

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.

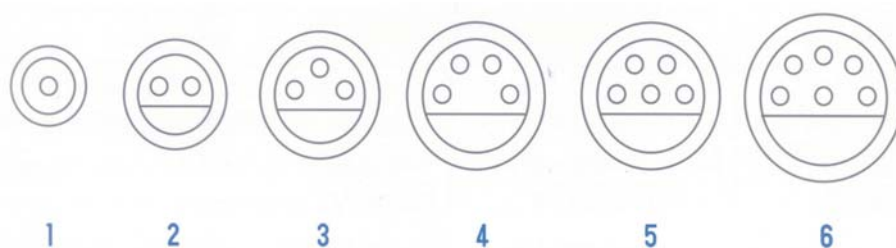
Features

- 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.

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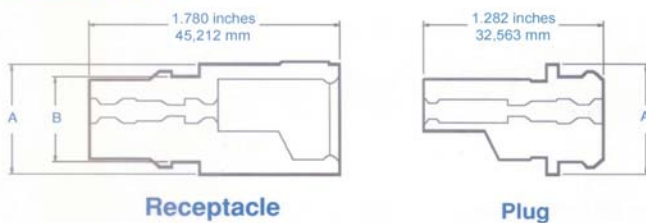
Technical Characteristics

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 mm² - 2,5 mm²)
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.

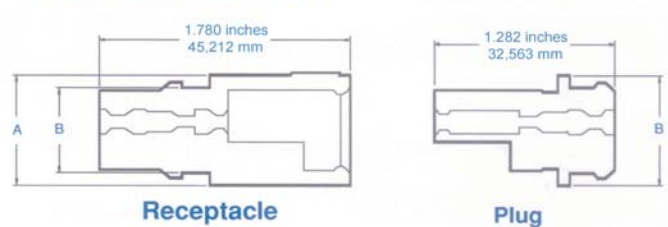
Dimensions

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

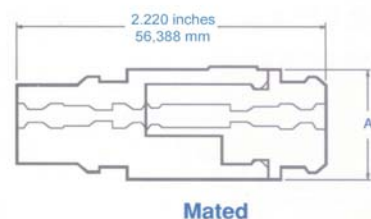


Low Insertion Force Type



Technical drawing showing the cross-section of the Standard Type Mated connector. The length dimension is 2.220 inches (56,388 mm) and the contact width dimension is A.

Mated



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 ZN01 020 0009 7	356-258	356-259	Use with receptacle only
Socket contact tool	044-102-1414S ZN02 020 0009 7	356-258	356-260	Use with plugs only

General information

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

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