



# W Series

Mil-DTL-55302 CONNECTORS 0.10" (2.54mm)

## AirBorn W-Series meets or exceeds MIL-C-55302 performance specifications

(for full specification details please consult website)

### Performance;

<b>Contact Rating;</b>	5 Amperes
<b>Solderability;</b>	Terminals (except crimp, wire wrap) tested in accordance with Mil-STD 202
<b>Wire Size;</b>	Stranded 22 AWG (consult factory for other sizes)
<b>Operating Temperature;</b>	-65c to +125c

### Requirements tested per SAE-AS-13441

<b>Test Voltage;</b>	300v RMS, 60Hz @70,000ft 1000v RMS, 60Hz at sea level
<b>Insulation Resistance;</b>	5,000 megohms minimum at 500vdc
<b>Durability;</b>	500 connector mating cycles
<b>Vibration;</b>	Mated Connectors
<b>Shock;</b>	Mated Connectors
<b>Salt Spray;</b>	Mated Connectors
<b>Humidity;</b>	Test type 2
<b>Temperature Cycling;</b>	Mated Connectors
<b>Contact Resistance;</b>	0.005 ohms max (interface measurement)/0.25 volt maximum drop @ 5 amperes
<b>Connector Engaging Force;</b>	4 oz maximum with .031 diameter test per SAE-AS31971

### Materials and Finishes.

<b>Contacts;</b>	Pins= Copper Alloy Clipped Sockets= BeCu/ Copper Alloy
<b>Contact Finish;</b>	Gold Plate / Localized finish
<b>Moulded Insulators;</b>	Glass filled Polyphenylene Sulfide
<b>Hardware;</b>	Jackscrows, Jacksockets, Guide Pins/Sockets all passivated Stainless Steel
<b>Face Seal Gasket;</b>	Silicone Rubber

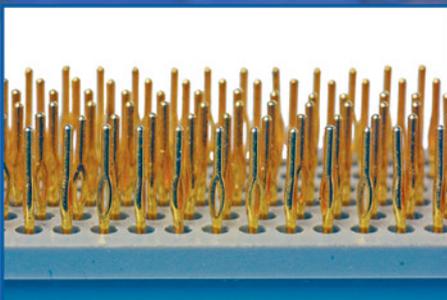
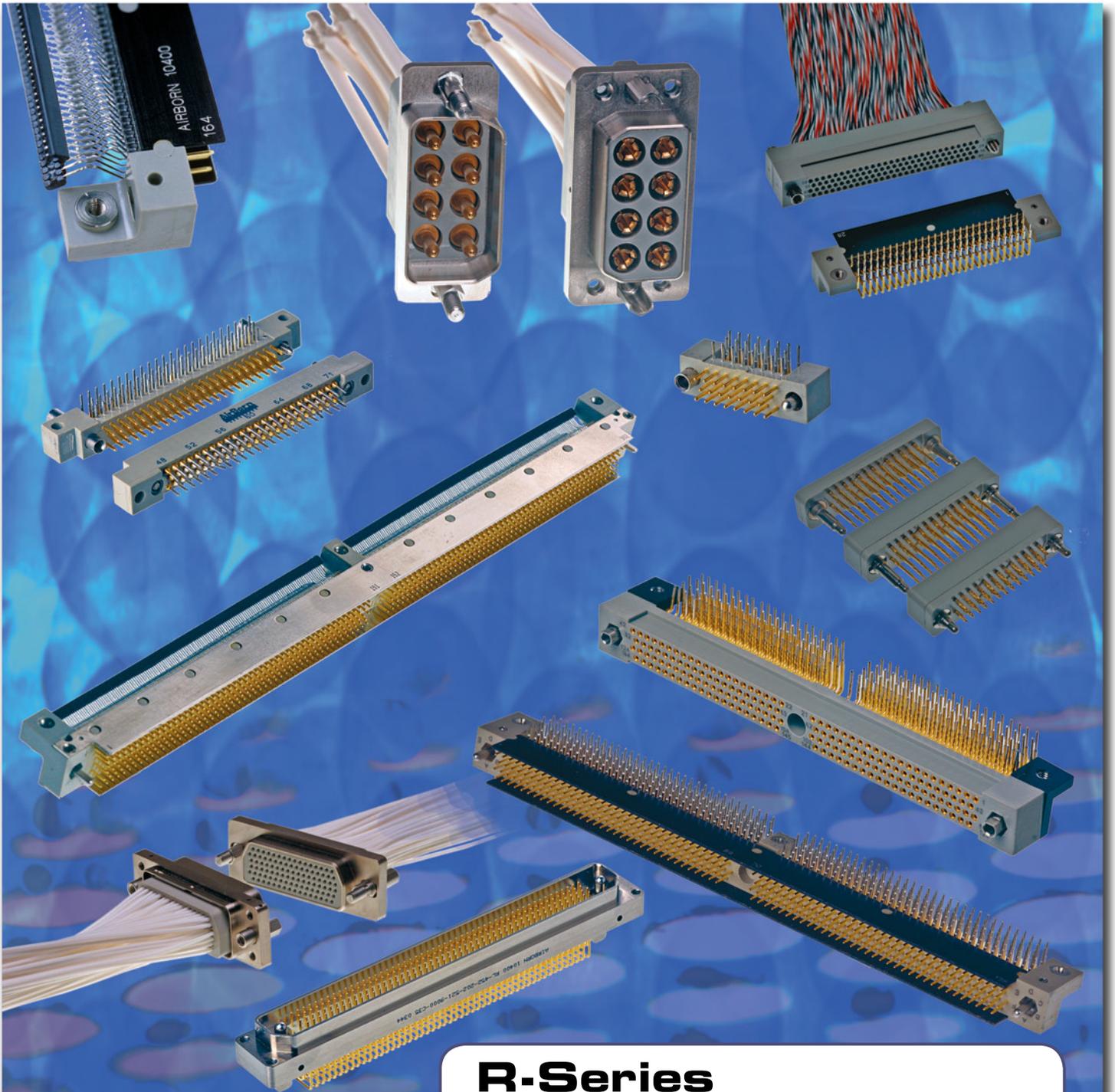
---

## AirBorn International Ltd.

Tannery Road.  
Tonbridge.  
Kent. TN9 1RF  
United Kingdom

[T] +44 (0) 1732 356593 [E] cs@airbornint.com

[www.airborn.com](http://www.airborn.com)



## **R-Series**

A range of high density Metal and Plastic Shell connectors. Based on M55302 approval with a contact spacing of only 0.075" (1.905mm) and contact counts from 11 to over 600 positions. A wide range of termination styles, including PTH, SMT, Solder Cup, Crimp and Press-Fit are available enabling customer selection of their preferred option. AirBorn's R-Series is becoming the standard for high density interconnection applications.

# R Series

**Mil-C-55302 CONNECTORS 0.075" (1.905mm)**

## **AirBorn R-Series meets or exceeds MIL-C-55302 performance specifications**

(for full specification details please consult website)

### **Performance;**

<b>Contact Rating;</b>	3 Amperes (2 Amperes for .016 diameter)
<b>Solderability;</b>	Terminals (except crimp, wire wrap, stackable) tested in accordance with Mil-STD 202
<b>Wire Size;</b>	Stranded 26AWG
<b>Operating Temperature;</b>	-65c to +125c

### **Requirements tested per SAE-AS-13441**

<b>Test Voltage;</b>	250v RMS, 60Hz @70,000ft 750v RMS, 60Hz at sea level
<b>Insulation Resistance;</b>	5,000 megohms minimum at 500vdc
<b>Durability;</b>	500 connector mating cycles
<b>Vibration;</b>	Mated Connectors
<b>Shock;</b>	Mated Connectors
<b>Salt Spray;</b>	Mated Connectors
<b>Humidity;</b>	Test type 2
<b>Temperature Cycling;</b>	Mated Connectors
<b>Contact Resistance;</b>	0.015 ohms max (interface measurement) @ 3 amperes
<b>Connector Mating Force;</b>	2.50 oz x number of contacts average
<b>Outgassing;</b>	Consult catalog

### **Materials and Finishes.**

<b>Contacts;</b>	Pins= BeCu or Brass Alloy Sockets= BeCu or Brass Alloy
<b>Contact Finish;</b>	Gold Plate
<b>Solder;</b>	Sn/Pb alloy or SAC305 (Tin/silver/copper)
<b>Moulded Insulators;</b>	Glass filled Polyphenylene Sulfide
<b>Hardware;</b>	Jackscrews, Jackposts,, nuts, clips, washers, guide pins all Stainless Steel

---

## **AirBorn International Ltd.**

Tannery Road.  
Tonbridge.  
Kent. TN9 1RF  
United Kingdom

[T] +44 (0) 1732 356593 [E] cs@airbornint.com

**www.airborn.com**



## **M-Series**

AirBorn offers the widest range of Micro-Miniature connectors available in the market today. Featuring a contact spacing of 0.050" (1.27mm) and Mil-DTL-83513 qualification, the range offers an extensive mix of termination styles and custom design capability.

# M Series

Mil-DTL-83513 CONNECTORS 0.050" (1.27mm)

## AirBorn M-Series meets or exceeds MIL-DTL-83513 performance specifications

(for full specification details please consult website)

### Performance;

<b>Contact Rating;</b>	3 Amperes maximum
<b>Solderability;</b>	Terminals (except crimp) tested in accordance with Mil-STD 202
<b>Wire Size;</b>	stranded 26AWG or Solid 25awg as standard. (for others consult factory)
<b>Test Voltage;</b>	600v RMS, 60Hz
<b>Operating Temperature;</b>	-55c to +125c
<b>Insulation Resistance;</b>	5,000 megohms minimum at 500vdc
<b>Durability;</b>	500 connector mating cycles
<b>Vibration;</b>	Tested in accordance with MIL-STD1344
<b>Shock;</b>	Tested in accordance with MIL-STD1344
<b>Salt Spray;</b>	Tested in accordance with MIL-STD1344
<b>Humidity;</b>	Tested in accordance with MIL-STD1344
<b>Thermal Shock;</b>	Tested to the temperature extremes of MIL-STD1344
<b>Contact Resistance;</b>	Contact Resistance; 0.065 volt maximum drop @2.5amps (0.26ohms)
<b>Contact Engaging Force;</b>	6.0 ounce maximum, with .0221 diameter test sleeve per contact
<b>Contact Separating Force;</b>	0.5 ounce minimum, with .230 diameter test sleeve per contact
<b>Crimp Strength;</b>	5 pound minimum tensile strength
<b>Mating &amp; Unmating Force;</b>	10 ounces maximum per contact

### Materials and Finishes.

<b>Contacts;</b>	Pins= BeCu alloy strip Sockets= Brass
<b>Contact Finish;</b>	Gold Plate
<b>Shells;</b>	Aluminium Alloy or Passivated Stainless Steel
<b>Aluminium Shell Finishes;</b>	Electroless Nickel, Electrodeposited Cadmium, Black Anodized
<b>Moulded Insulators;</b>	Glass filled Polyphenylene Sulfide
<b>Hardware;</b>	Jackscrews, Jackposts,, nuts, clips, washers,guide pins all corrosion resistant steel
<b>Latches;</b>	Beryllium Copper with Electroless Nickel plate.
<b>Interfacial Sealing Gaskets;</b>	Flurosilicone

---

### AirBorn International Ltd.

Tannery Road.  
Tonbridge.  
Kent. TN9 1RF  
United Kingdom

[T] +44 (0) 1732 356593 [E] cs@airbornint.com

[www.airborn.com](http://www.airborn.com)



## **N-Series**

The N-Series 'Nano-Connector' offers an ultra high density contact spacing of only 0.025" (0.635mm) and is fully approved to Mil-DTL-32139. Light weight metal shell, single and dual row, contact counts from 9 to more than 100 positions and terminations styles including PTH, SMT and Pre-Wired. The ultimate connector solution for the smallest and most demanding spaces.

# N Series

Mil-DTL-32139 CONNECTORS 0.025" (0.635mm)

## AirBorn N-Series meets or exceeds M32139 performance specifications

(for full specification details please consult website)

### Performance;

<b>Contact Rating;</b>	1 Amperes maximum
<b>Solderability;</b>	Terminals (except crimp) tested in accordance with Mil-STD 202
<b>Wire Size;</b>	Stranded 30 and 32awg or Solid 30awg as standard. (for others consult factory)
<b>Test Voltage;</b>	250v RMS, 60Hz
<b>Operating Temperature;</b>	-55c to +125c
<b>Insulation Resistance;</b>	5,000 megohms minimum at 100vdc
<b>Durability;</b>	200 connector mating cycles
<b>Vibration;</b>	Tested in accordance with EIA-364
<b>Shock;</b>	Tested in accordance with EIA-364
<b>Salt Spray;</b>	Tested in accordance with EIA-364 (Mated connectors)
<b>Humidity;</b>	Tested in accordance with EIA-364 (Mated connectors)
<b>Thermal Shock;</b>	Tested to the temperature extremes of EIA-364
<b>Contact Resistance;</b>	0.021 volt maximum drop @ 1.0amps (0.21 ohms)
<b>Contact Engaging Force;</b>	5.0 ounce maximum, with minimum diameter test sleeve
<b>Contact Separating Force;</b>	0.4 ounce minimum, with maximum diameter test sleeve

### Materials and Finishes.

<b>Contacts;</b>	Pins= BeCu alloy strip Sockets= Brass
<b>Contact Finish;</b>	Gold Plate
<b>Shells;</b>	Aluminium Alloy , Passivated Stainless Steel , Passivated Titanium
<b>Aluminium Shell Finishes;</b>	Electroless Nickel, Electrodeposited Cadmium
<b>Moulded Insulators;</b>	Glass filled Liquid Crystal Polymer (LCP)
<b>Hardware;</b>	All corrosion resistant steel

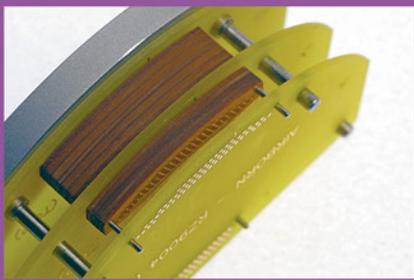
---

## AirBorn International Ltd.

Tannery Road.  
Tonbridge.  
Kent. TN9 1RF  
United Kingdom

[T] +44 (0) 1732 356593 [E] cs@airbornint.com

[www.airborn.com](http://www.airborn.com)



## **Custom Design**

AirBorn is proud of our ability to provide cost effective solutions for custom requirements.

***At AirBorn, 'Non-standard' is 'Standard'.***

# Custom Design

Integrated Solutions Supplier

AirBorn Inc is an Integrated Solutions Supplier employing over 1300 people at 9 locations worldwide, specialising in high reliability Interconnect, Assembly and Packaging solutions.

AirBorn Inc is AS9100 and ISO-13485 certified, manufacturing to IPC and military standards, offering an extensive range of design skills and capabilities, including PRO/E integrated 3D CAD/CAM/CAE solutions.

AirBorn's fully approved Interconnect Divisions focus on your need for non-standard interconnect solutions. We ensure you get what you require, rather than simply what's available, making products that exactly fit your needs. We serve markets as diverse as Medical, Test, Defence, Aerospace, Industrial, and Commercial Electronics with a highly experienced team.

We engineer and design the entire system from component selection, innovative customised designs and assembly methods, final test and packaging, providing the customer with a repeatable process at the highest level of quality, delivery and consistency. Our advanced technology, experienced design support and attentive service, provides a complete interconnect solution reducing inventory and lowering installed cost.

**We provide the customer with what they want when they need it.**

---

## **AirBorn International Ltd.**

Tannery Road.  
Tonbridge.  
Kent. TN9 1RF  
United Kingdom

[T] +44 (0) 1732 356593 [E] [cs@airbornint.com](mailto:cs@airbornint.com)

[www.airborn.com](http://www.airborn.com)