

Amphenol®

Military standard connectors
Bayonet coupling connectors
High tension connectors





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®

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.

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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.

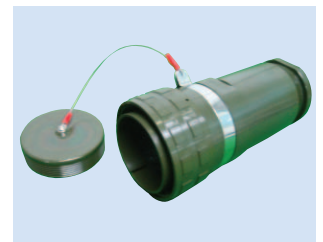
Class designations and brief descriptions are listed below.

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:

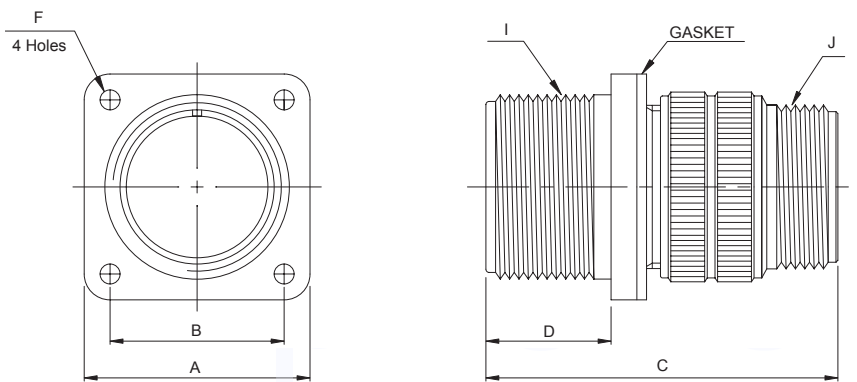
Inserts are resilient synthetic rubber, offering high dielectric strength, high arc resistance to vibration.

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.

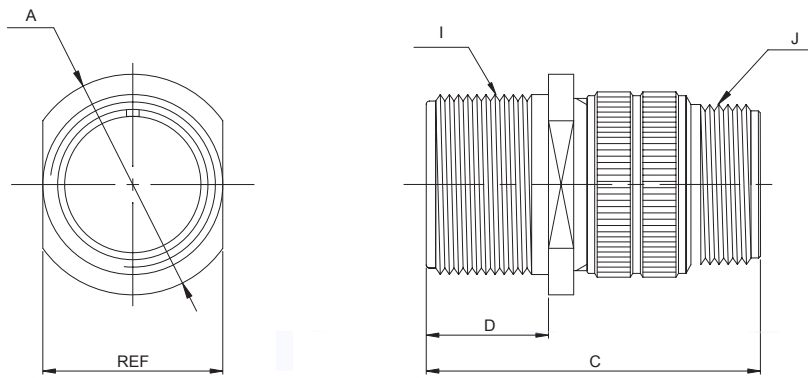
(mm)

Shell Size	□A ±0.79	□B ±0.12	C Max	D +0.79 -0.00	∅F +0.25 -0.12	I Thread-2A (UNEF)	J Thread-2A (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)

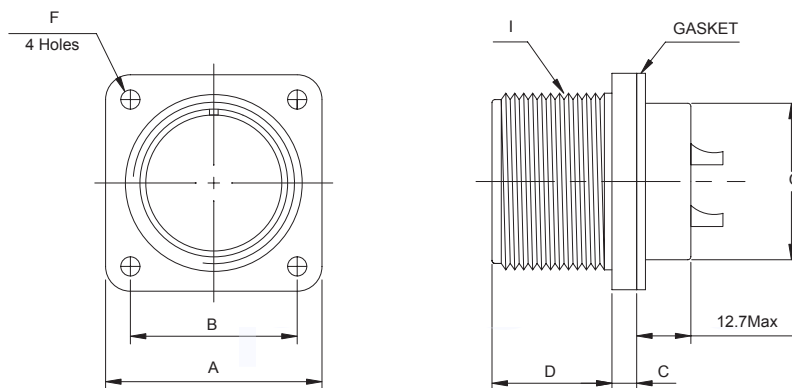
Shell Size	∅ A Max	C Max	D +0.79 -0.00	I Thread-2A (UNEF)	J Thread-2A (UNEF)
10SL	24.61	38.88	14.28	5/8-24 NEF	5/8-24 NEF
12S	26.97	42.87	14.28	3/4-20 NEF	5/8-24 NEF
12	26.97	52.37	19.05	3/4-20 NEF	5/8-24 NEF
14S	29.36	42.87	14.28	7/8-20 NEF	3/4-20 NEF
14	29.36	52.37	19.05	7/8-20 NEF	3/4-20 NEF
16S	31.75	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

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.

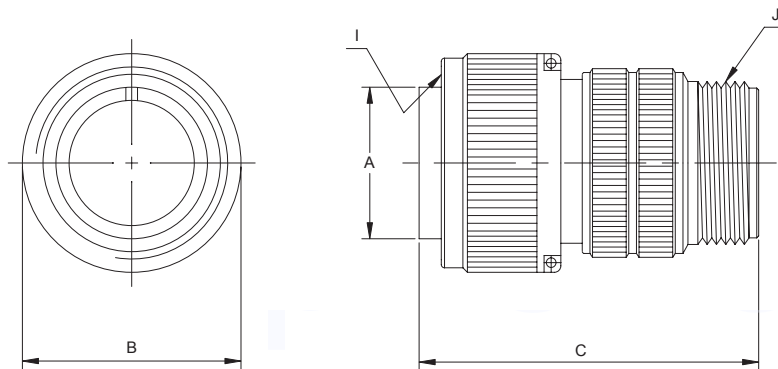
(mm)

Shell Size	□A ±0.79	□B ±0.12	C ±0.50	D +0.79 -0.00	∅F +0.25 -0.12	∅G Max	I Thread-2A (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.

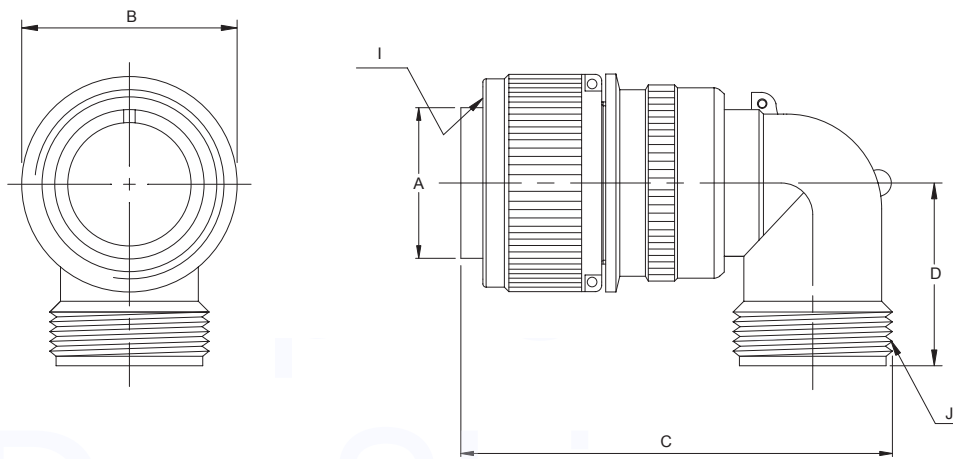
(mm)

Shell Size	Ø A +0.00 -0.38	Ø B Max	C Max	I Thread-2B (UNEF)	J Thread-2A (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 +0.00 -0.38	Ø B Max	C Max	D Max	I Thread-2B (UNEF)	J Thread-2A (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

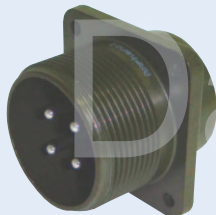
Amphenol MIL-C-5015 Connectors MS/DS-E/F Class



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 to vibration.

Proprietary design permits pressurization of either pin or socket insert.

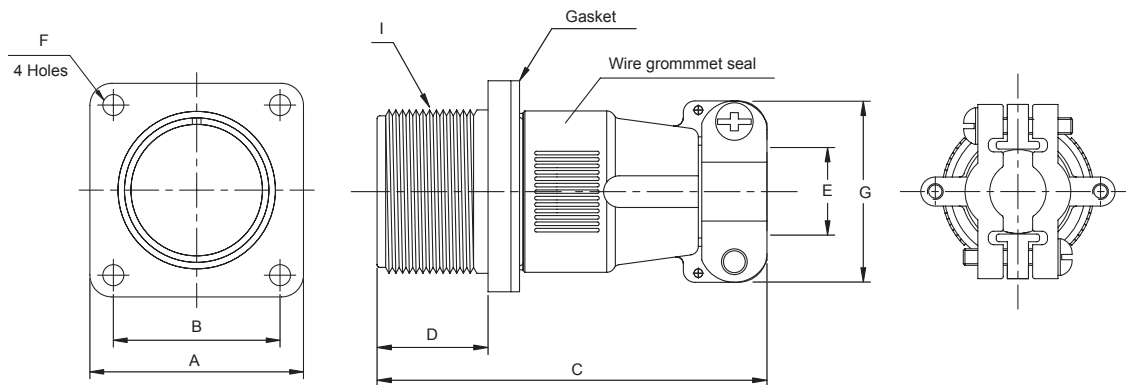
Strain relief clamp:

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



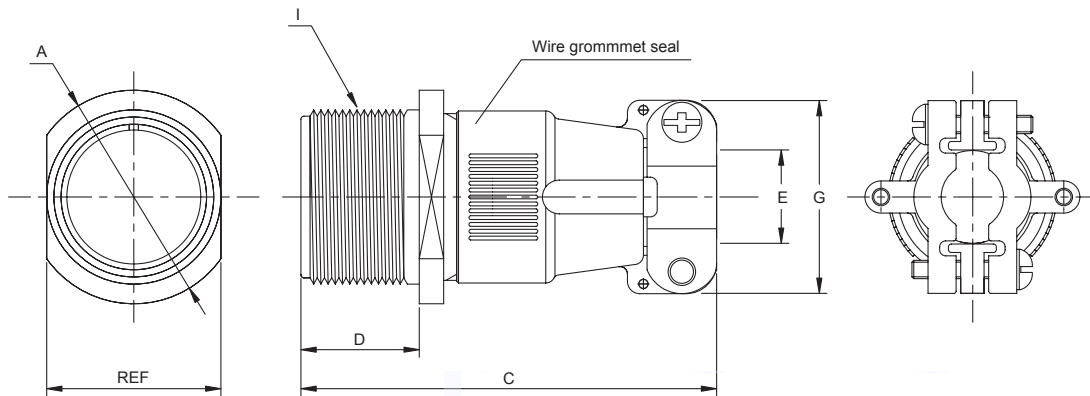
MS3100E/F wall mounting receptacles are used to carry wires thru walls or bulkheads, or to provide a means of disconnection at a bulkhead MS 3100E/F receptacles mate with 3106 and 3108 plugs.

(mm)

Shell Size	□A ±0.79	□B ±0.12	C Max	D +0.79 -0.00	∅E Max	∅F +0.25 -0.12	∅G Max	I Thread-2A (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.

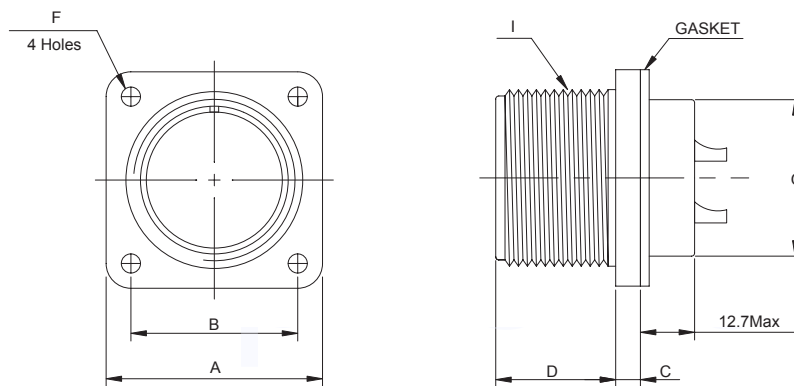
(mm)

Shell Size	A Max	C Max	D +0.79 -0.00	Ø E Max	Ø G Max	I Thread-2A (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)

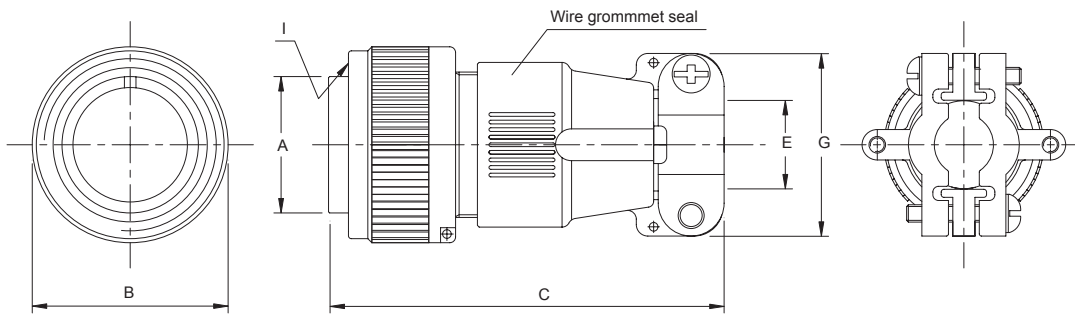
Shell Size	□A ±0.79	□B ±0.12	C ±0.5	D +0.79 -0.00	Ø F +0.25 -0.12	Ø G Max	I Thread-2A (UNEF)
10SL	25.40	18.26	3.0	14.28	3.05	16.0	5/8-24 NEF
12S	27.79	20.62	3.0	14.28	3.05	16.5	3/4-20 NEF
12	27.79	20.62	3.0	19.05	3.05	16.5	3/4-20 NEF
14S	30.18	23.01	3.0	14.28	3.05	20.0	7/8-20 NEF
14	30.18	23.01	3.0	19.05	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

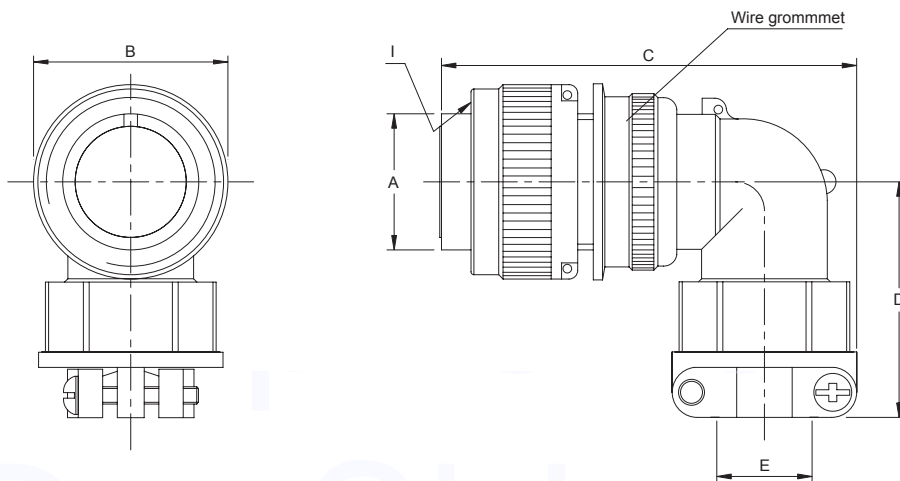
(mm)

Shell Size	A +0.00 -0.38	B Max	C Max	Ø E Max	Ø G Max	I Thread-2B (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 +0.00 -0.38	B Max	C Max	D Max	Ø E Max	I Thread-2B (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

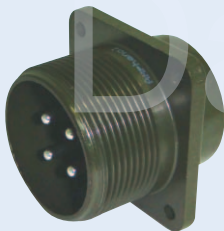
Amphenol MIL-C-5015 Connectors MS/DS R-Class



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.

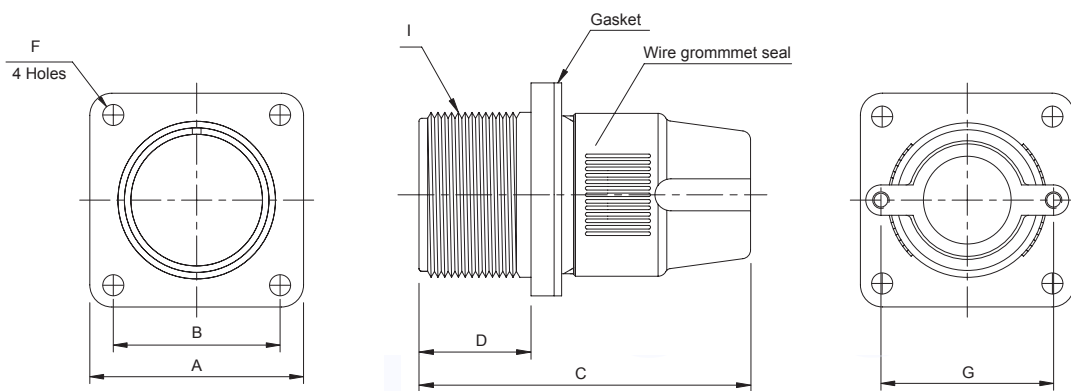
Inserts:

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.

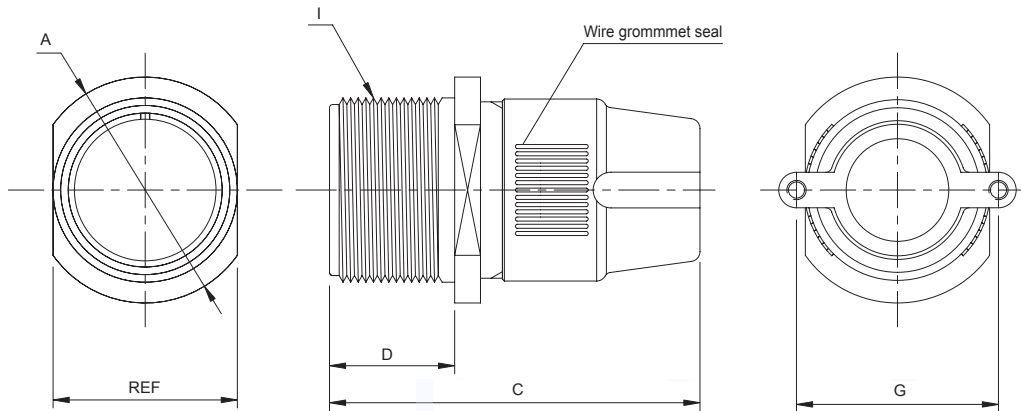
(mm)

Shell Size	□A ±0.79	□B ±0.12	C Max	D +0.79 -0.00	G ±0.12	∅F +0.25 -0.12	I Thread-2A (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.

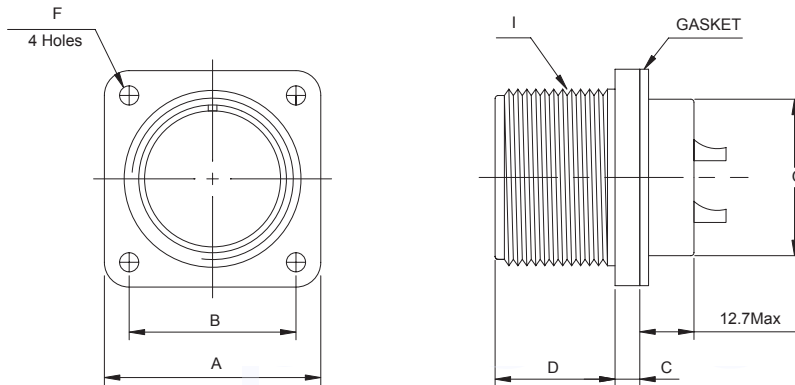
(mm)

Shell Size	A Max	C Max	D +0.79 -0.00	G ±0.12	I Thread-2A (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.

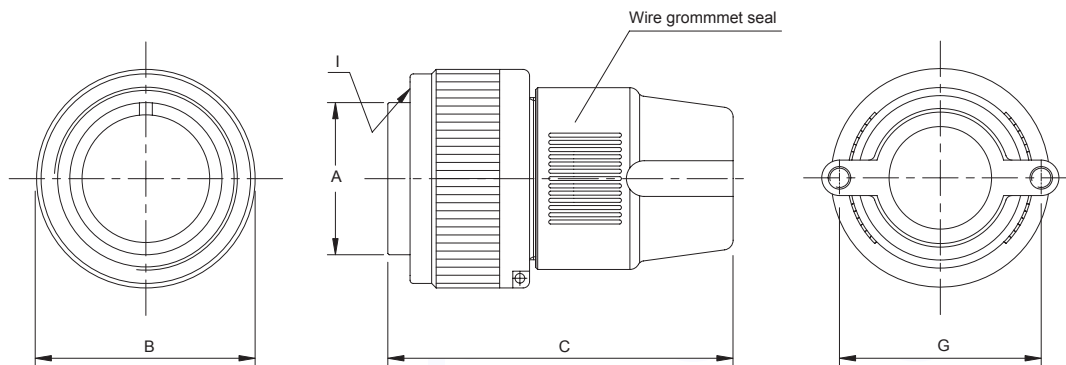
(mm)

Shell Size	□A ±0.79	□B ±0.12	C ±0.5	D +0.79 -0.00	Ø F +0.25 -0.12	Ø G Max	I Thread-2A (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.

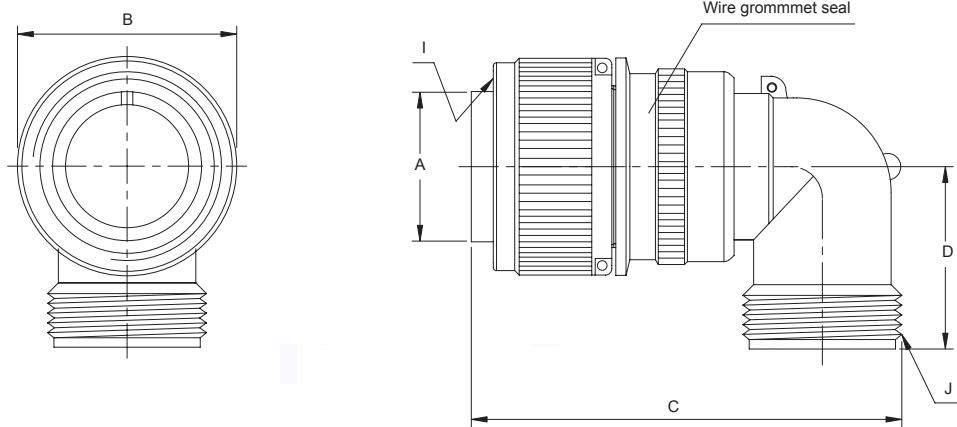
(mm)

Shell Size	A +0.00 -0.38	B Max	C Max	G ±0.12	I Thread-2B (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)

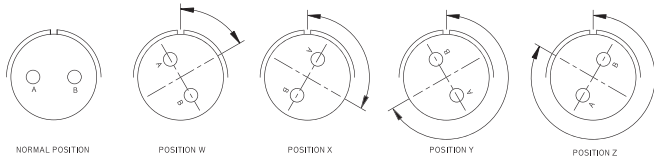
Shell Size	Ø A +0.00 -0.38	Ø B +0.00 -0.38	C Max	D Max	I Thread-2B (UNEF)	J Thread-2A (UNEF)
10SL	11.33	24.61	46.02	25.4	5/8-24 NEF	5/8-24NEF
12S*	14.10	26.97	50.80	26.9	3/4-20 NEF	5/8-24 NEF
12*	14.10	26.97	57.15	26.9	3/4-20 NEF	5/8-24 NEF
14S	17.15	29.36	53.97	28.5	7/8-20 NEF	3/4-20 NEF
14	17.15	29.36	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



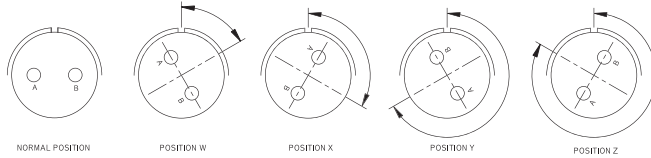
Contact Arrangement	Service Rating	Total Contacts	Contact Size					Alternate Position-Degrees				
			0	4	8	12	16	W	X	Y	Z	
10SL-2	A	1					1	-	-	-	-	
10SL-3	A	3					3	-	-	-	-	
10SL-4	A	2					2	63	-	-	-	
12S-1	A	2					2	-	-	-	-	
12S-3	A	2					2	70	145	215	290	
12S-5	D	1				1		-	-	-	-	
14S-1	A	3					3	-	-	-	-	
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 Arrangement	Service Rating	Total Contacts	Contact Size					Alternate Position-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					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 Arrangement	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 Arrangement	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 Socket Insert	Front of 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	3	2	
Contact Size	16	16	16	12	12	12	



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	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

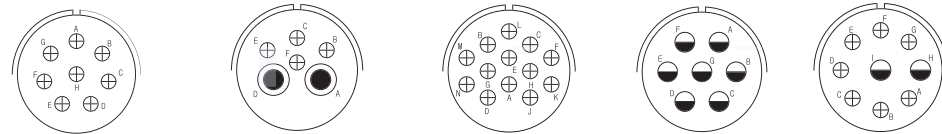
MS- A,E/F,R Class

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



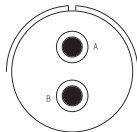
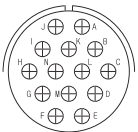
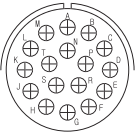
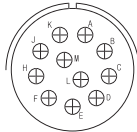
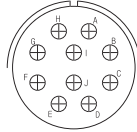
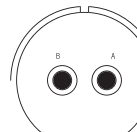
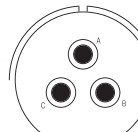
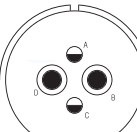
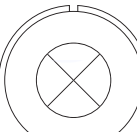
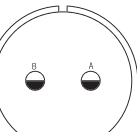
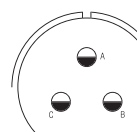
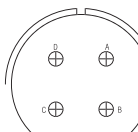
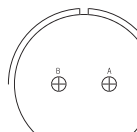
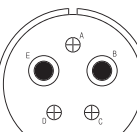
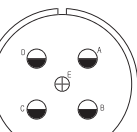

CONTACT LEGEND 16 12 8 4 0

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

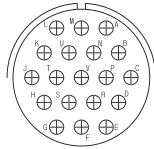
					
Insert Arrangement	20-23	20-27	20-29	20-33	20-01
Service Rating	A	A	A	A	A
Number of Contacts	2	14	17	11	10
Contact Size	8	16	16	16	16
					
Insert Arrangement	22-1	22-2	22-4	22-7	22-8
Service Rating	D	D	A	E	E
Number of Contacts	2	3	2 2	1	2
Contact Size	8	8	8 12	0	12
					
Insert Arrangement	22-9	22-10	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
					
	CONTACT LEGEND 16 12 8 4 0				

Amphenol MIL-C-5015 Connectors

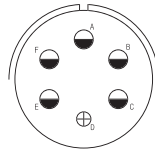
MS- A,E/F,R Class

Contact Arrangements

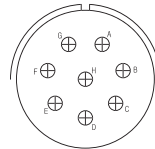
Front face of pin insert or rear face of socket insert illustrated



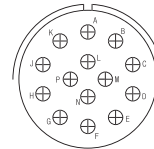
Insert Arrangement 22-14
Service Rating A
Number of Contacts 19
Contact Size 16



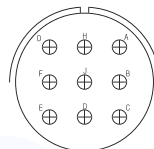
22-15
D=E; A, B, C, E, F=A
5 1
12 16



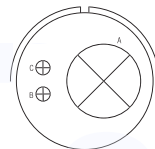
22-18
A,B,F,G,H=D; C,D,E=A
8
16



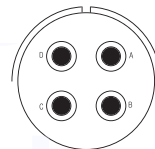
22-19
A
14
16



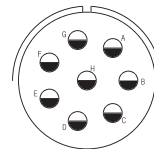
Insert Arrangement 22-20
Service Rating A
Number of Contacts 9
Contact Size 16



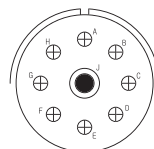
22-21
A
1 2
0 16



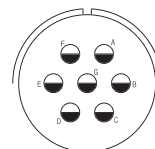
22-22
A
4
8



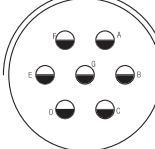
22-23
H=D; Bal.=A
8
12



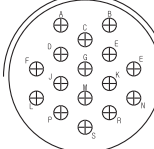
Insert Arrangement 22-27
Service Rating J=D; Bal.=A
Number of Contacts 1 8
Contact Size 8 16



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

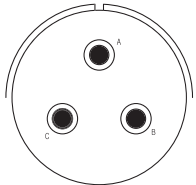
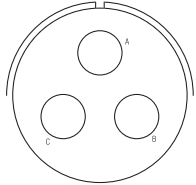
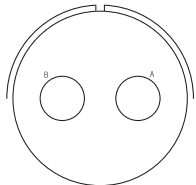
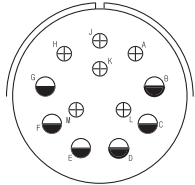
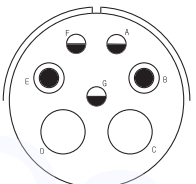
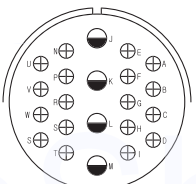
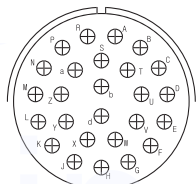
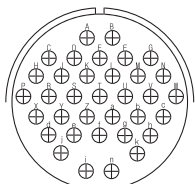
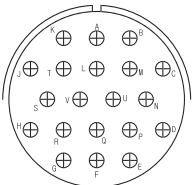
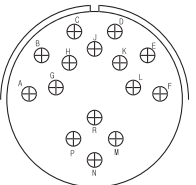
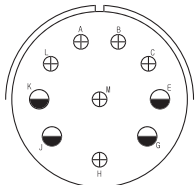
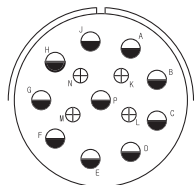

	24-6	24-7	24-9	24-10
Insert Arrangement	A, G, H=D; Bal.=A	A	A	A
Service Rating	8	2 14	2	7
Number of Contacts	12	12 16	4	8
Contact Size				
	24-11	24-12	24-20	24-22
Insert Arrangement	A	A	D	D
Service Rating	3 6	2 3	2 9	4
Number of Contacts	8 12	4 12	1 16	8
Contact Size				
	24-28	24-02	24-03	28-1
Insert Arrangement	Inst.	A	A	A,J,E=D; Bal.=A
Service Rating	24	9	12	3 6
Number of Contacts	16	12	16	8 12
Contact Size				
	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	28-3	28-6	28-7	28-9
Service Rating	E	D	D	D
Number of Contacts	3	3	2	6 6
Contact Size	8	4	4	12 16
				
Insert Arrangement	28-10	28-11	28-12	28-15
Service Rating	G=D; Bal. A	A	A	A
Number of Contacts	2 2 3	4 18	26	35
Contact Size	4 8 12	12 16	16	16
				
Insert Arrangement	28-16	28-17	28-19	28-20
Service Rating	A	R=B;M,N,P=D;A to L=A	H,M=B;A,B=D;Bal.=A	A
Number of Contacts	20	15	4 6	10 4
Contact Size	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

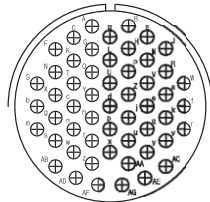
Insert Arrangement	28-21	28-22	28-51	32-1
Service Rating	A	D	A	A=E; B, C, D, E=D
Number of Contacts	37	3 3	12	2 3
Contact Size	16	4 16	12	0 12
Insert Arrangement	32-5	32-6	32-7	32-8
Service Rating	D	A	A, B, h, j=Inst.; Bal.=A	A
Number of Contacts	2	2 3 2 16	7 28	6 24
Contact Size	0	4 8 12 16	12 16	12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

Amphenol MIL-C-5015 Connectors

MS Series A,E/F,R Class

Contact Arrangements

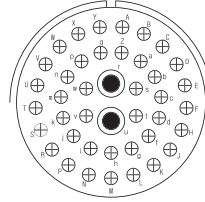
Front face of pin insert or rear face of socket insert illustrated



32-22

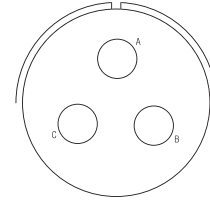
Insert Arrangement
Service Rating
Number of Contacts
Contact Size

A
54
16



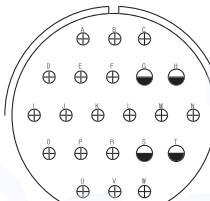
32-59

A
2 40
8 16



32-03

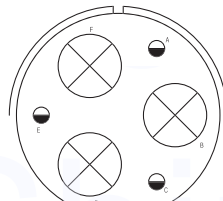
A
3
4



36-1

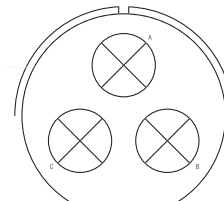
Insert Arrangement
Service Rating
Number of Contacts
Contact Size

D
4 18
12 16



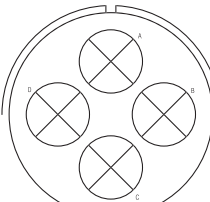
36-3

D
3 3
0 12



36-4

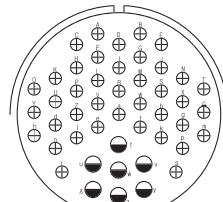
A=D; B, C=A
3
0



36-5

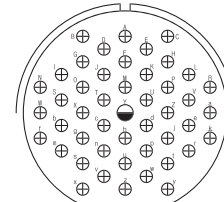
Insert Arrangement
Service Rating
Number of Contacts
Contact Size

A
4
0



36-7

A
7 40
12 16



36-8

A
1 46
12 16

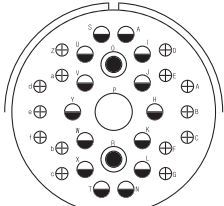
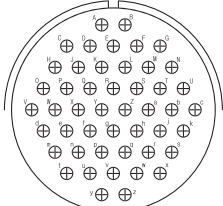
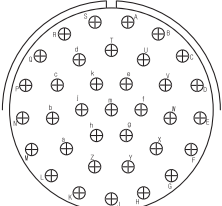
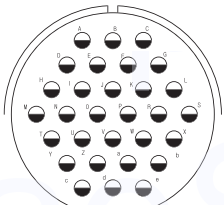
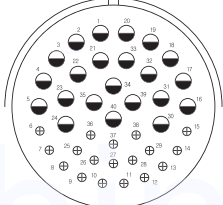
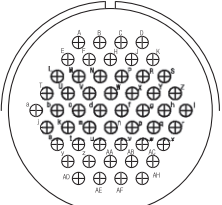
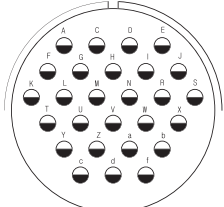
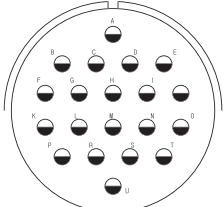
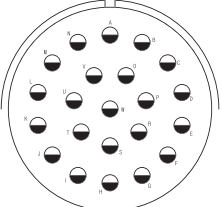



CONTACT LEGEND

16 12 8 4 0

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	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
			
Insert Arrangement	36-30	36-40	36-52
Service Rating	A	A	A
Number of Contacts	30	22 18	52
Contact Size	12	12 16	16
			
Insert Arrangement	36-02	36-03	36-04
Service Rating	A	A	A
Number of Contacts	27	20	22
Contact Size	12	12	12
	 CONTACT LEGEND 16 12 8 4 0		

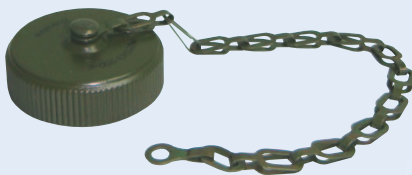
Amphenol MIL-C-5015 Connectors

MS Series

Accessories



Plug Protection Cap



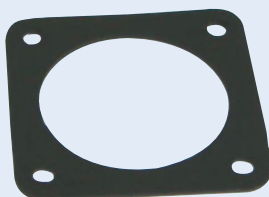
Receptacle Protection Cap



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.

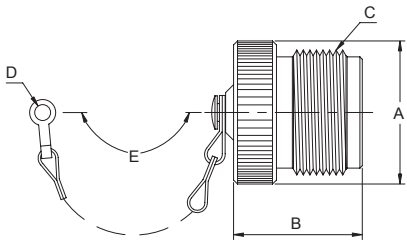
Telescoping bushings keep dirt, oil and moisture out of end bell.

Sealing Gasket

Sealing Gasket is being supplied separately

Amphenol MIL-C-5015 Connectors MS Series Accessories Dimension

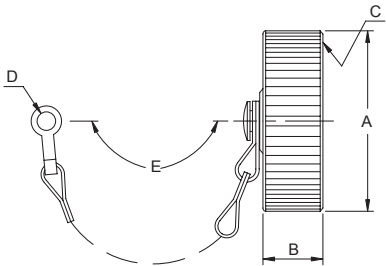
Plug Protection Cap MS25042



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

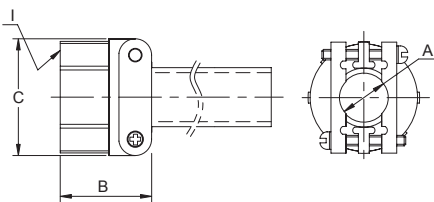


Part Number	Size	Ø A Max	Ø B Max	C Thread 2A	Ø D -0.3	E Approx
MS25043-10D	10S,10SL	20.2	15.8	5/8-24 NEF	4.2	102
MS25043-12D	12S,12	23.4	15.8	3/4-20 NEF	4.2	114
MS25043-14D	14S,14	27.9	15.8	7/8-20 NEF	4.2	114
MS25043-16D	16S,16	29.8	15.8	1-20 NEF	4.2	114
MS25043-18D	18	32.2	15.8	1 1/8-18 NEF	4.2	114
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	?-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.
Metal 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

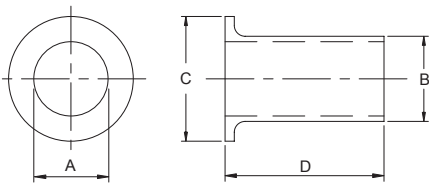


Part Number	Size	Ø A ±0.4	B ±0.8	Ø C ±0.8	I Thread-2B
MS3057-4A	10SL,12S	5.6	20.3	23.3	5/8-24 NEF
MS3057-6A	14S,14	7.9	22.5	25.9	3/4-20 NEF
MS3057-8A	16S,16	11.1	24.4	28.9	7/8-20 NEF
MS3057-10A	18	14.3	23.6	32.2	1-20 NEF
MS3057-12A	20,22	15.9	23.6	37.8	1 3/16-18 NEF
MS3057-16A	24,28	19.1	26.0	43.4	1 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 Max	Ø B 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

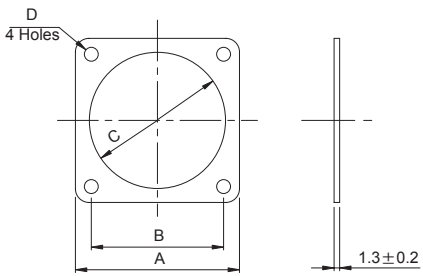
Telescoping grand bushings (used with 3057 clamp) keep dirt, oil and moisture out of endbell.

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

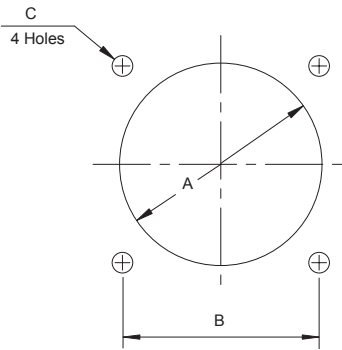
Sealing Gasket BMA 31



Part Number	Shell Size	□ A	□ B	∅ C	D +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	∅ A ±0.5	□ B ±0.12	C +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.

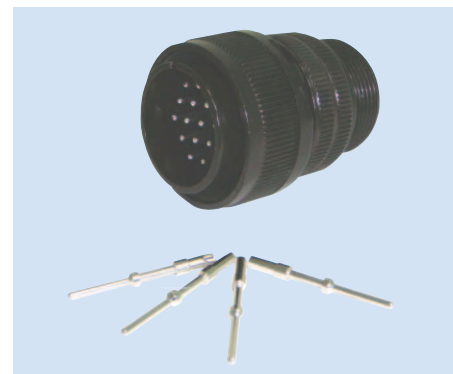
Therefore, you will always find the right connector in Amphenol, with us, for conditions & performance requirements you may have.

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 separation 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.

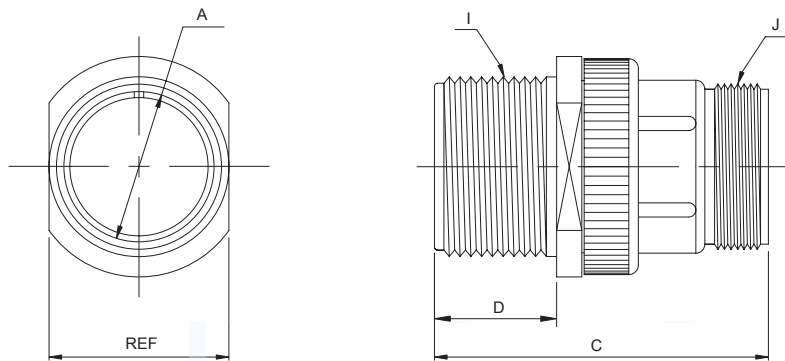
Inserts:

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)

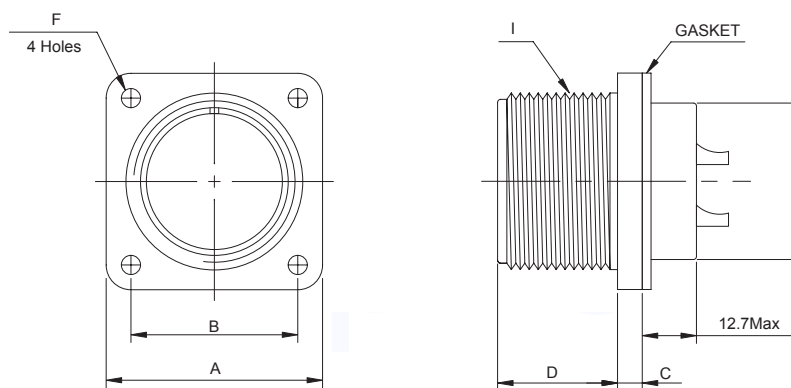
Shell Size	Ø A Max	C Max	D +0.79 -0.00	I Thread-2A (UNEF)	J Thread-2A (UNEF)
10SL	24.61	38.88	14.28	5/8-24 NEF	5/8-24 NEF
12S*	26.97	42.87	14.28	3/4-20 NEF	5/8-24 NEF
12*	26.97	52.37	19.05	3/4-20 NEF	5/8-24 NEF
14S	29.36	42.87	14.28	7/8-20 NEF	3/4-20 NEF
14*	29.36	52.37	19.05	7/8-20 NEF	3/4-20 NEF
16S	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.

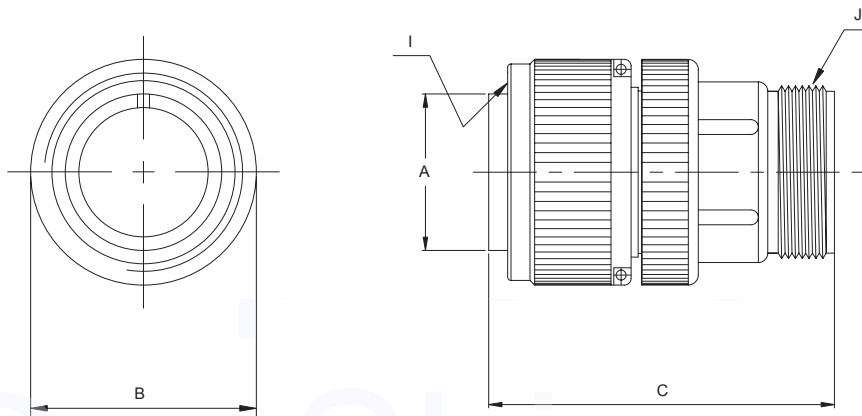
(mm)

Shell Size	□A ±0.79	□B ±0.12	C ±0.50	D +0.79 -0.00	∅F +0.25 -0.12	∅G Max	I Thread-2A (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)

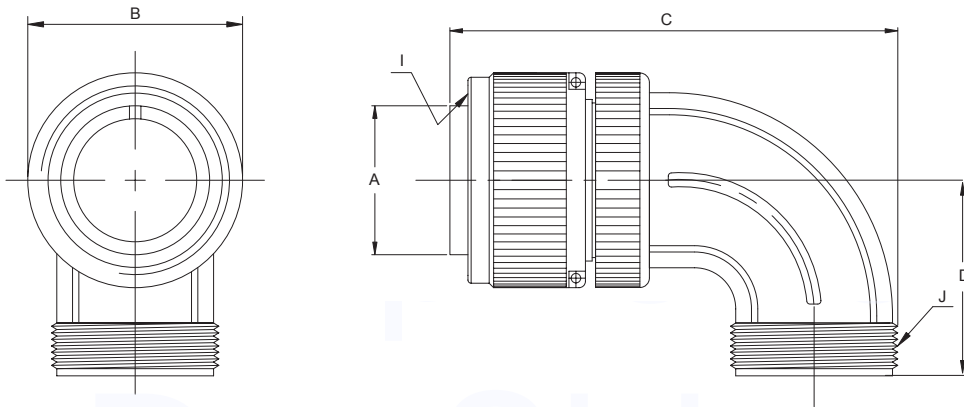
Shell Size	Ø A +0.00 -0.38	Ø B Max	C Max	I Thread-2B (UNEF)	J Thread-2A (UNEF)
10SL	11.33	24.61	38.88	5/8-24 NEF	5/8-24 NEF
12S*	14.1	26.97	42.87	3/4-20 NEF	5/8-24 NEF
12*	14.1	26.97	52.37	3/4-20 NEF	5/8-24 NEF
14S	17.15	29.36	42.87	7/8-20 NEF	3/4-20 NEF
14*	17.15	29.36	52.37	7/8-20 NEF	3/4-20 NEF
16S	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)

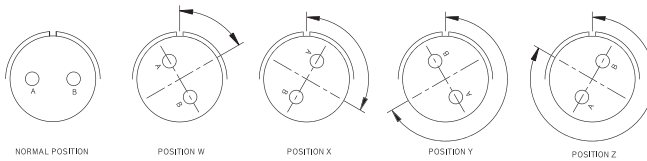
Shell Size	Ø A +0.00 -0.38	Ø B Max	C Max	D Max	I Thread-2A (UNEF)	J Thread-2A (UNEF)
10SL	11.33	24.61	46.02	25.4	5/8-24 NEF	5/8-24 NEF
12S*	14.10	26.97	50.80	26.9	3/4-20 NEF	5/8-24 NEF
12*	14.10	26.97	57.15	26.9	3/4-20 NEF	5/8-24 NEF
14S	17.15	29.36	53.97	28.5	7/8-20 NEF	3/4-20 NEF
14*	17.15	29.36	58.72	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



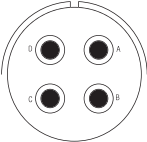
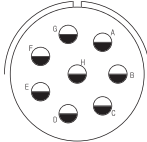
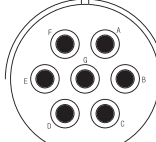
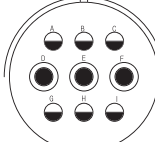
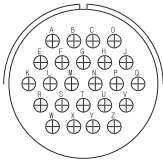
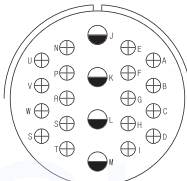
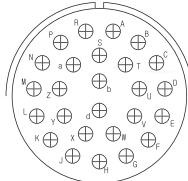
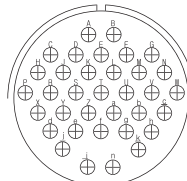
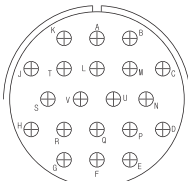
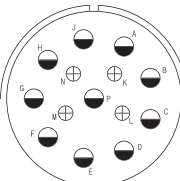
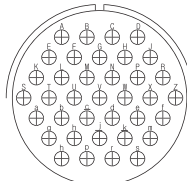
Contact Arrangement	Service Rating	Total Contacts	Contact Size					Alternate Position-Degrees			
			0	4	8	12	16	W	X	Y	Z
	A	3					3	-	-	-	-
10SL-3	Inst	4					4	-	120	240	-
14S-2	Inst	6					6	-	-	-	-
14S-6	A	3					3	90	180	270	-
14S-7	A/Inst	10					10	70	145	215	290
18-1	A	8				1	7	70	-	-	290
18-8	A	4				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

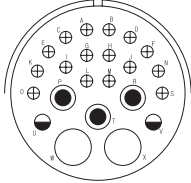
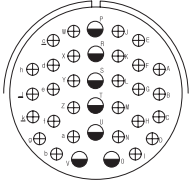
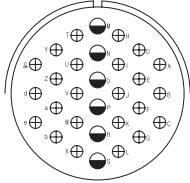
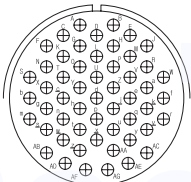
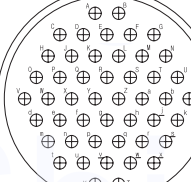
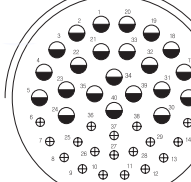
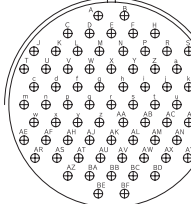
				
Insert Arrangement	22-22	22-23	24-10	24-11
Service Rating	A	H=D; Bal.=A	A	A
Number of Contacts	4	4	7	3 6
Contact Size	8	8	8	8 16
				
Insert Arrangement	24-28	28-11	28-12	28-15
Service Rating	Inst.	A	A	A
Number of Contacts	24	4 18	26	35
Contact Size	16	12 16	16	16
				
Insert Arrangement	28-16	28-20	28-21	
Service Rating	A	A	A	
Number of Contacts	20	10 4	37	
Contact Size	16	12 16	16	



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</u> - <u>10</u>	<u>S</u>	<u>W</u>	<u>XXX</u>
1	2	3 4	5	6	7

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. ermutable 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:

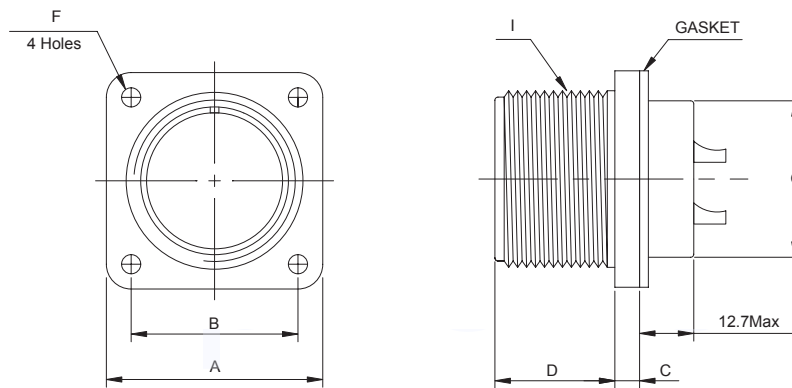
Front inserts are Silicone rubber and Rear inserts are PPS resin for box mount receptacle only.

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)

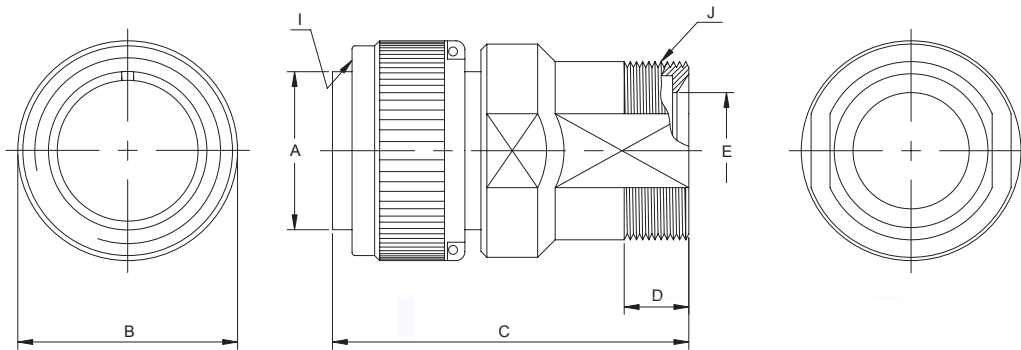
Shell Size	□ A ±0.79	□ B ±0.12	C ±0.3	D +0.79 -0.00	E ±0.2	Ø F +0.25 -0.12	Ø G Max	I Thread-2A (UNEF)
10SL	25.40	18.26	2.1	14.28	23.5	3.05	16	5/8-24 NEF
18	34.93	26.97	2.7	19.05	28.0	3.05	25	1 1/8-18 NEF
20	38.10	29.36	2.7	19.05	30.0	3.05	30	1 1/4-18 NEF
22	41.28	31.75	2.7	19.05	30.8	3.05	33	1 3/8-18 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)

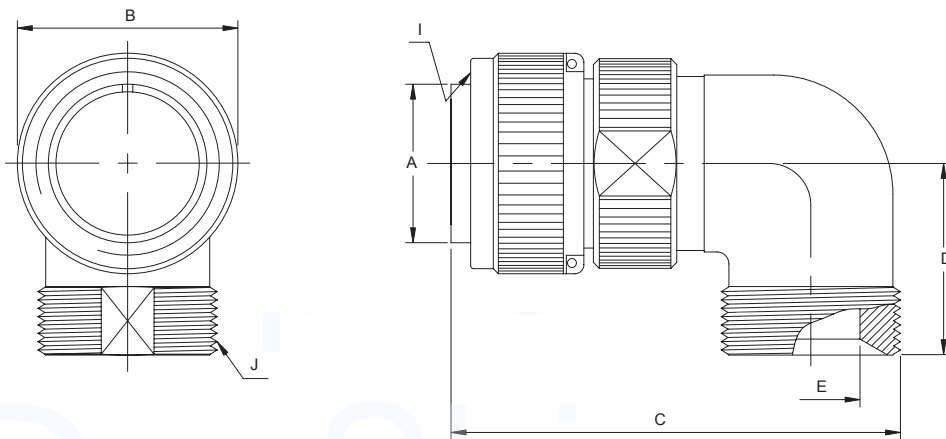
Shell Size	Ø A +0.00 -0.38	Ø B Max	C Max	D Min	E Max	I Thread-2B (UNEF)	J Thread-2A (UNEF)
10SL	11.33	24.61	44.2	10.0	6.8	5/8-24 NEF	5/8-24 NEF
18	23.62	34.13	58.3	11.5	15.0	1 1/8-18 NEF	1-20 NEF
20	26.27	37.31	60.0	11.0	17.0	1 1/4-18 NEF	1 3/16-18 NEF
22	29.85	40.48	67.6	11.0	17.0	1 1/4-18 NEF	1 3/16-18 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	$\varnothing A$ +0.00 -0.38	$\varnothing B$ Max	C Max	D Max	E Max	I Thread-2B (UNEF)	J Thread-2A (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 MIL-C-5015 Connectors DL Series

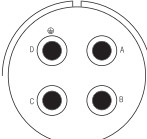
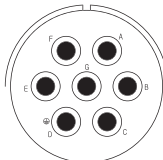
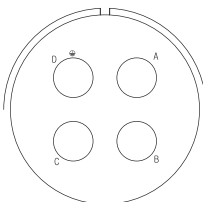
Insert Arrangements

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	10SL-3	18-10	18-12	20-15
Service Rating	A	A	A	A
Number of Contacts	3	4	6	7
Contact Size	16	12	16	12

			
Insert Arrangement	22-22	24-10	32-17
Service Rating	A	A	D
Number of Contacts	4	7	4
Contact Size	8	8	4

CONTACT LEGEND



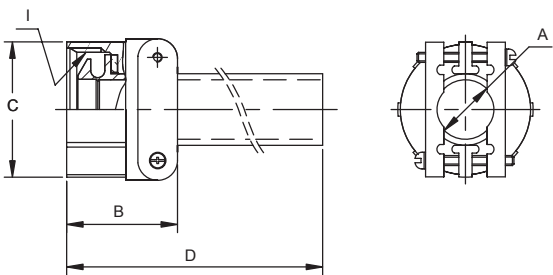
16 12 8 4 0 4/0

Amphenol MIL-C-5015 Connectors

DL Series

Accessories Dimension

Cable Clamp DL3057

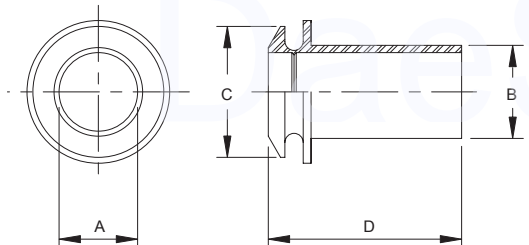


Part Number	Size	Ø A	B	Ø C	D	I Thread-2B
DL3057-4A	10SL	6.0	20.3	23.3	53.3	5/8-24 NEF
DL3057-10A	18	14.0	23.6	32.2	54.4	1-20 NEF
DL3057-12A	20,22	15.9	23.6	37.8	57.3	1 3/16-18 NEF
DL3057-16A	24	18.0	26.0	43.4	56.4	1 7/16-18 NEF

(mm)

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



Part Number	Size	Ø A Max	Ø B Max	Ø C	D
DL3420-4	10SL	6.0	7.7	12.0	47.5
DL3420-10	18	14.0	15.6	20.7	52.2
DL3420-12	20,22	15.9	18.8	24.5	52.3
DL3420-16	24	18.0	23.6	30.0	56.0

(mm)

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®

Amphenol MIL-C-5015 Connectors DL-Series, Pre-Earth type How to order

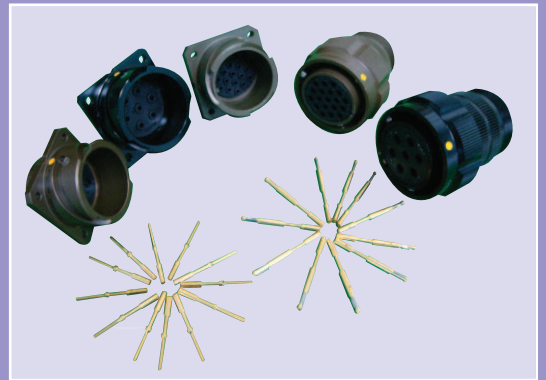
MIL-C-5015 (Solder Contacts)

DL **3102A** **32** - **17** **P** **XXX**
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

DaeShin

DaeShin



**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.

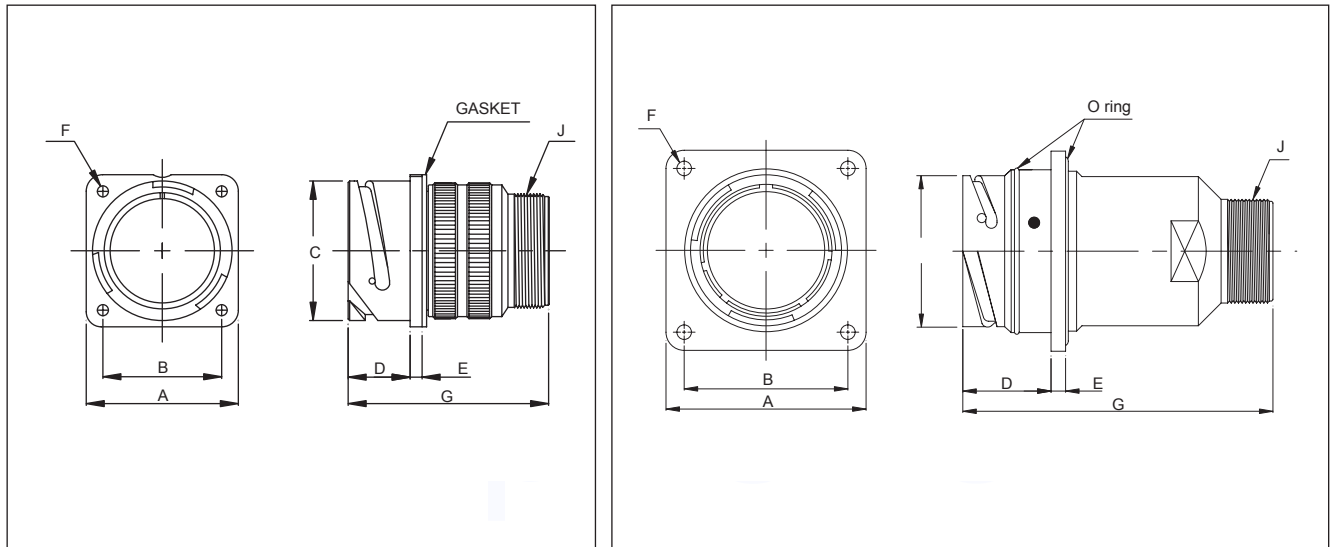
Insulators:

- 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

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(mm)

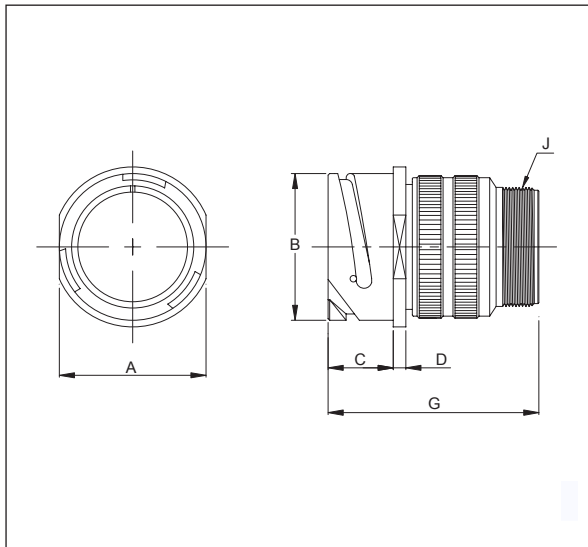
Shell Size	□A ±0.79	□B ±0.79	C ±0.3	D +0.79 -0.00	E ±0.5	F +0.25 -0.12	G Max	J (UNEF)
10SL	25.40	18.26	18.2	14.28	2.8	3.2	40.5	5/8-24 NEF
14S	30.18	23.01	24.6	14.28	3.2	3.2	43.5	3/4-20 NEF
16S	32.54	24.61	27.4	14.28	3.2	3.2	40.5	7/8-20 NEF
16	32.54	24.61	27.4	19.05	3.2	3.2	54.0	7/8-20 NEF
18	34.93	26.97	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

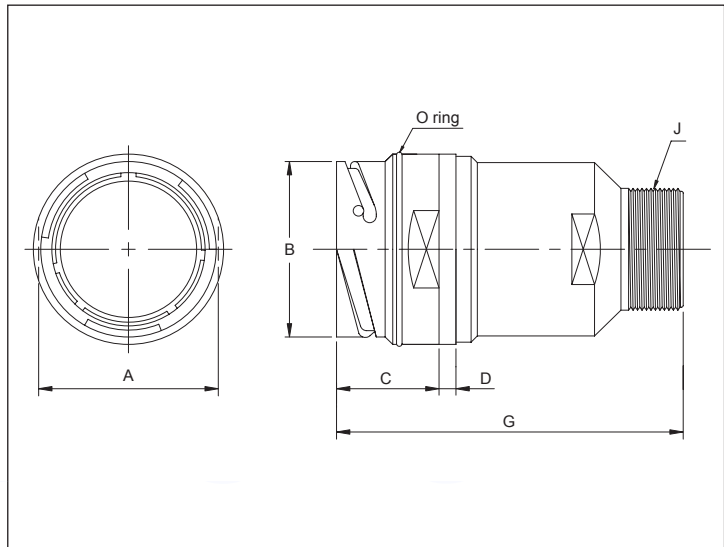
Amphenol MIL-C-5015 Connectors

ADG01A, ADGC01A

Inline receptacle



under 36 size shell only



over 48 size shell only

DaeShin

(mm)

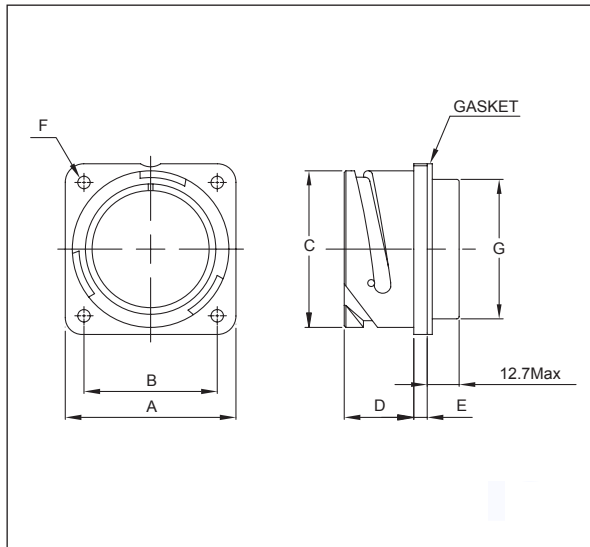
Shell Size	A Max	B ±0.3	C +0.79 -0.00	D ±0.5	G Max	J (UNEF)
10SL	23.00	18.2	14.28	2.8	40.5	5/8-24 NEF
14S	29.00	24.6	14.28	3.2	43.5	3/4-20 NEF
16S	29.00	27.4	14.28	3.2	40.5	7/8-20 NEF
16	33.00	27.4	19.05	3.2	54.0	7/8-20 NEF
18	34.93	30.8	19.05	4.0	54.0	1-20 NEF
20	38.10	34.2	19.05	4.0	56.0	1 3/16-18NEF
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

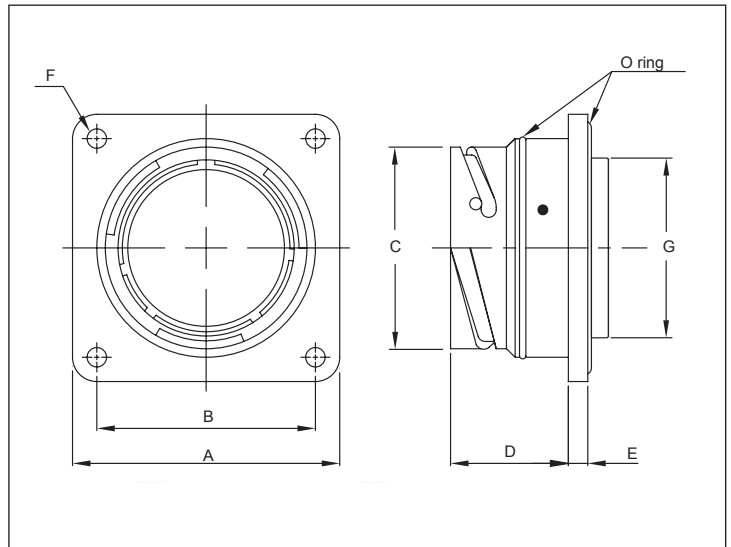
Amphenol Bayonet Coupling Connectors

ADG02A, ADGC02A

Box mounting receptacle



under 36 size shell only



over 48 size shell only

DaeShin

(mm)

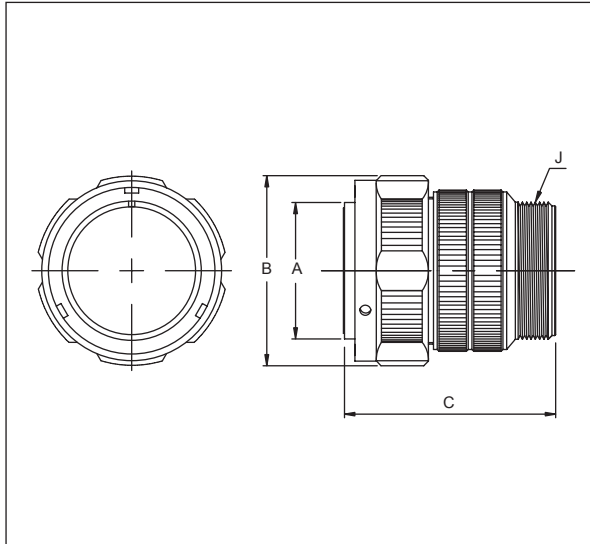
Shell Size	□A ±0.79	□B ±0.79	C ±0.3	D +0.79 -0.00	E ±0.5	F +0.25 -0.12	G Max
10SL	25.40	18.26	18.2	14.28	2.8	3.20	16.2
14S	30.18	23.01	24.6	14.28	3.2	3.20	19.2
16S	32.54	24.61	27.4	14.28	3.2	3.20	22.4
16	32.54	24.61	27.4	19.05	3.2	3.20	22.4
18	34.93	26.97	30.8	19.05	4.0	3.20	25.6
20	38.10	29.36	34.2	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

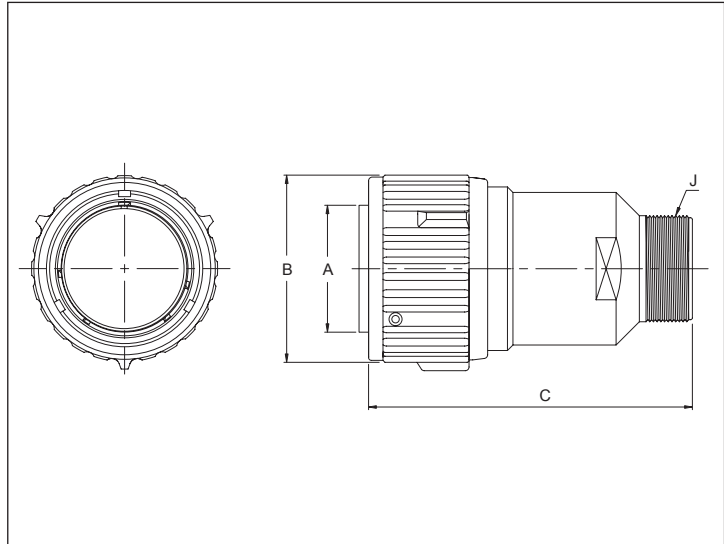
Amphenol Bayonet Coupling Connectors

ADG06A, ADGC06A

Straight Plug



under 36 size shell only



over 48 size shell only

DaeShin

(mm)

Shell Size	A +0.00 -0.38	B Max	C Max	J (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

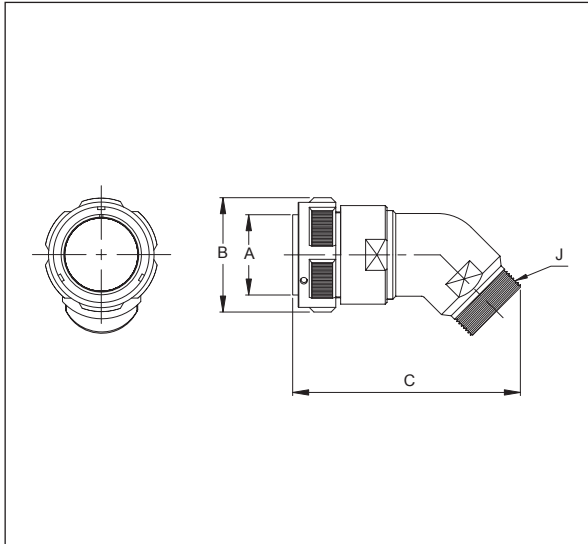
All dimensions for reference only

Amphenol®

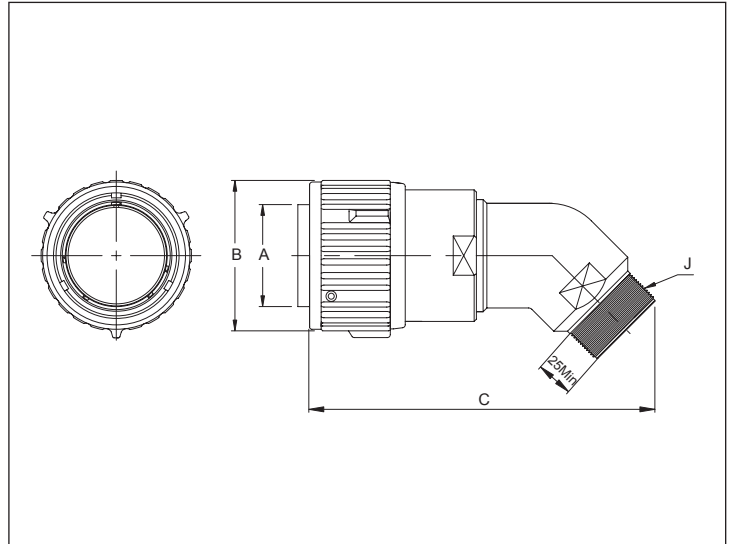
Amphenol Bayonet Coupling Connectors

ADG08A, ADGC08A

45° Angle plug



under 36 size shell only



over 48 size shell only

DaeShin

(mm)

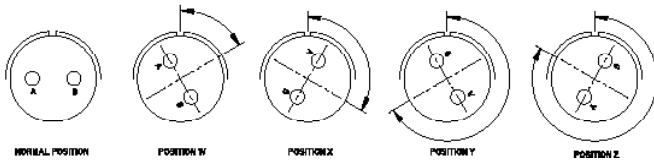
Shell Size	A +0.00 -0.38	B Max	C Max	J (UNEF)
36	50.3	72.0	136.0	2-18 UN
48	68.3	101.0	232.0	2 1/4-16 UN
70	126.3	161.0	233.0	2 1/4-16 UN

All dimensions for reference only

Amphenol Bayonet Coupling Connectors

ADG, ADGC Series

Insert Arrangements & Alternate Positioning

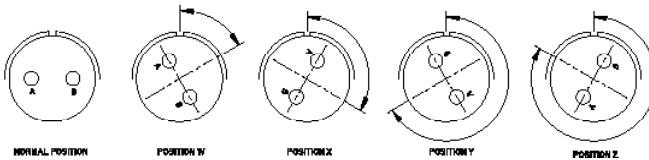


Contact Arrangement	Service Rating	Total Contacts	Contact Size					Alternate Position-Degrees			
			0	4	8	12	16	W	X	Y	Z
10SL-2	A	1					1	-	-	-	-
10SL-3	A	3					3	-	-	-	-
10SL-4	A	2					2	63	-	-	-
14S-2	Inst	4					4	-	120	240	-
14S-5	Inst	5					5	-	110	-	-
14S-6	Inst	6					6	-	-	-	-
14S-7	A	3					3	90	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 Arrangement	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 Arrangement	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




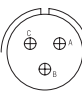
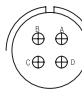

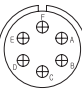





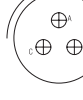

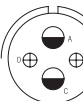
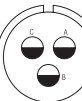





Special insert Arrangements for transfer of High Power & Signal

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

							
Insert Arrangement	10SL-2	Front of Socket Insert 10SL-3	Front of Socket Insert 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						

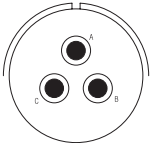
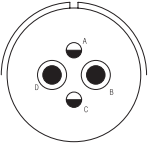
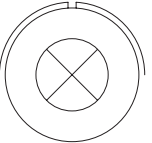
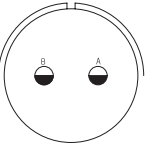
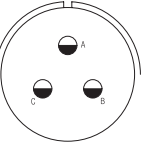
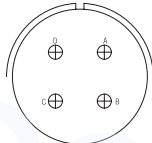
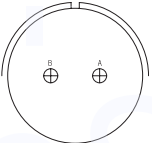
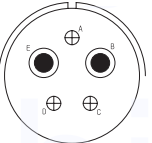
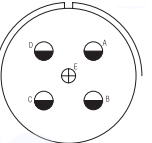
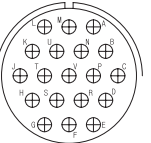
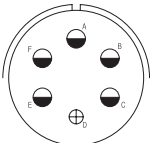
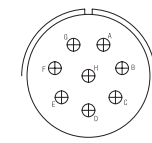
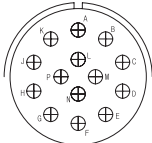
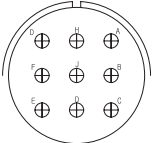
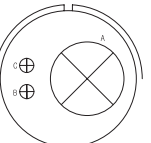
Amphenol Bayonet Coupling Connectors ADG, ADGC Series Contact Arrangements

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
	CONTACT LEGEND 16 12 8 4 0 4/0					

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
Insert Arrangement	24-5	24-6	24-7	24-9	24-10
Service Rating	A	A,G,H=D; Bal.=A	A	A	A
Number of Contacts	16	8	2 14	2	7
Contact Size	16	12	12 16	4	8
Insert Arrangement	24-11	24-12	24-20	24-22	24-28
Service Rating	A	A	D	D	Inst.
Number of Contacts	3 6	2 3	2 9	4	24
Contact Size	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	
	CONTACT LEGEND 16 12 8 4 0 4/0			

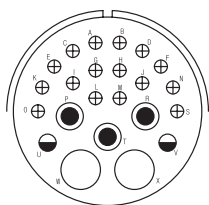
Amphenol Bayonet Coupling Connectors ADG, ADGC Series Contact Arrangements

Insert Arrangement	28-16	28-17	28-19
Service Rating	A	M,N,P=D; A to 1	H.M=B; A,B=D; Bal.=A
Number of Contacts	20	15	4 6
Contact Size	16	16	12 16
Insert Arrangement	28-20	28-21	28-22
Service Rating	A	A	D
Number of Contacts	10 4	37	3 3
Contact Size	12 16	16	4 16
Insert Arrangement	28-51	32-1	32-5
Service Rating	A	A=E; B,C,D,E=D	D
Number of Contacts	12	2 3	2
Contact Size	12	0 12	0
			CONTACT LEGEND 16 12 8 4 0 4/0

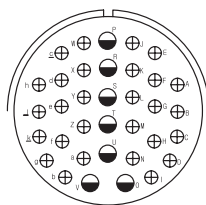
Amphenol Bayonet Coupling Connectors

ADG, ADGC Series

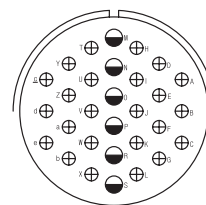
Contact Arrangements



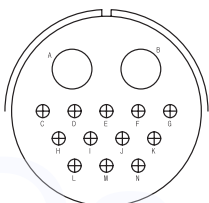
Insert Arrangement	32-6			
Service Rating	A			
Number of Contacts	2	3	2	16
Contact Size	4	8	12	16



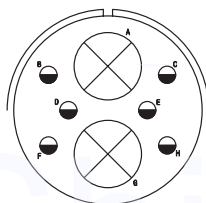
Insert Arrangement	32-7			
Service Rating	A, B, h, j = Inst.; Bal = A			
Number of Contacts	7	28		
Contact Size	12	16		



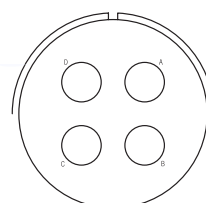
Insert Arrangement	32-8			
Service Rating	A			
Number of Contacts	6	24		
Contact Size	12	16		



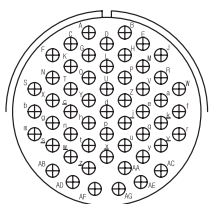
Insert Arrangement	32-9	
Service Rating	D	
Number of Contacts	2	12
Contact Size	4	16



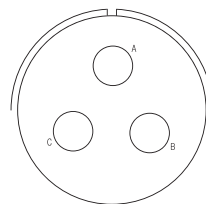
Insert Arrangement	32-15	
Service Rating	D	
Number of Contacts	2	6
Contact Size	0	12



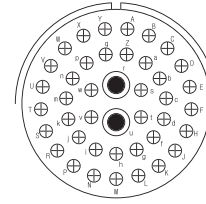
Insert Arrangement	32-17	
Service Rating	D	
Number of Contacts	4	
Contact Size	4	



Insert Arrangement	32-22	
Service Rating	A	
Number of Contacts	54	
Contact Size	16	



Insert Arrangement	32-03	
Service Rating	A	
Number of Contacts	3	
Contact Size	4	

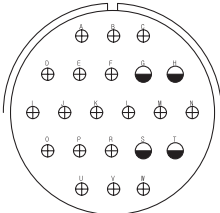
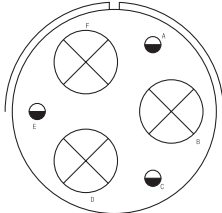
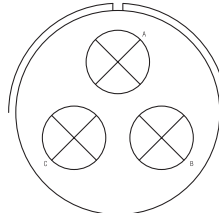
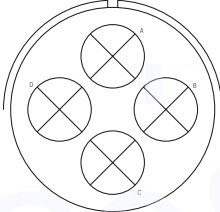
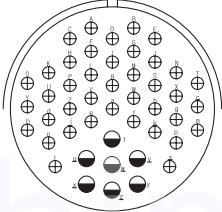
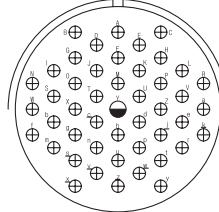
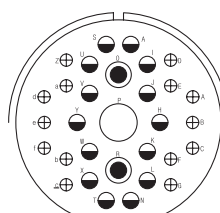
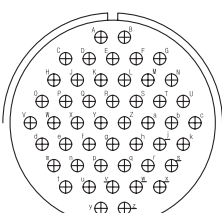
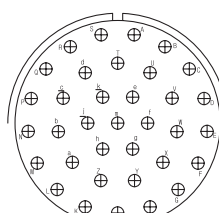



Insert Arrangement	32-59	
Service Rating	A	
Number of Contacts	2	40
Contact Size	8	16



CONTACT LEGEND 16 12 8 4 0 4/0

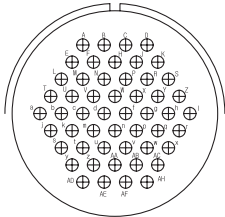
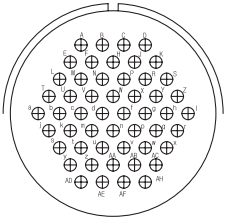
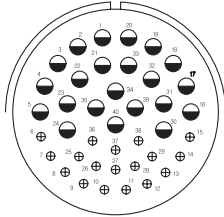
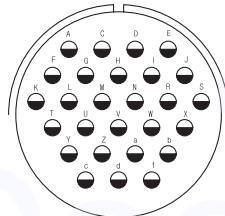
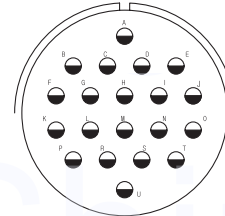
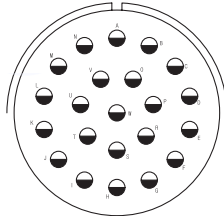
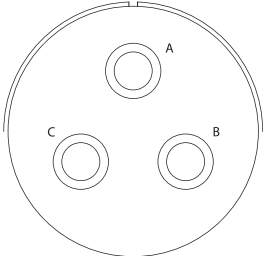
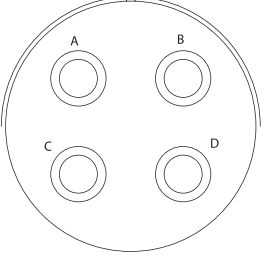
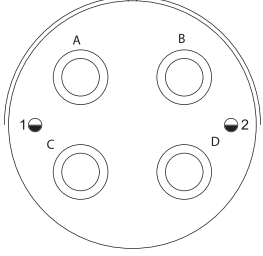
Amphenol Bayonet Coupling Connectors ADG, ADGC Series Contact Arrangements


			
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



CONTACT LEGEND 16 12 8 4 0 4/0

Amphenol Bayonet Coupling Connectors ADG, ADGC Series Contact Arrangements

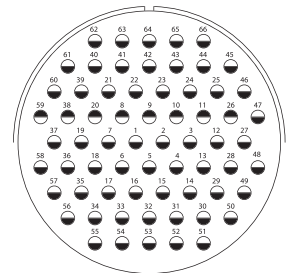
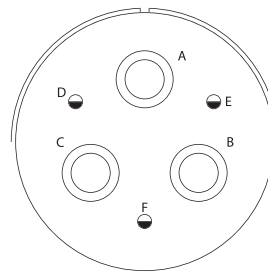
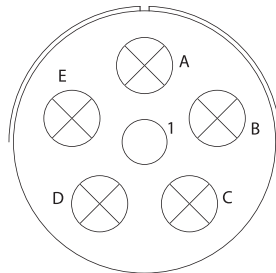
			
Insert Arrangement	36-52	36-30	36-40
Service Rating	A	A	A
Number of Contacts	52	30	22 18
Contact Size	16	12	12 16
			
Insert Arrangement	36-02	36-03	36-04
Service Rating	A	A	A
Number of Contacts	20	20	22
Contact Size	12	12	12
			
Insert Arrangement	*48-03	*48-04	*48-06
Service Rating	B	D	D
Number of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



CONTACT LEGEND 16 12 8 4 0 4/0

* Special arrangement for railway

Amphenol Bayonet Coupling Connectors ADG, ADGC Series Contact Arrangements



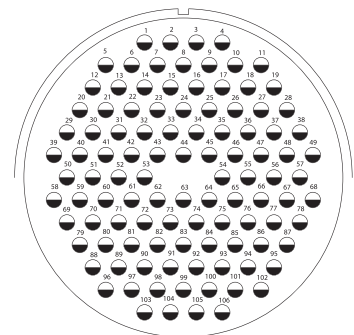
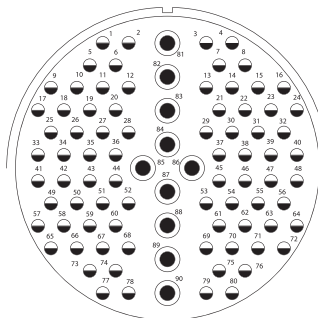
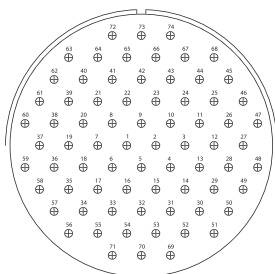
Insert Arrangement
Service Rating
Number of Contacts
Contact Size

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

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

***48-66**
A
66
12

DaeShin

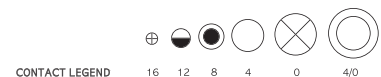


Insert Arrangement
Service Rating
Number of Contacts
Contact Size

***48-74**
A
74
16

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

***70-106**
A
106
12

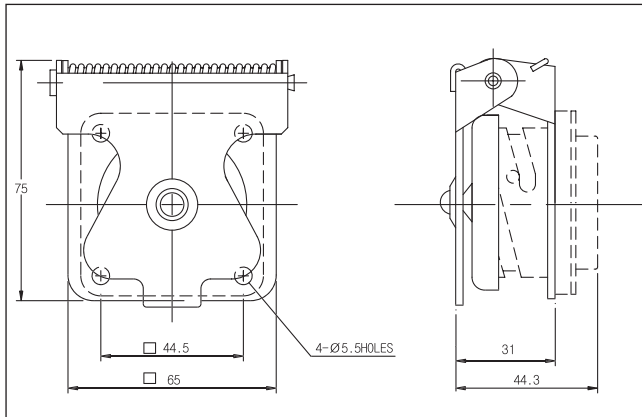


* Special arrangement for railway

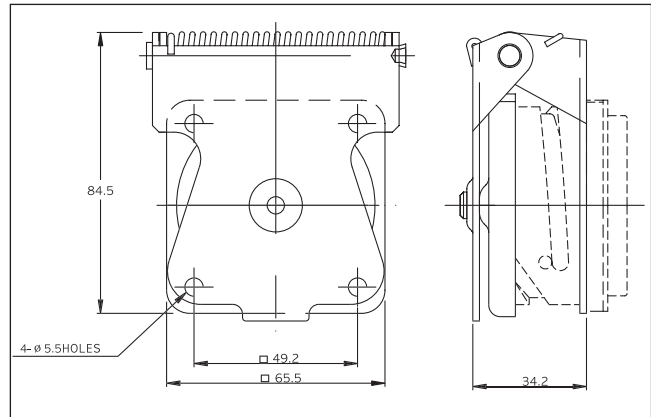
Amphenol Bayonet Coupling Connectors

ADG, ADGC Series

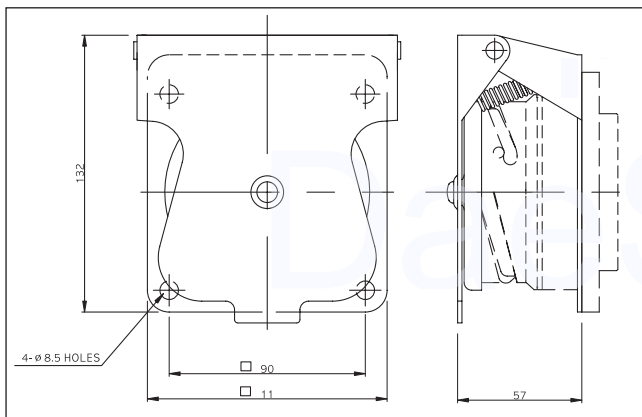
Accessories



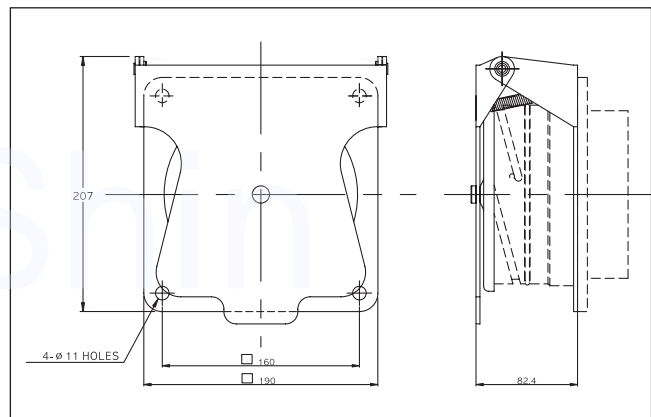
AMDC-28



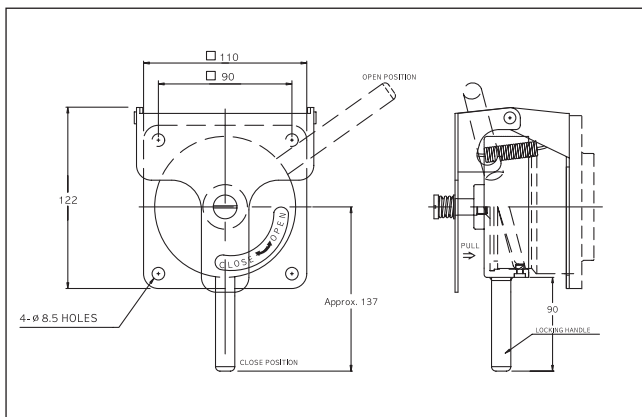
AMDC-36



AMDC-48



AMDC-70

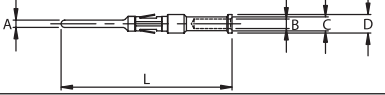
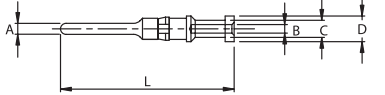
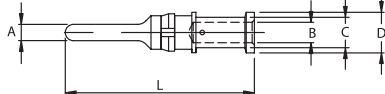
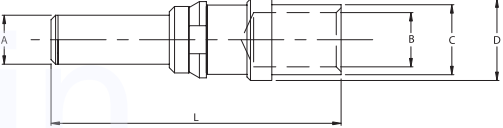
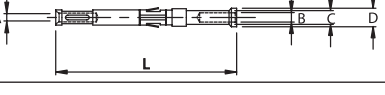
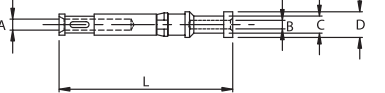
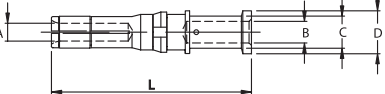
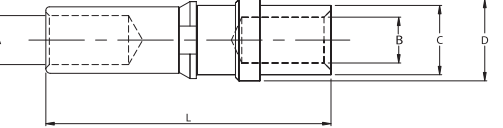


AMPC-MT48



Amphenol Bayonet Coupling Connectors ADG, ADGC Series Contact Dimension

Crimp contacts

Size	mm ² (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	Female 
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 Bayonet Coupling Connectors ADG, ADGC Series Contact Dimension

Crimp contacts

Size	mm ² (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	
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	
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

Shell	Aluminium or Aluminium alloy	Indicated for indoor and outdoor not particularly heavy application.
Insulator	Synthetic rubber Plastic with silicon gasket	Under 36 size shell / Synthetic rubber. Over 48 size shell / Plastic with silicon gasket. Fire resistant & temperature range -40°C to 125°C
Contact	Copper alloy	Silver or gold plating.
Durability	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 contacts and between the shell and 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

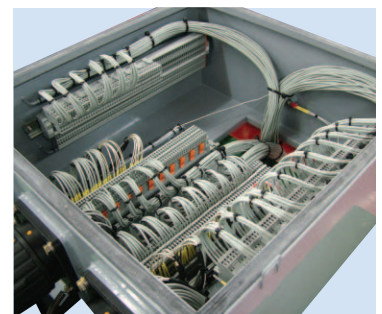
<u>ADG</u>	<u>08A</u>		<u>18-10</u>	<u>P</u>	<u>W</u>		
<u>ADGC</u>	<u>08A</u>	<u>G</u>	<u>48-03</u>	<u>P</u>	<u>W</u>	<u>5K</u>	<u>(XXX)</u>
1	2	3	4	5	6	7	8

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 ² /AWG)	Tool Part Nr		Applicate Insert arrange
		For crimping	For removal	
#16	0.5 ~ 0.75	TP201411-AG or DMC CAGE11851	AMET-JC 16/12	48-74
	1.0 ~ 2.0			
	2.5 ~ 3.0			
#12	1.0 ~ 2.0mm ²	TP201411-AG DMC CAGE11851 TP-201328-12D	AMET-JC 16/12	48-06 70-90 700-106
	2.5mm ²			
	12 AWG			
	4.0mm ²			
#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 or IZUMIEP-510B	AMET-JC4/0	48-03 48-04 48-06
	50			
	70			
	95			



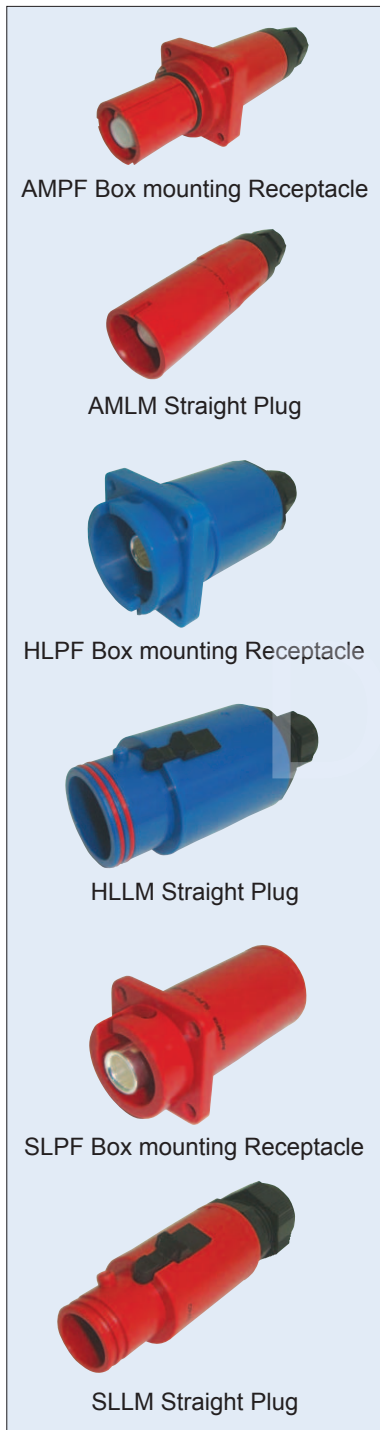
Description	Part Nr	Fig
Crimpig Tool	TP201411-AG	
	DMC CAGE11851	
	TP-201328	
	IZUMIEP-510B	
Removal Tool	AMET-JC16/12	
	AMET-JC4/0	
Insertion Tool	BMD-297-16	
	BMD-297-12	



**High Tension
Connectors
AMHTC Series**

DaeShin

Amphenol High Tension Connectors AMHTC Series



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	-

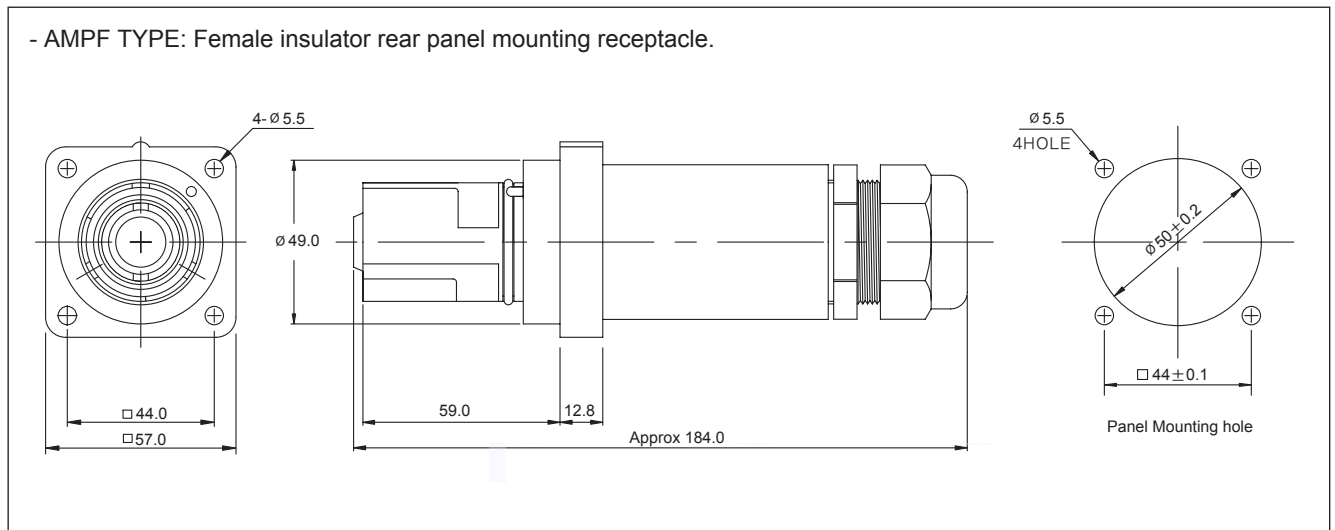
4. Technical Data

Item	High Lock		Low Lock
	AMPF, AMLM	HLPF, HLLM	SLPF, SLLM
Continuous Current Rating	660A@ambent<70°C	350A@ambent<70°C	250A@ambent<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 100MΩ @ DC 1,000V		
Ingress Protection (mated)	IP67		
Protection against Electric Shock	IP2X		
Flammability	UL94-V0		

Amphenol High Tension Connectors Amphenol AMHTC Connectors

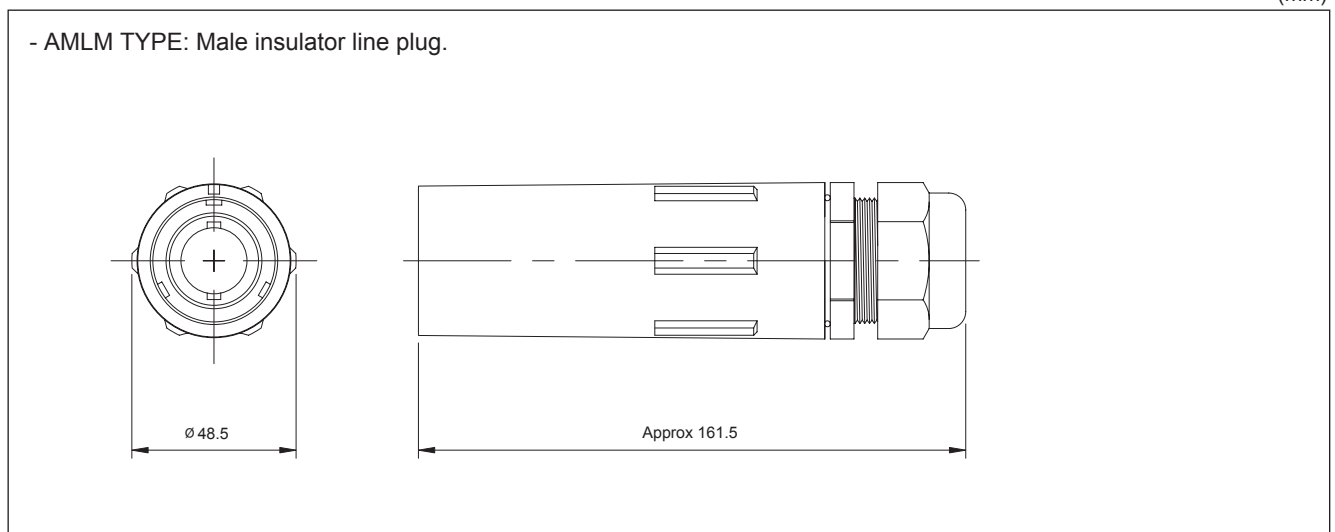
High Lock Box mounting receptacle

(mm)



High Lock Straight Plug

(mm)

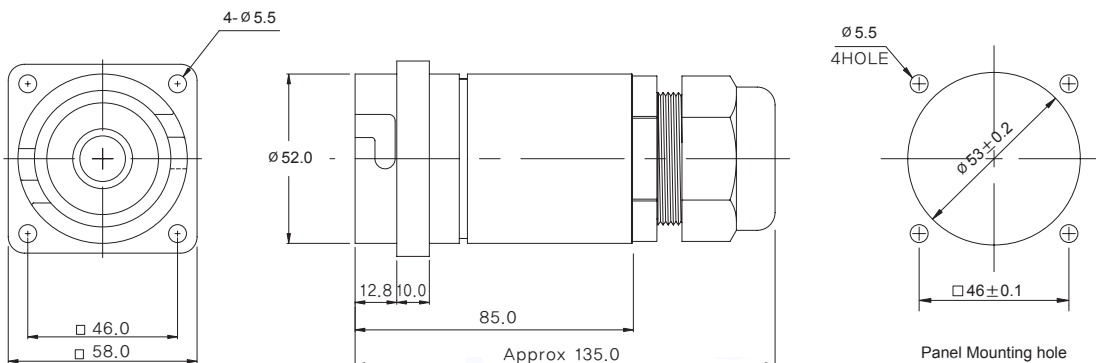


Amphenol High Tension Connectors Amphenol AMHTC Connectors

High Lock Box mounting receptacle

(mm)

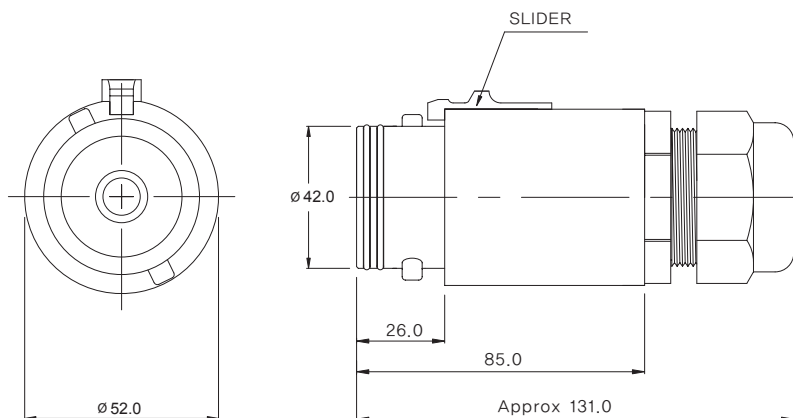
- HLPF TYPE: Female insulator front panel mounting receptacle.



High Lock Straight Plug

(mm)

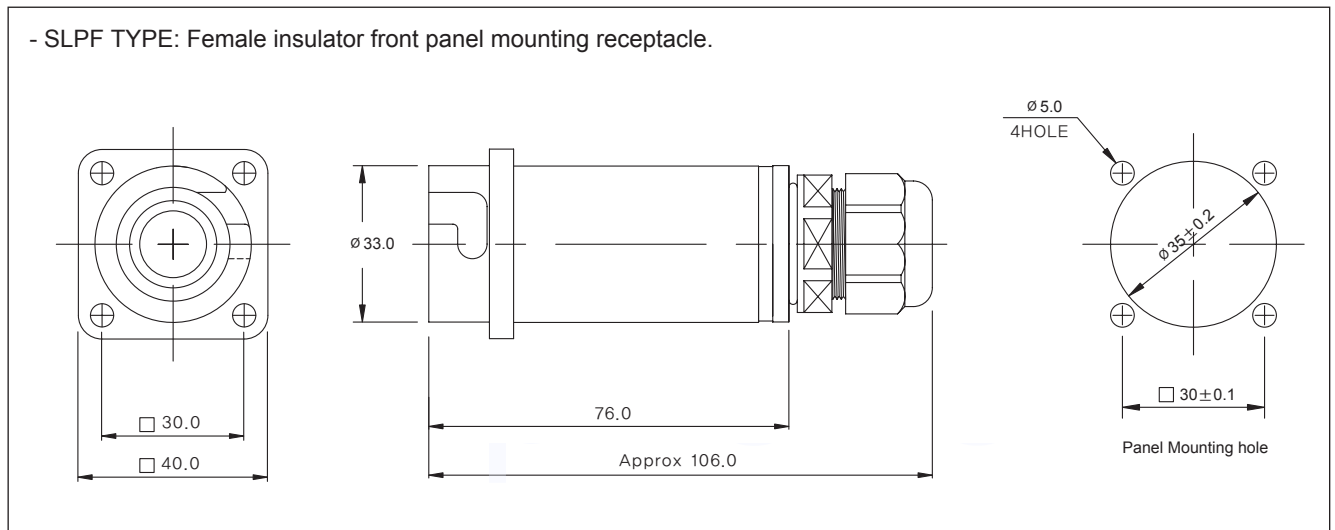
- HLLM TYPE: Male insulator line plug.



Amphenol High Tension Connectors Amphenol AMHTC Connectors

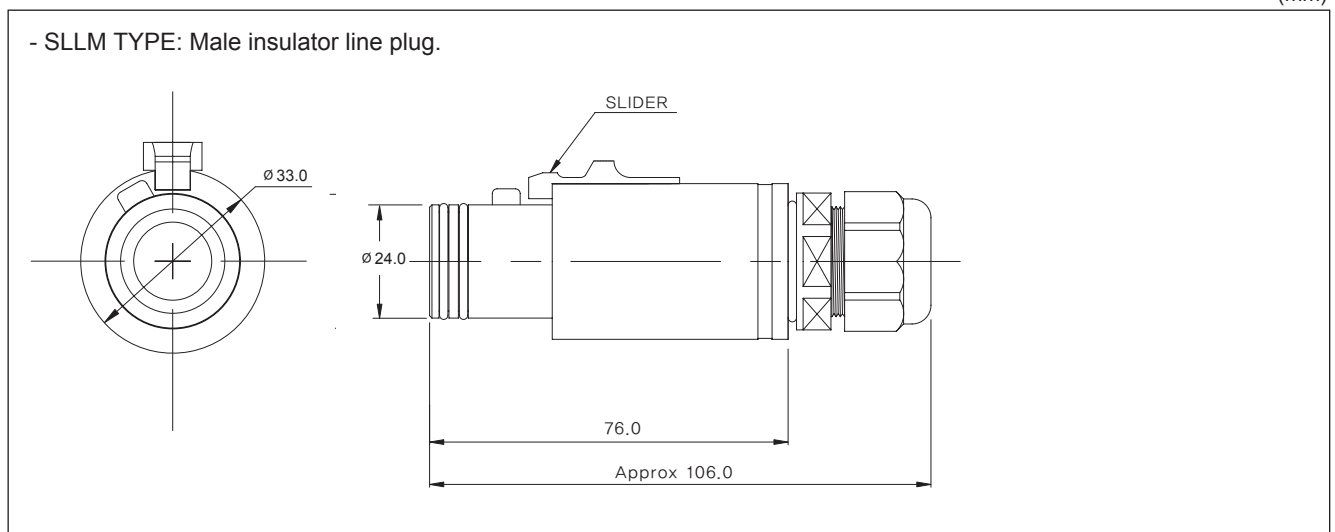
Low Lock Box mounting receptacle

(mm)



Low Lock Straight Plug

(mm)



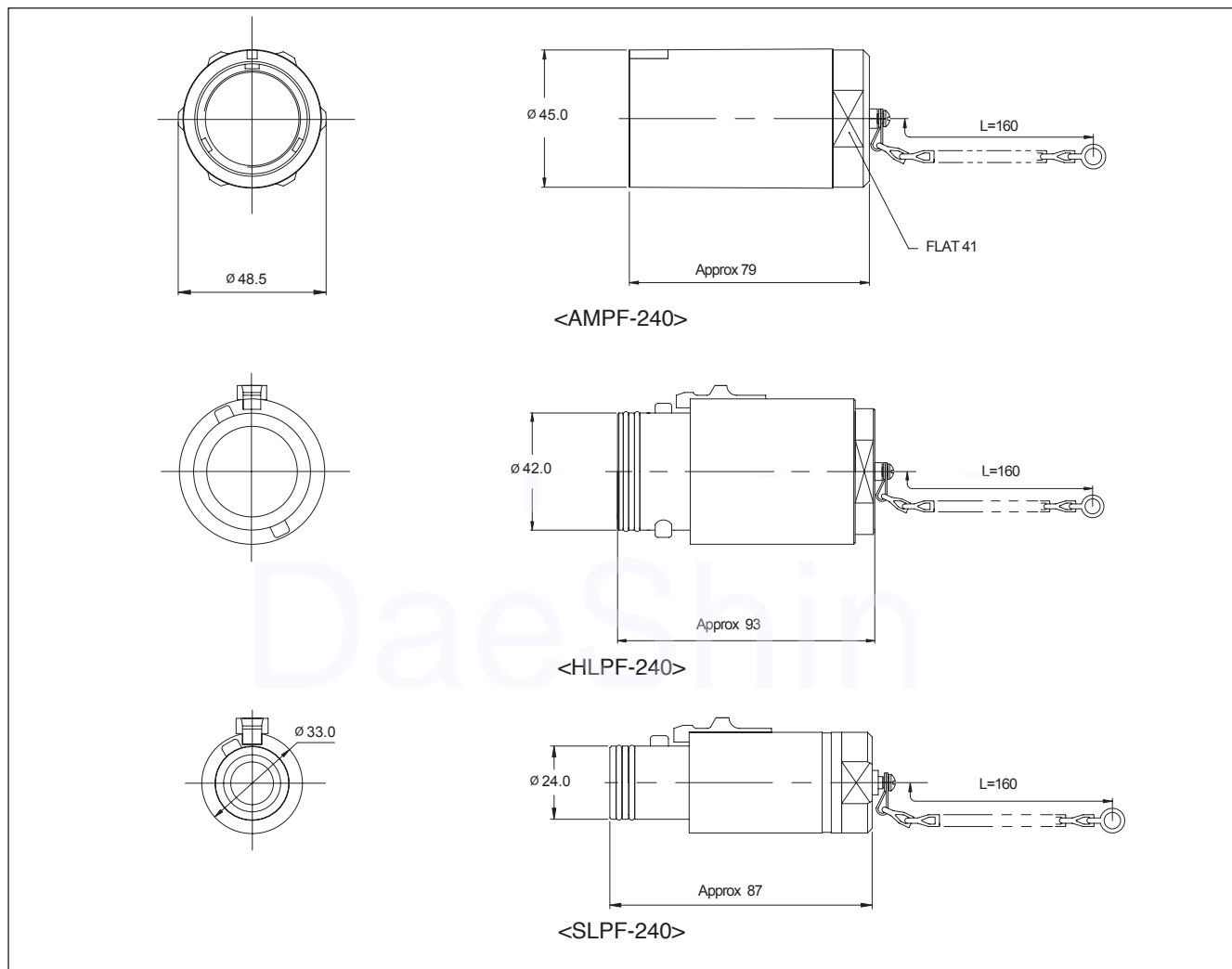
Amphenol High Tension Connectors

AMHTC Series

Accessories Dimension

Receptacle Protection Cap

(mm)



Amphenol High Tension Connectors

Amphenol AMHTC Series

How to order

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

1. Connector Type

High Lock		Low Lock	Remarks
AMPF	HLPF	SLPF	Panel Female connector
AML M	HLL M	SLL M	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 : 240 _{mm} ~ Crimp	C70 : 70 _{mm} ~ Crimp
C200 : 200 _{mm} ~ Crimp	C50 : 50 _{mm} ~ Crimp
C185 : 185 _{mm} ~ Crimp	C35 : 35 _{mm} ~ Crimp
C120 : 120 _{mm} ~ Crimp	C25 : 25 _{mm} ~ Crimp
C95 : 95 _{mm} ~ Crimp	C14 : 14 _{mm} ~ Crimp

5. Cable grip(Consult factory)

13.5 : PG13.5 (6 ~ 12mm cable OD)	M20S : M20X1.5 (6 ~ 12mm cable OD)
16 : PG16 (10 ~ 14mm cable OD)	M20L : M20X1.5 (10 ~ 14mm cable OD)
21 : PG21 (13 ~ 18mm cable OD)	M25 : M25X1.5 (13 ~ 18mm cable OD)
29 : PG29 (18 ~ 25mm cable OD)	M32 : M32X1.5 (18 ~ 25mm cable OD)
36 : PG36 (22 ~ 32mm cable OD)	M40 : M40X1.5 (22 ~ 32mm cable OD)



Amphenol High Tension Connectors AMHTC Series

Contact Size	Wire Size (mm ² /AWG)	Crimping Tool No.	Removal Tool No.	Remarks
Special Pin	50 mm ²	IZUMI EP-510	AMET-HTCSP	AMLM
	70 mm ²			
	90 mm ²			
	120 mm ²			
	185 mm ²			
Special Socket	50 mm ²	IZUMI EP-510	AMET-HTCSP	AMPF
	70 mm ²			
	90 mm ²			
	120 mm ²			
	185 mm ²			
#4/0 Pin	16 mm ²	TP=201328 or IZUMI EP-510B	AMET-JC4/0	HLLM
	25 mm ²			
	35 mm ²			
	38 mm ²		AMET-SLLM	SLLM
	50 mm ²			
	70 mm ²			
	95 mm ²			
#4/0 Socket	16 mm ²	TP=201328 or IZUMI EP-510B	AMET-JC4/0	HLPF SLPF
	25 mm ²			
	35 mm ²			
	38 mm ²			
	50 mm ²			
	70 mm ²			
	95 mm ²			



TP-201328



AMET



IZUMI EP-510B

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