

Backshells



Amphenol

BS-1

Amphenol...We Connect the world together

Amphenol is a leading Interconnect solution providing company with a product portfolio of connectors, accessories, cable assemblies and system integration for almost all applications across various industries. With connectors conforming to almost all Military, Aerospace and Industrial standards in US, Europe and Asia, Amphenol assumes the leadership in meeting the interconnect needs of these market segments.

The quality system is certified to ISO 9001:2000 standards and the new product development is customer driven. Amphenol, with its design, manufacturing facilities and sales offices spread across the globe, is well equipped to serve the customers locally, harnessing global synergy. Exceeding the expectations of customers and there by delighting them continually is an integral part of Amphenol practices.



With the widest range of circular connectors conforming to most Military (MIL) specifications in the product portfolio, Amphenol retains its undisputed leadership in these categories of products. Backshell is an integral part of any Circular connector when it comes to reliable cable connections. It is only logical for Amphenol to offer full range of Backshells as it creates newer values for our esteemed customers.

For details about our entire range of interconnect products, please visit our corporate website **www.amphenol.com**. Please visit **www.backshellworld.com** for more and up to date information on our backshell product line and industry trends.

Why Amphenol for Backshells..?

3 Unique reasons..!!



Leaders in Circular Connectors

Amphenol companies in USA, Europe and Asia design, develop and manufacture circular connectors conforming to virtually all Military, Aerospace and Industrial standards for over 50 years. Since the Backshell is being used with connectors, every aspects of the connector design is to be considered while designing any Backshell. Amphenol, with its vast experience and expertise in connector design, has all the right inputs, both explicit and implicit, to make a good Backshell.



Cable Harnessing Expertise

Amphenol has already moved up the value chain from the connector manufacturing to cable harnessing and then the system integration. Such subsystem and system integration experience enables Amphenol to understand even the most intricate requirement in terms of the application of a Backshell accessory, which is always an integral part of such assembly. Such practical insights are valuable and never compensated.



Flexible and Fast Service

Amphenol has a variety of standard Backshells to suit most interconnect needs. The more exciting feature is that Amphenol can provide **custom designed Back shells** quickly. With the on-line design inputs and approval facility, implementation of such flexible service becomes fast and timely.

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BACKSHELL FAMILY

Amphenol Backshells are available in different types for variety of applications. In ground and naval application the robustness and environmental sealing may be more important, where as weight may be prime consideration for space and Aerospace application. The following section 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 mechanism 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 saving is of higher importance

Non Environmental Backshell



Amphenol Non Environmental Backshell is an 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.

This type of Backshell is suitable for an inside the box/climate controlled room application where heavy cabling should be supported with adequate strain relief.

Environmental Backshell



These Backshells from Amphenol 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 on to the cable jacket during assembly. These Backshells from Amphenol give 6 feet water sealing protection when used with perfectly jacketed cable and are suitable for harsh environment applications.

Non-Environmental EMI/RFI Backshell



360-degree screen termination facility is offered in this Backshell in addition to other features of the Non-Environmental type. Available in straight, 90 degree bent and 45 degree bent varieties, it accommodates both individual and overall shielding.

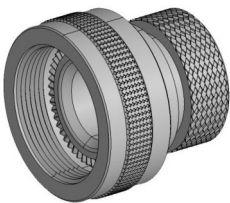
BACKSHELL FAMILY

Environmental EMI/RFI Backshell



Both individual and overall shieldings can be terminated in this type in addition to the cable sealing as possible in the Environmental Backshell. It is an ideal choice for heavy duty cabling solutions in harsh environment situations where electromagnetic and radio frequency noises are to be isolated.

Shrink Boot Adaptor



Amphenol shrink boot adapter is a good option 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 here to ensure the repairability. Amphenol shrink boot adapter is designed to provide excellent characteristics in all these parameters.

Crimp Ring Adaptor



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

Band Lock Adaptor



This is another method of termination of screens. A high quality band will do the job in this back shell. Tempered bands are tightened over the shields, which is pulled over the banding area, using special assembly tools. 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 Adaptor



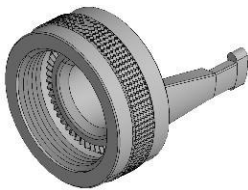
This adaptor is supplied with some length of braid attached. This braid overlaps with the cable braid and effective shielding takes place due to its 360° contact. It is designed to accept heat shrink boot. Ease and less time for cable termination are the prime advantages here.

SQ Adaptor



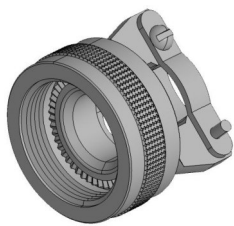
This is another cost effective way to terminate the braid to the adaptor. The braid is pulled over the conical shape to the rear end of the adaptor and tied. The end nut is tightened to ensure adequate grip for the shielding. Heat shrink boot can be used with this adaptor too.

Quick Clamp



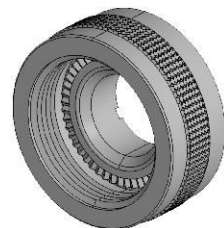
Many applications call for just tidying up the cable in the desired direction with a "minimum weight" consideration. Amphenol Quick Clamps are useful for such applications. It finds applications in interior wiring of flying machines

Strain Relief Clamp



Amphenol Strain Reliefs not only tidy-up the cable after termination but provide good strain relief at the termination area. It is a cost effective cable holding option when environmental protection is not a concern, and weight saving is a major consideration

Grommet Nut



Amphenol Back Nut provide a good grommet-holding force for the crimp connectors, when expensive and heavy back shells are not used. Such holding force is essential to hold the contacts and grommet in place when terminated with wire bundles.

Lamp Thread Adaptor

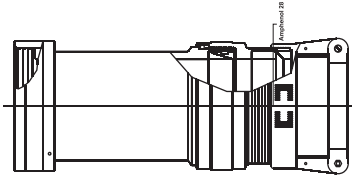


This adaptor is designed with threads similar to that in the lamp base for shield termination. It is very effective, easy and quick method of shield termination and field maintenance is also effortless. The termination area is designed to accept 'Nut' as well as 'Clamp'. The nut option enables the use of heat shrink boot and the clamp option will facilitate the strain relief clamping without heat shrink boot after the shield/cable termination.



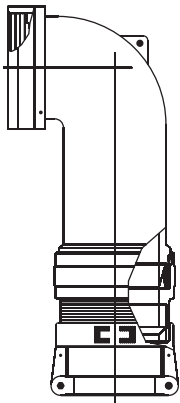
Amphenol Backshells are available in three different angular profiles as given in the section. These profiles will meet most of the cable routing required in the interconnect market. We can also make additional profiles if required. Please contact the factory or go to the web link <http://www.backshellworld.com/customdesign.asp> for the same.

Straight Backshells



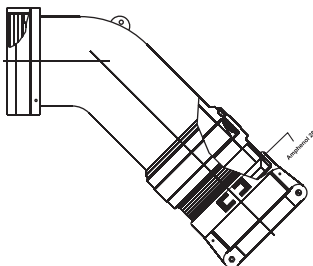
Straight Backshells are available in different length and cable entry diameter for most applications. Different cable and braid terminating systems are also available as shown in the respective product sections

90° bent Backshells



Many applications require the cable to be bent and routed rather than straight routing. Space saving and convenience are two important features here. Amphenol offers 90° bent style in all the Backshell families.

45° bent Backshells



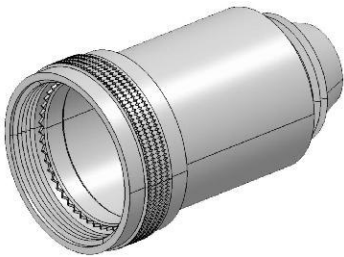
Amphenol offers yet another style which allows the cable to be routed in 45° to the axis of the assembly. This increases the design flexibility.



COUPLING STYLE

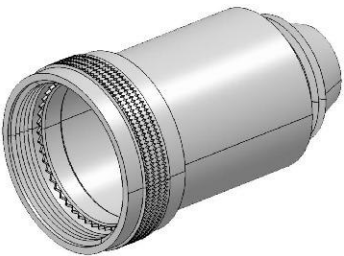
Various coupling styles as shown here are possible for the coupling between the Backshell and the connector. Popular styles are shown in the respective Backshell section. However we can make all profiles for any Backshell. Please contact the factory or go to the web link <http://www.backshellworld.com/customdesign.asp> for addressing your specific need.

Spin Coupling



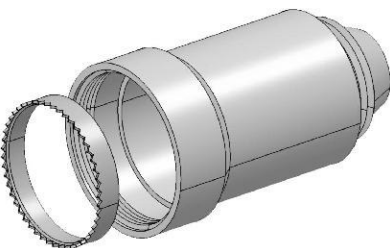
The coupling nut is captivated in the Backshell follower by suitable retention mechanism. This style facilitates the free rotation of the coupling nut and hence assembly of Backshell to the connector becomes easy without turning the entire Backshell body. Lock wire holes are provided on the coupling nut to prevent accidental de-coupling when specified.

Self-Lock Coupling



This style is same as that of Spin Coupling with the additional feature of 'self locking'. The free movement of the coupling nut is arrested by suitable device so that the accidental de-coupling is prevented within the specified vibration levels.

Direct coupling



The coupling nut is eliminated in this design. Coupling end of the Backshell is designed for the direct fitment to the connector. This style finds applications when simple direct connectivity is sufficient.



How to select a suitable Backshell ?

1. Based on the design and application considerations select the backshell type from the "Backshell Family" section in pages: 1-3
2. Go thru the "Angle/profile" and "Coupling Style" sections in pages: 4-5 and make up your mind about the configuration which suites your application.
3. Scan "Connector Group"(Tables:1A-D) in pages: 7-11 and find out the group code of the connector for which you require the backshell.
4. Go to the respective detailed "Backshell family" section from Page: **I-1** where get in to the respective "Connector group"- "Angle/Profile" sub section and zero-in to the appropriate backshell version.
5. Complete the part number by selecting relevant data from the correct diagram and tables in the same section. Please go to Page-12 for Table-2, which gives many options for "Material & Finish".

This selection could be done in much easier way from our web link

[Http://www.backshellworld.com/backshelldesigner.asp](http://www.backshellworld.com/backshelldesigner.asp)

Cross reference to other make Backshells.

If you have a Military part number or other manufacturer's part number for which you are looking for equivalent item, we have provided the same too in our web link **<http://www.backshellworld.com/crossreference.aspx>** which you will find very user friendly.

Cross reference to the Military designation is provided in the Appendix - 1 of this catalogue.

Custom built Backshells

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 most popular styles of Backshells, many applications call for additional styles and designs. Here is where the capability of Amphenol will come for your help. We will support you from the concept to product realization and thereby your unique specification need is satisfied. Please visit our web link **<http://www.backshellworld.com/customdesign.asp>** for further help



Connector Group (Table - 1 A, B, C, D)

By Specification (TABLE-1A)

Connector Specification	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
EN3372		M
ESC 10		J
ESC11		J
JN1003		M
LN 29504		J
LN 29728		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
PAN6433-2		M
VG 96912	2	K
VG 96912	1	M

By Military Part Number prefix (TABLE-1B)

Military part number prefix	Specification	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
M83723/95	MIL-DTL-83723	III	J
M83723/96	MIL-DTL-83723	III	J

Table Continued

Connector Group (Table - 1 A, B, C, D)

By Military Part Number prefix (TABLE-1B)

Military part number prefix	Specification	Series/Class	Connector group code
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
MS27473	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/MS345	J
MS3401	MIL-DTL-5015	MS340/MS345	J
MS3404	MIL-DTL-5015	MS340/MS345	J
MS3406	MIL-DTL-5015	MS340/MS345	J
MS3408	MIL-DTL-5015	MS340/MS345	J
MS3409	MIL-DTL-5015	MS340/MS345	J
MS3412	MIL-DTL-5015	MS340/MS345	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
NAS1599	MIL-C-81703	3	J
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

By Military Part Number prefix (TABLE-1B)

Military part number prefix	Specification	Series/Class	Connector group code
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

Table Continued

Connector Group (Table - 1 A, B, C, D)

By Manufacturer's Part Number prefix (TABLE-1C)

Manufacturer's 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
662	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
8ST	Souriau	M
8T	Souriau	K
91-483	Amphenol/Bendix/Socapex/Pyle	J
944	Matrix	J
951	Deutsch	J
951-50	Deutsch	J
981	Matrix	J
983	Deutsch	J
991	Deutsch	J
999.1	Deutsch	K
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

Table Continued

By Manufacturer's Part Number prefix (TABLE-1C)

Manufacturer's part number	Manufacturer	Connector group code
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
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

Table Continued

Connector Group (Table - 1 A, B, C, D)

By Manufacturer's Part Number prefix (TABLE-1C)

Manufacturer's part number	Manufacturer	Connector group code
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
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
PVW	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 / TTPQ	ITT Cannon	K
TT / TTPQ	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 (Table - 1 A, B, C, D)

By Manufacturer (TABLE-1D)

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

Manufacturer's part number prefix	Connector group code
Burndy	
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
MT3	J
MT93	L

Manufacturer's part number prefix	Connector group code
Plessey Connector	
2PSN	N
CT	K
CT-R	K
MK12	N
MK25	K
MK38	K
MK8	N
P5	N
Raychem	
RD1	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	
920F20	J

MATERIAL AND FINISHES

FINISH (TABLE-2)

Amphenol offers adaptors in the following standard finishes, which are not exhaustive. For additional finishes specially required if any, please contact factory. The base material is Aluminium alloy.

Table-2 (Plating Finishes)

Amphenol Designation	MIL designation	Finish	Guiding specifications/Requirements
A	A	Anodize,Black*	To meet AS85049 requirements
B		Anodize,Hard*	AMS-A-8625,Type-III,Class-1
L		Nickel,Bright	AMS-QQ-290,Class-1,Grade-F
M		Electroless Nickel	AMS-C-26074,Class-4,grade-B
N	N	Electroless Nickel	To meet AS85049 requirements
T		Cadmium,Bright	AMS-QQ-P-416,Type-I,Class-2
U		Cadmium,Olive drab	AMS-QQ-P-416,Type-II,Class-3
V		Cadmium,Olive drab over Electroless Nickel	AMS-QQ-P-416,Type-II,Class-3(Cadmium); AMS-C-26074,Class-4,grade-B(Nickel)
W	W	Cadmium,Olive drab over Electroless Nickel	To meet AS85049 requirements
Y		Zinc-Cobalt,Dark Olive drab	ASTM-B840
Z		Zinc-Cobalt,Black	ASTM-B840

* Non conductive coatings.

MATERIAL:

Aluminum parts: As per ASTM B 211,221,209,85,26
Steel parts: 300series,as per AMS-QQ-S-763/ASTM A 582
Elastomers: Fluro Silicon, Silicon
Other parts: Suitable corrosion resistant material

MIL (QPL) Qualification

Many Amphenol Backshells are qualified to SAE-AS 85049 standard. Qualification status of each item shown in this catalogue may change and therefore please check with us or refer "Qualified Product List" to know our exact qualification status at any time. A valid offer for a MIL part Number at any time from Amphenol will only constitute our claim of approval validity.



ASSEMBLY TORQUE VALUE

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

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

GUIDING SPECIFICATION

As per SAE, AS85049 standard (Old standard is MIL-C-85049).



STYLE-2 CONFIGURATION

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 adaptor body with cable entry dimensions more than the connector rear side dimensions. Amphenol support this kind of applications too. The coupling end of the adaptor will be modified to Style-2 design as shown in the figure in such cases. The overall length of the style-2 design adaptors would be increased by approx 1inch (25.4mm) as shown. This alternate design is applicable for all the 'Backshell Families' listed in this catalogue

