

**D38999 QPL CRIMP CONTACTS (500 CYCLE)**



| How-To-Order D38999 QPL Qualified Crimp Contacts |                   |                                |                                   |
|--------------------------------------------------|-------------------|--------------------------------|-----------------------------------|
| Mating End Size                                  | Wire Accomodation | Pin Contacts Military Part No. | Socket Contacts Military Part No. |
| 23                                               | 22 AWG*           | <a href="#">M39029/122-670</a> | <a href="#">M39029/121-663</a>    |
| 22                                               | 22-28 AWG         | <a href="#">M39029/58-360</a>  | <a href="#">M39029/56-348</a>     |
| 20                                               | 20-24 AWG         | <a href="#">M39029/58-363</a>  | <a href="#">M39029/56-351</a>     |
| 16                                               | 16-20 AWG         | <a href="#">M39029/58-364</a>  | <a href="#">M39029/56-352</a>     |
| 12                                               | 12-14 AWG         | <a href="#">M39029/58-365</a>  | <a href="#">M39029/56-353</a>     |

\*26 AWG accommodation is available for size 23, consult factory for details

**MATERIAL AND FINISH**

- Copper alloy, plated; meets AS39029 specifications.
- Rated to 500 cycles of durability.

**EXTENDED DURABILITY (1500 CYCLE) D38999 QPL AND COMMERCIAL EQUIVALENT /107 (850-007) H PIN CONTACT OPTION AND /106 (850-006) J SOCKET CONTACT OPTION**



| How-To-Order Extended Duty Crimp Contacts |                   |                                |                                |                                   |                                  |
|-------------------------------------------|-------------------|--------------------------------|--------------------------------|-----------------------------------|----------------------------------|
| Mating End Size                           | Wire Accomodation | Pin Contacts Military Part No. | Pin Contacts Glenair Part No.  | Socket Contacts Military Part No. | Socket Contacts Glenair Part No. |
| 22                                        | 22-28 AWG         | <a href="#">M39029/107-620</a> | <a href="#">850-007-22-620</a> | <a href="#">M39029/106-614</a>    | <a href="#">850-006-22-614</a>   |
| 20                                        | 20-24 AWG         | <a href="#">M39029/107-621</a> | <a href="#">850-007-20-621</a> | <a href="#">M39029/106-615</a>    | <a href="#">850-006-20-615</a>   |
| 16                                        | 16-20 AWG         | <a href="#">M39029/107-622</a> | <a href="#">850-007-16-622</a> | <a href="#">M39029/106-616</a>    | <a href="#">850-006-16-616</a>   |
| 12                                        | 12-14 AWG         | <a href="#">M39029/107-623</a> | <a href="#">850-007-12-623</a> | <a href="#">M39029/106-617</a>    | <a href="#">850-006-12-617</a>   |

**MATERIAL AND FINISH**

- Copper alloy, plated; meets AS39029 specifications.
- Rated to 1500 cycles of durability.

**COMMERCIAL, EXTENDED DUTY (1500 CYCLE) CONTACTS FOR SUPERNINE 233-205 AND 233-206 CONNECTORS; AVAILABLE FOR TYPE P AND S CRIMP CONTACT OPTIONS ONLY**



| How-To-Order Extended Duty Crimp Contacts |                   |                                |                               |                                   |                                  |
|-------------------------------------------|-------------------|--------------------------------|-------------------------------|-----------------------------------|----------------------------------|
| Mating End Size                           | Wire Accomodation | Pin Contacts Military Part No. | Pin Contacts Glenair Part No. | Socket Contacts Military Part No. | Socket Contacts Glenair Part No. |
| 23                                        | 22-28 AWG         | --                             | <a href="#">857-189</a>       | --                                | <a href="#">857-190</a>          |
| 22                                        | 22-28 AWG         | <a href="#">M39029/107-620</a> | <a href="#">857-151-22</a>    | <a href="#">M39029/106-614</a>    | <a href="#">857-150-22</a>       |
| 20                                        | 20-24 AWG         | <a href="#">M39029/107-621</a> | <a href="#">857-151-20</a>    | <a href="#">M39029/106-615</a>    | <a href="#">857-150-20</a>       |
| 16                                        | 16-20 AWG         | <a href="#">M39029/107-622</a> | <a href="#">857-151-16</a>    | <a href="#">M39029/106-616</a>    | <a href="#">857-150-16</a>       |
| 12                                        | 12-14 AWG         | <a href="#">M39029/107-623</a> | <a href="#">857-151-12</a>    | <a href="#">M39029/106-617</a>    | <a href="#">857-150-12</a>       |

**MATERIAL AND FINISH**

- Copper alloy, plated; meets AS39029 specifications.
- Rated to 1500 cycles of durability.



## SIZE #23 CONTACTS FOR HIGH-DENSITY CONTACT ARRANGEMENTS



| How-To-Order Size #23 Contacts for High-Density Arrangements |           |          |                               |            |        |        |
|--------------------------------------------------------------|-----------|----------|-------------------------------|------------|--------|--------|
| Contact Type                                                 | Wire Size | Material | Part Number                   | Color Band |        |        |
|                                                              |           |          |                               | 1st        | 2nd    | 3rd    |
| Pin                                                          | #22 – #28 | BeCu     | <a href="#">M39029/18-177</a> | Brown      | Violet | Violet |
| Socket                                                       | #22 – #28 | BeCu     | <a href="#">M39029/17-172</a> | Brown      | Violet | Red    |

## SIZE #16 COAXIAL CONTACTS



These #16 contacts accept 50 ohm and 75 ohm coaxial cable. Inner contact is rated at 1 amp, the outer contact 12 amps. DWV rating is 800 Vac rms sea level, 250 Vac at 50,000 feet. Contacts are packaged individually and are unassembled with instruction sheet. One contact consists of outer contact, fluorocarbon dielectric, inner contact and shield crimp sleeve. Inner and outer contacts are gold-plated copper alloy. Approved to SAE AS39029. VSWR rating 1.5:1 maximum up to 700 MHz. 5000 megohm insulation resistance.

| How-To-Order Size #8 Coaxial Contacts |                                                                                                                                           |                                |                               |            |        |        |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|------------|--------|--------|
| Type                                  | Cable Accommodation                                                                                                                       | Part Number                    | Military Part Number          | Color Band |        |        |
|                                       |                                                                                                                                           |                                |                               | 1st        | 2nd    | 3rd    |
| Pin                                   | M17/119-RG174, M17/113-RG316, M17/094-RG179, Times AA3248, Teledyne 11299, Haveg 8100207, Thermax 75-738-BCCWXE, Tensolite 3088/L707YX-1  | <a href="#">852-008-16-424</a> | <a href="#">M39029/76-424</a> | Yellow     | Red    | Yellow |
|                                       | M19/093-RG178                                                                                                                             | <a href="#">852-008-16-425</a> | <a href="#">M39029/76-425</a> | Yellow     | Red    | Green  |
|                                       | Haveg 61-02051, Revere WH95623                                                                                                            | <a href="#">852-008-16-426</a> | <a href="#">M39029/76-426</a> | Yellow     | Red    | Blue   |
|                                       | Haveg 30-00761, Haveg 30-02024, Haveg 30-02033, Tensolite 24713/A955KK1, Tensolite 26723/A955KK1                                          | <a href="#">852-008-16-427</a> | <a href="#">M39029/76-427</a> | Yellow     | Red    | Violet |
| Socket                                | M17/119-RG174, M17/113-RG316, M17/094-RG179, Times AA3248, Teledyne 11299, Haveg 8100207, Thermax 75-738-BCCWXE, Tensolite 30888/L707YX-1 | <a href="#">852-009-16-428</a> | <a href="#">M39029/77-428</a> | Yellow     | Red    | Gray   |
|                                       | M17/093-RG178                                                                                                                             | <a href="#">852-009-16-429</a> | <a href="#">M39029/77-429</a> | Yellow     | Red    | White  |
|                                       | Haveg 61-02051, Revere WH95623                                                                                                            | <a href="#">852-009-16-430</a> | <a href="#">M39029/77-430</a> | Yellow     | Orange | Black  |
|                                       | Haveg 30-00761, Haveg 30-02024, Haveg 30-02033, Tensolite 24713/A955KK1, Tensolite 26723/A955KK1                                          | <a href="#">852-009-16-431</a> | <a href="#">M39029/77-431</a> | Yellow     | Orange | Brown  |

### MATERIAL AND FINISH

- Contact Body: Copper Alloy/Gold Plated
- Center Contact: Copper Alloy/Gold Plated
- Crimp Sleeve: Copper Alloy/Gold Plated
- Insulator: Teflon

### SIZE #12 COAXIAL CONTACTS



These contacts offer improved frequency response compared to standard coaxial contacts. VSWR is 1.32:1 at 3GHz . Nominal impedance is 50 ohms. Insertion loss at 3GHz is 0.20 dB maximum. Inner contact is rated at 1 amp, the outer contact 12 amps. DWV voltage rating is 1000 Vac rms sea level, 250 Vac at 50,000 feet. Contacts are packaged individually and shipped unassembled with instruction sheet. Inner and outer contacts are gold-plated copper alloy. 5000 megohm insulation resistance.

| How-To-Order Size #12 Coaxial Contacts |                                |                       |                       |            |       |       |
|----------------------------------------|--------------------------------|-----------------------|-----------------------|------------|-------|-------|
| Type                                   | Cable Accommodation            | Part Number           | Military Part Number  | Color Band |       |       |
|                                        |                                |                       |                       | 1st        | 2nd   | 3rd   |
| Pin                                    | M17/113-RG316<br>M17/094-RG179 | <b>852-004-12-558</b> | <b>M39029/102-558</b> | Green      | Green | Gray  |
| Socket                                 | M17/113-RG316<br>M17/094-RG179 | <b>852-005-12-559</b> | <b>M39029/103-559</b> | Green      | Green | White |

### MATERIAL AND FINISH

- Contact Body: Copper Alloy/Gold Plated
- Hood: Stainless Steel/Passivated
- Center Contact: Copper Alloy/Gold Plated
- Crimp Sleeve: Copper Alloy/Gold Plated
- Insulator: Teflon

### SIZE #12 PNEUMATIC CONTACTS



Cavity F contains a Pitot tube  
Socket contact



Stainless steel pneumatic contacts fit MIL-DTL-38999 connectors. Contacts snap into size #12 cavities. Attach to 3/32 inch (2.38) diameter tubing. Socket contact has fluorosilicone O-ring and PTFE backup washers. Originally designed for pitot tube connections, these pneumatic contacts are rated for 100 psi maximum air pressure. No installation tool is required. Remove contacts with plastic extraction tool 809-132 (M81969/14-04).

| Contact Type | For Use In              | Part Number                |
|--------------|-------------------------|----------------------------|
| Pin          | D38999 Type, All Series | <b>830-003<sup>1</sup></b> |

1. 830-003 supersedes 857-011

| Contact Type | For Use In                    | Part Number    |
|--------------|-------------------------------|----------------|
| Socket       | D38999 Type Series I, III, IV | <b>830-005</b> |

#### #8 HIGH POWER CONTACTS

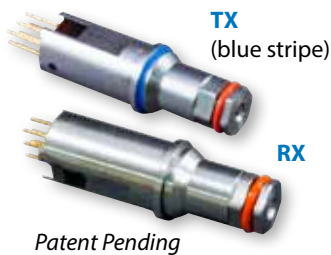


| How-To-Order #8 High Power Contacts |                 |                    |                         |
|-------------------------------------|-----------------|--------------------|-------------------------|
| Type                                | Mating End Size | Wire Accommodation | Glenair Part Number     |
| Socket                              | 8               | 8 AWG              | <a href="#">850-013</a> |
| Pin                                 | 8               | 8 AWG              | <a href="#">850-014</a> |

#### MATERIAL AND FINISH

- Contact Body: Copper alloy, plated with 50 microinches gold per ASTM B488 Type II code C
- Hood: CRES, passivated
- 50–100 microinches nickel IAW SAE AMS-QQ-N-290, class II

#### SIZE #8 CAVITY OPTOELECTRONIC CONTACT



Size 8 Cavity Optoelectronic contacts transmit and receive differential CML electrical signals over Multimode fiber optic cable. Transmitters consist of a laser driver with a temperature compensation circuit to maintain optical power over the entire operating temperature range, and a 850nm VCSEL laser. Receivers consist of an 850nm PIN Photo Detector, a Transimpedance Amplifier with automatic gain control circuit, and a Limiting Amplifier. Differential output data signals are CML compatible. The transmitter has a Tx Disable pin to turn off transmitter output and a Tx Fault pin to signal a fault condition. Receiver includes a CMOS compatible Loss of Signal Indicator to prevent invalid data.

#### MATERIAL/FINISH

Shell: 300CRES/Passivate or NM6  
 Seal: Silicone elastomer  
 Ferrule & sleeve: Zirconia ceramic  
 PC tails: Copper alloy/gold plated  
 PCB flex: FR4 & Polyimide  
 Solder type: RoHS compliant Sn95/Sb5 (232°C melting temp) & RoHS compliant Sn96.5/Ag3.0/Cu0.5 (217° melting)

| How-To-Order Size 8 Transmitter Optoelectronic Contacts |             |                              |
|---------------------------------------------------------|-------------|------------------------------|
| Type                                                    | Signal Type | Glenair Part Number          |
| Transmitter                                             | 1.25 Gbps   | <a href="#">050-301-01-T</a> |
|                                                         | 2.50 Gbps   | <a href="#">050-301-02-T</a> |
|                                                         | 3.20 Gbps   | <a href="#">050-301-03-T</a> |
|                                                         | 4.25 Gbps   | <a href="#">050-301-04-T</a> |

| How-To-Order Size 8 Receiver Optoelectronic Contacts |             |                              |
|------------------------------------------------------|-------------|------------------------------|
| Type                                                 | Signal Type | Glenair Part Number          |
| Receiver                                             | 1.25 Gbps   | <a href="#">050-301-01-R</a> |
|                                                      | 2.50 Gbps   | <a href="#">050-301-02-R</a> |
|                                                      | 3.20 Gbps   | <a href="#">050-301-03-R</a> |
|                                                      | 4.25 Gbps   | <a href="#">050-301-04-R</a> |

#### SIZE #8 COAXIAL CONTACTS



These #8 contacts accept 95 ohm coaxial cable. Inner contact is rated at 1 amp, the outer contact 12 amps. DWV rating is 1,300 Vac rms sea level, 250 Vac at 50,000 feet. Contacts are packaged individually and shipped unassembled with instruction sheet. One contact consists of outer, inner, contact, fluorocarbon dielectric, inner contact and shield crimp sleeve. Inner and outer contacts are gold-plated copper alloy. Approved to SAE AS39029. 5000 megohm insulation resistance.

| How-To-Order Size #8 Coaxial Contacts |                     |                                |                               |            |      |        |
|---------------------------------------|---------------------|--------------------------------|-------------------------------|------------|------|--------|
| Type                                  | Cable Accommodation | Part Number                    | Military Part Number          | Color Band |      |        |
|                                       |                     |                                |                               | 1st        | 2nd  | 3rd    |
| Pin                                   | M17/095-RG180       | <a href="#">852-007-08-367</a> | <a href="#">M39029/60-367</a> | Orange     | Blue | Violet |
| Socket                                | M17/095-RG180       | <a href="#">852-006-08-366</a> | <a href="#">M39029/59-366</a> | Orange     | Blue | Blue   |

#### MATERIAL AND FINISH

- Contact Body: Copper Alloy/Gold Plated
- Ferrule: Copper Alloy/Gold Plated
- Center Contact: Copper Alloy/Gold Plated
- Insulator: Teflon

## SIZE #8 CONCENTRIC TWINAX CONTACTS



These #8 concentric twinax contacts accept MIL-STD-1553 data bus twinax cable. Center and intermediate contacts are rated at 1 amp, the outer contact 12 amps. DWV rating is 500 Vac rms sea level, 125 Vac at 70,000 feet. Operating frequency is 0-20 MHz. Contacts are packaged individually and shipped unassembled with instruction sheet. One contact consists of outer contact , fluorocarbon dielectric, inner contact , intermediate contact and shield crimp bushing. All contacts are gold-plated copper alloy. Approved to SAE AS39029. 5000 megohm insulation resistance.

| How-To-Order Size #8 Concentric Twinax Contacts |                     |                       |                       |            |     |        |
|-------------------------------------------------|---------------------|-----------------------|-----------------------|------------|-----|--------|
| Type                                            | Cable Accommodation | Part Number           | Military Part Number  | Color Band |     |        |
|                                                 |                     |                       |                       | 1st        | 2nd | 3rd    |
| Pin                                             | M17/176-00002       | <b>853-003-08-625</b> | <b>M39029/113-625</b> | Blue       | Red | Green  |
| Socket                                          | M17/176-00002       | <b>853-004-08-628</b> | <b>M39029/114-628</b> | Blue       | Red | Violet |

### MATERIAL AND FINISH

- Contact Body: Copper Alloy/Gold Plated
- Inner and Intermediate Contacts: Copper Alloy/Gold Plated
- Crimp Sleeve: Copper Alloy/Gold Plated
- Insulator: PEEK and PTFE (Teflon)

## SIZE #8 QUADRAX CONTACTS



These #8 quadrax contacts accept 100 ohm quadrax cable. Center contacts are rated at 1 amp, the outer contact 12 amps. DWV rating is 500 Vac rms sea level, 125 Vac at 70,000 feet. Contacts are packaged individually and shipped unassembled with instruction sheet. One contact consists of outer contact , fluorocarbon dielectric, inner contacts and shield crimp bushing. All contacts are gold-plated copper alloy. 5000 megohm insulation resistance at 200Vdc. Mates with: 854-002. Ideally suited for up to 1000 Base-T gigabit Ethernet.

| How-To-Order Size #8 Concentric Twinax Contacts |                     |                      |                       |                  |            |         |           |
|-------------------------------------------------|---------------------|----------------------|-----------------------|------------------|------------|---------|-----------|
| Type                                            | Glenair Part Number | Military Part Number | Cable Accommodation   | Grommet Follower | Cable O.D. | "A" Hex | Wire Size |
| Pin                                             | <b>854-001-01</b>   | N/A                  | Tensolite NF26Q100    | 687-754-8-1      | .137       | .218    | 26 AWG    |
|                                                 | <b>854-001-02</b>   | N/A                  | Tensolite NF24Q100    | 687-754-8-2      | .163       | .218    | 24 AWG    |
|                                                 | <b>854-001-03</b>   | N/A                  | Draka Fileca F-4704-6 | 687-754-8-3      | .153       | .218    | 26 AWG    |
|                                                 | <b>854-001-04</b>   | N/A                  | Draka Fileca F-4704-4 | 687-754-8-4      | .175       | .218    | 24 AWG    |
|                                                 | <b>854-001-05</b>   | N/A                  | Tensolite NF22Q100    | 687-754-8-5      | .190       | .231    | 22 AWG    |
| Socket                                          | <b>854-002-01</b>   | N/A                  | Tensolite NF26Q100    | 687-754-8-1      | .137       | .218    | 26 AWG    |
|                                                 | <b>854-002-02</b>   | N/A                  | Tensolite NF24Q100    | 687-754-8-2      | .163       | .218    | 24 AWG    |
|                                                 | <b>854-002-03</b>   | N/A                  | Draka Fileca F-4704-6 | 687-754-8-3      | .153       | .218    | 26 AWG    |
|                                                 | <b>854-002-04</b>   | N/A                  | Draka Fileca F-4704-4 | 687-754-7-4      | .175       | .218    | 24 AWG    |
|                                                 | <b>854-002-05</b>   | N/A                  | Tensolite NF22Q100    | 687-754-8-5      | .190       | .231    | 22 AWG    |

### MATERIAL AND FINISH

Contact Body: Copper Alloy/Gold Plated  
 Inner Contact: Copper Alloy/Gold Plated  
 Crimp Bushing: Brass or equivalent/Gold Plated  
 Insulator: Teflon, Ultem Series 1000 or equivalent  
 Grommet/Follower: Fluorosilicone/Ultem 1000 or equivalent



## THERMOCOUPLE CONTACTS



| How-To-Order Thermocouple Contacts |                 |                   |                               |                                |
|------------------------------------|-----------------|-------------------|-------------------------------|--------------------------------|
| Type                               | Mating End Size | Wire Accomodation | Military Part Number          | Glenair Part Number            |
| Pin                                | 22              | 22-28 AWG         | <a href="#">M39029/87-470</a> | <a href="#">850-023-22-470</a> |
|                                    | 22              | 22-28 AWG         | <a href="#">M39029/87-471</a> | <a href="#">850-023-22-471</a> |
|                                    | 22              | 22-28 AWG         | <a href="#">M39029/87-472</a> | <a href="#">850-023-22-472</a> |
|                                    | 22              | 22-28 AWG         | <a href="#">M39029/87-473</a> | <a href="#">850-023-22-473</a> |
|                                    | 20              | 20-24 AWG         | <a href="#">M39029/87-474</a> | <a href="#">850-023-20-474</a> |
|                                    | 20              | 20-24 AWG         | <a href="#">M39029/87-475</a> | <a href="#">850-023-20-475</a> |
|                                    | 20              | 20-24 AWG         | <a href="#">M39029/87-476</a> | <a href="#">850-023-20-476</a> |
|                                    | 20              | 20-24 AWG         | <a href="#">M39029/87-477</a> | <a href="#">850-023-20-477</a> |
|                                    | 16              | 16-20 AWG         | <a href="#">M39029/87-478</a> | <a href="#">850-023-16-478</a> |
|                                    | 16              | 16-20 AWG         | <a href="#">M39029/87-479</a> | <a href="#">850-023-16-479</a> |
|                                    | 16              | 16-20 AWG         | <a href="#">M39029/87-480</a> | <a href="#">850-023-16-480</a> |
|                                    | 16              | 16-20 AWG         | <a href="#">M39029/87-481</a> | <a href="#">850-023-16-481</a> |
| Socket                             | 22              | 22-28 AWG         | <a href="#">M39029/88-482</a> | <a href="#">850-024-22-482</a> |
|                                    | 22              | 22-28 AWG         | <a href="#">M39029/88-483</a> | <a href="#">850-024-22-483</a> |
|                                    | 22              | 22-28 AWG         | <a href="#">M39029/88-484</a> | <a href="#">850-024-22-484</a> |
|                                    | 22              | 22-28 AWG         | <a href="#">M39029/88-485</a> | <a href="#">850-024-22-485</a> |
|                                    | 20              | 20-24 AWG         | <a href="#">M39029/88-486</a> | <a href="#">850-024-20-486</a> |
|                                    | 20              | 20-24 AWG         | <a href="#">M39029/88-487</a> | <a href="#">850-024-20-487</a> |
|                                    | 20              | 20-24 AWG         | <a href="#">M39029/88-488</a> | <a href="#">850-024-20-488</a> |
|                                    | 20              | 20-24 AWG         | <a href="#">M39029/88-489</a> | <a href="#">850-024-20-489</a> |
|                                    | 16              | 16-20 AWG         | <a href="#">M39029/88-490</a> | <a href="#">850-024-16-490</a> |
|                                    | 16              | 16-20 AWG         | <a href="#">M39029/88-491</a> | <a href="#">850-024-16-491</a> |
|                                    | 16              | 16-20 AWG         | <a href="#">M39029/88-492</a> | <a href="#">850-024-16-492</a> |
|                                    | 16              | 16-20 AWG         | <a href="#">M39029/88-493</a> | <a href="#">850-024-16-493</a> |

## MATERIAL AND FINISH

Copper alloy per ASTM B196 or B197, 50 microinches gold plated per ASTM B488 Type II Code C Class 1.25 over nickel plate per QQ-N-290 Class 2, 50-100 microinches.

Thermocouple contacts: alumel or chromel alloy, unplated, per ANSI 96.1

Socket contact hood: stainless steel, passivated per AMS-QQ-P-35.