





## Thermoplastic Rubber Circular Connectors

#### Available in 1, 2, 3, 4, 5 and 6 position

Amphenol Sine Systems proudly introduces the **44 Series<sup>TM</sup> Thermoplastic Rubber Circular Connectors**. The demand for reliable and versatile connectivity solutions has never been higher and these connectors exhibit outstanding durability, resisting a range of environmental factors including water, fuel, lubricants, ozone, and road salt. Our 44 Series<sup>TM</sup> is vibration-resistant and field-proven for indoor/outdoor, rugged applications.

#### **Advantages**

- Sealed watertight system ensures performance in wet conditions
- Low-cost, economical solution for manufacturers
- Proven reliability and established as a trusted choice across industries
- Reduce both time and installation expenses with a straightforward crimp and insert method





#### **Key Features**

- Offered in 1 through 6 position variations
- Engineered with a polarized design to facilitate quick, mistake-free, blind connections and protection against mis-mating
- Designed for 14-18AWG wires, able to efficiently handle a range of power requirements
- IP65/67 Rated (in mated condition)
- Stamped and formed contacts for discreet wire interconnection

Applications: Marine, Military, Heavy Equipment, Industrial, Traffic Control, Outdoor Lighting, Recreational Vehicle, as well as other demanding interconnect applications

#### 44 Series™ - Specifications (Reference Individual Datasheets)

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Temperature Range	-40°C to +105°C
Max. Current (Amperage)	8A
Voltage Rating	250V
Impulse Withstand Voltage	1000V
Insulation Resistance	> 5000mΩ
Contact Resistance	< 30mΩ
Max. Mating Cycles	> 25
IP Rating (in mated condition)	IP65/67
Wire Range	18 - 14AWG (2.5mm² - 1.0mm²)

Contacts	Tinned, Copper-Alloy
Contact Retention	Axial Displacement of Contact < 0.03" (0.762mm)
Insulation Material	Santoprene, Thermoplastic Rubber
Strain Relief	For free connectors, the wires have to be prevented against push/pull-forces and from rotation at the connection area
RoHS Compliant	ROHS ALL materials meet the requirements of the European Directive.

Overall Wire Insulation Dia. 0.080" to 0.130" (2.03mm to 3.30mm)

44 Series™ - Insert Configurations







2 Position



3 Position



4 Position



5 Position



6 Position







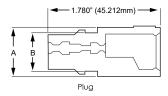


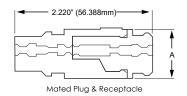


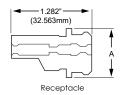
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### 44 Series<sup>™</sup> - Dimensions (mm)



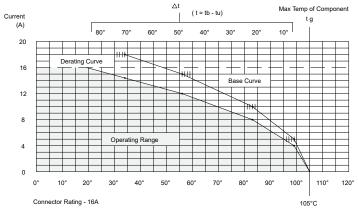




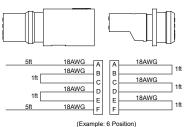
No. of Contacts	A Dimension	B Dimension
1	0.497" (12.624mm)	0.440" (11.176mm)
2	0.607" (15.418mm)	0.470" (11.938mm)
3	0.708" (17.983mm)	0.570" (14.478mm)
4	0.819" (20.803mm)	0.682" (17.323mm)
5	0.819" (20.803mm)	0.682" (17,323mm)
6	0.933" (23,698mm)	0.796" (20,218mm)

Connector: 0441031000x (x = Number Of Positions) Pin: 0441021414S

#### 44 Series™ - Derating Curves







44 Series™ - Seperating Force (lbf)

Force

With an assembled connector and receptacle in a mated condition, held firmly by the wires, apply an axial load until seperation.  The rate of pull shall be one inch per minute.			
	Unmating Force		
	Conector Size	Minimum	Maximum
	1 Position	3 lbf	10 lbf
Connector Seperating	2 Position	6 lbf	15 lbf

8 lbf

9 lbf

10 lbf

10 lbf

18 lbf

20 lbf

30 lbf

30 lbf

3 Position

4 Position

5 Position

6 Position

### 44 Series<sup>TM</sup> - Cut-Away View

- A Plug Housing
- B Receptacle Housing
- (c) Alignment Arrows
- (D) Wire Sealing Area
- (E) Primary Seal
- (F) Secondary Seal
- (G) Secondary Seal Locking Groove
- (H) Socket Contacts
- (J) Pin Contacts
- Boot Seal (For optional cable jacketing)



### 44 Series<sup>TM</sup> - Plugs (See individual datasheets on www.amphenol-sine.com for full specs, faceviews, keying location and product dimensions.)

lmage	Part Number	Description	Wire AWG	Amperage
	04410310001	1 Position, Female Plug, Socket Contact, 44 Series™, Black Body	14-18AWG	8A
	04410310002	2 Position, Female Plug, Socket Contact, 44 Series™, Black Body	14-18AWG	8A
	04410310003	3 Position, Female Plug, Socket Contact, 44 Series™, Black Body	14-18AWG	8A
	04410310004	4 Position, Female Plug, Socket Contact, 44 Series™, Black Body	14-18AWG	8A
	04410310005	5 Position, Female Plug, Socket Contact, 44 Series™, Black Body	14-18AWG	8A
	04410310006	6 Position, Female Plug, Socket Contact, 44 Series™, Black Body	14-18AWG	8A

#### 44 Series<sup>TM</sup> - Receptacles (See individual datasheets on www.amphenol-sine.com for full specs, faceviews, keying location and product dimensions.)

0441041000102	1 Position, Male Receptacle, Pin Contact, 44 Series™, Black Body	14-18AWG	8A
0441041000202	2 Position, Male Receptacle, Pin Contact, 44 Series™, Black Body	14-18AWG	8A
0441041000302	3 Position, Male Receptacle, Pin Contact, 44 Series™, Black Body	14-18AWG	8A



44 Series<sup>TM</sup> - Receptacles (See individual datasheets on www.amphenol-sine.com for full specs, faceviews, keying location and product dimensions.)

Image	Part Number	Description	Wire AWG	Amperage
	0441041000402	4 Position, Male Receptacle, Pin Contact, 44 Series™, Black Body	14-18AWG	8A
	0441041000502	5 Position, Male Receptacle, Pin Contact, 44 Series™, Black Body	14-18AWG	8A
	0441041000602	6 Position, Male Receptacle, Pin Contact, 44 Series™, Black Body	14-18AWG	8A

44 Series™ - Contacts (See individual datasheets on www.amphenol-sine.com for full specs and product dimensions.)

	0441001414P100101	Male Pin Contact for Receptacle, Tinned Copper Alloy, 100 Piece Bag	14-18AWG	8A
	0441001414P1000101	Male Pin Contact for Receptacle, Tinned Copper Alloy, 1,000 Piece Bag	14-18AWG	8A
	0441001414P5000	Male Pin Contact for Receptacle, Tinned Copper Alloy, 5,000 Piece Reel	14-18AWG	8A
044102	0441021414\$100101	Female Socket Contact for Plug, Tinned Copper Alloy, 100 Piece Bag	14-18AWG	8A
	0441021414\$1000101	Female Socket Contact for Plug, Tinned Copper Alloy, 1,000 Piece Bag	14-18AWG	8A
	0441021414S5000	Female Socket Contact for Plug, Tinned Copper Alloy, 5,000 Piece Reel	14-18AWG	8A

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