

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 Finish
- Zinc 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 O.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 (Black), Cable O.D 3mm to 6.5mm (0.118" to 0.255")



Large Jaws cable clamp (Purple), 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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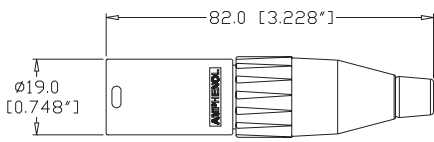

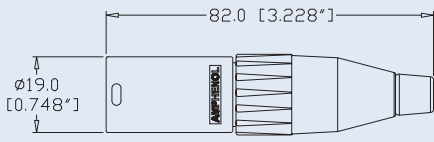

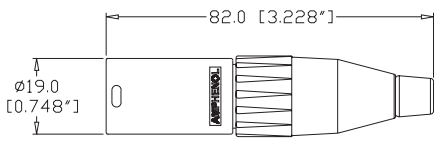

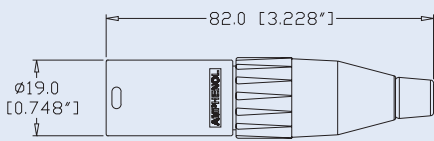

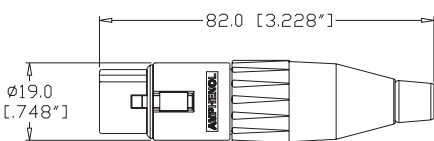

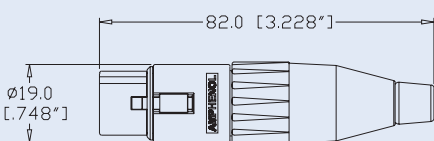

Features:

- 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 13

Specifications: Page 20-21


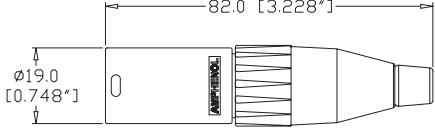

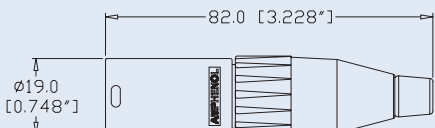

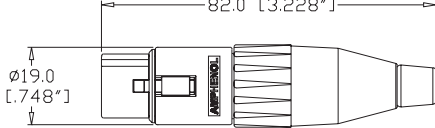





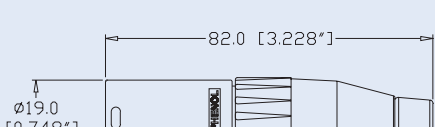



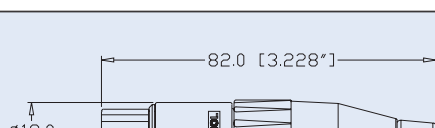
PRODUCT - FIGURE	DRAWING	DESCRIPTION	VARIATIONS	PART NUMBER
		XLR 3 pole male, Machined contacts, Nickel Finish, Jaws cable clamp	Standard Gold Plated Contacts Large Cable Clamp Bulk Pack	AC3MM AC3MM-AU AC3MMJ AC3MM BULK
		XLR 3 pole male, Machined contacts, Black Finish, Jaws cable clamp	Standard Gold Plated Contacts Large Cable Clamp Bulk Pack	AC3MMB AC3MMB-AU AC3MMBJ AC3MMB BULK
		XLR 3 pole male, Stamped contacts, Nickel Finish, Jaws cable clamp	Standard Gold Plated Contacts Large Cable Clamp Bulk Pack	AC3M AC3M-AU AC3MJ AC3M BULK
		XLR 3 pole male, Stamped contacts, Black Finish, Jaws cable clamp	Standard Gold Plated Contacts Large Cable Clamp Bulk Pack	AC3MB AC3MB-AU AC3MBJ AC3MB BULK
		XLR 3 pole female, Stamped contacts, Nickel Finish, Jaws cable clamp	Standard Gold Plated Contacts Large Cable Clamp Bulk Pack	AC3F AC3F-AU AC3FJ AC3F BULK
		XLR 3 pole female, Stamped contacts, Black Finish, Jaws cable clamp	Standard Gold Plated Contacts Large Cable Clamp Bulk Pack	AC3FB AC3FB-AU AC3FBJ AC3FB BULK

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PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	VARIATIONS	PART NUMBER
		XLR 4 pole male, Machined contacts, Nickel Finish, Jaws cable clamp	Standard	AC4M
			Gold Plated Contacts	AC4M-AU
			Large Cable Clamp	AC4MJ
			Bulk Pack	AC4M BULK
		XLR 4 pole male, Machined contacts, Black Finish, Jaws cable clamp	Standard	AC4MB
			Gold Plated Contacts	AC4MB-AU
			Large Cable Clamp	AC4MBJ
			Bulk Pack	AC4MB BULK
		XLR 4 pole female, Machined contacts, Nickel Finish, Jaws cable clamp	Standard	AC4F
			Gold Plated Contacts	AC4F-AU
			Large Cable Clamp	AC4FJ
			Bulk Pack	AC4F BULK
		XLR 4 pole female, Machined contacts, Black Finish, Jaws cable clamp	Standard	AC4FB
			Gold Plated Contacts	AC4FB-AU
			Large Cable Clamp	AC4FBJ
			Bulk Pack	AC4FB BULK
		XLR 5 pole male, Machined contacts, Nickel Finish, Jaws cable clamp	Standard	AC5M
			Gold Plated Contacts	AC5M-AU
			Large Cable Clamp	AC5MJ
			Bulk Pack	AC5M BULK
		XLR 5 pole male, Machined contacts, Black Finish, Jaws cable clamp	Standard	AC5MB
			Gold Plated Contacts	AC5MB-AU
			Large Cable Clamp	AC5MBJ
			Bulk Pack	AC5MB BULK
		XLR 5 pole female, Machined contacts, Nickel Finish, Jaws cable clamp	Standard	AC5F
			Gold Plated Contacts	AC5F-AU
			Large Cable Clamp	AC5FJ
			Bulk Pack	AC5F BULK
		XLR 5 pole female, Machined contacts, Black Finish, Jaws cable clamp	Standard	AC5FB
			Gold Plated Contacts	AC5FB-AU
			Large Cable Clamp	AC5FBJ
			Bulk Pack	AC5FB BULK



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PRODUCT - FIGURE	DRAWING Dimensions in mm (inches)	DESCRIPTION	VARIATIONS	PART NUMBER
		XLR 6A pole male, Machined contacts, Nickel Finish, Jaws cable clamp	Standard	AC6AM
			Gold Plated Contacts	AC6AM-AU
			Large Cable Clamp	AC6AMJ
			Bulk Pack	AC6AM BULK
		XLR 6A pole male, Machined contacts, Black Finish, Jaws cable clamp	Standard	AC6AMB
			Gold Plated Contacts	AC6AMB-AU
			Large Cable Clamp	AC6AMBJ
			Bulk Pack	AC6AMB BULK
		XLR 6A pole female, Machined contacts, Nickel Finish, Jaws cable clamp	Standard	AC6AF
			Gold Plated Contacts	AC6AF-AU
			Large Cable Clamp	AC6AFJ
			Bulk Pack	AC6AF BULK
		XLR 6A pole female, Machined contacts, Black Finish, Jaws cable clamp	Standard	AC6AFB
			Gold Plated Contacts	AC6AFB-AU
			Large Cable Clamp	AC6AFBJ
			Bulk Pack	AC6AFB BULK
		XLR 7 pole male, Gold plated Machined contacts, Nickel Finish, Jaws cable clamp	Standard	AC7M
			Large Cable Clamp	AC7MJ
			Bulk Pack	AC7M BULK
		XLR 7 pole male, Gold plated Machined contacts, Black Finish, Jaws cable clamp	Standard	AC7MB
			Large Cable Clamp	AC7MBJ
			Bulk Pack	AC7MB BULK
		XLR 7 pole female, Gold plated Machined contacts, Nickel Finish, Jaws cable clamp	Standard	AC7F
			Large Cable Clamp	AC7FJ
			Bulk Pack	AC7F BULK
		XLR 7 pole female, Gold plated Machined contacts, Black Finish, Jaws cable clamp	Standard	AC7FB
			Large Cable Clamp	AC7FBJ
			Bulk Pack	AC7FB BULK



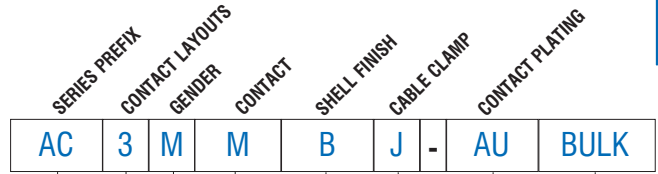
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PART NUMBER BREAKDOWN

METAL SHELL TYPE - SOLDER



E. G. **AC3MMBJ-AU BULK**
AC (Series Prefix), **3** contacts, **Male**, **M**achined Contacts, **B**lack Polyester Finish,
J (Large Jaws), **- AU** (Gold Plated Contacts), **BULK** Packaged.



SERIES PREFIX	AC	=	Series Prefix
CONTACT LAYOUTS	3	=	3 Contacts
	4	=	4 Contacts
	5	=	5 Contacts
	6A	=	6 Contacts
	7	=	7 Contacts
GENDER	F	=	Female Socket Contacts
	M	=	Male Pin Contacts
CONTACT	Blank	=	Stamped Contacts
	M	=	Machined Contacts
	G	=	Stamped Contacts, Ground Tag
	MG	=	Machined Contacts, Ground Tag (Applicable 3 male pin contacts, option M and MG only)
NOTE: 4 - 7 contact connectors have machined contacts and grounding as standard. They are not available in stamped contacts.			
SHELL FINISH	Blank	=	Nickel Plated Finish
	B	=	Black Polyester Finish
CABLE CLAMP	Blank	=	Standard Jaws 3 mm - 6.5 mm cable O.D. (0.118" to 0.255")
	J	=	Large Jaws 6.5mm - 8mm cable O.D. (0.255" to 0.314")
CONTACT PLATING	Blank	=	Standard Plating (Silver or Tin - Refer to Standard Data.)
	AU	=	Gold Plated
NOTE: 7 Contact is gold plated as standard.			
PACKAGING	Blank	=	Individual Bags
	BULK	=	Bulk Packed

Note: All AC Series Connectors are available with optional colour coded boot / backshell. Refer to page 80 and simply add colour to end of part number. Example: AC3MM - RED



Features:

- Thermoplastic Shell.
- Solder Bucket Connections.
- “Jaws” Cable Retention System.
- Stamped or Machined Contacts.
- Leading first mate last break socket contact.
- Quick and easy assembly without screws – by hand or portable termination tool. (Part number T2860.)

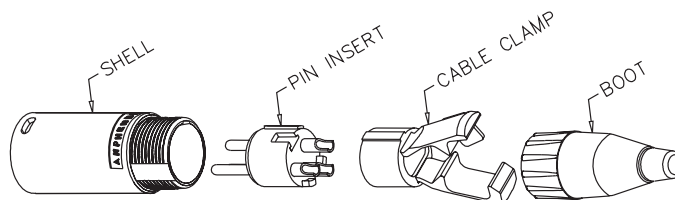
Options: Gold Plated Contacts, Stamped Contacts (3 Contact only), Bulk Pack, Coloured Boots / Backshells
3, 4, 5, 6A and 7 Contacts.

Specifications: Page 20-21

PRODUCT - FIGURE	DRAWING	DESCRIPTION	VARIATIONS	PART NUMBER
		XLR 3 pole male, Machined contacts, Thermoplastic shell, Jaws cable clamp	Standard	AC3MMCP
			Gold Plated Contacts	AC3MMCP-AU
			Large Cable Clamp	AC3MMCPJ
			Bulk Pack	AC3MMCP BULK
		XLR 3 pole male, Stamped contacts, Thermoplastic shell, Jaws cable clamp	Standard	AC3MCP
			Gold Plated Contacts	AC3MCP-AU
			Large Cable Clamp	AC3MCPJ
			Bulk Pack	AC3MCP BULK
		XLR 3 pole female, Stamped contacts, Thermoplastic shell, Jaws cable clamp	Standard	AC3FCP
			Gold Plated Contacts	AC3FCP-AU
			Large Cable Clamp	AC3FCPJ
			Bulk Pack	AC3FCP BULK

Note: Thermoplastic shell connectors are also available in 4 - 7 contact arrangements, please contact us for ordering code.

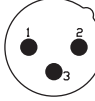
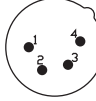
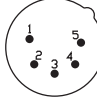
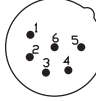
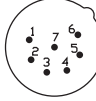
ISO VIEW OF AC3MM



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STANDARD DATA AC CABLE CONNECTORS



		VALUE				
GENERAL CHARACTERISTICS	Number of contacts	3	4	5	6A	7
	AC Series Contact Arrangements (Front view of pin inserts)					
	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				
Environmental	Complies with RoHS Directive 2002/95/EC					
ELECTRICAL CHARACTERISTICS	Service Voltage RMS	133V ¹⁾				
	Test Voltage AC RMS	1400V				
	Current carrying capacity:					
	IDC	1A	N/A	N/A	N/A	N/A
	Solder	15A	10A	7.5A	7.5A	5A
	Typical Contact Resistance	≤3mΩ				
Insulation Resistance	≥1GΩ					
CLIMATIC CHARACTERISTICS	Protection Class	IP40				
	Operating Temperature	-25°C to +75°C (-13°F to +167°F)				
MECHANICAL CHARACTERISTICS	Insertion and Withdrawal force	≥10N - ≤30N				
	Weight - Metal ²⁾	36g (0.080lb)	37g (0.081lb)	38g (0.083lb)	38g (0.083lb)	38g (0.083lb)
	Weight - Thermoplastic ²⁾	18g (0.039lb)	19g (0.041lb)	20g (0.044lb)	20g (0.044lb)	20g (0.044lb)
	Typical Cable retention force	22Kg to 44Kg (50lb to 100lb) - Dependent on cable material and diameter.				
	Cable O.D. range - JAWS clamp					
	IDC	Max. Cable O.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 cycles					

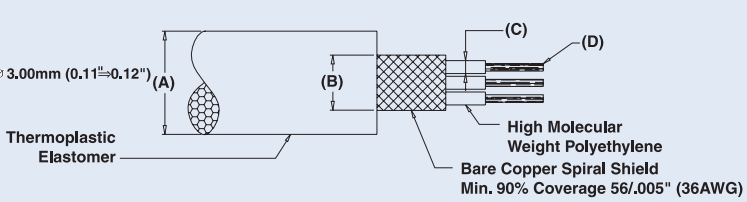
¹⁾ Not suitable for domestic applications above 50V

²⁾ Approximate weight only, does not include packaging. Please contact us for exact weight for shipping purposes.

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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 80
	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	Santoprene
	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	 <p> A - Cable O.D.: Max. \varnothing 5.85mm (0.23"). B - Bare Copper Spiral Shield OD \varnothing 2.75 \Rightarrow \varnothing 3.00mm (0.11 \Rightarrow 0.12") C - OD \varnothing 1.30 \Rightarrow \varnothing 1.50mm (0.05 \Rightarrow 0.06") D - 16/.005" (24 AWG stranded wire) </p> <p> Thermoplastic Elastomer High Molecular Weight Polyethylene Bare Copper Spiral Shield Min. 90% Coverage 56/.005" (36AWG) </p>	

Rev 4 - 12/2009