

## EP / AP SERIES HIGH POWER CONNECTORS

The EP Series incorporates a rugged zinc diecast shell to give it maximum durability when used in demanding situations. The EP cable connector cable flex relief design minimises cable bend stress at point of entry into the connector housing.

The AP Series Shell is manufactured from tough, durable thermoplastic, and ideal for fixed indoor installations. Both the EP and AP Series utilise the same contact and insulator components.

#### **Features**

- High current contacts for distortion free signal.
- Tough, durable zinc diecast shell for the EP series.
- Cost effective durable thermoplastic shell for the AP series.
- EP series available in 3, 4, 5, 6 and 8 contact arrangements
- AP series available in 4, 5, 6, and 8 contact arrangements.
- Cable clamp capable of supporting cables from 9mm (0.35") to 16mm (0.63") in diameter
- · Quick release, vibration resistant latch lock.
- EP Cable Connectors are supplied with two different boots for different cable diameters.
- · AP & EP Series are completely intermatable.

### **Options**

- · Solder Bucket termination
- · Nickel Plated Zinc Alloy shell
- · Black finished Zinc Alloy shell
- · Precision machined contacts
- · Thermoplastic shell

### **Ordering Codes**

We have listed the more common ordering codes in each section. Please contact us if you need any further assistance.

## Simple steps to guide you in using this catalogue

- 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.



#### **METAL TYPE - SOLDER**



The EP Series has set the standard in high performance speaker connectors. Apart from its durability and strength, it offers consistent superior power handling capabilities.

#### Features:

- Solder Bucket connections.
- Precision machined contacts.
- Diecast Metal Housings
- · High current contacts
- Male and female cable and chassis connectors available.
- EP Cable Connectors are supplied with two different boots for different cable diameters.

Options: Black Finish Shell.

Specifications: Page 57-58

Panel Cutouts: Page 58

PRODUCT - FIGURE	DRAWING	Dimensions in mm (inches)	DESCRIPTION	VARIATIONS	PART NUMBER
	64.0 [2.521"] 		EP Male cable connector,	3 poic flicker filliant   El -3-	EP-3-12
		(A)1.138	Machined contacts, Metal Shell	3 pole black finish	EP-3-12B
			4 pole nickel finish	EP-3-12 EP-3-12B EP-4-12 EP-4-12B EP-5-12 EP-5-12B EP-6-12 EP-6-12B EP-8-12 EP-8-12B EP-3-11P EP-3-11PB EP-4-11PB EP-4-11PB EP-5-11PB	
			4 pole black finish	EP-4-12B	
		OR CABLE	5 pole nickel finish	EP-5-12	
	PIN INSULATO	SHELL		5 pole black finish	EP-5-12B
ISO ASSEMBLY OF EP MALE			6 pole nickel finish	EP-6-12	
EP WALE			6 pole black finish	EP-6-12B	
			8 pole nickel finish EP-8-12	EP-8-12	
				8 pole black finish	EP-8-12B
	66.8 [2.63']	EP Female cable connector,	3 pole nickel finish	EP-8-12 EP-8-12B EP-3-11P EP-3-11PB EP-4-11P	
		Machined contacts, Metal Shell	3 pole black finish		
			4 pole nickel finish EP-4-11P		
	88.0 [3	88.0 [3.465*]		4 pole black finish EP-4-11PB	EP-4-11PB
ISO ASSEMBLY OF EP FEMALE			5 pole nickel finish	EP-5-11P	
	PIN INSULA	TOR SHELL CABLE CL.	AMP BUSHING	5 pole black finish	EP-5-11PB
				6 pole nickel finish EP-6-11P	
	660	60 S		6 pole black finish	EP-6-11PB
			8 pole nickel finish	EP-8-11P	
				8 pole black finish	EP-8-11PB



#### **METAL TYPE - SOLDER**

PRODUCT - FIGURE	DRAWING	Dimensions in mm (inches)	DESCRIPTION	VARIATIONS	PART NUMBER
	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Π	mount,	3 pole nickel finish	EP-3-14
		1.132		EP-3-14B	
		Round Flange, Machined contacts, Metal Shell	4 pole nickel finish	EP-4-14	
O interest	-29.2 [1.148°] → -050.8 [02°]	3.5 [.138"]		4 pole black finish	EP-4-14B
		-31.8 [1.252"]		5 pole nickel finish EP-5-14	EP-5-14
				5 pole black finish	EP-5-14B
				6 pole nickel finish	EP-6-14
				6 pole black finish	EP-6-14B
				8 pole nickel finish	EP-8-14
				8 pole black finish	EP-8-14B
100		7.5 [.295*]	EP Female chassis mount,	3 pole nickel finish	EP-3-13P
100	9508 [2']  -29.2 [I.148']  -950.8 [2']  -36.5 [I.438']		Round Flange, Machined contacts,	3 pole black finish	EP-3-13PB
		38.3 [1,5087]	Metal Shell	4 pole nickel finish	EP-4-13P
		3.5 [.138*]		4 pole black finish	EP-4-13PB
		36.5 [1.438*]		5 pole nickel finish EP-5-13P	EP-5-13P
				5 pole black finish	EP-5-13PB
				6 pole nickel finish	EP-6-13P
				6 pole black finish	EP-6-13PB
				8 pole nickel finish	EP-8-13PT
				8 pole black finish	EP-8-13PBT
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7.5 [.295"]	EP Female chassis mount, Round Flange, Stamped contacts, Metal Shell	8 pole nickel finish	EP-8-13P
Q and discount	950.8 [92"]	3.5 [.138"] 		8 pole black finish	EP-8-13PB



#### THERMOPLASTIC TYPE - SOLDER



The AP Series provides the same power handling performance as the EP Series in a cost effective, yet durable Thermoplastic housing.

#### Features:

- Solder Bucket connections.
- Precision machined contacts.
- Thermoplastic Housings
- · High current contacts
- Male & Female Cable and Chassis connectors available.

Specifications: Page 57-58 Panel Cutouts: Page 58

PRODUCT - FIGURE	DRAWING	Dimensions in mm (inches)	DESCRIPTION	VARIATIONS	PART NUMBER
	28.8 [1.135']		AP Male cable connector,	4 pole	AP-4-12
		Machined contacts, Thermoplastic Black	5 pole	AP-5-12	
8				6 pole	AP-6-12
	100.0 [3.937	ر"]		8 pole	AP-8-12
	Ø28.8 (1.132*)		AP Female cable connector, Machined contacts, Thermoplastic Black shell.	4 pole	AP-4-11
110				5 pole	AP-5-11
				6 pole	AP-6-11
	98.7 [3.886*]	]		8 pole	AP-8-11
		<u>-                                    </u>	AP Male chassis mount, Round Flange, Machined contacts, Thermoplastic Black shell.  4 pole 5 pole 6 pole 8 pole	4 pole	AP-4-14
	29.2 [1.15] 450.8 [2]	232.4 [81.276 <sup>-</sup> ]-		5 pole	AP-5-14
		<u></u>		6 pole	AP-6-14
		2.8 [.11 <sup>*</sup> ] 		8 pole	AP-8-14
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7.5 (.295")	AP Female chassis mount, Round Flange, Machined contacts, Thermoplastic Black shell.	4 pole	AP-4-13
		-632.4 [81.276])-		5 pole	AP-5-13
				6 pole	AP-6-13
		2.8 [.11"] 		8 pole	AP-8-13
		<u></u>	AP Male chassis mount, Rectangular Flange, Machined contacts, Thermoplastic Black of pole	4 pole	AP-4-22
1	282 [1.148 <sup>-</sup> ].	2.4 [91.276]		5 pole	AP-5-22
	AMPHINOL			6 pole	AP-6-22
Name of the last	20.2 [1.140]		shell.	8 pole	AP-8-22
.5		7.5 [.295"]	AP Female chassis mount,	4 pole	AP-4-21
	Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	1 28.2 [ 1.506.]	Rectangular Flange, Machined contacts,	ctangular Flange, 5 pole AP-5-21	AP-5-21
( · · · · ·			Thermoplastic Black shell.	6 pole	AP-6-21
THE REAL PROPERTY.	-29.2 [1.148"]- -40.0 [1.575"]	2.8 [.11"] 	SHEII.	8 pole	AP-8-21



#### STANDARD DATA

### STANDARD DATA EP/AP

		VALUE					
GENERAL CHARACTERISTICS	Number of contacts	3	4	5	6	8	
	Contact Arrangements (Front view of pin insert)	1 3 • e	1 4 6 2 3 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	5 6 8 4	2 6 4 6 4 6 4 6 6 6 6 6 6 6 6 6 6 6 6 6	02 8 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	Termination	SOLDER					
	Wire Gauge - Stranded wire:	12AWG	12AWG	12AWG	12AWG	14AWG	
	Flammability	UL94V-0					
	Environmental	Complies with RoHS Directive 2002/95/EC					
ELECTRICAL CHARACTERISTICS	Service Voltage RMS <sup>1)</sup>	460V	660V	200V	200V	100V	
CHARACTERISTICS	Test Voltage AC RMS	2400V	3000V	1600V	1600V	1300V	
	Current carrying capacity	20A	20A	20A	20A	15A	
	Typicial Contact Resistance	≤ 3mΩ					
	Insulation Resistance	≥ 1000MΩ					
CLIMATIC CHARACTERISTICS	Protection Class	IP40					
CHARACTERISTICS	Operating Temperature	-25°C to +75°C (-13°F to +167°F)					
MECHANICAL	Weight - EP 11 & 12 <sup>2)</sup>	80g	84g	86g	86g		
CHARACTERISTICS		(0.176lb)	(0.185lb)	(0.189lb)	(0.189lb)		
	Weight - EP 13 & 14 <sup>2)</sup>	48g	50g	54g	54g		
		(0.105lb)	(0.110lb)	(0.119lb)	(0.119lb)		
	Weight - AP 11 & 12 <sup>2)</sup>	N/A	42g	44g	44g		
			(0.092lb)	(0.097lb)	(0.097lb)		
	Weight - AP 13, 14, 21 & 22 <sup>2)</sup>	N/A	26g	30g	30g		
			(0.057lb)	(0.066lb)	(0.066lb)		
	Typical Cable retention force	22Kg to 44Kg (50lb to 100lb) - Dependant on cable material and diameter					
	Mechanical operations	1000 mating cycles					



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.

#### STANDARD DATA

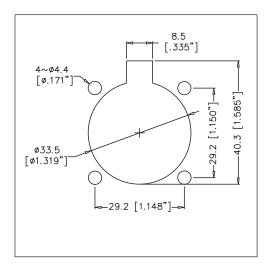
## STANDARD DATA EP/AP (CONT'D)

		DETAILS				
MATERIALS	TYPE	AP	EP			
	Connector shell	Modified PPE Resin	Diecast Zinc Alloy			
	Shell finish	Black	Satin Nickel or Black			
	Insulators	UL94V-0 PBT Resin				
Cable Bushing		Silicon Rubber	UL94 HB Thermoplastic Elastomer			
Male contact Machined - Solder						
	Material / Plating	Brass / Bright Tin  Brass / Bright Tin				
	Female contact Machined - Solder					
	Material / Plating					
CLAMPING	Cable OD Range	11mm to 17mm	9mm to 16mm			
CHARACTERISTICS		(0.43" to 0.67")	(0.35" to 0.63")			
	Retention Method	Two opposing plastic screws	Metal saddle clamp			



## **EP/AP SERIES PANEL CUTOUT DATA - FRONT VIEW**

### EP 13/AP 13/AP 21



### EP 14/AP 14/AP 22

