

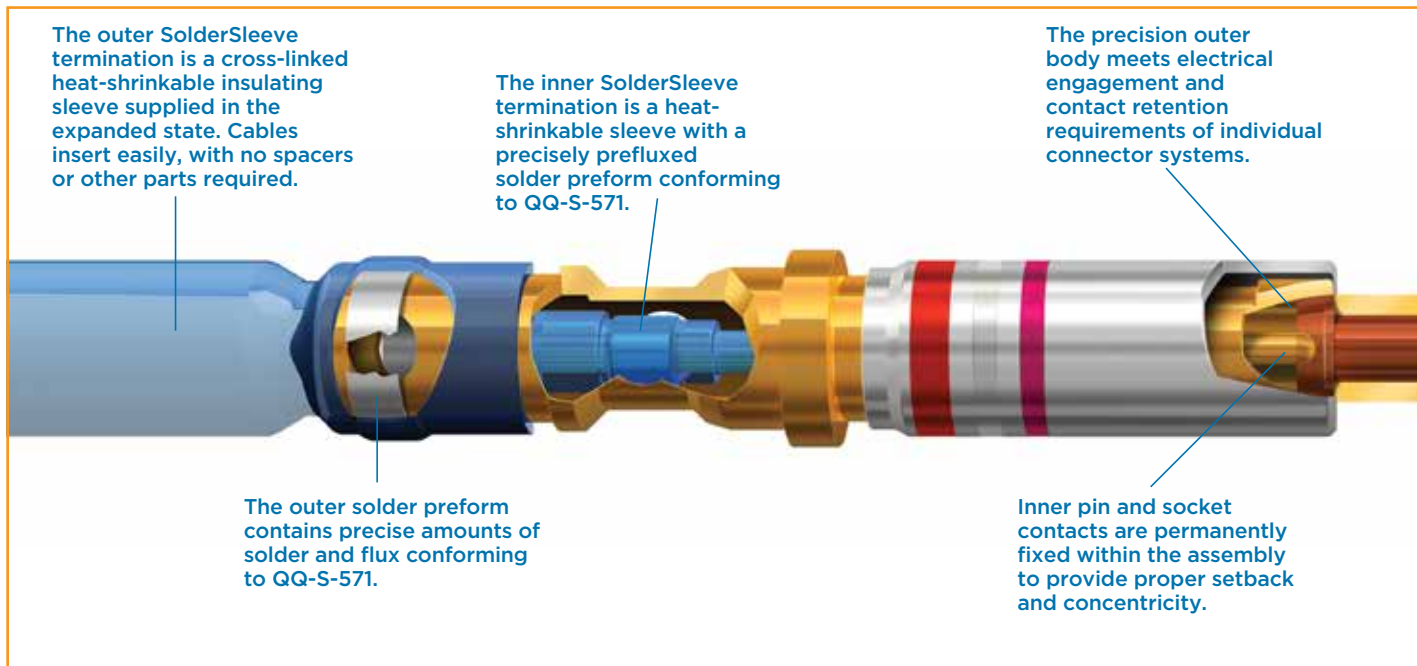
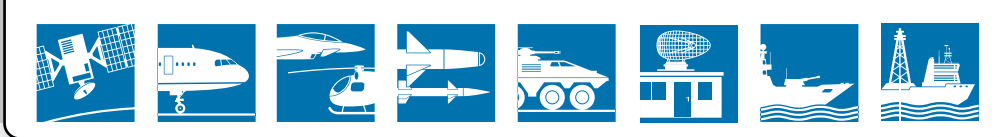


SolderTacts Contacts

One-piece, controlled-solder contacts for fast, reliable terminations



EVERY CONNECTION COUNTS



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.

- One-piece contact design with integrated soldering technology
- Controlled reflow soldering process yields reliable, consistent terminations
- 360° shielding reduces crosstalk and improves signal transmission
- One-step installation process
- One contact fits multiple cable sizes
- Reflow solder joints are strong and reliable
- Terminations are fully inspectable
- Termination available for coax cables, shielded pairs, twisted pairs, and triaxial cables
- Compatible with a variety of commercial and military connectors
- 150°C temperature rating

Applications

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

Product Specification

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

Application Tooling

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

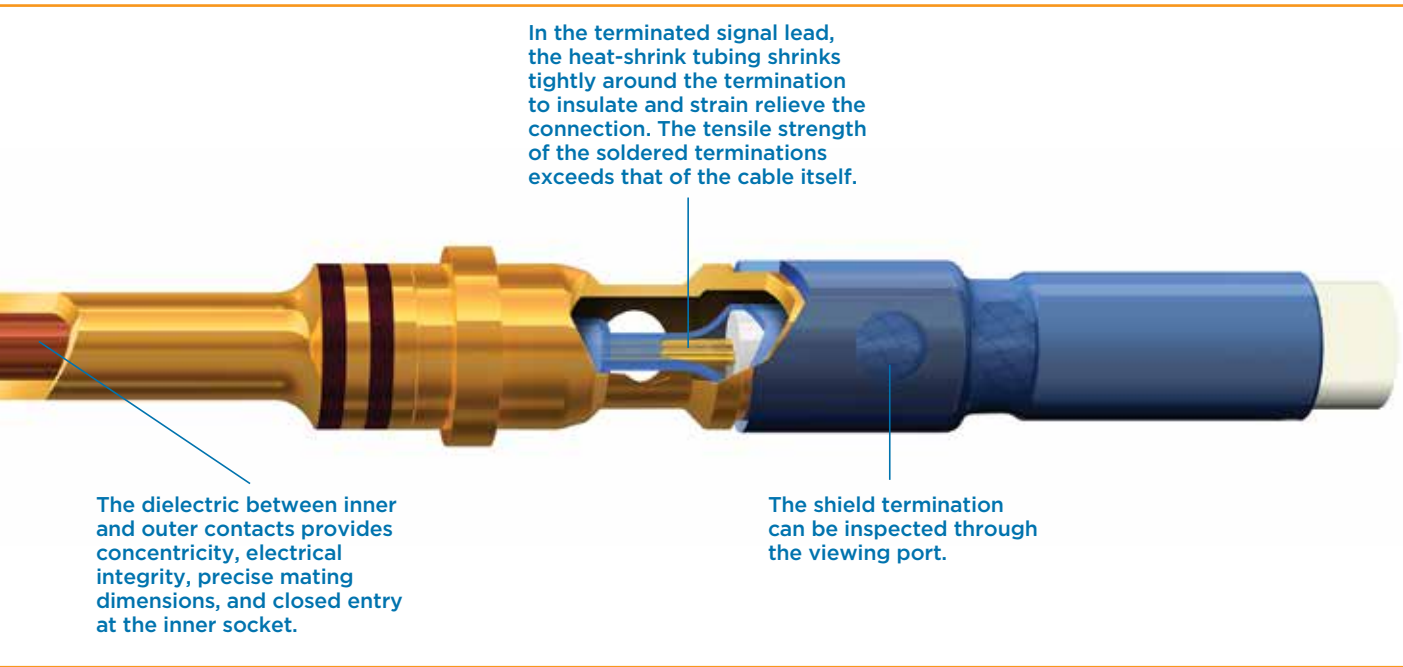
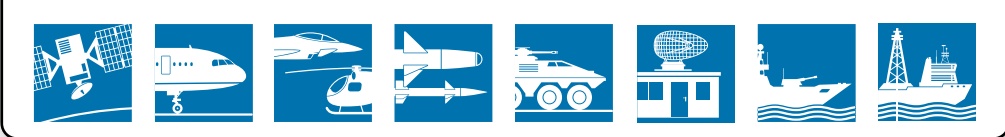
CONSISTENT, RELIABLE TERMINATIONS

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 + 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.



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.

These contacts contain two solder sleeve 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.

EASY INSPECTION

Transparent insulation and inspection windows make terminations fully inspectable.

ECONOMICAL

The one-piece construction and heat-shrink design make SolderTacts contacts easier to use. There are no separate pieces to handle, no complicated assembly procedures, and no special tools requiring constant calibration. The controlled-solder termination is repeatable and reliable in production environments.

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.

TOOLING

TE offers a range of heating equipment for terminating SolderTacts contacts. The contacts use the standard insertion/extraction tools for each connector each connector series.

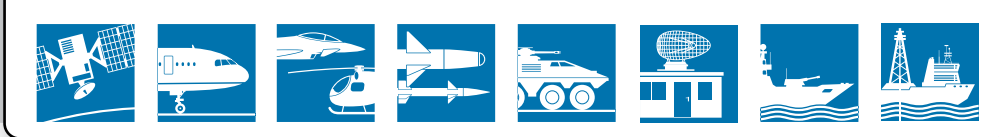


Table I: SolderTacts Contacts-to-Cable Cross Reference

	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.

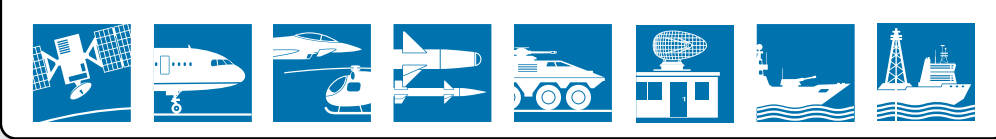


Table I: SolderTacts Contacts-to-Cable Cross Reference

	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.

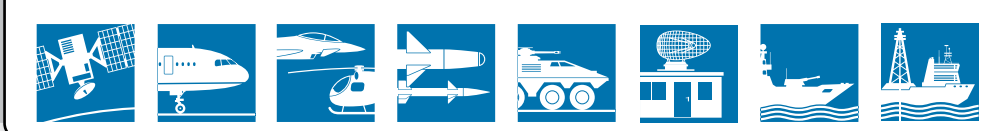


Table II: Connector Accommodation: SolderTacts Shielded Contacts

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			USAF8340713-2^	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.

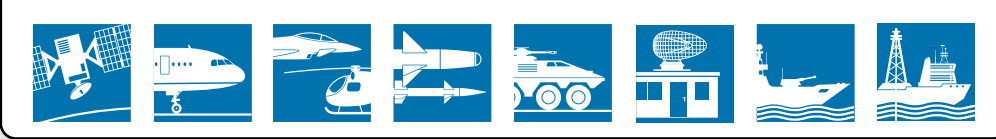


Table III: SolderTacts Contact Compatibility

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	Intermountable and intermatable. Replaces crimp-style termination.	MIL-DTL-38999 Series I, II*, III, IV *Size 16 only	999 Series
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	Intermountable and intermatable. Replaces crimp-style termination.		
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.

FOR MORE INFORMATION

Technical Support

North America	+1 800 522 6752
Asia Pacific	+86 0 400 820 6015
Austria	+43 1 905 601 228
Baltic Regions	+46 8 5072 5000
Benelux	+31 73 6246 999
Czech Republic	+420 800 701 462
France	+33 1 34 20 86 86
Germany	+49 6251 133 1999
Hungary	+36 809 874 04
Italy	+39 011 401 2632
Nordic	+46 8 5072 5000
Poland	+48 800 702 309
Russia	+7495 790 790 2
Spain/Portugal	+34 93 2910366
Switzerland	+41 52 633 66 26
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1-1773722-5 ADM/RRD 5M 12/2013

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EVERY CONNECTION COUNTS