

D-Sub Cable Connectors

Amphenol's D-Subminiature (D-Sub) connectors are part of an industry standard for applications requiring robust and reliable connectors. These proven D-Sub connectors are one of the most popular Input/Output interconnects, addressing a wide variety of applications in telecommunications, data, consumer, industrial, military, instrumentation and medical. Amphenol offers a wide range of D-Sub connectors to meet various design requirements including those in harsh environment.

These cable connectors are designed to act as input output connectors and mate with PCB connectors or another cable connector depending on the application. It comes with solder bucket and crimp terminations. Various associated accessories including Hoods and locking devices help to prevent risks of pulling up and accidental un-mating.



TARGET MARKETS



FEATURES

- A Basic I/O connector comes with five shell size and housing design
- Has a D-shaped shell design
- Meets DIN 41652 and MIL-C-24308 dimensional standards
- Available in Solder Bucket, Crimp terminations
- Frugal- D design (2 shells + 2 housings) with stamped & formed contacts
- Various PCB and Panel mounting accessory options available
- Hoods available in plastic, metalized and metallic form with locking screws
- Lead-free and RoHS compliant

BENEFITS

- Most popular Rugged and sturdy I/O connector
- Supports the need for polarisation
- Interchangeable and intermateable with other makes
- Support all Cable mounting requirements
- Economical solution
- Wide variety of choices for secure connection
- Supports cable connection; Prevents risks of pulling up and accidental un-mating
- Meets environmental, health and safety requirements

CRIMP CONTACTS AND CABLE CONNECTORS



UL RECOGNISED FILE E 66906

- 8656 series is a D connector with removable crimp contacts for AWG 20/24 or 24/28 wires
- It is used for commercial cabling like computer equipment, cash register
- It accepts our standard accessories (hoods, locking devices) and is available with a complete range of crimping tools from hand tools to high volume production equipment



PART NUMBER SELECTOR – CRIMP CONNECTOR HOUSING (W/O CONTACTS)

8656	09	P	L	T	X	LF	
SERIES	LOCKING ACCESSORIES	NO. OF CONTACTS	CONTACTS	L	SHELL PLATING	DIMPLES	LEAD-FREE
8656		09 15 25 37 50			Standard tin plated T Standard on male shell only X Supplied without contacts (obligatory)		Lead Free X
	Standard mounting hole (Ø = 3.10) Threaded insert UNC 4-40 Female screw (Hexagonal) UNC 4-40	Blank O V		Pin P Socket S			

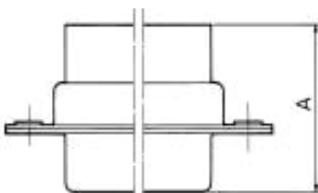
PART NUMBER SELECTOR – CRIMP CONTACTS

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

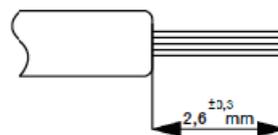
Δ Contact performance code

4LF: ≥200 mating/unmating, RoHS compatible
5LF: ≥500 mating/unmating, RoHS compatible

SPECIFIC DIMENSIONS



CABLE PREPARATION



Contacts	09	15	25	37	50
A _{Max.} Pin	17.19	17.19	17.35	17.35	17.35
Socket	17.44	17.44	17.44	17.44	17.44

▶ D-Sub Cable Connectors

MIXED AND FULL POWER CABLE CONNECTORS

LAYOUTS

- Male insulator front view

Shell size		Layout	
E	5W1		
	A	11W1	
		7W2	
		3W3	
		3V3	
B	21W1		
	17W2		
	13W3		
	9W4		
	5W5		

Shell size		Layout
C	25W3	
	21WA4	
	27W2	
	8W8	
D	47W1	
	24W7	
	36W4	

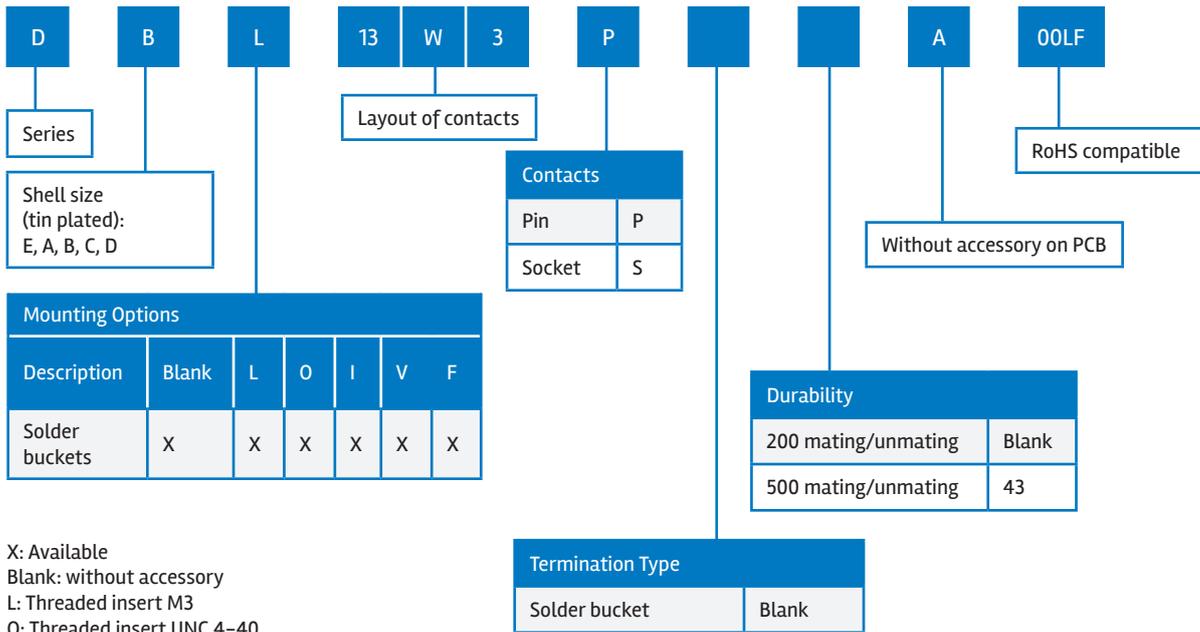
- Standard contacts
- Coaxial and power contacts

MIXED AND FULL POWER CABLE CONNECTORS

UL [®] RECOGNISED FILE E66906



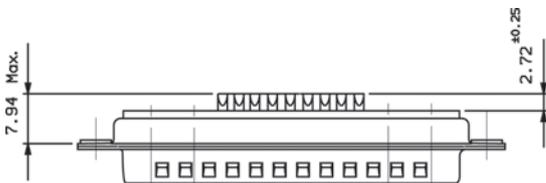
ORDERING INFORMATION



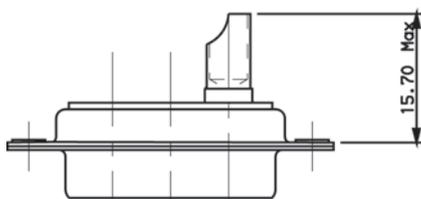
X: Available
Blank: without accessory
L: Threaded insert M3
O: Threaded insert UNC 4-40
V: Female screw UNC 4-40

SPECIFIC DIMENSIONS

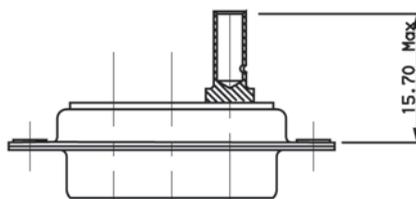
Solder Bucket



Solder version



Crimp version

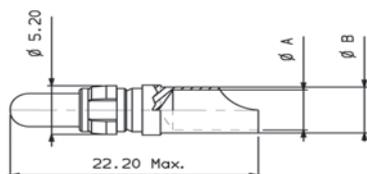


▶ D-Sub Cable Connectors

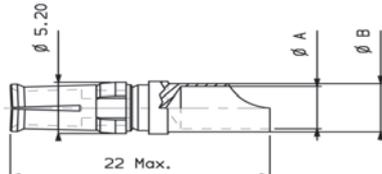
POWER SOLDER AND CRIMP CONTACTS

SOLDER CONTACTS

Male



Female



Type	Max. Current Rating	Clip Colour	RoHS* Part Number ≥200 mating/ unmating	RoHS* Part Number ≥500 mating/ unmating	Wire		Strip length mm ^{±0.5}	Ø A +0.1 +0	Ø B +0.5
					Size	Section mm ²			
Male	10A	Black	8638PPS1005LF	8638PPS1006LF	16	1.3	7	1.7	2.6
Male	15A	White	8638PPS1505LF	8638PPS1506LF	14	1.9	7	2.1	3
Male	20A	Red	8638PPS2005LF	8638PPS2006LF	12	3.2	7	2.8	3.65
Male	40A	Blue	8638PPS4005LF	8638PPS4006LF	8	9	7	4.4	5
Female	10A	Black	8638PSS1005LF	8638PSS1006LF	16	1.3	7	1.7	2.6
Female	15A	White	8638PSS1505LF	8638PSS1506LF	14	1.9	7	2.1	3
Female	20A	Red	8638PSS2005LF	8638PSS2006LF	12	3.2	7	2.8	3.65
Female	40A	Blue	8638PSS4005LF	8638PSS4006LF	8	9	7	4.4	5

Clip material: Plastic withstanding 125°C

Termination plating: Matt tin

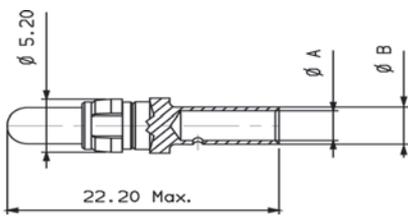
*RoHS compatible EU directive 2002/95/EC

► D-Sub Cable Connectors

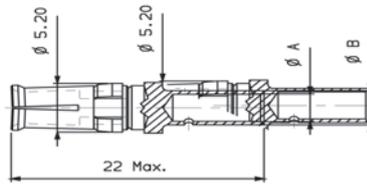
POWER SOLDER AND CRIMP CONTACTS

CRIMP CONTACTS

Male



Female



Type	Max. Current Rating	Clip Colour	RoHS* Part Number ≥200 mating/ unmating	RoHS* Part Number ≥500 mating/ unmating	Wire		Strip length mm ^{±0.5}	Ø A +0.1 +0	Ø B +0.5
					Size	Section mm ²			
Male	10A	Black	8638PPC1005LF	8638PPC1006LF	16 to 18	0.9 to 1.3	7	1.8	2.55
Male	15A	White	8638PPC1505LF	8638PPC1506LF	12 to 14	2 to 3	7	2.8	3.7
Male	20A	Red	8638PPC2005LF	8638PPC2006LF	9	6	7	3.75	4.65
Male	40A	Blue	8638PPC4005LF	8638PPC4006LF	8 to 10	5 to 8	7	4.8	5.5
Female	10A	Black	8638PSC1005LF	8638PSC1006LF	16 to 18	0.9 to 1.3	7	1.8	2.55
Female	15A	White	8638PSC1505LF	8638PSC1506LF	12 to 14	2 to 3	7	2.8	3.7
Female	20A	Red	8638PSC2005LF	8638PSC2006LF	9	6	7	3.75	4.65
Female	40A	Blue	8638PSC4005LF	8638PSC4006LF	8 to 10	5 to 8	7	4.8	5.4

Clip material: Plastic withstanding 125°C

Termination plating: Matt tin

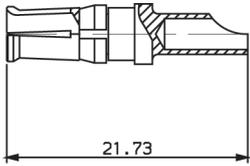
*RoHS compatible EU directive 2002/95/EC

► D-Sub Cable Connectors

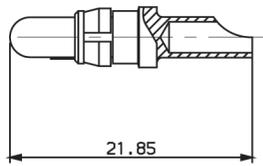
CONTACTS (OTHER VERSIONS)

POWER CONTACTS – METAL CLIP

Female



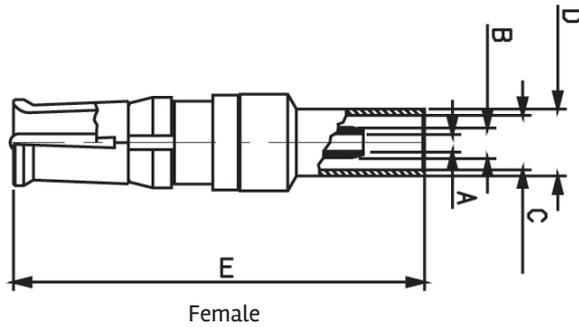
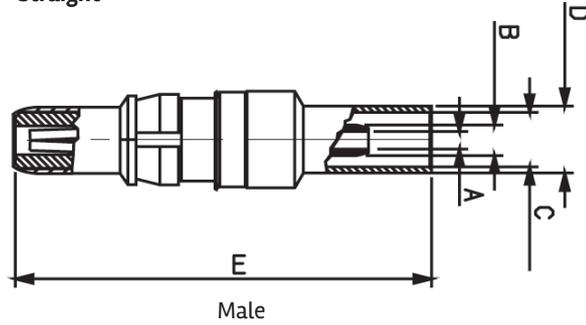
Male



Wire Size	Max. Current	Part Numbers	
		Male	Female
AWG8	40A	86303098NLF	86303099NLF
AWG12	20A	86303056NLF	86303057NLF
AWG14	15A	86303060NLF	86303061NLF
AWG16	10A	86303064NLF	86303065NLF

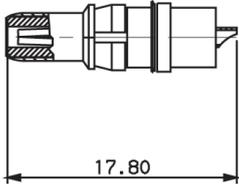
COAXIAL CONTACTS

Straight

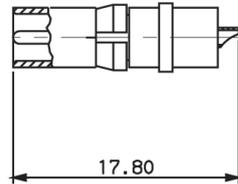


HIGH VOLTAGE CONTACTS

Male 86382000LF



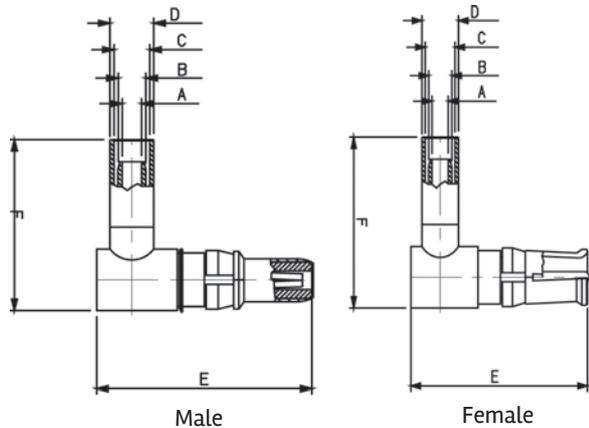
Female 86382001LF



Colors: Blue

White

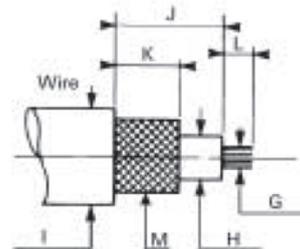
Angled



These removable contacts are suitable for the contact cavities of the DMW series and DW series.

The coaxial contacts are in compliance with:

- NFC 93569
- KMX4 specification



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TECHNICAL INFORMATION

ELECTRICAL PERFORMANCE

- Dielectric Withstanding Voltage: 2800V RMS
- Break Down Voltage: 3200V RMS
- Insulation Resistance: $10^6 M\Omega$
- Contact Resistance: $\leq 5m\Omega$
- Max. Current Rating: 5A
- Material: TEFLON

ENVIRONMENTAL

- Operating temperature range: $-55^{\circ}C$ to $+125^{\circ}C$

MECHANICAL PERFORMANCE

- Mating force per set of contact: 3 N
- Mating endurance: 200

TARGET MARKETS/APPLICATIONS



Asymmetric Digital Subscriber Line (ADSL)
Base Station
Switching
Transmission



Set-top Box



Desktop and Laptop
Storage System
Router and Server



Automotive Diagnostics
Control Drives
Energy Meter
Gaming Machine
Test Equipment
Office Automation
POS & Handheld terminal
Power Supplies
Parking Meter
Printer and Copier
Renewable Energy
Robotics
Surveillance Camera



Medical Instrument



Avionics
Military Equipment