### THERMOPLASTIC A TYPE FLANGE

### AC SERIES - A TYPE THERMOPLASTIC XLR PCB CHASSIS CONNECTORS



## 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.
- 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.

The AC series, A type XLR chassis receptacles have been designed and manufactured with the Original Equipment Manufacturers' (OEM) needs in mind. The compact shell design allows a significant space saving over the traditional 'D' type shell. Gold plated contacts improve the performance, ensuring a reliable contact and the unique grounding link options offer flexibility in design.

#### **Features**

- A leading first mate last break socket contact is standard on all female connectors (Pin 1).
- Vertical and Horizontal PCB versions available.
- · Latching and Non-latching versions available.
- A range of different grounding options are available including:
  - Mating connector shell to Pin 1
  - Mating connector shell to Chassis
  - Mating connector shell to pin 1 to Chassis
- Available in 3 contact arrangement only.
- Compatible with all other XLR brands.

#### **Options**

- Vertical PCB contacts
- Horizontal PCB contacts
- Precision Machined Pin contacts
- Cost effective Stamped Socket contacts
- Gold Plated contacts (Standard)
- Silver Plated contacts (Optional)
- Bulk Packaging

**Ordering Codes** 

further assistance.

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

### THERMOPLASTIC A TYPE FLANGE



#### Features:

- Thermoplastic Shell
- Industry standard PCB footprints.
- Vertical or Horizontal PCB mounting.
- Precision machined pin contacts.
- Gold plated contacts.
- Leading first mate last break socket contact.
- Bulk packed in trays, 100 to a box as standard.
- Positive latch lock system.

**Options:** Silver plated contacts, Vertical or Horizontal PCB, Various grounding methods, Latching or Non-Latching.

### Part Number Breakdown:Page 32-33 Specifications: Page 34

#### PCB Footprints: Page 35

Panel Cutouts: Page 36

PRODUCT - FIGURE	DRAWING	Dimensions in mm (inches)	DESCRIPTION	GROUND LINK VARIATIONS	PART NUMBER
	25.4 [.998"] -25.4 [.998"] 		XLR 3 pole male, Horizontal PCB, Gold Plated Contacts, Bulk Pack	No Ground Link	AC3MAH-AU-B
	25.4 [.998"] 		XLR 3 pole male, Horizontal PCB, Gold Plated Contacts, Bulk Pack	Pin 1 to Chassis to Mating connector shell	AC3MAH1-AU-B
	25.4 [.998"]		XLR 3 pole male, Horizontal PCB, Gold Plated Contacts, Bulk Pack	Mating connector shell to Chassis - Pin 1 sep. Ground	AC3MAH2-AU-B
			XLR 3 pole male, Horizontal PCB, Gold Plated Contacts, Bulk Pack	Mating connector shell to Pin 1	AC3MAH3-AU-B
			XLR 3 pole male, Horizontal PCB, Gold Plated Contacts, Bulk Pack	Mating connector shell to Chassis to PCB, Pin 1 sep. Ground	AC3MAH4-AU-B
		-24.0 [.945"] -19.8 [.780"] -19.8 [.780"] -10.8	XLR 3 pole male, Vertical PCB, Gold Plated Contacts, Bulk Pack	No Ground Link	AC3MAV-AU-B

### THERMOPLASTIC A TYPE FLANGE

PRODUCT - FIGURE	DRAWING	Dimensions in m	nm (inches)	DESCRIPTION	GROUND LINK VARIATIONS	PART NUMBER
				XLR 3 pole male, Vertical PCB, Gold Plated Contacts, Bulk Pack	Pin 1 to Chassis to Mating connector shell	AC3MAV1-AU-B
			.780°]	XLR 3 pole male, Vertical PCB, Gold Plated Contacts, Bulk Pack	Mating connector shell to Chassis - Pin 1 sep. Ground	AC3MAV2-AU-B
	25.4 [.998"] -25.4 [.998"] 		.780"]	XLR 3 pole male, Vertical PCB, Gold Plated Contacts, Bulk Pack	Mating connector shell to Pin 1	AC3MAV3-AU-B
				XLR 3 pole male, Vertical PCB, Gold Plated Contacts, Bulk Pack	Mating connector shell to Chassis to PCB, Pin 1 sep. ground	AC3MAV4-AU-B
	25.4 [.998"]	-3.3 [.130"] -19.5 [.766"] -19.6 [. -19.6 [.] -19.6 [. -19.6 [.] -19.6 [		XLR 3 pole female, Horizontal PCB, Latching Type, Gold Plated Contacts, Bulk Pack	No Ground Link	AC3FAH-AU-B
e te pusit	25.4 (998") PUSH	-3.3 [.130"] -19.5 [.768"] 		XLR 3 pole female, Horizontal PCB, Latching Type, Gold Plated Contacts, Bulk Pack	Pin 1 to Chassis to Mating connector shell	AC3FAH1-AU-B
0	25.4 [.998"] <b>PUSH</b> <b>PUSH</b> <b>PUSH</b> <b>PUSH</b> <b>PUSH</b> <b>PUSH</b> <b>PUSH</b> <b>PUSH</b> <b>PUSH</b> <b>PUSH</b> <b>PUSH</b> <b>PUSH</b> <b>PUSH</b> <b>PUSH</b>	-3.3 [.130"] -19.5 [.768"]- 		XLR 3 pole female, Horizontal PCB, Latching Type, Gold Plated Contacts, Bulk Pack	Mating connector shell to Chassis - Pin 1 sep. Ground	AC3FAH2-AU-B
C	25 4 [998"] <b>PUSH</b> <b>PUSH</b> <b>PUSH</b> <b>27</b> 1.106"]	3 3   130   = 19 5   766   - 19 5   - 19 6   - 19 6		XLR 3 pole female, Horizontal PCB, Latching Type, Gold Plated Contacts, Bulk Pack	Pin 1 to Chassis	AC3FAH3-AU-B

### THERMOPLASTIC A TYPE FLANGE

PRODUCT - FIGURE	DRAWING	Dimensions in mm (inches)	DESCRIPTION	GROUND LINK VARIATIONS	PART NUMBER
			XLR 3 pole female, Horizontal PCB, Non-Latching Type Gold Plated Contacts, Bulk Pack	No Ground Link	AC3FAHL-AU-B
0			XLR 3 pole female, Horizontal PCB, Non-Latching Type Gold Plated Contacts, Bulk Pack	Pin 1 to Chassis to mating connector shell	AC3FAHL1-AU-B
0			XLR 3 pole female, Horizontal PCB, Non-Latching Type Gold Plated Contacts, Bulk Pack	Mating connector shell to Chassis - Pin 1 sep. Ground.	AC3FAHL2-AU-B
C			XLR 3 pole female, Horizontal PCB, Non-Latching Type Gold Plated Contacts, Bulk Pack	Pin 1 to Chassis	AC3FAHL3-AU-B
0	25.4 [.998"] PUSH PUSH PUSH PUSH 2.7 [.106"] 2.7 [.106"] 2.7 [.106"]		XLR 3 pole female, Vertical PCB, Latching Type, Gold Plated Contacts, Bulk Pack	No Ground Link	AC3FAV-AU-B
	25.5 [.998"] 25.5 [.998"] 19.5 [.76 19.5 [.76 19.5 [.76 19.5 [.76 19.5 [.76 19.5 [.76 19.5 [.76 19.5 [.76 19.5 [.76 19.5 [.76] 19.5		XLR 3 pole female, Vertical PCB, Latching Type, Gold Plated Contacts, Bulk Pack	Pin 1 to Chassis to mating connector shell	AC3FAV1-AU-B
C.C.	25.4 [.998"] 19.5 [.76 19.5 [.76] 19.5 [.7		XLR 3 pole female, Vertical PCB, Latching Type, Gold Plated Contacts, Bulk Pack	Mating connector shell to Chassis - Pin 1 sep. Ground.	AC3FAV2-AU-B
0	25.4 [998"] 95.7		XLR 3 pole female, Vertical PCB, Latching Type, Gold Plated Contacts, Bulk Pack	Pin 1 to Chassis	AC3FAV3-AU-B

### THERMOPLASTIC A TYPE FLANGE

PRODUCT - FIGURE	DRAWING	Dimensions in mm (inches)	DESCRIPTION	GROUND LINK VARIATIONS	PART NUMBER
0	25.4 [.998"]		XLR 3 pole female, Vertical PCB, Latching Type, Gold Plated Contacts, Bulk Pack, Machined Contact Mount	Mating connector shell to Chassis - Pin 1 sep. Ground.	AC3FAV4-AU-B
	25.4 [.998"] -25.4 [.998"] -15.5 [.1 -15.5 [.1] -15.		XLR 3 pole female, Vertical PCB, Latching Type, Gold Plated Contacts, Bulk Pack, Machined Contact Mount	No Ground Link	AC3FAV5-AU-B
0	25.4 [.998"] 		XLR 3 pole female, Vertical PCB, Non-Latching Type, Gold Plated Contacts, Bulk Pack	No Ground Link	AC3FAVL-AU-B
0	25.4 [.998"] -25.4 [.998"] -19.5 [ -19.5 [ -19.5 [ -19.5 [ -2.7 -2.7 -2.4.0		XLR 3 pole female, Vertical PCB, Non-Latching Type, Gold Plated Contacts, Bulk Pack	Pin 1 to Chassis to Mating connector shell	AC3FAVL1-AU-B
0.	25.4 [.998 <sup>-</sup> ] 	768"] -19.8 [.780"] -19.8 [.780"]	XLR 3 pole female, Vertical PCB, Non-Latching Type, Gold Plated Contacts, Bulk Pack	Mating connector shell to Chassis - Pin 1 sep. Ground.	AC3FAVL2-AU-B
0	25.4 [.998"]	768 <sup>*</sup> ] 19.8 [.780 <sup>*</sup> ] 19.8 [.780 <sup>*</sup> ] 1.02 <i>L</i> 3.5 [.345 <sup>*</sup> ]	XLR 3 pole female, Vertical PCB, Non-Latching Type, Gold Plated Contacts, Bulk Pack	Pin 1 to Chassis	AC3FAVL3-AU-B
	25.4 [.998"]		XLR 3 pole female, Vertical PCB, Non-Latching type, Gold Plated Contacts, Bulk Pack, Machined Contact Mount	Mating connector shell to Chassis - Pin 1 sep. Ground.	AC3FAVL4-AU-B
	27. [.106"]		XLR 3 pole female, Vertical PCB, Non-Latching type, Gold Plated Contacts, Bulk Pack, Machined Contact Mount	No Ground Link	AC3FAVL5-AU-B

ENTERTAINMENT INTERCONNECT CATALOGUE - Amphenol Australia Pty Ltd Telephone 61 3 8796 8888 Fax 61 3 8796 8801

### THERMOPLASTIC A TYPE FLANGE

### PART NUMBER BREAKDOWN

AC SERIES A TYPE MALE

			Vertical Printed Circuit Board, Latchless, old Plated Contacts), Bulk Packaged.
SERIES PREFIX	AC	=	Series Prefix
CONTACT LAYOUT	3	=	3 Contacts only
GENDER	М	=	Male Pin Contacts
SHELL SERIES	А	=	А Туре
TERMINATION	Н	=	Horizontal Printed Circuit Board
	V	=	Vertical Printed Circuit Board
	Blank	=	Latching
MECHANISM	L	=	Latchless
GROUNDING LINK OPTIONS	Blank	=	No Ground Link
	1	=	Pin 1 to Chassis to mating connector shell
	2	=	Mating connector shell to Chassis, Pin 1 separate ground.
	3	=	Mating connector to Pin 1
	4	=	Mating connector shell to Chassis to PCB, Pin 1 separate ground.
CONTACT PLATING	AU	=	Gold Plated Contacts
	AG	=	Silver Plated Contacts (Non-Standard
PACKAGING	В	=	Bulk Packed
	1		

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### PART NUMBER BREAKDOWN

AC SERIES A TYPE FEMALE

E. G . AC3FAVL3-AU B AC (series prefix),3 3 (Pin 1 to Chassis	contacts, Fer Grounding), -	male, <b>A</b> Type - <b>AU</b> (Gold P	, Vertical Printed Circuit Board,Latchless, lated Contacts), Bulk Packaged.
SERIES PREFIX	AC	=	Series Prefix
CONTACT LAYOUT	3	=	3 Contacts only
GENDER	F	=	Female Socket Contacts
SHELL SERIES	А	=	А Туре
TERMINATION	Н	=	Horizontal Printed Circuit Board
	V	=	Vertical Printed Circuit Board
LOCKING	Blank	=	Latching
MECHANISM	L	=	Latchless
GROUNDING LINK OPTIONS	Blank	=	No Ground Link
	1	=	Pin 1 to Chassis to mating connector shell
	2	_	Mating connector shell to Chassis
	2	_	- Pin 1 sep. Ground.
	3	=	Pin 1 to Chassis
	4	=	Mating Shell to Chassis & Pin 1
			Seperate Ground / Machined Contacts
	5	=	No Ground Link / Machined
			Contacts
CONTACT PLATING	AU	=	Gold Plated Contacts
	AG	=	Silver Plated Contacts (Non-Standard)
PACKAGING	В	=	Bulk Packed

STANDARD DATA

### STANDARD DATA AC SERIES A TYPE CHASSIS

		VALUE		
GENERAL CHARACTERISTICS	Number of contacts	3		
CHARACTERISTICS	Contact Arrangements (Front view of pin insert)			
	Termination	Printed Circuit Board (PCB)		
	Flammability rating of plastics	UL94V-0		
	Environmental	Complies with RoHS Directive 2002/95/EC		
ELECTRICAL CHARACTERISTICS	Service Voltage RMS	133V <sup>1)</sup>		
CHARACTERISTICS	Test Voltage AC RMS	1500V		
	Current carrying capacity	6A		
	Typical Contact Resistance	≤ 5mΩ		
	Insulation Resistance (initial)	≥ 2GΩ		
	Insulation Resistance (after damp heat test)	≥ 2GΩ		
CLIMATIC	Protection Class	IP40		
CHARACTERISTICS	Operating Temperature	-25°C to +75°C (-13°F to +167°F)		
MECHANICAL CHARACTERISTICS	Weight <sup>2)</sup>	14g (0.030lb)		
CHARACTERISTICS	Retention Spring separating force	≥ 20N		
	Mounting Hole torque max.	1.5Nm		
	Mechanical Operations	1500 mating cycles		
	Fastening	Self-Tapping PT screw with thread 2.9 x 1.06 and of Tri-rondular configuration		
MATERIALS	Connector Shell Shell Finish	PA6.6 + 25% glass fibre reinforced, ULV94V-0 Black		
	Insulators	PA6.6 + 25% glass fibre reinforced, ULV94V-0		
	Male Contact			
	Material	Brass		
	Plating	0.0762µm (3µ") gold over 0.0762µm (30µ") nickel		
	Female Contact			
	Material	Bronze		
	Plating	0.0762µm (3µ") gold over 0.0762µm (30µ") nickel		
	Latch lock and Spring	Spring Steel		
	Ground element	Spring Steel		

 $^{\mbox{\tiny 1)}}$  Not suitable for domestic applications above 50V

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

ENTERTAINMENT INTERCONNECT CATALOGUE - Amphenol Australia Pty Ltd Telephone 61 3 8796 8888 Fax 61 3 8796 8801

Rev 2 - 09/2005

AC SERIES CHASSIS CONNECTORS

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### AC SERIES A TYPE CHASSIS

PCB FOOTPRINTS STRAIGHT (V) - CONNECTOR SIDE OF PCB

AC3FAH AC3FAH1 8.25 [.325"] 3.81 [.150"] TYP 150" AC3FAH2 AC3FAH3 3.81 - 3.81 [.150"] TYP à 772 Ł  $\overline{m}$ 500"] 350 12.70 20 .200"] .025"] 5.08 .225 .025 5.71 0.64 [ 64 +Panel cutout CL 0ø1.2mm(.047") Oø1.6mm(.063") +Panel cutout CL 0ø1.2mm(.047") Oø1.6mm(.063") AC3FAV AC3FAV1 3.81 [.150"] 3.81 [.150"] AC3FAV2 AC3FAV3 [.175"] [.175"] 3.81 [.150"] [.225"] 45 3.81 [.150"] .45 5.71 í+G 2 0 G 8.25 [.325"] +Panel cutout CL 0ø1.2mm(.047") Oø1.6mm(.063") + Panel cutout CL 0ø1.2mm(.047") Oø1.6mm(.063") AC3FAV4 AC3FAV5 3.81 [.150"] 3.81 [.150" 3.81 [.150"] 3.81 [.150"] .175 175" [.225" 45 45 5.71 Ó 2 Ğ 8.25 [.325"] +Panel cutout CL 0ø1.2mm(.047") +Panel cutout CL 0ø1.2mm(.047") AC3MAH AC3MAH1 3.81 [.150"] TYP 3.81 [.150"] TYP AC3MAH2 AC3MAH3 3.81 [.150"] TYP 3.81 [.150"] TYP AC3MAH4 .70 [.5"]-700"] 700" .78 [. ►12.7 Ģ 7.78 .150"] .150"] 350"] -20 g 0<sup>1</sup>  $\frac{2}{-0}$   $\frac{3}{3}$   $0^{1+G}$ 3.81 8.89 3.81 3.89 + Panel cutout CL 0¢1.2mm(.047") O¢1.6mm(.063") +Panel cutout CL 0ø1.2mm(.047") Oø1.6mm(.063") AC3MAV AC3MAV1 AC3MAV2 AC3MAV3 3.81 [.150"] 3.81 [.150"] 3.81 [.150"] 3.81 [.150"] AC3MAV4 | + 0\_2 0 2 -30 8.25 [.325"] 1+G С [.150"] 0-4.45 [.175" 3.81 +Panel cutout CL 0ø1.2mm(.047") Oø1.6mm(.063") +Panel cutout CL O ø1.6mm(.063")

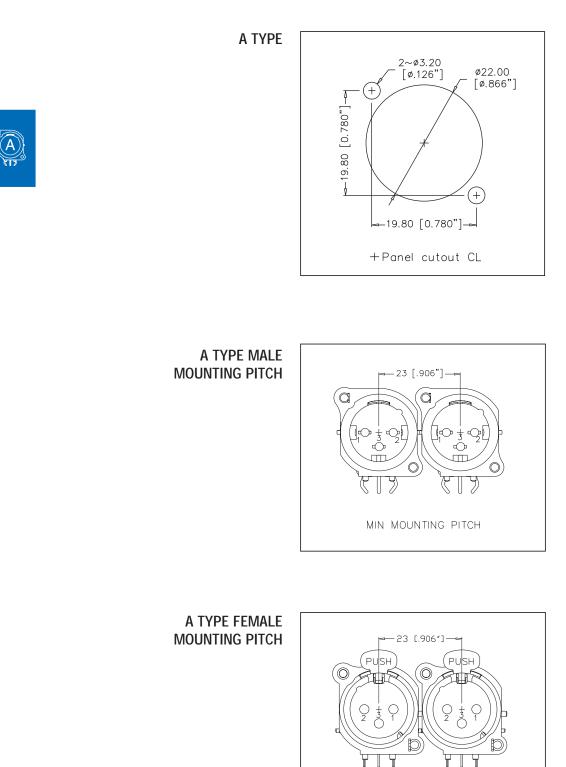


AC SERIES CHASSIS CONNECTORS

#### THERMOPLASTIC A TYPE FLANGE

### AC SERIES A TYPE CHASSIS

PANEL CUTOUT DIMENSIONS - FRONT VIEW



MIN MOUNTING PITCH