



## 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

- 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.





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  | 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    | DESCRIPTION   | VARIATIONS           | PART NUMBER |
|---|------------|---|----------------------|-------------|
|    |            | EP Male chassis mount, Round Flange, Machined contacts, Metal Shell   | 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   |   |                      |             |
|  |            | EP Female chassis mount, Round Flange, Machined contacts, Metal Shell | 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-8-13PT   |
| 8 pole black finish   | EP-8-13PBT |   |                      |             |
|  |            | EP Female chassis mount, Round Flange, Stamped contacts, Metal Shell  | 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 57-58](#)

**Panel Cutouts:** [Page 58](#)

| PRODUCT - FIGURE | DRAWING | Dimensions in mm (inches)  | DESCRIPTION  | VARIATIONS                           | PART NUMBER                              |
|------------------|---------|--|--|--------------------------------------|--|
|                  |         | 28.8 [1.135"]<br>100.0 [3.937"]  | AP Male cable connector, Machined contacts, Thermoplastic Black shell.                     | 4 pole<br>5 pole<br>6 pole<br>8 pole | AP-4-12<br>AP-5-12<br>AP-6-12<br>AP-8-12 |
|                  |         | 28.8 [1.132"]<br>98.7 [3.886"]   | AP Female cable connector, Machined contacts, Thermoplastic Black shell.                   | 4 pole<br>5 pole<br>6 pole<br>8 pole | AP-4-11<br>AP-5-11<br>AP-6-11<br>AP-8-11 |
|                  |         | 29.2 [1.15"]<br>29.2 [1.15"]<br>450.8 [2"]<br>432.4 [16.276"]<br>30.6 [1.204"]<br>2.8 [0.11"]<br>6.2 [0.244"]<br>31.8 [1.252"]                                       | AP Male chassis mount, Round Flange, Machined contacts, Thermoplastic Black shell.         | 4 pole<br>5 pole<br>6 pole<br>8 pole | AP-4-14<br>AP-5-14<br>AP-6-14<br>AP-8-14 |
|                  |         | 29.2 [1.148"]<br>29.2 [1.148"]<br>450.8 [2"]<br>7.5 [0.295"]<br>432.4 [16.276"]<br>38.3 [1.508"]<br>2.8 [0.11"]<br>6.2 [0.244"]<br>36.5 [1.438"]                     | AP Female chassis mount, Round Flange, Machined contacts, Thermoplastic Black shell.       | 4 pole<br>5 pole<br>6 pole<br>8 pole | AP-4-13<br>AP-5-13<br>AP-6-13<br>AP-8-13 |
|                  |         | 29.2 [1.148"]<br>29.2 [1.148"]<br>50.0 [1.969"]<br>40.0 [1.575"]<br>432.4 [16.276"]<br>30.6 [1.204"]<br>2.8 [0.11"]<br>6.2 [0.244"]<br>31.8 [1.252"]                 | AP Male chassis mount, Rectangular Flange, Machined contacts, Thermoplastic Black shell.   | 4 pole<br>5 pole<br>6 pole<br>8 pole | AP-4-22<br>AP-5-22<br>AP-6-22<br>AP-8-22 |
|                  |         | 29.2 [1.148"]<br>29.2 [1.148"]<br>50.0 [1.969"]<br>40.0 [1.575"]<br>7.5 [0.295"]<br>432.4 [16.276"]<br>38.3 [1.508"]<br>2.8 [0.11"]<br>6.2 [0.244"]<br>36.5 [1.438"] | AP Female chassis mount, Rectangular Flange, Machined contacts, Thermoplastic Black shell. | 4 pole<br>5 pole<br>6 pole<br>8 pole | AP-4-21<br>AP-5-21<br>AP-6-21<br>AP-8-21 |



## STANDARD DATA EP/AP

|                                   |  | VALUE   |   |   |   |   |
|-----------------------------------|--|---|---|---|---|---|
| <b>GENERAL CHARACTERISTICS</b>    | Number of contacts                                 | 3   | 4   | 5   | 6   | 8   |
|                                   | Contact Arrangements<br>(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<br>(0.176lb)  | 84g<br>(0.185lb)  | 86g<br>(0.189lb)  | 86g<br>(0.189lb)  |   |
|                                   | Weight - EP 13 & 14 <sup>2)</sup>                  | 48g<br>(0.105lb)  | 50g<br>(0.110lb)  | 54g<br>(0.119lb)  | 54g<br>(0.119lb)  |   |
|                                   | Weight - AP 11 & 12 <sup>2)</sup>                  | N/A   | 42g<br>(0.092lb)  | 44g<br>(0.097lb)  | 44g<br>(0.097lb)  |   |
|                                   | Weight - AP 13, 14, 21 & 22 <sup>2)</sup>          | N/A   | 26g<br>(0.057lb)  | 30g<br>(0.066lb)  | 30g<br>(0.066lb)  |   |
|                                   | 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.

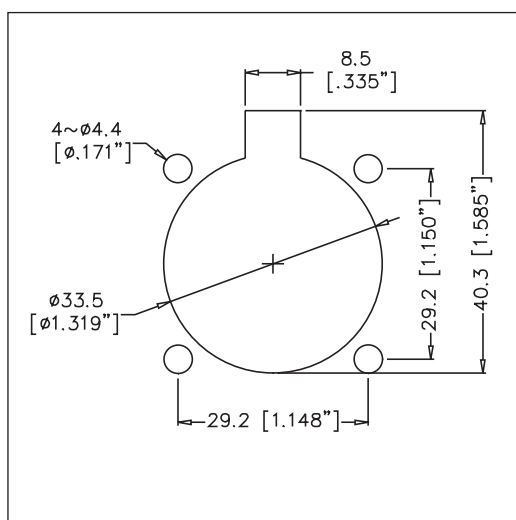


## STANDARD DATA EP/AP (CONT'D)

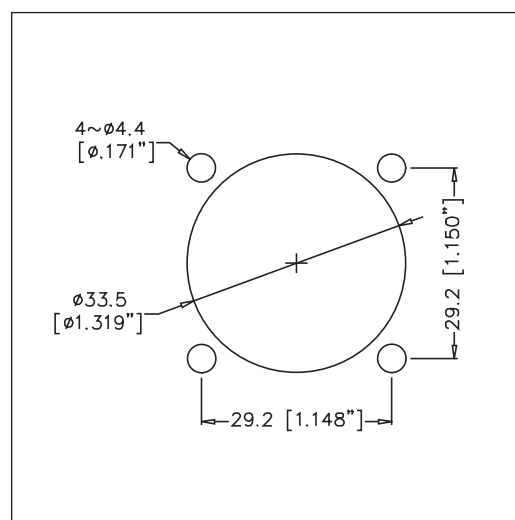
|                          |                                  | DETAILS                          |                                 |
|--------------------------|----------------------------------|----------------------------------|---------------------------------|
| MATERIALS                | TYPE 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



## Данный компонент на территории Российской Федерации

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Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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