

tyco

Electronics

Raychem

- Reliable one-piece solder contacts
- One-step installation
- Termination for coax cables, shielded wires, twisted pairs, triaxial cables

SolderTacts

Shielded contacts for MIL-C-38999, series I, II*, III, IV circular connectors

*Size 16 only.

One-piece controlled-soldering SolderTacts contacts for MIL-C-38999 circular connectors are designed to terminate coaxial cables, shielded wires, and twisted pairs faster and more reliably than any other method. SolderTacts contacts eliminate the variables associated with hard-to-handle crimping. Their one-step installation accelerates production while reducing handling and installed costs.

Controlled soldering

SolderTacts contacts provide the optimum amount and type of solder and flux in

prefluxed solder preforms to control soldering. The geometry of the coaxial cable is carried through the connector to eliminate separate pins, help reduce cross talk, and improve shielding effectiveness and signal transmission.

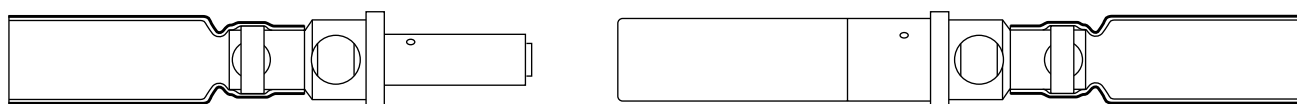
SolderTacts contacts provide simultaneous electrical connection and strain relief. Heat-shrinkable-tubing insulations eliminate stress concentration on the wire within the contact. Because the insulation is transparent and inspection windows are provided, terminations are fully inspectable.

Compatibility

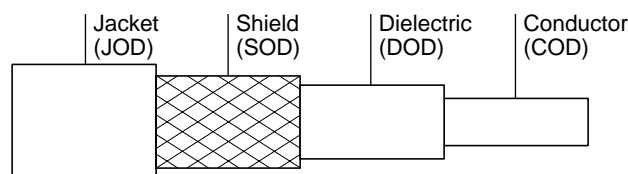
The design versatility of SolderTacts contacts makes them exceptionally well suited to military applications.

SolderTacts shielded contacts can be terminated with standard Raychem heating tools. Once terminated, they can be installed into connector cavities with standard insertion and extraction tools. They are replaceable without cutting and restripping or shortening the cable.

SolderTacts product construction



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SolderTacts series: MIL-C-38999

Contact military specification ^a	United States Air Force drawing no.	Cable diameter (in inches)				Wire (AWG)	Raychem SolderTacts part number	Size	Polarity	Cable type
		JOD	SOD	DOD	COD					
Series I, III, and IV										
M39029/60		.150-.234	.150-.170	.060-.151	.019-.043	22-24	D-602-0122	8	P	Coaxial
M39029/59		.150-.234	.150-.170	.060-.151	.019-.043	22-24	D-602-0123	8	S	Coaxial
M39029/76	915304-1	.050-.103	.066-.084	.036-.068	.009-.023	26-30	D-602-0140	16	P	Coaxial
M39029/77	915305-1	.050-.103	.066-.084	.036-.068	.009-.023	26-30	D-602-0141	16	S	Coaxial
M39029/76	915304-2	n/a	n/a	.025-.043	.009-.023	26-30	D-602-0142	16	P	Twisted pair
M39029/77	915305-2	n/a	n/a	.025-.043	.009-.023	26-30	D-602-0143	16	S	Twisted pair
M39029/28	915307-1	.058-.122	.066-.094	.044-.080	.019-.035	24-32	D-602-0144	12	P	Coaxial
M39029/75	915308-1	.058-.122	.066-.094	.044-.080	.019-.035	24-32	D-602-0145	12	S	Coaxial
M39029/28	915307-3	n/a	n/a	.029-.057	.019-.035	22-26	D-602-0146	12	P	Twisted pair
M39029/75	915308-3	n/a	n/a	.029-.057	.019-.035	22-26	D-602-0147	12	S	Twisted pair
M39029/28	915307-2	.075-.150	.100-.117	.050-.103	.019-.035	22, 28	D-602-0150	12	P	Coaxial
M39029/75	915308-2	.075-.150	.100-.117	.050-.103	.019-.035	22, 28	D-602-0151	12	S	Coaxial
M39029/77	915306-1	.050-.103	.066-.084	.036-.068	.009-.023	26-32	D-602-0171	16	S	Coaxial
M39029/77	915306-2	n/a	n/a	.025-.042	.009-.023	26-32	D-602-0174	16	S	Twisted pair

^a These SolderTacts contacts are intermateable and intermountable with contacts qualified to indicated specification; they replace crimp-style termination.

(continued)

SolderTacts series: MIL-C-38999 (continued)

Contact military specification ^a	United States Air Force drawing no.	Cable diameter (in inches)				Wire (AWG)	Raychem SolderTacts part number	Size	Polarity	Cable type
		JOD	SOD	DOD	COD					
	8340712-OS-01	.098-.135	.066-.120	.030-.049	.011-.031	24-26	D-602-1108	8	S	Twisted pair ^b
	8340713-OS-01	.098-.135	.066-.120	.030-.049	.011-.031	24-26	D-602-1109	8	P	Twisted pair ^b
		.098-.148	.066-.130	.036-.070	.009-.035	22-26	D-602-1110	8	S	Triaxial
		.098-.148	.066-.130	.036-.070	.009-.035	22-26	D-602-1111	8	P	Triaxial
	8340712-OL-01	.098-.135	.066-.120	.030-.049	.011-.031	24-26	D-602-1112	8	S	Twisted pair ^b
	8340713-OL-01	.098-.135	.066-.120	.030-.049	.011-.031	24-26	D-602-1113	8	P	Twisted pair ^b
M39029/90	8912020-OS-01	.145 max.		.029-.051	.011-.029	24-26	DK-602-0156-1	8	P	Twinaxial
M39029/90	8912020-DL-01	.162 max.		.029-.051	.011-.029	24-26	DK-602-0156-2	8	P	Twinaxial
M39029/90	8912020-EL-01	.177 max.		.029-.051	.011-.029	24-26	DK-602-0156-3	8	P	Twinaxial
M39029/91	8912019-OS-01	.145 max.		.029-.051	.011-.029	24-26	DK-602-0157-1	8	S	Twinaxial
M39029/91	8912019-DL-01	.162 max.		.029-.051	.011-.029	24-26	DK-602-0157-2	8	S	Twinaxial
M39029/91	8912019-EL-01	.177 max.		.029-.051	.011-.029	24-26	DK-602-0157-3	8	S	Twinaxial
M39029/90	8912020-OL-01	.184 max.				20	DK-602-0169-1	8	P	Twinaxial
M39029/91	8912019-OL-01	.184 max.				20	DK-602-0170-1	8	S	Twinaxial

Series II

M39029/77	915306-1	.050-.103	.066-.084	.036-.068	.009-.023	26-30	D-602-0171	16	S	Coaxial
M39029/77	915306-2			.025-.042	.009-.023	26-30	D-602-0174	16	S	Twisted pair

^a These SolderTacts contacts are intermateable and intermountable with contacts qualified to indicated specification; they replace crimp-style termination.

^b These SolderTacts contacts are designed for shielded twisted pair cable per MIL-STD-1553B.

Tool selection guide

SolderTacts series	Part numbers (D-602-)	Engineering standard (termination instructions)	Convection (hot air) heating		IR1004 infrared semiautomatic heater tool set	Contact insertion tool	Contact removal tool*
			AT-1319 adapter	Repair wand			
999 Size 16	0140/0141 0142/0143	ES61226 ES61224	AT-1319-78	AD-1565	AT-1044-70 (P) AT-1044-69 (S)	M81969/8-07 or M81969/14-03	M81869/8-08 or M81969/14-03
999 Size 12	0144/0145 0146/0147 0150/0151	ES61206 ES61218 ES61223	AT-1319-24	AD-1566	AT-1044-72 (P) AT-1044-71 (S)	M81969/8-09 or M81969/14-04	M81969/8-10 or M81969/14-04
999 Size 8	0122/0123 1108/1109 1110/1111 1112/1113 0156/0157-X 0169/0170-X	ES61179 ES61172 ES61172 ES61184 ES61231 ES61235	AT-1319-22	AD-1568 and AD-1568 and AD-1480			M81969/14-06 or Astro ATBX-2277

*Raychem does not provide this tool. See connector manufacturer.

Performance

The performance of SolderTacts contacts is defined by the applicable Raychem specification control drawing (SCD) and Raychem Specification D-6002. Products on qualified product lists meet the requirements of the base specification.

Termination

Termination of SolderTacts contacts is defined in the appropriate Raychem Engineering Standard. To obtain a copy, contact your Raychem representative.

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