

CONTACTS

PINS

CONTACT SIZE	WIRE SIZE AWG	PIN CONTACT PART NUMBER	COLOR BANDS			WIRE STRIP LENGTHS	WIRE RANGE		WIRE HOLE FILLER	COLOR
			1	2	3		MIN.	MAX.		
22D	22,24,26 & 28	M39029/58-360	Orange	Blue	Black	.125 (3.18)	.030 (0.76)	.054 (1.37)	MS27488-22-2	Black
		M39029/107-620#	Blue	Red	Black					
20	20,22 & 24	M39029/58-363	Orange	Blue	Orange	.188 (4.77)	.040 (1.02)	.083 (2.11)	MS27488-20-2	Red
		M39029/107-621#	Blue	Red	Brown					
16	16,18 & 20	M39029/58-364	Orange	Blue	Yellow	.188 (4.77)	.065 (1.65)	.109 (2.77)	MS27488-16-2	Green
		M39029/107-621#	Blue	Red	Brown					
12	12 & 14	M39029/58-365	Orange	Blue	Green	.188 (4.77)	.097 (2.46)	.142 (3.61)	MS27488-12-2	Yellow
		M39029/107-623#	Blue	Red	Orange					
10	10 & 12	M39029/58-528	Green	Red	Gray	.335 (8.51)	.135 (3.42)	.162 (4.12)	M85049/81-10	Green
8	Coax* RG180B/U RG195A/U	M39029/60-367	Orange	Blue	Violet	Detailed instructions included with contacts	.135 (3.42)	.162 (4.12)	MS27488-8-3	Red
8	Twinax** M17/M176-0002	M39029/90-529	Green	Red	White		.124 (3.15)	.134 (3.40)	MS27488-8-3	Red
8 Power	8	10-497448-075	-	-	-	.470 (11.94)	.135 (3.42)	.162 (4.12)	MS27488-8-3	Red
8 Power	10	10-497448-095	-	-	-	.470 (11.94)	.135 (3.42)	.162 (4.12)	MS27488-8-3	Red
8 (Power-EU)	8	900-197	-	-	-	.393 (10.0)	.135 (3.42)	.162 (4.12)	MS27488-8-3	Red

#1500 Mating Cycle Contacts *Coax **Twinax call for details. For fibre optic contacts, please contact us.

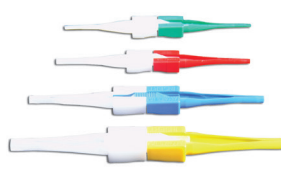
SOCKETS

CONTACT SIZE	WIRE SIZE AWG	SOCKET CONTACT PART NUMBER	COLOR BANDS			WIRE STRIP LENGTHS	WIRE RANGE		WIRE HOLE FILLER	COLOR
			1	2	3		MIN.	MAX.		
22D	22,24,26 & 28	M39029/56-348	Orange	Yellow	Gray	.125 (3.18)	.030 (0.76)	.054 (1.37)	MS27488-22-2	Black
		M39029/106-614#	Blue	Brown	Yellow					
20	20, 22 & 24	M39029/56-351	Orange	Green	Brown	.188 (4.77)	.040 (1.02)	.083 (2.11)	MS27488-20-2	Red
		M39029/106-615#	Blue	Brown	Green					
16	16,18 & 20	M39029/56-352	Orange	Green	Red	.188 (4.77)	.065 (1.65)	.109 (2.77)	MS27488-16-2	Green
		M39029/106-616#	Blue	Brown	Blue					
12	12 & 14	M39029/56-353	Orange	Green	Orange	.188 (4.77)	.097 (2.46)	.142 (3.61)	MS27488-12-2	Yellow
		M39029/106-617#	Blue	Brown	Violet					
10	10 & 12	M39029/56-527	Green	Red	Violet	.355 (8.51)	.135 (3.42)	.162 (4.12)	M85049/81-10	Green
8	Coax* RG180B/U RG195A/U	M39029/59-366	Orange	Blue	Blue	Detailed instructions included with contacts	.135 (3.42)	.162 (4.12)	MS27488-8-3	Red
8	Twinax** M17/M176-0002	M39029/91-530	Green	Orange	Black		.124 (3.15)	.134 (3.40)	MS27488-8-3	Red
8 Power	8	10-497446-075	-	-	-	.470 (11.94)	.135 (3.42)	.162 (4.12)	MS27488-8-3	Red
8 Power	10	10-497446-095	-	-	-	.470 (11.94)	.135 (3.42)	.162 (4.12)	MS27488-8-3	Red
8 (Power-EU)	8	900-217	-	-	-	.393 (10.0)	.135 (3.42)	.162 (4.12)	MS27488-8-3	Red

#1500 Mating Cycle Contacts *Coax **Twinax call for details. For Fiber Optic Contacts, please call.

All dimensions in inches (millimeters in parenthesis)

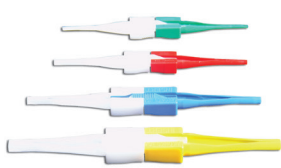
PINS



CONTACT SIZE	HAND-CRIMP TOOL	POWER-CRIMP TOOL	TURRET HEADS	USE LOCATOR COLOR	PLASTIC INSERTION/EXTRACTION TOOL	INSERTION TIP COLOR	EXTRACTION TIP COLOR	METAL INSERTION TOOL	COLOR BAND	METAL EXTRACTION TOOL	COLOR BAND	
											1	2
22D	M22520/2-01	WA22††	M22520/2-09	-	M81969/14-01	Green	White	MS27495A22M	Black	MS27495R22M	Black	White
20	M22520/1-01	WA27F††	M22520/1-04	Red	M81969/14-10	Red	Orange	MS27495A20	Red	MS27495R20	Red	White
16	M22520/1-01	WA27F††	M22520/1-04	Blue	M81969/14-03	Blue	White	MS27495A16	Blue	MS27495R16	Blue	White
12	M22520/1-01	WA27F††	M22520/1-04	Yellow	M81969/14-04	Yellow	White	DAK95-12B	-	DRK95-12B	-	-
10	TP-201423 or 1716P-1	-	-	-	M81969/14-05	Gray	White	M81969/8-11	Green	M81969/8-12	Green	White
8 Coax	M22520/2-01 M22520/5-01	WA22†† HX23	M22520/2-31 (inner) M22520/5-05 (outer)	-	M81969/14-12	Green		-	-	DRK264-8	-	-
8 Twinax	M22520/2-01 M22520/5-01	WA22 HX23	K709 (inner) Y631 (outer)	-	M81969/14-12	Green		M81969/46-06	Red	M81969/46-12	-	-
8 8 AWG Power	-	400B-1	414DA-8N (Die) 4691 (positioner)	-	M81969/14-12 (extraction only)	-	Green	-	-	DRK264-8	-	-
8 10 AWG Power	M3SP-6	400B-1	414DA-10N (Die) 4691 (positioner)	-	M81969/14-12 (extraction only)	-	Green	-	-	DRK264-8	-	-
8 (Power-EU)	809-872	-	809-873 (Die Set)	-	M81969/14-12 (extraction only)	-	Green	-	-	DRK264-8	-	-

†† Contact us for more tool accessories.

SOCKETS



CONTACT SIZE	HAND-CRIMP TOOL	POWER-CRIMP TOOL	TURRET HEADS	USE LOCATOR COLOR	PLASTIC INSERTION/EXTRACTION TOOL	INSERTION TIP COLOR	EXTRACTION TIP COLOR	METAL INSERTION TOOL	COLOR BAND	METAL EXTRACTION TOOL	COLOR BAND	
											1	2
22D	M22520/2-01	WA22††	M22520/2-07	-	M81969/14-01	Green	White	MS27495A22M	Black	MS27495R22M	Black	White
20	M22520/1-01	WA27F††	M22520/1-04	Red	M81969/14-10	Red	Orange	MS27495A20	Red	MS27495R20	Red	White
16	M22520/1-01	WA27F††	M22520/1-04	Blue	M81969/14-03	Blue	White	MS27495A16	Blue	MS27495R16	Blue	White
12	M22520/1-01	WA27F††	M22520/1-04	Yellow	M81969/14-04	Yellow	White	DAK95-12B	-	DRK95-12B	-	-
10	TP-201423 or 1716P-1	-	-	-	M81969/14-05	Gray	White	M81969/8-11	Green	M81969/8-12	Green	White
8 Coax	M22520/2-01 M22520/5-01	WA22†† HX23	M22520/2-31 (inner) M22520/5-05 (outer)	-	M81969/14-12	Green		-	-	DRK264-8	-	-
8 Twinax	M22520/2-01 M22520/5-01	WA22 HX23	K709 (inner) Y631 (outer)	-	M81969/14-12	Green		M81969/46-06	Red	M81969/46-12	-	-
8 8 AWG Power	-	400B-1	414DA-8N (Die) 4691 (positioner)	-	M81969/14-12 (extraction only)	-	Green	-	-	DRK264-8	-	-
8 10 AWG Power	M3SP-6	400B-1	414DA-10N (Die) 4691 (positioner)	-	M81969/14-12 (extraction only)	-	Green	-	-	DRK264-8	-	-
8 (Power-EU)	809-872	-	809-873 (Die Set)	-	M81969/14-12 (extraction only)	-	Green	-	-	DRK264-8	-	-

†† Contact us for more tool accessories.

CONTACTS

COAX CONTACTS



M22520/5-01

Crimp Dies

COAX CONTACT SIZE	CABLE TYPE	CONTACT PART NUMBER		CRIMPING TOOLS	
		PIN	SOCKET	INNER CONTACT	CRIMP FERRULE
16	RG-178B/U, RG-196A/U	21-033122-564 (M39029/76-425)	21-033123-564 (M39029/77-429)	M22520/2-01 w/ Positioner M22522/2-35 or w/ Daniels Positioner K532	M22520/4-01 w/ Positioner M22520/4-02
	RG-174A/U, RG-188A/U, RG-161/U, RG-187A/U, RG-316/U, RG-179B/U	21-033122-563 (M39029/76-424)	21-033123-563 (M39029/77-428)		
12	RG-180B/U, RG-195A/U	21-033122-546 (M39029/28-211)	21-033123-546 (M39029/75-416)	M22520/2-01 w/ Positioner M22520/2-34 or w/ Daniels Positioner K323	M22520/31-01 w/ Positioner M22520/31-02 or Daniels GS-200 Tool w/ Positioner G2P330
		21-033122-541 (M39029/28-409)	21-033123-541 (M39029/75-417)		
8	RG-187A/U, RG-179B/U, RG-174A/U, RG-188A/U, RG-316/U, RG-161/U	21-033102-023	21-033101-023	M22520/2-01 w/ Positioner M22520/2-31 or Solder	M22520/5-01 w/ die set M22520/5-03 (A) or M22520/5-08 (A) M22520/5-35 (B) or M22520/10-01 w/ die set M22520/10-05 (A)
	RG-142B/U, RG-223/U	21-033102-024	21-033101-024		M22520/5-01 w/ die set M22520/5-05 (A) or M22520/5-19 (B) or M22520/10-01 w/ die set M22520/10-07 (A)
	RG-180B/U, RG-195A/U	21-033102-021 (M39029/60-367)	21-033101-021 (M39029/59-366)		M22520/5-01 w/ die set M22520/5-05 (B) or M22520/5-41 (B) or M22520/10-01 w/ die set M22520/10-07 (B)
	RG-400	21-033102-027	21-033101-027	M22520/2-01 w/ Positioner M22520/2-10	M22520/5-01 w/ die set M22520/5-45 (A)
	RG-58 (M17/155-00001)	21-033102-029	21-033101-029	Solder	M22520/5-01 w/ die set M22520/5-05 (B)

PRINTED CIRCUIT BOARD CONTACTS - PIN

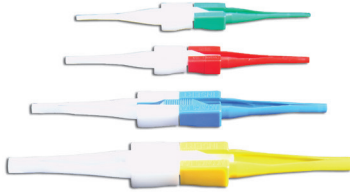
PCB PIN CONTACTS	SIZE	TAIL DIAMETER +/- .001	CONTACT STICKOUT MAX./MIN.				
			D38999/20 TVP00	TVP02	D38999/26 TV06	D38999/24 TV07	
						METAL	COMPOSITE
10-407552-015	22D	0.019	.335 / .280	.555 / .500	.360 / .305	.329 / .279	.286 / .236
10-407552-055	22D	0.019	.224 / .169	.444 / .389	.249 / .194	.218 / .168	.175 / .125
10-407552-085	22D	0.019	.060 / .010	.280 / .230	.085 / .035	.054 / .009	.011 / NS
10-407552-115	22D	0.019	.002 / NS	.222 / NS	.023 / NS	NS	NS
10-497640-015	20	0.019	.348 / .298	.568 / .518	.373 / .323	.342 / .297	.299 / .254
10-497640-025	20	0.019	.213 / .163	.433 / .383	.238 / .188	.207 / .162	.164 / .119
10-497640-045	20	0.019	NS	NS	NS	NS	NS
10-497596-015	20	0.025	.058 / .012	.278 / .232	.083 / .037	.052 / .011	.009 / .044
10-497596-025	20	0.025	.148 / .102	.368 / .322	.173 / .127	.142 / .101	.099 / .058
10-497596-035	20	0.025	.229 / .183	.449 / .403	.254 / .208	.223 / .182	.180 / .058
10-497596-055	20	0.025	.346 / .300	.566 / .520	.371 / .325	.340 / .299	.297 / .256
10-497695-015	16	0.040	.255 / .205	.475 / .425	.280 / .230	.249 / .204	.206 / .161
10-497630-035	16	0.062	.060 / .010	.280 / .230	.085 / .035	.054 / .009	.011 / NS
10-497630-055	16	0.062	.228 / .178	.460 / .375	.253 / .203	.244 / .177	.201 / .190
10-597502-015	12	0.081	.228 / .178	.448 / .398	.252 / .203	.222 / .177	.179 / .134

Standard PC tail used

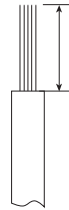
All dimensions in inches (millimeters in parenthesis)

CONTACTS

INSERTION/EXTRACTION TOOLS



WIRE STRIP LENGTH



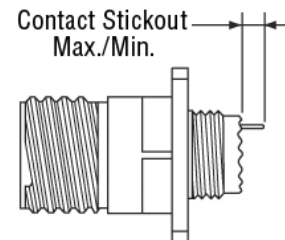
WIRE SEALING RANGE



INSTALLATION TOOLS		WIRE STRIP LENGTHS	WIRE SEALING RANGE	
INSERTION	REMOVAL		MIN.	MAX.
M81969/8-07 or M81969/14-03	M81969/8-08 or M81969/14-03	Contact us for details	.065 (1.65)	.109 (2.77)
M81969/8-09 or M81969/14-04	M81969/8-10 or M81969/14-04	Contact us for details	.097 (2.46)	.142 (3.61)
Hand insertion	M81969/14-012 or DRK264-8 or 11-9170	Contact us for details	.135 (3.43)	.155 (3.94)

PRINTED CIRCUIT BOARD CONTACTS - SOCKET

PCB PIN CONTACTS	SIZE	TAIL DIAMETER +/- .001	CONTACT STICKOUT MAX./MIN.					
			D38999/20 TVP00		D38999/26 TV06	D38999/24 TV07		
						METAL	COMPOSITE	
10-597878-011	22D	0.019	.291 / .226	.511 / .446	.316 / .251	.285 / .222	.242 / .182	
10-597878-331	22D	0.019	.242 / .181	.471 / .399	.267 / .202	.258 / .180	.215 / .155	
10-497623-025	22D	0.019	.868 / .803	1.088 / 1.023	.893 / .828	.862 / .802	.819 / .759	
10-497623-035	22D	0.019	.348 / .283	.568 / .503	.373 / .308	.342 / .282	.299 / .239	
10-597878-031	22D	0.019	.208 / .143	.428 / .363	.233 / .168	.202 / .142	.159 / .099	
10-597878-071	22D	0.019	.146 / .081	.366 / .301	.171 / .106	.140 / .080	.097 / .037	
10-497623-145	22D	0.019	.609 / .539	.829 / .759	.634 / .564	.603 / .538	.560 / .495	
10-597878-151	22D	0.019	.423 / .358	.643 / .578	.448 / .383	.417 / .357	.374 / .314	
10-497643-015	20	0.019	.348 / .294	.568 / .514	.373 / .319	.342 / .293	.299 / .250	
10-497643-025	20	0.019	.213 / .159	.433 / .379	.238 / .184	.207 / .158	.164 / .115	
10-597878-031	20	0.019	.555 / .501	.775 / .721	.580 / .526	.549 / .500	.506 / .457	
10-497650-015	16	0.040	.255 / .201	.475 / .421	.280 / .226	.249 / .200	.206 / .157	
10-597503-015	12	0.081	.184 / .130	.404 / .350	.209 / .155	.178 / .129	.135 / .086	



= Standard PC tail used

All dimensions in inches (millimeters in parenthesis)

QUADRAX CONTACTS



Cable Part Number	Contact Part Number		Inner Impedance	Conductor (AWG)	Electrical Protocol
	Pin	Socket			
Draka Fileca F-4703-3, F4704-4, Filotex ET 2PC236, FilotexET2PF870, PIC Wire E50424ABS0972, Tensolite23450/04090X-4(LD)	21-033384-021	21-033385-021	100Ω	24	Ethernet, 1000Base-T Gigabit Ethernet
Tensolite 26473/02006X-4(LD)/Gore RCN8328 (not for new designs, use 21-033450/1 series)	21-033384-031	21-033385-031	150Ω	26	-
Tensolite NF24Q100, NF24Q100-0, 24443/9P025X-4(LD), S280W502-4, 24443/03130X-4(LD), 24443/C20714X-4(LD), 24450/0120X-4(LD), NF24-2Q100, TYCO CECRWC-18664, GORE GSC-01-81869-01, 24443/03166X-4(LD), ThermaxT956-4T200, Pic Wire E51424, Thermax MX100Q-24, NF24Q100-01-200C (Space), PIC E50424	21-033384-051	21-033385-051	100Ω	24	Ethernet, 1000Base-T Gigabit Ethernet
Tensolite NF22Q100, NF22Q100-01, Thermax 956-5, Draka FilecaF-4704-5, GORE RCN 7688, ABS1503 KD 24	21-033384-061	21-033385-061	100Ω	22	
Tensolite NF26Q100, NF26Q100-01, NF26-2Q100, PIC E50426	21-033384-071	21-033385-071	100Ω	26	Ethernet (100 Mbps), 1000 Base-T Gigabit Ethernet (1 Gbps)
JSFY02-1	21-033384-091	21-033385-091	110Ω	24	
Gore RCN8487, JSFY18	21-033384-111	21-033385-111	110Ω	24	
Draka Fileca F-4704-6, Gore RCN 8672	21-033384-151	21-033385-151	100Ω	26	
Tensolite NF24Q100-01 (same as 21-03338()-051, uses EMI Piggyback)	21-033384-161	21-033385-161	100Ω	24	
Gore RCN8513, JSF-118-3	21-033384-171	21-033385-171	100Ω	22	
Tensolite NF24Q100, NF24Q100-01 for 2.5 Gbps applications	21-033384-191	21-033385-191	100Ω	24	Serial FPDP Applications (2.5 Gbps)
USB2 (28433/02171LX-4)	21-033384-101	21-033385-101	95Ω		USB2.0 (480 Mbps)
Tensolite 24450/03089X-4(LD)	21-033384-211	21-033385-211	110Ω	24	IEEE 1394B Firewire
JSFY02-1, JSFY18	21-033384-221	21-033385-221	110Ω	24	Contact us for details
Gore RCN8487, JSFY18	21-033384-231	21-033385-231	110Ω	24	
Tensolite 24450/03089X-4(LD) Same as 21-03338()-211 but Box pattern, mates with 21-03338()-241 only	21-033384-241	21-033385-241	110Ω	24	

PCB types and transitions are available, please contact us.



Crimping Tools



M22520/5-01

Crimp Dies

Plastic

Metal

Installation Instruction Sheet	Inner Crimp Tool		Outer Crimp Tool		Plastic Sealing Plug	Metal Sealing Plug*	Metalized Piggyback Grommet
	Tool (setting)	Positioner	Tool	Die Set (location)			
L-2119-A	M22520/2-01 (5)	Daniels K709 (M22520/2-37)	M22520/5-01	M22520/5-45 (A)	T3-4008-59P	21-033899-8Q1	21-033321-023
L-2119-B	M22520/2-01 (4)		M22520/5-01	M22520/5-45 (A)	T3-4008-59P	21-033899-8Q1	21-033321-023
L-2119-D	M22520/2-01 (5)		M22520/5-01	M22520/5-45 (A)	T3-4008-59P	21-033899-8Q1	21-033321-023
L-2119-H	M22520/2-01 (5)		M22520/5-01	M22520/5-45 (A)	T3-4008-59P	21-033899-8Q1	21-033321-023
L-2119-AB	M22520/2-01 (5)		M22520/5-01	M22520/5-45 (A)	T3-4008-59P	21-033899-8Q1	21-033321-023
L-2119-AD	M22520/2-01 (5)		M22520/5-01	M22520/5-45 (A)	T3-4008-59P	21-033899-8Q1	21-033321-023
L-2119-AK	M22520/2-01 (4)		M22520/5-01	M22520/5-45 (A)	T3-4008-59P	21-033899-8Q1	21-033321-023
L-2119-AW	M22520/2-01 (4)		M22520/5-01	M22520/5-45(A)	T3-4008-59P	21-033899-8Q1	21-033321-023
L-2119-BE							
L-2119-BN	M22520/2-01 (5)		M22520/5-01	M22520/5-45 (A)	T3-4008-59P	21-033899-8Q1	21-033321-023
L-2119-BS	M22520/2-01 (5)	M22520/5-01	M22520/5-45 (A)	T3-4008-59P	21-033899-8Q1	21-033321-023	
Contact us for details							
Contact us for details							
L-2119-CD	M22520/2-01 (5)	Daniels K709 (M22520/2-37)	M22520/5-01	M22520/5-45 (A)	T3-4008-59P	21-033899-8Q1	21-033321-023
L-2119-CR	M22520/2-01 (4)		M22520/5-01	M22520/5-45 (A)	T3-4008-59P	21-033899-8Q1	21-033321-023

Contact us for details

*Can be used when mating with contacts on mating half.