



BACKSHELLS

Have a Connector? We've Got Your Back!



BACKSHELLS OVERVIEW

| Type | Military P/N | Amphenol P/N | Family | Angle | Finish |
|------------|--------------|--------------|---------------------------|----------|------------|
| Backshells | M85049/82 | BL1SSJ | Band Lock | Straight | N,P,W,Z,ZP |
| Backshells | M85049/83 | BL1BSJ | Band Lock | 45° | N,P,W,Z,ZP |
| Backshells | M85049/84 | BL1ASJ | Band Lock | 90° | N,P,W,Z,ZP |
| Backshells | M85049/85 | BL1SSK | Band Lock | Straight | N,P,W,Z,ZP |
| Backshells | M85049/86 | BL1BSK | Band Lock | 45° | N,P,W,Z,ZP |
| Backshells | M85049/87 | BL1ASK | Band Lock | 90° | N,P,W,Z,ZP |
| Backshells | M85049/88 | BL1SSL | Band Lock | Straight | N,P,W,Z,ZP |
| Backshells | M85049/89 | BL1BSL | Band Lock | 45° | N,P,W,Z,ZP |
| Backshells | M85049/90 | BL1ASL | Band Lock | 90° | N,P,W,Z,ZP |
| Backshells | M85049/93 | B5021 | Composite | - | T |
| Backshells | M85049/91 | B5021 | Composite Strain Relief | Straight | T |
| Backshells | M85049/92 | B5021 | Composite Strain Relief | 90° | T |
| Backshells | M85049/20 | BC2SRL | Crimp Ring Adapter | Straight | N,W,Z |
| Backshells | M85049/26-1 | BC2SRJ | Crimp Ring Adapter | Straight | N,W,Z |
| Backshells | M85049/26-2 | BC3XXX | Crimp Ring Adapter | Straight | N,W,Z |
| Backshells | M85049/26-3 | BC1SRJ | Crimp Ring Adapter | Straight | N,W,Z |
| Backshells | M85049/33-1 | BC2SRK | Ring Adapter | - | N,W,Z |
| Backshells | M85049/7 | BE1BRJ | Environmental | 45° | N,W,Z |
| Backshells | M85049/9 | BE1ARJ | Environmental | 90° | N,W,Z |
| Backshells | M85049/11 | BE1SRJ | Environmental | Straight | N,W,Z |
| Backshells | M85049/6 | BV1BRJ | Environmental EMI/RFI | 45° | N,W,Z |
| Backshells | M85049/8 | BV1ARJ | Environmental EMI/RFI | 90° | N,W,Z |
| Backshells | M85049/10 | BV1SRJ | Environmental EMI/RFI | Straight | N,W,Z |
| Backshells | M85049/17 | BV1SDK | Environmental EMI/RFI | Straight | N,W,Z |
| Backshells | M85049/18 | BV1SRL | Environmental EMI/RFI | Straight | N,W,Z |
| Backshells | M85049/76 | BV1ARK | Environmental EMI/RFI | 45° | N,W,Z |
| Backshells | M85049/77 | BV1BRK | Environmental EMI/RFI | 90° | N,W,Z |
| Backshells | M85049/78 | BV1BRL | Environmental EMI/RFI | 45° | N,W,Z |
| Backshells | M85049/79 | BV1ARL | Environmental EMI/RFI | 90° | N,W,Z |
| Backshells | M85049/19 | BM1SRL | Non-Environmental | Straight | N,W,Z |
| Backshells | M85049/21 | BN1SRL | Non-Environmental | Straight | N,W,Z |
| Backshells | M85049/29 | BN1SDK | Non-Environmental | Straight | A,N,W,Z |
| Backshells | M85049/23 | BM1BRJ | Non-Environmental EMI/RFI | 45° | N,W,Z |
| Backshells | M85049/24 | BM1ARJ | Non-Environmental EMI/RFI | 90° | N,W,Z |
| Backshells | M85049/25 | BM1SRJ | Non-Environmental EMI/RFI | Straight | N,W,Z |
| Backshells | M85049/36 | BM1SDK | Non-Environmental EMI/RFI | Straight | N,W,Z |
| Backshells | M85049/109 | BH1SRJ | Pre-Shield Adapter | Straight | N,W,Z |
| Backshells | M85049/111 | BH1ARJ | Pre-Shield Adapter | 90° | N,W,Z |
| Backshells | M85049/112 | BH1SRK | Pre-Shield Adapter | Straight | N,W,Z |
| Backshells | M85049/114 | BH1ARK | Pre-Shield Adapter | 90° | N,W,Z |
| Backshells | M85049/115 | BH1SRL | Pre-Shield Adapter | Straight | N,W,Z |

BACKSHELLS OVERVIEW

| Type | Military P/N | Amphenol P/N | Family | Angle | Finish |
|------------|--------------|--------------|---------------------------|----------|---------|
| Backshells | M85049/117 | BH1ARL | Pre-Shield Adapter | 90° | N,W,Z |
| Backshells | M85049/15 | BQIBRL | Tie Wrap | 45° | A,N,W,Z |
| Backshells | M85049/16 | BQ1ARL | Tie Wrap | 90° | A,N,W,Z |
| Backshells | M85049/53 | BQ1SRJ | Tie Wrap | Straight | A,N,W,Z |
| Backshells | M85049/54 | BQ1BRJ | Tie Wrap | 45° | A,N,W,Z |
| Backshells | M85049/55 | BQ1ARJ | Tie Wrap | 90° | A,N,W,Z |
| Backshells | M85049/56 | BQ1SRK | Tie Wrap | Straight | A,N,W,Z |
| Backshells | M85049/57 | BQ1BRK | Tie Wrap | 45° | A,N,W,Z |
| Backshells | M85049/63 | BQ1ARK | Tie Wrap | 90° | A,N,W,Z |
| Backshells | M85049/60-1 | BB1SRJ | Shrink Boot Adapter | Straight | A,N,W,Z |
| Backshells | M85049/60-2 | BB2SRJ | Shrink Boot Adapter | Straight | A,N,W,Z |
| Backshells | M85049/62 | BB1SRK | Shrink Boot Adapter | Straight | A,N,W,Z |
| Backshells | M85049/69 | BB1SRL | Shrink Boot Adapter | Straight | A,N,W,Z |
| Backshells | M85049/38 | BS1SRL | Strain Relief Clamp | Straight | A,N,W |
| Backshells | M85049/39 | BS1ARL | Strain Relief Clamp | 90° | A,N,W |
| Backshells | M85049/41 | MS3057 | Strain Relief Clamp | Straight | W |
| Backshells | M85049/42 | - | Strain Relief Clamp | Straight | N,W,Z |
| Backshells | M85049/43 | BS1BRJ | Strain Relief Clamp | 45° | A,N,W,Z |
| Backshells | M85049/47 | BS1ARK | Strain Relief Clamp | 90° | N,W |
| Backshells | M85049/49-2 | BS1SRK | Strain Relief Clamp | Straight | A,N,W |
| Backshells | M85049/51 | BS1ARJ | Strain Relief Clamp | 90° | A,N,W |
| Backshells | M85049/52 | BS1SRJ | Strain Relief Clamp | Straight | A,N,W |
| Backshells | M85049/118 | BS014SSJ | Strain Relief Clamp | Straight | N,W,Z |
| Backshells | M85049/120 | BS014ASJ | Strain Relief Clamp | 90° | A,N,W,Z |
| Backshells | M85049/121 | BS014SSK | Strain Relief Clamp | Straight | A,N,W,Z |
| Backshells | M85049/123 | BS014ASK | Strain Relief Clamp | 90° | A,N,W,Z |
| Backshells | M85049/124 | BS014SS | Strain Relief Clamp | Straight | A,N,W,Z |
| Backshells | M85049/126 | BS014ASL | Strain Relief Clamp | 90° | A,N,W,Z |
| Backshells | M85049/147 | - | Strain Relief Clamp | Straight | A,N,W,Z |
| Backshells | - | BEL1SS | Alumalight- Environmental | Straight | W, N |
| Backshells | - | BLL1SS | Alumalight-Band Lock | Straight | W, N |
| Backshells | - | BLL1AS | Alumalight-Band Lock | 90° | W, N |
| Backshells | - | BLL1BS | Alumalight-Strain Relief | 45° | W, N |
| Backshells | - | BML1SS | Alumalight-Strain Relief | Straight | W, N |
| Backshells | - | BML1AS | Alumalight-Strain Relief | 90° | W, N |

HOW TO SELECT A BACKSHELL

1. Select the Backshell Family (pgs. 6-7; i.e. Non-Environmental Backshell)
2. Select Angle (pg. 8; i.e. Straight)
3. Select Coupling Style (pg. 8; i.e. Spin)

In order to complete steps 4-9, you must know the connector specification. For example, we'll use connector D38999/26WB35PN to walk through the remaining steps of selecting a backshell.

4. Select Connector Group Code based on your connector specifications (pgs.10-14; i.e. L)
5. Select material and finish option (pg. 15; i.e. Cadmium Olive Drab over Electroless Nickel)

*Recommended to follow the same finish as connector

In order to complete step 7, you must know the actual cable diameter. For example, we'll use the cable diameter of 0.20 inches to walk through the remaining steps of selecting a backshell.

6. Determine the clamp size by using the table on the Backshell product page, see full catalog for more. (pg. 5)
7. If applicable, determine backshell length using the table on the Backshell product page see full catalog for more. (pg. 5)
8. Build a part number based on the selections you made (pg.5; i.e. M85049/2111W02A)

*Contact Amphenol Pcd if you can not find your preferences to meet your application, we may be able to support under priority part number

Cross Reference

If you have a Military part number or other manufacturer's part number for which you are looking for an equivalent item, we have provided a cross-reference on our web link: <http://www.backshellworld.com/crossreference.aspx>

Customize

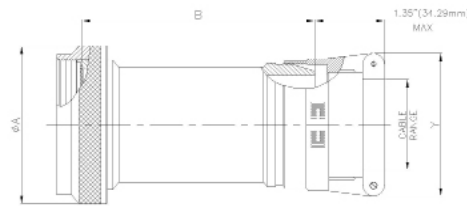
Backshells for Military & Aerospace applications are governed by SAE, AS85049 standard and Amphenol Backshells are designed to meet the requirement of this standard. Though this standard covers the most popular styles of backshells, many applications call for additional styles and designs. Here is where the capability of Amphenol can support you from the concept to product realization and thereby your unique specification need is satisfied.

Please visit our web link for further help: <http://www.backshellworld.com/customdesign.asp>

STRAIGHT, SPIN COUPLING

38999 Series III, IV

| | | | | | |
|--------|--------------|----------------------|--|------------|---------------------------|
| M85049 | /21 | 11 | W | 02 | A |
| SERIES | SLASH SHEET | ACCESSORY SHELL SIZE | FINISH | CLAMP SIZE | LENGTH |
| | 21: Straight | Table A | N: Electroless Nickel W: Cadmium Olive Drab Z: Black Zinc Nickel | Table A | Table A Omit for "STD" |



| Accessory Shell Size | Clamp Size | Length | Connector Shell Size | Cable Range | | | | A Ø Max. | | B Ø Max. | | Y Max. | |
|----------------------|------------|--------|----------------------|-------------|-------|------|-------|----------|-------|----------|-------|--------|-------|
| | | | | Min. | | Max. | | inch | mm | inch | mm | inch | mm |
| | | | | inch | mm | inch | mm | | | | | | |
| 9 | 01 | STD. | 9 / A | 0.06 | 1.57 | 0.13 | 3.18 | 0.75 | 19.05 | 1.53 | 38.86 | 0.80 | 20.32 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| | 02 | STD. | | 0.13 | 3.18 | 0.25 | 6.35 | | | 1.53 | 38.86 | 1.00 | 25.40 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| 11 | 01 | STD. | 11 / B | 0.06 | 1.57 | 0.13 | 3.18 | 0.85 | 21.59 | 1.53 | 38.86 | 0.80 | 20.32 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| | 02 | STD. | | 0.13 | 3.18 | 0.25 | 6.35 | | | 1.53 | 38.86 | 1.00 | 25.40 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| | 03 | STD. | | 0.25 | 6.35 | 0.38 | 9.53 | | | 1.53 | 38.86 | 1.10 | 27.94 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| 13 | 02 | STD. | 13 / C | 0.13 | 3.18 | 0.25 | 6.35 | 1.00 | 25.40 | 1.53 | 38.86 | 1.00 | 25.40 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| | 03 | STD. | | 0.25 | 6.35 | 0.38 | 9.53 | | | 1.53 | 38.86 | 1.10 | 27.94 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| | 04 | STD. | | 0.31 | 7.92 | 0.50 | 12.70 | | | 1.53 | 38.86 | 1.20 | 30.48 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| 15 | 02 | STD. | 15 / D | 0.13 | 3.18 | 0.25 | 6.35 | 1.10 | 27.94 | 1.53 | 38.86 | 1.00 | 25.40 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| | | B | | | | | | | | 3.53 | 89.66 | | |
| | 03 | STD. | | 0.25 | 6.35 | 0.38 | 9.53 | | | 1.53 | 38.86 | 1.10 | 27.94 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| | | B | | | | | | | | 3.53 | 89.66 | | |
| | 04 | STD. | | 0.31 | 7.92 | 0.50 | 12.70 | | | 1.53 | 38.86 | 1.20 | 30.48 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| | | B | | | | | | | | 3.53 | 89.66 | | |
| | 05 | STD. | | 0.44 | 11.10 | 0.63 | 15.88 | | | 1.53 | 38.86 | 1.25 | 31.75 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| | | B | | | | | | | | 3.53 | 89.66 | | |
| 17 | 02 | STD. | 17 / E | 0.13 | 3.18 | 0.25 | 6.35 | 1.25 | 31.75 | 1.53 | 38.86 | 1.00 | 25.40 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| | | B | | | | | | | | 3.53 | 89.66 | | |
| | 03 | STD. | | 0.25 | 6.35 | 0.38 | 9.53 | | | 1.53 | 38.86 | 1.10 | 27.94 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| | | B | | | | | | | | 3.53 | 89.66 | | |
| | 04 | STD. | | 0.31 | 7.92 | 0.50 | 12.70 | | | 1.53 | 38.86 | 1.20 | 30.48 |
| | | A | | | | | | | | 2.53 | 64.26 | | |
| | | B | | | | | | | | 3.53 | 89.66 | | |

BACKSHELL TYPE

Amphenol Backshells are available in several different types, designed for optimum performance in the application or environment it will be used in. For example, in ground and naval applications, the robustness and environmental sealing may be more important, weight may be the prime consideration for Space and Aerospace applications. The following overview explains the various families of Amphenol Backshells with its applications. Some families of backshells shown here can be used without any additional protection. Some other types of backshells shown are generally used with heat shrink boots or similar protection/strain relief mechanisms depending upon the specific requirements. Also, there are some clamps & nuts for the applications where varying degrees of strain reliefs and cable holding will suffice and weight savings is of higher importance.



Non-Environmental Backshell

Effective cable holding mechanism with good strain relief when the environmental protection of the cable termination area is not a concern. Amphenol offers cost-effective solutions by eliminating extra sealing parts. Suitable for an inside-the-box/climate controlled room application where heavy cabling should be supported with adequate strain relief.

**Example shown on pg. 4*



Environmental Backshell

Not only provide the cable support and strain relief, but ensure the cable sealing and environment protection by means of high quality sealing grommet and grommet follower. The strain relief nut is tightened, squeezing the grommet onto the cable jacket during assembly. Provides 6 feet water sealing protection when used with perfectly jacketed cable, and suitable for harsh environment applications.



Non-Environmental EMI/RFI Backshell

Offering 360-degree electromagnetic and radio frequency noise isolation shielding in addition to standard features available with the Non-Environmental type. Available in straight, 90 degree and 45 degree varieties. Accommodates both individual and overall shielding.



Environmental EMI/RFI Backshell

Ideal choice for heavy duty cabling solutions in harsh environments where electromagnetic and radio frequency noises are to be isolated. Accommodates both individual and overall shielding.



Shrink Boot Adapter

A good solution when the unshielded cables are terminated with heat shrink boots. It has a groove where the boot lip can be held which provides good grip apart from sufficient space inside for the cable looping. Using the heat shrink boot is one way of providing environmental protection and strain relief to cable termination. Using a suitable adapter is essential to ensure the repair ability.



Crimp Ring Adapter

Many cable terminations where heat shrink boots are used; will require provision for terminating the screens, too. It is achieved in this type of backshell through a ring, which can be crimped to the backshell body holding the screens in between.

BACKSHELL TYPE



Band Lock Adapter

A high quality band will do the job with this backshell. Tempered bands are tightened over the shields, which are pulled over the banding area using a special assembly tool. Suitable over cover by heat shrink boot or some other method as chosen by the designer could be used. Both crimp ring and banded terminations give a low DC resistance.



Pre-Shield Adapter

This adapter comes with a pre-cut braid that is fitted to the adapter for easy assembly. The braid overlaps with the cable braid. Effective shielding takes place due to the 360° contact of the braid. Designed to accept heat shrink boot. Ease of assembly saves time for cable termination.



SQ Adapter

The SQ adapter is a cost-effective way to terminate the braid to the adapter. The braid is pulled over the conical shape to the rear end of the adapter and then tied. The end nut is tightened to ensure adequate grip for the shielding. A heat shrink boot can be used with this adapter as well.



Strain Relief Clamps

If environmental protection is not a concern and weight savings is a major consideration this strain relief clamp is what you need. It secures and “tidys-up” the light/medium cable and also provides good strain relief at the termination area.



Lamp Thread Adapter

An adapter with threads similar to that in the lamp base for shield termination. An effective, easy and quick method of shield termination and field maintenance. Termination area can accept a nut as well as a clamp. The nut option enables the use of heat shrink boot and the clamp option will facilitate the strain relief clamping without heat shrink boot after the shield/cable termination.



Tie Wrap

A light weight clamp used for securing and “tidying up” cable into a desired direction. Used in interior wiring of aircraft.



Composite

Designed to provide strain relief, support weight saving initiatives and can withstand severe corrosive environments. This mix of durability and weight savings creates a lightweight, high performing backshell ideally suited for the commercial air market.



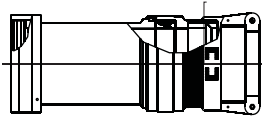
AlumaLight

With its unmatched combination of weight, performance, and price, AlumaLight exceeds the performance and functionality of Mil - standards and is more durable than composites with enhanced EMI performance.

ANGLES/PROFILES & COUPLING STYLES

Angles/Profiles

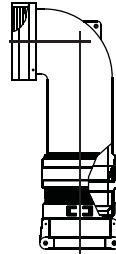
Amphenol Backshells are available in three different angular profiles: straight, 90 degree and 45 degree. These profiles will meet most of the cable routing required in the interconnect market. We can also make additional profiles if required. Please go to the web link <http://www.backshellworld.com/customdesign.asp> to contact Amphenol about your specific backshell needs.



Straight Backshells

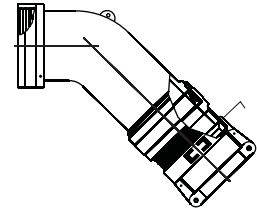
Available in different lengths and cable entry diameters for most applications. Different cable and braid terminating systems are also available as shown in the respective product sections.

*Example shown on pg. 5



90° Angled Backshells

Many applications require the cable to be bent and routed rather than straight routed. Amphenol offers a 90° angled style in all the backshell families for space saving and convenience.



45° Angled Backshells

Amphenol offers further design flexibility with a backshell that allows the cable to be routed 45° to the axis of the assembly.

Coupling Styles

Various coupling styles are available for the coupling between the backshell and the connector. Popular styles are shown in the respective backshell sections, and custom profiles can be designed. Please go to the web link

<http://www.backshellworld.com/customdesign.asp> to contact Amphenol about your specific backshell needs.



Spin Coupling

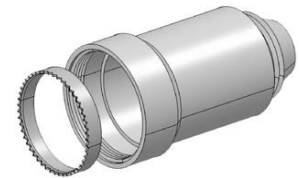
A captivated coupling nut within the backshell which provides the following advantages: Free rotation of the coupling nut making the assembly of the backshell to the connector easy without turning the entire backshell body. Lock wire holes are provided on the coupling nut to prevent accidental decoupling.

*Example shown on pg. 5



Self-Lock Coupling

Same as the Spin Coupling style with the additional feature of "self-locking." Internally locks the movement of the coupling nut so that accidental decoupling is prevented. Used in higher vibration conditions.



Direct Coupling

The coupling nut is eliminated in this design, and the backshell directly threads to the connector. For applications where simple direct connectivity is sufficient.

ASSEMBLY TORQUE VALUE & STYLE 2 CONFIGURATION

Amphenol recommends the following torque values for its adapters while assembling them to the connectors. These values are based on the coupling thread strength specified in SAE-AS85049 standard.

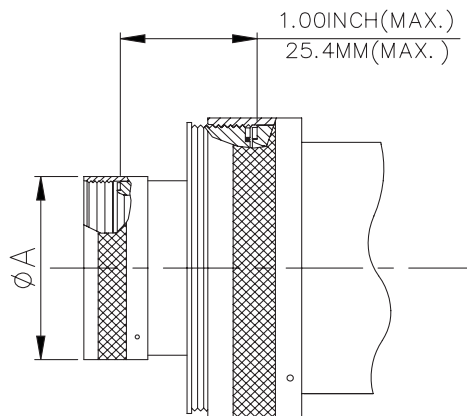
| Assembly Torque Value | |
|-----------------------|----------------------|
| Connector Shell Size | Torque (Inch-Pounds) |
| 8,9 | 40 |
| 3, 10, 10SL, 11 | 40 |
| 7, 12, 12S, 13 | 40 |
| 14, 14S, 15 | 40 |
| 16, 16S, 17 | 40 |
| 18, 19, 27 | 40 |
| 20, 21, 37 | 80 |
| 22, 23 | 80 |
| 24, 25, 61 | 80 |
| 28 | 100 |
| 32 | 100 |
| 36 | 100 |
| 40 | 120 |
| 44 | 120 |
| 48 | 120 |

| Torque Values for Cable Clamp Screw | |
|-------------------------------------|----------------------|
| Screw Size | Torque (Inch-Pounds) |
| 2-56 | 2 ± .5 |
| 4-40 | 4 ± .5 |
| 6-32 | 6 ± 1.0 |
| 8-32 | 8 ± 1.0 |
| 10-32 | 10 ± 1.0 |
| .250-20 | 12 ± 1.0 |

*Recommended 75-80% of Values shown for installation

Style 2 Configuration

Some design consideration will require bigger diameter cable to be terminated in the smaller shell size connectors. Cable with heavy/thicker shielding, many wires for different branches/routing are some of the examples. Such cable termination will require a bigger adapter body with cable entry dimensions more than the connector rear side dimensions. Amphenol support this kind of applications too. The coupling end of the adapter will be modified to Style-2 design as shown in the figure in such cases. The overall length of the style-2 design adapters would be increased by approximately 1inch (25.4mm) as shown. This alternate design is applicable for all the 'Backshell Families' listed in this catalogue.



CONNECTOR GROUP CODE

| SPECIFICATIONS | | |
|--------------------------|--------------|----------------------|
| Connector Specifications | Series/Class | Connector Group Code |
| 40M38277 | | K |
| 40M39569 | | J |
| BS9520 | G0001 | K |
| BS9520 | G0002 | K |
| BS9520 | G0003 | L |
| BS9522 F0001 | Patt 602 | J |
| BS9522 F0012 | Patt 615 | M |
| BS9522 F0017 | Patt 105 | N |
| BS9522 F0020 | Patt 608 | N |
| BS9522 F0029 | Patt 616 | K |
| BS9522 F0042 | | J |
| BS9522 N0001 | Patt 603 | N |
| BS9522 N0003 | Patt 614 | K |
| CECC 75201.001 | | J |
| CECC 75201.002 | | L |
| DEF 5326-3 | | J |
| EN 2997 | | J |
| EN 3645 | | L |
| EN 3646 | | J |
| EN 3372 | | M |
| ESC 10 | | J |
| ESC 11 | | J |
| JN1003 | | M |
| LN29504 | | J |
| LN29728 | | J |
| LN29729 | | M |
| MIL-C-81703 | 3 | J |
| MIL-DTL-26482 | 2 | J |
| MIL-DTL-38999 | I | K |
| MIL-DTL-38999 | II | K |
| MIL-DTL-38999 | III | L |
| MIL-DTL-38999 | IV | L |
| MIL-DTL-5015 | MS340 | J |
| MIL-DTL-5015 | MS345 | J |
| MIL-DTL-83723 | I | J |
| MIL-DTL-83723 | III | J |
| NAS 1599 | | J |
| NFC93422 | HE302 | J |
| NFC93422 | HE306 | M |
| NFC93422 | HE308 | K |
| NFC93422 | HE309 | K |
| NFL 54140 | | J |
| PAN 6432-1 | | J |
| PAN 6432-2 | | J |
| PAN 6433-1 | | K |
| PAN 6433-2 | | M |
| VG 96912 | 2 | K |
| VG 96912 | 1 | M |

| MILITARY PART NUMBER PREFIX | | | |
|-----------------------------|----------------|--------------|----------------------|
| Military Part Number Prefix | Specifications | Series/Class | Connector Group Code |
| D38999/20 | MIL-DTL-38999 | III | L |
| D38999/24 | MIL-DTL-38999 | III | L |
| D38999/26 | MIL-DTL-38999 | III | L |
| D38999/40 | MIL-DTL-38999 | IV | L |
| D38999/42 | MIL-DTL-38999 | IV | L |
| D38999/46 | MIL-DTL-38999 | IV | L |
| D38999/47 | MIL-DTL-38999 | IV | L |
| M83723/01 | MIL-DTL-83723 | I | J |
| M83723/02 | MIL-DTL-83723 | I | J |
| M83723/03 | MIL-DTL-83723 | I | J |
| M83723/04 | MIL-DTL-83723 | I | J |
| M83723/05 | MIL-DTL-83723 | I | J |
| M83723/06 | MIL-DTL-83723 | I | J |
| M83723/07 | MIL-DTL-83723 | I | J |
| M83723/08 | MIL-DTL-83723 | I | J |
| M83723/13 | MIL-DTL-83723 | I | J |
| M83723/14 | MIL-DTL-83723 | I | J |
| M83723/36 | MIL-DTL-83723 | I | J |
| M83723/37 | MIL-DTL-83723 | I | J |
| M83723/38 | MIL-DTL-83723 | I | J |
| M83723/39 | MIL-DTL-83723 | I | J |
| M83723/40 | MIL-DTL-83723 | I | J |
| M83723/41 | MIL-DTL-83723 | I | J |
| M83723/42 | MIL-DTL-83723 | I | J |
| M83723/43 | MIL-DTL-83723 | I | J |
| M83723/48 | MIL-DTL-83723 | I | J |
| M83723/49 | MIL-DTL-83723 | I | J |
| M83723/65 | MIL-DTL-83723 | III | J |
| M83723/66 | MIL-DTL-83723 | III | J |
| M83723/67 | MIL-DTL-83723 | III | J |
| M83723/68 | MIL-DTL-83723 | III | J |
| M83723/69 | MIL-DTL-83723 | III | J |
| M83723/71 | MIL-DTL-83723 | III | J |
| M83723/72 | MIL-DTL-83723 | III | J |
| M83723/73 | MIL-DTL-83723 | III | J |
| M83723/74 | MIL-DTL-83723 | III | J |
| M83723/75 | MIL-DTL-83723 | III | J |
| M83723/76 | MIL-DTL-83723 | III | J |
| M83723/77 | MIL-DTL-83723 | III | J |
| M83723/78 | MIL-DTL-83723 | III | J |
| M83723/82 | MIL-DTL-83723 | III | J |
| M83723/83 | MIL-DTL-83723 | III | J |
| M83723/84 | MIL-DTL-83723 | III | J |
| M83723/85 | MIL-DTL-83723 | III | J |
| M83723/86 | MIL-DTL-83723 | III | J |
| M83723/87 | MIL-DTL-83723 | III | J |
| M83723/91 | MIL-DTL-83723 | III | J |
| M83723/92 | MIL-DTL-83723 | III | J |

CONNECTOR GROUP CODE

| MILITARY PART NUMBER PREFIX | | | |
|-----------------------------|----------------|--------------|----------------------|
| Military Part Number Prefix | Specifications | Series/Class | Connector Group Code |
| M83723/95 | MIL-DTL-83723 | III | J |
| M83723/96 | MIL-DTL-83723 | III | J |
| M83723/97 | MIL-DTL-83723 | III | J |
| M83723/98 | MIL-DTL-83723 | III | J |
| MS27466 | MIL-DTL-38999 | I | K |
| MS27467 | MIL-DTL-38999 | I | K |
| MS27468 | MIL-DTL-38999 | I | K |
| MS27472 | MIL-DTL-38999 | II | K |
| MS27474 | MIL-DTL-38999 | II | K |
| MS27475 | MIL-DTL-38999 | II | K |
| MS27479 | MIL-DTL-38999 | II | K |
| MS27480 | MIL-DTL-38999 | II | K |
| MS27481 | MIL-DTL-38999 | II | K |
| MS27482 | MIL-DTL-38999 | II | K |
| MS27484 | MIL-DTL-38999 | II | K |
| MS27497 | MIL-DTL-38999 | II | K |
| MS27498 | MIL-DTL-38999 | I | K |
| MS27500 | MIL-DTL-38999 | II | K |
| MS27652 | MIL-DTL-38999 | I | K |
| MS27653 | MIL-DTL-38999 | I | K |
| MS27654 | MIL-DTL-38999 | I | K |
| MS27656 | MIL-DTL-38999 | I | K |
| MS27665 | MIL-DTL-38999 | I | K |
| MS3400 | MIL-DTL-5015 | MS340/MS245 | J |
| MS3401 | MIL-DTL-5015 | MS340/MS245 | J |
| MS3404 | MIL-DTL-5015 | MS340/MS245 | J |
| MS3406 | MIL-DTL-5015 | MS340/MS245 | J |
| MS3408 | MIL-DTL-5015 | MS340/MS245 | J |
| MS3409 | MIL-DTL-5015 | MS340/MS245 | J |
| MS3412 | MIL-DTL-5015 | MS340/MS245 | J |
| MS3424 | MIL-C-81703 | 3 | J |
| MS3446 | MIL-C-81703 | 3 | J |
| MS3450 | MIL-DTL-5015 | MS340/MS345 | J |
| MS3451 | MIL-DTL-5015 | MS340/MS345 | J |
| MS3454 | MIL-DTL-5015 | MS340/MS345 | J |
| MS3456 | MIL-DTL-5015 | MS340/MS345 | J |
| MS3459 | MIL-DTL-5015 | MS340/MS345 | J |
| MS3464 | MIL-C-81703 | 3 | J |
| MS3467 | MIL-C-81703 | 3 | J |
| MS3468 | MIL-C-81703 | 3 | J |
| MS3470 | MIL-DTL-26482 | 2 | J |
| MS3471 | MIL-DTL-26482 | 2 | J |
| MS3472 | MIL-DTL-26482 | 2 | J |
| MS3474 | MIL-DTL-26482 | 2 | J |
| MS3475 | MIL-DTL-26482 | 2 | J |
| MS3476 | MIL-DTL-26482 | 2 | J |
| MS1599 | MIL-C-81703 | 3 | J |

| MILITARY PART NUMBER PREFIX | | | |
|-----------------------------|----------------|--------------|----------------------|
| Military Part Number Prefix | Specifications | Series/Class | Connector Group Code |
| NAS1641 | MIL-C-81703 | 3 | J |
| NAS1642 | MIL-C-81703 | 3 | J |
| NAS1643 | MIL-C-81703 | 3 | J |
| NAS1650 | MIL-C-81703 | 3 | J |
| NAS1651 | MIL-C-81703 | 3 | J |
| NAS1652 | MIL-C-81703 | 3 | J |
| NAS1653 | MIL-C-81703 | 3 | J |
| NAS1692 | MIL-C-81703 | 3 | J |
| NAS1693 | MIL-C-81703 | 3 | J |
| NAS1694 | MIL-C-81703 | 3 | J |
| NAS1699 | MIL-C-81703 | 3 | J |
| NAS1700 | MIL-C-81703 | 3 | J |
| NAS1701 | MIL-C-81703 | 3 | J |
| NAS1702 | MIL-C-81703 | 3 | J |
| NATC00 | SSQ21635 | | L |
| NATC06 | SSQ21635 | | L |
| NATC07 | SSQ21635 | | L |
| NB4 | 40M39569 | | J |
| NB6 | 40M39569 | | J |
| NB6G | 40M39569 | | J |
| NB7 | 40M39569 | | J |
| NBO | 40M39569 | | J |
| NLS6 | 40M39569 | | K |
| NLS6G | 40M39569 | | K |
| NLS7 | 40M39569 | | K |
| NLSO | 40M39569 | | K |

Connector Group Code Conitnued

CONNECTOR GROUP CODE

| MANUFACTURERS PART NUMBER PREFIX | | |
|----------------------------------|---------------------------------|----------------------|
| Manufacturer Part Number | Manufacturer | Connector Group Code |
| 10-475 | Amphenol/ Bendix/ Socapex/ Pyle | K |
| 118 | Amphenol/ Bendix/ Socapex/ Pyle | J |
| 162GB | Amphenol/ Bendix/ Socapex/ Pyle | N |
| 2PSN | Plessey Connector | N |
| 381 | Deutsch | J |
| 418-1 | Amphenol/ Bendix/ Socapex/ Pyle | K |
| 418-2 | Amphenol/ Bendix/ Socapex/ Pyle | K |
| 418-5 | Amphenol/ Bendix/ Socapex/ Pyle | M |
| 486 | Amphenol/ Bendix/ Socapex/ Pyle | J |
| 518 | Amphenol/ Bendix/ Socapex/ Pyle | J |
| 602GB | Amphenol/ Bendix/ Socapex/ Pyle | J |
| 62GB | Amphenol/ Bendix/ Socapex/ Pyle | N |
| 65 | Glenair | L |
| 652 | Amphenol/ Bendix/ Socapex/ Pyle | J |
| 66 | Glenair | L |
| 711 | Amphenol/ Bendix/ Socapex/ Pyle | J |
| 801 | Amphenol/ Bendix/ Socapex/ Pyle | J |
| 837 | Deutsch | J |
| 83723 | Souriau | J |
| 83730 | Deutsch | J |
| 851 | Souriau | N |
| 8520 | Souriau | J |
| 8525 | Souriau | J |
| 8526 | Souriau | J |
| 853 | Souriau | J |
| 8533 | Souriau | J |
| 8534 | Souriau | J |
| 857 | Souriau | J |
| 89 | Souriau | J |
| 8D | Souriau | L |
| 8LT | Souriau | K |
| 8T | Souriau | M |
| 91-483 | Amphenol/ Bendix/ Socapex/ Pyle | K |
| 944 | Matrix | J |
| 951 | Deutsch | J |
| 951-50 | Deutsch | J |
| 981 | Matrix | J |
| 983 | Deutsch | J |
| 991 | Deutsch | J |
| 999.1 | Deutsch | J |

| MANUFACTURERS PART NUMBER PREFIX | | |
|----------------------------------|---------------------------------|----------------------|
| Manufacturer Part Number | Manufacturer | Connector Group Code |
| ABJ | AB Electronics | K |
| AE22 | Aero-Electric | L |
| AE46 | Aero-Electric | K |
| AE47 | Aero-Electric | K |
| AE48 | Aero-Electric | K |
| AE49 | Aero-Electric | K |
| AE55 | Aero-Electric | J |
| AE77 | Aero-Electric | J |
| AE83 | Aero-Electric | J |
| AFD | Deutsch | J |
| AFD5 | Deutsch | J |
| AFE | Deutsch | J |
| B | Amphenol/ Bendix/ Socapex/ Pyle | J |
| BE | Amphenol/ Bendix/ Socapex/ Pyle | J |
| BL | Flight Connector | L |
| BT | Amphenol/ Bendix/ Socapex/ Pyle | J |
| BY1 | Amphenol/ Bendix/ Socapex/ Pyle | J |
| CGK | ITT Cannon | M |
| CN0930 | TRW | J |
| CNO | G & H Technology | L |
| CNO930 | Labinal/ Cinch | J |
| CT | Burndy | K |
| CT | Plessey Connector | K |
| CT-R | AB Electronics | K |
| CT-R | Plessey Connector | K |
| CV340 | ITT Cannon | J |
| CV345 | ITT Cannon | J |
| D817 | Deutsch | J |
| DBA | Deutsch | J |
| DBA7 | Deutsch | J |
| DBAS | Deutsch | J |
| DFE | Deutsch | J |
| DIV4 | Deutsch | L |
| DL | Deutsch | J |
| DL6 | Deutsch | J |
| DTS | Deutsch | L |
| DVG | Deutsch | J |
| EA | Amphenol/ Bendix/ Socapex/ Pyle | J |
| EB | Amphenol/ Bendix/ Socapex/ Pyle | J |
| EEG | Amphenol/ Bendix/ Socapex/ Pyle | J |
| ES | Amphenol/ Bendix/ Socapex/ Pyle | J |
| ET | Amphenol/ Bendix/ Socapex/ Pyle | J |
| FDBA | Deutsch | J |
| FF | Deutsch | J |
| FF | Flight Connector | J |
| FH | Flight Connector | J |
| HDJ | Deutsch | M |

CONNECTOR GROUP CODE

| MANUFACTURERS PART NUMBER PREFIX | | |
|----------------------------------|---------------------------------|----------------------|
| Manufacturer Part Number | Manufacturer | Connector Group Code |
| HTMF | ITT Cannon | J |
| JT | Amphenol/ Bendix/ Socapex/ Pyle | K |
| JT 3400 | J-Tech | J |
| JT 3450 | J-Tech | J |
| JT-R | FKI | K |
| JT-R | Teldix | K |
| JTVG 95234 | J-Tech | J |
| JVS | Souriau | L |
| KJ | ITT Cannon | K |
| KJA | ITT Cannon | L |
| KJAD/V4 | ITT Cannon | L |
| KJL | ITT Cannon | K |
| KV-R | ITT Cannon | J |
| LJT | Amphenol/ Bendix/ Socapex/ Pyle | K |
| LS | Amphenol/ Bendix/ Socapex/ Pyle | J |
| LTT | FKI | K |
| MB1 | Matrix | J |
| MB3 | Matrix | J |
| MB9 | Matrix | K |
| MD | Matrix | J |
| MF | ITT Cannon | J |
| MFG | ITT Cannon | J |
| MK 12 | AB Electronics | N |
| MK 18 | AB Electronics | N |
| MK 8 | AB Electronics | N |
| MK12 | Plessey Connector | N |
| MK25 | Plessey Connector | K |
| MK38 | Plessey Connector | K |
| MK8 | Plessey Connector | N |
| ML94 | Matrix | L |
| MQ3 | Matrix | J |
| MT3 | Matrix | J |
| MT93 | Matrix | L |
| P5 | Plessey Connector | N |
| PL | Deutsch | L |
| PT | ITT Cannon | N |
| PT33 | FKI | N |
| PT33SE | FKI | N |
| PT44 | FKI | N |
| PT44SE | FKI | N |
| PT55 | FKI | N |
| PT55SE | FKI | N |
| PT77 | FKI | N |
| PT77SE | FKI | N |
| PTG55 | FKI | N |
| PTG55SE | FKI | N |
| PTS-DR | Amphenol/ Bendix/ Socapex/ Pyle | J |

| MANUFACTURERS PART NUMBER PREFIX | | |
|----------------------------------|---------------------------------|----------------------|
| Manufacturer Part Number | Manufacturer | Connector Group Code |
| PT-SE | ITT Cannon | N |
| PV7 | ITT Cannon | J |
| PVA | ITT Cannon | J |
| PV-G | ITT Cannon | J |
| PVJ | ITT Cannon | J |
| PV-S | ITT Cannon | J |
| PWW | ITT Cannon | J |
| PVX | ITT Cannon | J |
| RD1 | Raychem | J |
| RR | Deutsch | J |
| RR20 | Deutsch | J |
| RR50 | Deutsch | J |
| RR70 | Deutsch | J |
| RR70 | Deutsch | J |
| SA | SAE | J |
| SJT | Amphenol/ Bendix/ Socapex/ Pyle | M |
| STT | FKI | M |
| STT | ITT Cannon | M |
| T3 | Amphenol/ Bendix/ Socapex/ Pyle | L |
| TT | FKI | K |
| TT/TPQ | ITT Cannon | K |
| TT/TPQ | ITT Cannon | K |
| TV | Amphenol/ Bendix/ Socapex/ Pyle | L |
| TVP | FKI/ Bendix | L |
| TVRB | Amphenol/ Bendix/ Socapex/ Pyle | L |
| TVS | Amphenol/ Bendix/ Socapex/ Pyle | L |
| VTT | FKI | L |

Connector Group Code Conitnued

CONNECTOR GROUP CODE

| MANUFACTURERS PART NUMBER PREFIX | |
|-----------------------------------|----------------------|
| Manufacturer's Part Number Prefix | Connector Group Code |
| AB Electronics | |
| ABJ | K |
| CT-R | K |
| MK 12 | N |
| MK 18 | N |
| MK 8 | N |
| Aero-Electric | |
| AE22 | L |
| AE46 | K |
| AE47 | K |
| AE48 | K |
| AE49 | K |
| AE55 | J |
| AE77 | J |
| AE83 | J |
| Amphenol/ Bendix/ Socapex/ Pyle | |
| 10-475 | K |
| 118 | J |
| 162GB | N |
| 418-1 | K |
| 418-2 | K |
| 418-5 | M |
| 486 | J |
| 518 | J |
| 602GB | J |
| 62GB | N |
| 652 | J |
| 711 | J |
| 801 | J |
| 91-483 | J |
| B | J |
| BE | J |
| BT | J |
| BY1 | J |
| EA | J |
| EB | J |
| EEG | J |
| ES | J |
| ET | J |
| JT | K |
| LJT | K |
| LS | J |
| PTS-DR | J |
| SJT | M |
| T3 | L |
| TV | L |
| TVRB | L |
| TVS | L |

| MANUFACTURERS PART NUMBER PREFIX | |
|-----------------------------------|----------------------|
| Manufacturer's Part Number Prefix | Connector Group Code |
| Burdy | |
| CT | K |
| Deutsch | |
| 381 | J |
| 837 | J |
| 83730 | J |
| RR70 | J |
| RR70 | J |
| FKI | |
| JT-R | K |
| LTT | K |
| PT33 | N |
| PT33SE | N |
| PT44 | N |
| PT44SE | N |
| PT55 | N |
| PT55SE | N |
| PT77 | N |
| PT77SE | N |
| PTG55 | N |
| PTG55SE | N |
| STT | M |
| TT | K |
| VTT | L |
| TVP | L |
| Flight Connector | |
| BL | L |
| FF | J |
| FH | J |
| G & H Technology | |
| CNO | L |
| Glenair | |
| 65 | L |
| 66 | L |
| ITT Cannon | |
| CGK | M |
| CV340 | J |
| CV345 | J |
| HTMF | J |
| KJ | K |
| KJA | L |
| KJAD/V4 | L |
| KJL | K |
| MB3 | J |
| MB9 | K |
| MD | J |
| ML94 | L |
| MQ3 | J |

| MANUFACTURERS PART NUMBER PREFIX | |
|-----------------------------------|----------------------|
| Manufacturer's Part Number Prefix | Connector Group Code |
| MT3 | J |
| MT93 | L |
| Plessey Connector | |
| 2PSN | N |
| CT | K |
| CT-R | K |
| MK12 | N |
| MK25 | K |
| MK38 | K |
| MK8 | N |
| P5 | N |
| Raychem | |
| RDI | J |
| Souriau | |
| 83723 | J |
| 851 | N |
| 8520 | J |
| 8525 | J |
| 8526 | J |
| 853 | J |
| 8533 | J |
| 8534 | J |
| 857 | J |
| 89 | J |
| 8D | L |
| 8LT | K |
| 8ST | M |
| 8T | K |
| JVS | L |
| Teldix | |
| JT-R | K |
| TRW/Cinch | |
| CN0930 | J |

MATERIALS & FINISHES

Amphenol offers adapters in the following standard finishes. The base material is aluminum alloy.

- Aluminum parts: As per ASTM B 211, 221, 209, 85, 26
- Steel parts: 300 series, as per AMS-QQ-S-763/ASTM A 582
- Elastomers: fluorosilicone, silicone
- Composite: Suitable corrosion resistant material
- Nickel Aluminum (NiAl)-Bronze AMS-QQ-C-465

| Backshell Plating Finishes | | | | |
|----------------------------|----------------------|--|--------------------------------------|------|
| Amphenol Designation | Mil-Spec Designation | Finish | Guiding Specifications/ Requirements | RoHS |
| A | A | Anodized, Black* | Meet AS85049 Requirements | Yes |
| N | N | Electroless Nickel | | Yes |
| W | W | Cadmium Olive Drab over Electroless Nickel | | No |
| ZN | Z | Black Zinc Nickel | | Yes |
| P | P | Cadmium Olive Drab w/ Exposed Nickel | | No |
| S | - | Stainless Steel | Coming Soon | Yes |



Nickel Fluorocarbon



Electroless Nickel



Striped Cadmium



Cadmium



Black Zinc Nickel



Stripped Black Zinc Nickel



Stainless Steel

Amphenol Pcd
www.amphenolpcd.com