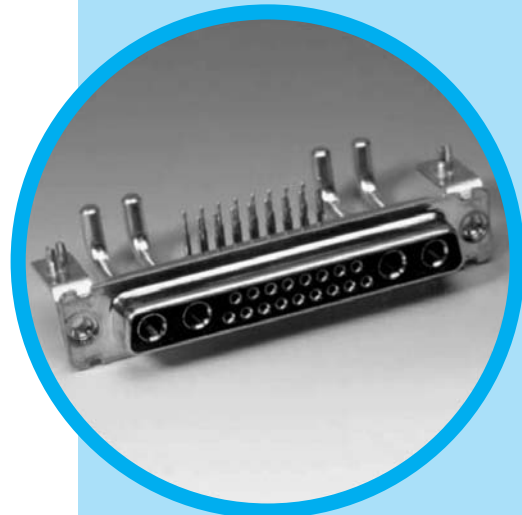




# TW

## Hybrid D'Sub series



CONTENT

### Specifications

• Connectors according to: MIL C24308 - NFC93425 - HE507

Materials and platings		Electrical Data	
Shells	Steel-Tin plating	Current rating	
Insulators	High temperature black thermoplastic	Signal contacts	7.5 A. with 10 A. peaks
Signal contacts	Female: machined bronze	Power contacts	
Material	Male: machined brass	PCB terminations	10 to 40 A.
Plating finish	16µ "Au over 79µ" Ni min.	Solder cup terminations	10 to 40 A.
Or	30µ "Au over 79µ" Ni min.	Crimp terminations	10 to 40 A.
Shielded contacts	Female: machined bronze	Shielded contacts	0.5 A.
Material	Male: machined brass	Voltage rating	
Plating		Signal and power contacts	300 V.R.M.S. at 50 Hz
Inner conductor	16µ "Au or 30µm Au over 79µ" Ni	Shielded contacts	150 V.R.M.S. at 50 Hz
Outer ring	10µ "Au over 79µ" Ni	Shielded contacts	
Terminations	Tinned	Frequency range	0-1 GHz
Except solder cup and crimp terminations	gold flash	Attenuation	0.2dB
Power contacts	Female: machined bronze	V. S. W. R.	1.4(+0.04/GHz)
Material	Male: machined brass	Characteristic impedance	50 Ohms
Plating		Dielectric withstanding voltage	≥ 1000 V.R.M.S. at 50Hz
Contacts	16µ "Au or 30µ" Au over 79µ" Ni	Insulation resistance	≥ 5000 M Ohms at 500 VDC
Terminations	Tinned	Contact resistance	≤ 5m Ohms
Except solder cup and crimp terminations	gold flash	Shell resistance (electrical grounding)	≤ 1m Ohm
Brackets	Steel-Tin plating		
Front jackscrews	Brass-Tin plating		
Rear clinch nuts	Brass-Tin plating		
Boardlocks	Bronze-Tin plating		
Stand-off	Brass-Tin plating		

Climatic Data		Mechanical data	
Operating temperature	-55°C + 155°C (with peaks up to 180°C)	Shells	With or without dimples
Damp heat	56 days (40°C - 95% HR)	Contact retention force in dielectric material	> 40N
Salt spray	48 hours	Maximum mating and unmating force	
		With dimples	E size = 70 N A size = 80 N B size = 100 N C size = 150 N D size = 180 N
		Without dimples	E size = 30 N A size = 50 N B size = 80 N C size = 120 N D size = 160 N
		Compatible with process	
		IR - Air convectioned	260° for 20 s.
		Resistance to solder iron heat	260°C for 30 s.
		Mating cycles	≥ 200 (classe II) or 500 (classe I)
		Blind mating system	Available upon request
		Polarization	Available with locking accessories Consult factory



DESCRIPTION

Amphenol D'Sub TW Hybrid Series permits a mix of contacts including signal, power, shielded, high voltage and fiber optics in the same housing with 18 different contacts arrangements.

This economic series was first developed from our military series, and has improved features:

- new contacts
- new high temperature black thermoplastic insert
- PCB configurations come preloaded with fixed contacts and brackets.

These connectors are supplied with screw machined contacts which are fixed in the insulator.

A complete range of housings are also available for cable application.

*A full range of arrangements compatible with reflow process*

APPLICATIONS

- Commercial
- Medical
- Industrial
- Telecom
- Any application requiring optimization of space

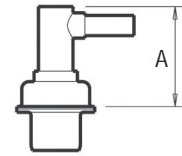
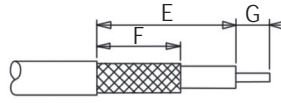
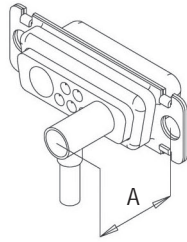
TW / E1



**Amphenol**

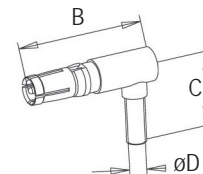
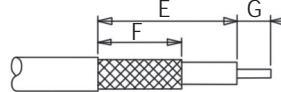
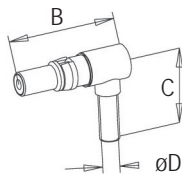
## Right angled shielded contact

### Crimp ferrule and inner solder



Type	P/N	Dimensions (inch)			Cable - RG	Trim dimensions (inch)		
		A Max	B	D		E	F	G
plug	L17DM 53741	13.5 (.531")	18.6 (.732")	1.0 (.039")	178 B/U	9.5 (.374")	5.9 (.232")	1.6 (.062")
plug	L17DM 53741-1	13.5 (.531")	18.6 (.732")	1.7 (.066")	179 B/U 316 B/U	9.5 (.374")	5.9 (.232")	1.6 (.062")
plug	L17DM 53741-3	13.5 (.531")	18.6 (.732")	2.8 (.110")	180 B/U	10.7 (.421")	7.9 (.311")	2.4 (.094")
plug	L17DM 53741-4	13.5 (.531")	18.6 (.732")	3.2 (.126")	58 C/U	10.7 (.421")	7.9 (.311")	2.4 (.094")
socket	L17DM 53743-2	13.5 (.531")	18.6 (.732")	1.0 (.039")	178 B/U	9.5 (.374")	5.9 (.232")	1.6 (.062")
socket	L17DM 53743-3	13.5 (.531")	18.6 (.732")	1.7 (.066")	179 B/U 316 B/U	9.5 (.374")	5.9 (.232")	1.6 (.062")
socket	L17DM 53743-5	13.5 (.531")	18.6 (.732")	2.8 (.110")	180 B/U	10.7 (.421")	7.9 (.311")	2.4 (.094")
socket	L17DM 53743-6	13.5 (.531")	18.6 (.732")	3.2 (.126")	58 C/U	10.7 (.421")	7.9 (.311")	2.4 (.094")

### Ferrule and inner solder



Type	P/N	Dimensions (inch)			Cable - RG	Trim dimensions (inch)		
		A Max	B	D		E	F	G
plug	L17DM 53741-5000	13.5 (.531")	18.6 (.732")	1.0 (.039")	178 B/U	9.5 (.374")	5.9 (.232")	1.6 (.062")
plug	L17DM 53741-5001	13.5 (.531")	18.6 (.732")	1.7 (.066")	179 B/U 316 B/U	9.5 (.374")	5.9 (.232")	1.6 (.062")
plug	L17DM 53741-5003	13.5 (.531")	18.6 (.732")	2.8 (.110")	180 B/U	10.7 (.421")	7.9 (.311")	2.4 (.094")
plug	L17DM 53741-5004	13.5 (.531")	18.6 (.732")	3.2 (.126")	58 C/U	10.7 (.421")	7.9 (.311")	2.4 (.094")
socket	L17DM 53743-5000	13.5 (.531")	18.6 (.732")	1.0 (.039")	178 B/U	9.5 (.374")	5.9 (.232")	1.6 (.062")
socket	L17DM 53743-5001	13.5 (.531")	18.6 (.732")	1.7 (.066")	179 B/U 316 B/U	9.5 (.374")	5.9 (.232")	1.6 (.062")
socket	L17DM 53743-5003	13.5 (.531")	18.6 (.732")	2.8 (.110")	180 B/U	10.7 (.421")	7.9 (.311")	2.4 (.094")
socket	L17DM 53743-5004	13.5 (.531")	18.6 (.732")	3.2 (.126")	58 C/U	10.7 (.421")	7.9 (.311")	2.4 (.094")

## Crimping tool

### Hand crimp tool

227-0944 (without dies) (M 22 520/5-01)

RG cables	MIL reference	Amphenol P/N	dim. between 2 flat surface	
			cavity A	cavity B
RG 58 C/U	M 22 520/5-05	227 1221-05	5.41	-
RG 178 B/U	M 22 520/5-03	227 1221-03	-	2.67
RG 179 B/U	M 22 520/5-03	227 1221-03	3.25	-
RG 180 B/U	M 22 520/5-05	227 1221-05	-	4.52

## Extraction tool

Extraction tool for sizes 8 cts

L17D429SP

