### AC SERIES XLR CABLE CONNECTORS

# **Amphenol**





# **AC SERIES XLR CABLE CONNECTORS**

Amphenol Australia have been manufacturing and designing innovative XLR connectors since 1955 and were the first to offer the cost saving Insulation Displacement Contact (IDC) in an XLR connector. The IDC connector is ideal for Original Equipment Manufacturers and end users alike and offers an alternative to our standard solder connector. The AC series cable connector range complies with IEC268-12 and AES 14-1992 standards. CSA File Number 68598.

### **Features**

- AC series XLR connectors feature the unique Australian design and patented "Jaws" cable retention system for both standard Solder connectors and the Insulation Displacement Contact (IDC) connectors.
- · A leading first mate last break socket contact is standard on all female connectors (Pin 1).
- The "Jaws" cable retention system provides up to 44kg (100lb) of strain.
- · Solderless IDC technology offers savings of up to 60% in termination time.
- . The AC series connector can be quickly and easily assembled without screws - by hand or portable termination tool. (Part number T2860)
- Available in 3, 4, 5, 6A and 7 contact arrangements.
- · Compatible with all other XLR brands.

## **Options**

- · Solder Bucket termination
- Insulation Displacement Contact (IDC)
- · Thermoplastic shell
- Zinc Diecast shell Satin Nickel FinishZinc Diecast shell Black Polyester Finish
- · Gold, Silver or Tin Plated contacts
- · Bulk Style Packaging
- · Single Bag packs
- · Precision machined contacts
- · Cost effective stamped contacts on 3 pole

### Options (Cont'd)

- Standard Jaws cable clamp, Cable O.D 3mm to 6.5mm (0.118" to 0.255")
- · Large Jaws cable clamp, Cable 0.D 6.5mm to 8mm (0.255" to 0.314")
- IDC Jaws cable clamp, Max. Cable O.D 5.85mm (0.23")
- Metal Boots / Backshells
- · Coloured Boots / Backshells
- · Coloured Identification rings
- . Termination / Assembly tooling

## **Jaws Cable Clamp Options**



Standard Jaws cable clamp, Cable O.D 3mm to 6.5mm (0.118" to 0.255")



Large Jaws cable clamp, Cable O.D. 6.5mm to 8mm (0.255" to 0.314")

## **Ordering Codes**

We have listed the more common ordering codes in each section. For further options please refer to the part number breakdown charts. Please contact us if you need any further assistance

## Simple steps to guide you in using this catalogue

- 1) Identify the product group listed in Contents on Page 1 and go directly to that page number.
- 2) Each product group cover page then details information and options available.
- 3) Refer to the product detail pages and identify the product you require pictorially.
- 4) Read the product description column for the products standard features.
- 5) Use variations column to determine your choice.
- 6) Identify part number.
- 7) In the event the particular option you require is not listed please refer to the part number breakdown page at the end of each section.
- 8) Please contact us directly if you have any further problems.

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# METAL SHELL TYPE - SOLDER



### Features:

- Zinc Diecast Shell.
- Solder Bucket connections.
- "Jaws" Cable Retention System.
- Contact layouts in 3, 4, 5, 6A and 7.
- Precision machined or Stamped contacts.
- Leading first mate last break socket contact.
- Quick and easy assembly without screws by hand or portable termination tool. (Part number T2860.)

Options: Stamped Contacts (3 contact only), Gold plated contacts, Large or Small Jaws Cable Clamp, Black Finish Shell, Bulk Pack, Coloured Boots / Backshells

Part Number Breakdown: Page 7 Specifications: Page 13-14

PRODUCT - FIGURE	DRAWING	Dimensions in mm (inches)	DESCRIPTION	VARIATIONS	PART NUMBER
	Ø19.0 [0.748"] 0	-82.0 [3.228"]	XLR 3 pole male, Machined contacts, Nickel Finish, Jaws cable clamp	Standard	AC3MM
				Gold Plated Contacts	AC3MM-AU
				Large Cable Clamp	AC3MMJ
•				Bulk Pack	AC3MM BULK
	Ø19.0 [0.748"] 0	-82.0 [3.228"]	XLR 3 pole male, Machined contacts, Black Finish, Jaws cable clamp	Standard	AC3MMB
				Gold Plated Contacts	AC3MMB-AU
		ARPHENON .		Large Cable Clamp	AC3MMBJ
				Bulk Pack	AC3MMB BULK
	82.0 [3.228*] Ø19.0 [0.748*]	-82.0 [3.228 <sup>*</sup> ]	XLR 3 pole male, Stamped contacts, Nickel Finish, Jaws cable clamp	Standard	AC3M
				Gold Plated Contacts	AC3M-AU
				Large Cable Clamp	AC3MJ
				Bulk Pack	AC3M BULK
	82.0 [3.228"]- \$\psi_{\text{919.0}} \\ [0.748"] \\ \text{0} \\ \text{1} \\ \text{1} \\ \text{2} \\ \text{1} \\ \text{2} \\ \text{3} \\ \text{2} \\ \text{3} \\ \text{4} \\ \text{2} \\ \text{3} \\ \text{4} \\ \text{3} \\ \text{4} \\ \text{5} \\ \text{6} \\ \text{7} \\ \text{6} \\ \text{7} \\ \t	-82.0 [3.228*]	XLR 3 pole male, Stamped contacts, Black Finish, Jaws cable clamp	Standard	AC3MB
				Gold Plated Contacts	AC3MB-AU
				Large Cable Clamp	AC3MBJ
				Bulk Pack	AC3MB BULK
	82.0 [3.228"] ø19.0 [.748"]	-820 [3228″] <del></del>	XLR 3 pole female, Stamped contacts,	Standard	AC3F
		Nickel Finish, Jaws cable clamp	Gold Plated Contacts	AC3F-AU	
		Jawa Cabic Clamp	Large Cable Clamp	AC3FJ	
				Bulk Pack	AC3F BULK
	82.0 [3.228"] Ø19.0 [.748"]	-82.0 [3.228″] <del></del>	XLR 3 pole female, Stamped contacts, Black Finish, Jaws cable clamp	Standard	AC3FB
				Gold Plated Contacts	AC3FB-AU
				Large Cable Clamp	AC3FBJ
				Bulk Pack	AC3FB BULK





# STANDARD DATA AC CABLE CONNECTORS

				VALUE			
GENERAL	Number of contacts	3	4	5	6A	7	
CHARACTERISTICS	AC Series Contact Arrangements (Front view of pin inserts)						
	(Tolk vow or pill illoorto)	<b>⊕</b> 3	e 4 2 e 3	2 3 4	•¹ 6 5 •° 3 • 4	1 7 6 6 8 9 5 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	
	Termination	IDC / SOLDER	SOLDER	SOLDER	SOLDER	SOLDER	
	Max. Wire Gauge - Stranded wire:						
	IDC	24AWG	N/A	N/A	N/A	N/A	
	Solder	14AWG	16AWG	18AWG	18AWG	20AWG	
	Flammability rating of insulator plastics and housings	UL94V-0					
ELECTRICAL CHARACTERISTICS	Service Voltage RMS 133V <sup>1)</sup>						
	Test Voltage AC RMS	1400V					
	Current carrying capacity:	1A	N/A	N/A	N/A	N/A	
	Solder	15A	10A	7.5A	7.5A	5A	
	Typicial Contact Resistance	t Resistance ≤ 3mΩ					
	Insulation Resistance $\geq 1G\Omega$						
CLIMATIC CHARACTERISTICS	Protection Class			IP40			
	Operating Temperature	-25°C to +75°C					
MECHANICAL	Insertion and Withdrawal force	≥ 10N - ≤ 30N					
CHARACTERISTICS	Weight - Metal 2)	36g	37g	38g	38g	38g	
		(0.080lb)	(0.081lb)	(0.083lb)	(0.083lb)	(0.083lb)	
	Weight - Thermoplastic 2)	18g	19g	20g	20g	20g	
		(0.039lb)	(0.041lb)	(0.044lb)	(0.044lb)	(0.044lb)	
	Typical Cable retention force	22Kg to 44Kg (50lb to 100lb) - Dependant on cable material and diameter.					
	Cable O.D. range - JAWS clamp						
	IDC	Max. Cable 0.D. 5.85mm (0.23")					
	Standard solder	3mm to 6.5mm (0.118" to 0.255")					
	Large Solder	6.5mm to 8mm ( 0.255" to 0.314")					
	Mechanical Operations			1000 mating cycl	es		

<sup>1)</sup> Not suitable for domestic applications above 50V

<sup>&</sup>lt;sup>2)</sup> Approximate weight only, does not include packaging. Please contact us for exact weight for shipping purposes.

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STANDARD DATA



# STANDARD DATA AC CABLE CONNECTORS

		DETAILS				
MATERIALS	Connector shell - Metal	Diecast Zinc Alloy				
	Shell finish	Satin nickel or Black polyester				
	Connector shell - Thermoplastic	Thermoplastic, UL94V-0 Modified PPE Resin				
	Shell finish	Black				
	Insulators	UL94V-0 PBT Resin or Modified PPE Resin				
	Boot / Backshell	UL94V-0 Modified PPE Resin or Machined Brass				
	Finish	Black, other colours available - see page 60				
	Cable clamp					
	IDC Socket JAWS	UL94V-0 Modified PPO Resin (Pink)				
	IDC Pin JAWS	UL94V-0 Modified PPO Resin (Blue)				
	Standard Solder JAWS	UL94V-0 Modified PPO Resin (Black)				
	Large Solder JAWS	UL94V-0 Modified PPO Resin (Purple)				
	Cable Bushing	Thermoplastic Polyurethane				
	Male Contact					
	Stamped - IDC / Plating	Phosphor Bronze / Silver or Gold (Optional)				
	Stamped - Solder / Plating	Phosphor Bronze / Silver or Gold (Optional)				
	Machined - Solder / Plating	Brass / Silver or Gold (Optional)				
	Female Contact					
	Stamped - IDC / Plating	Phosphor Bronze / Tin or Gold (Optional)				
	Stamped - Solder / Plating	Phosphor Bronze / Tin or Gold (Optional)				
	Machined - Solder / Plating	Brass / Silver or Gold (Optional)				
IDC RECOMMENDED CABLE DIMENSIONS	A - Cable O.D.:Max. Ø 5.85mm (0.23"). B - Bare Copper Spiral Shield OD Ø 2.75⇒Ø 3 C - OD Ø1.30⇒Ø1.50mm (0.05"⇒0.06") D - 16/.005" (24 AWG stranded wire)	0.00mm (0.11≝-0.12")(A)  (B)  (High Molecular Weight Polyethylene Bare Copper Spiral Shield Min. 90% Coverage 56/.005" (36AWG)				