



# ARINC 600 Press-Fit Power and Quadrax Contacts

More Sizes, More Choice in PCB Attach Connectors that Eliminate Soldering

# ARINC 600 Press-Fit Power and Quadrax Contacts

Eliminate Soldering, Reduce Weight Up to 10%



To simplify application and help lower costs, we were the first to offer size 22 contacts in a press-fit PCB attachment style. The addition of press-fit size 20, 16 and 12 power contacts, as well as press-fit Quadrax contacts to our ARINC 600 product portfolio, enable us to offer you a total press-fit PCB-attach connector solution.

ARINC 600 press-fit power and Quadrax receptacle contacts allow a complete press-fit receptacle solution that will provide manufacturing cost savings by eliminating the PCB soldering process. They also enable up to 10% weight savings (depending on insert arrangement) and backward compatibility, while delivering the high levels of performance and reliability you need.

## WEIGHT-SAVING DESIGN

- Up to 10% lighter than equivalent standard receptacles (depending on insert arrangement)

## LOWER COSTS

- Single-piece monoblock inserts simplify the manufacturing process, helping to reduce cost
- Stamped and formed, selectively plated contacts help provide cost savings over screw-machined contacts

## COMPATIBLE

- Completely intermateable with existing ARINC 600 plug connectors
- Equivalent electrical performance vs. legacy design
- Stamped and formed contacts offer excellent performance and reliability

## VERSATILE

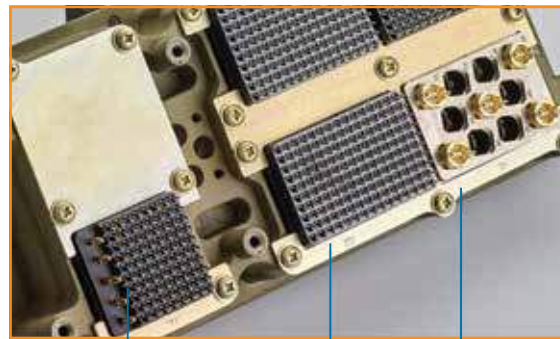
- Solder tail or press-fit power and Quadrax contacts
- Available with selectively loaded contact configurations

## APPLICATIONS

- In-Flight Entertainment
- In-Flight Networks
- Flight Controls and Communication
- Military Ground Vehicles

## For Applied Cost Savings during Board Assembly

### Size 22 Press-Fit Contact System



Power

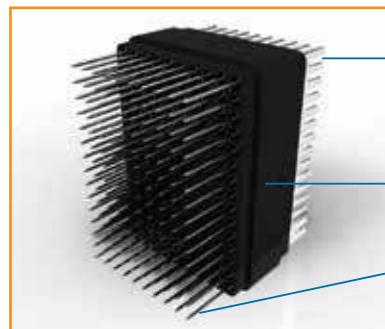
Signal

Quadrax

## ALSO AVAILABLE IN NEXT GEN ARINC:

## For Complete Backwards Compatibility with Legacy Applications

### Size 22 Solder Tail Contact System



High-performance copper-alloy stamped contacts with selectively plated gold contact tips

One-piece insert

Contact solder tails

## TE Components . . . TE Technology . . . TE Know-how . . .

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## MATERIALS

- **Size 20, 16, 12 Power Contacts\***
- **Quadrax Contact Outer Shell\***
- **Quadrax Pin Contact\***

\* High strength copper alloy base.  
TE offers various platings.

## MECHANICAL/ENVIRONMENTAL

- **Connector Mating/Unmating Forces (after mating cycles):**  
Size 2: 60 lbs (267 N)  
Size 3: 105 lbs (467 N)
- **Maximum Installation Force (For Pressing Eye of the Needle Connector onto a PCB):**  
Size 12 - 11 lbs  
Size 16 - 11 lbs  
Size 20 - 11 lbs  
Size 22 - 8 lbs  
Quadrax - 48 lbs
- **Durability:** 500 mating cycles
- **Vibration:** EIA-364-28, Test Condition V
- **Shock:** EIA-364-27, Test Condition A
- **Temperature Range:** -65°C to +125°C
- **Thermal Cycling:** 1000 hours at 125°C
- **Mixed Flowing Gas:** EIA-364-65, Class IIA
- **Process Capability Rating (Solder Tail Only):**  
Wave solder processing (270°C for 10 seconds) and vapor phase processing (260°C for 2 minutes)
- **Salt Spray Tolerance:** MIL-STD-1344, Method 1001, Condition B
- **Fluid Imperviousness:** MIL-L-23699; MIL-H-5606:  
1:3 mix isopropyl alcohol and mineral spirits (Test immersions of mated connectors in these fluids caused no evident deterioration)
- **Humidity Tolerance:** Insulation resistance: 1 megohm min., 1 to 2 hours after exposure to humidity per MIL-STD-1344, Method 1002-1, Type II 5000 megohms min. after 24 hours at 25°C

## ELECTRICAL

- **Dielectric Withstanding Voltage (min.):**  
1500 VAC<sub>rms</sub>, 60 Hz at sea level  
500 VAC<sub>rms</sub>, 60 Hz at 50,000 ft. (15,240 m)  
(Tested at rated voltages for 60 seconds produced no flashover and 1 mA leakage, max.)
- **Insulation Resistance:** 1000 megohms min.  
(Test conducted on unmated connector after 30 min. exposure to 120°C to 125°C)
- **Contact Resistance:** Mated pairs tested per MIL-STD-1344, Method 3004-1
- **Current Ratings:**  
5.0 A (Size 22 contacts)  
7.5 A (Size 20 contacts)  
13.0 A (Size 16 contacts)  
23.0 A (Size 12 contacts)

## STANDARDS AND SPECIFICATIONS

- **Industry Specification:** ARINC 600-19
- **Product Specifications:** 108-2384 and 108-32118
- **Application Specification:** 114-13272
- **Seating Tooling:** 230865
- **Product Validation Test Report:** 502-1263
- **Arrangements Available:**  
60 Position (Size 1)  
85 Position  
100 Position  
150 Position  
68Q2 Position  
120T2 Position  
13CQ2 Position

For Ordering Information, Contact TE Connectivity.



## LET'S CONNECT

We make it easy to connect with our experts and are ready to provide all the support you need. Just call your local support number or visit [www.te.com/industrial](http://www.te.com/industrial) to chat with a Product Information Specialist.

## Technical Support

[te.com/support-center](http://te.com/support-center)

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Consult TE for the latest dimensions and design specifications.

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