



## 38999 CONNECTOR SERIES I, III, AND IV DERIVATIVE CONFIGURATIONS

CIRCULAR CONNECTORS BEYOND MIL-SPEC LIMITS TO MEET THE WIDEST RANGE OF HARSH ENVIRONMENTS FOR SIGNAL, POWER, AND OPTICAL NEEDS

# 38999 Connector Series I, III, and IV Derivative Configurations

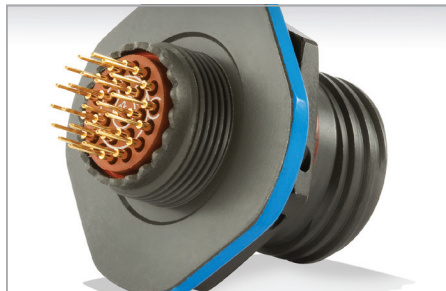


## Circular Connectors Built for Harsh Environments

TE Connectivity (TE) is your one-stop source for MIL-DTL-38999 and 38999-style connectors. We offer mil-qualified Series I, III, and IV connectors in a wide array of configurations, materials and finishes to help meet the needs of ground, aerospace, and marine applications. The circular connectors are time tested for reliability in harsh environments.

### Beyond Mil Specs

Because of the widespread popularity of 38999 Series III connectors, we have also used this form factor for designs to meet a variety of configurations beyond those of MIL-DTL-38999. This gives you a familiar, reliable connector and access to the full range of backshells and other accessories.



### Recent 38999 Highlights

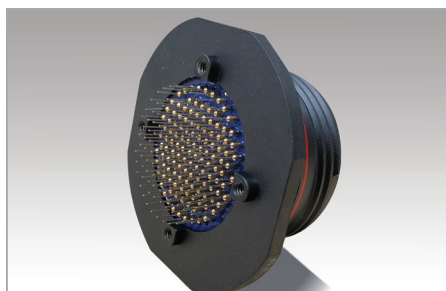
#### PC Board-Mount Connectors

TE offers hundreds of different sizes and types of standard and extended-tail contacts. Direct board mounting not only saves weight and space, it enhances system reliability and performance by replacing a separable interface with a more reliable soldered interconnection.



#### Integral Accessories

Connectors with integral accessory help provide space and weight savings over using a separate backshell. One or two knurled areas help support reliable shield termination with a band strap. The connectors also accept a heat-shrink boot or overmolding.



#### High Sealing Epoxy Seal PC Tail Connectors

TE has launched its high sealing 38999 pc tail connector offering. TE can offer 38999 connectors with pc tail contacts (or solder cup contacts) that are potted in the rear and offer less than  $1 \times 10^{-5}$  cc/sec helium at 1 ATM. TE has been supplying this product for several years now, and it is field proven reliability. TE thermal shocks the connectors prior to testing the helium leak rate to ensure long term sealing performance. When the application calls for more sealed protection than normal but hermetically sealed connectors are overkill, this is the best solution in the market today.



#### RoHS-Compatible Finishes

Our 38999-qualified connectors are available with cadmium-free, environment-resisting plating options offering 500-hour salt spray resistance and a  $-65^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$  temperature range.

**Class T:** Nickel-PTFE

**Class B:** Marine Bronze

**Class Z:** Black zinc nickel

# 38999 Connector Series I, III, and IV

## 38999-DERIVED CONNECTORS



**DTB Series Connectors**  
38999 Series III  
Bronze Shells

### Designed for Marine Application

- Marine bronze shell
- Excellent corrosion resistance
- Dry mate sealing down to 4 m immersion
- -65°C to +175°C operating temperature

### Compliant

- STD CECC 75201-002
- RoHS compliant

### Typical Applications

- Shipboard
- Ground vehicles



**HDJ Series Connectors**  
38999 Series 1.5

### Reduced Profile

- Based on 38999 Series I coupling interface lengths and Series II diameters
- Meets LN29729 standard
- Meets J 62.017 and DIN 65002 standards
- -55°C to +175°C operating temperature

### Typical Applications

- Military aerospace



**High Power 38999-Style Connectors**

### High Current Capacity

- Up to 1000 A in a size 25 shell
- Single and multicontact configurations

### Space Saving

- Hybrid configurations with signal and power contacts
- Variety of shell sizes

### Rugged

- Rear removable crimp contacts
- Dedicated sealed backfitting and cable support grommet
- Excellent contact retention under severe vibration



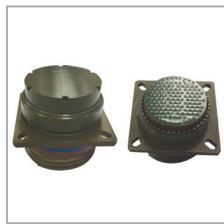
**PCB Contacts for 38999 Series**

### Versatile and Flexible

- Mil spec, commercial, and composite shells
- Variety of standard and custom tail lengths available
- Choice of platings
- Connectors with pc tail contacts available in standard and semi-custom 38999 series I, III, and IV receptacles

### Typical Applications

- Ground, space, and marine
- Sealed environments



**CBC Series Bussed or Grounded Connectors**

### Simple, Reliable Wire Bussing

- Internal pc board connects contacts for grounding distribution, power distribution, and similar needs
- Range of standard and custom bussing and/or grounding configurations

### Weight and Space Savings

- Composite and aluminum shells
- Eliminates external bussing components
- Shell sizes 9 through 25



**Ruggedized Commercial Connectors**

### Versatile

- RJ45, with Cat 5e, 6, or 6A performance
- USB 2.1, up to 480 Mb/s
- USB 3.0, up to 5 Gb/s
- SIM card replacement
- Micro SD card receptacle
- LC, for multimode and single-mode fiber

### Rugged

- Shell options include aluminum, bronze, stainless steel, titanium, and composite
- Sealed up to IP68 for fluid and dust-laden environments



**Wildcat 38999 High-Density Connectors**

### High Density

- Nearly double the contact density of standard M38999 connectors
- Four shell sizes, 11 to 64 contacts
- 3 amps per contact

### Lightweight and Space Saving

- Aerospace grade aluminum
- Rear removable crimp and PCB contacts
- -65°C to +175°C / +200°C (plating dependent)

### Typical Applications

- Universal soldier
- UAV
- Communications



**38999 Protective Metal Covers**

### Versatile

- Available in four plating configurations
- Available in nine shell sizes

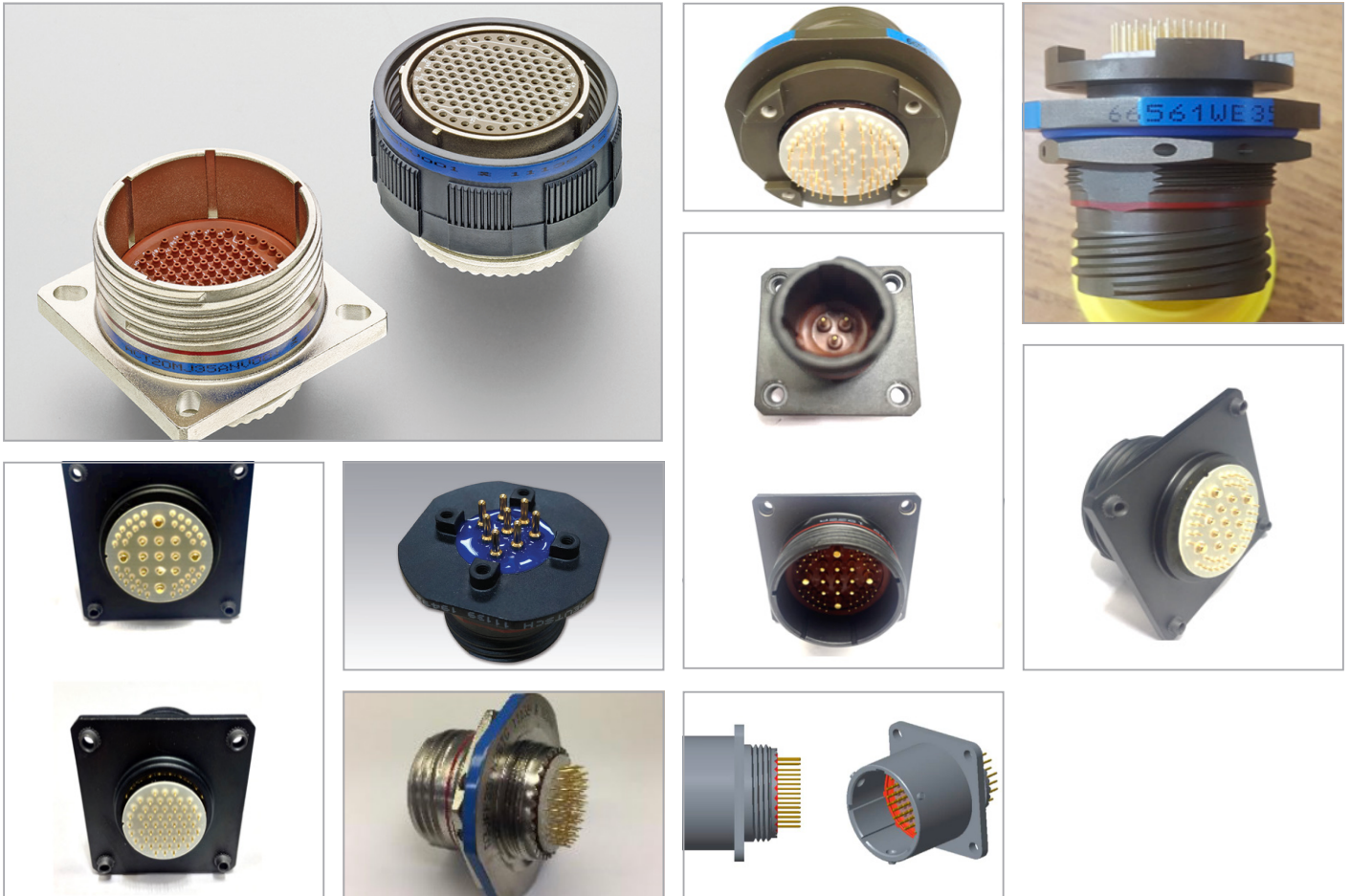
### Enhanced Protection

- Helps protect connector against dust, foreign objects and moisture intrusion in the unmated condition
- Utilizes ACME triple start threads

### Mil Qualified

Empower Engineers to Solve Problems, Moving the World Forward.

AMP | AGASTAT | CII | HARTMAN | KILOVAC | MICRODOT | NANONICS | POLAMCO | Raychem  
SEACON | Rochester | DEUTSCH



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### 38999 DERIVATIVE CONNECTORS

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