



SolderTacts Contacts

One-Piece, Controlled-Solder Contacts for Fast, Reliable Terminations

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One-piece controlled-reflow-solder SolderTacts contacts are designed to terminate coaxial cables, shielded wires and twisted pairs faster and more reliably than other methods. SolderTacts contacts help eliminate the variables of crimping. The one-step installation process helps cut down on production time while reducing handling and installed costs.

Controlled Soldering and Strain Relief

SolderTacts contacts provide the optimum amount and type of solder and flux in a prefluxed solder preform that controls soldering and reduces operator sensitivity. The geometry of the coaxial cable is carried through the connector to eliminate separate pins, help reduce crosstalk, and supports improved shielding effectiveness and signal transmission.

These contacts contain two SolderSleeve terminations. One terminator connects the cable's signal conductor to the contact's inner pin. The other terminator connects the shield or ground lead to the contact body. When the contact is heated, the solder melts to provide a precise solder connection. SolderTacts contacts provide a simultaneous electrical connection and strain relief. Heat shrinkable tubing insulations help eliminate stress concentration on the wire within the contact.

Improved Signal Integrity

For digital and RF signals, SolderTacts contacts offer better signal transmission than obtained with crimp contacts. They reduce crosstalk, signal attenuation, and reflections, while providing excellent protection against outside noise.

Compatibility

SolderTacts contacts are compatible with a wide range of circular and rectangular military and commercial connectors, including MIL-DTL-38999, MIL-DTL-83723 and MIL-DTL-28748. Compatible with most standard connector cavities, SolderTacts contacts are intermateable and intermountable with contacts qualified to the above connector specifications. They use standard insertion and extraction tools.

ECONOMICAL

- One-piece contact design with integrated soldering technology
- One-step installation process
- One contact fits multiple cable sizes
- No special tools required

RELIABLE

- 360° shielding reduces crosstalk and improves signal transmission
- Reflow solder joints are strong and reliable
- Controlled reflow soldering process yields reliable, consistent terminations
- Terminations are fully inspectable

VERSATILE

- Compatible with a variety of commercial and military connectors
- Termination available for coax cables, shielded pairs, twisted pairs, and triaxial cables
- 150°C temperature rating

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

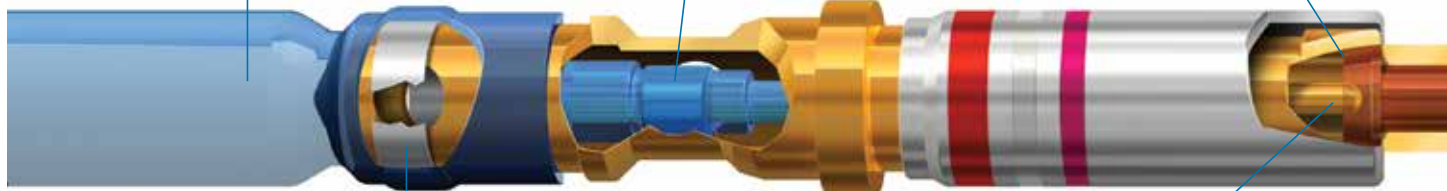
AMP | AGASTAT | CII | HARTMAN | KILOVAC | MICRODOT | NANONICS | POLAMCO | Raychem | Rochester | DEUTSCH
SEACON Phoenix | LL ROWE | Phoenix Optix | AFP | SEACON

Get your product to market faster with a smarter, better solution.

The outer SolderSleeve termination is a cross-linked heat-shrinkable insulating sleeve supplied in the expanded state. Cables insert easily, with no spacers or other parts required.

The inner SolderSleeve termination is a heat-shrinkable sleeve with a precisely prefluxed solder preform conforming to QQ-S-571.

The precision outer body meets electrical engagement and contact retention requirements of individual connector systems.



The outer solder preform contains precise amounts of solder and flux conforming to QQ-S-571.

Inner pin and socket contacts are permanently fixed within the assembly to provide proper setback and concentricity.



APPLICATION TOOLING

- Steinel HL1910E or HL2010E
- Steinel HL1920E or HL2020E
- Steinel HL1802E-074616
- Raychem CV-1981
- Raychem CV-1983
- Raychem AA-400

For more details, please see TE Application Tooling brochure 1-1773872-1

SPECIFICATION

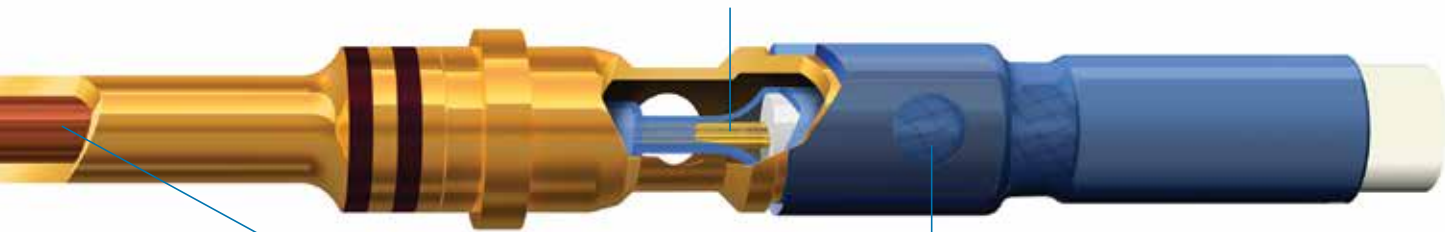
- **D-6002:** SolderTacts Military-Grade Electrical Contacts for Solder Termination

APPLICATIONS

- Commercial Aerospace
- Military Marine
- Military Aerospace
- Missile Defense
- C4ISR
- Offshore/Civil Marine
- Ground Defense
- Space

| SolderTact Series | Part No. (D-602-) | Engineering Standard (Termination Instructions) | Repair Wand | |
|-------------------|-------------------|---|-------------|---------------------------|
| | | | Part No. | Part Description |
| Submin | 0218, 0219 | ES-61170 | 959014-000 | AD-1481-SUBMN-SLDTK-HOLDR |
| | 0238, 0239 | ES-61169 | | |
| 748 | 44, 45 | ES-61133 | 994040-000 | AD-1480 |
| | 0172, 0173 | ES-61240 | | |
| | 54, 55 | ES-61132 | | |
| | 0126, 0127 | ES-61199 | | |
| 723 | D-610-09, -10 | ES-61187 | 551737-000 | AD-1571-1-POWERTACT-HOLDR |
| | 0094, 0095 | ES-61128 | 994057-000 | AD-14940723-SLTC-HLD-ASY |
| | 0106, 0107 | ES-61134 | | |
| No. 12 | 16, 17 | ES-61161 | 966800-000 | AD-1508-REP-FOR-12-CONT |
| | 482 | 46, 47 | ES-61137 | 181779-000 |
| 56, 57 | | ES-61138 | | |
| 999 Size 16 | 0140, 0141 | ES-61226 | 859747-000 | AD-1572-1-SOLD-HOLDER-ASY |
| | 0142, 0143 | ES-61224 | | |
| | 0171 | ES-61226 | | |
| | 0174 | ES-61124 | | |
| 999 Size 12 | 0144, 0145 | ES-61206 | 122917-000 | AD-1566-1-HOLDER-ASSEMBLY |
| | 0146, 0147 | ES-61218 | | |
| | 0159/0151 | ES-61223 | | |
| 999 Size 8 | 1108/1109 | ES-61172 | 635308-000 | AD-1568-1-SOLDERTACT-HLDR |
| | 1110/1111 | | | |
| | 1112/1113 | ES-61184 | | |
| | 0156/0157-X | ES-61231 | | |
| | 0169/0170-X | ES-61235 | | |

In the terminated signal lead, the heat-shrink tubing shrinks tightly around the termination to insulate and strain relieve the connection. The tensile strength of the soldered terminations exceeds that of the cable itself.



The dielectric between inner and outer contacts provides concentricity, electrical integrity, precise mating dimensions, and closed entry at the inner socket.

The shield termination can be inspected through the viewing port.



Table I: SolderTacts Contacts-to-Cable Cross Reference

| | Submin Series | 723 Series Size 12 | 723 Series Size 12 | 748 Series Size 16 | 748 Series Size 16 | 847 Series Size 16 | 748 Series Size 16 |
|--------------------------------|----------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | D-602-0278 | D-602-0094 | D-602-0106 | D-602-44 | D-602-0172 | D-602-72 | D-602-76 |
| | D-602-0279 | D-602-0095 | D-602-0107 | D-602-45 | D-602-0173 | D-602-73 | D-602-77 |
| Cheminax Coaxial Cables | | | | | | | |
| 5021K1X1X | | | | | | | |
| 5022A1X1X | | | | | | | |
| 5024A1X1X | ✓ | ✓ | | | | | |
| 5026A1X1X | ✓ | | | ✓ | | ✓ | ✓ |
| 5026D1X2X | ✓ | | | ✓ | | ✓ | ✓ |
| 5028A1X1X | ✓ | | | | | | |
| 5028A1X2X | ✓ | | | | | | |
| 5030A1X1X | ✓ | | | ✓ ⁴ | ✓ | ✓ | ✓ |
| 7522A1X1X | | | | | | | |
| 7524A1X1X | | | | | | | |
| 7528A1X1X | ✓ | ✓ | | ✓ ⁴ | ✓ | ✓ | ✓ |
| 7530A1X1X | ✓ | | | ✓ ⁴ | ✓ | ✓ | ✓ |
| 7530D1X2X | | | | | | | |
| 9526A1X1X | | | | | | | |
| 9528A1X1X | | | ✓ | | | | |
| 9528D1X2X | | | ✓ | | | | |
| 9530A1X1X | | ✓ | | | | | |
| 9530H1X1X | ✓ | ✓ | | | | | |
| 9532A1X1X | ✓ | ✓ | | ✓ ⁴ | ✓ | ✓ | ✓ |
| RG/U Coaxial Cables | | | | | | | |
| RG-58 | | | | | | | |
| RG-174 | ✓ | ✓ | | ✓ | | ✓ | ✓ |
| RG-178 | ✓ | ✓ | | ✓ ¹ | ✓ | ✓ ¹ | ✓ ¹ |
| RG-179 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ |
| RG-180 | | | | | | | |
| RG-195 | | | ✓ | | | | |
| RG-316 | ✓ | ✓ | | ✓ | | ✓ | ✓ |
| Twisted Pair Cables | | | | | | | |
| | Submin Series | 723 Series Size 12 | 723 Series Size 12 | 748 Series Size 16 | 748 Series Size 16 | 847 Series Size 16 | 748 Series Size 16 |
| | D-602-0288 | D-602-0104 | | D-602-54 | D-602-0126 | D-602-74 | |
| | D-602-0289 | D-602-0105 | — | D-602-55 | D-602-0127 | D-602-75 | — |
| 22-26 | | | | | ✓ | | |
| 24-26 | | ✓ | | | | | |
| 24-30 ³ | ✓ ² | | | ✓ | | ✓ | |
| 26-30 ³ | | | | | | | |

1. Requires use of barrier.

2. .048" maximum insulation diameter.

3. Smaller cables can be accommodated. Consult product management.

4. These cables can be accommodated by D-602-44 and D-602-45. However, the D-602-0172 and the D-602-0173 are preferred for these cables. The cross reference list above is not intended to be exhaustive. Please consult TE.



Table I: SolderTacts Contacts-to-Cable Cross Reference

| | 482 Series Size 16 | No. 12 Size 12 | 999 Series Size 8 | 999 Series Size 12 | 999 Series Size 12 | 999 Series Size 16 |
|--------------------------------|-----------------------|----------------------|--------------------------|--------------------------|--------------------------|--|
| | D-602-46 D-602-47 | D-602-16 D-602-17 | D-602-0122 D-602-0123 | D-602-0144 D-602-0145 | D-602-0150 D-602-0151 | D-602-0140 D-602-0141 D-602-0171 |
| Cheminax Coaxial Cables | | | | | | |
| 5021K1X1X | | | ✓ | | | |
| 5022A1X1X | | | ✓ | | ✓ | |
| 5024A1X1X | | ✓ | | ✓ | | |
| 5026A1X1X | ✓ | ✓ | | ✓ | | ✓ |
| 5026D1X2X | ✓ | ✓ | | | | ✓ |
| 5028A1X1X | | | | | | ✓ |
| 5028A1X2X | | ✓ | | | | |
| 5030A1X1X | ✓ | ✓ | | | | ✓ |
| 7522A1X1X | | | ✓ | | | |
| 7524A1X1X | | | ✓ | | | |
| 7528A1X1X | ✓ | ✓ | | ✓ | | ✓ |
| 7530A1X1X | ✓ | ✓ | | ✓ | | ✓ |
| 7530D1X2X | | ✓ | | | | |
| 9526A1X1X | | | ✓ | | | |
| 9528A1X1X | | | ✓ | | ✓ | |
| 9528D1X2X | | | ✓ | | ✓ | |
| 9530A1X1X | | | | ✓ | | |
| 9530H1X1X | | ✓ | | ✓ | | |
| 9532A1X1X | ✓ | ✓ | | ✓ | | |
| RG/U Coaxial Cables | | | | | | |
| RG-58 | | | ✓ | | | |
| RG-174 | ✓ | ✓ | | ✓ | | |
| RG-178 | ✓ | | | | | ✓ |
| RG-179 | ✓ ¹ | ✓ | | ✓ | | ✓ |
| RG-180 | | | ✓ | | ✓ | |
| RG-195 | | | ✓ | | | |
| RG-316 | ✓ | ✓ | | ✓ | | ✓ |
| Twisted Pair Cables | | | | | | |
| | 482 Series Size 16 | No. 12 Size 12 | 999 Series Size 8 | 999 Series Size 12 | 999 Series Size 12 | 999 Series Size 16 |
| | D-602-56 D-602-57 | — | — | D-602-0146 D-602-0147 | — | — |
| 22-26 AWG | | | | ✓ | | |
| 24-26 | | | | | | |
| 24-30 ³ | ✓ | | | | | |
| 26-30 ³ | | | | | | ✓ |

1. Requires use of barrier.

2. .048" maximum insulation diameter.

3. Smaller cables can be accommodated. Consult product management.

4. These cables can be accommodated by D-602-44 and D-602-45. However, the D-602-0172 and the D-602-0173 are preferred for these cables. The cross reference list above is not intended to be exhaustive. Please consult TE.



Table II: Connector Accommodation: SolderTacts Shielded Contacts

| Military Specification | SolderTacts Contacts Series/Contact Size | Specification | Cable Type | Contact Type | Part No. |
|--|--|----------------------------|--------------------------------------|--------------|------------|
| NAS 1599 | 723 Series Size 12 Contact | AS39029/74 | Small Coaxial | Pin | D-602-0094 |
| MIL-DTL-26482 Series II | | AS39029/73 | Small Coaxial | Socket | D-602-0095 |
| SAE-AS81703 Series III | | AS39029/74 | Large Coaxial | Pin | D-602-0106 |
| MIL-DTL-83723 Series I & III | | AS39029/73 | Large Coaxial | Socket | D-602-0107 |
| MIL-DTL-83733 | | AS39029/74 | Twisted Pair | Pin | D-602-0104 |
| | | AS39029/73 | Twisted Pair | Socket | D-602-0105 |
| MIL-DTL-26482 Series I | No. 12 Series Size 12 Contact | MIS-20067 (Army) | Coaxial | Pin | D-602-17 |
| | | | Coaxial | Socket | D-602-16 |
| MIL-DTL-26500 MIL-PRF-81733 Series II | 482 Series Size 16 Contact | | Coaxial | Pin | D-602-46 |
| | | | Coaxial | Socket | D-602-47 |
| MIL-DTL-28748/3,4,9,10 MIS-20065 (Army) | 748 Series Size 16 Contact | MIS20067 (Army) | Twisted Pair | Pin | D-602-56 |
| | | | Twisted Pair | Socket | D-602-57 |
| | | | Coaxial | Pin | D-602-44 |
| | | | Coaxial | Socket | D-602-45 |
| | | | Twisted Pair | Pin | D-602-54 |
| | | | Twisted Pair | Socket | D-602-55 |
| | | | Power | Pin | D-610-09 |
| | | | Power | Socket | D-610-10 |
| | | | Coaxial | Pin | D-602-0173 |
| | | | Coaxial | Socket | D-602-0172 |
| | Twisted Pair (MIL-STD-1553) | Pin | D-602-0126 | | |
| | Twisted Pair | Socket | D-602-0127 | | |
| MIL-DTL-38999 Series I, II*, III, IV | 999 Series Size 16 Contact | AS39029/76 | Coaxial | Pin | D-602-0140 |
| | | AS39029/77 | Coaxial | Socket | D-602-0141 |
| | | AS39029/77 | Coaxial* | Socket | D-602-0171 |
| | | AS39029/76 | Twisted Pair | Pin | D-602-0142 |
| | | AS39029/77 | Twisted Pair | Socket | D-602-0143 |
| | | AS39029/77 | Twisted Pair* | Socket | D-602-0174 |
| | 999 Series Size 12 Contact | AS39029/28 | Coaxial | Pin | D-602-0144 |
| | | AS39029/75 | Coaxial | Socket | D-602-0145 |
| | | AS39029/28 | Twisted Pair | Pin | D-602-0146 |
| | | AS39029/75 | Twisted Pair | Socket | D-602-0147 |
| | | AS39029/28 | Large Coaxial | Pin | D-602-0150 |
| | | AS39029/75 | Large Coaxial | Socket | D-602-0151 |
| | 999 Series Size 8 Contact | AS39029/60 | Coaxial | Pin | D-602-0122 |
| | | AS39029/59 | Coaxial | Socket | D-602-0123 |
| | | USAF8340712-1 [^] | Shielded Twisted Pair (MIL-STD-1553) | Socket | D-602-1108 |
| | | USAF8340713-1 [^] | Shielded Twisted Pair (MIL-STD-1553) | Pin | D-602-1109 |
| | | USAF8340712-2 [^] | Shielded Twisted Pair (MIL-STD-1553) | Socket | D-602-1112 |
| | | USAF8340713-2 [^] | Shielded Twisted Pair (MIL-STD-1553) | Pin | D-602-1113 |
| Submin Series Size 16 | | | Triaxial | Socket | D-602-1110 |
| | | | Triaxial | Pin | D-602-1111 |
| | | | Coaxial | Pin | D-602-0278 |
| | | | Coaxial | Socket | D-602-0279 |
| | | | Twisted Pair | Pin | D-602-0288 |
| | | | Twisted Pair | Socket | D-602-0289 |

* Size 16 contacts only for use with MTCP and MIL-DTL-38999 Series II connectors only.

[^] Intermountable and intermatable, replaces crimp style termination.



Table III: SolderTacts Contact Compatibility

| Contact Military Specification | Raychem Equivalent* Part Numbers | Nature of Compatibility | SolderTacts - Compatible Connector Specifications | SolderTact Series | | | |
|--|--|---|---|-------------------|---|--|------------------|
| M39029/73-396 M39029/73-397 M39029/73-398 M39029/73-555 | D-602-0107 D-602-0095 D-602-0105 D-602-0093 | Equivalent product. TE is a qualified vendor. | MIL-DTL-26482 Series II MIL-DTL-81703 Series III MIL-DTL-83723 Series I, III MIL-DTL-83733 NAS-1599 | 723 Series | | | |
| M39029/74-399 M39029/74-400 M39029/74-401 | D-602-0106 D-602-0094 D-602-0104 | | | | | | |
| M39029/28 | D-602-0144 D-602-0146 D-602-0150 | Intermountable and intermatable. Replaces crimp-style termination. | MIL-DTL-38999 Series I, II*, III, IV *Size 16 only | 999 Series | | | |
| M39029/59 | D-602-0123 | | | | | | |
| M39029/60 | D-602-0122 | | | | | | |
| M39029/75 | D-602-0145 D-602-0147 D-602-0151 | | | | | | |
| M39029/76 | D-602-0140 D-602-0142 | | | | | | |
| M39029/77 | D-602-0141 D-602-0143 D-602-0171 D-602-0174 | | | | | | |
| M39029/90 | DK-602-0156-N-X DK-602-0169-N-X | | | | | | |
| M39029/91 | DK-602-0157-N-X DK-602-0170-N-X | | | | | | |
| USAF8340712-1 USAF8340712-2 USAF8340713-1 USAF8340713-2 | D-602-1108 D-602-1112 D-602-1109 D-602-1113 | | | | Equivalent product. TE is a qualified vendor. | | |
| M39029/25 M39029/26 | D-602-17 D-602-16 | | | | Intermountable and intermatable. Replaces crimp-style termination. | MIL-DTL-26482 Series I MIL-DTL-26500 MIL-DTL-81703 Series II | No. 12 Series |
| MIS20067/5 MIS20067/6 | D-602-16 D-602-17 | Equivalent product. TE is a qualified vendor. | | | | | |
| M39029/40 M39029/41 M39029/42 M39029/43 | D-602-76 D-602-77 D-602-77 D-602-76 | Intermountable and intermatable. Replaces crimp-style termination. | MIL-DTL-28748/3, /4, /9, /10 | 748 Series | | | |
| M39029/79 | D-602-72 D-602-74 | Intermountable and intermatable. Replaces crimp-style termination. | | 847 Series | | | |
| M39029/80 | D-602-73 D-602-75 | | | | | | |
| MIS20067/1 MIS20067/2 MIS20067/3 MIS20067/4 MIS20067/7 MIS20067/8 | D-602-45 D-602-44 D-602-55 D-602-54 D-610-10 D-610-09 | Equivalent products. TE is a qualified vendor. | MIS-20065 (Army) | 748 Series | | | |
| | D-602-77 D-602-76 D-602-76 D-602-77 | Intermountable and intermatable. Replaces crimp-style termination. | | 748 Series | | | |
| | D-602-0278 D-602-0279 D-602-0288 D-602-0289 | Intermountable and intermatable. Replaces crimp-style termination. | Souriau Trim Trio Connector Family | Submin Series | | | |

* SolderTacts contacts are intermatable and interchangeable with existing MIL-spec contacts.