

# Amphenol

EP / AP / SP SERIES

EP 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.


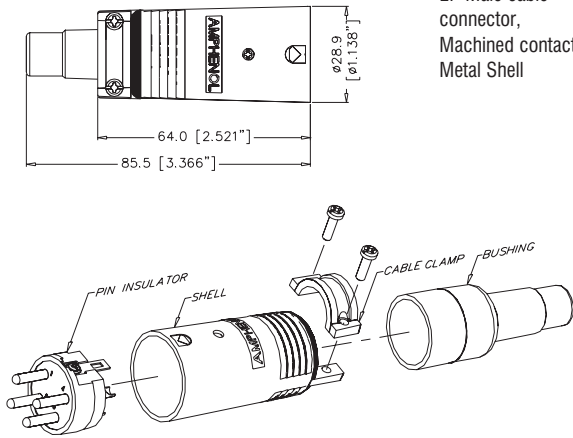

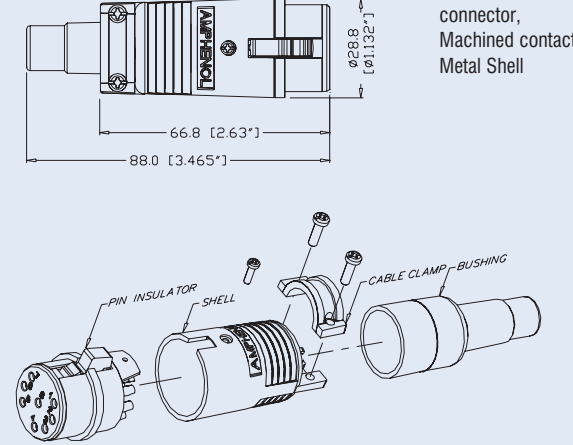
**Features:**

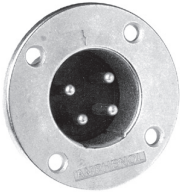

- Solder Bucket connections.
- Precision machined contacts.
- Diecast Metal Housings
- High current contacts
- Male and female cable and chassis connectors available.

**Options:** Black Finish Shell.

**Specifications:** Page 77-78

**Panel Cutouts:** Page 78

PRODUCT - FIGURE	DRAWING	Dimensions in mm (inches)	DESCRIPTION	VARIATIONS	PART NUMBER
 <p><b>ISO ASSEMBLY OF EP MALE</b></p>		<p>EP Male cable connector, Machined contacts, Metal Shell</p>	3 pole nickel finish	EP-3-12	
			3 pole black finish	EP-3-12B	
			4 pole nickel finish	EP-4-12	
			4 pole black finish	EP-4-12B	
			5 pole nickel finish	EP-5-12	
			5 pole black finish	EP-5-12B	
			6 pole nickel finish	EP-6-12	
			6 pole black finish	EP-6-12B	
			8 pole nickel finish	EP-8-12	
			8 pole black finish	EP-8-12B	
 <p><b>ISO ASSEMBLY OF EP FEMALE</b></p>		<p>EP Female cable connector, Machined contacts, Metal Shell</p>	3 pole nickel finish	EP-3-11P	
			3 pole black finish	EP-3-11PB	
			4 pole nickel finish	EP-4-11P	
			4 pole black finish	EP-4-11PB	
			5 pole nickel finish	EP-5-11P	
			5 pole black finish	EP-5-11PB	
			6 pole nickel finish	EP-6-11P	
			6 pole black finish	EP-6-11PB	
			8 pole nickel finish	EP-8-11P	
			8 pole black finish	EP-8-11PB	

PRODUCT - FIGURE	DRAWING	Dimensions in mm (inches)	DESCRIPTION	VARIATIONS	PART NUMBER
		<p>Dimensions in mm (inches)</p> <p>29.2 [1.148"]</p> <p>29.2 [1.148"]</p> <p>ø50.8 [ø2"]</p> <p>3.5 [.138"]</p> <p>31.8 [1.252"]</p> <p>ø28.6 [ø1.132"]</p>	<p>EP Male chassis mount, Round Flange, Machined contacts, Metal Shell</p>	3 pole nickel finish	EP-3-14
				3 pole black finish	EP-3-14B
				4 pole nickel finish	EP-4-14
				4 pole black finish	EP-4-14B
				5 pole nickel finish	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
		<p>Dimensions in mm (inches)</p> <p>29.2 [1.148"]</p> <p>29.2 [1.148"]</p> <p>ø50.8 [ø2"]</p> <p>7.5 [.295"]</p> <p>3.5 [.138"]</p> <p>36.5 [1.438"]</p> <p>38.3 [1.508"]</p>	<p>EP Female chassis mount, Round Flange, Machined contacts, Metal Shell</p>	3 pole nickel finish	EP-3-13P
				3 pole black finish	EP-3-13PB
				4 pole nickel finish	EP-4-13P
				4 pole black finish	EP-4-13PB
				5 pole nickel finish	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-8-13P
				8 pole black finish	EP-8-13PB





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.

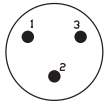
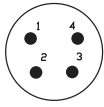
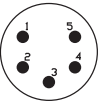
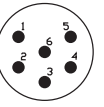
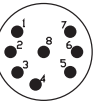
**Specifications: Page 77-78**

**Panel Cutouts: Page 78**

PRODUCT - FIGURE	DRAWING	Dimensions in mm (inches)	DESCRIPTION	VARIATIONS	PART NUMBER
		28.8 [1.135"] 100.0 [3.937"]	AP Male cable connector, Machined contacts, Thermoplastic Black shell.	4 pole	AP-4-12
				5 pole	AP-5-12
				6 pole	AP-6-12
				8 pole	AP-8-12
		28.8 [1.132"] 98.7 [3.886"]	AP Female cable connector, Machined contacts, Thermoplastic Black shell.	4 pole	AP-4-11
				5 pole	AP-5-11
				6 pole	AP-6-11
				8 pole	AP-8-11
		29.2 [1.15"] 50.8 [2"] 32.4 [1.276"] 30.6 [1.204"] 2.8 [1.1"] 6.2 [244"] 31.8 [1.252"]	AP Male chassis mount, Round Flange, Machined contacts, Thermoplastic Black shell.	4 pole	AP-4-14
				5 pole	AP-5-14
				6 pole	AP-6-14
				8 pole	AP-8-14
		29.2 [1.148"] 50.8 [2"] 7.5 [295"] 32.4 [1.276"] 38.3 [1.508"] 2.8 [1.1"] 6.2 [244"] 36.5 [1.438"]	AP Female chassis mount, Round Flange, Machined contacts, Thermoplastic Black shell.	4 pole	AP-4-13
				5 pole	AP-5-13
				6 pole	AP-6-13
				8 pole	AP-8-13
		29.2 [1.148"] 50.0 [1.969"] 40.0 [1.575"] 32.4 [1.276"] 30.6 [1.204"] 2.8 [1.1"] 6.2 [244"] 31.8 [1.252"]	AP Male chassis mount, Rectangular Flange, Machined contacts, Thermoplastic Black shell.	4 pole	AP-4-22
				5 pole	AP-5-22
				6 pole	AP-6-22
				8 pole	AP-8-22
		29.2 [1.148"] 50.0 [1.969"] 40.0 [1.575"] 7.5 [295"] 32.4 [1.276"] 38.3 [1.508"] 2.8 [1.1"] 6.2 [244"] 36.5 [1.438"]	AP Female chassis mount, Rectangular Flange, Machined contacts, Thermoplastic Black shell.	4 pole	AP-4-21
				5 pole	AP-5-21
				6 pole	AP-6-21
				8 pole	AP-8-21



## STANDARD DATA EP/AP

		VALUE				
<b>GENERAL CHARACTERISTICS</b>	Number of contacts	3	4	5	6	8
	Contact Arrangements (Front view of pin insert)					
	Termination	SOLDER				
	Wire Gauge - Stranded wire:	12AWG	12AWG	12AWG	12AWG	14AWG
	Flammability	UL94V-0				
Environmental	Complies with RoHS Directive 2002/95/EC					
<b>ELECTRICAL CHARACTERISTICS</b>	Service Voltage RMS <sup>1)</sup>	460V	660V	200V	200V	100V
	Test Voltage AC RMS	2400V	3000V	1600V	1600V	1300V
	Current carrying capacity	20A	20A	20A	20A	15A
	Typical Contact Resistance	≤3mΩ				
	Insulation Resistance	≥1000MΩ				
<b>CLIMATIC CHARACTERISTICS</b>	Protection Class	IP40				
	Operating Temperature	-25 °C to +75 °C (-13°F to +167°F)				
<b>MECHANICAL CHARACTERISTICS</b>	Weight - EP 11 & 12 <sup>2)</sup>	80g (0.176lb)	84g (0.185lb)	86g (0.189lb)	86g (0.189lb)	86g (0.189lb)
	Weight - EP 13 & 14 <sup>2)</sup>	48g (0.105lb)	50g (0.110lb)	54g (0.119lb)	54g (0.119lb)	54g (0.119lb)
	Weight - AP 11 & 12 <sup>2)</sup>	N/A	42g (0.092lb)	44g (0.097lb)	44g (0.097lb)	44g (0.097lb)
	Weight - AP 13, 14, 21 & 22 <sup>2)</sup>	N/A	26g (0.057lb)	30g (0.066lb)	30g (0.066lb)	28g (0.061lb)
	Typical Cable retention force	22Kg to 44Kg (50lb to 100lb) - Dependant on cable material and diameter				
	Mechanical operations	1000 mating cycles				

<sup>1)</sup> 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.



Rev 2 - 09/2005

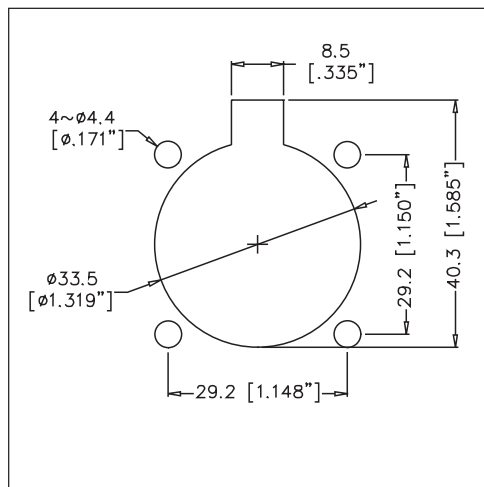
## STANDARD DATA EP/AP (CONT'D)

MATERIALS	TYPE	DETAILS	
		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	Brass / Bright Tin	
	Material / Plating		
	Female contact Machined - Solder	Brass / Bright Tin	
	Material / Plating		
CLAMPING CHARACTERISTICS	Cable OD Range	11mm to 17mm (0.43" to 0.67")	9mm to 16mm (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

