

# Amphenol

Amphenol-Tuchel Electronics GmbH

## 44 Series Circular Connectors



# Amphenol 44 Series

## Economic Environmental Connecting Solutions

### Description

Amphenol 44 series associates easy assembly with high performance and an inexpensive price. The easy one piece structure is impervious against water, fuel, lubricants, ozone, road salt and other environmental impacts. Furthermore the 44 series is vibration resistant and field proven in rugged applications. Due to the high quality and the excellent price/performance relationship there is a wide range of applications for this connector series.

### Features

- Long time resistance against environmental impacts
- 3 liquid proof seals (primary, secondary and wire)
- Quick and easy assembly
- Quick and easy mating
- Protection against mismatching
- Protection class IP65/67
- High reliability
- Discrete wire interconnection
- 1,2,3,4,5 and 6 contact configurations available
  - 1 to 6 standard type
  - 2 to 6 low insertion force type

### Applications

- Automotive safety and security system connectors
- Traffic control equipment
- Marine industrial connectors
- Truck accessory disconnects
- Mining ventilation systems
- Car interconnections
- RV interconnections

### Insert configurations



Remark: For the low insertion force type configuration 4 differs.

# Amphenol 44 Series

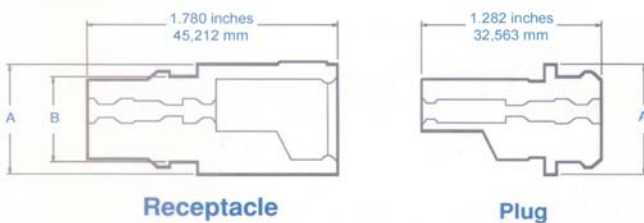
## Technical Characteristics

|                                  |   |
|----------------------------------|---|
| Rated insulation voltage         | 250 V~  |
| Rated impulse withstand voltage  | 1000 V~   |
| Current carrying capacity        | 8 A   |
| Insulation resistance            | > 5000 MΩ   |
| Contact resistance               | < 30 mΩ   |
| Operating temperature            | - 40°C to +105°C  |
| Wire gauge                       | AWG 18 – AWG 14 (1,0 mm <sup>2</sup> - 2,5 mm <sup>2</sup> )  |
| Overall wire insulation diameter | 0.080 to 0.130 inches (2,03 to 3,30 mm)   |
| Contact Material                 | Tinned copper alloy   |
| Insulation material              | Santoprene, thermoplastic rubber  |
| Mating cycles                    | Max. 25   |
| Contact retention                | Axial displacement of contact < 0.03 inches (0,762 mm)  |
| Color                            | Black   |
| Strain relief                    | For free connectors, the wires have to be prevented against push-/pull-forces and from rotation at the connection area. |

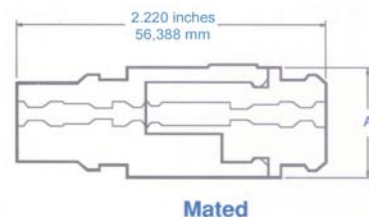
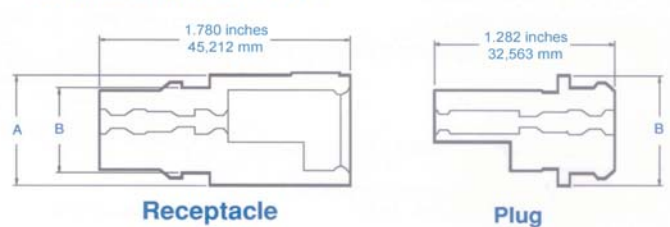
## Dimensions

| No. of contacts | A                        | B                        |
|-----------------|--------------------------|--------------------------|
| 1               | 0.497 inches (12,624 mm) | 0.440 inches (11,176 mm) |
| 2               | 0.607 inches (15,418 mm) | 0.470 inches (11,938 mm) |
| 3               | 0.708 inches (17,983 mm) | 0.570 inches (14,478 mm) |
| 4               | 0.819 inches (20,803 mm) | 0.682 inches (17,323 mm) |
| 5               | 0.819 inches (20,803 mm) | 0.682 inches (17,323 mm) |
| 6               | 0.933 inches (23,698 mm) | 0.796 inches (20,218 mm) |

### Standard Type



### Low Insertion Force Type



# Ordering Information

## Amphenol 44 Series

### Standard Type (Insulation only)

| No. of contacts | Receptacles Part No. | Plug Part No. |
|-----------------|----------------------|---------------|
| 1               | 044-104-10001-02     | 044-103-10001 |
| 2               | 044-104-10002-02     | 044-103-10002 |
| 3               | 044-104-10003-02     | 044-103-10003 |
| 4               | 044-104-10004-02     | 044-103-10004 |
| 5               | 044-104-10005-02     | 044-103-10005 |
| 6               | 044-104-10006-02     | 044-103-10006 |



### Low insertion force type (Insulation only)

| No. of contacts | Receptacles Part No. | Plug Part No. |
|-----------------|----------------------|---------------|
| 2               | 044-104-10302        | 044-103-10302 |
| 3               | 044-104-10303        | 044-103-10303 |
| 4               | 044-104-10304        | 044-103-10304 |
| 5               | 044-104-10305        | 044-103-10305 |
| 6               | 044-104-10306        | 044-103-10306 |

Remark: Connector with one contact size is not available in low insertion force type  
The standard and low insertion force housings are not intermatable

### Contacts

| Pin contacts (receptacle) | Socket contacts (plug)  | Pcs  | Remark                              |
|---------------------------|-------------------------|------|-------------------------------------|
| 044-100-1414P-100(101)    | 044-102-1414S-100(101)  | 100  | Bag for use with hand crimping tool |
| 044-100-1414P-1000(101)   | 044-102-1414S-1000(101) | 1000 | Bag for use with hand crimping tool |

Reels with 2000 and 5000 pcs. for automatic crimping tool on request

### Tools

| Description                        | Part No. | Crimping dies | Remark             |
|------------------------------------|----------|---------------|--------------------|
| Hand crimping tool without ratchet | 357-561  | -             | For loose contacts |
| Hand crimping tool with ratchet    | 357-588  | -             | For loose contacts |

Automatic crimping tool on request

### Hand insertion and removal tools

| Description         | Contact part No. | Insertion tool | Removal tool | Remark                   |
|---------------------|------------------|----------------|--------------|--------------------------|
| Pin contact tool    | 044-100-1414P    | 356-258        | 356-259      | Use with receptacle only |
|                     | ZN01 020 0009 7  |                |              |                          |
| Socket contact tool | 044-102-1414S    | 356-258        | 356-260      | Use with plugs only      |
|                     | ZN02 020 0009 7  |                |              |                          |

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We reserve the right to change the design due to improvement in quality, development or production requirements.

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All technical data have been measured in a laboratory environment and can be different during practical usage of the product. Any product information is for descriptive usage only and not legally binding; particularly the information does not constitute or provide any legal guaranties.

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- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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