



Special Purpose Contacts Selected Examples

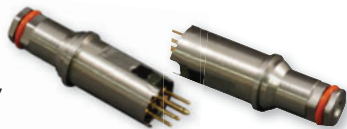
Size #12 Differential Twinax Contacts for Multi-Gigabit Data Rate Applications

| Glenair Part No. | Cable | Impedance | Frequency Range | VSWR | Insertion Loss |
|---|--------------------|---------------------|-----------------|---------------------|----------------|
| Socket = 853-015-01 Pin = 853-016-01 | 859-041 963-001 | 100-Ohms Nominal | DC to 10 GHz | 1.1 + (.03 * F GHz) | 1.3 * F GHz |



050-301 Size #8 Contact Cavity Optoelectronic Insert Transmitter and Receiver

- ARINC 664, 801, 803, 804, and 818 standard compliant
- Data rates from 125Mbps to 3.8 Gbps for transmitter, 125Mbps to 4.25Gbps for receiver
- Supports fast and Gigabit Ethernet, AFDX, 1x/2x Fibre Channel, DVI, HDMI, SFPDP, Serial Rapid I/O (sRIO).
- ARINC 801 1.25mm/2.5mm ceramic fiber ferrule, or expanded beam



Thermocouple Contacts to Fit D38999 Series I, II, III and IV Connectors



| Glenair Part No. | Military Part No. | AWG Wire Size |
|---|---------------------------------------|---------------|
| Pin = 850-023 | Pin = AS39029/87 | 16-28 |
| Series I, III, IV Socket = 850-024 | Series I, III, IV Socket = AS39029/88 | |
| Series II Socket = 850-025 | Series II Socket = AS39029/89 | |
| Custom PCB and crimp termination thermocouples available in type K, E, J, N and more. | | |

Wire-to-Contact Expansion and Reducer Adapters

| Glenair Part No. | Finish | Wire Accommodation | Contact Wire Barrel Size |
|------------------|--------------------------------------|---|--------------------------|
| 687-348 | Z2 - Gold Plate Z3 - Silver Plate | 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 0-4 | 4, 8, 12, 16, 20, 22 |
| 859-015 | Z4 - Tin Plate | 10, 12, 14, 16, 18, 20, 22, 24, 26, 28 | 10, 12, 16, 20, 22 |



PCB Contacts to Fit MIL-DTL-38999/20 and /24 Rear-Release Connectors

| Mating End Size | Glenair Part Number |
|-----------------|---------------------|
| 22 | 850-010-22 |
| 20 | 850-010-20 |
| 16 | 850-010-16 |
| 12 | 850-010-12 |



| Mating End Size | Glenair Part Number |
|-----------------|---------------------|
| 22 | 850-011-22 |
| 20 | 850-011-20 |
| 16 | 850-011-16 |
| 12 | 850-011-12 |



Special Purpose Contacts Selected Examples

High-Power and LouverBand Contacts



| High-Power Contacts | | |
|---------------------|--------------------|-----------------------------------|
| Contact Cavity Size | Wire Accommodation | Glenair Part Number |
| 8 | 8 AWG | 850-013 (Socket) 850-014 (Pin) |



High capacity LouverBand contacts for use in Glenair Series 970 PowerTrip™
850-026 (pin) 850-027 (skt)

High-Pressure Assemblies for Pure Gas Pneumatic/Hydraulic Applications



831-001 #12 Gas Tube Assembly for MIL-DTL-38999 Series I, III, and IV



D38999 Ser. I, III, IV

Size #12 Pneumatic Contacts

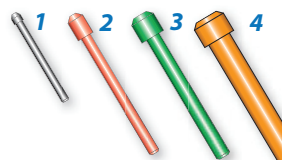


| Contact Type | For Use In | Part Number |
|--------------|-------------|-------------|
| Socket | Series 79 | 857-010 |
| Socket | D38999 Type | 857-050 |



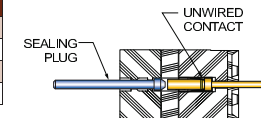
| Contact Type | For Use In | Part Number |
|--------------|-------------|-------------|
| Pin | Series 79 | 857-011 |
| Pin | D38999 Type | 857-057 |

Grommet Sealing Plugs



| Fig. | Size | Color | Part Number | Military Part Number |
|------|------|--------|-------------|----------------------|
| 1 | #23 | Black | 809-155 | (None) |
| 2 | #20 | Red | 859-012 | MS27488-20-2 |
| 3 | #16 | Green | 859-013 | MS27488-16-2 |
| 4 | #12 | Orange | 859-014 | MS27488-12-2 |

All sizes available and in Same-Day stock. Consult factory for more information.



Crimp Tool And Positioner For #12, #16 and #20 Power Contacts, Crimp Adapters



- 1 Crimp tool for use with size #20, #16 and #12 power pins. 9.75 inches OAL, 1.25 pounds. Use with M39029/57 and /58 contacts and 809-093 adapters.
- 2 Positioner for use with 809-093 adapters.
- 3 Positioner for use with size #20, #12 and #16 Power contacts.

Glenair offers a complete line of crimp tools in Same-Day stock.

| Figure | Part Number | Military Part Number | Daniels Part Number |
|--------|-------------|----------------------|---------------------|
| 1 | 809-136 | M22520/1-01 | AF8 |
| 2 | 809-137 | M22520/1-04 | TH163 |
| 3 | 809-138 | (none) | TH653 |



High-Speed Wire, Cable, and Flex



Size #12 Differential Twinax Pin and Socket Contacts and High-Speed Differential Pair Cable

- One-stop shopping for general-purpose and specialty high-speed wire, cable and contacts
- No minimum orders. Glenair wire and contact part numbers are in stock and ready for immediate, same-day shipment
- All major high-speed cable protocols supported
- Custom marking available

High availability, high-speed cables and contacts for digital and RF applications—No minimum orders or minimum cable runs

| Size #12 Differential Twinax Cable and Printed Circuit Board Contacts and Compatible Cables | | | | | | | |
|---|------------------|---------------|---------------------|------------------|-----------------|---------------------|----------------|
| Type | Glenair Part No. | AWG Wire Size | Cable Accommodation | Impedance | Frequency Range | VSWR | Insertion Loss |
| Socket | 853-015-01 | 28 | 963-001 | 100-Ohms Nominal | DC to 10 GHz | 1.1 + (.03 * F GHz) | 1.3 *F GHz |
| Pin | 853-016-01 | 28 | 963-001 | 100-Ohms Nominal | DC to 10 GHz | 1.1 + (.03 * F GHz) | 1.3 *F GHz |
| Socket | 853-020 | N/A | PC Mount | 100-Ohms Nominal | DC to 10 GHz | 1.1 + (.03 * F GHz) | 1.3 *F GHz |
| Pin | 853-021 | N/A | PC Mount | 100-Ohms Nominal | DC to 10 GHz | 1.1 + (.03 * F GHz) | 1.3 *F GHz |

| High-Performance Coaxial Contacts and Compatible Cables | | | |
|---|--------------|---------|----------------|
| Connector | Contact Size | Cable | Glenair Part # |
| 38999 I, III, IV | 8 Pin | 962-004 | 852-060-285 |
| 38999 I, III, IV | 8 Socket | 962-004 | 852-061-285 |
| 38999 I, III, IV | 8 Pin | 962-003 | 852-060-141 |
| 38999 I, III, IV | 8 Socket | 962-003 | 852-061-141 |
| 38999 I, III, IV | 12 Pin | 962-002 | 852-062 |
| 38999 I, III, IV | 12 Socket | 962-002 | 852-063 |
| 38999 I, III, IV | 16 Pin | 962-002 | 852-064 |
| 38999 I, III, IV | 16 Socket | 962-002 | 852-065 |
| 38999 II | 16 Socket | 962-002 | 852-066 |
| 38999 I, III, IV | 20 Pin | 962-001 | 852-067 |
| 38999 I, III, IV | 20 Socket | 962-001 | 852-068 |
| HiPer-D/24308 | 20HD Pin | 962-001 | 852-069 |
| HiPer-D/24308 | 20HD Socket | 962-001 | 852-070 |
| Mighty Mouse | 20HD Pin | 962-001 | 852-038 |
| Mighty Mouse | 20HD Socket | 962-001 | 852-039 |

Contact the factory for preterminated coaxial cordsets



Matched impedance Coax contacts available in sizes ranging from #20 to #8



Quadrax contacts available for D38999 Series I, II, III and IV type connectors, Series 28 HiPer-D and Series 80 Mighty Mouse



High-Speed Wire, Cable, and Flex

| General-Purpose High-Speed Wire and Cable | | | | | |
|---|-------------------------|------------|--------------------------|-----------------------------|-----------------------------|
| Cable Protocol | 100BASE-T | 100BASE-T | Impedance Matched Ribbon | 100 Ω Shielded Twisted Pair | 100 Ω Shielded Twisted Pair |
| Glenair Part Number | 963-008 | 963-009 | 963-007 | 963-010 | 963-011 |
| Construction | unshielded twisted pair | Quad | Ribbon | shielded twisted pair | shielded twisted pair |
| Number of Pairs | 2 | - | 10 to 64 | 2 | 4 |
| Number of Conductors | 4 | 4 | - | 4 | 8 |
| Conductor AWG | 24 | 24 | 28 | 26 | 26 |
| Impedance | 100 ± 10 Ω | 100 ± 10 Ω | - | 100 ± 10 Ω | 100 ± 10 Ω |
| Capacitance (pF/ft.) | 13 | 13 | - | 13 | 13 |
| Velocity of Propagation | 80% | 80% | - | 80% | 80% |

| Protocol-Specific High-Speed Cable | | | | | | |
|------------------------------------|-------------------------|-----------------------|-----------|-----------------------|------------------|------------------------|
| Cable Protocol | 1000BASE-T (Cat 5e) | 10GBASE-T (Cat 6a) | IEEE 1394 | USB 2.0 | USB 3.0 | SATA |
| Glenair Part Number | 963-002 | 963-003 | 963-006 | 963-005 | 963-012 | 963-013 |
| Construction | unshielded twisted pair | shielded twisted pair | Quad | shielded twisted pair | 3 pairs, 2 power | 2 foiled twisted pairs |
| Number of Pairs | 4 | 4 | - | 1 | 3 | 2 |
| Number of Conductors | 8 | 8 | 4 | 4 | 10 | 8 |
| Conductor AWG | 24 | 24 | 24 | variable | variable | 26 signal; 28 drain |
| Impedance | 100 ± 10 Ω | 100 ± 10 Ω | 110 ± 7 Ω | 90 ± 13 Ω | 90 ± 7 Ω | 100 ± 10 Ω |
| Capacitance (pF/ft.) | 14.5 | 14.5 | 12.5 | 13 | - | - |
| Velocity of Propagation | 70% | 70% | 80% | 70% | - | - |

| High-Speed Coaxial Cable | | | | |
|--------------------------|---------------|---------------|---------------|----------------|
| Cable Protocol | Temp Flex 047 | Temp Flex 086 | Temp Flex 141 | Harbour LL-285 |
| Glenair Part Number | 962-001 | 962-002 | 962-003 | 962-004 |
| Construction | coaxial | coaxial | coaxial | coaxial |
| Number of Conductors | 1 | 1 | 1 | 1 |
| Overall Shield Dia. | .047 | .086 | .141 | .285 |
| Impedance | 50 ± 1 Ω | 50 ± 1 Ω | 50 ± 1 Ω | 50 ± 2 Ω |
| Capacitance (pF/ft.) | 29 | 29 | 29 | 24.5 |
| Velocity of Propagation | 70% | 70% | 70% | 84% |

