

Amphenol

COMMUNICATIONS SOLUTIONS

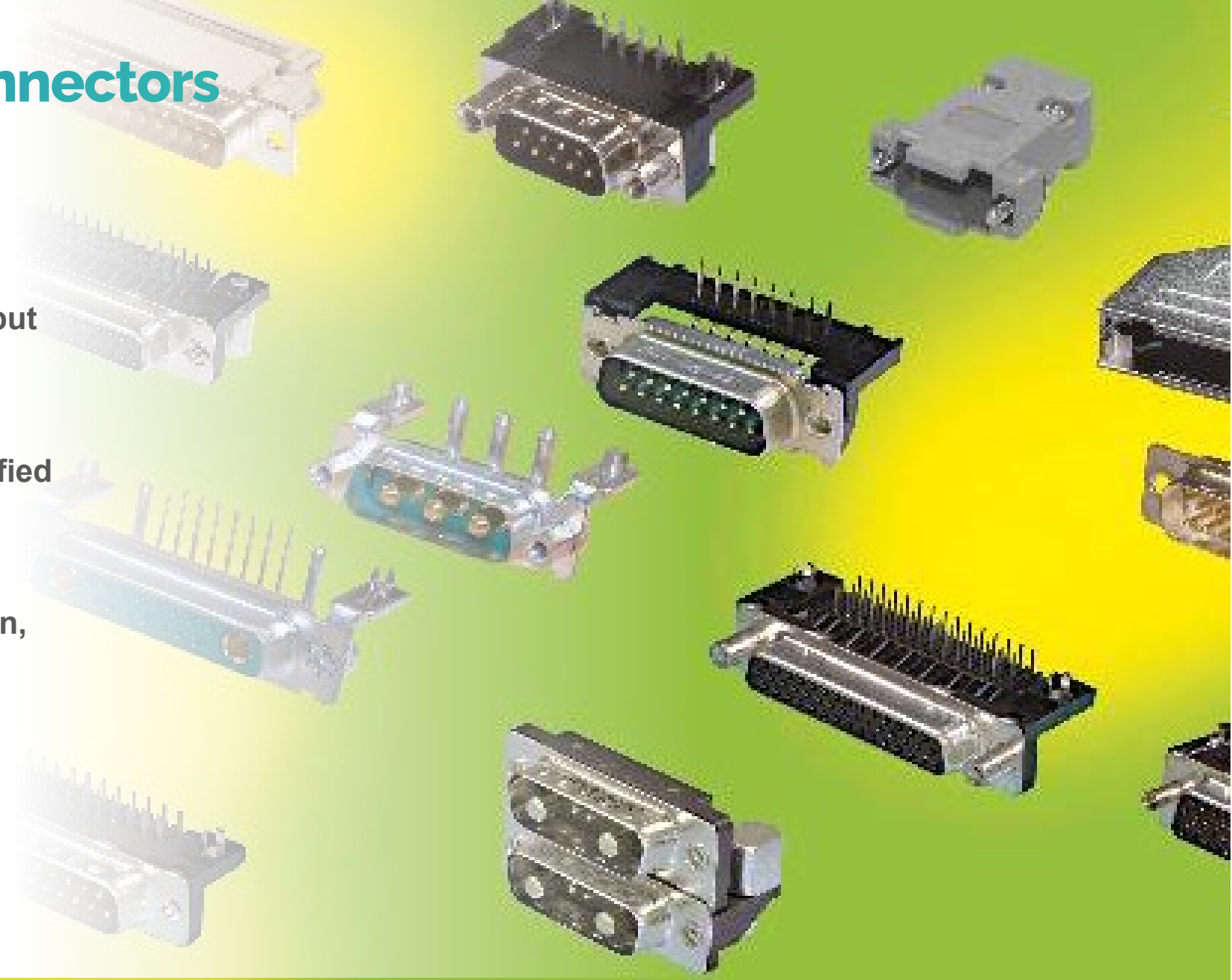
D-subminiature Connectors

ACPA



D-Subminiature Connectors

- Industries most popular Input- Output InterConnect solution.
- Broad range of robust and reliable Connectors backed by factory certified Quality.
- Segments Served: Industrial, Instrumentation, Telecommunication, Medical, Consumer, Data etc..



Dsub: Basic Shell Sizes

Standard Density

9 to 50 positions,

High Density

5 to 44 positions

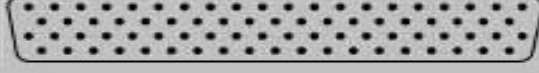
15 pin HD Dsub & 9 pin Std density connectors can use same Hood as they both use same shell size A

15 pin HD Dsub has 3 rows whereas 15 pin Std density has 2 rows

D-subminiature (D-sub) Standard Density Connectors

Shell	Pinout	Correct Name	Pins	Rows
DA		DA-15	15	2
DB		DB-25	25	2
DC		DC-37	37	2
DD		DD-50	50	3
DE		DE-09	9	2

D-subminiature (D-sub) High Density Connectors

Shell	Pinout	Correct Name	Pins	Rows
DA		DA-26	26	3
DB		DB-44	44	3
DC		DC-62	62	3
DD		DD-78	78	4
DE		DE-15	15	3

D-Sub Range & Performance

Accessories for all range of Std/ High Density



Mixed Power : 10 to 75 Amp

rated



★ **New Products**

Slim Line



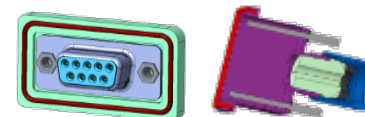
SMT



Dsub / Delta- D / Crimp Series



High Density Versions



DM Series



5Amp to 75Amp Solution

Standard Density

High Density

Hybrid (Combo)

Mil Grade

D-Sub Product Overview

Standard Board Mount Type

- RA and Straight Type
- Stamped & Machined Contacts



Accessories

- Right Angled, Angled, Straight Type
- Plastic, Metallic and Metalized Type Hoods
- Locking Devices- Female Screws,, Lever Locks etc.

Press Fit Type

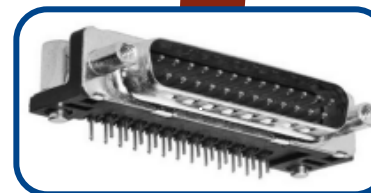
- Solderless Board locking .
- 09 to 50 position
- RA and Straight Type.
- Full Power Versions available



- ☐ Customized Dsub Connector Solutions
- ☐ Dsub Cable Assembly Solutions.

Pin-in -Paste Type

- Through hole parts in SMT mfg.
- 09 to 37 positions.
- RA and Straight Versions



High Density Version

- Board and crimp type cable connection.
- 15, 26 & 44 position contacts
- More number of contacts in basic shell sizes



Cable Connectors

- Crimp & Solder Bucket Type
- Stamped and Formed Contacts



Full/ Mixed Power

- Signal, Power & Coaxial Contacts
- Up to 75Amp contacts
- 2V2 to 36W4 layout options

Input Output Connectors- Dsub

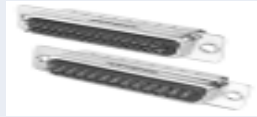
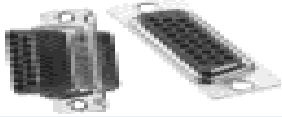
Stamped and Formed Contacts

Product Features and Benefits

- Standards: DIN 41652 and MIL-C-24308 (Meet IEC60807)
- Current rating: 3A to 5A for stamped and formed contacts
- Operating Temp.: -55°C to +125°C; Durability: 200, 500+
- Orientation: Straight & Right Angle
- Termination: Solder tail, Press-fit, Pin-in-Paste / SMT (Reflow compatible) for board side; ID Solder cup, Crimp for cable side
- RoHS Compliant

Applications

Servo Drives, Test & Measurement Equipment, Access Control,
Smart Metering, Portable Device, VTS, Projectors

Cable Side		
Solder Cup		Crimp
Standard and High Density		Standard Density, Housing & Contacts
SD: 9/15/25/37/50 AWG 20 HD: 15/26/44 AWG 24-28		SD: 9/15/25/37/50 AWG 20-28
		

Board Side

Solder Tail Straight	Solder Tail Right Angle	Press-fit Straight & Right Angle	Pin-in-Paste Straight	Pin-in-Paste Right Angle	SMT/ SlimLine
Standard and High Density Standard and low profile	Standard and High Density	Standard Density Standard and low profile	Standard Density	Standard and High Density	Standard Density Std & Slim Type
SD: 9/15/25/37/50 Types: Frugal-D & Delta- D HD: 15/26/44	SD: 9/15/25/37/ 50 Eu Std:FP:10.4 Pitch:2.54 US Std:FP:8.08 Pitch:2.84 HD: 15/26/44	9/15/25/37/50 Eu Std, US Std, Eurostyle	SD: 9/15/25/37/50 Tray / T&E packaging	SD: 9/15/25/37 HD: 15/26/44 Tray / T&E packaging	9 way
Board locks, inserts, female screw locks (UNC, M3)	Board locks, brackets, inserts, female screw locks (UNC, M3)	Board locks, inserts, female screw locks (UNC, M3)	Pegs, inserts, posts, female screw locks (UNC, M3)	Board locks, inserts, female screw locks	Zero or low force insertion, inserts, female screw locks
					

Input Output Connectors- Dsub

Machined Contacts

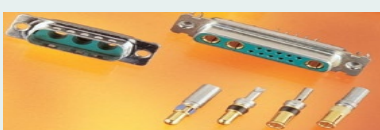
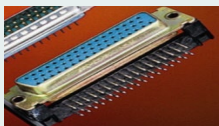
Applications

Switching, Transmission & Data center,
Railway, Medical Devices
Avionics, Windmills etc..

Product Features and Benefits

- Mil-C24308 standard interface & Meet IEC60807
- Current rating: 7.5A for screw machined signal contacts, 10A to 75A for power contacts
- Orientation: Straight & Right Angle
- Operating Temp.: -55°C to +125°C; Durability: 200, 500+, Mil grade
- Wide choices of Hoods and locking devices



Industrial grade DP series (Std Density)	Combo DW series Signal, Power and Coaxial Contact (up to 75A)	Military Grade DM series (Std Density)
Solder cup, Solder tail Straight, R/A, Wire Wrap	Solder cup, Solder Tail Straight, R/A, Wire Wrap	Solder cup, Crimp, Solder Tail Straight, R/A, Wire Wrap, Combo
9/15/25/37/50 Board locks, brackets, inserts, female screw locks (UNC, M3)	2V2 to 36W4 Full Power & Combo layouts Board locks, brackets, inserts, female screw locks (UNC, M3)	9/15/25/37/50 5W1 to 36W4 HE501
	 	 

Dsub- Crimp Connectors

- Connector Series with removable crimp contacts for AWG 20/24 or AWG 24/28 wires.
- Used for commercial cabling applications.
- Accepts our standard accessories like Hoods, locking devices; and is available with complete range of crimp tools.

Contact Type	Packaging Type		
	Box of 500 Contacts ✓	Reel of 400 Contacts R	Reel of 5000 Contacts ✓
AWG 24/28 male	865635006 Δ	8656300306 Δ	8656451006 Δ
AWG 24/28 female	865635106 Δ	8656300406 Δ	8656651006 Δ
AWG 20/24 male	865635206 Δ	8656300506 Δ	8656452006 Δ
AWG 20/24 female	865635306 Δ	8656300606 Δ	8656652006 Δ



Δ Contact performance code

4LF: ≥200 mating/unmating, RoHS compatible

5LF: ≥500 mating/unmating, RoHS compatible

Dsub- Mixed & Full Power Connectors



LAYOUT OPTIONS

Shell size	Layout		Shell size	Layout	
E	5W1		C	25W3	
	11W1			21WA4	
	7W2			27W2	
	3W3			8W8	
	3V3			47W1	
A	21W1		D	24W7	
	17W2			36W4	
	13W3				
	9W4				
	5W5				

- Power connectors available in various layouts from 2V2 to 36W4.
- Available in full power and in mixed layout (signal + power)
- Contacts available from 10A to 75A*.
- Available in Straight, Angle, Solder Bucket, Crimp terminations
- Hoods available in plastic, metalized and metallic form with locking screws
- Lead-free and RoHS compliant

Note: * Denotes that the 75 Amp connectors confirm to UL1977 spec (T-Rise at rated current below RTI value of housing material)

Dsub- Press-fit Connectors

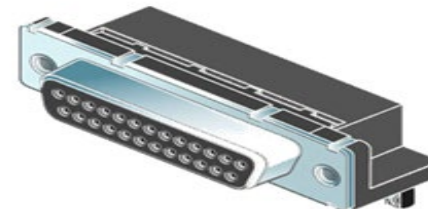
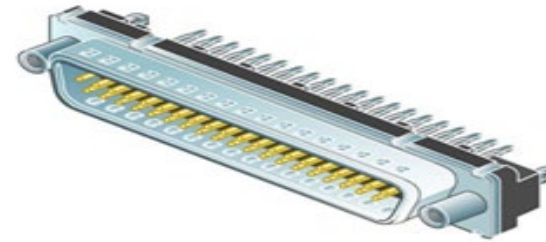
- Compatible with PCB thicknesses of 1.60 mm & 2.40 mm
- No soldering and easy to assemble
- Maximum current rating per contact: 5 A
- Pin and socket: 9 to 50 ways

Straight versions

- 9 to 50 ways, two profiles : 6.00 to 5.60-mm heights
- 9 to 25 ways, socket only : 6.30 mm profile for mezzanine applications

Right Angled Versions

- 9 to 50 ways : Euro style (low profile) height: 3.70 mm
- 9 to 37 ways : 7.20 mm height (Europe style)
- 9 to 37 ways : 6.30 mm height (US style)



Dsub Pin-in- Paste Connectors

- Pin-in-Paste technology (PiP) allows the use of Through Hole product in SMT manufacturing processes.
- The connectors are automatically or manually placed on the board, and then soldered in the same operation as the SMT components
- Same PCB layouts and hole diameters of signal hole contacts are maintained
- Pin-in-Paste connectors are molded in high temperature plastics which are able to withstand a temperature exposure up to 260°C peak for 10 to 30 seconds

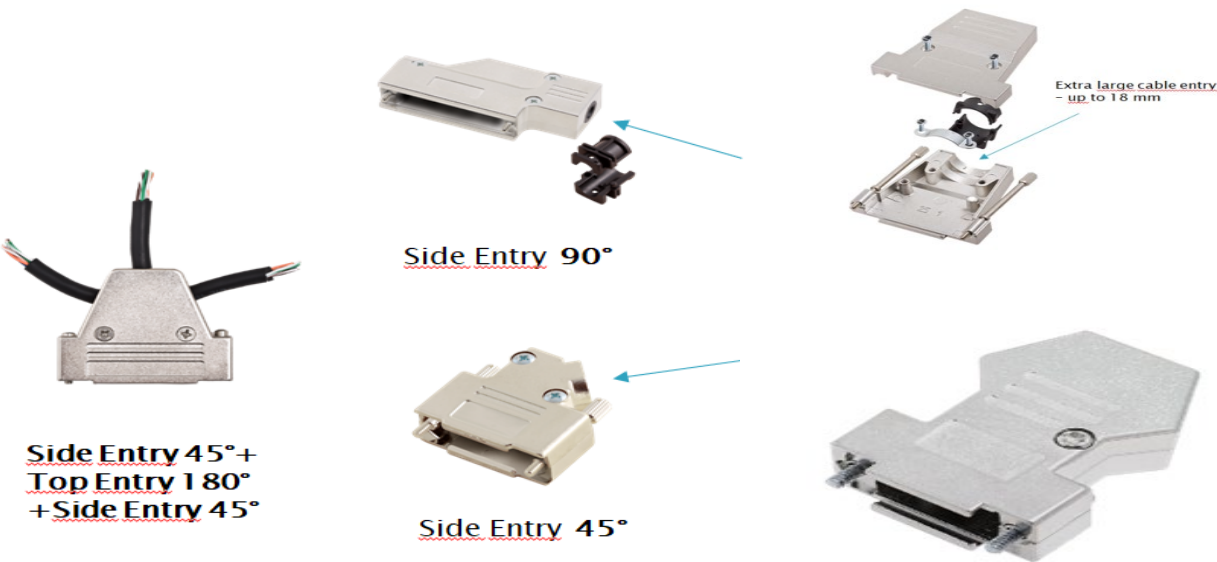
Benefits:

- Through hole parts which supports Reflow Soldering
- Time Saving
- Fast and easy switchover from a wave soldering to a reflow process
- Higher quality
- Less Control time / re-work time for repairing.



Dsub Accessories

- Various locking devices to ensure secure connection



POSITION	PLASTIC (COMBINED HOOD)	METALIZED (UNIVERSAL HOOD)	METALLIC (STRAIGHT EXIT)
9 way	86303637BLF	863093C09MLF	8655MH0901BLF
15 way	86303638BLF	863093C15MLF	8655MH1501BLF
25 way	86303639BLF	863093C25MLF	8655MH2501BLF
37 way	86303640BLF	863093C37MLF	8655MH3701BLF

SCREW LOCK P/N	DESCRIPTION
863005ATLF	Male screw locks UNC 4-40
863001TLF	Female screw lock M3 (4.6 + 8.3 mm)
863001060TLF	Female screw lock UNC 4-40 (4.6 + 8.3 mm)
863001061TLF	Female screw lock M3 (4.6 + 13.0 mm)

New Product – Dsub Slimline

ULTRA SLIM D-SUB CONNECTORS:

- Modified ultra slim body with contact alignment in a single row.
- Available in SMT termination and solder tail version.
- Perfectly suited for low profile design application.

Ultra Slim Design with single row contacts

- Saves 66% of Pcb board space.

Available in SMT/ Solder Tail versions.

- Makes it suitable for Reflow Soldering and Wave Soldering.

Solderable Retention Pegs

- To absorb vibration

SMT connector comes in Tape & Reel Packaging..

- Support automated assembly , and saves process time.

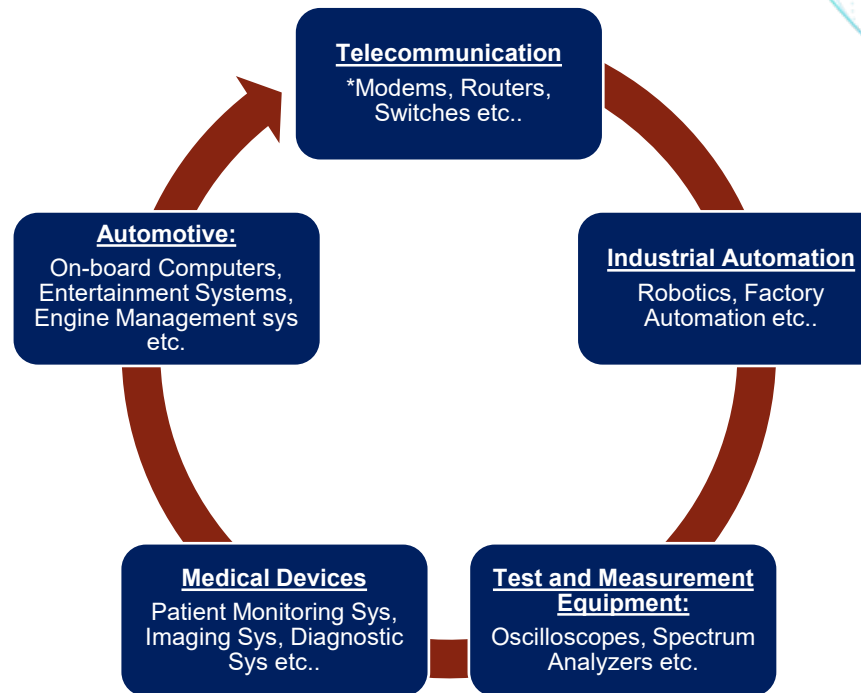
Better Coplanarity

- To ensure better product quality.

Meets DIN 41652 and MIL C -24308 dimensional standards

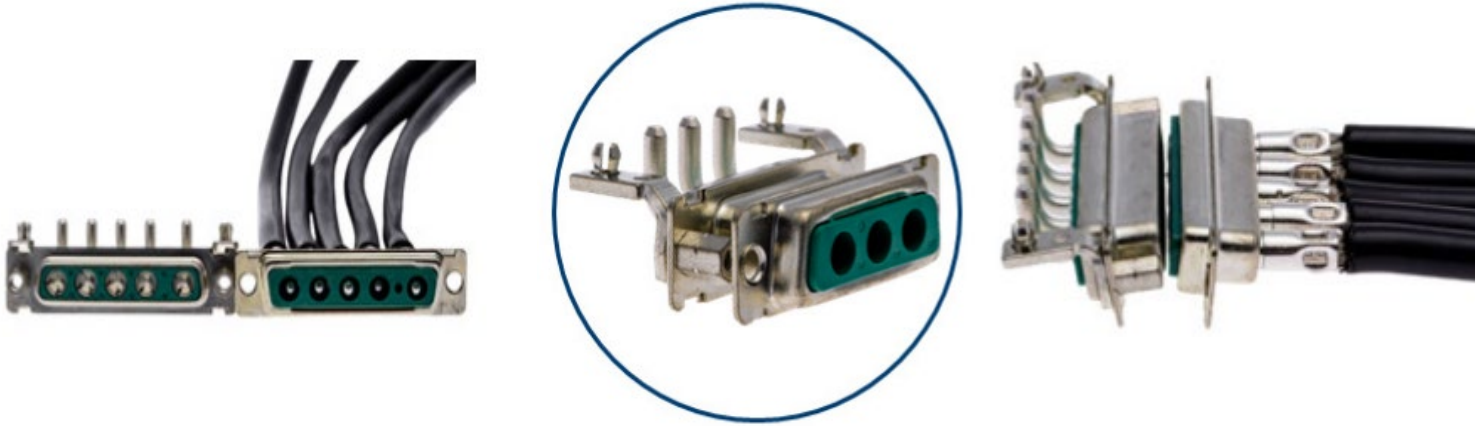
- Intermateable with standard connectors.

General Applications:



Website link => <https://www.amphenol-icc.com/product-series/d-sub-slimline.html>

New Product: Dsub High Power (75A*)



Features and Benefits:

***75 Amp Full power connectors from 2pos - 8pos**

- Layout options in the standard shell Size

***75 Amp rated contacts**

- Suitable for power applications
- * Denotes that the connectors confirm to UL1977 Spec.

Board and Cable connectivity options

- Solder cup, Crimp and Pcb terminations available.

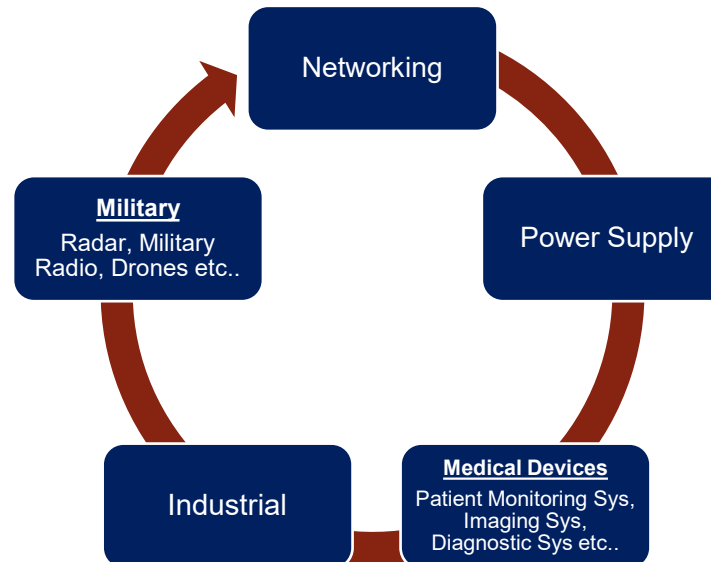
Various Pcb and panel Mounting accessories.

- Wide choice for secure connections.

Lead Free and ROHS Compliant.

- Meets Environmental, health and safety standards

General Applications:



Code	LAYOUT
2V2	
3W3	
3V3	
5W5	
8W8	



D-Sub SMT Connectors

REFLOW COMPATIBLE D-SUB CONNECTOR WITH SMT TERMINATION

- Available in standard form factors(9 pos is active now)
- Meets DIN 41652 standards
- Durability of 500 mating and un-mating cycles
- Comes with different accessories to support secure connection

Features and Benefits:

Surface Mount Technology

- Compatible to Reflow Soldering

Suitable for Pick and Place

- Saves Process Time

Special Contact Terminal Design

- Better Coplanarity

Proven Socket Contact Design.

- Ensures reliable connection

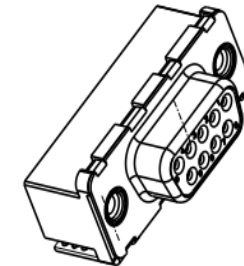
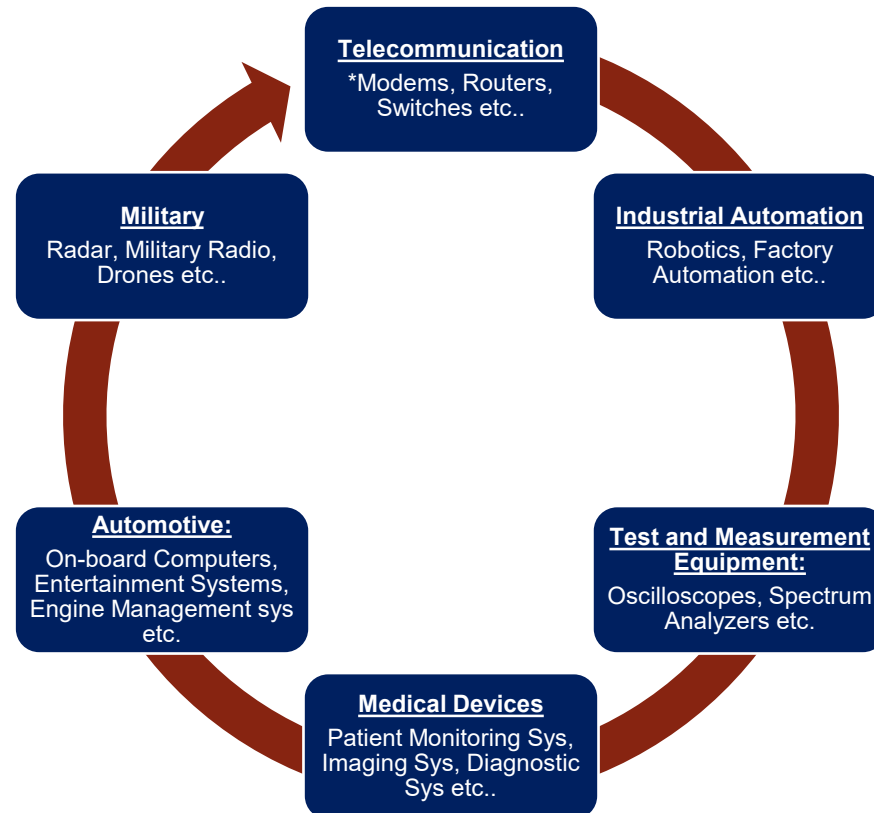
SMT Connectors with Reflow

- More stable Process than Wave Soldering

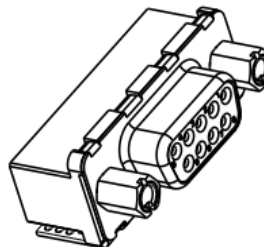
Meets DIN 41652 and MIL C -24308 dimensional standards

- Interchangeable and Intermateability

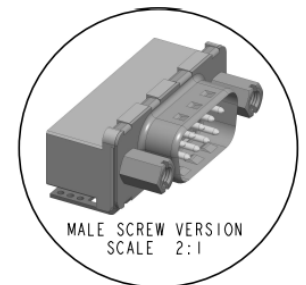
General Applications:



CLINCH NUT VERSION



FEMALE SCREW VERSION



MALE SCREW VERSION
SCALE 2:1

Focused Market Segments and Applications

Factory Automation



Control Systems
PLC, DCS, HMIs, SCADA



Data Communications
Serial Communications



Robotics
Robot Controllers, Drives, End Effectors



Power Supplies
Servo Power Supplies, AC/DC Power Supplies

Test & Measurement



Electronic Test & Measurement
Data Acquisition Systems, Signal Analyzers,



Environmental Test Equip
Temp Chambers, Humidity Chambers



Semiconductor Test Equipment's
Plasma Etching , Batch Processing



Non-Destructive Test Equipments

Energy Management



Energy Meters



Building Automation



Renewable Energy

Amphenol

COMMUNICATIONS SOLUTIONS

Thank You!

