

**M39029 and Glenair signature solutions
MIL-DTL-38999 Series III type**

D38999 QPL CRIMP CONTACTS (500 CYCLE)



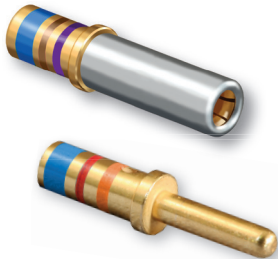
How-To-Order D38999 QPL Qualified Crimp Contacts			
Mating End Size	Wire Accomodation	Pin Contacts Military Part No.	Socket Contacts Military Part No.
23	22 AWG*	M39029/122-670	M39029/121-663
22	22-28 AWG	M39029/58-360	M39029/56-348
20	20-24 AWG	M39029/58-363	M39029/56-351
16	16-20 AWG	M39029/58-364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

*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

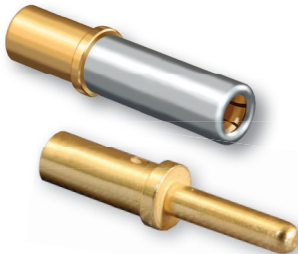


How-To-Order Extended Duty Crimp Contacts					
Mating End Size	Wire Accomodation	Pin Contacts Military Part No.	Pin Contacts Glenair Part No.	Socket Contacts Military Part No.	Socket Contacts Glenair Part No.
22	22-28 AWG	M39029/107-620	850-007-22-620	M39029/106-614	850-006-22-614
20	20-24 AWG	M39029/107-621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

MATERIAL AND FINISH

- Copper alloy, plated; meets AS39029 specifications.
- Rated to 1500 cycles of durability.
- Size 23 contacts not available for M39029/107, for size 23 extended duty crimp contacts, see part number 857-189 and 857-190.

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 Glenair Part No.	Socket Contacts Glenair Part No.
23	22-28 AWG	857-189	857-190
22	22-28 AWG	857-151-22	857-150-22
20	20-24 AWG	857-151-20	857-150-20
16	16-20 AWG	857-151-16	857-150-16
12	12-14 AWG	857-151-12	857-150-12

MATERIAL AND FINISH

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



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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	M39029/18-177	Brown	Violet	Violet
Socket	#22 – #28	BeCu	M39029/17-172	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

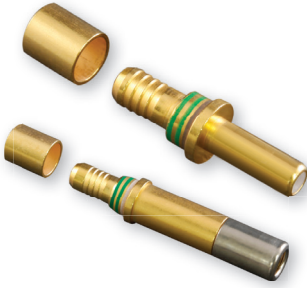
Type	Cable Accommodation	Part Number	Military Part Number	Color Band		
				1st	2nd	3rd
Pin	M17/119-RG174, M17/113-RG316, M17/094-RG179, Times AA3248, Teledyne 11299, Haveg 8100207, Thermax 75-738-BCCWXE, Tensolite 3088/L707YX-1	852-008-16-424	M39029/76-424	Yellow	Red	Yellow
	M19/093-RG178	852-008-16-425	M39029/76-425	Yellow	Red	Green
	Haveg 61-02051, Revere WH95623	852-008-16-426	M39029/76-426	Yellow	Red	Blue
	Haveg 30-00761, Haveg 30-02024, Haveg 30-02033, Tensolite 24713/A955KK1, Tensolite 26723/A955KK1	852-008-16-427	M39029/76-427	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	852-009-16-428	M39029/77-428	Yellow	Red	Gray
	M17/093-RG178	852-009-16-429	M39029/77-429	Yellow	Red	White
	Haveg 61-02051, Revere WH95623	852-009-16-430	M39029/77-430	Yellow	Orange	Black
	Haveg 30-00761, Haveg 30-02024, Haveg 30-02033, Tensolite 24713/A955KK1, Tensolite 26723/A955KK1	852-009-16-431	M39029/77-431	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

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SIZE #12 COAXIAL CONTACTS



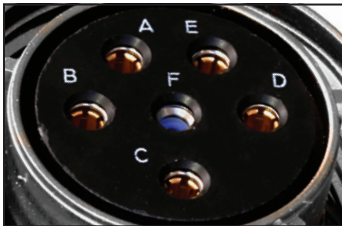
These contacts offer improved frequency response compared to standard coaxial contacts. VSWR is 1.32:1 at 3GHz . Nominal impedance is 50 ohms. Insertion loss at 3GHz is 0.20 dB maximum. Inner contact is rated at 1 amp, the outer contact 12 amps. DWV voltage rating is 1000 Vac rms sea level, 250 Vac at 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 M17/094-RG179	852-004-12-558	M39029/102-558	Green	Green	Gray
Socket	M17/113-RG316 M17/094-RG179	852-005-12-559	M39029/103-559	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	830-003'

1. 830-003 supersedes 857-011



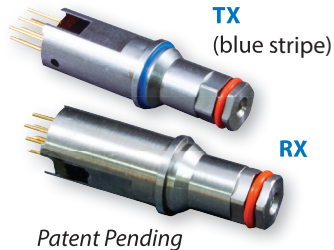
Contact Type	For Use In	Part Number
Socket	D38999 Type Series I, III, IV	830-005



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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	050-301-01-T
	2.50 Gbps	050-301-02-T
	3.20 Gbps	050-301-03-T
	4.25 Gbps	050-301-04-T

How-To-Order Size 8 Receiver Optoelectronic Contacts		
Type	Signal Type	Glenair Part Number
Receiver	1.25 Gbps	050-301-01-R
	2.50 Gbps	050-301-02-R
	3.20 Gbps	050-301-03-R
	4.25 Gbps	050-301-04-R

SIZE #8 COAXIAL CONTACTS, 50Ω



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 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 50 Ohm Coaxial Contacts						
Type	Cable Accommodation	Part Number	Military Part Number	Color Band		
				1st	2nd	3rd
Pin	M17/095-RG180	852-007-08-367	M39029/60-367	Orange	Blue	Violet
Socket	M17/095-RG180	852-006-08-366	M39029/59-366	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 COAX CONTACTS FOR 75Ω VIDEO CABLE



Size 8 coax contacts fit aerospace-grade digital video cable. 75 ohm nominal impedance. 0-4 GHz frequency range. Crimp termination. Supplied as unassembled kit with contact body, center contact, outer ferrule and optional sealing boot. Snap-in, rear-release for SuperNine connectors with #8 contact cavities.

How-To-Order Size #8 75 Ohm Coaxial Contacts			
Contact Type	Part Number Contact Only	Sealing Boot	Part Number Contact and Sealing Boot
Pin	852-056-01	859-042-01	852-056-01F
Socket	852-057-01	859-042-01	852-057-01F

MATERIAL AND FINISH

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

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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	853-003-08-625	M39029/113-625	Blue	Red	Green
Socket	M17/176-00002	853-004-08-628	M39029/114-628	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	854-001-01	N/A	Tensolite NF26Q100	687-754-8-1	.137	.218	26 AWG
	854-001-02	N/A	Tensolite NF24Q100	687-754-8-2	.163	.218	24 AWG
	854-001-03	N/A	Draka Fileca F-4704-6	687-754-8-3	.153	.218	26 AWG
	854-001-04	N/A	Draka Fileca F-4704-4	687-754-8-4	.175	.218	24 AWG
	854-001-05	N/A	Tensolite NF22Q100	687-754-8-5	.190	.231	22 AWG
Socket	854-002-01	N/A	Tensolite NF26Q100	687-754-8-1	.137	.218	26 AWG
	854-002-02	N/A	Tensolite NF24Q100	687-754-8-2	.163	.218	24 AWG
	854-002-03	N/A	Draka Fileca F-4704-6	687-754-8-3	.153	.218	26 AWG
	854-002-04	N/A	Draka Fileca F-4704-4	687-754-7-4	.175	.218	24 AWG
	854-002-05	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



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#8 HIGH POWER CONTACTS



How-To-Order #8 High Power Contacts			
Type	Mating End Size	Wire Accommodation	Glenair Part Number
Socket	8	8 AWG	850-013
Pin	8	8 AWG	850-014

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

THERMOCOUPLE CONTACTS



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

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.