

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

STAMPED AND ROLLED CONTACTS



D series is the standard D-Sub full metal shell version with stamped contacts. This design is basically proposed in solder bucket version.

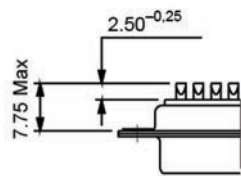


PART NUMBER SELECTOR

D	E	09		P		0		64		T		X	LF								
SERIES	SHELL SIZE	LOCKING ACCESSORIES		TOTAL CONTACTS	CONTACTS TYPE		TERMINATION TYPE	MATING CYCLES	TERMINATION TYPE	SHELL PLATING	DIMPLES	LEAD-FREE									
D	E A B C D	<table><tr><td>Blank</td><td>Standard</td></tr><tr><td>L</td><td>Threaded Insert M3</td></tr><tr><td>O</td><td>Threaded Insert UNC 4-40</td></tr><tr><td>V</td><td>Female screw (Hexagonal) UNC 4-40</td></tr></table>		Blank	Standard	L	Threaded Insert M3	O	Threaded Insert UNC 4-40	V	Female screw (Hexagonal) UNC 4-40	09	Pin	P	Solder Bucket	≥200	64		Standard on male connector only		LF
Blank				Standard																	
L				Threaded Insert M3																	
O				Threaded Insert UNC 4-40																	
V				Female screw (Hexagonal) UNC 4-40																	
	15	Socket	S	≥500	65																
	25																				
	37																				
	50																				
							0			Standard tin plating	T										
							Solder Buckets		Index												
							Without accessory		Blank												
							Shielding termination fingers*		H*												

SPECIFIC DIMENSIONS

Solder Buckets



CRIMP CONTACTS AND CABLE CONNECTORS



- 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	Lead Free
8656		09				Standard on male shell only	X	
Standard mounting hole (Ø = 3.10)	Blank	15			Standard tin plated	T		
Threaded insert UNC 4-40	O	25			Supplied without contacts (obligatory)			
Female screw (Hexagonal) UNC 4-40	V	37			Pin	P		
		50			Socket	S		

PART NUMBER SELECTOR – CRIMP CONTACTS

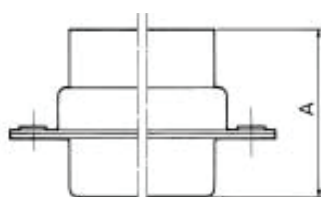
Contact Type	Packaging Type		
	Box of 500 Contacts ✓	Reel of 400 Contacts R	Reel of 5000 Contacts ✓
AWG 24/28 male	865635006 Δ	8656300306 Δ	8656451006 Δ
AWG 24/28 female	865635106 Δ	8656300406 Δ	8656651006 Δ
AWG 20/24 male	865635206 Δ	8656300506 Δ	8656452006 Δ
AWG 20/24 female	865635306 Δ	8656300606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

Δ Contact performance code

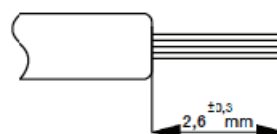
4LF: ≥200 mating/unmating, RoHS compatible

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

MIXED AND FULL POWER CABLE CONNECTORS

LAYOUTS

- Male insulator front view

Shell size	Layout	
E	5W1	
	11W1	
	7W2	
	3W3	
	3V3	
A	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® **UL RECOGNISED FILE E66906**



ORDERING INFORMATION

D

Series

B

Shell size (tin plated):
E, A, B, C, D

L

13

W

3

Layout of contacts

P

Contacts

Pin	P
Socket	S

A

Without accessory on PCB

00LF

RoHS compatible

Mounting Options

Description	Blank	L	O	I	V	F
Solder buckets	X	X	X	X	X	X

Durability

200 mating/unmating	Blank
500 mating/unmating	43

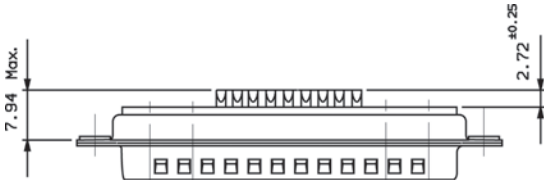
Termination Type

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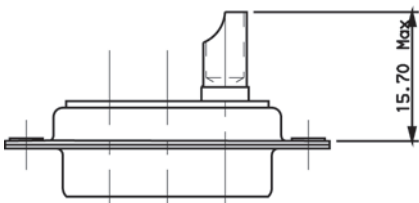
X: Available
Blank: without accessory
L: Threaded insert M3
O: Threaded insert UNC 4-40
V: Female screw UNC 4-40

SPECIFIC DIMENSIONS

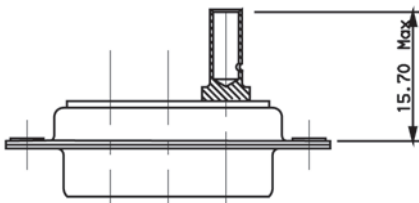
Solder Bucket



Solder version



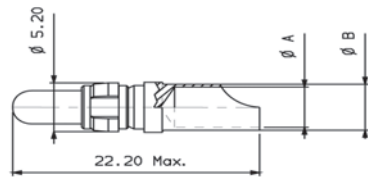
Crimp version



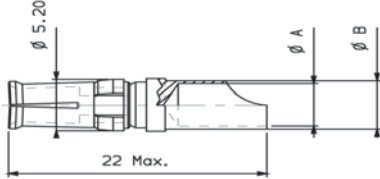
POWER SOLDER AND CRIMP CONTACTS

SOLDER CONTACTS

Male



Female

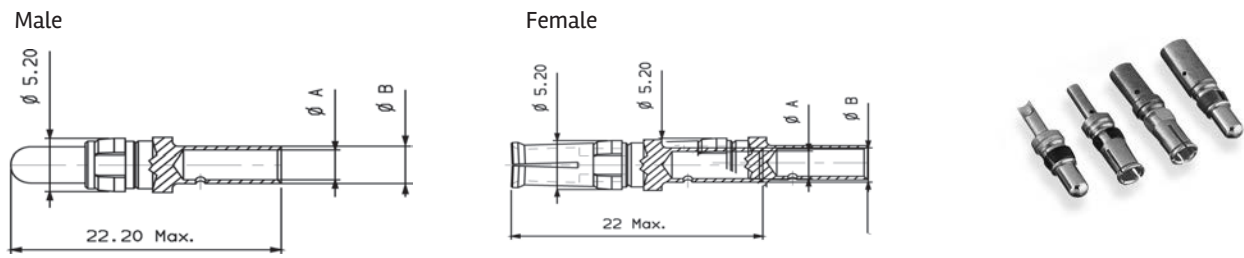


Type	Max. Current Rating	Clip Colour	RoHS* Part Number ≥200 mating/ unmating	RoHS* Part Number ≥500 mating/ unmating	Wire		Strip length mm ^{±0.5}	Ø A +0.1 +0	Ø B +0.5
					Size	Section mm ²			
Male	10A	Black	8638PPS1005LF	8638PPS1006LF	16	1.3	7	1.7	2.6
Male	15A	White	8638PPS1505LF	8638PPS1506LF	14	1.9	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

POWER SOLDER AND CRIMP CONTACTS

CRIMP CONTACTS



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

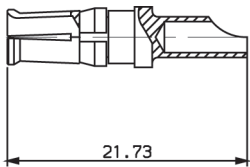
Clip material: Plastic withstanding 125°C
Termination plating: Matt tin
*RoHS compatible EU directive 2002/95/EC

► D-Sub Cable Connectors

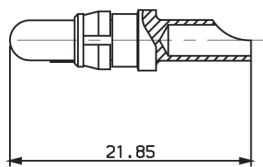
CONTACTS (OTHER VERSIONS)

POWER CONTACTS – METAL CLIP

Female



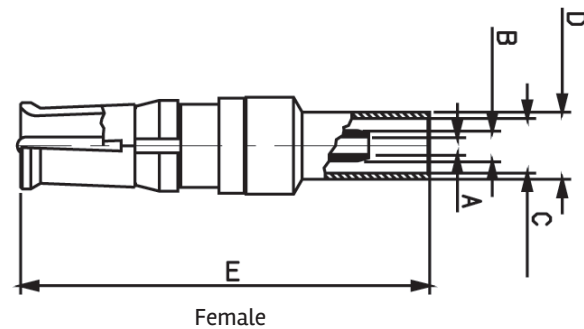
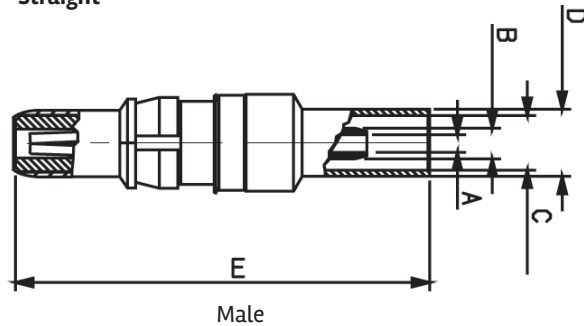
Male



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

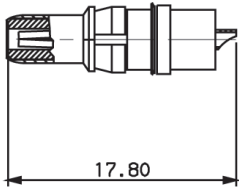
COAXIAL CONTACTS

Straight

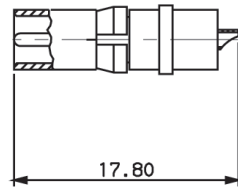


HIGH VOLTAGE CONTACTS

Male 86382000LF



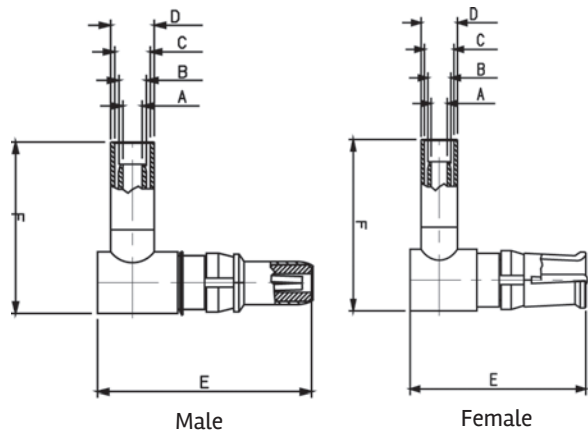
Female 86382001LF



Colors: Blue

White

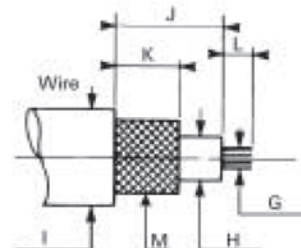
Angled



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



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