - 6 | 70 | 145 | 215 | 290 |
| 28 - 7 | 35 | 110 | 250 | 325 |
| 28 - 8 | 80 | 110 | 250 | 280 |
| 28 - 9 | 80 | 110 | 250 | 280 |
| 28 - 10 | 80 | 110 | 250 | 280 |
| 28 - 11 | 80 | 110 | 250 | 280 |
| 28 - 12 | 90 | 180 | 270 | - |
| 28 - 15 | 80 | 110 | 250 | 280 |
| 28 - 16 | 80 | 110 | 250 | 280 |
| 28 - 17 | 80 | 110 | 250 | 280 |
| 28 - 18 | 70 | 145 | 215 | 290 |
| 28 - 19 | 80 | 110 | 250 | 280 |
| 28 - 20 | 80 | 110 | 250 | 280 |
| 28 - 21 | 80 | 110 | 250 | 280 |
| 28 - 22 | 70 | 145 | 215 | 290 |
| 32 - 1 | 80 | 110 | 250 | 280 |
| 32 - 2 | 70 | 145 | 215 | 290 |
| 32 - 3 | 80 | 110 | 250 | 280 |
| 32 - 4 | 80 | 110 | 250 | 280 |
| 32 - 5 | 35 | 110 | 250 | 325 |
| 32 - 6 | 80 | 110 | 250 | 280 |
| 32 - 7 | 80 | 125 | 235 | 280 |
| 32 - 8 | 80 | 125 | 235 | 280 |
| 32 - 9 | 80 | 110 | 250 | 280 |
| 32 - 10 | 80 | 110 | 250 | 280 |
| 32 - 12 | 80 | 110 | 250 | 280 |
| 32 - 13 | 80 | 110 | 250 | 280 |
| 32 - 15 | 35 | 110 | 250 | 280 |
| 32 - 17 | 45 | 110 | 250 | - |
| 36 - 1 | 80 | 110 | 250 | 280 |
| 36 - 3 | 70 | 145 | 215 | 290 |
| 36 - 4 | 70 | 145 | 215 | 290 |
| 36 - 5 | - | 120 | 240 | - |
| 36 - 6 | 35 | 110 | 250 | 325 |
| 36 - 7 | 80 | 110 | 250 | 280 |
| 36 - 8 | 80 | 110 | 250 | 280 |
| 36 - 9 | 80 | 125 | 235 | 280 |
| 36 - 10 | 80 | 125 | 235 | 280 |
| 36 - 13 | 80 | 110 | 250 | 280 |
| 36 - 14 | 90 | 180 | 270 | - |
| 36 - 15 | 60 | 125 | 245 | 305 |
| 36 - 20 | - | - | - | - |
| 36 - 52 | - | - | - | - |

AMS Series Accessories

Cable Clamps and Bushing

Cable Clamp MS3057A Type

For jacketed cable or wires protected by tubing. Both clamping halves float for maximum strain relief. For unjacketed cable or wires, ie. use corresponding MS3420 bushing. To order a clamp with bushing, add -1 to the 97- number, ie. 97-3057-1004-1. Two telescoping bushings are furnished with shell sizes 24 and larger.

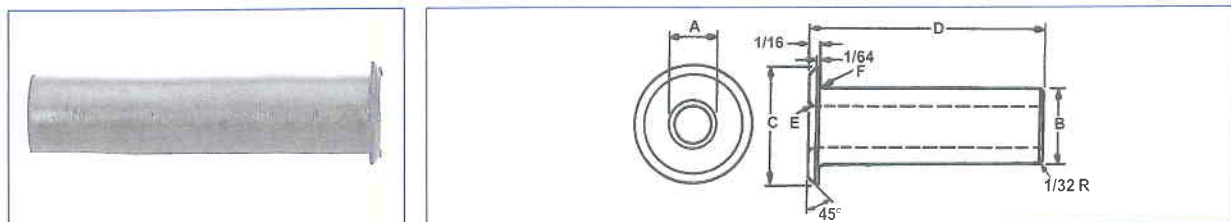


All dimensions in mm, unless otherwise stated.

| Amphenol Part Number | Shell Size | Max. O.D. Cable | A | B | C | V Thread in Inches |
|----------------------|------------|-----------------|-------|-------|-------|--------------------|
| 97-3057-1004 | 10SL, 12S | 7.92 | 20.19 | 21.39 | 7.92 | .625-24 UNEF |
| 97-3057-1007 | 14, 14S | 11.10 | 21.59 | 25.27 | 11.10 | .750-20 UNEF |
| 97-3057-1008 | 16, 16S | 14.27 | 23.37 | 28.45 | 14.27 | .875-20 UNEF |
| 97-3057-1010 | 18 | 15.88 | 23.37 | 30.89 | 15.88 | 1.000-20 UNEF |
| 97-3057-1012 | 20, 22 | 19.05 | 23.55 | 35.64 | 19.05 | 1.1875-18 UNEF |
| 97-3057-1016 | 24, 28 | 23.80 | 25.78 | 42.75 | 23.80 | 1.4375-18 UNEF |
| 97-3057-1020 | 32 | 31.75 | 27.81 | 52.07 | 31.75 | 1.750-18 UNS |
| 97-3057-1024 | 36 | 34.93 | 29.36 | 57.02 | 34.93 | 2.000-18 UNS |

Bushing MS3420

Rubber bushing specifically designed for MS3057A type cable clamp. Can also be used as a reducing bushing.



All dimensions in mm, unless otherwise stated.

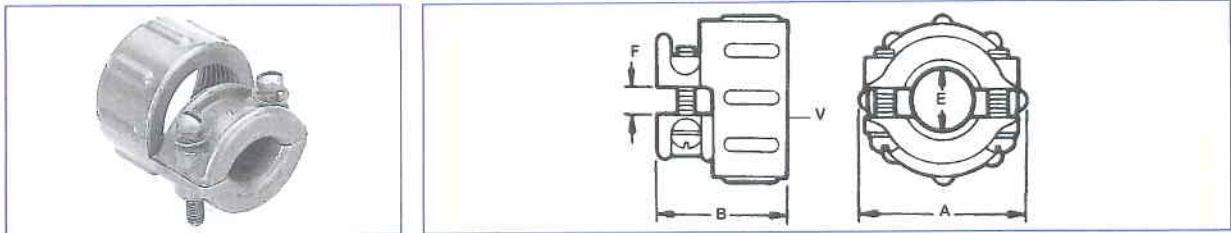
| Bushing Part Number MS | Amphenol | A | B | C | D | E | F |
|------------------------|-------------|-------|-------|-------|-------|------|------|
| 3420-3 | 9779-513-3 | 3.30 | 5.33 | 9.50 | 73.03 | .79 | .79 |
| 3420-4 | 9779-513-4 | 5.59 | 7.67 | 12.70 | 69.85 | .79 | .79 |
| 3420-6 | 9779-513-6 | 7.92 | 10.85 | 15.60 | 66.68 | .79 | 1.57 |
| 3420-8 | 9779-513-8 | 11.10 | 14.02 | 18.77 | 63.50 | 1.57 | 1.57 |
| 3420-10 | 9779-513-10 | 14.27 | 15.62 | 22.58 | 60.33 | 1.57 | 1.57 |
| 3420-12 | 9779-513-12 | 15.88 | 18.80 | 27.53 | 57.15 | 1.57 | 1.57 |
| 3420-16 | 9779-513-16 | 19.05 | 23.55 | 26.39 | 53.98 | 1.57 | 1.57 |
| 3420-20 | 9779-513-20 | 23.80 | 31.50 | 40.41 | 50.80 | 1.57 | 1.57 |
| 3420-24 | 9779-513-24 | 31.75 | 34.67 | 46.79 | 47.63 | 1.57 | 1.57 |

AMS Series Accessories

Cable Clamps and Bushing

Cable Clamp AN3057

For jacketed cable or wires protected by tubing. Cable or wires should be centered in the jaws of the clamp for maximum grip. A vinyl or rubber bushing or sleeve may be used for centering. One resilient washer and two fibre washers are included with each clamp.

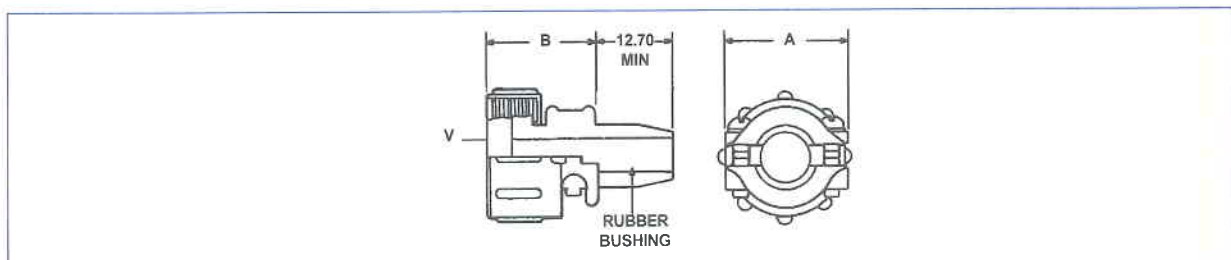


All dimensions in mm, unless otherwise stated.

| AN Number | Fits Shell Size | Fits AN Fitting Size | Max O.D. Cable | A | B | E | F | V Thread in Inches |
|-----------|-----------------|----------------------|----------------|-------|-------|-------|-------|--------------------|
| AN3057-4 | 10SL, 12S | 4 | 7.92 | 19.84 | 25.40 | 7.92 | 4.75 | .625-24 UNEF |
| AN3057-6 | 14, 14S | 6 | 11.10 | 23.80 | 27.38 | 11.10 | 4.75 | .750-20 UNEF |
| AN3057-8 | 16, 16S | 8 | 14.27 | 26.97 | 28.58 | 14.27 | 7.14 | .875-20 UNEF |
| AN3057-10 | 18 | 10 | 15.88 | 30.15 | 28.58 | 15.88 | 7.92 | 1.000-20 UNEF |
| AN3057-12 | 20, 22 | 12 | 19.05 | 34.93 | 30.15 | 19.05 | 7.92 | 1.1875-18 UNEF |
| AN3057-16 | 24, 28 | 16 | 23.80 | 41.28 | 33.32 | 23.80 | 9.53 | 1.4375-18 UNEF |
| AN3057-20 | 32 | 20 | 31.75 | 49.20 | 38.10 | 31.75 | 12.70 | 1.750-18 UNS |
| AN3057-24 | 36 | 24 | 34.93 | 55.55 | 39.67 | 34.93 | 15.06 | 2.000-18 UNS |

Cable Clamp for AN Fittings

In selecting a cable clamp for a connection with AN fittings, the 9767 clamp with the adaptor may be used.



All dimensions in mm, unless otherwise stated.

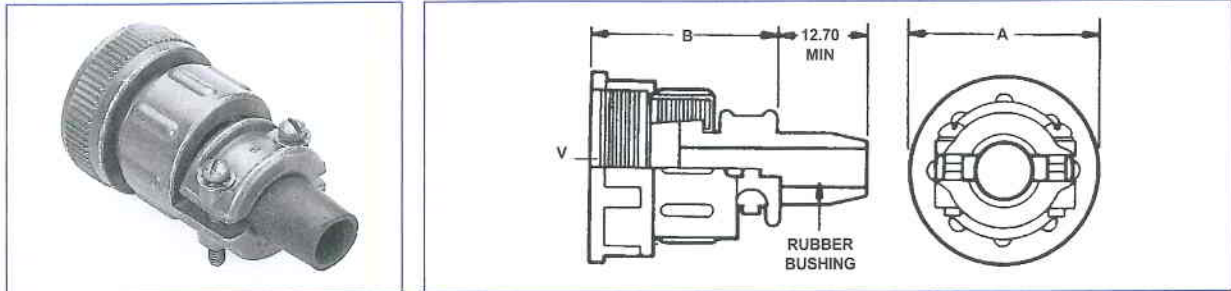
| Max. Cable O.D. | Amphenol Part Number | Fitting Size | A | B | V Thread in Inches |
|-----------------|----------------------|--------------|-------|-------|--------------------|
| 5.54 | 9767-4 | 4 | 19.84 | 25.40 | .624-24 UNEF |
| 8.71 | 9767-6 | 6 | 23.01 | 27.38 | .750-20 UNEF |
| 11.10 | 9767-8 | 8 | 26.97 | 28.58 | .875-20 UNEF |
| 14.27 | 9767-10 | 10 | 30.15 | 28.58 | 1.000-20 UNEF |
| 17.45 | 9767-12 | 12 | 34.93 | 30.15 | 1.1875-18 UNEF |
| 21.41 | 9767-16 | 16 | 41.28 | 33.32 | 1.4375-18 UNEF |

AMS Series Accessories

Cable Clamps and Bushing

9767 Water Resistant Cable Clamp

The 9767 assembly includes an AN3057 clamp, a rubber bushing, a washer and the AN3055 adaptor. To assure best results, the plug must be ordered with deviation (417), which supplies an 'O' ring gasket in the plug.



All dimensions in mm, unless otherwise stated.

| Max. O.D. Cable mm | Amphenol Part Number | Connector Size | A | B | V |
|-----------------------|-------------------------|-------------------|-------|-------|------------------|
| | | | mm | mm | Thread in Inches |
| 5.55 | 9767-12-4 | 10SL, 12S, 12 | 19.84 | 38.89 | .624-24 UNEF |
| | 9767-14-4 | 12SL, 14S, 14 | 23.01 | 38.89 | .750-20 UNEF |
| | 9767-16-4 | 16S, 16 | 26.97 | 38.89 | .875-20 UNEF |
| 8.73 | 9767-14-6 | 12SL, 14S, 14 | 23.01 | 40.46 | .750-20 UNEF |
| | 9767-16-6 | 16S, 16 | 26.97 | 40.46 | .875-20 UNEF |
| | 9767-18-6 | 18 | 30.15 | 40.46 | 1.000-20 UNEF |
| 11.12 | 9767-16-8 | 16S, 16 | 26.97 | 40.46 | .875-20 UNEF |
| | 9767-18-8 | 18 | 30.15 | 40.46 | 1.000-20 UNEF |
| | 9767-22-8 | 20, 22 | 34.93 | 40.46 | 1.1875-18 UNEF |
| 14.29 | 9767-18-10 | 18 | 30.15 | 40.46 | 1.000-20 UNEF |
| | 9767-22-10 | 20, 22 | 34.93 | 40.46 | 1.1875-18 UNEF |
| | 9767-28-10 | 24, 28 | 41.28 | 38.89 | 1.4375-18 UNEF |
| 17.46 | 9767-22-12 | 20, 22 | 34.93 | 42.06 | 1.1875-18 UNEF |
| | 9767-28-12 | 24, 28 | 41.28 | 42.06 | 1.4375-18 UNEF |
| 21.43 | 9767-28-16 | 24, 28 | 41.28 | 45.24 | 1.4375-18 UNEF |
| | 9767-36-16 | 36 | 55.56 | 50.00 | 2.000-18 UNS |
| 26.19 | 9767-32-20 | 32 | 49.20 | 50.00 | 1.750-18 UNS |

AMS Series Accessories

Metal Protection Caps

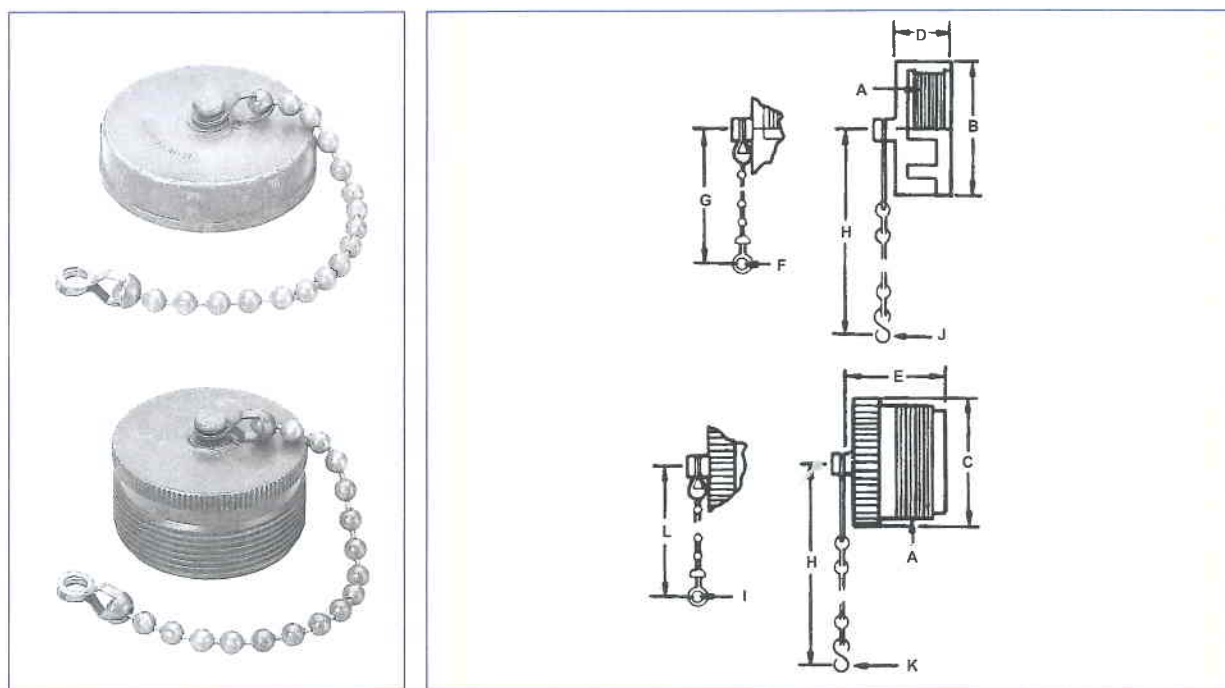
9760 Caps and Chain Assemblies

Fits MS and AMS type receptacles and plugs; provides protection against live circuits and keeps out dirt and dust when the connector is not in use.

Two options are available: one with a stainless steel link chain and one with a beaded chain. Both use the same caps and both have a cadmium olive drab finish.

Caps for receptacles have internal threads and are used on MS3102, MS3101 and MS3100 receptacles. A soft rubber disc seats on the connector shell, forming a water tight joint.

Caps for plugs have external threads, for use on all plugs where a coupling nut is provided (MS3106 and MS3108).



All dimensions in mm, unless otherwise stated.

| For Receptacles † | | For Plugs † | | For Connector Size | A Threads | B | C | D | E |
|-------------------|------------|-------------|------------|-----------------------|---------------|-------|-------|-------|-------|
| Link Chain | Bead Chain | Link Chain | Bead Chain | | | | | | |
| 9760-910 | 9760-10 | 9760-810 | 9760-10P | 10S, 10SL | .625-24 UNEF | 20.62 | 15.88 | 11.10 | 16.66 |
| 9760-912 | 9760-12 | 9760-812 | 9760-12P | 12, 12S, 12SL | .750-20 UNEF | 23.80 | 19.05 | 11.10 | 21.41 |
| 9760-914 | 9760-14 | 9760-814 | 9760-14P | 14, 14S | .875-20 UNEF | 26.97 | 22.23 | 11.10 | 21.41 |
| 9760-916 | 9760-16 | 9760-816 | 9760-16P | 16, 16S | 1.000-20 UNEF | 28.58 | 25.40 | 11.10 | 21.41 |
| 9760-918 | 9760-18 | 9760-818 | 9760-18P | 18 | 1.125-18 UNEF | 33.32 | 28.58 | 11.10 | 21.41 |
| 9760-920 | 9760-20 | 9760-820 | 9760-20P | 20 | 1.250-18 UNEF | 36.50 | 31.75 | 11.10 | 21.41 |
| 9760-922 | 9760-22 | 9760-822 | 9760-22P | 22 | 1.375-18 UNEF | 39.67 | 34.93 | 11.10 | 21.41 |
| 9760-924 | 9760-24 | 9760-824 | 9760-24P | 24 | 1.500-18 UNEF | 42.85 | 38.10 | 11.10 | 21.41 |
| 9760-928 | 9760-28 | 9760-828 | 9760-28P | 28 | 1.750-18 UNS | 48.79 | 44.45 | 12.70 | 21.41 |
| 9760-932 | 9760-32 | 9760-832 | 9760-32P | 32 | 2.000-18 UNS | 55.55 | 50.80 | 12.70 | 21.41 |
| 9760-936 | 9760-36 | 9760-836 | 9760-36P | 36 | 2.250-16 UN | 61.90 | 57.15 | 12.70 | 21.41 |

† Caps less chains are available. To order add G to the part number; for example: 9760-8G

AMS Series Accessories

Metal Protection Caps

All dimensions in mm, unless otherwise stated.

| For Connector Size | F | G | H ± 1 Link | I | J | K | L |
|--------------------|------|--------|---------------|------|------|------|--------|
| 10S, 10SL | 3.18 | 65.07 | 101.60 | 3.18 | 3.56 | 3.96 | 71.44 |
| 12, 12S, 12SL | 3.18 | 65.07 | 114.30 | 3.18 | 3.56 | 3.96 | 96.84 |
| 14, 14S | 3.18 | 65.07 | 114.30 | 3.18 | 3.56 | 3.96 | 96.84 |
| 16, 16S | 4.24 | 117.48 | 114.30 | 4.24 | 3.56 | 3.96 | 117.48 |
| 18 | 4.24 | 117.48 | 114.30 | 4.24 | 3.56 | 3.96 | 117.48 |
| 20 | 4.24 | 117.48 | 127.00 | 4.24 | 3.56 | 4.75 | 117.48 |
| 22 | 4.24 | 117.48 | 127.00 | 4.24 | 3.56 | 4.75 | 117.48 |
| 24 | 4.24 | 117.48 | 139.70 | 4.24 | 4.34 | 4.75 | 117.48 |
| 28 | 4.24 | 117.48 | 196.85 | 4.24 | 4.34 | 4.75 | 117.48 |
| 32 | 4.83 | 146.05 | 196.85 | 6.60 | 6.60 | 5.54 | 146.05 |
| 36 | 4.83 | 146.05 | 196.85 | 6.60 | 6.60 | 5.54 | 146.05 |

† Caps less chains are available. To order add G to the part number; for example: 9760-8G

Panel Sealing Gasket

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

| MS Shell Size | Part Number |
|---------------|-------------|
| 10SL | 10-40450-10 |
| 12S | 10-40450-12 |
| 14S | 10-40450-14 |
| 16S | 10-40450-16 |
| 16 | 10-40450-16 |
| 18 | 10-40450-18 |
| 20 | 10-40450-20 |
| 22 | 10-40450-22 |
| 24 | 10-40450-24 |
| 28 | 10-40450-28 |
| 32 | 10-40450-32 |
| 36 | 10-40450-36 |

